DETs in the Functional Syntax of Greek Nominals

by

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Abstract

In this dissertation, I explore the formal mechanisms underlying restrictive modification by nominals (*RMN*). The central claim is that RMN is dependent on how definiteness is encoded in a given language.

In Greek, RMN is exemplified by extra definite determiners followed by bare adjectives, as shown in (1) below. These may precede or follow the matrix nominal:

(1) *To*   *ksilino*   to   kuti   *to*   *skalisto*
The   wooden   the   box   the   carved
'The carved wooden box'/ 'The carved box the wooden one'

Syntactically, I argue that the determiner and the adjective may form either a restrictive or non-restrictive nominal depending on their structural position. Focusing on restrictive nominals, I argue that they are adjuncts to nP, which raise to FocP when focused. These adjuncts are small nominals, consisting of acategorial roots and n. A look at the structure of the matrix noun reveals

that adjectives adjoin to NumP, as they are always prenominal. A look at genitives also suggests that Greek nouns move as high as NumP.

Central to this thesis is the question of what licenses RMN. Previous analyses have correlated it with rich morphology (Lekakou and Szendrői, 2007, 2008, 2010). For them, the determiner is the spell-out of inflection, but is otherwise a semantic expletive. To these claims, I counter-argue that *RMN* is best viewed as being dependent on how definiteness is encoded and that the definite determiner is simply underspecified for definiteness. Assuming that definiteness consists of two components, familiarity and uniqueness, and based on data from Standard English and Scottish English, I propose that definite determiners spelling out one component, familiarity, are predicted to exhibit RMN. Familiarity and uniqueness can thus be mapped into two syntactic projections, FamP and *ι*P, respectively. I then propose a syntactico-semantic mechanism that derives these constructions.

Hence, this research offers a modern cross-linguistic account of RMN, while it also provides us with new insights about how definiteness can be encoded cross-linguistically.

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Introduction

This dissertation explores the formal mechanisms that make restrictive nominal modification possible cross-linguistically. The possibility of having restrictive nominals has been previously correlated with the morphological nominal paradigm of a given language, such as Greek (Lekakou and Szendrői, 2007 and later). As I show in this dissertation, Greek restrictive modification is quite pervasive in the nominal system. However, the phenomenon of restrictive modification by nominals (*RMN*) is not related to the rich inflectional paradigm as has been previously argued by Lekakou and Szendrői. We will see here that RMN is in fact available even in languages without nominal inflection. Furthermore, since a precise definition of rich inflection that differentiates Greek from other languages with inflection, such as Romance, is lacking, my analysis does not depend on this claim rather it departs from it.[1] The central proposal of this work is that RMN directly follows from the properties of the definite determiner. That is, the source for this phenomenon is the representation of definiteness and its syntactic decomposition.

In particular, I distinguish between two types of nominals: (i) the main nominal of the construction (which may or may not be modified), which I will refer to as 'the matrix nominal'; (ii) and the modifying DPs, which can modify the matrix nominal restrictively or non-restrictively. Focusing on Greek, I show that there are different subtypes of modifying nominals, one of which consists of the definite article, an adjective and an empty nominal, also known as

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[1] Many thanks to Professor Brian Joseph for pointing this out to me.

'polydefinites' (Kolliakou, 2004). These can precede or follow the matrix noun, as shown in (1) and (2) respectively:[2]

(1)　Polis　　　　kozmos　　　protimaj　　[ta　　　kokkina　　　[ta

　　　Many.s　　　people.s　　　prefer.3s　　the.n.pl red.n.pl　　the.n.pl

　　　triandafila]].

　　　rose.n.pl

　　　'Many people prefer the RED roses.'

(2)　Polis　　　　kozmos　　　protimaj　　[[ta　　triandafila]　　ta

　　　Many.s　　　people.s　　　prefer.3s　　the.n.pl rose.n.pl　　the.n.pl

　　　kokkina].

　　　red.n.pl

　　　'Many people prefer red roses.'

Modifying nominals, such as *ta kokkina,* lit. 'the red (ones)', are proposed here to be adjunct-like elements that modify the matrix noun, here *triandafila* 'roses'. There are two ways that such a nominal can modify the noun: restrictively or non-restrictively. Restrictive nominals identify the noun more closely by narrowing down its extension. Non-restrictive nominals are appositive nominals that do not change the extension of the matrix DP but provide further information about it. While restrictive nominals can be either prenominal or post-nominal, non-restrictive nominals can only be postnominal. This syntactic distribution suggests that the two types of modifying nominals are derived by distinct syntactic mechanisms. Focusing primarily on restrictive nominals, I propose that information structure, specifically Focus, plays a role in these constructions. Prenominal restrictive nominals are focused. Other, non-nominal, types of

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restrictive modifiers are found to pattern identically. In the proposed account, Greek restrictive modifiers are all unified under the same analysis.

Comparative analysis reveals that this type of modification is not unique to Greek, but rather constitutes a universal property of language that can be manifested in different ways. Standard English (SE) for instance, also allows RMN in cases where the definite determiner is something other than the definite article '*the*'. That is, in contrast to determiners like *the,* proper names and possessive determiners easily allow RMN. The difference between these determiners and determiners like *'the'* is that *'the'* always picks out a unique and salient entity among the set of entities while proper names and possessive D may not. They are thus underspecified in terms of definiteness and permit RMN. There seem to be two kinds of 'definite' determiners cross-linguistically: (i) those that are fully specified for definiteness spelling out both familiarity and uniqueness, such as SE *'the'*; (ii) and those that are less specified, or less fully definite, such as the Greek definite article, and the determiners found in proper names and English possessed DPs. The less specified determiners spell out familiarity, but not uniqueness, while the fully specified ones carry uniqueness, as well.[3] When underspecified definite DPs are unmodified, uniqueness arises from contextual restrictions. When they are modified, uniqueness arises from the intersection of the matrix nominal and the modifying DP. I therefore propose that definiteness is decomposed into two syntactic projections, the familiarity phrase (FamP) and what I call the

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[3] Note that this claim does not imply that there are no expletive definite determiners. There might be languages where the determiner is truly an expletive. Albanian could be such a language where it has been shown that the determiner may cooccur with the demonstrative. Interestingly, Albanian could also serve as a counter-example to Lekakou and Szendrői's claim that a language with rich inlfection and proper names with overt determiners exhibits polydefinites. Albanian has both nominal inflection and proper names with the definite article, but no polydefinite constructions. Many thanks to Professor Brian Joseph for bringing Albanian to my attention.

'iota phrase' (ιP). The former contains a set of salient entities, while the latter will give us the unique entity.

Therefore, if the determiner is underspecified, definiteness must be mapped onto two separate syntactic projections, as in (3a). If the determiner is fully definite, definiteness must be mapped to a single projection, as in (3b):

(3) a. ιP

          ιP

     ι FamP

              Fam
          $\{\varnothing_{SE}, D_{Poss\text{-}SE}, D_{Greek}\}$

b.   DefP/DP$_{def}$

          DefP/DP$_{def}$

     Def°/ D$_{def}$
       $\{\textit{the}\}_{SE}$
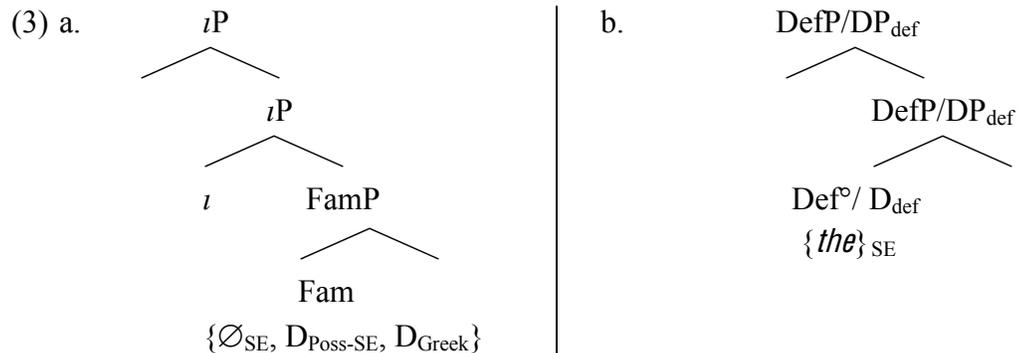
Although the focus of this work is on primarily definite nominals as matrix DPs and as modifying nominals, a look at indefinites shows that indefinite modifying nominals are also possible. Unlike definite modifying nominals, the indefinite ones never modify the matrix noun restrictively. The reason RMN is allowed in the first place is because restrictive nominals narrow down the extension of the matrix noun. They thus help in selecting a unique and familiar entity. Since indefinite nominals by definition do not pick out a unique and familiar entity, they cannot serve as restrictive modifiers. However, nothing prevents indefinite matrix nominals from being modified non-restrictively, since non-restrictive modifiers are comments that do not change the extension of the noun.

The main result of this research is a unified account of RMN not only in Greek, but cross-linguistically. The overall contribution is that RMN is directly related to definiteness, or rather an effect of its decomposition. Under the proposed analysis we can make predictions as to whether a

language has modifying nominals, and if so, we now have a simple mechanism that elegantly derives them.

The dissertation is organized as follows. Chapter 1 introduces the main properties of the Greek nominal system, which are crucial to subsequent proposals. It lays out all the facts about the morphology and distribution of the determiners, adjectives and nouns and raises the questions that begin the analysis. Chapter 2 presents some of the most influential research on definite nominals and the nominal modifiers, here called 'polydefinites'. It outlines the assumptions to be adopted and some of the implications. Chapter 3 presents the syntax of Greek nominals, both matrix and modifying, and proposes a unified analysis that accounts for their properties. Chapter 4 explores the question of what makes such constructions possible, concluding that it is definiteness. It applies the proposed analysis to two languages – English and Greek – that differ in interesting ways. Chapter 5 examines indefinite nominals and their modification, showing that there are no indefinite restrictive nominals. A study of the indefinite determiners reveals some interesting structural properties of Greek nominals. In Chapter 6, I present the overall functional syntax of Greek nominals and compare it to languages such as English. I conclude by presenting a single mechanism that accounts for the proposal that determiners can be underspecified in terms of definiteness. I further explore the consequences of this proposal for the claim that determiners can often function as expletives.

Chapter 1   The Greek DP: Form and Order

In this Chapter I present the main properties of the Greek noun phrase, with a particular focus on the definite DP.

Typically, the noun in Greek is accompanied by a determiner. The determiner agrees in number, gender, and morphological case with the noun. Nominal modifiers, such as adjectives, also inflect to agree with the noun though in the case of adjectives morphological case is often phonologically invisible.

 A nominal must have a determiner even when it is a proper name or a generic noun. In example (4a) for instance, the definite articles cannot be absent. In (4b) the plural subject DP *ta skilakia* ('the puppies') receives a generic interpretation despite the presence of the definite determiner. In fact, this is the default interpretation, unlike a singular definite DP where either interpretation is possible (as in 4c), or a demonstrative DP where only the definite interpretation is possible:[4]

(4) a.   *(O)   Ghiannis   perimeni   *(tin)   Eleni.
           The.m.nom.s John.m.nom   wait.3s   the.f.acc.s   Helen.f
           'John is waiting for Helen.'

     b.   *Ta*   *skilak-ia*   latrev-un   ta   biskota.
           The.n.pl   puppy-n.pl   adore.3pl   the.n.pl   biscuits.n.pl
           'Puppies love biscuits.'

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[4] One way to enforce the specific definite reading in examples like (4b) is via demonstratives:

e.g.   Afta   ta   skilak-ia   latrev-un   ta   biskota.
        This.n.pl the.n.pl puppy-n.pl   adore.3pl   the.n.pl   biscuits.n.pl
         'These puppies love biscuits.'

c. *To*   *skilak-i*   latrev-i   ta   biskota.

The.n.s   puppy-n.   adore.3s   the.n.pl   biscuits.n.pl

'The puppy loves biscuits.'

d. *Afta*   *ta* *skilak-ia*   latrev-un   ta   biskota.

These.n.pl   the.n.pl puppy-n.pl   adore.3pl   the.n.pl   biscuits.n.pl

'These puppies love biscuits.'

As can be observed in these examples, it is not only the subject DP that is interpreted as generic, but also the object DP. Hence, example (4b), for instance, would be interpreted as *for puppies in general it is true that they love biscuits in general*. In such constructions it is not clear what forces the generic interpretation. It might be the determiner or it might be both the determiner and plurality. Furthermore, we can observe from the fact that generic expressions are indefinite in English and definite in Greek that it is not obvious whether these constructions should be analyzed as definite or indefinite. We will examine such constructions and investigate the properties of the Greek definite determiner, asking in particular, whether it is truly definite.

A second interesting aspect of Greek definite determiners involves a nominal construction known as 'polydefinites' (Kolliakou 2004) or 'definiteness spreading' (Androutsopoulou, 1996). A polydefinite DP is one that contains more than one instance of the definite determiner. A polydefinite is shown in (5a), where the phrase *ta kokkina ta triandafila* 'the red roses' contains two instances of the definite determiner. Contrast this with (5b) where the DP contains only a single definite determiner:

(5) a.

O	kosm-os	protim-a	*ta*	*kokkin-a*
the.m.s	world-m.s	prefer-3s	the.n.pl	red-n.pl

ta	*triandafil-a.*
the.n.pl	rose-n.pl

'People prefer/like RED roses.' (implied *among roses with other colors*)

b.

O	kosm-os	protim-a	*ta*	*kokkin-a*
the.m.s	world-m.s	prefer-3s	the.n.pl	red-n.pl

triandafil-a.
rose-n.pl

'People prefer/like red roses.'

The difference between these two examples is not immediately obvious from the translations. Informally speaking, the polydefinite construction seems to be used in contexts where a particular element needs to be selected from a set of similar things. The determiner in the modifier seems to play an important role in this. In this thesis, I will show that polydefinite constructions reveal the main properties of the Greek definite determiner.

Indefinite nominals also exhibit a construction similar to polydefinites, though as we will see, they are not identical. I thus look at indefinite nominals as well. I further study the properties of the indefinite determiners, considering how similar they are to the definite article. As we will see, indefinite DPs are introduced either by the indefinite article *enas* 'a(n)'/ 'one' as in (6.a) or more often by indefinite quantifiers, as in (6.b). Bare NPs are generally not possible except in object position, whether singular, as in (6.c), or plural:

(6) a.

Enas	*fititis*	afise	to	vivlio	tu	edho.
A/one.m	student.m	left	the.n	book	his	here

A student left his book here.

    b.   *Kapjos*   *fititis*   afise   to   vivlio tu   edho.

        Some.m   student.m   left   the.n   book his   here

        'Some student left his book here.'

    c.   Aghorasa   *stilo*   ce   *molivi.*

        Bought.1s   pen   and   pencil

        'I bought a pen and a pencil.'

Indefinite quantifiers in Greek show an interesting distribution. It appears that some quantifiers can only co-occur with count nouns. For example, *kapjos*, which means 'some', is used with a count noun. The majority of the quantifiers do not seem to be inherently specified as mass or count. Rather, what seems to be the case is that singular quantifiers are used with mass nouns, and plural quantifiers with count nouns. The quantifier *lighos* can be used in the singular with mass nouns, in which case it can be interpreted as 'some'. When it is plural though, it is used only with count nouns and means *few*:

    (7) a. Kapj-o   pedhi/ Kapj-a   pedhj-a

         Some-n   child-n/ Some-n.pl   child-n.pl

         'Some child'/ 'Some children' (Q + Count noun)

    b. *kapj-a   pit-a   c. √ ligh-i   pita

       Some-f pie-f   some-f   pie

       'Some pie' (Q+mass noun)   'Some pie'[5]

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[5] Note that pluralized *pita* 'pie' functions as count, in which case a count quantifier meaning *some* is used:

    e.g.   merikes pites

            some.pl pie.pl

            'Some pies'

d. #ligh-o vivlio   e. √ ligh-a   vivlia

few-n book.n   few-n.pl book.n.pl

≈ 'part (/amount) of book'   'few books'

Thus, while some quantifiers, like *kapjos,* appear to be inherently count, others, like *lighos,* seem to be underspecified for the mass-count distinction. Number seems to play a significant role in the interpretation of underspecified quantifiers as mass or count. For example, a quantifier denoting quantity, such as *polis* ('a lot', 'much'/ 'many') can be either mass or count.[6] In (8.a.i), *polis* is used in singular and is interpreted as mass, while in (8.b.i) it is plural and is interpreted as count:

(8)   a. (i) poli   liakadha (mass use)   (ii) # poles   liakadhes (count use)

               Much.f sunshine.f   many.f.pl sunshine.f.pl

      b. (i) poles   eljes (count use)   (ii) # poli   elja (mass use)

               many.f.pl olive tree-f.pl   much.f.sg olivetree.f.sg

It thus appears that there is a distinction to be made in the quantifier domain between quantifiers that are inherently count, such as *kapjos,* and those that are underspecified for the mass or count distinction. With the second group, the number marking determines the interpretation. I turn now to the distribution of quantifiers and then return to them in Chapter (5) where I determine their syntactic properties and categories. As I show, they all seem to be adjectival-like: (i) they inflect similarly to adjectives, in that their inflection is not as rich as as that of the determiner; (ii) many of them can also cooccur with the definite article, raising questions again about the semantic

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[6] Note that *polis* is spelled differently when it is used either as mass or count. In speech, this distinction is not available, as the pronunciation is the same.

contribution of the definite article, but also about the role of the quantifiers themselves, which seem to retain their quantificational force.

To sum up, in this dissertation I focus on: (i) definite DPs with multiple definite determiners (i.e. polydefinites); (ii) definite DPs with generic interpretations; and (iii) indefinite noun phrases with determiners and quantifiers.

I begin with polydefinites, examining how they differ from definite DPs with a single definite determiner, also known as *monadic definite* (Kolliakou, 2004). I then turn to generic DPs. If generics are not true definites, then how do they differ from the indefinites? What, if anything, does the definite determiner contribute in a generic DP?

With these questions in mind, let us now look at the morphological properties of each of the elements that make up the Greek DP. I then turn to their distribution, and draw some tentative conclusions.

1.1 The morphology of the Greek DP

As mentioned in the previous section, the Greek noun almost always appears with a determiner. The determiner and the noun, as well as adjectival modifiers, agree in case, number and gender. Traditional grammars of Greek (Triandafillidis, 2004) distinguish three cases: the nominative, the genitive and the accusative. Greek has two numbers, singular and plural, and three genders, feminine, masculine and neuter.

As can be observed in table 1, the definite article is fully inflected, i.e. for all cases, numbers and genders, with only a few syncretisms:[7]

TABLE: 1	DEFINITE ARTICLE		
SINGULAR	MASC	NEU	FEM
Nominative	o	to	i
Accusative	to(n)	to	ti(n)
Genitive	tu	tu	tis
PLURAL	MASC	NEU	FEM
Nominative	i	ta	i
Accusative	tus	ta	tis
Genitive	ton	ton	ton

In contrast, the indefinite article does not show a rich inflectional paradigm (cf. table 2). It can only be singular, and there are many syncretisms in case and gender:

TABLE: 2	INDEFINITE ARTICLE		
SINGULAR	MASC	NEU	FEM
Nominative	enas	ena	mia
Accusative	ena(n)	ena	mia
Genitive	enos	enos	mias

[7] As an example, some of the syncretisms are indicated with brackets, underlining, bold and italics.

In the indefinite article there are also syncretisms, as shown for example in the feminine form *mia*, but also between genders as in the case of the genitive *enos* masculine and neuter. The paradigm of the adjective and the noun contains even more syncretic forms. Syncretisms are found: (a) between the different genders, i.e. masculine and feminine, or masculine and neuter; (b) among the three cases, most commonly nominative and accusative; (c) and between the two numbers:

TABLE: 3	ADJECTIVE (e.g. kokkin-os 'red')		
SINGULAR	MASC	NEU	FEM
Nominative	kokkin -os	kokkin -o	kokkin -i
Accusative	kokkin -o	kokkin -o	kokkin -i
Genitive	kokkin -u	kokkin -u	kokkin -is
PLURAL	MASC	NEU	FEM
Nominative	kokkin -i	kokkin -a	kokkin -es
Accusative	kokkin -us	kokkin -a	kokkin -es
Genitive	kokkin -on	kokkin -on	kokkin -on

The inflection of the noun is more complex as there are various noun classes. The paradigms in table 4 below are those of typical nouns. Here too, there are plenty of syncretic forms, i.e. suffixes, mostly in feminine and neuter nouns:

TABLE: 4 NOUN	O anthrop-os ('human', MASC)	To vuno ('mountain', NEU)	I thalas-a ('sea', FEM)
SINGULAR	MASC	NEU	FEM
Nom	o anthrop-os	to vun-<u>o</u>	i thalas-*a*
Acc	ton anthrop-<u>o</u>	to vun-<u>o</u>	ti(n) thalas-*a*
Gen	tu anthrop-u	tu vun-u	tis thalas-as
Voc	- anthrop-e	- vun-<u>o</u>	- thalas-*a*
PLURAL	MASC	NEU	FEM
Nom	i anthrop-i	ta vun-*a*	i thalas-es
Acc	tus anthrop-us	ta vun-*a*	tis thalas-es
Gen	(ton anthrop-on	ton vun-on	ton thalas-on)
Voc	- anthrop-i	- vun-*a*	- thalas-es

As we can observe in table 4, the Greek noun has a relatively rich inflectional paradigm. However, there are many syncretic forms. In such cases, the article provides more information about the inflectional properties of a given nominal phrase. In fact, some nouns, like *ipurgh-os* 'minister' carry the masculine suffix –*os* but can be treated as either feminine or masculine. Here, the article is the only indicator of gender. For example, in the phrase *tin ipurgho* 'the.acc.f minister', the bare noun form *ipurgho* could be either masculine accusative, neuter nominative or neuter accusative. The presence of the article *tin* shows that it is in fact feminine, accusative.

Thus, the article might sometimes be the only indication of the inflectional properties of the noun.[8]

1.1.1. Number and the Noun

As mentioned above, Greek has two numbers, singular and plural, and the majority of nouns fully inflect for number. However, there are many nouns that appear in only one number (Triandafillidis, 2004: 78).

According to the traditional grammars, the nouns that appear only in *singular* are usually proper names, names of holidays, etc; or mass and abstract nouns: *amos* 'sand', *evghenia* 'politeness'. Other nouns of these types, however, can be pluralized: *pola kria* 'lots of cold', *nera* 'water'(pl.) *rizja* 'rice'(pl.), *xjonja* 'snow'(pl.). In many cases, as in *pola kria* 'lots of cold' for example, their mass denotation is retained:

(9)   Exi   pola   kria/   xjonja   eki   pano.
        Has.3s lot.n.pl.   cold.n.pl/   snow.n.pl   there   up
        'It is very cold up there'/ 'there is lots of snow up there.'

This is an important observation, since it provides support for my claim, as we will see in section 3.1, that Number Phrase is always present in Greek and that it corresponds to *n*P in English. That is, nominal inflection is higher in Greek since nouns, whether they have a count or mass denotation, can be plural. In addition to nouns that usually appear only in the singular, there are also nouns that appear only in the plural, and may not even have a singular form. According to Triandafillidis' classification, these are nouns like: (i) *trexamata* 'errands'/'rush', *xeretismata*

'greetings', *gheramata* 'old age', *asimika* 'silverware', *ghialika* (anything made of glass); (ii) nouns that denote inherently paired objects: *ghilja* 'eye glasses', *cialja* 'binoculars'; (iii) compounds, such as *ghineko-pedha* 'women and children', *ambelohorafa* 'vineyards'; (iv) nouns referring to compensation like *dhidhaktra* (neu.pl) 'tuition', *komistra* (neu.pl) 'fare'; (v) names of languages, possibly functioning as nominalized adjectives): *aglika* 'English', *ghalika* 'French', *elinika* 'Greek', *ghermanika* 'German'; (vi) certain proper names, such as holidays *Xristughena* 'Christmas', and certain names of places: *Xania* 'Chania'.

Some of these nouns seem to be inherently mass (e.g. *dhidhaktra* 'tuition', *trexamata* 'errands'/ 'rush'). They are only marked with plural, lacking the singular-plural contrast. The existence of such nouns again suggests that Number in Greek may be underspecified for mass or count, and thus NumP is always present whether the noun is mass or count.

1.1.2. Gender and the Noun

Greek has three genders, feminine, masculine and neuter. Traditional grammars distinguish two kinds of gender assignment, natural and arbitrary. For people and animals, gender usually corresponds to natural gender, though there are lots of exceptions:

(10) a.   I   miter-a   b.   o   pater-as

           the.f.nom   mother-f   the.nom.m   father-nom.m

           'the mother   the father

Nouns naming inanimate objects can be masculine, feminine, or neuter:

(11)　a.　　　O　　　　　　　vrah-os

　　　　　　　　The.nom.m　　rock-nom.m.

　　　　　　　　'The rock'

　　　b.　　　I　　　　　　　mer-a

　　　　　　　　The.nom.f　　day.f

　　　　　　　　'The day'

　　　c.　　　To　　vun-o

　　　　　　　　The.n　mountain.n

　　　　　　　　'The mountain'

Gender is indicated by the suffix marked on the noun, as well as by the gender of the determiner. In feminine nouns, gender can often be further indicated by the placement of stress. Feminine nouns most often have penultimate stress (unless it is overridden by the phonological antepenult stress), although some masculine and neuter nouns do, as well. Furthermore, it is often the case that a single noun stem is found in two genders, with two different meanings. Compare for instance, *xor-a* 'country', feminine, with *xor-os* 'place', masculine. In this work, I assume that gender on the nouns is inherent, and will not deal with it further here.

1.2 The syntactic distribution of the elements of DP

1.2.1　The definite DP

As mentioned earlier, in a definite DP the article is obligatorily present even when the nominal is generic, as in (12), or proper, as in (13):

(12) *(Ta)   pedja   protimane   * (ta) ghlika   apo *(to)   faghito.
      The.n.pl   child.n.pl   prefer.3pl   the sweets   from the.n   food.n
      'Children prefer candies to food.'

(13) *(I)   Maria perimeni   * (ti)   Stella.
      The.f.nom   Maria wait.3s   the.f.acc   Stella
      'Maria is waiting for Stella.'

Furthermore, the definite determiner may appear more than once in a single nominal. As shown in (14a) below, the nominal consisting of the first and last name *Lena Adoniu* may contain two instances of the definite determiner. Example (14b) also illustrates the same point, except that the nominal consists of a common noun preceded by an adjective:

(14) a.   I   Maria perimeni [ti   Lena   tin   Adoniu.]
           The.f.nom   Maria wait.3s   the.f.acc Lena   the.f.acc   Adoniu
           'Maria is waiting for Lena Adoniu.'

      b.   Evale   [to   xondro   to   fakelo]   sti   tsanda tu
           Put.3pst the.acc thick   the.acc envelope   in-the.f.acc   bag   his
           ke   [to   lepto] sti   tsepi tu.
           and   the.acc   thin   to-the.f.acc   pocket his
           'He put the thick envelope in his bag and the thin one in his pocket.'

I will refer to modifiers such as these, which are preceded by a definite determiner, as *polydefinite modifiers*. As we will see later on, these modifiers serve to pick out a single referent among a set of similar entities. (14a) for instance implies that there is more than one person named *Lena*, and by means of the modifier *tin Adoniu* the one whose last name is *Adoniu* is

selected.[9] (14b) implies that there is more than one envelope and again, by means of the modifier, here *to xondro* the thick envelope is selected. Thus, a noun not only almost always appears with a determiner, and often a nominal contains more than one determiner.

It is possible for a noun to appear without a determiner, though the contexts are restricted (see Marinis, 2002 for more). In this case, the object nominal can be singular or plural. With other verbs, as in (15c), bare plural objects are possible, but not bare singulars:

(15) a. Pirate   *molivi/ molivja*   ja   to   sxolio? (=1/ more pencils)
          Take.aor.2s   pencil/ pencils   for   the school
          'Did you buy a pencil/ pencils for school?'

      b. Aghorase   kinito.
          Buy.aor.3s   cellphone.n
          'S/he bought a cellphone.'

      c. Dhjavasa/   Edhosa   * vivlio/   √ vivlia.
          Read.aor.1s/   Give.aor.1s   book.n   book.n.pl
          'I read books'/ 'I gave/donated books.'

I set bare NP arguments aside, as in this work I focus on the definite DP.

Let us see now what elements may appear in the definite DP, and the different possible word orders. Minimally, a definite nominal consists of a determiner followed by noun (cf.16):

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[9] Note that (14a) may also have an interpretation where there is more than one Adoniu and Lena picks that one. Many thanks to Alana Johns for this observation.

(16)   DET   N

              I   pen-a

              The.f.nom.s   pen-f.s

              'The pen'

The noun can be preceded, but not followed, by a modifying adjective, as in (17):

(17)   a. DET   ADJ   N

              I   asimenj-a   pena

              The.f   silver-f.   pen.f

              'The silver pen'

        b. *DET   N   ADJ

              I   pena asimenja

              The.f pen.f silver.f

              'The silver pen'

In contrast, a polydefinite adjectival modifier can be either prenominal or postnominal:

(18)   a. DET   ADJ   DET N

              <u>I</u>   *asimenja*   <u>i</u>   pena

              The   silver   the   pen

              'The silver pen'

        b. DET N   DET   ADJ

              <u>I</u>   pena <u>i</u>   *asimenja*

              The   pen   the   silver

              'The silver pen' (or more accurately 'the pen the silver one')

In a regular monadic DP, i.e. a DP with a single determiner, a demonstrative may also appear. Unlike English, the demonstrative co-ccurs with, does not replace, the definite article. As shown

in (19), in Greek the absence of the definite article in a phrase with a demonstrative makes the phrase ungrammatical:

(19) a. DEM   DET   N

    Aft-i   i   pena

    This.f.sg the.f.nom pen.f

    *'This the pen'

  b. *DEM   N

    Aft-i   pena

    This.f.sg pen.f

    'This pen'

The demonstrative can also be found in a polydefinite DP. The determiner and the adjective can appear in the same positions as those without the demonstrative:

(20) a. DEM <u>DET ADJ</u>   DET N

    Afti i asimenja i   pena

    This (the silver) the pen

    'This silver pen'

  b. DEM DET N <u>DET ADJ</u>

    Afti i pena i asimenja

    This the pen the silver

    'This silver pen'

The demonstrative may also appear in various positions within the DP. In the example above, we saw that it may be initial, whether the DP is monadic or polydefinite. Example (21) shows that the demonstrative can also be final in a monadic DP:

(21)   DET   N   DEM

            i   pena   afti

            the   pen   this

            'This pen'

In a polydefinite DP, the determiner and the adjective follow a post-nominal demonstrative:

(22)   DET   N   DEM   DET   ADJ

            I   pena   afti   i   asimenja

            The   pen   this   the   silver

            'This pen, the silver one'

Finally, the demonstrative may marginally appear, as argued in section 2.1, between the

adjective and the noun whether the DP is monadic, as in (23a) or polydefinite as in (23b):

(23)   a. DET   ADJ   DEM N

            I   asimenja   afti   pena

            The   silver   this   pen

        b. DET   ADJ   DEM DET   N

            I   asimenja   afti   i   pena

            The   silver   this   the   pen

It is not always possible for the demonstrative to appear at the end of the DP. The heavier the DP

is, the less it is possible for a demonstrative to be DP-final. For example in a polydefinite DP, the

demonstrative may not appear at the end, whether the polydefinite modifier is prenominal or

postnominal:

(24) a. */? DET   N   DET   ADJ   DEM

            I   pena   i   asimenja   *afti*

            The   pen   the   silver   this

b. */? DET ADJ DET N DEM

    I asimenja i pena *afti*

    The silver the pen this

A DP-final demonstrative becomes even less acceptable if the DP contains even more elements, such as an additional adjective preceded by a determiner or a possessive clitic pronoun, as shown in (25a):[10]

(25) a. *DET ADJ DET ADJ DET N DEM

    I asimenja i palja i pena *afti*

    The silver the old the pen this

b. *DET ADJ POSS DET N DEM

    I asimenja mu i pena *afti*

    The silver my the pen this

In conclusion, the demonstrative seems to be possible at the end of the DP only if the DP consists of no more than an article and a noun. In contrast, when the demonstrative is DP-initial (as in 20), there are no restrictions on what elements may appear. This suggests that the demonstrative may originate in prenominal position, and that the noun may move leftwards under certain conditions.

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[10] Note that the demonstratives may otherwise co-occur with possessive clitics, which may also cliticize on them:

    E.g. Afti mu i pena

         This.f my the.f pen.f

         'This pen of mine'

According to the traditional grammars, another type of element that may form a definite DP is the adjective *idhjos* literally meaning 'same'. It is interpreted as 'by Xself' and functions like a definite pronoun. When alone, *idhjos* always appears with its own definite article as in (26a), while if *idhjos* co-occurs with a noun, it forms a polydefinite as in (ex.26b). *Idhios* cannot appear as a modifier in a monadic DP, as in (26c), which implies that it functions like a nominalized element:

(26) a. Irthe   [o   *idhjos*].
            Came.3s   the.m.nom   same.m.nom
            'He himself was here.'

      b. Irthe   [o   *idhjos*   o   pateras   tu].
          Came.3s   the.m.nom same.m.nom the.m.nom father.m.nom   his
          'His father himself was here.'
                                   (example from Triandafillidis, 2004: 133)

      c. *Irthe   [o   *idhjos*   pateras   tu].
         Came.3s   the.m.nom same.m.nom father.m.nom his
         'His father himself was here.'

Another element that can be found in the DP is the universal quantifier *olos* ('all'). As with the demonstrative, the definite article is obligatory. In a DP consisting only of *olos*, a definite article and a noun, *olos* can be initial, or less acceptably, final:

(27) a. Q   DET   N

Oles   i   penes

All.f.pl   the.f.pl pen.f.pl

'All (the) pens'

b. *Det   Q   N

I   oles   penes

The.f.pl   all.f.pl pen.f.pl

'All (the) pens'

c. *Q   N

Oles   penes

All.f.pl   pen.f.pl

'All (the) pens'

d. ?/√DET   N   Q

i   penes   oles

The.f.pl   pen.f.pl   all

'All (the) pens'

When a demonstrative is present, whether the demonstrative precedes or follows the noun, *olos* must be initial in the DP:

(28) a. Q   (DEM)   DET   N   (DEM)

Oles   (aftes)   i   penes (aftes)

All.f.pl   these.f   the   pens these.f

'All these pens'

b. *(DEM)   DET   N   (DEM)   Q

(Aftes)   i   penes (aftes)   *oles*

These.f   the   pens these.f   all.f.pl

Since *olos* must have scope over the whole construction, its surface position should be at the beginning of the nominal. It starting position though seems to be postnominal, as can also be seen in (29):[11]

(29)   a.   Q   DEM DET ADJ   N

           Oles   aftes i   paljes penes

           All.f.pl these.f the.f.pl old.f.pl pens

   b.   DEM   DET   ADJ   N   Q

           Aftes   i   paljes penes oles

           These.f the.f.pl old.f.pl pens   all.f.pl

The distribution of the quantifier *kathe* 'every'/ 'each' is more restricted. It can never occur post-nominally, as shown in (30.a, b). In this respect, *kathe* seems similar to English *every,* and functions as a real determiner, and not like an adjectival element. That is, unlike adjectival elements, *kathe* always appears with a noun, and may only precede it. With *kathe*, the definite article may also be present, though it is not required, as shown in (30c). If the article is present, then unlike *olos* 'all', *kathe* follows the determiner as in (30a):

(30)   a.   To   *kathe*   pedhi   tha   plirosi 25€ simetohi.

           The.n every   child.n   FUT pay.3s 25€ participation

           'Every child will pay 25€ for participation.'

---

[11] I discuss the syntactic properties of *oli* in 5.2.2 and 5.2.3.

    b. *To   pedhi   *kathe* tha   plirosi 25€ simetohi.

       The.n child.n every   FUT pay.3s 25€ participation

       'Every child will pay 25€ for participation.'

    c. *Kathe* pedhi tha   plirosi 25€ simetohi.

       Every child.n FUT pay.3s 25€ participation

       'Every child will pay 25€ for participation.'

As I discuss in section 5.2, the presence of the determiner with *kathe* makes a difference to the meaning. When the determiner is present, the interpretation seems more similar to the more distributive *each*. Like English *everyone, kathe* can also incorporate *enas* 'a/one' giving *kathenas.* In this case, the definite determiner is obligatory and the distributive reading is strengthened. Example (30a) thus sounds a bit odd, since it is interpreted as each person lifted a piano separately. In contrast, (30b) is perfectly fine, as each person can in fact carry a chair:

(31) a. ?O   kath-enas   sikose   to   pjano.

        The   every-one   lift.aor.3s   the.n pjano.f

        'Each person lifted the piano'.

    b. O   kath-enas   sikose   mia   karekla.

        The   every-one   lift.aor.3s   a.f   chair.f

        'Each person lifted a chair'.

Hence, it is possible that the definite article strengthens the distributivity. Consider also the following example:

(32) a. Aghorase   paghoto   ghia kathe pedhi.

        Bought   ice-cream   for   each kid

        'S/he bought ice-cream for every kid.'

      b.   Aghorase   paghoto   ghia   *to*   kathe pedhi.

           Bought   ice-cream   for   the.n   each kid.n

           'S/he bought ice-cream for each kid.'

The English translations seem to capture the exact meaning of these DPs. That is, in (30b) the presence of the determiner results in a strong distributive reading as opposed to (30a) where the determiner is absent. Therefore, the presence or absence of the determiner does in fact correspond to the each/every distinction of English marking a distinction between optional and obligatory distributivity (Beghelli & Stowell, 1997). I will return to this in Chapter 5.

Another element that can appear in a definite DP is the possessor. The possessor in Greek can be either a possessive pronominal clitic or a full independent genitive DP. The possessive pronoun attaches to the noun as an enclitic, shown in (33a), or to a prenominal adjective as in (33b). In a polydefinite nominal, the clitic usually attaches to the first nominal (whether it is a noun or an adjective), as shown in (33c), although it can also attach later, as in (33d):

   (33) a.   To   vivlio mu

             The.neu   book cl.1s

             'My book'

      b.   To   paljo mu   vivlio

           The   old   cl.1s   book

            'My old book'

      c.   To   vivlio mu   to   paljo

           the   book cl.1s   the   old

           'My old book'

d.　　To　　vivlio　to　　　paljo　mu

　　　　the　　book　the　　　old　　cl.1s

　　　　'My old book'

An independent possessive DP usually follows the noun, but if focused, it may also be prenominal. In this case, it is initial in the DP:

(34) a.　　To　　vivlio　　　　*tu*　　　　　　*Strati*

　　　　　The.n　book.n　　　　the.m.gen.　　Stratis.m.gen

　　　　　'Stratis' book'

b.　　Tυ　　　　　　Strati　　　　　to　　vivlio

　　　The.m.gen　　Stratis.m.gen　the.n　book.n

　　　'STRATIS' book'

With a full possessive DP, both determiners of possessive and possessed noun are obligatory as shown in (35):

(35) a.　<u>To</u>　　vivlio　　<u>*tu*</u>　　　　*Strati*

　　　　The.n　book.n　the.m.gen　Stratis.m.gen

　　　　'The book of Stratis/ Stratis' book'

b. *To　　vivlio　　*Strati*　　　　　　　　　(the determiner of the possessor is absent)

　　　The.n　book.n　Stratis.m.gen

　　　'The book of Stratis/ Stratis' book'

c. * Vivlio　　　　*tu*　　　　　　*Strati*　(the determiner of the matrix DP is absent)

　　Book.n　　　　the.m.gen　　Stratis.m.gen

　　'The book of Stratis/ Stratis' book'

Possessive constructions thus seem at first glance to be polydefinites. Hence, possessors will also be examined in this thesis.

1.2.2 Indefinite DPs

I now turn to an overview of indefinite DPs. In Chapter 5, I examine indefinites in more detail, considering whether they share properties with definite DPs, and in particular with polydefinites.

Indefinites in Greek are most often preceded by the indefinite determiners *kapjos* 'some' and *enas* 'a/one'. The indefinite article *enas* has been argued to function mostly as a numeral (Roussou and Tsimpli, 1994). *Kapjos* seems to be mostly restricted to animate (and preferably human) noun phrases. As shown in (36a), it may cooccur with animate nouns, but not with inanimate ones (cf. 36b).   For inanimate or mass nouns, other quantifiers are used, such as *lighi* in (36c).

(36)   a. Kapji   anthropi   / fitites
           Some.m.nom.pl   people.m.nom.pl   / student.m.nom.pl
           'Some people/ students'

       b. *Kapja   pita / kapjo vivlio   /kapja   dhendra
           Some.f   pie.f / some.n book.n /some.n.pl   tree.n.pl
           'Some pie/book/ trees'

        c. Lighi   pita   / ena   vivlio   /merika   dhendra
           Few.f pie.f / one.n   book.n /some.n.pl   tree.n.pl
           'Some pie/book/ trees'

Typically, the indefinite determiners do not have the rich inflection that the definite determiner has. Rather, their suffixal inflection is like that of adjectives, which, as we saw in 1.1, are not always overtly marked with case. Furthermore, as we will later see, they cannot occur more than once in a nominal. In this respect, indefinite Ds are unlike definite determiners.

As mentioned above, the majority of quantifiers seem to be underspecified for mass or count. They are thus possible with both mass and count. The quantifier *lighos* for instance, can be used with both mass and count nouns with a change in meaning. The quantifier *lighi* for instance means 'some' if it is used with a mass noun (e.g. *lighi pita* 'some pie'), and 'few' when used with a count noun (e.g. *lighi fitites* 'few students').

Although a slight change in the meaning of the quantifier might occur, it is their number marking that determines their use as count or mass. As shown in (37a) below, the *singular* form of the quantifier *arketos* (conveying meanings *lots, plenty, several)* is used with a mass noun, and the *plural* form with a count one (cf. 37b). If the singular form of *arketos* is used with a count noun, or its plural form with a typical mass noun, then unacceptability results as shown in (37c, d):

(37) a. Arket-i   pita
         Lot-f   pie
         A lot of pie   (Mass noun)

    b.   Arket-i   fitit-es
         Lot-m.nom.pl   student.m.pl
         Lots of/ several students   (Count)

c. #Arketos   fakelos

   Lots-of.m.nom envelope.m.nom

   'Some (large) amount of envelope'

d. #Arketa   alevria

   Lot.n.pl   flour.n.pl

   'Lots of flours'

Similarly, the quantifier *kambosos,* roughly 'some amount of' or 'some number of', is singular

when used with mass, and plural when used with count. The opposite is simply unacceptable:

(38) a. Kambos-os   kozm-os

   Some.m.nom.s   world.m.nom.s

   'Some (amount of) people'[12]

b. Kambos-i   pelates

   Some.m.nom.pl   client.m.pl

   Some (number of) clients (Count use)

c. #Kambos-os   fakel-os

   Some.m.nom.s   envelope.m.nom.s

   Some (amount of) envelope (count)

d. # Kambos-a   alevrja

   some.n.pl   flour.n.pl

   * Some (number of) flours

We can therefore conclude that singular quantifiers are used with mass nouns and are thus

categorized as mass. The same quantifiers in plural are used with count nouns and are

---

[12] Although this might not be evident in this example, the noun *kozmos* is mass, which is why it is glossed as 'world'.

categorized as such. An interesting observation is that this appears to be a property only of quantity-denoting quantifiers. The quantifier *kapjos* 'some/a' is the only quantifier that may only used with count (animate) nouns and not with mass:

(39) a.   #kapja laspi   b.   * kapjo   rizi
            some   mud   some   rice
      = # One (indef) mud/   # one (indef) rice

Indefinite quantifiers always occur pre-nominally: **fitites kapji* (students some), **pita líɣi* ('pie some'), **kosmos kamposos* ('people some'). Structurally, this suggests that indefinite quantifiers should originate in a prenominal position, i.e. in a functional projection with determiner-like properties.

Turning to adjectives, we saw that in definite DPs they can appear postnominally only if they are preceded by a definite determiner. In indefinite DPs, multiple instances of indefinite determiners are banned (cf. (40) below). Only one indefinite article can be present, and it must appear prenominally:

(40) *Enas*   kalos   (**enas*)   fititis
      A/One.m.nom   good.m.nom   a/one.m.nom   student.m.nom
      'A good student'

Since only one indefinite determiner is allowed, we might expect that postnominal adjectives would be impossible in an indefinite DP. Recall that in definite DPs, postnominal adjectives are not possible, unless they are preceded by a definite determiner. This prediction is not borne out. As can be observed below, in indefinites, bare postnominal adjectives *are* possible:

(41)   *Enas*   fititis   kalos

            A/One.m.nom   student.m.nom   good.m.nom

            'A good student'

We thus need to examine why postnominal adjectives are possible in indefinites, but not in (monadic) definites, and determine the exact syntactic positions of the elements. It might be that such examples shed some light on the case of polydefinites, or it might be that they are an indefinite counterpart of polydefinites, which has been previously referred to as *polyindefinites* (Kolliakou 2004, and later Lekakou and Szendrői 2007, 2008 and 2010).

1.3 Conclusions and some first Questions

We have seen that in definite DPs multiple instances of the definite article are possible in the same nominal giving rise to the so-called *polydefinites*. As the difference from monadic definite is the determiner, I examine its role and semantic contribution to the noun phrase, but also establish what makes its multiple appearances possible. Furthermore, one more issue that needs to be examined is whether there is a structural or semantic difference between polydefinites and 'monadic' or single definite DPs. If there is, we need to examine exactly what the difference is. Possessors are of special interest in this regard.

In addition, we have seen that the DP with the definite article is not always fully definite. When it is plural, it can also be generic, as in (3). The question raised then is what is the precise meaning of the definite article and how does it vary with number? The main question we are concerned here with is how the generic interpretation arises in such DPs. If it is caused by

plurality then perhaps the plural marking somehow renders the definiteness of the determiner inactive. Hence, generic plurals will be looked at in more detail in Chapter 4.

We have also seen that indefinite DPs have interesting properties. In some respects they seem to be similar to polydefinites by allowing postnominal adjectives; in others they seem to be very different, in that they do not allow multiple occurrences of the indefinite determiner. We will also consider indefinite articles and quantifiers, since these may cooccur with the definite article. In Chapter 5, I consider where these are generated, but also whether they may form the counterpart of polydefinites, the *polyindefinites.*

The noun itself also raises some interesting questions. We have seen that some mass nouns are pluralized without becoming count, as in (9). Furthermore, there are also mass and abstract nouns that have only a plural form and a true non-count meaning. As we will see in Chapter 3, this property is accounted for if we assume that a NumP projected above *n*P functions as the place where all nominal inflection takes place.

These are the central questions that I investigate in this thesis. In the next chapter, I present some previous analyses of the definite DP. These analyses shed some light on the questions we are looking at. However, as we will see, they miss some important generalizations. I then develop a structural analysis that will provide the basis for answering the questions I look at. Finally, I turn to an account of the polydefinite DPs.

Chapter 2   Previous Analyses

In this section, I present previous analyses of Greek definite DPs, both monadic and polydefinite. Specifically, I discuss Stavrou and Horrocks' (1987) and Panagiotidis' (2000) analyses on monadic DPs, and then focus on the analyses of polydefinite DPs primarily by Lekakou and Szendrői (2007 and later). As we will see, each of these analyses offers some initial insight into our questions and will constitute the starting point of the proposed analysis.

2.1   The structure of a typical DP

It is commonly assumed that the noun stays *in situ* (Stavrou and Horrocks 1987, Alexiadou 2005). Alexiadou (2005) states that nouns always follow the adjectives modifying them, as in (42), and concludes that Greek lacks N-raising:

(42)   To   kokkino   vivlio tu   Jani.
        The   red   book   the.gen Jani
        'John's red book'/ 'The red book of John.'

This claim is not examined any further by Alexiadou. However, we have seen in the previous chapter that adjectives may in fact follow the noun in indefinite DPs. Whether or not this postnominal position arises because the noun moves, the possibility of noun movement should be more thoroughly examined. Panagiotidis (2000) for instance, claims that the noun can raise, though according to him it does not move in every case. Specifically, Panagiotidis proposes a NumP between D and the NP and stipulates that Num has a strong nominal feature. The noun then moves to Num to satisfy the strong feature. However, he adds that the noun does not always

move. In particular, N-movement can be blocked if an adjective is present. Following Stavrou and Horrocks (1987), Panagiotidis assumes that adjective phrases merge in the specifier of NumP, where they can satisfy the strong feature on Num. When an AP merges in Spec-NumP, a Spec-Head checking relation between AP and Num is established, and N-movement is blocked. For Panagiotidis then, the noun moves only if there is no adjective in the structure.

The NumP projection seems to be necessary to account for the structure of Greek nominals. However, the claim that the noun cannot raise to Num if an AP is present is problematic. To maintain this claim, Panagiotidis has to stipulate that an adjective can satisfy the strong features of Num by merging in the specifier of Num; however, if heads initially probe into their c-command domain (Rezac, 2004), an adjective in the specifier of Num should not block movement of the noun into Num. In the analysis developed in this dissertation, the movement of the noun is consistent, eliminating the problem just described.

As we have seen in the first chapter, demonstratives may also appear in the definite DP. Stavrou and Horrocks (1987) consider the demonstrative to be itself an XP, rather than a head. They argue that the demonstrative is merged as a complement of the noun. It then either stays *in situ*, giving the order DET N DEM, or moves to the specifier of DP, giving DEM DET N. The two possibilities are shown in (43):

(43) a. O   andhras   aftos
          the.m.nom.s   man.m.nom.s this.m.nom.s
          'This man' (demonstrative *in situ*)

b.
```
              DP
            /    \
          D       NP
          o      /   \
         the   N      DemP
              andhras  /\
               man    aftos
                      this
```
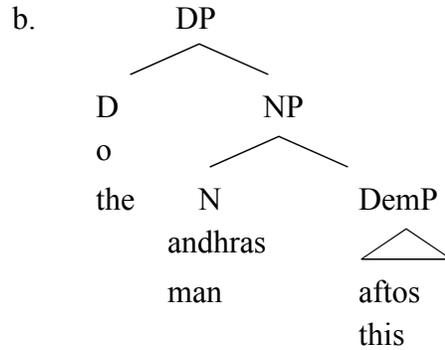
c.   Aftos   o   andhras
     This.m.nom.sgthe.m.nom.sg   man.m.nom.sg
     'This man'

d.
```
              DP
            /    \
        DemPᵢ      D
        aftos    /   \
               D      NP
               o     /   \
              the   N      DemP
                  andhras   tᵢ
                   man
```
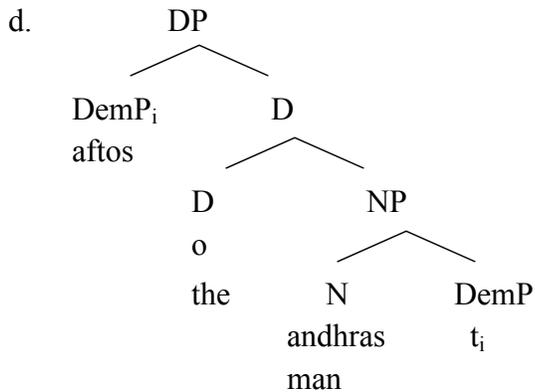
As mentioned in the previous chapter, if an adjective is present, the demonstrative can also follow the adjective, giving the order DET-ADJ-<u>DEM</u>-N:

(44)   O   neos   aftos   andhras
       The.m.nom young.m.nom   this.m.nom   man.m.nom
       'This young man'

For this order, Stavrou and Horrocks assume that the demonstrative is a sort of phrasal clitic that can attach to the right of an adjective. They also draw a parallel between wh-movement and the movement of the demonstrative. That is, parallel to wh-movement, they claim that the

demonstrative moves from the N-complement position to the specifier of DP to satisfy a strong feature on D.

A problematic aspect of Stavrou and Horrocks' analysis (1987) is the idea that the demonstrative originates as a complement of the noun. As Panagiotidis (2000) also observes, if the complement of N is where genitive arguments of the noun are merged, as Stavrou and Horrocks suggest, and if the noun θ-marks its complement, then one must ask what kind of θ-role a demonstrative nominal receives. Furthermore, the possibility of a nominal containing a demonstrative and a genitive XP with both the demonstrative and the genitive XP *in situ* cannot be explained. Finally, in a theory of grammar without right-adjunction, movement to a post-adjectival position is problematic.

Panagiotidis (2000) proposes instead, that the demonstrative is also a DP, but that it originates in spec NP rather than as the complement of N. This is shown in (45b). Notice that in this example N moves to Num:

(45) a. I   katici   afti   tis   polis
          The.m.pl.nom inhabitants   these   the.gen.f.sg   city.gen.f.sg
          'These inhabitants of the city'

b.

```
              DP
           ╱     ╲
        D           NumP
        I         ╱     ╲
       the    Num          NP
           ╱    ╲       ╱    ╲
         N    Num  DP        N'
       katici      △      ╱    ╲
     inhabitants  afti  <N>      DP
                  these katici    △
                              tis polis
                              the city
```
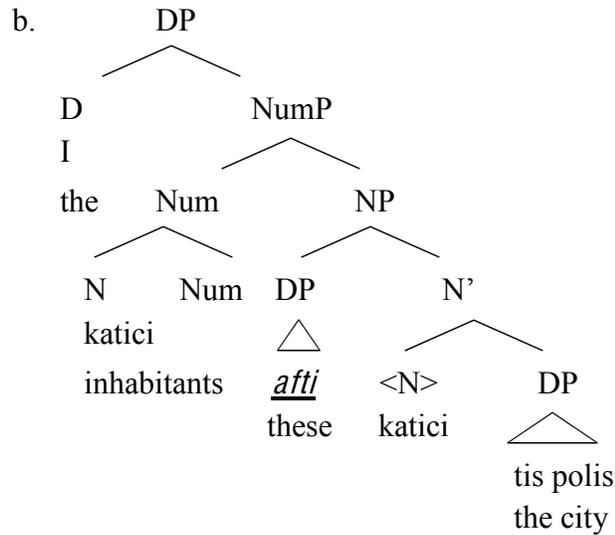
For the order where the demonstrative precedes the whole DP, Panagiotidis argues in a similar fashion to Horrocks and Stavrou that the higher D bears a strong Dei(ctic) feature. Parallel to wh-movement, the demonstrative moves to the DP-specifier to satisfy its strong feature. Finally, for cases like (44), where the demonstrative follows the adjective, he argues that the adjective in the spec NumP satisfies Num's strong feature. Noun-movement is therefore blocked, and the demonstrative ends up in a prenominal position. Panagiotidis gives the following:

(46)   a.   (Afti) i   nej   (afti) katici   tis   polis

             These the young   these inhabitants   the.gen.f.sg   city.gen.f.sg

             'These young inhabitants of the city.'

b.

```
                        DP
              _____
           (DP)              D'
            △          _____
          Afti        D         NumP
         (These)      i      _____
                     (the) AP        Num'
                          △      _____
                        nej    Num        NP
                       (young)        _____
                                   (DP)          N'
                                    △        _____
                                  (afti)    N        DP
                                  (these) katici      △
                                      (inhabitants)  tis polis
                                                     (the city)
```
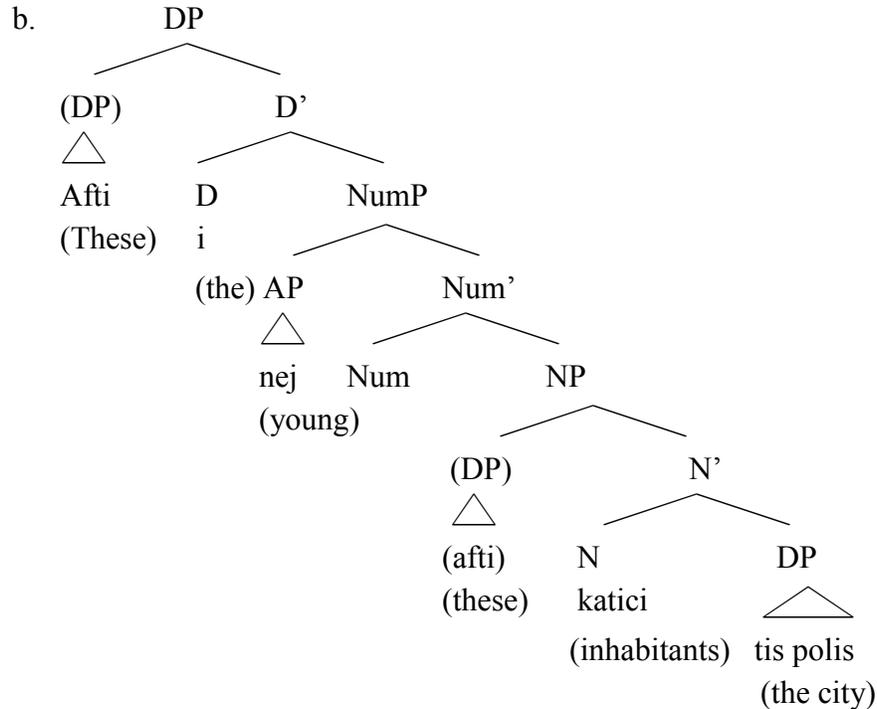
Here, I adopt Panagiotidis' view that the demonstrative should not originate as a complement of the noun. If *aftos* were the complement of the noun as Horrocks and Stavrou argue, then it is not clear where real complements would go. The example in (47) is like (45) above in showing that real complements are possible when the demonstrative is present. In this example, the genitive *avghon* 'eggs' is the theme-complement of the nominalized root *vafi* 'dye'/ 'coloring'. As can be observed the demonstrative *afti* can be present, too:[13]

(47) Afti   i   vafi   avghon
      This.f   the.f.nom   dye.f   egg.pl.gen
      'This egg dye'

According to the Single Complement Hypothesis (Larson 1988), standardly assumed since then, there can be only one complement. Since both the demonstrative *afti* and the genitive

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[13] See Chapter 3 for a detailed discussion of such genitive constructions.

complement *avghon* can be present, this example suggests, as (45) does, that the demonstrative is not the complement of the noun.

On the other hand, Panagiotidis' claim that the demonstrative originates in spec NP needs to be further examined. This claim accounts for cases where the demonstrative appears after an adjective. Interestingly however, such constructions are not very productive. In fact, the demonstrative can only follow certain adjectives, namely those that seem to act as nouns. As shown below, with regular adjectives this order is not possible:

(48) *I   palji   afti   katici
      The.m.pl.nom   old.m.pl.nom these.m.pl.nom   inhabitant.m.pl
      'These old inhabitants of the city.'

The adjective *paljos* can only refer to a property of an object. That is, unlike *neos* 'young', it cannot be interpreted as a nominal, e.g. *an old person*. For such an expression, the nominal *gheros* 'old man' would be used instead.

In other words, adjectives like *paljos* do not appear on their own. Adjectives like *neos* ('young'/ 'young man') on the other hand, seem to have nominalized. They are freely used as nouns and usually appear on their own. More support is provided by other real adjectives below. As shown, here the demonstrative cannot follow them either:

(49) a. ?/*To   *strogilo*   afto   avgho
          The.n round.n   this.n egg.n
          'This round egg'

      b. ?/*To   *metaliko* afto   molivi
          The.n   metal.n   this.n   pencil.n
          'This metal pencil'

c.   ?/*O   proighumenos   aftos   proedhros

      The.m.nom.s   former.m.nom.s   this.m.nom.s   president.m.nom.s

      'This former president'

d.   ?/*Ta   meghala   afta   xamoghela

      The.n.pl   big.n.pl   this.n.pl   smile.n.pl

      'These big smiles'

In contrast, the smaller class of nominalized adjectives can be followed by the demonstrative:

(50) a.   O   *mikros*   aftos   (edho)

      The.m.sg   little.m.sg   this.m.sg   here

      'This little one (/the little one over here)'

b.   I   *neari*   afti

      This.f.sg/m.pl young.f.sg/m.pl   this.f.sg/m.pl

      'This young woman'/ 'These young people'

c.   I   ghries   aftes

      The.f.pl   old.f.pl this.f.pl

      'These old women'

It therefore seems that demonstratives cannot in fact follow a true AP, but rather must precede it. In examples like (50), the preceding D+Adjective forms a DP and, as we will see later, the demonstrative modifies it non-restrictively. Regular DPs allow postnominal demonstratives, as shown in (51):

(51) to   mixanaki   afto
      the.n bike.n   this.n
      'This bike'

I will follow Panagiotidis in assuming that Greek DPs contain a number phrase between D and N. In contrast to his analysis though, I will argue that the adjective always adjoins to the NumP, whose head can be occupied by the moved noun. For the demonstrative, I adopt Stavrou and Horrocks' assumption that it is an XP. Unlike their analysis though, I assume with Panagiotidis that it is generated prenominally. As we will see in Chapter 3, the demonstrative does not originate in an argument position within the noun phrase. It is thus neither a complement nor a specifier, but rather an adjunct; i.e. a restrictive or a non-restrictive modifier. Before we turn to this analysis though, let us now consider some of the more influential analyses of definite DPs with multiple instances of the definite determiner.

2.2 The definite article and its multiple instances

In this section, I discuss previous accounts of polydefinite constructions (term due to Kolliakou 2004), also known as *Determiner Spreading* (Androutsopoulou, 1995). As was briefly shown, in polydefinite constructions, each adjective and noun is paired with a preceding determiner. A simple polydefinite, i.e. one that consists of one extra determiner and an adjective, has two possible word orders: (i) one where the D+Adj sequence precedes the determiner of the noun, giving <u>Det-Adj</u>-Det-N; and one which the determiner and the adjective follow the noun giving Det-N-<u>Det-Adj</u>.

A polydefinite DP may contain more than one Det+Adj pair. In such cases, all possible orderings may arise, as shown in (52) from Alexiadou and Wilder (1998):

(52)   'the big red book' in DS
   a.   *the big the red* the book   to megalo to kokkino to vivlio
   b.   *the red the big* the book   to kokkino to megalo to vivlio
   c.   *the big* the book *the red*   to megalo to vivlio to kokkino
   d.   *the red* the book *the big*   to kokkino to vivlio to megalo
   e.   the book *the red the big*   to vivlio to kokkino to megalo
   f.   the book *the big the red*   to vivlio to megalo to kokkino

Unlike monadic DPs, which contain only a single determiner and in which adjectives must be prenominal, polydefinites exhibit a remarkable flexibility in the word order. In contrast to (52), the only possible word-order for the corresponding monadic DP is the one in (53a). As shown in (53b), the order of the adjectives seems to be fixed too:

(53) a. To   megalo kokkino vivlio
         The   big   red   book

     b. *To   kokkino   megalo vivlio
         The   red   big   book

Androutsopolou (1995) was the first to discuss the phenomenon of polydefinites, which she characterized as *determiner spreading*. In her analysis, the multiple determiners are taken to be instances of functional heads within the DP projection, which she calls Def°, for definiteness. Def° is optionally projected above NP and AP and hosts formal agreement features, i.e. ɸ-features, Case and definiteness. These are spelled out by the relevant form of the article. Crucially, the articles under Def are 'expletive'. The only article interpreted semantically is hosted by the highest head in the extended projection of N. Note that D itself contains no overt determiner:

(54)   Androutsopoulou's proposed structure for polydefinites

```
                    DP
             ╱            ╲
          D                DefP
          Ø            ╱          ╲
                     Def           AP
                     the      ╱         ╲
                            A             DefP
                           big        ╱         ╲
                                    D               AP
                                   the         ╱        ╲
                                             A            DefP
                                            red       ╱         ╲
                                                    Def           NP
                                                    the          ╱╲
                                                                book
```
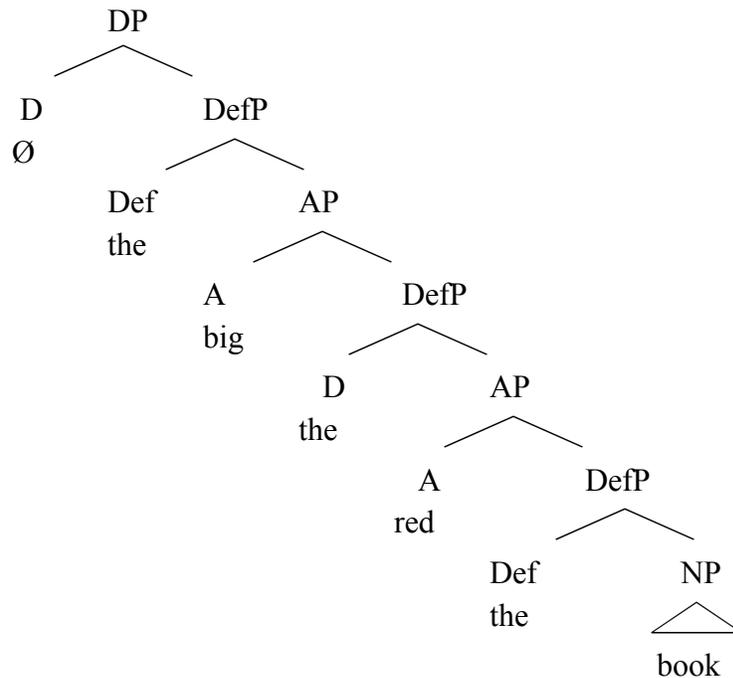
By means of pied-piping and/or single movements to the specifier of DefP, the different possible orders are then derived. However, it is not evident what drives movement. Furthermore, as Alexiadou and Wilder (1998) argue, there is a problem with treating adjectival modifiers in DPs as heads, as shown in (54). Greek allows complex APs containing head-complement structures, in pre-N as well as post-N position:

(55)   a. i [periphani ja   to jo tis]   mitera
           the proud   for   the son her   mother

       b. i   mitera   i [periphani   ja   to   jo   tis]
           the mother   the proud   for   the   son   her

Indeed, the analysis of both types of DP, monadic and polydefinite, must account for the possibility of modification by phrasal APs.

Secondly, although a DefP seems to be relevant to these constructions, it is clear what regulates this type of spreading, or whether spreading is the actual process that takes place. As we will see, in line with Kolliakou (2004) and Lekakou and Szendrői (2007, 2008, 2010), the determiner and the adjective signal the existence of a whole DP. That is, we do not have spreading here, but modifying DPs.

Third, Androutsopoulou (1995) assumes that determiner spreading only shows up in definite DPs. Alexiadou and Wilder (1998) claim that this is not true, as it appears that the word order in indefinite DPs mirrors that of polydefinites:

(56) a. a big red book   ena megalo kokkino vivlio
      b. a big book red   ena megalo vivlio kokkino
      c. a red book big   ena kokkino vivlio megalo
      d. a book red big   ena vivlio kokkino megalo
      e. a book big red   ena vivlio megalo kokkino

They suggest that one way to account for this is to assume that Def may also be present when D hosts an indefinite article, differing presumably in the value of the 'definiteness' feature. In such a case, not only D but also all instances of Def° would be phonologically empty. Although a DefP in the indefinite could help in maintaining Androutsopoulou's analysis, there is no independent motivation for such a projection in indefinites.

A final issue with Androutsopoulou's analysis is that she maintains that there is no difference in meaning or use between monadics and polydefinites. But we will see that this is not the case. Polydefinite constructions exist for a reason, and this is to convey certain meanings as well as reveal certain functions of the definite determiner.

Turning now to Alexiadou and Wilder's (1998) account of polydefinites, the structure they propose is the one proposed for reduced relatives by Kayne (1994). They argue that the adjective is the predicate of a clausal complement of the D head of the DP, with the noun phrase being treated as the subject of this clausal complement and thus occupying the specifier position in IP, as in (57a). Monadics, on the other hand, have the standard DP structure shown in (57b). This structure is also found in the embedded DP to *podhilato* 'the bike' in (57a). Their analysis assumes obligatory movement of the adjective to [Spec, CP], to block ill-formed strings such as **to to podilato kokkino* (the the bike red).

(57)   a. [$_{DP}$ To [$_{CP}$ kokkino$_i$ [$_{IP}$ [$_{DP}$ to [$_{NP}$ podhilato]] t$_i$]]]

               The   red   the   bike

        b. [$_{DP}$ To [$_{NP}$ AP kokkino [$_{NP}$ podhilato]]]

               The   red   bike

Based on their description, the resulting structure of (57a) seems to be something along the lines of (58):

(58)

```
                    DP
              _____|_____
             D            CP
             To        ____|____
             the     APᵢ          IP
                    kokkino    ____|____
                    red       DP         ___|___
                         _____|____     I      tᵢ
                        D        NP
                        to      /\
                        the    podhilato
                               bike
```
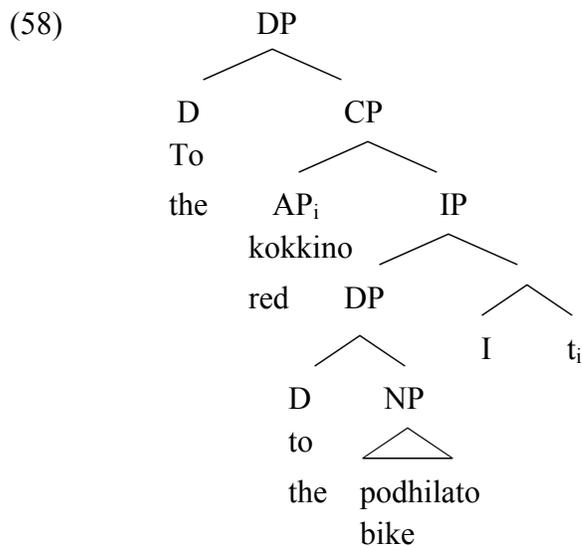
As in Androutsopoulou's analysis, polydefinites are claimed to have no special semantic properties (Alexiadou & Wilder, 1998: 304). The treatment of polydefinite adjectives as

predicates is primarily motivated by the distribution of non-intersective adjectives such as *ipotiθemenos* 'alleged'. These adjectives cannot occur in predicative positions, and they are also excluded from the polydefinite construction:

(59) a. O   ipotithemenos (*o)   dolofonos
          The   alleged   (*the) murderer
          'The alleged murderer'

      b. *O   dolofonos   itan   ipotithemenos
          The   murderer   was   alleged

Indeed, polydefinite constructions only allow intersective adjectives. However, this constraint follows directly from the properties of polydefinite constructions. As I argue in Chapter 3, the reason only intersective adjectives are allowed in polydefinites is that they may function as nouns. These adjectives form along with the determiner form a modifying DP, and in effect a polydefinite. Non-intersective adjectives though lack this property and thus they may not appear on their own.

Furthermore, it is not clear what triggers the obligatory movement of the predicative adjective to [Spec, CP] in Alexiadou and Wilder's analysis. In addition, Alexiadou and Wilder posit two distinct structures for DPs: a clausal structure for polydefinites, and the typical nominal structure for single DPs. With respect to this, Kolliakou argues that it is not clear what would prevent a Kayne-style DP from occurring inside a polydefinite in place of a standard modification structure. Finally, it is not clear in this analysis why the CP would be selected by a determiner. Overall, this analysis relies on a number of unexplained stipulations, such as assuming that Ds take verb-less clauses as their complement.

Campos & Stavrou (2004) present a similar predicative analysis as shown in (60):

(60)

```
              DP
           ╱      ╲
         D          FP
      I pena_i    ╱    ╲
      The pen   F       PredP
                      ╱      ╲
                   Spec       Pred'
                   pro      ╱      ╲
                          i_i       AP
                          the    asimenja
                                 silver
```
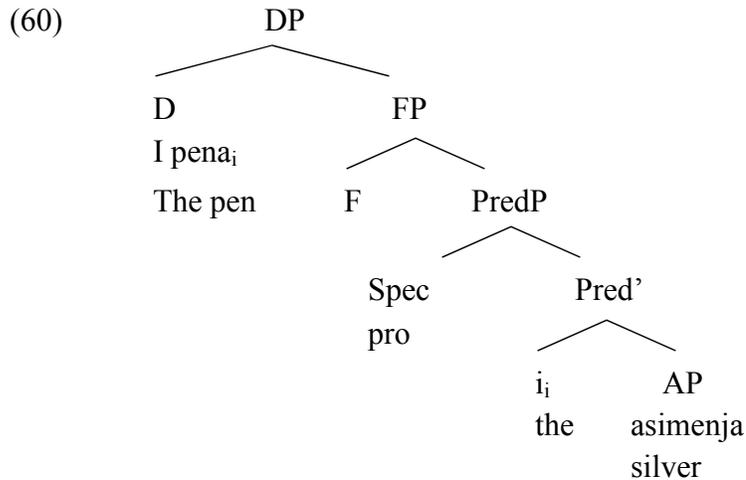
Campos and Stavrou (2004) take Det+N in polydefinites to form a complex head originating in D. The reason they resort to such a claim is that not many elements, if any, can intervene between the determiner and the noun. They also assume an agreement projection FP as the complement of D. This corresponds in some respects to the Number Projection used in the analysis proposed here. FP takes PredP as its complement. The head of PredP is occupied by what they call an *adjectival* definite article. It is anaphorically linked to the lexical subject of the predication, i.e. the complex D head. The subject of the DP-internal predication is *pro*, a silent pronoun licensed by the definite article of Pred^0 under spec-head agreement. *Pro* receives its descriptive content from the noun in D. They argue that *pro* may be spelled out as a demonstrative, giving a polydefinite sequence Det-N-Dem-Det-Adj.

Although this analysis highlights some interesting facts about the polydefinites, it also has shortcomings. First, the claim that Det+N form a complex head is not adequately argued for. It is mysterious why the noun in polydefinites is generated under D. The structure suggests that this noun is different from those found in regular DPs, but no evidence is given for the difference. Also, the fact that not many elements can intervene between D + N does not necessarily imply

that Det+N forms a complex head, specifically a complex D head. The noun does not display any inherent D properties, and nothing suggests that Det+N form a single lexical item.

In addition, the PredP adds further complication to the account. First, the assumption that FP and thus PredP is a complement of [D+N] is problematic for the cases that a real complement of the noun is present.[14] Such cases cannot be account for under this assumption. Moreover, the co-indexing between [D+N] and the head of PredP as well as the mechanism accomplishing it is unclear. Furthermore, the fact that the demonstrative can be found in the polydefinite, giving orders such as Det-N-Dem-Det-Adj, does not demonstrate conclusively that *pro* is present or indeed that there should be such a structural position available altogether. If the structure in (60) is correct, then the sequence Dem-Det-Adj should form a constituent. However, we have seen that the demonstrative can appear in other positions, giving orders like <u>Dem</u>-Det-N[Det-Adj] and [Det-Adj]-<u>Dem</u>-Det-N. It is not clear how such orderings can be derived from the structure in (60). Notice further, that a genitive can also intervene between the demonstrative and Det-Adj, as shown in (61a), or between the Det-N and Det-Adj sequences when the demonstrative is in initial position as in (61b):

---

[14] E.g. I   vafi   avghon tis   Stellas
        The   dye   egg.gen.pl   the.gen Stella.gen
        'Stella's egg dye'

Such examples are indicators that the bare genitive *avghon* 'eggs' is the internal complement of the noun. I discuss these in detail in 3.1.1.

(61) a. To   vivlio [afto   *tis   Stella*s   to   kokkino]
          The.n book.n this.n the.gen Stella.gen   the.n   red.n

      b. Afto   to   vivlio *tis   Stella*s   to   kokkino
          This.n the.n   book.n the.gen Stella.gen   the.n   red.n

      'This book of Stella's, the red one'

It thus does not seem to be true that that Dem/*pro* forms a sequence with Det-Adj. Consequently, Campos and Stavrou's analysis also is not without drawbacks, either.

Kolliakou (2004), and Lekakou & Szendrői (2007, 2008, 2010) take a different view of polydefinites.[15] Assuming an HPSG approach, Kolliakou first made a distinction between monadic and polydefinite nominals and discussed the pragmatic import of polydefinites as well as their morhosyntactic properties. Crucially, Kolliakou also noted the restrictive reading that the polydefinite may involve.

Building on Kolliakou's work, Lekakou & Szendrői further argue that polydefinites are an instance of close apposition and that they involve an obligatorily restrictive interpretation. In a more semantic view, Lekakou & Szendrői (2008, 2010) argue that the polydefinite involves a big DP consisting of two DPs with an instance of noun ellipsis. The definite article itself is argued to be an expletive, since it obligatorily appears with proper names. More generally, they claim that all definite determiners in Greek are semantically expletive, and do not yield an individual. For them, the semantics of D in Greek is the identity function: whatever is its input will also be its output. The source of semantic definiteness, i.e. the uniqueness presupposition, is located in a

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[15] The technical details in Kolliakou's HPSG analysis (2004) are not relevant here.

distinct, phonologically null functional head, Def, which c-commands and scopes over DP. Lekakou & Szendrői thus propose that in languages with expletive determiners there is a Def-D split. They attribute the Def-D split to the existence of morphological case in the language.

In particular, they assume that the highest member of the extended nominal projection is Kase. For them Kase is responsible for marking the nominal as an argument of the clausal predicate. Under this view, the definite article renders a nominal element argumental (i.e. type e), while Kase is responsible for marking it as such for the clausal predicate. But in some languages the two roles are performed by a single, fused functional head, i.e. K+D. Whether a particular language has fused K+D or separate K and D heads depends on the presence of case morphology. If a language has case morphology, K and D project separately. They argue that a child learning Greek establishes that the language has morphological case marking, and thus will infer that Kase projects separately from D.

The child also realizes that proper names take determiners obligatorily. This, for Lekakou & Szendrői, counts as evidence for distinguishing the source of semantic definiteness from the phonologically realized D head. The child thus concludes that the overt realization of the definite article is semantically inert. For Lekakou & Szendrői (2010), it then follows that the obligatory presence of the definite determiner on proper names triggers a Def-D split. The [+definite] feature with its associated semantics is elsewhere, on a separate, higher projection, Def. Based on their view, the proper name in (62a) should have the structure in (62b):

(62) a. *(O) *Janis* eftase stin   ora   tu

          The   John   arrived on-the time his

          'Janis arrived on time.'

(Lekakou & Szendrői, 2010: 13)

b.
```
            KP
           /  \
          K    DefP
          ∅    /  \
             Def    DP
             ∅     /  \
                  D    NP
                  O    △
                     Janis
```
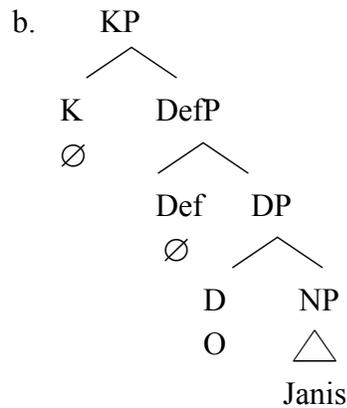
They take proper names to be of type e, inherently bearing the feature [+definite], so definiteness cannot be contributed by the definite determiner. To account for the cases where the proper noun appears in predicative contexts without a determiner, they assume a type-shifting operation which changes the argument to a predicative noun.

To account for restrictive polydefinites, which they call Close Appositives (CA), they argue for a process of identification of Referential roles, as in Williams (1981, 1989). This identification takes place under sisterhood, and the result is interpreted as an intersective set:[16]

(63)   DP1, 2 [R1 = R2]
         /   \
    DP1[R1]   DP2[R2]

---

[16] Adopting Lekakou and Szendrői's claims, Velegrakis (2011) builds further on their analysis. However, as we will see next, Lekakou and Szendrői's analysis runs into problems since further examination reveals that the referent noun and the modifying DP must be treated as structurally asymmetrical.

The higher DP refers to an entity that belongs to the intersection of the two sets designated by the smaller DP subparts. This entails for them that the DP in Greek is of the predicative type <et> and not <e>, until Def turns it into an argument. If they are correct in assuming that only Greek has polydefinites, the question that arises for them is why. They conclude from this without much discussion that a language with morphological case and obligatory determiners on proper names is predicted to have polydefinites.

To sum up, Lekakou and Szendrői's analysis sheds some light on the properties of polydefinites, as well as monadic DPs. Importantly, they point out that a split is involved in D. Although the split is in definiteness, as we will see in the next chapter, this split is directly related to polydefinites. Furthermore, Lekakou and Szendrői recognize the restrictive properties of polydefinites, as well as the intersection that should be involved between the modifying DP and the modified noun, which also accords with what Heim and Kratzer (1998) have argued for. In sum, Lekakou and Szendrői's analysis makes some important contributions. However, there are also questions that now need to be addressed.

First, it is not clear why close apposition should involve identification of referential roles. The assumption of sisterhood between restrictive modifying DPs and the nominals they modify is contra previous analyses of restrictive relative clauses and other nominal modifiers that assume that restrictive modifiers are lower modifiers (see Heim and Kratzer 1998 for some discussion on this topic). Both restrictive DPs and relative clauses modify the noun in the same way and this should be captured uniformly in the structure.

Furthermore, as shown in (63), Lekakou and Szendrői make the assumption that the two DPs are

sisters. However, if the two DPs are structurally identical, we would expect that either the

restrictive or the matrix DP could be the head. This is not the case. Consider the polydefinite

nominal in (64):

(64) a. I   falena   to   thilastiko   ine   terastia.
         The.f.nom   whale.f.nom the.n mammal.n   be.3s huge.f
         'The mammal whale is huge.'

      b. *I   falena   to   thilastiko   ine   terastio.
         The.f.nom   whale.f.nom the.n mammal.n   be.3s huge.n
         'The mammal whale is huge.'

In Greek, *thilastiko* 'mammal' is a nominalized adjective, not a pure noun like the English word

'mammal'. As shown, the adjective for 'heavy' may only agree with the female noun *falena*

'whale' as in (64a), but not with the neuter nominalized adjective *thilastiko* 'mammal' as shown

in (64b).[17]

These agreement facts show that the DP containing the determiner and the adjective and the DP

containing the overt noun are not in a sisterhood relationship. If that were the case, the adjective

should be able to agree with either DP, since either the adjective or the overt noun would be the

matrix head of this whole construction. Since it only agrees with the DP containing the overt

noun, it follows that the relation between the two DPs is asymmetrical.

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[17] Note that in (64) the nominalized adjective *thilastiko* 'mammal' is interpreted as a modifier to the noun, in which case, it may not precede the modified noun. As we will see in Chapter 4, modifying nominal with overt head nouns may not precede the modified noun, but only follow it.

This asymmetry can only be accounted for under an analysis that is similar to that of relative clauses, which structurally captures the asymmetric c-commanding relation between the matrix and adjectival DP.

I will argue against their claim that all definite articles are expletives. Briefly, the evidence they provide is based on the observation that proper names are always preceded by the definite article. However, the fact that the definite article appears with proper names does not in and of itself show that the article is an expletive. It might be for instance that proper names in Greek are of <et> type, as suggested for proper names by Longobardi (1994) and later Ghomeshi and Massam (2009). Some evidence for this can be provided from the fact that both proper names and count nouns may appear bare, such as in vocative case, and predicative positions. This possibility suggests that proper names are indeed predicates and that the determiner turns them into arguments. Under this view, the determiner makes a semantic contribution. Lekakou and Szendrői argue against this possibility, and claim instead that it is the predicative noun that type-shifts to become an argument. Such a claim though cannot be maintained. Rather, such cases clearly show that the determiner is not semantically an expletive.

A further question that needs to be examined is how the definite article differs from the indefinite article. We will also see that there is a difference in meaning between polydefinite nominals and their monadic counterparts, an aspect that is not discussed by Lekakou and Szendrői. As the only difference in form between the two types of the DPs is the presence or the absence of the definite determiner, it appears that the definite determiner does make a semantic contribution, and is thus not simply a place holder. In particular, I will argue that the determiner introduces a modifying DP whose noun is covert. We will also see that the determiner does mark definiteness, i.e. the modifying DP involved is definite. More evidence on this is provided by the fact that in other

cases the modifying DP can in fact be indefinite, in which case an indefinite article is present. Furthermore, I argue that the definiteness marked by the Greek definite article is underspecified, and it thus can appear with proper names.

I also do not adopt the claim that the presence of the determiner in Greek is forced by a need to spell out case overtly. Such a claim would wrongly predict that indefinite DPs should always appear with a fully inflected determiner to spell out case. Indefinite DPs though are not always headed by a determiner, and furthermore, the indefinite determiner does not display the rich inflectional marking of the definite determiner.

I will thus propose an account of polydefinites that does not claim the polydefinite DPs in Greek are unique. I will show that such constructions are a property of language in general, but that the ways they are spelled out may differ cross-linguistically. We begin by taking a closer look at the definite DP.

Chapter 3   Definite DPs

Greek definite DPs can be divided into two types: the monadic DP with a single definite determiner; and the polydefinite DP, where the definite determiner occurs more than once. After a thorough examination of both types, I present the initial proposal of this thesis and then turn to an account of the properties of monadic and polydefinite DPs.

We have seen that the definite article may appear in a variety of environments, not all of which are obviously definite. The article can carry the main nominal inflection, i.e. case, gender and number, spelled out as a portmanteau suffix. I claim, contra some previous analyses, that the inflection is not so essential as to force the definite article to be inserted. If inflection were so crucial, then all DPs, definite and indefinite ones, should require a determiner spelling out the inflection, which is not the case. However, bare nouns are also possible in object position, with no element spelling out a richer inflection. Inflection thus does not appear to play such crucial role resulting in the insertion of the definite article. Regardless of inflectional marking, the view supported here, is that the definite article does mark definiteness.

Turning to the structure, I propose that the noun moves higher, to NumP. This movement allows us to adopt the common assumption (Ritter 1991) that the possessor, which usually appears post-nominally, is generated in the specifier of nP. I argue that the possessive clitic and the full DP possessor originate in the same structural position.

The assumption that the noun moves out of nP to NumP has consequences for the structural position of adjectives, which are almost always prenominal. Adjectives must therefore originate higher than the number phrase, possibly as adjuncts to it. It thus appears that adjectives, whether

intersective or not, have the same prenominal position. Unlike Alexiadou (2005), I do not assume that the adjective moves. Rather, it is the noun that moves, and the adjective stays *in situ*. Evidence for this comes from genitives, and from bare noun complements (Section 3.1.1). These clearly show not only that the noun moves, but that the movement is in fact phrasal.

Turning to the polydefinite modifiers, and parallel to Lekakou and Szendrői's distinction between 'close' and 'loose' appositives, I distinguish restrictive polydefinites from (loose) appositives. Like Lekakou & Szendrői (2007, 2008 and 2010), I argue that the polydefinite modifier is a DP. Focusing on the restrictive polydefinites, I further propose that they involve an acategorial root which is merged with *n*. This way the modifying DPs are predicted to be prosodically 'small', disallowing other elements to appear in it. This property is shown here to be a characteristic property of restrictive modifying DPs.

However, my analysis differs from theirs in that the different orderings give rise to different meanings. When a polydefinite modifier is prenominal, it is always restrictive. If it is postnominal, on the other hand, it is ambiguous between a restrictive and an appositive non-restrictive reading. I propose that the restrictive polydefinite has the same merge position whether it is prenominal or postnominal, i.e. as an adjunct to the nP, since, as opposed to bare APs, they can be postnominal (see structure (65) below). In this analysis, the head noun moves past the polydefinite modifier to derive the postnominal order. Hence, contra Lekakou & Szendrői (2008), the restrictive DP is not a complement but an adjunct, whose interpretation is based on that of the matrix noun. The occurrence of multiple restrictive DPs is also explained. In contrast to complements, multiple adjuncts are possible. Finally, these pattern more like adjuncts, i.e. that they can be omitted without making the meaning incomplete.

Restrictive DPs in a prenominal position are always focused, either informationally or contrastively. I therefore propose that prenominal restrictive DPs have moved to a FocP. Non-restrictive modifiers are not focused and thus cannot appear prenominally. Under this view, the fact that the prenominal polydefinite is unambiguously restrictive is derived from its structural position, the specifier of FocP. I will argue for a structure roughly as in (65). In this example, there is a restrictive DP, *to kenurjo* 'the new one', and a bare regular adjective *kokkino* both modifying *podhilato* 'bike':

(65) a. To   kenurjo   [to   kokkino   podhilato]

      The.n   new.n   the.n   red.n   bike.n

      'The new red bike'

b.
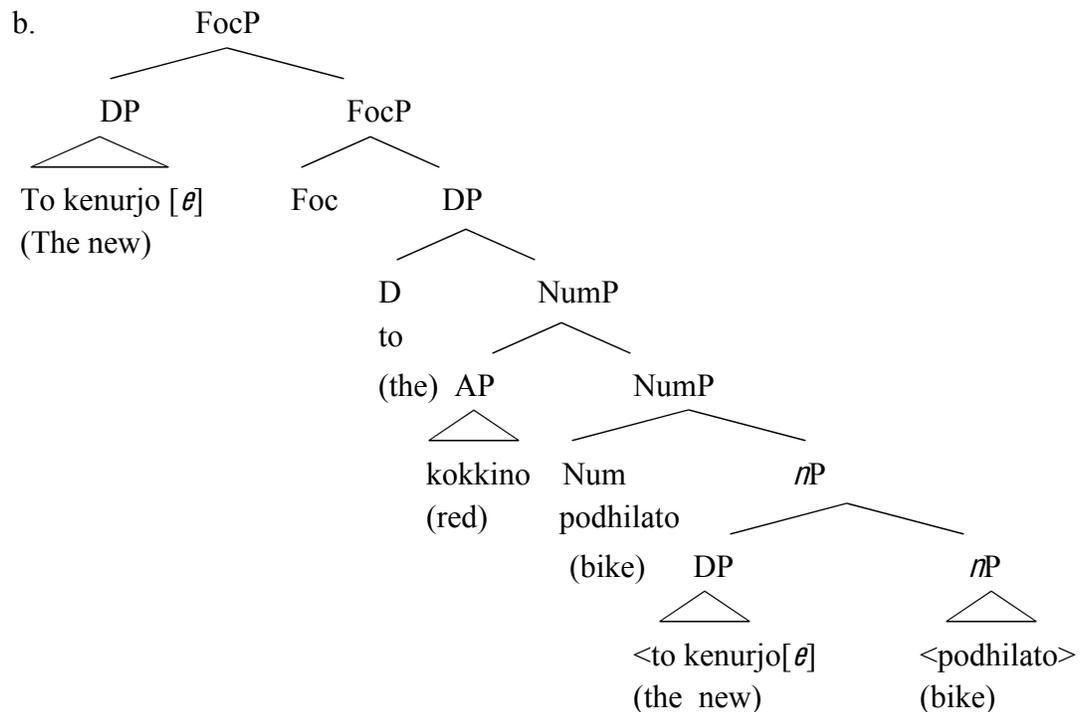
Briefly, the noun raises to Num, as this is where inflection in Greek nominals takes place. The modifying nominal *to kenurjo* 'the new (bike)' adjoins to *n*P, and stays in situ if it is

postnominal. If it is prenominal, it raises to the specifier of FocP. The bare AP on the other hand, is always prenominal, and thus adjoins no lower than NumP.

This chapter is organized as follows: First, I look at monadic definite DPs and genitives (section 3.1). These provide evidence for movement of the matrix noun, and for the proposal that the adjectives adjoin higher in Greek than they do in English. I also consider demonstratives in this section as they appear in definite DPs. As we will see, though, demonstratives are best viewed as polydefinite modifiers. In section 3.2, I turn to polydefinites. I show that these are of two kinds, restrictive and non-restrictive. Focusing on the restrictive ones, I examine their properties and develop an analysis of their internal structure, and their structural position in the larger nominal phrase.

I then show that these restrictive nominals are not the only type of modifying nominal. There are many other types that closely parallel polydefinite constructions. Hence, the term *polydefinites* takes on a broader meaning: definite nominals modified by other definite nominals, restrictively or not. Finally, I present a unified account that derives these and other properties.

3.1. Analyzing monadic definite DPs

In this section I look at definite DPs with a single determiner, also known as monadic DPs (Kolliakou 2004). Working upwards from the noun, I determine the position of the noun itself, the possessors, the adjectives and the determiners.

Following Borer (2005), I assume that nouns are underspecified for mass or count. As Borer argues, in the syntax count nouns can be turned into mass and mass nouns can be turned into

count depending on whether or not a number phrase projects above the *n*P. In Greek too, count nouns can be turned into mass, and vice versa. As shown below, a normally count noun like *kotopulo* 'chicken' can be used as mass in (66a). On the other hand, (66b,c) show also how normally mass nouns can also be used as count.

(66) a. Exi   poli/   boliko *kotopulo*   stin   katsarola.
          Has.3s a-lot/ much.n chicken   in-the pot
          'There is lots of chicken in the pot.'

      b. I   *eleftheries*   ton   *laon*
          The.pl.f   freedom.mass.pl.f   the.gen.pl   folk/people.mass.gen.pl
          'The (different kinds of) freedoms of all people'

      c. ta   xionja/   ena   alati/ ola   ta   krasja
          the.n.pl snow.n.pl/   a.n   salt.n/ all.n.pl the.n.pl wine.n.pl
          'the snow' (mass/count reading) / 'a salt'(count reading) / 'all the wines' (count reading)

Similar to English thus, Greek nouns can be used either as mass or count nouns. Turning to the analysis, I assume that the noun starts off in NP but then moves and merges with little *n*.[18] Following Ritter (1992), Borer (2005) and Cowper (2005), I further assume that a number projection merges next. In Greek, the noun moves to Number. Following Abney (1987), I assume that determiners occupy their own extended functional projection, a DP:[19]

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[18] I will show in section 3.1.1 that this movement is phrasal, i.e. it is actually the NP that moves, not simply the head N.

[19] See Matthewson (1998) and Wiltschko (2009) for more on determiners.

(67)   a.   Vivlia
            Books

   b.   NumP

        Num   *n*P
        vivlia
        (books)   *n*   NP
              <vivlia> |
                                 N
                             <vivlia>
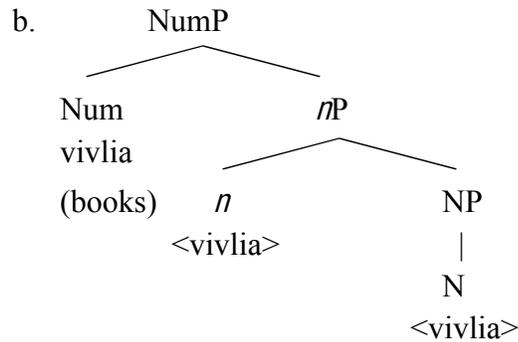
Evidence that the noun moves higher than *n*P comes from genitive nominals. Although I consider these in detail in the next section, I take a brief look at them here, as they determine where the noun is found in the structure.

Typically, possessors appear post-nominally, unless they are focused (Horrocks and Stavrou, 1987). This is true for both possessive clitics and full DP possessors[20]:

(68) a.   To   vivlio   *mu*
          The.n   book.n   cl.gen.1s
          'My book'

   b.   To   vivlio   *tis*   *Stellas*
        The.n   book.n   the.f.gen.   Stella.f.gen
        'Stella's book'

---

[20] Notice that when the clitic is prenominal, the possessive adjective *dhiko* must be present. The clitic can then cliticize onto it. I look at these constructions in more detail next.

c. TO   DHIKO MU   to   vivlio

the.n   own.n cl.gen.1s   the.n book.n

'MY book (not John's)'

d. TIS   STELLAS   to   vivlio

The.f.gen   Stella.f.gen   the.n book.n

'STELLA'S book (not John's)'

Examples like these suggest that the possessor originates in a post-nominal position that may raise to a Focus Phrase when it is prenominal. Considering its post-nominal merge position, the possessor cannot be the complement of N. As we have seen earlier in (47), repeated below as (69), a thematic complement can also be present:

(69)   I   vafi   *avghon*   tis   Stellas

The   dye   egg.gen.pl   the.gen Stella.gen

'Stella's egg dye'

Here, the bare genitive *avghon* 'eggs' is the true complement of the nominalized root *vafi* 'dye'. Since a true complement – also genitive – can be present, the possessor, which is in this case the agent of *egg-dye,* must originate no lower than the specifier of NP. I will adopt the common assumption that possessors originate in spec *n*P as shown in (70).[21] Keeping for now to the assumption that N moves by head movement to get the unmarked order, the noun must move past the possessor to the head of NumP.[22] This movement takes place successively from N to *n* and then to Num, deriving the post-nominal position of possessors:

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[21] See Ritter (1991) and Adger (2003) for more on this view of possessors.

[22] If the whole NP moved, it would move to spec NumP.

(70) a. To   vivlio *tis*   *Stellas*

   The.n book.n the.gen.f   Stella.gen

   'Stella's book'

b.
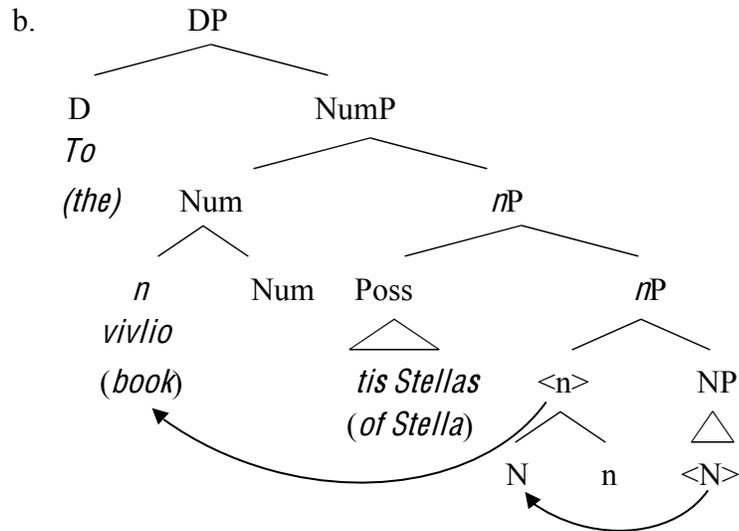
Let us consider now the position of the adjectives. As in English, adjectives in definite noun phrases are always prenominal. If they are postnominal ungrammaticality results:

(71) a. Ta   freska/   kokkina/   megala   triandafila

   The.n.pl   fresh.n.pl/   red.n.pl/   big.n.pl   rose.n.pl

   'The fresh/red/big roses'

b. *Ta   triandafila   freska/   kokkina/   megala

   The.n.pl   rose.n.pl   fresh.n.pl/   red.n.pl/   big.n.pl

   'The roses fresh/red/big'

On the other hand, we have concluded that the Greek noun is no lower than Number. Since adjectives then are prenominal, it follows that they must merge higher than *n*P, at NumP. Building on the structure in (70) this would give us the following:

(72) a. To paljo vivlio *tis* *Stellas*

The.n old.n book.n the.gen.f Stella.gen

'Stella's old book'

b.

```
                        DP
                   _____
                  D           NumP
                  To      _____
                 (the)   AP            NumP
                         △         _____
                       paljo     Num         nP
                       (old)    ___      _____
                               n  Num  PossP      nP
                             vivlio    △       _____
                             (book)  tis Stellas <n>    NP
                                    (of Stella)  ___    |
                                                N   n  <N>
```
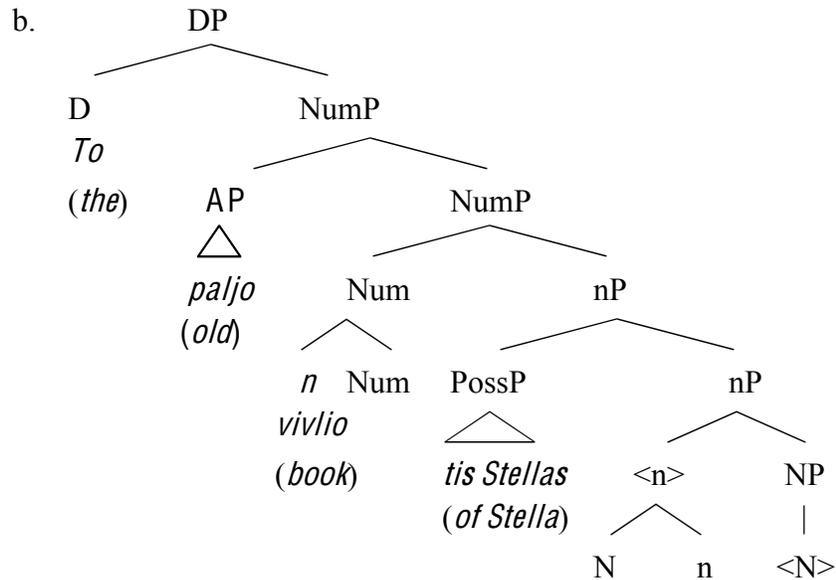
In other words, while the English noun ends up in *n*, the Greek noun ends up in Num. Although the surface order of the adjective and the noun appear to be the same in English and Greek, evidence from genitives shows that the Greek noun must be higher than the English noun. It follows then that in Greek, nominal inflection takes place in Num. Since the Greek noun must be in NumP, it follows that the prenominal adjective must adjoin to NumP rather than *n*P.

This analysis contrasts with Alexiadou's (2005) analysis, in which the adjective moves, rather than the noun. However, Alexiadou does not provide any motivation for why the adjective moves or for the claim that the noun stays *in situ*. Consequently, I take the more common view that it is the noun that moves and the adjective, as a typical adjunct, stays *in situ* (Pollock, 1989). Since we have evidence, as will shortly be shown, that the noun must move higher than nP, the adjective must adjoin higher, as well.

3.1.1. Genitives

3.1.1.1. Possessive Nouns

In the previous section, I provided evidence that the noun moves as far as Num. In the nominal system, Num is the inflectional head corresponding to TP or IP in the verbal system. In this section I present some decisive evidence for why it must be the noun that moves rather than the adjective phrase. As we will see, the possessor, which I assume merges in the specifier of *n*P or higher, always follows the noun, unless the possessor is focused. In this section, I take a closer look at the possessors and genitives.

Evidence that the noun must move comes from the fact that if the noun has a thematic complement, the whole noun complex appears before the possessor.[23] That is, assuming that the possessor is the specifier of *n*P, as I argue next, then the only way that the NP *vafi avghon* 'egg dye' may appear before the possessor, is if the NP has moved. The example that illustrates this is repeated below:

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[23] Kolliakou (1995) argues that constructions of the type Noun + NP[gen] may behave as a unit, but that the genitive has a modifying function:

e.g.	To	mathima	istorias/	kalitexnikon
	The	lesson	history.gen/	art.gen

'History/ Art lesson'

In the nominalizations that are considered here this does not seem to be the case. The bare genitives are arguments, and as I show in this section it does not form a tight unit, i.e. in the form of noun incorporation, with the noun.

(73) I   *vafi   avghon*   tis   Stellas

The   dye   egg.gen.pl   the.gen Stella.gen

'Stella's egg dye'

Let us now consider whether the genitive *avghon* is truly a complement. One might argue, for instance, that it is incorporated into the head noun, and thus the possessor originates post-nominally. Nominalizations and adjectives show that the bare genitive is not incorporated, since as we will see next, it can host modifiers, such as adjectival phrases. Before we see this in detail though let us first look at nominalizations.

As in English, roots like *katastrefo* 'destroy' are necessarily transitive. In (74) we see that a clause containing the verb *katastrefo* for 'destroy' is ungrammatical if the external argument is absent, as in (74b):

(74) a. Oti   o   janis   katestrepse   *tin poli*

That   the   John   destroyed   the city

'That John destroyed the city'

b. *Oti   i   poli katastrefi

That   the city destroy.3s

*'That the city destroyed'

Horrocks and Stavrou (1987) point out that multiple genitive thematic arguments are not allowed in Greek nominalizations. As shown below, if *tu Jani* 'John's' appears prenominally, ungrammaticality results. If it is post-nominal, it can be interpreted as the possessor of the city, but not as the agent of *katastrofi* 'destruction':

(75) a.   * *Tu*   *jani*   i   katastrofi   *tis*   *polis*

           The.m.gen John.m   the.f.nom   destruction.f   the.f.gen   city.f.gen

           'John's destruction of the city'

    b.   ?I   katastrofi   tis   polis   tu   Jani

           The.f.nom   destruction.f   the.f.gen   city.f.gen   the.m.gen John.m

           'The destruction of the city of John' (= John's city)

It seems thus that in Greek no more than one argumental genitive is possible in a single nominal. Notice further that when only one genitive is present, the genitive is not necessarily interpreted as the agent, as shown in (76). In fact, as it can be observed below, the genitive *Jani* is best interpreted as the patient:

(76) a.   I   katastrofi   tu   Jani

           The   destruction   the.gen   John

           'The destruction of John' (preferably interpreted as the *patient*)

    b.   I   katastrofi   tis   polis

           The   destruction   the.gen   city

           'The destruction of the city' (interpreted as the *theme*)

In conclusion, only one genitive argumental DP seems to be allowed with nominalized transitives. Similar facts arise with other roots such as *kaliergho* 'grow'. Here too, the second genitive is impossible unless it is interpreted as the possessor of *domaton* 'tomatoes':

(77)   I   kallierjia   *ton*   *domaton*   *tu*   *Jani*

           The.f.nom   growth.f   the.gen.pl   tomato.gen.pl the.m.gen   John

           *'John's growing of tomatoes'

         √ 'The growth of John's tomatoes'

If only one genitive is present then it is interpreted either as the theme or the agent:

(78) a.   i   kalierghia   ton   domaton

            The.f.nom   growth.f   the.gen.pl   tomato.gen.pl

            'The growth of tomatoes'

b.   I   kalierghia   tu   Jani

            The.f.nom   growth.f   the.m.gen John

            'The growth (=farming) of John' (necessarily interpreted as agent)

Again, only one argumental genitive DP is allowed with this type of roots, too.

However, the pattern is different when the theme argument appears without a determiner. As shown in (79), more than one genitive is then possible:

(79)   I   kalierghia   domaton   tu   Jani

            The.f.nom   growth.f   tomato.gen.pl the.m.gen   John

            'John's growing of tomatoes'

In this example *tu Jani* ('of John') may be interpreted either as the possessor of the *tomaton* 'tomatoes' or the agent of the nominalized root *kalierghia* 'growth'. This example shows that in fact, two argumental genitives *are* possible, provided that one of them is a bare noun. The genitive DP with the determiner can be interpreted as the agent of the nominalized root, while the bare genitive must be the internal theme argument of the root.

As shown in (79), in such constructions, the theme genitive must immediately follow the noun. The postnominal agent DP must follow the theme genitive DP. Alternatively, if the agent is focused, it precedes both the noun and the theme genitive. The noun and the theme genitive cannot be separated, and appear to behave like a unit:

(80)   *I   kalierghia   *tu*   *Jani*   tomaton

        The.f.nom   growth.f   the.m.gen   John   tomato.gen.pl

        'The growth of tomatoes of John'

The fact that the noun along with its theme precedes the agentive genitive clearly suggests that not only does the noun move past the possessor to a higher functional position, but the internal argument moves along with it. If the internal argument is a full DP, as we saw earlier (see example (81) repeated below), a full genitive DP as the agent is not possible. This suggests that the theme DP ends up in a different position than the bare genitive NP. Since an agentive bare genitive DP is not possible, I will assume that the internal genitive starts off in the complement position, but as a full DP it moves to the specifier of *n*P. Genitive case on DPs is licensed thus in the specifier of *n*P and not in the complement of N.[24] Hence, in (81) *Jani* can only be interpreted as the owner of the tomatoes and not as the farmer.

(81)   I   kallierjia   *ton*   *domaton*   *tu*   *Jani*

        The.f.nom   growth.f   the.gen.pl   tomato.gen.pl the.m.gen   John

      * 'John's growing of tomatoes'

      √ 'The growth of John's tomatoes'

An important issue that needs to be addressed concerns the syntactic status of the bare genitive. One might argue that the bare genitive in (79) is incorporated to the nominalized root. Massam (2001) offers some very helpful diagnostics for incorporation. In her work, Massam looks at a similar case in Niuean, which has been previously claimed to involve *noun incorporation*. She argues that such constructions constitute a case of *pseudo-incorporation*, and not an actual noun-incorporation. Massam shows that the noun claimed to incorporate is in fact a phrase and not a

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[24] Many thanks to Elizabeth Cowper (p.c.) for this idea.

head. As Massam argues, although this noun also appears without a determiner, it can host modifiers, such as adjectival phrases. It thus cannot be a bare N and cannot be incorporated into the verb. One diagnostic she offers for pseudo-incorporation is the absence of prenominal functional elements.

Similar facts seem to hold for Greek, as well. First, the determiner is absent in the bare genitive (cf. 79). Secondly, adjectival phrases modifying the bare genitive are allowed, as illustrated in the following example:

(82) a. i   kalierghia   *mikron*   domaton   (tu Jani)
         The.f.nom   growing.f   small.gen.pl   tomato.gen.pl   the.gen John
         'The growing of small tomatoes (of John)'

    b. I   vafi   *meghalon*   avghon   (tis   Stellas)
       The   dye   big.gen.pl   egg.gen.pl   the.gen Stella.gen
       'The dying of big eggs (of Stella)'

Since the genitive appears without a determiner and can also host modifiers, such as adjectives, it cannot be a bare N-head, but rather must be a nominal phrase. This phenomenon then, is not a case of true noun incorporation, but rather, as in Niuean, a case of pseudo-incorporation (Massam, 2001). In the structure, this means that there are actually two argument positions: one for the determiner-less genitive and one for the agentive DP. The agentive arguments which

cannot appear without a D must occupy the specifier position while the theme determiner-less genitives must be internal in the complement position of N.[25]

Let us now consider the syntactic category of the determiner-less genitive. There are three possibilities: that it is a NP, a NumP or a DP with a null determiner. The fact that it can be modified by adjectives suggests that it cannot be an NP. In Greek, adjectives adjoin to NumP and in English they adjoin to *n*P. The bare genitive in Greek therefore seems to be at least a NumP. I propose that bare genitive arguments are, in fact, NumPs, without a DP projection since there is never an overt D head. When the genitive bears a definite determiner, it forms a full phrase as shown in the following example, and a second genitive DP is impossible. Thus, as mentioned also in (81), *tu Jani* in (83) is the possessor of the DP 'the small tomatoes, not the agent of 'growth':

(83)   I   kalierghia *ton*   mikron   domaton   (tu   Jani)
        The.f.nom   growth.f the.gen.pl   small.gen.pl   tomato.gen.pl   the.gen John
        'The growing of John's small tomatoes'

In such examples, both the meaning and function of the definite determiner in English and Greek are alike. That is, when the genitive nominal has a determiner, it is interpreted as a regular definite DP. When the determiner is absent, the definiteness seems to be determined by the matrix DP as a whole. Hence, in such constructions the bare genitive does not have definiteness

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[25] It has to be noted that determiner-less agents are marginal, if not impossible:

e.g.   a.   I   afiksi *Jani/   ?fititon   b.   I   afiksi tu   *Jani / ton   fititon
             The.f arrive.f John.gen / students.gen   The.f arrive.f the.gen.m John.gen/the.gen.pl students.gen
             'John's/ The students' arrival'   'John's/ The students' arrival'

features of its own. Rather, it is the matrix determiner that determines the definiteness of this construction.

To conclude then, in this section we have seen that NP moves to NumP in Greek nominals. This movement is phrasal, and the evidence for it came from bare genitive NumPs. A look at nominalizations clearly shows that more than one genitive argument is actually allowed in Greek nominals. It follows then that we should have two distinct structural positions for genitives in the DP. Going back to the structure then, the genitive theme NumP is the internal argument of the noun, and is the complement of N. The possessor or agentive DP is higher either in the little *n*P or in the specifier of its own projection. As such genitives may appear in polydefinites, and since polydefinite modifiers are also at *n*P, I will turn next to the structural relation between DP possessors and polydefinite modifiers. For the moment, we have the structure below:

(84) a. I   palja   vafi   avghon   tis   Stellas

         The.f.nom   old.f   dye.f.nom   egg.gen.pl   the.f.gen   Stella.f.gen

         'The old egg-dye of Stella' (/'Stella's old egg-dye')

b.
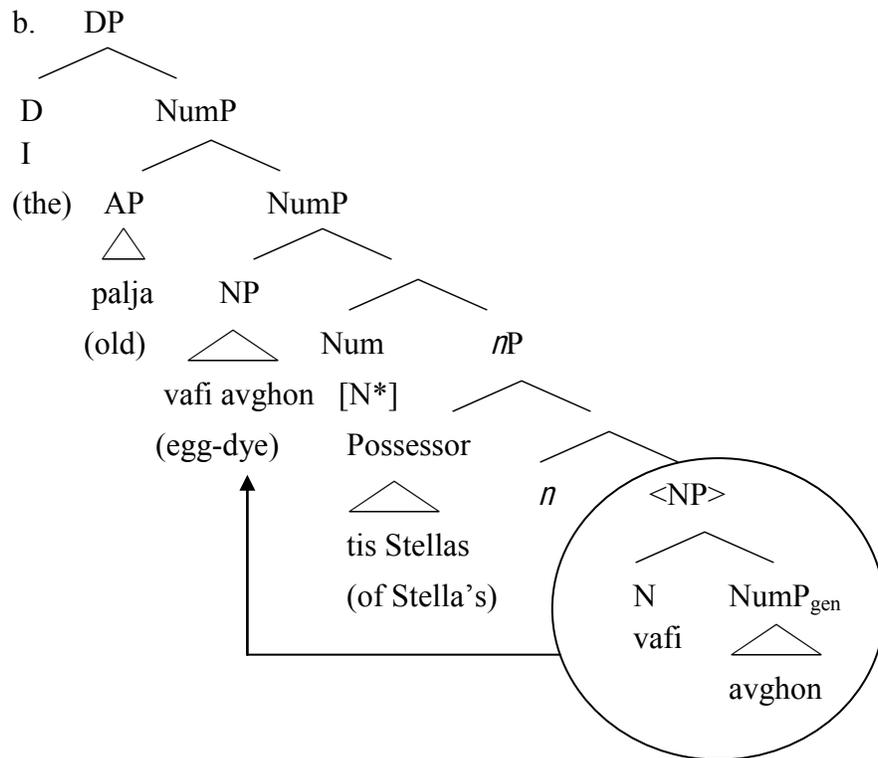
In this structure, the NP *vafi avghon* 'egg-dye' move to spec NumP. If no complement is present

we could either assume head to head movement, i.e. N moves to *n* and then to Num, or for the

sake of consistency, that the whole NP raises to NumP. I assume that this movement is driven by

a strong predicate N feature on Num. This assumption is in accordance with Massam and

Smallwood's (1996) work, where, following Chomsky (1995), they argue that a strong

uninterpretable categorial feature can attract an element of the same category to its checking

domain, so that it can be overtly checked.

Focusing on predication, and in particular on grammatical predication on English and Niuean,

Massam and Smallwood (1996) argue that this type of predication can be developed into a case

of feature checking.[26] In English, this feature is [D], i.e. a strong uninterpretable [D] feature attracts a like-categorized element to its checking domain so as to be overtly checked. They contrast this to Niuean, which, as they argue, lacks an EPP [D] feature. Instead, they argue that [T] is the feature of predication for Niuean, since Massam (1996) shows that V fronts to T to check inflectional features.

Parallel to Massam and Smallwood (1996), I propose that Greek nominals also have a predication feature, and since we deal with nouns, the relevant feature of predication here is [N]. I assume in particular, that Num bears a strong uninterpretable N-feature. The NP then, a like-categorized N-element, is attracted to the specifier of Num to check inflectional features. Hence, feature checking and concord between Num and its specifier take place.

Once the NP has moved, the possessor ends up in a post-nominal position. If the possessor is focused, it can raise higher, to a FocP dominating the DP. The adjective phrase, as discussed earlier, adjoins to NumP. Let us now briefly look at possessors consisting of either a clitic and a possessive adjective or a clitic alone.

3.1.1.2. Pronominal Possessors

The pronominal possessor is a clitic pronoun which may appear in different syntactic positions. When there is an overt matrix noun, the pronominal clitic follows the noun, as in (85a). It cannot intervene between the determiner and the noun, as shown in (85b):

---

[26] According to Massam and Smallwood (1996:1), following Chomsky (1995), grammatical predication takes place when a projection has an open place which must be satisfied in the syntactic component.

(85) a. To   vivlio <u>mu</u>

      The.n   book.n cl.gen.1s

      'My book'

   b. * To   <u>mu</u>   vivlio

      The.n   cl.gen.1s   book.n

      'My book'

In contrastive contexts, the emphatic possessive adjective *dhiko* 'own' may also be used, in which case the clitic obligatorily cliticizes onto the possessive adjective, as shown below in (86a,b). Like ordinary adjectives in monadic nominals *dhiko* must always be prenominal (86c):

(86)   a. To   DHIKO <u>mu</u>   vivlio

          The.n own.n cl.gen.1s   book.n

          MY book (not John's)

    b. *To   DHIKO vivlio <u>mu</u>

       the.n   own.n book.n cl.gen.1s

       MY book (not John's)

    c. *To   vivlio dhiko <u>mu</u>

       the.n   book.n own.n cl.gen.1s

       My book (not John's)

The clitic is generally assumed to attach at PF to the first element in the DP for prosodic reasons, whether the first element is a noun or an adjective.[27] Structurally, I assume that the clitic originates in the specifier of *n*P as other possessors do, and that it may cliticize onto the adjective at PF. This optionality is illustrated in the following examples:

---

[27] See Kolliakou (1995) for an HPSG approach to Greek possessives.

(87) a. Xriazome   to   forema   *mu.*
          Need.1s   the.n   dress.n   cl.gen.1s
          'I need my dress'.

      b. Xriazome   to   KOKKINO   *mu*   forema.
          Need.1s   the.n   red.n   cl.gen.1s   dress.n
          'I need my red dress.'

      c. Xriazome   to   kokkino   forema *mu.*
          Need.1s   the.n   red.n   dress.n cl.gen.1s
          'I need my red dress.'

However, there seems to be a difference in meaning between (b) and (c). In (b) for instance, where the clitic cliticizes onto the adjective *kokkino, kokkino* seems to be stressed, while in (c) it is not necessarily stressed. It may thus be that the adjective bears focus (either contrastive or informational) and thus attracts the clitic. In (c) though, the adjective is not necessarily focused (though it can be). Furthermore, when more adjectives are involved, as we will see, then the position of the clitic slightly changes the meaning.

The possessive pronominal clitic may often be preceded by the possessive adjective *dhikos* 'own'. In this case, the clitic *obligatorily* cliticizes onto it:

(88) a. To   dhiko *mu*   vivlio   *b.   To   dhiko vivlio *mu*
          The   own   my   book   the   own   book   my
          'My book'/ 'My own book'

When more adjectives are present, the possessive adjective must precede the other adjectives (cf. 76a) and the clitic can only attach to the possessive adjective (cf. 89b):

(89) a. *To *mikro* dhiko mu vivlio

     The little   own my book

     'My own little book'

    b. To   dhiko √(mu) mikro *(mu) vivlio *(mu)

     The own my little   book

     'My own little book'

If *dhiko* is indeed an adjective, we must account for its fixed ordering with respect to other adjectives. One possibility is to assume that the possessive adjective originates higher than other adjectives. Indeed, Cinque (1994) provides us with such an alternative. In his paper, he argues that adjective order is cross-linguistically consistent. He shows that in Italian, the possessive adjective also precedes all other adjectives but follows the article (Cinque, 1994: 92):

(90) *Le sue* due altre probabili goffe reazioni immediate alla tua lettera

   The his two other probable clumsy reactions immediate to your letter

   'His two other probable clumsy immediate reactions to your letter'

Cinque argues that each adjective is the specifier of a maximal projection and that the surface order of adjectives follows from the fixed hierarchy of these projections:

(91) poss > cardinal > ordinal > speaker-oriented > subject-oriented > manner > thematic (Cinque, 1994: 96)

In this respect, the Italian possessive adjective behaves similarly to Greek: i.e. the Italian possessive adjective must also precede all other adjectives. The difference from Greek is that there is no pronominal clitic attaching to the adjective in Italian. This is not a surprise though. In contrast to Greek, the Italian possessive adjective also spells out person. Hence, although the Italian possessive adjective does not appear with a clitic, it shows the same distribution.

Cinque's proposal thus provides us with an alternative that derives orders where the possessor precedes everything else. Applying this part of his proposal to our analysis, the Greek possessive adjective would appear higher than all other adjectives. Building on the structure, we would roughly have the following:

(92)

```
              DP
           ／    ＼
         D        AP_POSS
               ／    ＼
           A_POSS      AP
           dhiko     ／   ＼
           (own)    A      NumP
                        ／    ＼
                      NP       NumP
                            ／    ＼
                          Num      nP
                                ／   ＼
                          Possessor   nP
```
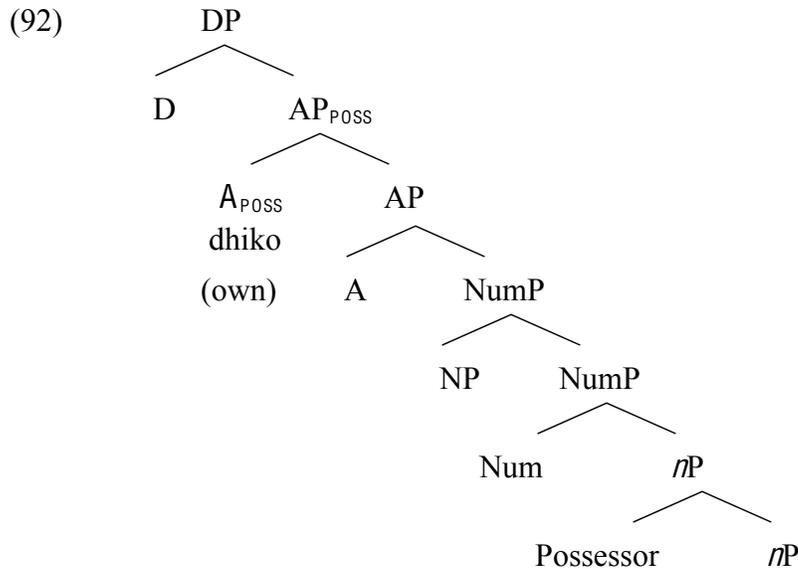
A problem with this analysis is that the proposal that the possessive adjective merges highest is a pure stipulation. That is, if we assume that the possessive adjective merges higher than other adjectives we need to provide a syntactic reason for that assumption. The key element here is the pronominal possessive clitic, which obligatorily cliticizes onto the possessive adjective, as the first nominal in the tree. Let us first consider *why* this is the case.

It might be that focus is somehow driving the cliticization. It was mentioned earlier that the possessive adjective appears in focused contexts:

(93) a. Efera to DHIKO mu vivlio (oxi tu Stelju)
   Brought.1s the.n own.n cl.gen.1 book.n neg the.gen Steljos.gen
   'I brought MY OWN book (not Stelios' book)'

b. #Efera to dhiko mu vivlio ke to dhiko su.
   Brought.1s the.n own.n cl.gen.1 book and the.n own.n cl.gen.2
   ?'I brought my own book and your own.'

c. #Efera to dhiko mu VIVLIO oxi tin tsanda
   Brought.1s the.n own.n cl.gen.1 book not the.f.acc purse.f
   ?'I brought my own BOOK not the purse.'

In (b), the omission of stress (contrastive or not) results in an unacceptable sentence. The possessive adjective is obligatorily focused. In (c), *dhiko* is not stressed and the sentence is also unacceptable. One might consider then that focus attracts the clitic onto the possessive adjective. It might be in particular, that focus is part of the specification of the possessive adjective. The clitic thus must cliticize onto it as part of a PF rule. Notice below that if the clitic does not cliticize onto focused adjectives, possessive or not, the sentence is at least strange and, in the case of the possessive adjective, ungrammatical:

(94) a.   To   PALIO/ IPOTITHEMENO/ VARI   <u>mu</u>   podhilato

        The.n old.n/ alleged.n/   heavy.n   cl.gen.1   bike.n

        'My OLD/ALLEGED/HEAVY bike'

    b. ?To   PALIO/ IPOTITHEMENO/ VARI   podhilato   <u>mu</u>

        The.n old.n/ alleged.n/   heavy.n   bike.n   cl.gen.1

        'My OLD/ALLEGED/HEAVY bike'

    c.   To   PALIO <u>mu</u>   vari   podhilato

        The.n old.n cl.gen.1   heavy.n   bike.n

        'My OLD heavy bike'

    d. ?To   PALIO vari   <u>mu</u>   podhilato

        The.n old.n heavy.n   cl.gen.1   bike.n

        'My OLD heavy bike'

    e. *To   DHIKO podhilato   <u>mu</u>

        The.n own.n bike.n   cl.gen.1

        'My OWN bike (not Stelios')'

    f. *To   DHIKO podhilato

        The.n own.n bike.n

       *'The OWN bike'

The adjectives in (a) may bear stress, in which case the clitic best cliticizes onto them. Otherwise they are odd as shown in (b). In (c) it is shown that the first adjective usually bears stress expressing informational or contrastive focus. If the clitic does not cliticize onto the first adjective, again the example might be taken to be odd. We can conclude from (a)-(d) that focus plays a role in the cliticization of the clitic to the adjective. Turning to (e), the possessive adjective is always stressed, and the clitic has to attach to it. In addition, as opposed to all other

adjectives, the possessive adjective cannot stand on its own (cf. f). The clitic is part of its prosodic specification. In effect, the possessive adjective never appears without a clitic.

Focus, though, is not the only reason for the obligatory cliticization of the pronoun onto the possessive adjective. Another reason for it is that the clitic spells out the person features that the possessive adjective does not have. Unlike Italian, other IE languages, e.g. German etc., the Greek possessive adjective is underspecified for person features. When the clitic attaches to it then, it essentially checks the uninterpretable features on the adjective. If the clitic does not check off the adjective's person feature, ungrammaticality results. This is why (94f) above is ungrammatical. (94a), on the other hand, is not fully acceptable purely for focus reasons, i.e. for PF reasons the clitic best attaches to focused adjectives. If the adjective is possessive the cliticization is also syntactic. In other words, I propose that the possessive adjective and the clitic form a unit that expresses possession. As the possessive adjective is always focused, I suggest that it has an inherent [Foc] feature that attracts the clitic. Thus, there are no interveners between the possessive adjective and the clitic. I further propose that this coherent unit forms a phrase, PossP. More evidence that it is a PossP comes from the fact that this unit cannot appear with a full DP possessor (cf. 95b). The only way the possessor can be focused is by stressing it, and not by adding the focused possessive adjective:

(95)   a. To   vivlio TIS   MARIAS
          The.n   book.n the.f.gen   Maria.gen
          'Maria's own book'

       b. *To   DHIKO TIS   vivlio   tis   Marias
          The.n own   the.f.gen   book.n the.f.gen   Maria.gen
          'Maria's own book'

Moreover, the possessive adjective and the clitic cannot appear without a determiner. Otherwise, ungrammaticality results[28]:

(96)   *(To/   ena)   *dhiko mu*   vivlio
           The.n/ A(/One).n   *own.n my.gen* book.n
           'My book'/ 'A book of mine'

As it can also be observed, in contrast to English, the possessive pronominal clitic in Greek can also appear with an indefinite determiner. This suggests that the clitic does not have any (in)definiteness features of its own, and thus the clitic should not form a full DP. Additionally, if the clitic were a DP, it should appear with a determiner of its own, as the case of independent genitives. We have seen that independent genitives are headed by their own determiner. In contrast, the possessive clitic is not headed by its own determiner. On the other hand, examples as in (96) show that a determiner is necessary. The determiner should thus, form a unit along with the possessive adjective and clitic, i.e. along with the PossP.

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[28] An exception to this is the vocative, the only morphological case in Greek where the determiner is obligatorily absent, turning count nouns to proper names: e.g. Dhik-e mu 'own.voc my' is interpreted as '*(my) Dude,…*'.

Turning to the structure, in the case of a DP with regular adjectives (as in 94a-c), I propose that the possessive pronominal clitic originates in the same position as the independent Genitive, i.e. in the specifier of *n*P. At PF, it can cliticize onto the focused nominal, either the adjective or the noun. As the mechanism that accomplishes this is not directly related to my research, I leave the details of the cliticization open.

In the case of a possessive nominal containing a possessive adjective though, as in (89b), the clitic originates as a Poss, i.e. in the head of PossP merged above NumP, and is in a binding relation with a null pro in the spec *n*P. By assuming that the clitic here originates in the head of PossP, and not in spec *n*P, we have a structural account of why it only appears next to the possessive adjective, and not next to any subsequent adjectives. In addition, by assuming that the possessor is high, as the D-complement, we account for why an overt possessor in spec *n*P is impossible (cf. 95b). The possessive adjective never co-occurs with a full possessor. Therefore, when *dhiko* is present, the clitic should not originate in the specifier of *n*P either. Rather, since it realizes person features of the possessor, it should originate in PossP. More importantly though, by assuming a PossP projection above NumP we can account for why the possessive adjective necessarily precedes the non-possessive ones. PossP is only present in a pronominal possessive construction, i.e. of the form D-Adj$_{poss}$-clit. Thus in other constructions, the clitic may surface lower in the specifier of *n*P, i.e. it may appear post-nominally.

Next, the specifier of PossP is occupied by the possessive adjective *dhiko*. As *dhiko* is inherently focused, as opposed to non-possessive adjectives, I assume that *dhiko* comes with a [foc] feature. Since as mentioned, it lacks its own person features, it also has uninterpretable person features. The clitic at Poss values and checks off the person features of the possessive adjective and checks off its own uninterpretable [foc] feature. This is shown in (97b).

With respect to possessive DPs with regular adjectives, only focus here plays a role, which, as we will see later, additionally brings a change in meaning. Here, depending on which element is stressed, the clitic starts off at its regular position, the specifier of nP, and can then cliticize onto the focused (non-possessive) adjective. In (97d) for instance, where the first adjective is preferably stressed, the clitic can cliticize onto it at PF:

(97) a. To   DHIKO mu   olo-kenurjo   vivlio
          The.n own.n cl.gen.1s   all-new.n   book.n
          'My own brand new book'

b.
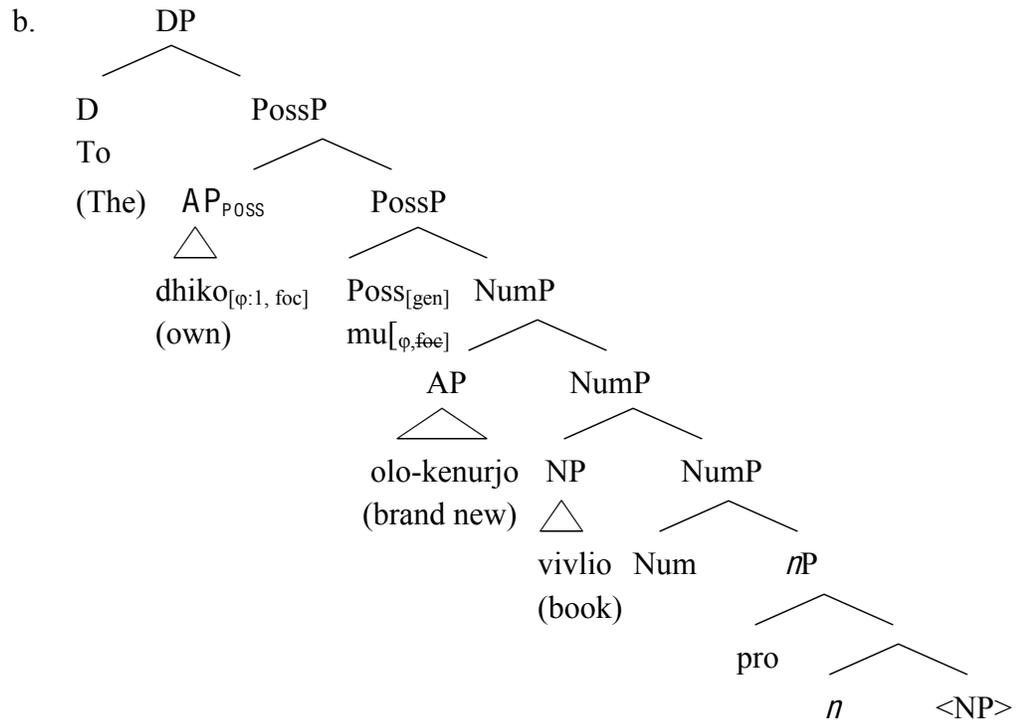
c. To   KENURJO   mu   kokkino   podhilato

   The.n new.n   cl.gen.1s   red.n   bike.n

   'My new red bike'

d.

```
            DP
           /  \
          D    NumP
          To    /  \
        (The)  AP[foc]  NumP
              /\         /  \
        kenurjo  AP     NumP
         (new)  /\       /  \
          kokkino NP    NumP
           (red) /\      /  \
        podhilato  Num    nP
          (bike)         /  \
                     mu[foc]
                      my    n   <NP>
```
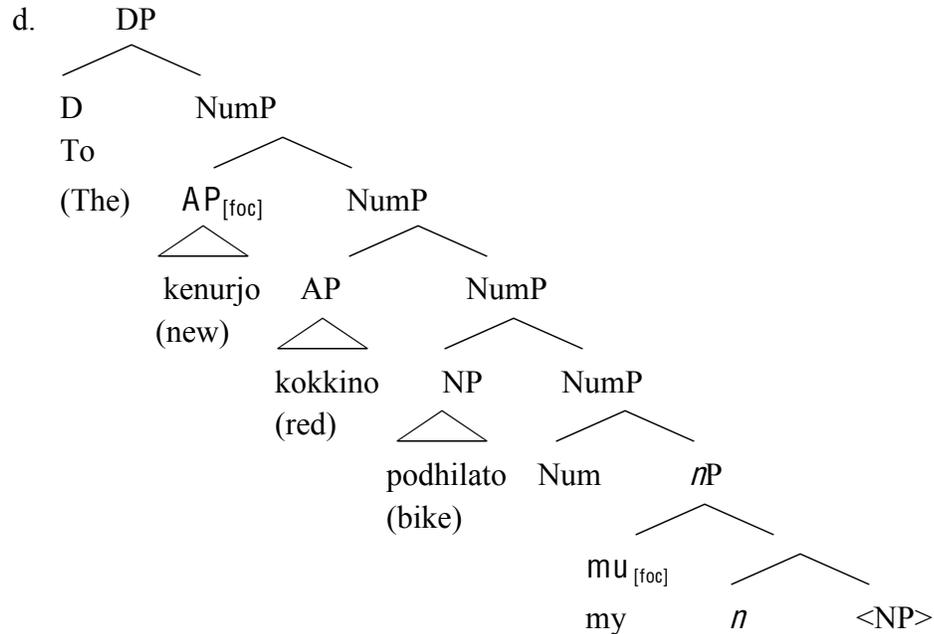
In conclusion, building on Cinque's observation that Italian possessive adjectives also precede all other adjectives, I proposed that the reason that the Greek possessive adjective obligatorily precedes other adjectives is because a PossP is merged above the NumP and as the complement of D. The clitic contributes the person features that the possessive adjective lacks, which is why it obligatorily attaches to it, and only optionally to other adjectives. Hence, we now have a derivation for possessive nominals. I now turn to constructions containing demonstrative pronouns.

3.1.2. Demonstratives

As we have seen, the demonstrative appears in various positions in definite nominals (cf. 19-23, Section 1.2.1). I now argue that the demonstrative is phrasal, as has been first argued by Stavrou and Horrocks (1987), but also that it may act as a modifier of a definite nominal. In such cases, I argue later that a polydefinite construction is formed (see section 3.4), like those to be discussed in section 3.2.

For Stavrou and Horrocks (1987), the demonstrative is a phrasal XP generated as a complement of the noun, which then moves to the specifier of the DP. Panagiotidis (2000), on the other hand, suggests that it originates in the specifier of the NP and then moves to spec DP. Both of these analyses correctly treat the demonstrative as a phrase. However, neither addresses two important properties of the demonstrative: (i) it can function as a typical third person pronoun and thus appear on its own; (ii) when it appears within a DP, it functions as a modifier.

Let us first consider, the fact that it can function as the third person pronoun. As shown below, the demonstrative *aftos* 'this one' or *ekinos* 'that one' can appear bare as an answer to a wh-subject question or as the subject in a full sentence:

(98) a. Ekinos
     That.m.nom
     'That guy/ that one'

    b. Irthe   afti   (me   ta   luludhja)
       Came   this.f   (with the.n.pl flower.n.pl)
       'The one(f)/ she (with the flowers) is here'

In (98b) in particular, *afti* is modified by *me ta luludja* 'with the flowers'. It is in this sense that it is different from English demonstratives, which cannot be modified when used pronominally.

Furthermore, both *aftos* and *ekinos* can be modified by spatial adverbials like *edho* 'over here'
eki 'over there':

(99) a. Aftos edho/ Ekinos eki (– o   neos   andhras)
          This   here/ That   there (the   young   man)
          'This one over here/ That one over there (the young man)'

     b. O   neos   andhras –   aftos edho/ ekinos eki
          The   young man   this   here/ that   there
          'The young man – the one over here/ the one over there'

Two observations can be made here. First, the spatial adverbial always immediately follows the
demonstrative. This means that the adverbial is part of the demonstrative phrase, modifying it.
Since the demonstrative can host a modifier, this clearly shows that the demonstrative constituent
is phrasal. Secondly, notice that in both of these examples a small pause is necessary between the
demonstrative and the nominal phrase. As we will see in the next section, such a pause (or
comma) is a characteristic of modification. Hence, this suggests that the demonstrative may act
as some kind of modifier, which is the second property of Greek demonstratives. I return to this
in (3.4).

Other types of demonstrative pronouns that the grammar of Triandafilidhis (2004: 133-134) lists
are pronouns such as *tetjos* 'such' or *tosos* 'so much/ many', which indicate the quantity of a
noun. These, like the demonstrative *aftos* and *ekinos*, can occur without a noun. However, unlike
aftos and *ekinos*, when *tetjos* 'such' or *tosos* 'so much/ many' co-occur with a noun, there is no
matrix determiner immediately before the noun. In fact, a matrix determiner is impossible:

(100) a. | *Tosa* | *(*ta)* | *xronia* | perasan | apo |
|---|---|---|---|---|
| So-many.n.pl | the.n.pl | year.n.pl | went-by.3pl | from |

tote pu idhoθikame.
then that saw.1pl.pass

'So many years went by since we last met.'

b. Ki o Ghanis theli *tetja (*ti) karekla.*
and the John want.3s such the.f chair.f

'John also wants such a (or *this type of*) chair.'

I propose that *tetjos* and *tosos* are not phrasal polydefinite modifiers as *aftos* and *ekinos* are. Thus, they do not precede a DP but something less, such as a Number or little *n* phrase. In fact, *tetjos* 'such' and *tosos* 'this much/many' may be determiners themselves.

To conclude, it seems that there are two types of demonstratives in Greek: (i) those that may appear with a full DP, i.e. *aftos* 'this (one)' and *ekinos* 'that (one)'; (ii) and those that appear with something less than a DP, i.e. *tetjos* ('such') and *tosos* ('so many/much'). The ones in the second group behave like heads and take a noun as their complement. In contrast, *aftos* and *ekinos* function as DP themselves. When they are used pronominally, they are simple DPs. When they modify a DP headed by the definite determiner, they seem to be some type of modifying DPs.

Notice also that such constructions are reminiscent of phrases like the English *we (the) linguists*, analyzed by Cowper and Hall (2009) as in (101). Here, ɸ stands for an indexed argument (bound or not) and # for number:

(101) a. φP
      φP   #P
      △   △
      We   linguists

b. φP
   φP   DP
   △   D   #P
   We   the   △
              linguists
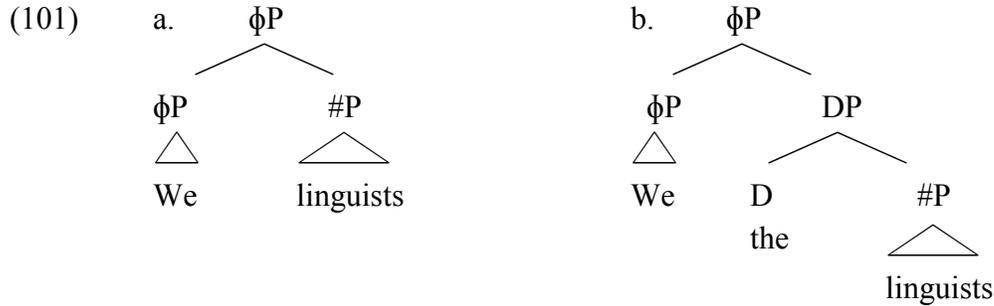
If the Greek *aftos/ ekinos* + nominal are similar to English appositives then such structures would be a possibility for Greek, as well. I return to this shortly. We will see that when the demonstrative precedes the whole noun phrase a restrictive interpretation arises. In other positions an appositive interpretation is also possible.[29] In examples such as in (102) below, the demonstrative behaves like an appositive inside a monadic DP. Appositives are comments, and as such, are more flexible in their distribution:[30]

(102)   O   neos   -   aftos   -   andhras.
         The.m.nom   young.m.nom this.m.nom   man.m.nom
         'This young man'

The demonstratives *aftos* and *ekinos* thus form definite phrases that serve as modifiers of the noun. Nominals containing them are therefore polydefinite DPs. As I argue in the next section, like other polydefinite modifiers, the demonstrative modifier is also an adjunct. This concludes our examination of monadic nominals. I now turn to the polydefinite DP.

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[29] See Potts (2005) and Den Dikken (2006) for a detailed analysis of appositives.

[30] See section 3.2.2 and also Chapter 5 for a discussion of appositives.

3.2   Analyzing Polydefinites

3.2.1   Restrictive and Appositive DPs

I distinguish two kinds of polydefinite modifiers: restrictive and non-restrictive, or appositive, polydefinites (see Potts 2005 for more on this distinction). This distinction is parallel to Lekakou and Szendrői's (2008) distinction between 'close' and 'loose' apposition. Focusing on restrictive polydefinite modifiers, which are possible only with definite nominals, I propose an analysis of their syntactic properties.

Like Lekakou & Szendrői (2007, 2008) I argue that a polydefinite modifier is essentially a DP. Therefore, by the term *polydefinite* expression I mean a nominal containing more than one DP and not simply multiple instances of the definite determiner. Hence, the polydefinite consists of a matrix DP and of one or more modifying DPs. A modifying DP is interpreted as either restrictive or appositive.

Let us now look at what the terms *restrictive* and *non-restrictive* are commonly assumed to refer to. Typically, restrictive modifying DPs identify the noun more closely. They restrict a particular noun by narrowing down its extension. In English, and most other languages, restrictive DPs are not set off by commas or pauses as non-restrictive appositive ones are. Moreover, they cannot be omitted without changing the extension of the matrix DP. If they are omitted the sentence may be nonsensical:

(103) a.   My sister Elia lives in Athens while my sister Maria works in Toronto.
    b.   #My sister lives in London while my sister works in Toronto.

In (103) the restrictive DPs 'Elia' and 'Maria' are essential to the meaning of the sentence. They tell us which sister is being referred to. A non-restrictive appositive, on the other hand, can be

absent without significantly changing the meaning of the sentence. As mentioned earlier, appositives are comments and are thus set off by pauses or commas:

(104) a.   My sister, Elia, lives in Athens.
      b.   My sister lives in Athens.

Let us consider now Greek polydefinites. When the modifying DP is interpreted restrictively, it is essential to the meaning of the sentence. Consider the following example with the two polydefinites *i arseniki* 'the male (cat)' and *i thiliki* 'the female (cat)'. These are interpreted restrictively, i.e. there have to be at least two (or more) cats. If the restrictive DPs are omitted as in (105b) the sentence is non-sensical:

(105) a.   I   arseniki i   gata   ine sto   parathiro ke i   thiliki
           The.f male.f the.f cat.f   is   on-the window   and the.f female.f
           ston kanape.
           on-the couch
           'The male cat is by the window and the female one on the couch.'

      b.   #I   gata   ine   sto   parathiro   ke   (i   ghata)
           The.f cat.f   is   on-the window   and   the.f   cat.f
           ston   kanape.
           on-the couch
           'The cat is by the window and (the cat) is on the couch.'

As can be observed in (105a) a restrictive DP may precede the matrix nominal, or, as illustrated below in (106), it may also follow it:

(106) Mu   fernis   to   forema *to*   *kokkino*   (oxi   *to*   *lefko*)?

Me.gen   bring.2s the.n dress.n the.n red.n   NEG   the.n   white.n

'Can you get me the red dress (not the white one)?'

This raises the question of whether prenominal and postnominal restrictive DPs have different interpretations. Lekakou & Szendrői (2008) have claimed that there is no difference in meaning between prenominal and postnominal restrictive DPs. However, notice what happens when the polydefinite modifier contains an adjective that is ambiguous between a restrictive and non-restrictive meaning. The adjective *aghapimenos* for instance, has two meanings, 'beloved' or 'favorite'. The meaning 'beloved' may be interpreted non-restrictively, but the meaning of 'favorite' is inherently restrictive. When *aghapimenos* appears prenominally, as in (107), it can only be interpreted restrictively, i.e. as 'my favorite mother', and not as 'my beloved mother'. Example (107) thus carries the implication that the speaker has more than one mother, which is what makes it sound strange:

(107) ? I   aghapimeni   mu   i

The.f.nom   beloved/favorite.f.nom   my.gen   the.f.nom

mitera

mother.m.nom

'My favorite mother'

Not: 'My beloved mother'

Non-restrictive DPs thus seem not to be possible prenominally, since a prenominal DP must be interpreted restrictively. However, if the adjective *aghapimenos* appears postnominally, both restrictive and non-restrictive interpretations are possible:

(108)	a.	I	mitera	mu	i	aghapimeni
		The.f.nom	mother.f.nom	my.gen	the.f.nom	beloved/favorite.f.nom

'My favorite mother'

	b.	I	mitera	mu –	i	aghapimeni
		The.f.nom	mother.f.nom	my.gen	the.f.nom	beloved/favorite.f.nom

'My beloved mother'

Hence, a post-nominal polydefinite modifier is ambiguous between restrictive and non-restrictive readings. The presence or absence of a pause (here after *mu*) disambiguates the sentence.

Since there is a difference in possible interpretations between prenominal and postnominal modifying DPs, different structural positions should be involved. A non-restrictive DP is possible only in a postnominal position, which means that it does not move to the left of the noun. The restrictive DP is possible both prenominally and postnominally, with a difference in stress as we will see. This suggests that the restrictive DP must involve some type of movement. First, let us consider where the restrictive DP originates.

3.2.2 The structural position of the restrictive DP

To determine the structural position of the restrictive DP, we now briefly look at restrictive relative clauses (RCs). Both restrictive DPs and RCs modify the matrix nominal in the same way. They could thus be treated under the same account. There are two dominant approaches to restrictive relative clauses, as defined by De Vries (2006). In the standard analysis (Chomsky 1977, Jackendoff 1977), the restrictive relative is adjoined to NP. This is shown in the updated structure (109b). In contrast, in the promotion or raising analysis (Kayne 1994, De Vries 2006)

the relative clause is a complement to the matrix determiner. The antecedent noun is raised from

within the relative clause, as shown in (109c):

(109)　a.　The students who succeeded on the midterm.

b.
```
              DP
            /    \
          D       NP
                /    \
              NP     CP_RRC
                    /    \
                 Rel      CP
                        /    \
                     (C)      IP
                              △
                          … t_rel …
```

c.
```
              DP
            /    \
          D       CP_RRC
                /        \
            DP_rel        C'
            /   \        /   \
          NP    D'    (C)     IP
                |             △
              D_rel       … t_rel …
```
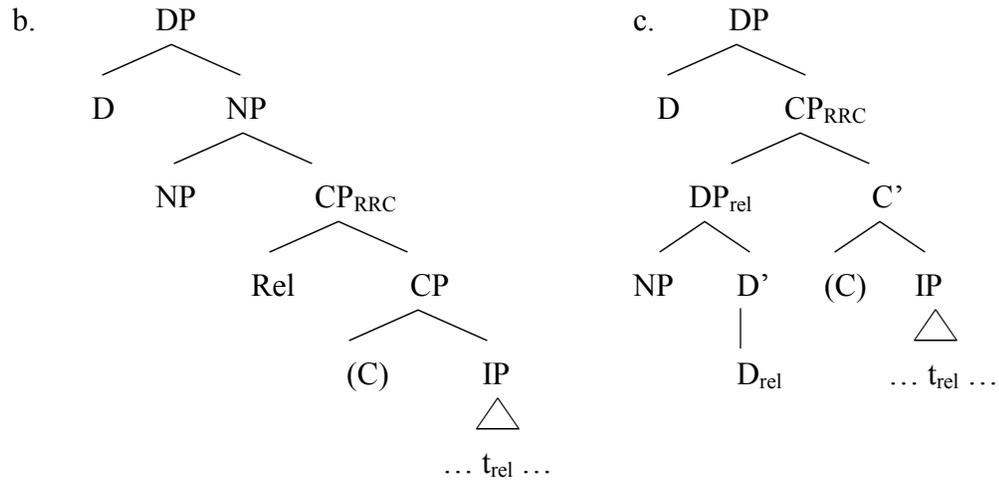
Before determining which analysis is appropriate for Greek, I first determine the syntactic status

of the restrictive DP in Greek polydefinites, i.e., whether it is indeed a complement or an

adjunct-like element. If the restrictive DP attaches as a sister to the noun, as suggested by

Lekakou and Szendrői, a possible structure is given in (110b):

(110) a. Pu ine [i   pena i   asimenja]?

     Where be.3s the.f.nom pen.f the.f.nom silver.f

     'Where is the silver pen?'

b.

```
                    FP
                  /    \
               Foc      DP
                       /  \
                      D    NumP
                      i    /   \
                    (the) Num   nP
                               /  \
                              n    NP
                                  /  \
                                 N    DP
                               pena   /\
                              (pen)  i asimenja
                                     (the silver)
```
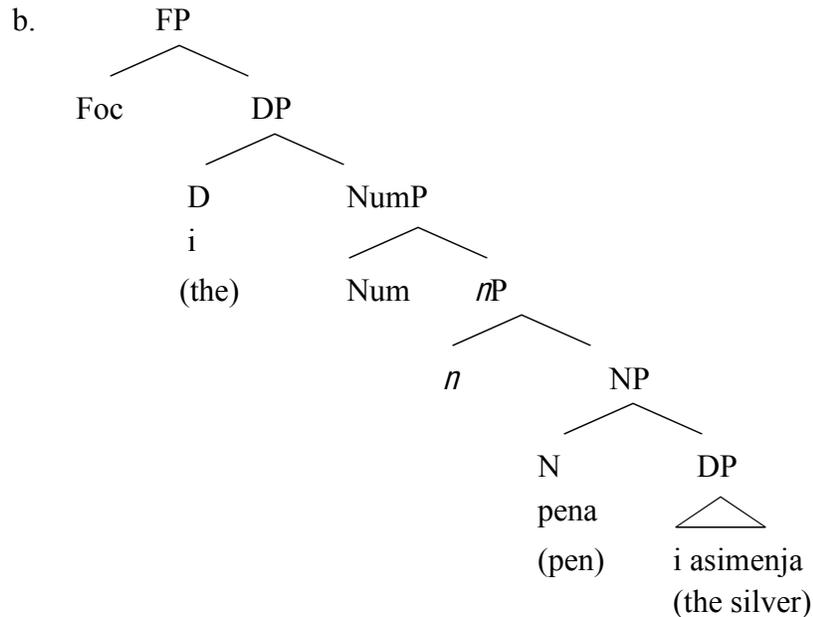
To account for the cases where the restrictive DP is prenominal, we could also assume that there

is a Focus Phrase above the highest DP to which the restrictive DP can later move, since a

prenominal restrictive DP is always focused. The focus involved is contrastive or informational,

i.e. stressed but not contrastive.[31]

---

[31] In (a) below, the prenominal restrictive DP is contrastive. In (b) it is only informational since the prepositional phrase *ja sena* 'for you' is now contrastively stressed:

 (a) Ja sena pira TO KITRINO to forema   (b) JA SENA pira *to* *kitrino* to forema
   For you got.1s the.n yellow.n the.n dress.n   For you got.1s the.n yellow.n the.n dress.n
   'I got the YELLOW dress for you'   'It is for you that I got the yellow dress'

However, the complement analysis cannot be maintained. Although it can derive a polydefinite with a single restrictive DP, it runs into trouble when more than one restrictive DP appears as in (111):

(111)　　Idhes　　　　TO　　MAKRI TO　　KOKKINO　　　to　　palto　mu?
　　　　　　Saw.2s　　　the.n　long.n the.n　red.n　　　　　the.n　coat.n　my.gen
　　　　　　'Have you seen my long red coat?'

Assuming that a single head can have only one complement, it is not clear how to derive a nominal containing multiple restrictive DPs. Moreover, complements are generally syntactically obligatory. This means that if they are absent the sentence in (111) should be ungrammatical. As shown in (112), if the modifying DPs are absent, the nominal is well-formed:

(112)　　Idhes　　　　to　　palto　mu?
　　　　　　Saw.2s　　　the.n　coat.n　my.gen
　　　　　　'Have you seen my coat?'

Therefore, although restrictive DPs are important to the meaning, they are not syntactically obligatory. Moreover, if the restrictive DP is a syntactic complement, then we predict that thematic complements should not be possible (as in *the natural egg dye*):

(113)　　I　　　　　　fitiki　　　　*i*　　　　　*vafi*　*avghon*
　　　　　　The.f .nom　natural.f　　the.f.nom　　dye.f.　egg.pl.gen
　　　　　　'The natural egg dye'

Since real complements are possible, and since the restrictive DP is syntactically optional and multiple instances are possible, restrictive DPs are more similar to ordinary adjectival modifiers.

Turning then to the possibility that the restrictive DP is an adjunct, one possible structure is shown in (114b) with the restrictive DP adjoined to *n*P:

(114) a. Idhes [tin   ASIMENJA   tin   pena]?

    Saw.2s the.f.acc   silver.f   the.f.acc   pen.f

    Have you seen the silver pen?

b.
```
                      FP
                     /  \
                  Foc    DP
                        /  \
                       D    NumP
                      tin   /  \
                     (the) Num  nP
                              /   \
                            DP     nP
                           /_\    /  \
                     tin asimenja n   NP
                     (the silver)     |
                                      N
                                    pena
                                    (pen)
```
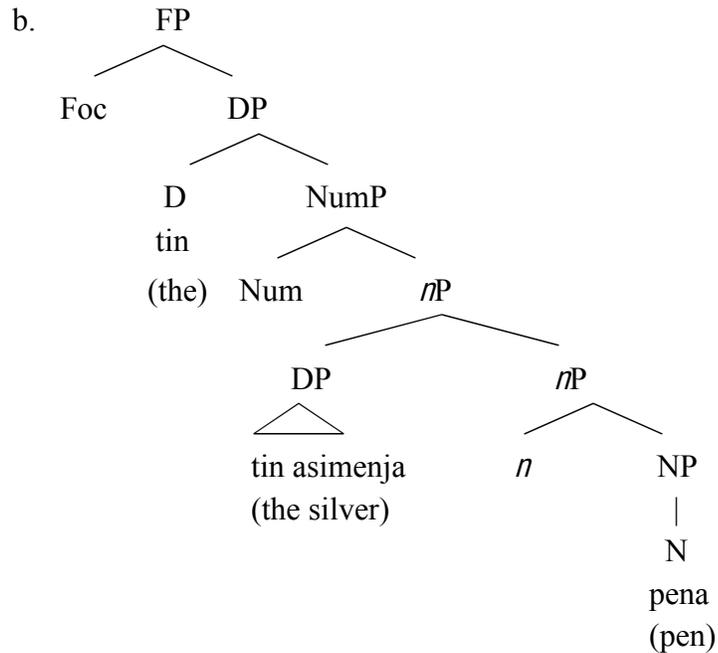
Since the restrictive DP in this structure is treated as an adjunct rather than as a complement, we predict that more than one adjunct should be possible. Next, the NP moves to the specifier of NumP, and the restrictive DP appears to be in post-nominal position. Bare adjective modifiers differ this way from restrictive DPs. That is, while APs adjoin to NumP as argued in 3.1, restrictive DPs must originate in a lower modifying position, i.e. adjoined to *n*P. If the restrictive DP is focused, it then raises to the spec of Focus Phrase, and surfaces prenominally, as shown in (115b). The prenominal restrictive DP thus arises:

(115) a. Tin   ASIMENJA   tin   pena

The.f.acc   silver.f   the.f.acc   pen.f.

'The silver pen'

b.
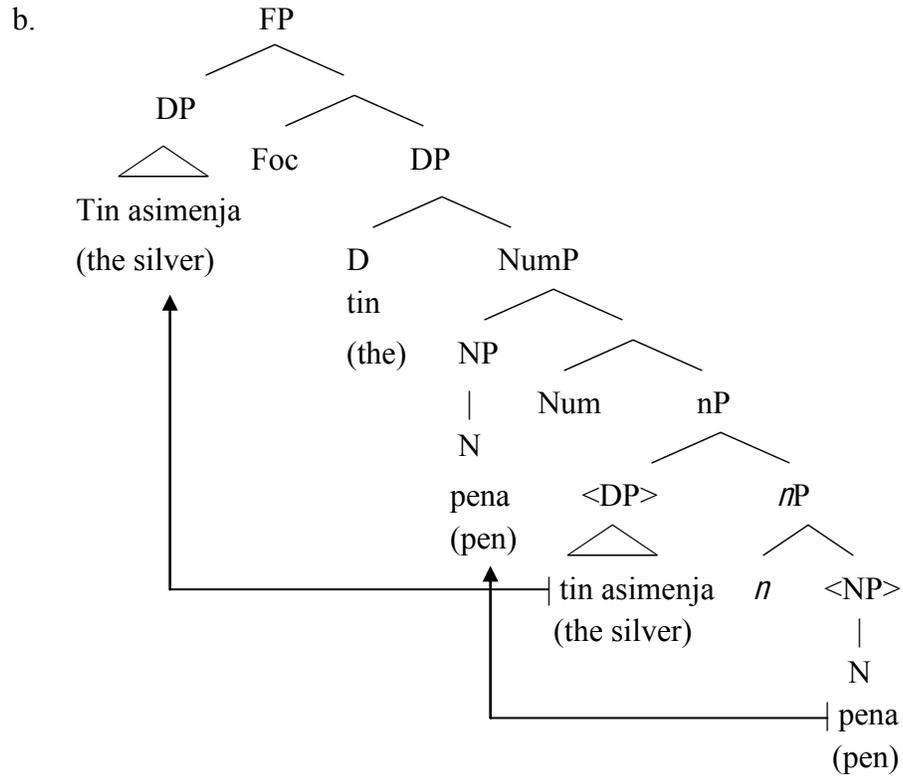
If more than one restrictive DP is present, they all adjoin to *n*P. Considering first the post-nominal restrictive DPs, the structure is as as in (116b), where the extension of the nominal phrase is successively narrowed down:

(116) a. Idhes [tin   pena tin   asimenja ti   lepti]?
           Saw.2s the.f.acc pen.f the.f.acc   silver.f the.f.acc   thin
           Have you seen the silver, thin pen?

b.
```
                    DP
                   /  \
                  D    NumP
                  tin   /  \
                 (the) NP    \
                       △    /  \
                      pena Num   nP
                      (pen)     /  \
                              DP    nP
                              △   /  \
                       tin asimenja DP   nP
                       (the silver) △   /  \
                              ti lepti  n   <NP>
                              (the thin)     △
                                            pena
                                            (pen)
```
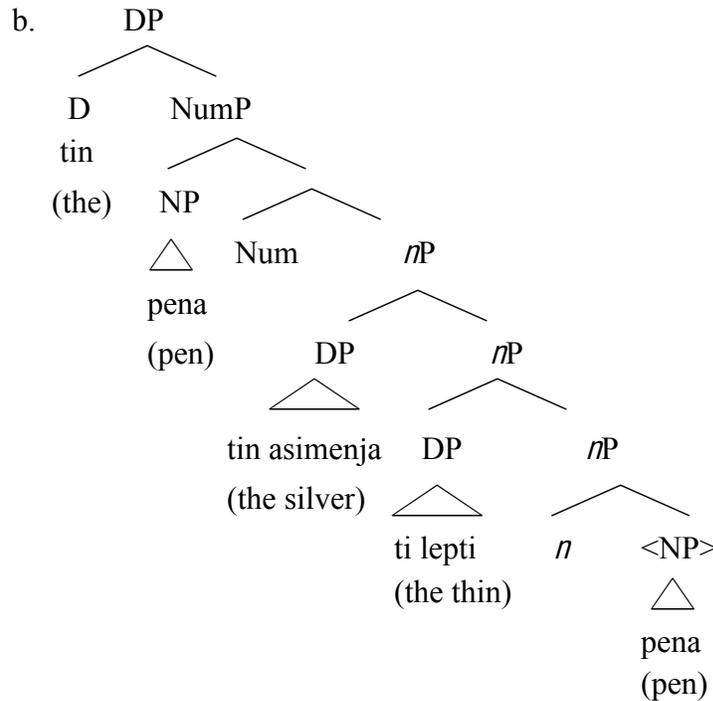
If these restrictive DPs appear prenominally, each one offers new information narrowing down the set. One way to account for such constructions is to treat them like fronted multiple wh-elements. Rudin (1988), for instance, has argued that in languages like Bulgarian, all fronted wh-elements form a constituent in the specifier of CP. Since Greek multiple restrictive DPs can be prenominal (cf. section 2.2), and bear some type of focus, they could also be treated as a constituent in the specifier of FocP which satisfies the strong feature on Foc. This analysis is one possible direction one can take for the prenominal multiple restrictive nominals. Alternatively, FocP could have multiple specifiers, with each fronted modifier in a separate specifier.[32] I leave the details of this for future research.

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[32] Thank you to Elizabeth Cowper for this observation.

To summarize, this analysis accounts for the two main properties of the restrictive DP: i.e. that there can be more than one such DP and that it is not the syntactic complement of the noun. If the restrictive DP were a syntactic complement, we would not able to account for the fact that they co-occur with true complements. Treating the restrictive DP as a low modifier is in accordance with standard views of restrictive relative clauses.

Turning now briefly to non-restrictive appositive DPs, I assume that these are also adjuncts (see De Vries (2006) for the corresponding analysis of relative clauses). The appositive phrase can be absent with no syntactic or semantic implications, and there can be more than one appositive modifier. Potts (2005) argues that appositives are comments and therefore parenthetical. Based on this observation, it follows that almost any modifying position should in fact be available for an appositive, as long as a pause is possible (as the Greek example in (102) literally translated as 'the young – this one – man').[33] However, as Potts notes, comments are not possible at the beginning of the sentence. In fact, as shown below, they are not even possible at the beginning of a nominal:

(117)   ?/*Tu   edhosa   – to   kokkino –   to   stilo.
        He.gen gave.1s   the   red   the   pen
        'I gave him the red one – the pen'

In the case of (102), the appositive is the demonstrative. It is not a prenominal appositive though, since, as mentioned, the adjective *young* is a nominalized adjective which functions as the matrix noun. Hence, in all cases, the appositive is post-nominal.

---

[33] In fact, these pauses seem to be available in any <et> nominal. It thus seems possible that appositives can adjoin to any predicative nominal. This correctly predicts that they will not appear in the beginning of a nominal, since at this point the matrix nominal is already an argument.

3.2.3 Determining the syntactic category of the restrictive modifying nominal

In this section I look at the structure of the restrictive modifier itself and determine the category of the head. Although at first glance it appears to be similar to English 'one', I show that it is not. Instead, I argue that it is a DP containing an empty noun.

It is worth noting the similarity between the Greek restrictive nominal and an English DP containing *one*, especially when the modifier follows the matrix noun:

(118) To   forema   *to   ghalazjo*
       The.n dress.n   the.n   azure.n
       'The dress *the azure one*'

It may be that such nominals are the equivalent of the English nominals containing *one.* We therefore need to examine whether the nominal head of the Greek modifier is indeed pronominal, corresponding to the English pronoun *one.* If it is similar to *one* then it should appear in the same environments. As shown below, the restrictive nominal can appear without the noun in the same contexts where the pronoun *one* appears:

(119) A: Telika tha paris   to   makri   to   forema i *to   konto*?
          At-last Fut take.2s the.n long.n   the.n dress.n or the.n short.n
          'So are you getting the long dress or *the short one*?'

     B: *To   makri.*
         The.n long.n
         '*The long one.*'

In such contexts, the nominal element behaves similar to *one*, which implies that it is pronominal. However, if it is like *one*, we should expect to find it in non-polydefinite constructions, as well. For instance, it should appear with a PP modifier as in (C). However, (C) is ill-formed, unlike the corresponding English sentence with 'one':

> C: * To   me   tis   tetraghones   tsepes.
>   The.n   with   the.acc square.f.pl   pocket.f.pl
>   ✓ 'The one with the square pockets.'

On the other hand, notice that such an answer is perfectly fine if a demonstrative like *afto* is used instead. As mentioned, demonstratives are used in Greek as third person pronouns. They can replace a noun and can be anaphoric. The response in (120) is well-formed, and corresponds closely to the English version with 'the one':

> (120) D: ✓ Afto   me   tis   tetraghones   tsepes.
>   This.n   with   the.f.acc   square.f.pl   pocket.f.pl
>   'The one with the square pockets.'

It seems that only overt pronominals can be used in such environments. Example (120-D) with an overt pronominal is grammatical, but (119-C) with only an overt definite determiner is not. This suggests that there is no empty pro-form in (119-C) corresponding to English *one.* If there were, it should be just as grammatical as (120-D). I thus hypothesize that a DP headed by the Greek definite determiner must contain a noun, either overt or null.

A final piece of evidence that the nominal head of the Greek modifier is different from English *one* is that the Greek polydefinite can occur with any type of noun, whether mass or count:

(121)   O   polis o   kosmos   efighe.

            The a-lot the   people.s(=world)   left.3s

            'The majority of the people left.'

(122)   To   poli to   alati pirazi.

            The a-lot the   salt.s harm.3s

            'The large quantity of salt is harmful.'

Notice that in this case English *one* cannot appear:

(123)   ✓I   lefki   i   zahari ine   kaliteri apo

           The.f.nom   white.f the.f.nom   sugar.f is   better.f from

           tin   kafe   (ti   zahari).

           the.f.acc   brown.f   the.f.acc   sugar.f

        * 'The white sugar is better than the brown one.'

In conclusion, the head of the polydefinite modifier does not behave exactly like English *one*. In all cases, it appears to be a noun. This would explain the presence of the determiner, since in Greek nouns and adjectives generally require a determiner, while pronouns do not. Furthermore, if we take the head to be a noun, it follows that there are no restrictions on the type of the noun the restrictive DP can refer to, i.e. whether it is count or mass. On this view then, a polydefinite adjectival modifier could be a restrictive nominal DP that contains an empty noun. This is illustrated in (124):

(124)

```
              DP
             /  \
            D    nP
                /  \
              AP    nP
                    /\
                   /  \
                  ‾‾‾‾‾‾
                    e
```
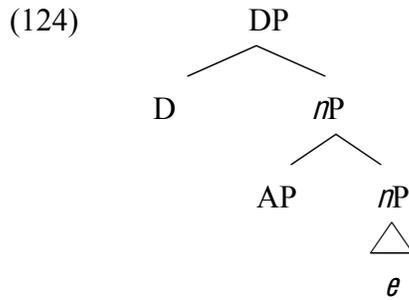
Moreover, the fact that the possessive clitic can cliticize onto the adjective as in (125) further supports the idea that the head in the restrictive DP is a noun. Possessives seem to be possible with nouns but not with pronouns. Interestingly, this seems to hold for English and German, as well. As we can observe in (126), the possessive pronoun or adjective does not coocur with pronominal elements: [34]

(125)   [[To   kokkino   mu]   to   forema]
          The.n red.n   my   the.n   dress.n
          'My red dress'

(126)   *Afto mu (Greek) /   *Mein   es (German) / *My it etc.
           This my/   My.adj it/

Going back to polydefinites, it is possible thus that the possessive pronoun occurs in the modifying DP because there is an empty noun. The clitic can also cliticize onto an overt noun. The following orderings are also possible:

---

[34] Daniel C. Hall pointed out to me (p.c.) that *my one* is also possible in English. Déchaine and Wiltschko (2002) claim that *one* is a type of noun, a predicative pro-NP, while Cowper and Hall (2009) argue that it is a pro-#P, where # stands for Number. Since the possessive pronoun usually occurs with nouns or #Ps, it is predicted that it may also co-occur with *one.*

(127)a.   [[To   kokkino   ]   to   forema   mu]

            The   red   the   dress   my

            'My red dress' (polydefinite DP)

      b.   [To   kokkino   forema   mu]

            The   red   dress   my

            'My red dress' (monadic DP)

Although it is not depicted in the translations, there is a subtle difference in meaning between (125), (127a) and (127b). That is, example (125) is interpreted as *among the dresses* (which may or may not be mine) *I refer to my red dress*. Example (127a) is interpreted as *among my dresses I refer to the (unique) red dress*. Example (127b) however, which contains a monadic definite DP, can be ambiguous between two readings: (i) *among my dresses I refer to the (unique) red one*; or (ii) *I want my unique dress which is also uniquely red*. These different meanings imply that there are different syntactic positions for the possessive clitic. For instance, when the possessive clitic cliticizes onto the adjective of the polydefinite, as in (125), it must be found in the specifier of nP of the restrictive DP (as in [$_{n\text{P}}$ mu [$_{n\text{P}}$ [$_{\text{NP}}$ e]], before any movement). This structure picks out *my red (dress), among all the dresses*. When it cliticizes onto the matrix noun as in (127a), it is in the specifier of nP of the matrix DP (as in [$_{n\text{P}}$ DP$_{\text{restr}}$ [$_{n\text{P}}$ mu [$_{n\text{P}}$ [$_{\text{NP}}$ N]]]). The meaning derived then is *among my dresses I pick out the red dress.* If we assume for now that the nominal in (127a) is a phonologically null noun, the overall structure should roughly look as in (128b):

(128) a. To   podhilato   to   kenurjo

         The   bike   the   new

         'The new bike'

b.

```
                    DP
               ┌─────┴─────┐
              To          NumP
             (the)     ┌───┴───┐
                      NP      NumP
                      │    ┌───┴───┐
                      N   Num     nP
                  podhilato    ┌───┴───┐
                   (bike)     DP        nP
                          ┌───┴──┐   ┌───┴───┐
                          D    NumP  n     <NP>
                          to  ┌──┴──┐         │
                         (the) AP  NumP       N
                             △   ┌─┴─┐   <podhilato>
                          kenurjo Num nP   (bike)
                           (new)    △
                                    e
```
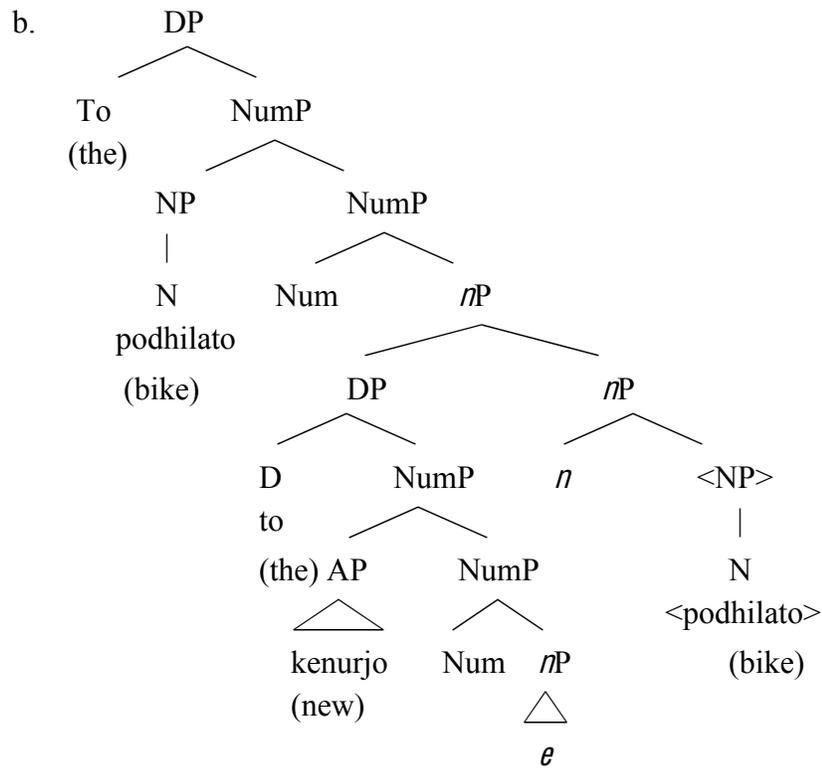
It was mentioned earlier that when a restrictive DP is prenominal, it is always focused. The prenominal ordering arises when the restrictive DP moves to the specifier of a higher Focus projection as shown in (129b):[35]

---

[35] Note that Mathieu (2009:145) also argues that determiners may be governed by focus and mentions the possibility of a Focus phrase projecting in the DP.

(129) a. To KENURJO to podhilato

The new the bike

'The NEW bike'

b.

```
                           FocP
                      ┌──────┴──────┐
                    DP              FocP
                ┌───┴───┐        ┌────┴────┐
             To kenurjo e       Foc        DP
             (the new)                   ┌──┴──┐
                                         D     NumP
                                         to   ┌──┴──┐
                                        (the) NP    NumP
                                              |    ┌──┴──┐
                                              N   Num    nP
                                          podhilato    ┌──┴──┐
                                           (bike)    <DP>    nP
                                                    ┌──┴──┐ ┌─┴──┐
                                               <to kenurjo e> n  <NP>
                                                  (the new)       |
                                                                  N
                                                             <podhilato>
                                                               (bike)
```
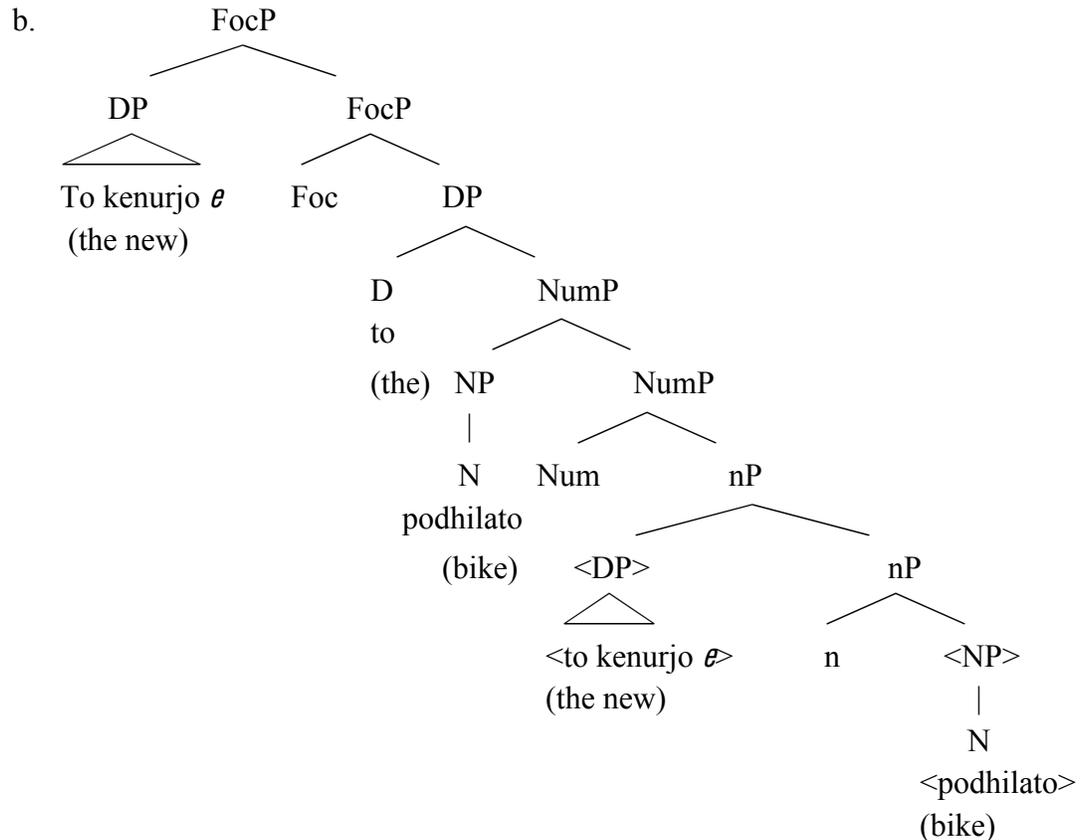
So far, it seems that the restrictive DP behaves like an ordinary DP, except that we assumed that the nominal head is phonologically null. However, it seems that there are restrictions on what can occur in a restrictive DP. For instance, although we have seen that there can be a possessive clitic, we will now see that no other nominals can appear inside this DP. Observe for instance that a full DP, such as an independent genitive DP, cannot appear inside the restrictive DP (130a). Such DPs can be accommodated only in the referent nominal (130c):

(130) a.*[To   kokkino   tis   Marias]   to   podhilato
       The.n red.n   the.gen.f Maria.gen   the.n   bike.n
       'Mary's red bike'

       b. [To   kokkina   tis]   to   podhilato
       The.n red.n   her.cl the.n   bike.n
        'Her red bike'

       c. *[To   kokkino]   to   podhilato   tis   Marias
       The.n red.n   the.n   bike.n   the.gen.f Maria.gen
       'Mary's red bike'

Restrictive DPs seem to be 'small' DPs allowing a clitic at most (cf. 130b). Further evidence

comes from the fact that modifying adjectives are also banned in restrictive DPs. Hence,

constructions like in (131a) are impossible. Multiple adjectives in monadic constructions in

(131b) though, are perfectly fine. Similar facts arise with adverbs, too. As shown in (131c), the

adjective in the modifier cannot be itself further modified, although this is not the case for a

single adjective in a monadic DP (cf. 131d):

(131)a.   *[To   kenurjo   kokkino   e]   to   podhilato.
          The.n new.n   red.n   the.n   bike.n
          'The new red bike'.

      b.   [To   kenurjo   kokkino   podhilato.]
          The.n new.n   red.n   bike.n
          'The new red bike'.

      c. *[To   pjo/   poli   kokkino   e]   to   podhilato.
          The.n more/ very   red.n   the.n   bike.n
   'The more/ very red bike'.

    d.   To   pjo/   poli   kokkina   podhilato.

        The.n more/ very   red.n   bike.n

        'The more/ very red bike'.

Hence, the restrictive DP is not a full DP. It seems to have a fixed, small structure, containing only the determiner, the adjective, and possibly a possessive clitic. However, this is not reflected in the structure we have proposed so far. As we can see in (132) the structure of the restrictive nominal is identical to a regular DP. In order to ensure that additional elements, such as the independent Genitive, as well as adjectival and adverbial modifiers, may not appear in the restrictive DP, and capture the fact that the restrictive DP has to be small, its structure must be revisited.[36]

    (132)   To   kenurjo (mu) to   podhilato

             The   new   1s.cl the   bike

             'The new bike'

---

[36] See section 3.4 for the structure that is proposed instead.

```
                    DP
            ╱              ╲
        D              NumP
        To          ╱        ╲
        (the)    NP            ╲
                  |     Num        nP
                  N        ╱            ╲
              podhilato   DP              nP
               (bike)   ╱     ╲        ╱      ╲
                      D       NumP    n       <NP>
                      to    ╱      ╲             |
                    (the)  AP       NumP         N
                           △      ╱      ╲   <podhilato>
                        kenurjo  e_NP       ╲
                         (new)         Num      nP
                                      ╱      ╲
                                  (Poss      nP
                                   mu)        △
                                           <e_NP>
```
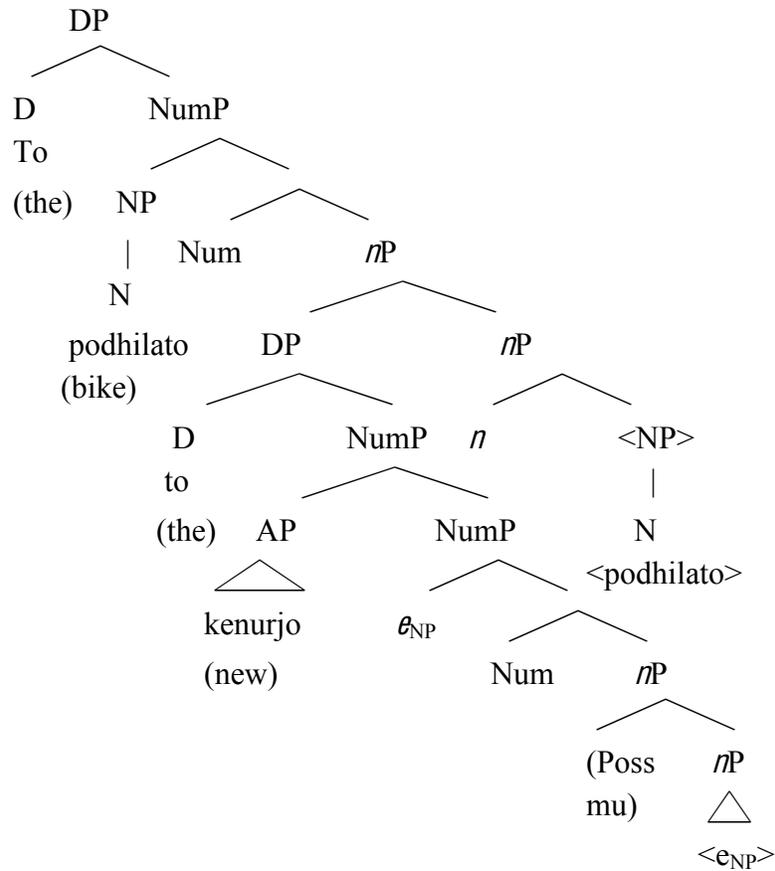
In conclusion, I have argued that the head of the restrictive DP is not pronominal, but rather some other type of nominal.[37] Before concluding on the structure though, let us look first at what else may appear in a polydefinite construction.

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[37] In 3.4 I propose that this nominal is the adjective itself which is nominalized.

3.3 Genitives and Polydefinites

In this section, we will see that in addition to modifying DPs, a matrix nominal may also contain genitives. The possibility of this co-occurrence will shed light on the structural position of the genitives.

Consider first constructions with a bare genitive complement of the matrix noun. As shown below, a modifying DP and a bare genitive can easily co-occur:

(133)   I   kalierghia   *domaton*   *i*   *viologhiki*
          The.f   growing.f   tomato.gen.pl   the.f   organic.f
          'The organic growing of tomatoes'

The same constructions with a prenominal modifying DP are a little marginal, though they are better if the modifier is stressed:

(134)   I   *VIOLOGHIKI*   *i*   kalierghia   *domaton*
          The.f   organic.f   the.f   growing.f   tomato.gen.pl
          'The ORGANIC growing of tomatoes'

Under no circumstances can the modifying DP intervene between the noun and its genitive complement:

(135)   * I   kalierghia   *i*   *viologhiki*   domaton
          The.f   growing.f   the.f   organic   tomato.gen.pl
          'The organic growing of tomatoes'

The fact that the modifying DP *i viologhiki* 'the organic one' cannot appear between the noun and its genitive complement provides more evidence that the noun and its complement form a constituent NP, and also that the noun and its complement move past the modifying DP. We saw a similar pattern with genitive possessors:

(136)   [_{NP}I   vafi   avghon]   tis   Stellas <t_{NP}>

      The.f   dye.f   egg.gen.pl   the.gen.f   Stella.gen

      'Stella's egg dye'

Modifying DPs thus support the view that the noun moves by phrasal movement. The NP with the genitive moves past the modifying DP, deriving the order N-Gen-DP_{MOD}, as in (133). Let us now consider how a DP with an independent genitive DP is derived. If it can co-occur with the modifying DP, we have to examine their order. However, if the independent genitive cannot co-occur with a nominal modifier it might be that they occupy the same position.

As can be observed in (137) below, the independent genitive *tis Stellas* 'Stella's' and the modifying DP *i fitiki* 'the organic one' can co-occur, though a pause is necessary:

(137)   I   vafi   *tis*   *Stellas*   –   i   fitiki

      The.f   dye.f   the.gen.f   Stella.gen   the.f   organic.f

      'Stella's organic dye'

In (137), the independent genitive precedes the modifying DP. However, the independent genitive may also be followed by the modifying DP as in (138):

(138)   I   vafi   i   fitiki   *tis*   *Stellas*

      The.f   dye.f   the.f   organic.f   the.gen.f Stella.gen

      'Stella's organic dye' (or 'The organic dye – namely Stella's')

In (137) above, the modifying DP *i fitiki* is interpreted as being more explanatory and parenthetical, which seems to be why a pause is necessary. I therefore propose that this constitutes a case of non-restrictive apposition (see Potts 2005 for a treatment of appositives). This contrasts with (138), where no such pause is necessary.

In (139) below, there is a bare genitive, as well. Again, in (139a) the modifier *i fiitiki* the organic one seems to act as a non-restrictive modifier as a pause is necessary between the genitive DP *tis Stellas* and the modifier itself. In (139b) there is no pause before the modifier *i fitiki*, suggesting that it functions here restrictively:

(139) a. ?? I   vafi   *avghon*   tis   Stellas   -   i   fitiki
          The.f   dye.f   egg.gen.pl   the.gen.f   Stella.gen.f   the.f   organic.f
          'Stella's organic egg dye'

   b. ?? I   vafi   *avghon*   i   fitiki   tis   Stellas
          The.f   dye.f   egg.gen.pl   the.f   organic.f   the.gen.f   Stella.gen.f
          'Stella's organic egg dye'

This example suggests that when the modifying DP is preceded by the independent genitive, the modifying DP is interpreted nonrestrictively. In the case where the modifying DP is followed by the independent gentive, the modifying DP seems to be interpreted restrictively. Focusing on the restrictive interpretation, i.e. with the modifying preceding the genitive, examples like (139b) suggest that the modifying DP is found in a position structurally higher than that of the independent genitive. Let us consider more examples before we conclude. For sentences like those in (140) below, it seems that native speakers of Greek have stronger intuitions. As it turns out, they consistently prefer the sentence with the genitive following the modifying DP:[38]

---

(140) a. Ekopsa   ta   triandafila *tis*   *Stellas*   –   ta   kokkina.
        Cut.1aor   the.n.pl rose.n.pl   the.f.gen Stella.gen   the.n.pl red.n.pl
        'I cut Stella's red roses.'

   b. # Ekopsa   ta   triandafila *tis*   *Stellas*   ta   kokkina.
        Cut.1aor   the.n.pl rose.n.pl   the.f.gen Stella.gen   the.n.pl red.n.pl
        'I cut Stella's red roses.'

   c. Ekopsa   ta   triandafila ta   kokkina   *tis*   *Stellas*
        Cut.1aor   the.n.pl rose.n.pl   the.n.pl   red.n.pl   the.f.gen Stella.gen
        'I cut Stella's red roses.'

The (b) sentence was found to be completely unacceptable without a pause between *tis Stellas* and *ta kokkina*. This shows that the final modifying DP must be an appositive, and thus examples like (140a) are acceptable. Examples like (140c) show that the modifying DP preceding the genitive can be interpreted restrictively. Hence, we have further evidence here that the restrictive modifying DP is structurally higher than the independent genitive.

A look at nominalizations provides us with the same insight. As we can observe in (141), the genitive DP preferably follows the modifying DP, as in (141b):

(141) a. */?I   kalierghia domaton [tu   Ghianni] – *i*   *viologhiki*
           The.f   growing.f tomato.gen.pl   the.gen John   the.f   organic
           'John's growing of tomatoes – the organic kind'

   b. I   kalierghia domaton   *i*   *viologhiki*   [tu Ghianni]
        The.f   growing.f tomato.gen.pl   the.f   organic   the.gen John
        'John's growing of tomatoes – the organic kind'

In all, we can conclude that the modifying DP and the genitive DP do not co-occur interchangeably. Rather, the genitive DP follows the modifying DP, if the modifying DP is

restrictive, as in (141b). If the genitive precedes the modifying DP, then the modifying DP is not restrictive, but rather appositive, and a pause is necessary, as in (141a).

I now consider the structure of a restrictive polydefinite containing a genitive DP. As mentioned, the fact that the genitive appears after the restrictive modifying DP, as in (141b), suggests that the independent genitive appears below the modifier in the structure. I thus suggest that the independent genitive originates in the specifier of nP and the modifying DP adjoins next. This gives us the following structure:

(142) a.

Ta	triandafila	ta	kokkina	*tis*	*Stellas*
The.n.pl	rose.n.pl	the.n.pl	red.n.pl	the.f.gen	Stella.gen

'Stella's red roses'

b.
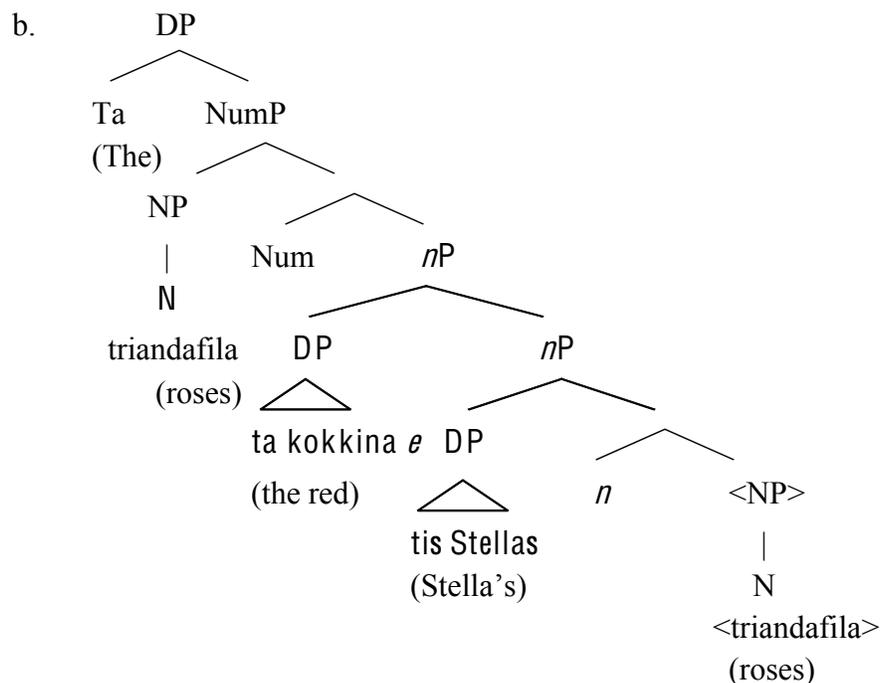
In conclusion, in this section we have seen that genitives are possible in polydefinite constructions. I have provided more evidence that the bare genitive is the complement of the noun and, as a result, the modifying DP cannot intervene. I have further argued that the

complement moves to NumP along with the noun, surfacing to the left of the modifying DP and the independent genitive.

We have seen that the independent genitive may also co-occur with the modifying DP. When the genitive appears before the modifying DP, then the modifying DP can only be appositive and must be preceded by a pause. When the genitive appears after a modifying DP, then the DP is restrictive. The independent genitive is argued to be the specifier of the nP.

3.4   Unifying the Definite Restrictive Nominals

In this section, I look at a wider range of polydefinites and argue that they all behave similarly. Examples of these are modifying DPs with overt nominals, demonstratives, and possessive DPs. I also revisit the structure of the modifier itself, and bringing the pieces together, I present a unified analysis for all types of polydefinites.

Let us briefly list the properties of the polydefinites seen so far, i.e. those containing a restrictive DP with an empty nominal. I have argued that the multiple instances of the determiner indicate that there are multiple DPs in the nominal phrase. The restrictive DP consists of a determiner, an adjective, and, at most, a possessive clitic. In contrast to a typical monadic DP, we have seen in section (3.2.3), this restrictive DP must have a small, fixed structure.

Another type of restrictive modifier is a DP with an overt noun. This DP is essentially the same as the nounless DP, except that the noun is overt. It can be a proper name, as in (143a) or a count noun as in (143b):

(143) a.

I	adherfi	mu	i		Elia	zi	stin
The.f.nom	sister.f.	my.cl	the.f.nom		Elia	live.3s	in-the

Aθina	ke	i		adherfi	mu	i	Elena	sto	Toronto.
Athens	and	the.f.nom		sister	my.cl	the.f	Elena	in-the	Toronto

'My sister Elia lives in Athens and my sister Helena in Toronto.'

b.

O	solomos	to	psari	(oxi	o	pijtis)
The.m.nom	salmon.m.nom	the.n.nom	fish.n	not	the.m.nom	poet

'Salmon the fish (not the poet)'

Since this type of restrictive DP contains an overt noun rather than an adjective (cf. 143b), the modifying DP has its own φ-features and there is no agreement between it and the matrix noun.

Interestingly, these restrictive DPs also must be syntactically small. Independent genitives and adjectives are not possible:

(144) a.

*O	solomos	*to*	*psari*	*tis*	*Stellas*
The.m.nom	salmon.m.nom	the.n.nom	fish.n	the.f.gen	Stellas

(oxi	o	pijtis)
not	the.m.nom	poet.m.nom

'Salmon Stella's *fish* (not the poet)'

b.

*O	solomos	*to*	*kanadhiko*	*psari*
The.m.nom	salmon.m.nom	the.n.nom	Canadian.n	fish.n

(oxi	o	pijtis)
not	the.m.nom	poet.m.nom

'Salmon *the Canadian fish* (not the poet)'

Restrictive DPs with overt nouns thus also form small DPs. Hence, so far we have that: if the noun is overt, no adjectives or genitives are possible. If there is no overt noun, an adjective must

appear. Hence, only one nominal element can be present in the restrictive DP, and the question is why. Although more research on this is needed, one reason might be that each restrictive DP can provide only one piece of new information, and thus only one nominal is allowed. Additionally, it could be that restrictive modifiers do not involve an empty noun, but rather an adjective that gets nominalized. This would explain why the nominalized adjective may not itself be modified by other intersective adjectives or adverbs, as we have seen in examples in (131).

In particular, it is possible that the restrictive modifier may contain roots that merge either with *n* or *a*. Roots that merge only with *a* are non-intersective adjectives. Intersective adjectives though may merge either with *n* or *a.* According to Alexiadou and Wilder (1998), non-intersective adjectives do not normally appear in polydefinites. Such adjectives and overt nouns easily appear in the restrictive modifying DPs. Hence, it could be that such a root is merged with *n* and thus the restrictive DP arises. Let us examine this possibility.

Considering first restrictive polydefinite modifiers containing an adjective, the adjective is always intersective, which explains why it can appear on its own. In a similar sense to Harley's (2005) work, we could take the adjectives in the polydefinite modifier to be roots merged with *n*. However, unlike Harley, I will assume that these roots are bare roots, and not root phrases. As we have seen, extra nominals are not allowed, and by this assumption we ensure that the structure of the modifier remains small. As shown in (145b), the restrictive DP now contains the determiner and an *n*P consisting of *n* and a root. NumP is absent, and therefore, any extra nominals in the restrictive modifier will be blocked since the relevant structural positions are unavailable. The presence or absence of NumP thus has important effects in the structure of a Greek nominal.

Restrictive polydefinite modifiers with overt nouns also involve an acategorial root that merges with *n*. Like polydefinites containing an adjective, this DP cannot host any other element other than the noun itself. I thus propose that both of these modifiers should be derived in the same way (cf. 145d):

(145) a. To kenurjo to podhilato
    The new the bike
    'The new bike'

b. DP

D NumP
To
(the) NP

N
podhilato Num *n*P
(bike)

DP   *n*P

D *n*P *n* \<NP\>
to

(the) *n* √   N

kenurj- \<podhilato\>
(new)
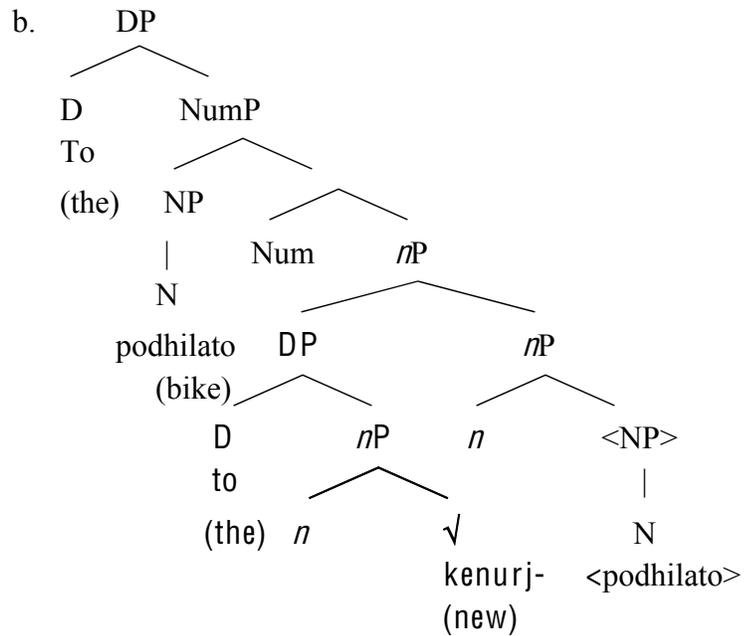
c. O   solomos to psari (oxi o   pijtis)

 The.m.nom salmon.m.nom the.n.nom fish.n not the.m.nom poet.m.nom

 'Salmon the fish (not the poet)'

d.
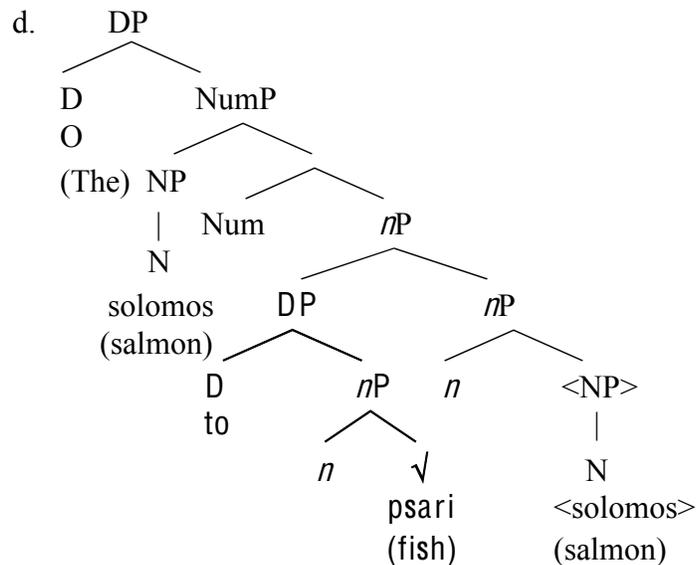
Let us take a look now at the demonstrative DPs. We have seen that the demonstrative *aftos* (this one) and *ekinos* (that one) are pronominal phrases rather than simple determiners. They can be argumental, but they may also appear as polydefinite modifiers. When they are argumental, they appear on their own. When they appear with other nouns, they are polydefinite modifiers. In this case they are similar to the other two modifying DPs. The difference is that the demonstrative completely identifies the set that constitutes the denotation of the noun, rather than simply narrowing it down. This property stems from the fact that demonstratives are deictic pronouns. Let us examine this in more detail.

Like other modifying DPs, a post-nominal demonstrative can be either restrictive or non-restrictive:

(146) a. To   podhilato   *afto*   exi parapano taxitites apo   to   alo.
          The.n bike.n   this.n has more   gears   than the.n   other.n
          'This bike has more gears than the other one.'   (restrictive)

       b. To   podhilato,   *afto eci sti yonia*, exi   parapano   taxitites...
          The.n bike.n   this.n there in-the corner has more   gears
          'The bike, this one over there in corner, has more gears…' (non-restrictive)

As can be observed in this example, in the (a) sentence the demonstrative appears alone and there is no pause between it and the modified noun. In the (b) sentence other modifiers are present within the demonstrative phrase and a pause is necessary. This suggests that the demonstrative can modify the noun restrictively as in (a), or non-restrictively, as in (b).

Similar to the modifiers with the nominalized root, when the demonstrative precedes the matrix determiner, as in the following example, it can only be interpreted restrictively:

(147) Afti   i   tenia   ine   romandiki   eno   ecini   ine
        This.f   the.f.nom movie.f be.3s romantic.f   while that.f   be.3s
        dhramatiki
        dramatic.f
        'This movie is a romance, while the other one is a drama.'

In such a sentence, if the demonstratives are omitted, the result is nonsensical:

(148) #I   tenia   ine   romandiki   eno   (i   tenia)   ine
        The.f.nom movie.f   be.3s romantic.f   while the.f. movie.f   is
        dhramatiki.
        dramatic.f
        'The movie is a romance, while the one is a drama.'

Finally, demonstratives, like other restrictive DPs, can bear focus, which seems to be a property of restrictive DPs just as it is for restrictive relative clauses:

(149) AFTO   to   vivlio xriazome   (oxi   to   allo).
      This.n the.n   book.n need.1   not   the.n   other.n
      Roughly 'I need THIS book (not the other one).'

In fact, only the demonstrative can be contrasted in such a sentence:

(150) #Afto   to   VIVLIO xriazome   (oxi   to   STILO).
      This.n   the.n   book.n need.1   not   the.n   pen.n
      'I need this BOOK (not this PEN).'

In sum, the demonstrative patterns like other restrictive DPs, i.e., those containing a nominalized adjective, as well as those containing an overt noun. Like the other restrictive DPs, the demonstrative has to form a small DP, accommodating at most a possessive clitic, as in (151a). No independent genitive DP is allowed, as shown in (151b):

(151) a. Afto   mu   to   pateloni
        This.n my   the.n   pant.n
        'These pants of mine'

      b. *Afto   tis   Stellas   to   pateloni
        This.n the.gen   Stella.gen   the.n   pant.n
        'These pants of Stella's'

Let us consider now the structure of a polydefinite construction with a demonstrative. We have seen that the demonstrative can also appear after the adjective:

(152) O   neos   aftos   andhras
       The.m.nom   young.m.nom this.m.nom   man.m.nom
       'This young man'

Such examples posed a problem for previous analyses (see Chapter 2 on previous work by Stavrou and Horrocks (1987), and Panagiotidis (2000)). To account for these orders, Stavrou and Horrocks had to assume that the demonstrative is a sort of phrasal clitic that can right-attach to adjectives. Panagiotidis, on the other hand, had to assume that the demonstrative occupying the spec projection of the NP ends up following the adjective, as the adjective, if present, can raise to Num.

Here, such constructions do not pose a problem. The reason is that when the demonstrative appears after the adjective, as in (152), it modifies the noun non-restrictively. Evidence for this comes from the fact that the demonstrative cannot be stressed. The impossibility of being stressed serves as a diagnostic to determine whether a nominal is a restrictive modifier or not (cf. 153a). Secondly, as shown in (153b), the demonstrative can in such contexts host the adverbial modifiers *edho* ('here') and *eki* ('there'):

(153) a. #O   neos   AFTOS   andhras
           The.m.nom   young.m.nom this.m.nom   man.m.nom
           'This young man'

      b. O   neos   -   *aftos*   *edho* - andhras
          The.m.nom   young.m.nom this.m.nom   here   man.m.nom
          'This young man over here'

In such constructions the demonstrative modifies the noun non-restrictively. It thus is not required to be 'small' and can be itself modified, here by the adverb *edho* 'here'. In addition, this

is why a pause is also possible. The interpretation of (b) then is: *the young man, namely the one over here*. Hence, when the demonstrative directly follows the adjective, it is a non-restrictive modifier. Thus, our structure for restrictive modifiers correctly excludes the derivation of such constructions.

In conclusion, the demonstrative must be a restrictive modifier when it is prenominal. When it appears post-nominally, a non-restrictive interpretation is also possible. However, the restrictive interpretation is not possible when the demonstrative is post-adjectival but prenominal. This shows that when it is non-restrictive, it is truly appositive, as according to Potts (2005) appositives are more flexible and can appear in various syntactic positions.

With respect to the type of the phrasal category of the demonstrative, I propose that it is φ but not D. According to Cowper and Hall's work (2009) [D] and [φ] provide two different ways in which a predicate NP or NumP can be converted into an argument of semantic type e: [φ] accomplishes this by introducing an index, converting a predicate into an indexed argument. [D] introduces a choice function.[39] The reason I argue that the demonstratives *aftos* ('this one') and *ekinos* ('that one') are φ and not D, is because we have seen that they can be anaphoric and thus must be able to be bound (see example (120) on page 107). They are used in place of third person pronouns and can thus appear on their own. They are thus very similar to the English pronouns *she*, *he*, and *it*, except that they also encode a proximal distal contrast like the English demonstratives *this* and *that*.

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[39] As I argue in 4.2.3.3, modifying DPs are different in this respect. Based on Heim and Kratzer's (1998) assumptions on restrictive modification, I argue modifying DPs are predicative. See 4.2.3.3 for more.

Turning to the structure of the restrictive demonstrative, I assume that like other restrictive nominals, it adjoins to the *n*P. It may raise to a position of new information, the specifier of Focus Phrase, and thereby appear prenominally, or it can remain *in situ* and appear postnominally. The proposed structure is shown in (154b):

(154) a. Afto   to   vivlio
        This.n the.n   book.n
        'This book'

b.

```
                    FocP
                   /    \
                φP       \
               /△\     Foc      DP
              Afto              /  \
             (This)           D     NumP
                              to    /   \
                             (the) NP    \
                                   |    Num     nP
                                   N          /    \
                                 vivlio    <φP>     nP
                                 (book)    /△\     /   \
                                        <afto>  n      <NP>
                                        (this)           |
                                                         N
                                                      <vivlio>
                                                       (book)
```
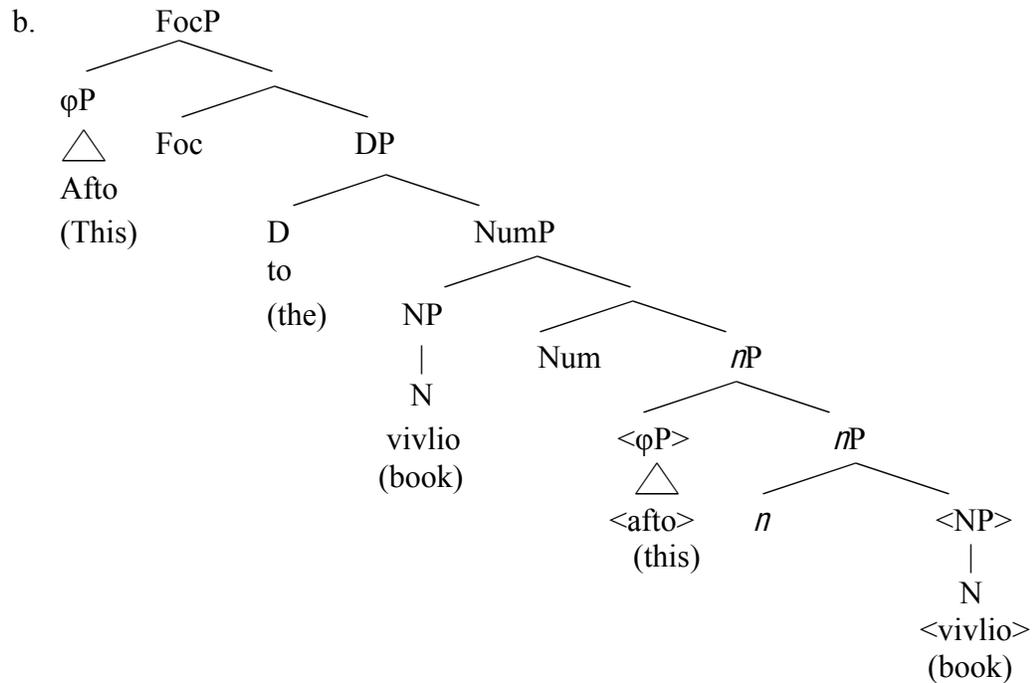
Here, the demonstrative merges in the same position as a restrictive nominal, i.e. with the *n*P. It may move to the specifier of the Focus Phrase and thus surface prenominally. Although the demonstrative is not always contrastive, it does always bear at least the intonation of a phrase conveying informational focus.

The possessive adjective can also form a restrictive modifier. The nominal containing it can appear either prenominally, as in (155a) or post-nominally, as in (155b).[40] Furthermore, like other restrictive DPs, this type of nominal may not host an additional nominal element:

(155) a.   To   DHIKO mu   to   vivlio.
           The.n own.n my.cl.gen   the.n   book.n
           'My own book'

      b.   To   vivlio TO   DHIKO mu
           The.n book.n the.n   own.n my.cl.gen
           'My own book'

      c. *To   DHIKO mu   *palio* to   vivlio
           The.n own.n my.cl.gen   old.n   the.n   book.n
           'My own old book'

      d. *To   *poli* DHIKO mu   to   vivlio
           The.n very   own.n my.cl.gen   the.n   book.n
           'My very own book'

Therefore, when the possessive adjective is headed by its own determiner, a modifying DP is formed. Like other adjectives in such DPs, the possessive adjective now merges first with *n*. Hence, in a monadic nominal, the possessive adjective is a root that merges with *a* to give us an adjective. In a polydefinite, it merges with *n* to give us a noun. Based on what I proposed for the possessive adjective and for restrictive modifiers with a bare adjective, (155a) is derived as in (156):

---

[40] Notice that although the possessive adjective in (155b) is postnominal it is still stressed since as mentioned, it comes with an inherent [foc] feature. Note though, that focus here is informational, i.e. stressed but not contrastive.

(156)

```
                    FocP
                   /    \
              DP         \
             / \      Foc    DP
            /___\            /  \
         To dhiko mu       D      NumP
         (The own my)     to (the) / \
                         vivlio_NP    \
                         (book)  Num    nP
                                      /    \
                                 <DP>        nP
                                 /  \       /__\
                                D     PossP  <vivlio_NP>
                              to (the) /  \  (book)
                                     nP     \
                                    /__\  Poss   <nP>
                                   dhiko  mu     /  \
                                   (own)  (my)  n      √
                                                    dhiko
                                                    (own)
```
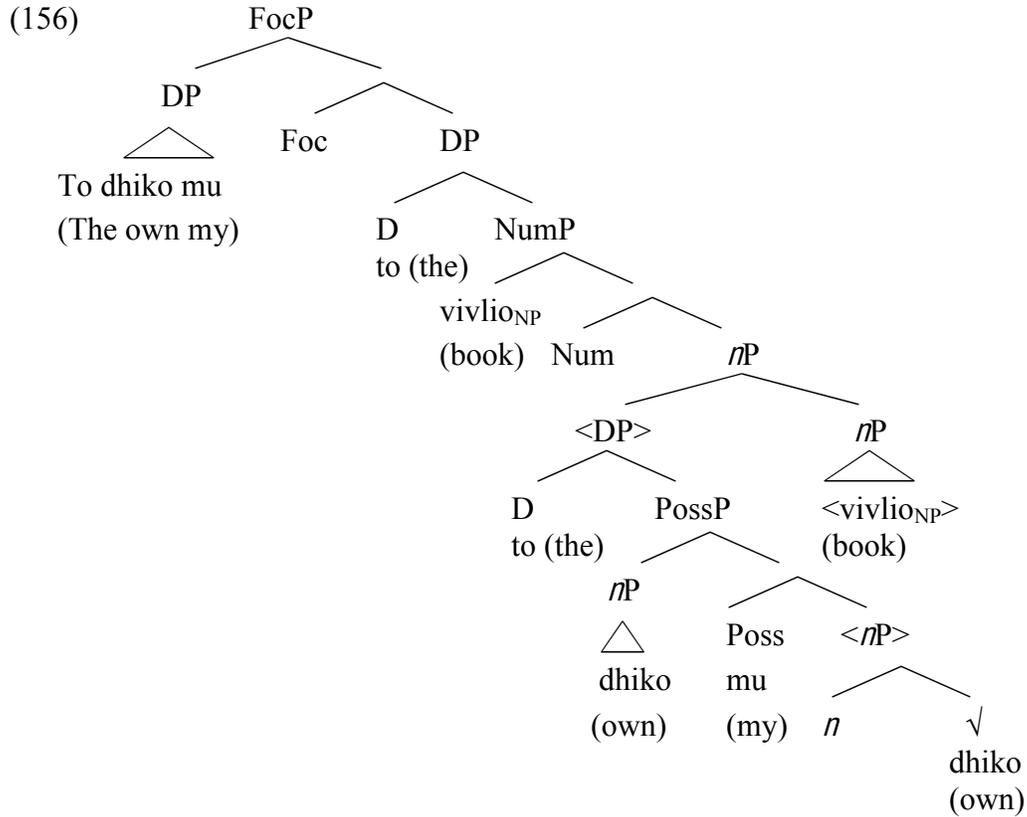
As proposed for adjectives that appear in the modifying DP, the possessive adjective merges

with *n*. Unlike other adjectives though, this adjective expresses possession and thus a PossP must

be additionally present in the modifying DP. The adjective bears an inherent focus feature and

uninterpretable person features that can only be checked from the possessive clitic locally. The

features on the adjective are inherited by the *n*P and movement to specifier PossP is triggered.

Hence, the nominal in (155b) with the postnominal modifying DP is now derived. For the

nominal in (155a) with the prenominal modifying DP, the DP containing the possessive adjective

additionally moves to the specifier of FocP.

In conclusion, I have shown here that there are different types of polydefinite restrictive

nominals. These are DPs with bare adjectives, demonstrative phrases, proper names and count

nouns. I have argued that the so-called 'polydefinites' are not a peculiar phenomenon, but rather,

simply an instance of modification by restrictive nominals. There are two questions raised now. First, do restrictive nominals have some type of definiteness requirement? If this is the case, they should be restricted to definite DPs. Secondly, is it a unique phenomenon restricted to languages with rich inflection as previous analyses suggest? Or is it a rather common property of languages? These are issues that I turn to in the next chapter.

3.5 Conclusions

In this Chapter, I have analyzed definite monadic and polydefinite constructions. I have argued that polydefinites contain modifying DPs that can be interpreted restrictively or non-restrictively. Focusing on prenominal polydefinite modifiers, I showed that they are always restrictive and that there are several types. Crucially they are all derived in the same way: (i) restrictive nominals adjoin to nP; (ii) they may raise to FP, giving an obligatorily restrictive reading. Overall, I proposed structure can be schematized as in (157):

(157)   FocP
├── Foc
└── DP
    ├── D
    └── (PossP
        ├── AP_Poss
        │   └── Poss)
        └── NumP
            ├── AP
            └── NumP
                ├── NP
                └── NumP
                    ├── Num [N*] [φ]
                    └── nP
                        ├── DP_RESTR
                        │   ├── D
                        │   └── nP
                        │   ├── n
                        │   └── √
                        └── nP
                            ├── Poss
                            └── nP
                                ├── n
                                └── <NP>
                                    ├── N
                                    └── NumP_gen
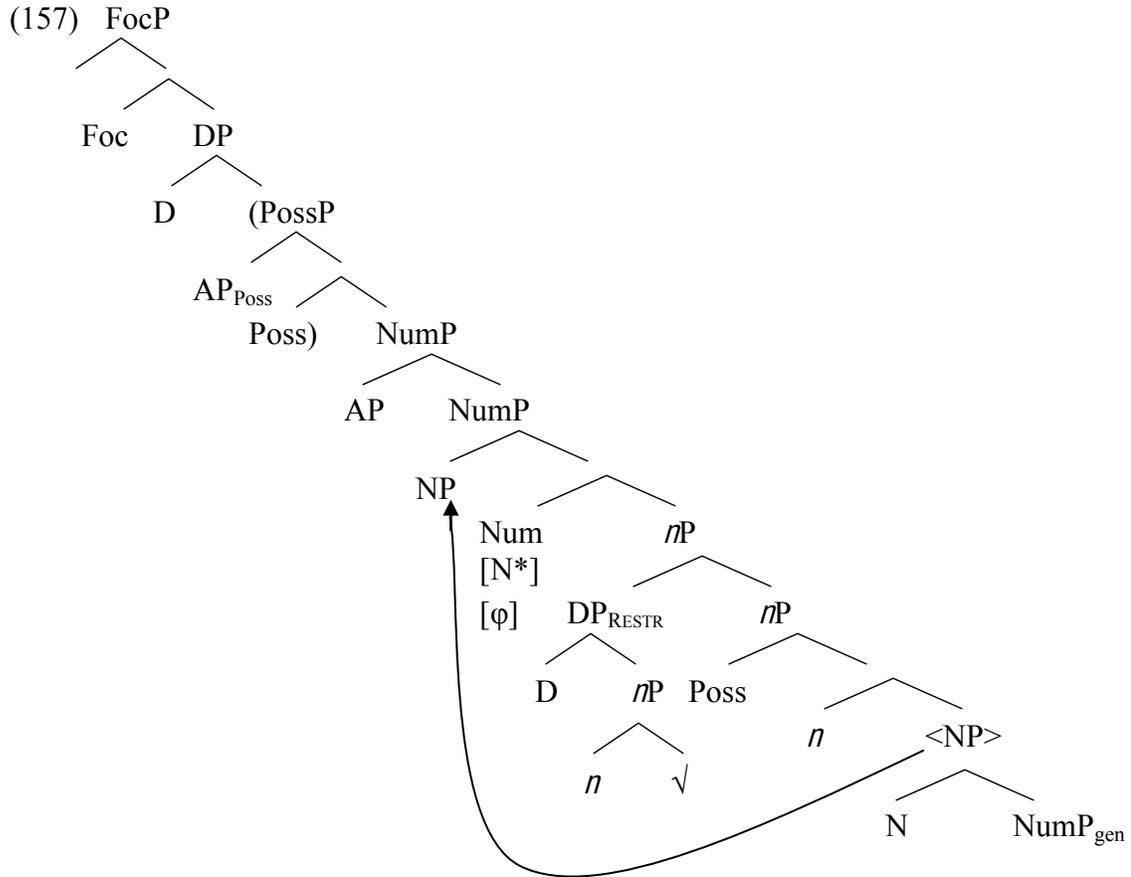
The claims that I made for nominals represented in this structure are as follows. First, nouns raise overtly to NumP to satisfy the strong predicate N-feature on Num. This movement is a consistent property of the Greek nouns and not conditional to whether or not an adjective phrase is present. If the noun has a complement, the complement moves along with the noun to Num. Second, the number projection itself carries the noun's φ-features. The number phrase is present not only with count nouns, but also with mass nouns. We have seen that Greek mass nouns can pluralize and can retain their mass denotation. Hence, the Greek NumP is slightly different from the English NumP, which is present only in count nominals.

Regular adjectives adjoin to NumP. This holds for both intersective and non-intersective adjectives. However, the possessive adjective *dhiko* is a special case. It is part of a different syntactic projection, PossP. When a PossP is present, the possessive pronoun is generated in

Poss. Genitives and demonstratives were also discussed. I examined their properties and determined their syntactic positions. Genitives provide evidence for the position of the different nominal elements, while demonstratives are argued to also to be DPs, either the main nominal element or a modifying DP, restrictive or non-restrictive.

Turning to polydefinites in particular, I have shown that these are simply a type of modifying DPs. They are thus not a peculiar parametric property of Greek, as has been previously claimed. As modifiers that can appear postnominally, I argued that they adjoin to *n*P, but may raise to the specifier of FocP when they are prenominal. Considering the contribution of the determiner in such constructions I argued that its function is to signify the nominal restriction on the head noun. The more determiners there are in a nominal, the more restrictive DPs are involved. Next we will see that it also makes a semantic contribution, which argues against Lekakou and Szendrői's claim that the definite determiner in Greek is a semantic expletive.

Finally, we have seen that the different types of restrictive nominals all behave similarly: they are necessary to the meaning, they can be focused, and they are 'small', i.e. reduced. They are thus all derived in the same way. With respect to the size of the restrictive DP, I have defined what it means to be small, i.e. this type of nominal is small because it only consists of a determiner and a root merged with *n*. In contrast, non-restrictive DPs may themselves be modified, such as the appositive demonstrative in ex. (153), which raises the question of what their structure looks like. As I am dealing with restrictive modification though, I will leave this question open.

Next, I turn to the question of what licenses this type of restrictive nominal modification. I also look at other languages that may shed light on modifying nominal DPs. It might be for instance,

that restrictive DPs of other languages pattern similarly. If so, it will be interesting to examine the ways they are similar or different, and whether they can receive the same account.

Chapter 4   Definiteness

Up until now, the focus of this thesis has been to account for the properties of polydefinites. I now turn to the question of why a language like Greek exhibits such constructions.

We have seen that these constructions are not a unique phenomenon to this language, although they are more prevalent in Greek than elsewhere. The question is why, i.e. why they are so common in Greek. My answer to this is that it is the specification of the Greek definite article that makes such constructions possible. In particular, I now argue that definiteness consists of two components, uniqueness and familiarity. The Greek definite article, as well as determiners allowing restrictive modification by nominals, only spells out one aspect of definiteness, familiarity. This type of underspecification is what makes RMN possible since the restrictive nominal may then contribute in identifying a unique entity. That is, RMN is possible because the matrix DP is only familiar, not unique. RMN allows us to add more information.

Before we see this in detail, let us first consider another phenomenon that provides more evidence for the underspecification of the Greek definite article. These are generic definite nominals, which have previously been taken to be indefinite (Roussou & Tsimpli, 1994).

4.1. Generic DPs: definitely definite

Earlier in this dissertation, we briefly saw that Greek generic nominals are headed by the definite article. I now look at these constructions and present some earlier work on these nominals by Roussou and Tsimpli (1994).

To start with, definite phrases that are interpreted generically can be either subjects or objects. Looking at subjects first, Roussou and Tsimpli (1994: 73) show that the definite article is obligatory. They give the following example:

(158) *(I) manavidhes kserun arithmitiki.
       The.pl.m greengrocer.pl.m know.3pl arithmetic
       'Greengrocers know arithmetic.'

Assuming a distinction between individual- and stage-level predicates, Roussou and Tsimpli argue that the interpretation of the individual-level predicate 'know arithmetic' in (158) is generic. They conclude that the subject is not interpreted as a definite description despite the presence of an overt D. A stage-level predicate on the other hand, can also have a definite subject:

(159) *(I) fitites pighenun se dhiadhilosis.
       The.pl.m student.pl.masc go.3pl to demonstration.pl.f
       'Students go to demonstrations.'
   Or 'The students are going to demonstrations.'

(Roussou & Tsimpli, 1994: 73)

They argue here that both a habitual interpretation, e.g. *students go to demonstrations* (shown in the first translation), and a progressive one, e.g. *the students are going to demonstrations* (shown in the second translation), are possible. In the first case they claim that the noun phrase is generic and indefinite, while in the second case the noun phrase is a definite description.

They point out that similar facts arise with generic objects, as well. Notice that here the determiner is also obligatory:

(160) Adipatho *(tis)   apsimaxies.

      Despise.1s the.pl.f.acc   skirmish.pl.f

      'I despise skirmishes.'

                                        (Roussou & Tsimpli, 1994:75)

To account for the obligatory presence of the determiner in generic noun phrases, they claim that the definite article is an expletive. Following Longobardi (1994), Roussou and Tsimpli argue that bare generic subjects are not allowed in non-lexically governed positions. The definite determiner thus needs to be inserted for syntactic reasons. They observe that Longobardi's analysis fails to account for generic objects since it predicts that bare objects should be possible. They conclude that Longobardi's analysis should be reformulated to account for the Greek facts, as well. In all cases, they conclude that the Greek determiner is inserted to satisfy the lexical government requirement and to allow the nominal to function as an argument.

Here, I adopt the standard claim that the determiner is inserted to turn the predicative noun into an argument. However, I argue against the view that the Greek determiner is inserted for purely syntactic reasons as Roussou and Tsimpli propose. One reason is that it wrongly predicts that bare object noun phrases should not be possible at all. As shown in (161), bare object noun phrases do occur:[41]

(161) Efera   molivi/ molivja   ke   stilo.

      Brought.1s   pencil.n/ pencil.n.pl   and   pen.n/ pen.n.pl

      'I brought a pencil/ pencils and a pen/ pens.'

---

[41] According to Marinis (2002) bare NPs of this type are objects of verbs of accomplishment. Tzartzanos (1945), Mackridge (1990), Holton, Mackridge & Philippaki-Warburton (1997) and Tsimpli & Stavrakaki (1999) have also mentioned them.

Clearly, these objects are interpreted differently from those in (160). The difference is that in (161) an existential indefinite interpretation is available, one that is unavailable if the definite article is present. As we will see, the impossibility of interpreting nominals like those in (158)-(160) existentially can only be explained if we leave open the possibility that the Greek definite determiner does in fact contribute some aspect of definiteness, and not if we treat it as an expletive. The question we need to ask is exactly what this contribution is.

Let us consider the generic definite subject and object DPs again. In example (159), repeated here as (162), the nominal *i fitites* 'the students' singles out the set of students from the set containing other sets or individuals.

(162) *(I)   fitites   pighenun   se   dhiadhilosis.
       The.pl.m   student.pl.masc   go.3pl   to   demonstration.pl.f
       'Students go to demonstrations.'

Hence although a specific group of students may not be picked out, the definite determiner picks out the class of students as opposed to non-students. The same holds for example (158), where a single class of entities is picked out, the one containing all the greengrocers.

Similarly for objects, in example (160) repeated below as (163), the object DP *tis apsimaxies* 'the skirmishes' selects a certain type of interaction, the set that contains all types of skirmishes:

(163) Adipatho   *(tis)   apsimaxies.
       Despise.1s the.pl.f.acc   skirmish.pl.f
       'I despise skirmishes.'

To conclude, morphologically definite plurals must be interpreted either as specific definites (i.e. there is a specific unique entity that is picked out) or as generics. The true indefinite interpretations are not possible. It thus seems that the determiner is not simply filling a syntactic

requirement. Rather, it does in fact make a semantic contribution. I propose that it marks a type of definiteness, which as it turns out can be of two types, generic or referential. We can now turn a formal account of this contribution.

4.2 The syntactic Partition of the semantics of Definiteness

4.2.1 Comparing the definite articles of English and Greek

So far, I have proposed that the underlying property that makes polydefinites and generic definites possible is located in the determiner. In this section, I now look at this property and argue that definiteness must be decomposed and mapped to two projections. I claim that definiteness consists of two components: *familiarity* (Heim, 1982) and *uniqueness* (Heim and Kratzer, 1998). The Greek determiner carries only the first of these, while the English determiner *the* carries both. The Greek determiner is thus underspecified in uniqueness. This can be seen from the fact that it does not always pick out a unique entity (cf. 164, below). It is for this reason that restrictive nominals are allowed in almost all nominal constructions of Greek. In a language such as English though, the determiner *the* always picks out a unique entity, and thus restrictive nominals are not possible. Interestingly enough, English definite DPs without *the* introducing them, such as proper names and possessed nominals, pattern with Greek nominals in not always picking a unique entity. Hence, the Greek definite determiner and English definite determiners other than *the* all seem to be underspecified in terms of definiteness. Let us see this in more detail.

Generally, restrictively modified DPs are different from those that are uniquely established in the context. The latter ones are unique entities that are selected from a set, the D set, while as we will

now see, the uniqueness of the restricted DPs arises from the intersection of this set with another set.

Consider for instance the following examples:

(164)   a. John offered me some coffee.

          b. John the assistant offered me some coffee.

Following Longobardi (1994), Massam and Ghomeshi (2009) argue from such examples that the proper DP *John* forms a definite phrase with a definite null D. They argue that this null D is specified with the feature [singular], though otherwise its meaning and function is similar to *the*. This means for them that the null D has the same semantics as given for *the* by Heim and Kratzer (1998). Accordingly, the context in (164a) supplies us with a unique entity, *John*. This entity is selected by the null determiner from a set of entities with different names. That is, in (164a) we have a unique entity that is contextually salient, and this is John.

In the context of (164b) however, *John* by itself does not give us a unique entity. Rather, we have instead a non-singleton set of entities named *John*. That is, the context of (164b) contains a set of contextually salient people with the same name. The selection of the unique entity is achieved by the successful intersection of this set with another one which contains the assistant. Thus, in (164a) the context C, which is a subset of D, is a singleton set containing a unique individual y. This is schematized in (165a). In (164b), C does not contain a single individual but rather is a (non-singleton) set of individuals {x, y, z...} as shown in (165b):

(165)   a.   D   b.   D

              C   C
                      y   {x, y, z}
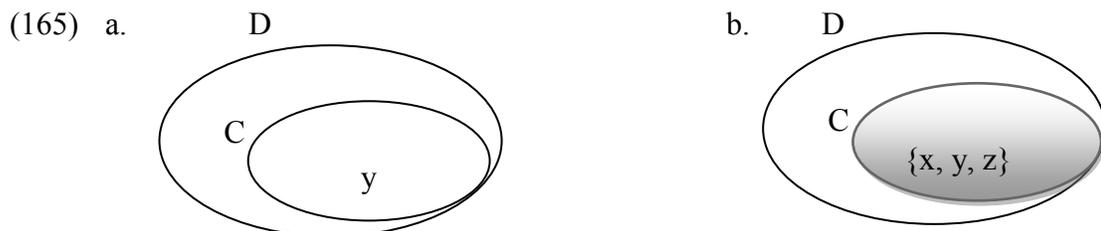
Hence, in (164a) a unique individual John is successfully selected. In (164b) though, C is a contextually salient non-singleton set and thus a unique individual cannot be selected. This is parallel to Greek. That is, proper names in English, and also possessives, as will be shown, are underspecified in the same way as are Greek DPs containing the definite article. I propose that all of these constructions, i.e. English proper names with restrictive modifiers and Greek polydefinites, involve sets and their intersection. This means that the matrix nominal is not argumental, but rather a predicative function of <et> type. The same, I claim, is true of the restrictive modifier. Regarding the restrictive modifier in particular, the idea that it is a function is not new. Restrictive modifiers are commonly argued to be of type <et> and to intersect with a noun, which is also of type <et>. For instance, Heim and Kratzer (1998) propose that restrictive modifying relative clauses are not propositions, but rather modifying predicates. Building on Quinn's (1960) proposal, Heim and Kratzer assume that relative clauses are just like other modifiers in the noun phrase, such as PPs and APs. In a sentence like *the house which is empty is available* the restrictive relative clause "which is empty" has the same denotation as "empty". Since both ⟦house⟧ and ⟦which is empty⟧ are of the same type, i.e., of type <et>, they combine via the intersective operation of Predicate Modification. The resulting <et> predicate is then the argument of the determiner ⟦the⟧ which is of type <<et>e>. By functional application, ⟦the⟧ applies to the predicate *house which is empty*, giving the unique empty house.

As Heim and Kratzer (1998: 82 – 83) further argue, the restrictive modifier first intersects with the noun to the exclusion of the determiner. This is shown in (166a). A structure as in (166b) with the modifier adjoining higher is ruled out, as it leads to uninterpretability:

(166) a.   DP$_e$ b.   * DP$_t$

        D$_{<et,e>}$ NP$_{<et>}$ DP$_e$ Mod$_{<et>}$

          N$_{<et>}$ Mod$_{<et>}$ D$_{<et,e>}$ NP$_{<et>}$

The reason structures like the one in (166b) are ruled out is because when the determiner, which is of type <<et>e>, combines first with the noun of type <et>, the result is an argument of type e. The adjunction of the predicative <et> modifier will give a propositional truth value instead of an individual. The DP will thus be unable to compose with a verb or verb phrase.

Since higher adjunction of the restrictive modifier leads to uninterpretability, (166b) should not be the structure that derives modified nominals. As Heim and Kratzer point out, this is the case even in languages that seem to exhibit the higher adjunction structure. As they argue, the modifier must be interpreted low at some other level of representation.

Going back to the restrictive nominals of Greek, we have seen independent evidence from genitives that the modifying nominal adjoins low (cf. Chapter 3). Thus, no such interpretative problems arise. Syntactico-semantically, a simple Greek DP should roughly look as follows:

(167)   DP

    D   … nP <et>

     DP$_{MOD}$<et> nP <et>
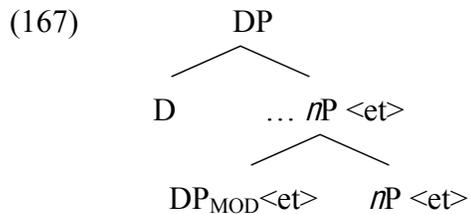
I will argue that the modifying DPs (DP$_{MOD}$) are <et> predicates that adjoin low, though they are interpreted higher, at LF. I now consider the types of nominals that allow restrictive modification, i.e. definite or indefinite, proper names, count nouns with possessors, etc., and examine the ways that ensure that the grammar will only generate those structures.

First, notice that not all DPs can be modified by restrictive nominals. As shown below, a restrictive modifying DP with a definite article cannot modify an indefinite nominal even if the indefinite is specific. This is true whether the modifier is prenominal or post-nominal:

(168) a. *Ena   triandafilo   [DP_mod to   kokkino]
           A/One rose   the   red
           * 'A rose the red one' (unacceptable if restrictive)

       b. *[DPmod To   kokkino]   ena   triandafilo
             The   red   a/one   rose
             Intended reading: 'The red one among roses'

(169)   *[Kapjos/   Enas   tipos o   apenanti]   irthe   apo   dho.
           Some/   A   guy   the   across   came.3s from   here
           'Some guy the one across the street dropped by.'

Additionally, restrictive DPs cannot be headed by overt indefinite determiners:

(170) a. #Ena   triadafilo   ena   kokkino
            One   rose   one   red
          #A rose a red one (on the restrictive reading)

       b. *Ena   kokkino   ena   triadafilo
            One   red   one   rose
          *'A red one a rose'

Only definite DPs can be restrictively modified by another nominal. Since the only difference between definite and indefinite DPs is the determiner, the determiner might be what makes this type of restrictive modification possible. As I argue, the fact that the definite article allows for this modification indicates that the definite determiner in Greek does not always uniquely select

an individual, and the restrictive modifying nominal can thus contribute to the selection of a unique individual. This contrasts with English, where, as we will see in more detail, the definite determiner *the* does not allow for restrictive modification by other nominals. As we can observe in (171), nominals not headed by *the*, such as proper names, can be modified by restrictive nominals:

(171)   John the professor is taller than John the doctor.

In Greek, proper names also allow modification by restrictive DPs as shown below. But notice that Greek proper names appear with the definite article:

(172)   O   Ghiannis o   kathighitis/   i   idhiofiia/   o   psilos
        The   John   the   professor/   the   genius/   the   tall
        'John the professor/ the genius/ the tall (guy)'

In contrast, English definite DPs with *the* do not allow such modification, although Greek definite DPs with common nouns allow it:

(173)   a. *The professor {the linguist/the genius/the active}
        b. *The professor the linguist* is taller than *the professor the biologist*.

(174)   a. O   kathighitis   {o   ghlosologhos/ i   idhiofiia/ o   dhrastirios}
            The   professor   the   linguist/   the   genius/   the   active

        b. O   kathighitis o   ghlosologhos ine psiloteros apo ton kathighiti to viologho.
            The professor   the linguist   is taller   than the professor the biologist.

The unacceptability of these English examples suggests that the English determiner *the* obligatorily selects a unique individual, making further restriction impossible. In contrast, the grammaticality of (171) suggests that the null D in a proper DP may not uniquely select an

individual. Interestingly, pronominal possessive nominals also allow for restrictive modification, as shown below both in Greek and English:[42]

(175) O ghitonas mu o ghiatros/ i

The neighbor my.gen the.nom doctor.nom/ the.nom.f

idhiofiia

genius.nom.f

'My neighbor the doctor/ the genius'

If the pronominal possessor is a type of D, it is similar to the null D found with proper names in that it allows for further restriction. As for Greek, examples like this are expected to be acceptable since the same definite determiner appears here as with proper names.

To conclude, in Greek the definite determiner allows for restriction. This determiner accompanies count nouns, generic nouns, proper names and possessive nominals. In English, proper names and pronominal possessors do not contain *the*, and pattern similarly to the Greek DP. The English determiner *the*, on the other hand, picks out a unique referent and thus cannot be restrictively modified.

Hence, the Greek definite nominals introduced by the definite article and English definite nominals not introduced by *the* pattern alike and form one class of nominals. This class seems to be underspecified in terms of definiteness: i.e. a unique entity is not necessarily selected and thus the additional restrictive nominal is possible.

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[42] English possessives and proper names are examined in more detail in 4.2.3.

4.2.2   Formalizing the properties of the article

In this section, I discuss exactly how the definite determiner in Greek is semantically underspecified. I will propose in particular that definiteness, which in languages like English is realized under a single syntactic node, is mapped in Greek to two separate projections. As the Greek definite article spells out only the lower of these positions, it can appear in contexts where fully specified definite determiners do not. Let us see this in more detail.

Thus far, I have argued that the determiner of the matrix noun in polydefinites does not select a unique entity. We have also seen that the context sometimes provides us with more than one contextually salient entity; i.e., it provides at least one entity that is familiar to us (see Heim 1982). Previously, it has been observed that just the familiarity or uniqueness requirement alone does not suffice cross-linguistically to pick out a unique individual, and that contextual restrictions are often argued to play an important role in determining it (see for instance Chung & Ladusaw 2004, Giannakidou 2004). Gillon (2006, 2009) in particular decomposes definiteness in domain restriction, i.e. the set of elements in the contexts, as well as the uniqueness presupposition.[43] For her, the former is a universal property of language, while the latter is a language-specific property. Lyons (1999) has also argued that it is not possible to provide a universal semantics for definiteness, since it may vary cross-linguistically. As he explains, the determiner may encode different semantic functions in different languages. Sometimes it may encode familiarity, and sometimes uniqueness. Instead, Lyons argues that definiteness is the grammaticalization of what he labels as 'semantic/ pragmatic definiteness'. Definiteness for

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[43] Many thanks to Diane Massam (p.c.) for bringing previous work on determiners to my attention.

Lyons is a grammatical category on a par with tense, mood, number and gender, not grammatically active in every language but only in those that show overt marking.

We have seen that the constructions we have been discussing here are also definite phrases; however, these definite phrases differ from English DPs headed by *the*, in that they do not necessarily select a unique individual. In most cases, the determiner in these nominals selects a group of familiar entities.[44]

Furthermore, we have seen that the same article appears with generic plurals, again not selecting a unique individual. Roussou & Tsimpli (1994) argue that with generics, a definite reading is not available. Notice that the nouns in these phrases are always plural or mass and that their generic interpretation is reminiscent of English bare plurals:

(176) I   manavides   kserun   arithmitiki.
       The.m.pl   greengrocer.m.pl   know.pl   arithmetics.f.sg
       'Greengrocers know arithmetic.' (Roussou & Tsimpli, 1994: 73)

(177) O   kozmos   aghapaj   ta   taksidhja.
       The.m.nom.mass   people.m.nom.mass   love.3s   the.n.pl   voyage.n.pl
       'People love voyages.'   (Generic subject and object)

Both of these examples have generic readings, and seem to lack a referential definite reading. But we must be clear about what we mean by *definiteness*. If definiteness means that there is a unique singular or plural individual, as defined by Heim and Kratzer, then these nominals are not definite.

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[44] Note that a similar observation is made by Paul (2009), where it is argued that the Malagasy determiner does not encode uniqueness, but rather it presupposes familiarity. Similar to Greek thus, the Malagasy determiner signals the familiarity of the discourse referent of the DP.

An important property of these plurals is that, while they can be generic, they are not interpreted existentially, as shown in (178a). Existentials are only possible with indefinites, as in (178b), or bare DPs as shown in (179a) and (180), singular or plural:

(178) a.# I   *manavides*   kserun   arithmitiki.
           The.m.pl   greengrocer.m.pl   know.3pl   arithmetic.f.s
           Unacceptable if interpreted as '(Some) greengrocers know arithmetic.'

       b. *Meriki*   *manavides*   kserun   arithmitiki.
           Some.m.pl   greengrocer.m.pl   know.3pl   arithmetic.f.s
           'Some greengrocers know arithmetic.'

(179) a. Dhen   iparxun   *loghia*   ja   afto   pu   eghine.
           Neg   exist.3pl   words.n.pl   for   this.n that   happen.aor.3s
           'There are no words for what has happened.'

       b. *Dhen   iparxun   *ta   loghia*   ja   afto   pu   eghine.
           Neg   exist.3pl   the.n.pl words.n.pl   for   this.n that   happen.aor.3s
           'There are no words for what has happened.'

(180) a. Efera   *tetradhio*   ke   *molivi.*
           Brought.1s   notebook.n   and   pencil.n
           'I brought a notebook and a pencil'

       b. Efera   *tetradhia*   ke   *molivia.*
           Brought.1s   notebook.n.pl   and   pencil.n.pl
           'I brought notebooks and pencils.'

As shown in (179) and (180), unlike English bare plurals, Greek definite plurals cannot be interpreted existentially. The impossibility of interpreting such nominals existentially is surprising if they are taken to be indefinite. It therefore seems that the Greek definite determiner

does in fact contribute something like definiteness. As mentioned above, this provides further evidence against the claim that the determiner is merely an expletive.

It seems that the standard uniqueness definition of definiteness is insufficient, not only for the restrictive nominals, but also for definite generics. With restrictive nominals, we saw that the matrix noun provides us with more than one familiar entity. With generics though, it is not clear what type of definiteness we are dealing with.

To start with, we have seen that definite plurals in Greek can be generic. This genericity is manifested in two ways: (i) semantically, where the reference of the nominal is to the whole ensemble (in examples (176) and (177) this is to *greengrocers* and *people* respectively); (ii) morphologically, i.e. with the definite determiner and the plural marking on the nominal, unless it is a mass noun.

Lyons (1999) argues that the reference to a whole ensemble is what may characterize English generics as familiar. That is, a hearer may fail to identify the individual referent of a noun phrase like *a/ the pencil*, but the ensemble denoted by generic *pencils* is familiar to us all. From a semantic point of view, English generics are familiar, and thus at least partially definite. This familiarity is not overtly marked in English. In Greek though, genericity, and thus familiarity, is spelled out by the definite determiner. Thus, familiarity in Greek is manifested both semantically and grammatically.

Since familiarity is present in both the matrix noun of a polydefinite and in nominals with generic interpretation, these should be treated in a consistent way. I thus propose that in these nominals there is a syntactic projection responsible for the familiarity effects. I call this category FamP, and its head is spelled out in Greek by the definite determiner. This phrase is not separate

from DefP, but rather constitutes part of the more fully-specified projection found in other languages. Building on this proposal bottom-up, I claim that all Greek DefPs bearing the definite article are at least FamPs:

(181)

FamP

Fam   NumP$_{<et>}$

to

(the) NP   NumP$_{<et>}$

N   Num   *n*P$_{<et>}$

molivi

(pencil)   FamP$_{MOD<et>}$ *n*P$_{<et>}$

to ksilino   *n*   <NP>
(the wooden one)
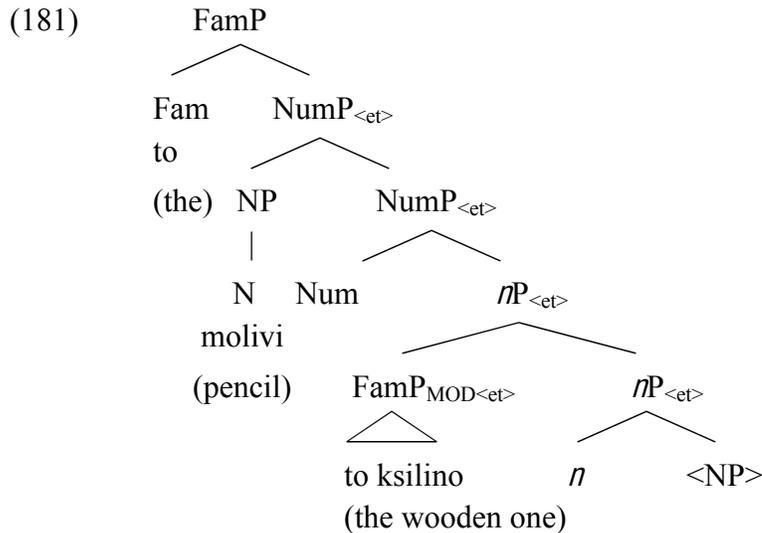
Now the question is what the semantic type of FamP is. Is it argumental or not? Focusing on the structure of restrictive nominals, I have argued that the modifying nominal is of type <et>, and so is the matrix noun. The modifying nominal adjoins low, to *n*P, but it has to move higher than Fam and thus get interpreted in that position. Fam then will take the modifying nominal and the matrix noun and give us the set containing *the familiar wooden pencils*. We have seen that the determiner selects a familiar entity but not a unique one. It selects a contextually salient or familiar set of entities, which is why a restrictive nominal is possible. This means that a FamP alone cannot denote an argument, since a single entity has not yet been picked out of the set of contextually salient entities. I propose that it is at this point that Heim and Kratzer's *ι* operator applies and gives us the unique entity of type *e*. With respect to the semantic type of FamP then, FamP is an <et> predicate.

Structurally, this implies that FamP must be dominated by another phrase headed by ι. I will call this phrase ιP for *iota* phrase. This gives us roughly the following structure:

(182)

ιP$_{<e>}$
- ι
- FamP $_{<et>}$
  - Fam / to / (the)
    - NP
      - N
      - molivi (pencil)
  - NumP$_{<et>}$
    - Num
    - nP$_{<et>}$
      - FamP$_{MOD<et>}$
        - to ksilino (the wooden one)
      - nP$_{<et>}$...<NP>
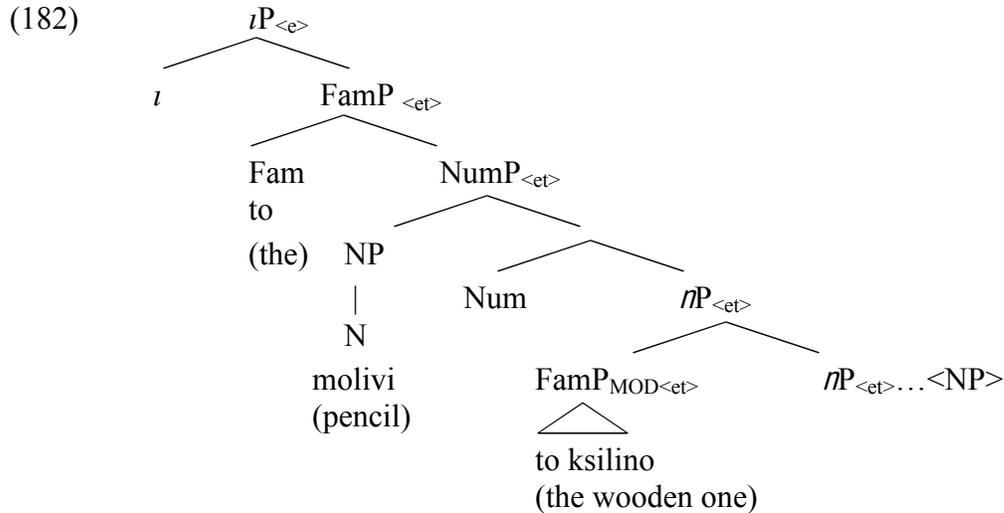
Thus, I propose here that definiteness can be decomposed into ιP and FamP. In Greek, definites have a structure like (182). As I argue in the following section, the null definite determiner of English is also underspecified in the same way. It is for this reason that it allows restrictive nominals. Definiteness in English definite nominals without *the* is thus also decomposed to FamP, whose head is occupied by the null determiner, and ιP, which picks out the unique entity. On the other hand, the English determiner *the* is specified for both familiarity and uniqueness, which is why it does not allow for restrictive nominal modification. Therefore, definiteness here is not decomposed but is spelled out by a single vocabulary item, *the,* and thus, English definites with *the* should have a typical DP structure. I discuss English modification in section 4.2.3.

To conclude, definiteness in Greek is mapped to two syntactic nodes: ιP, whose head appears to be phonologically null, and FamP, whose head is spelled out by the definite article. It is this type of definiteness mapping that makes restrictive modification possible. By this analysis hence, we can account for definite nominals whether they are polydefinite or not.

One question remaining concerns the generic nominals of Greek. It was earlier concluded that these are semantically definite, in that they denote familiarity. This property is now captured by the assumption that nominals containing the definite article have a FamP in their structure. However, unlike other definite nominals, a specific entity or set of entities is not picked out here. Instead, a whole set of entities sharing a property (i.e. in (176) the greengrocers) is singled out from sets of entities sharing different properties (i.e. the non-greengrocers). I concluded that definite plurals are of two types: (i) the specific definites, where there is a unique individual/ set of individuals that is selected by means of the iota function;[45] (ii) generic definites, i.e. a Generic operator is involved (see Carlson & Pelletier, 1995), which singles out a set of entities with specific properties. In other words, in specific definites we have the iota operator and thus have an ιP dominating FamP; in generics we have a Gen(eric) operator, i.e. a GenP dominating the FamP. Like ι, Gen will give us an argument noun phrase:[46]

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[45] Many thanks to Daniel C. Hall (p.c.) for suggesting this term.

[46] Note that in the case that genericity does not come from the nominal, but from the predicate VP, it might be that the generic operator is higher. Many thanks to Ana Teresa Pérez-Leroux and Christina Schmitt for pointing out this possibility.

(183)

$$\text{GenP}_e$$

Gen   FamP$_{<et>}$

Fam   NumP$_{<et>}$

Num nP$_{<et>}$

FamP$_{MOD<et>}$ nP $_{<et>}$…
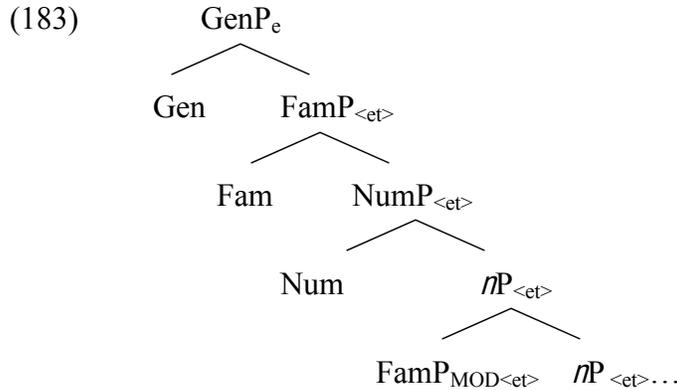
Hence, whether the generic nominal is a subject or an object, we can now account for why the definite article is obligatory. In contrast, we have seen that Roussou and Tsimpli's (1994) analysis does not provide an account for the presence of the article in object nominals. As we have seen, based on Longobardi (1994), Roussou and Tsimpli argue that the determiner appears on generic subjects to satisfy a lexical government requirement. This assumption may derive the subject facts, but as they also observe, not the object facts. By our analysis though, both generic subjects and objects are derived, but also accounted for why the determiner is necessary. These types of generics are FamPs and thus the determiner will be present.

Summing up, in this section I argued that definiteness in Greek is associated with two syntactic projections, ιP and FamP, the latter of which also appears in generics. This way, we were able to account for the properties of the Greek determiner. It is argued that the determiner is not an expletive, but one which does not fully spell out all the features spelled out by English *the*. Hence, the Greek definite article spells out familiarity, picking out a set of familiar entities, while in English *the* successfully selects the unique individual from that set. As a result, the Greek determiner allows nominal modification and also appears in generic nominals. This is unlike English *the*, but interestingly, similar to the null or possessive D. We examine null and

possessive D in turn. We will also account for the presence of the Greek determiner in proper DPs, where it also spells out familiarity.

4.2.3   English **'polydefinites'**

4.2.3.1   Null Ds

In 4.2.1, we have seen that English proper names and possessive definite DPs behave like Greek definite nominals, in that they allow restriction by other nominals. This similarity is accounted for if these English nominals have a definite determiner with the same syntactic-semantic properties as the Greek definite determiner.

Massam and Ghomeshi (2009) argue that English proper names include a null D similar to *the*, but additionally specified with the features [+singular] and [+proper]. Semantically, they suggest that the null D and *the* share the same semantic features. Both provide definiteness to the nominal phrase.

The account proposed here is in line with Massam and Ghomeshi's proposal in taking proper names to involve a null D reminiscent of *the.* However, I argue here that null D and *the* actually differ in the type of definiteness that they contribute. Although null D may be specified with the additional features [+singular] and [+proper] proposed by Massam and Ghomeshi, it appears to be underspecified in terms of definiteness. This is why expressions like *John the teacher (not the accountant)* are allowed, but expressions such as **the woman the doctor (not the manager)* are ungrammatical. The fact that null D allows these restrictive DPs suggests that null D is similar to the Greek determiner: unlike *the,* null D does not always pick out a unique individual, which is

why this type of modification is allowed. Proper names can thus be used in contexts where more than one entity with that name is established in the background.

If English null D does not pick out a unique individual but rather one or more familiar individuals, null D is underspecified in the same sense the Greek determiner is. This suggests that definiteness in English, as in Greek, is divided between *ι*P and FamP. Like the Greek definite article, the English definite null D is thus a Fam head. Uniqueness is contributed as in Greek, by the higher iota head, as shown in (184):

(184) a. English Definite Null D   b. Greek Definite D

```
          ιP                                              ιP
         /  \                                            /  \
        ι    FamP                                       ι    FamP
             /  \                                            /  \
           Fam                                             Fam
            Ø                                            {overt D}
```
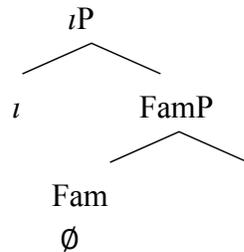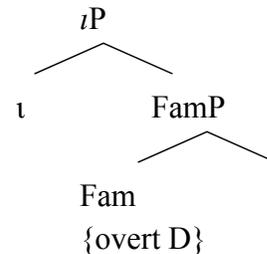
The English null definite determiner can thus allow nominal modification as the Greek determiner does. It is also underspecified in terms of definiteness, suggesting that definiteness is split between two syntactic heads. This provides evidence against the claim that polydefinite nominal modification is unique to languages with rich inflection. Instead, it depends on the definiteness specification of the determiner. This result is not surprising since, as Lyons points out, definiteness is encoded in different ways cross-linguistically.

4.2.3.2 Possessive Ds

In English, restrictive DPs can appear not only with proper names, but also with possessed nominals. In particular, we have seen that expressions like *my cousin the writer (not my cousin the florist)* are perfectly acceptable. Interestingly, expressions like *John's sister the writer (not the florist)* are also possible. At first glance, it might seem surprising that the possessive DPs allow for such a restriction. However, this is to be expected if the determiner in such phrases (e.g. *my cousin, John's sister*) is essentially an empty D, i.e. a null D, which is underspecified in the same way as proper D.[47] Based on what we have seen in the previous section then, I correctly predict that DP modifiers should be allowed in possessive constructions.

In detail, let us consider first DPs with the pronominal possessor, as in *my cousin.* Here, D may not always select a unique entity. Instead, it selects an entity from a set of possessed entities, which might not be fully definite. In Greek for instance, the possessive pronoun combines with either the definite or the indefinite article:

(185) To/   Ena   vivlio mu
       The.n/   A/One.n   book.n my.gen
       'My book/ Some book of mine'

In English, the possessive D seems to also be underspecified in terms of definiteness. That is, the uniqueness is not due to the possessive D, but rather it arises from the context. A phrase like *my cousin* does not necessarily entail that there is only one cousin. In a context where both the speaker and the hearer know that there is more than one salient entity then, such a phrase would be infelicitous (cf. 186a). This is because the null iota head cannot pick out a unique entity.

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[47] Thank you to Daniel C. Hall for pointing this out.

Contrast this with example (186b), where the restrictive DP is present and iota can now pick out a unique entity:

(186)   a. #I saw my cousin this morning (unacceptable, if more than salient entity are available, e.g. Abigail, Shanna, and Mariabella)
        b.   I saw my cousin Abigail this morning (not Shanna or Mariabella)

On the other hand, in contexts where there are no other salient entities, the phrase *her cousin* would be perfectly fine in the same way a proper name would be. As with proper names, any uniqueness in possessive DPs comes from the context and is not forced by the determiner itself. Hence, the determiner in the possessive DP is not like the definite determiner *the* but rather it is similar to the null D, i.e. this determiner too, is a Fam head.

Similarly, *John's sister* does not necessarily entail that John has only one sister. If, for instance, more than one sister is salient, the phrase *John's sister* is infelicitous. Again, the set is not in the domain of the iota operator. Thus, here too, the presence of the restrictive DP is necessary:

(187)   a. #We met John's sister (equally salient sisters: Abigail and Shanna)
        b.   We met John's sister Shanna (and not Abigail)

Similar to DPs with a possessive pronoun, in a context where only one entity is salient, a unique entity is successfully picked out. In a context where there is more than one salient entity, the selection of the unique entity will come from the intersection of the sets of the possessive nominal and the modifying DP. Thus, these DPs also pattern similar to those with the possessive pronoun, but also those headed by a null D. Hence, we can conclude that the possessive D is a Fam head, as well.

That the uniqueness does not arise from the determiner becomes more evident if we contrast a phrase *Mary's teacher* with *the teacher of Mary.* The latter requires that there be a unique teacher. As the main difference is the determiner, it follows that the uniqueness must arise from *the*. Since in the possessive DPs, this uniqueness is not presupposed, this means that the possessor does not necessarily select a unique entity either. Rather, like the null D it selects a set of familiar entities.

Like English proper DPs then, possessive DPs also involve FamPs. I assume following Ritter (1991) that the independent genitives occupy the specifier of the determiner phrase as a result of movement; that is, they move to this projection to satisfy a strong genitive feature on D. This D is null. I thus assume here too, that possessive DPs involve a null determiner. We now have an explanation for why these DPs allow restrictive modification. The reason lies in the null determiner, which in English is underspecified in terms of definiteness. As in our treatment of English proper names, I propose that English possessed DPs have an underspecified Fam head. Its specifier is occupied by the independent genitive, which has moved to that position to satisfy Fam's strong genitive feature (cf. (188) below).

English pronominal possessors too, are phrasal. Bernstein and Tortora (2005) argue that they are Number phrases which move to the specifier of a functional projection FP, to check a *definiteness* feature in D. Similarly, I assume here that pronominal possessors are phrases that move to the specifier of an FP, here FamP. Unlike independent genitives, I will also assume that this movement is triggered so that the pronominal possessor phrase will check a definiteness

feature on Fam.[48] In all cases, since such constructions involve a Fam head, we can now capture

the properties of English possessives and proper names with a single structure:

(188)

ιP
├── ι
└── FamP
    ├── Possessor
    │   (*my*)
    └── FamP
        ├── Fam
        │ $\varnothing$
        └── Possessum
            (*sister Abigail*)
            (John the accountant)
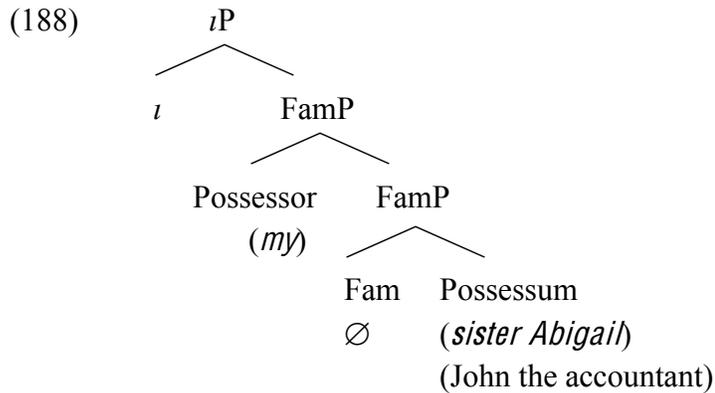
According to this structure, if the English nominal contains a possessor (e.g. *my* as in *my sister*

Abigail), it occupies the specifier of FamP. In the case of a proper nominal, such as *John the*

accountant, *John* raises to Fam head. Both proper and possessive nominals are FamPs, which is

why restrictive nominals are possible. In contrast, when the nominal is headed by the definite

determiner *the*, there is no split of definiteness between *iota* and *Fam*. The determiner *the*

encodes both and thus no (DP) restriction is possible.

In conclusion, it seems that the definiteness underspecification that the Greek article exhibits is

not unique. Rather, through a comparison with English, it seems not unusual that a definite

determiner is a Fam head without ι. This analysis thus provides a basis for a crosslinguistic

account of restrictive modification by nominals.

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[48] Note that it might also be that the possessor checks genitive case with Fam.

4.2.3.3 The DP modifier

After determining the syntactic type of the modified nominal, I now turn to the English restrictive nominal modifier itself. We have seen so far, that like Greek modified nominals, English proper names and possessive nominals are FamPs and thus can be modified. Regarding the modifying nominals themselves, we have seen that in Greek they are also FamPs, which are headed by the same underspecified definite determiner. One would expect the same to be true of English. This is not the case though. The English modifier can be headed by the definite determiner *the.* Unlike Greek modifiers, the English modifier seems to be a typical, fully specified definite DP. Setting aside a detailed derivation for now, for the phrases such as *John the doctor* we should roughly have the following:[49]

(189) a. My friend the doctor

   b.

$$\iota P$$

   ι FamP

   NumP   Fam   NumP

   My $\varnothing$

   friend [DP-restr the doctor]
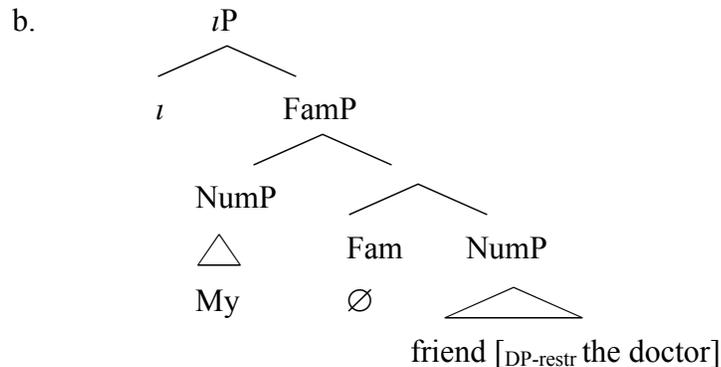
   c. John the doctor

---

[49] A more detailed structure is presented towards the end of this section.

d.

```
            ιP
          /    \
        ι       FamP
              /      \
            Fam       NumP
             ∅        /    \
              John [DP-restr the doctor]
```
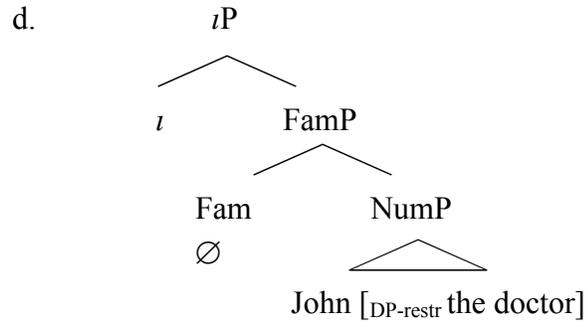
There are several questions that should now be addressed. First, what is the type of the modifying nominal itself? Is it an argument or a predicate? Secondly, what is its syntactic position? Finally, what is the structural position of the matrix noun itself, whether common or proper?

I first consider the main syntactic and semantic properties of the modifying nominal, and then determine whether it denotes an individual <e> or a predicate <et>. In order to determine this, we need to have a better understanding of the nature of these nominal expressions. In particular, consider the definite DP in (190):

(190)   John (is) the doctor.

In such sentences, *be* is generally assumed not to contribute to the meaning (see Heim and Kratzer, 1998, and references therein). In the semantics what is calculated is *John the doctor*, with *be* being semantically vacuous. What remains is virtually identical to the modified nominal *John the doctor*. We will thus look at copula sentences, to see if they provide us with evidence as to the semantic type of the nominal modifiers.

An interesting paper that focuses on *be-sentences* of this form is Holmberg (1989), which looks specifically at English predicate NPs.[50] He argues that constructions like in (190) are ambiguous between an equational and a predicative reading. On the equational reading (which he also calls *identificational*), there are two referential expressions, where the reference of one expression (in our example *John*) is equated with the reference of the other expression (i.e. *the doctor*). On the predicative reading, the noun phrase *the doctor* is not referential but denotes a property. This property holds of only one individual in the universe of discourse.

Holmberg (1989) observes that such constructions are not acceptable in contexts where a property is assigned to two distinct individuals in the same universe of discourse. In contrast to pure predicational constructions such as *John is a doctor*, identificational constructions are not acceptable in contexts like in (191):[51]

(191)   a.   John is *a* doctor, and Mary is *a* doctor, too.

         b. ??John is *the* doctor, and Mary is *the* doctor, too.

The non-unique property *being a doctor* can be ascribed to more than one individual (cf. 191a). However, a referring expression headed by *the* can only refer to a unique individual in the context, and a unique property cannot be ascribed to more than one (set of) individual(s) in the same context, as (191b) also shows.

Holmberg (1989) analyzes the unique denoting properties by assuming that these DPs contain an internally licensed empty pronoun. This empty pronoun is licensed through spec-head agreement

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[50] For more on copula constructions, see also Heycock (1991), Adger (2003) and Den Dikken (2006).

[51] Notice how phrases like *John the doctor and Mary the other doctor* are perfectly fine, which is exactly what we would expect since now we have one distinct property assigned to a unique individual. Thank you to Elizabeth Cowper for pointing that out.

and can be thought of as a demonstrative, which provides the referential or deictic aspect of the argument. Holmberg provides us with the following structure for *Peter is the teacher*:

(192)   [$_{IP}$ Peter is [$_{nP}$ e$_i$ [$_{n'}$ the$_i$ [teacher]]]]

Holmberg treats DPs like *the teacher* in (192) to be predicative. Although the mechanism accomplishing it is unclear, the unique denoting property *the teacher* is now an <et> predicate that can combine with *Peter* and thus give us a truth value.

Hence, Holmberg's account provides us with some diagnostics of whether the modifying DPs are predicative, but also with a starting point on how such DPs should be treated.

Let us first examine whether Greek modifying nominals exhibit the same properties. If this is the case, then we can treat the modifying DPs in a similar way. First, like Holmberg's DP predicates, the nominal modifiers are not acceptable in contexts where the property in question is ascribed to more than one individual in the relevant context:[52]

(193)   #/?? John the doctor and Mary the doctor

Similar facts hold for Greek, too:

(194)   ??O   Ghiannis   o   ghiatros   ke   i
         The.Nom.m   John.Nom.m   the.Nom.m doctor.Nom.m and   the.Nom.f
         Maria i   ghiatros
         Mary.f the.Nom.f   doctor.Nom.m
         'John the doctor and Mary the doctor'

---

[52] Note that the phrase *John the doctor and Mary the doctor* could be semantically acceptable in a context where there is more than one person named John, and more than one person named Mary, and exactly one John is a doctor and exactly one Mary is a doctor. Many thanks to Daniel C. Hall for pointing out this possibility.

This unacceptability suggests that these nominal modifiers have similar unique denoting properties to the predicative definite DPs in copular sentences. As shown in (193) and (194), this is true of both English and Greek.

Additional evidence that the nominal modifiers must exhaustively identify a unique person in the context comes from English. Here in particular, the modifier is introduced by the determiner *the,* which in regular DPs has been argued to presuppose uniqueness. If this is what *the* always contributes, it should also completely select the unique entity in these modifiers, too. This prediction is borne out. As shown below, the presence of more than one modifier results in ungrammaticality. This is true of both proper and possessive DPs as shown in (195a) and (195b), respectively:[53]

(195)   a.   *John the doctor the Italian
        b.   *My friend the doctor the Italian

This is not the case for Greek, as also predicted in this analysis. The Greek determiner does not require a unique entity, and thus not only should it allow for nominal modification, but also it should not block the presence of more than one nominal modifier. This prediction is borne out:[54]

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[53] Interestingly, as Ileana Paul (p.c.) also observed, multiple possessive modifiers do not seem possible either: e.g. *John my brother your coach*. The modifier thus seems to involve a more complex semantics that remains to be further investigated.

[54] Notice that in Greek although many properties can be ascribed to one individual (cf. 196), the reverse, i.e. one property ascribed to more than one individual (cf. 194), is not possible. It would be interesting to determine why.

(196) O   filos   mu o   daskalos

The.Nom.m friend.Nom.m my the.Nom.m teacher.Nom.m

o   Italos

the.Nom.m   Italian.Nom.m

*'My friend the teacher the Italian.'

Hence, in English the determiner *the* consistently identifies a unique entity. This is true when it heads the modified noun, and thus does not allow modification by another DP, but also when it heads the modifier, and thus no other modifier is allowed. This suggests that the two DPs should be of the same semantic type. Since non-modifying DPs headed by *the* are argumental, i.e. of type e, the same should hold for the modifying DPs, as well. That is, inside the modifying DP the DP headed by *the* should also be an argument DP, of type $<e>$. By this assumption, we capture why the referring expression in the modifier can only refer to a unique individual in the context, as well as the fact that in English there can only be one modifying referring expression. Crucially, this is a *1:1 relation*, according to which a unique individual cannot be assigned more than one unique property, and a unique property can only be assigned to a unique individual.

Turning to the structure, we now have to address the question of how the modifying DP of type e can compose with the predicate $<et>$ noun. As discussed earlier, such a combination would wrongly result in a truth value. However, if we adopt a version of Holmberg's analysis, we can simply assume that modifying DPs contain an internally licensed empty pronoun in the same way property-denoting predicative DPs in copular sentences do. In effect, the DP that looks like an argument ends up being a predicate with a referential index. This assumption is actually in accordance with Heim and Kratzer's (1998) claim that modifiers, like relative clauses or DPs carry an index. Hence, modifying DPs are predicative in the same way other modifiers are, but

also in the same way the referring expressions in *be*-sentences are. In contrast, non-modifying

DPs do not carry such an index and remain argumental.

An alternative analysis of treating modifying DPs as <et> would be to adopt a parallel view to

Heim and Kratzer's analysis on relative clauses. In particular, Holmberg's pronominal *e* is

similar to the wh-element of relative clauses, which is not assigned any denotation. In a phrase

like in (192) *Peter is e_i the$_i$ teacher*, this means that *the teacher* is still an argument. Parallel to

restrictive relative clauses, a so-called *Predicate Abstraction* (PA) applies which turns the

argument into a predicate.[55] The restrictive modifying DP (in our example *the teacher*) is now of

type <et>, and it can now compose with the <et> predicate of the matrix nominal via predicate

modification.

Both analyses provide an argument in favor of treating restrictive DPs as predicates. This is the

desired result since restrictive DPs are just another kind of intersective modifiers, which is what

Heim and Kratzer also point out, for restrictive relative clauses and adjective phrases. Hence,

regardless of which analysis we adopt, the restrictive DP should be treated as <et> modifier that

intersects with the noun.

The question is where that composition happens exactly. Does the modifying DP intersect with

little *n*P or does it adjoin lower? If the modifier for instance adjoined to *n*P, the structure should

look as following:

---

[55] Predicate Abstraction is defined by Heim and Kratzer (1998) as follows:

If α is a branching node whose daughters are a relative pronoun and β, then $[[\alpha]] = \lambda x \in D . [[\beta]]^x$.

(197)

$$\ldots nP_{<et>}$$

DP $_{<et>}$ nP $_{<et>}$

e$_i$ DP $_{<e>}$ John

D nP

the$_i$ teacher
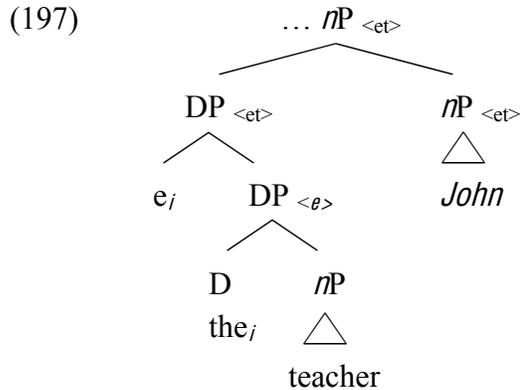
To derive the order *John the teacher* we could assume that proper names move to D as in Longobardi (1994), and Massam and Ghomeshi (2009). There is no phonological material in D and thus nothing prevents movement of this sort. Therefore, *John* may end up in D by means of head movement, and more precisely, in Fam. We could thus have roughly the following:

(198)

ιP $_{<e>}$

ι FamP$_{<et>}$

Fam   NumP

∅   *John*   Num nP $_{<et>}$

DP $_{<et>}$ nP $_{<et>}$

e$_i$ DP $_{<e>}$ *‹John›*

D nP

the$_i$ teacher
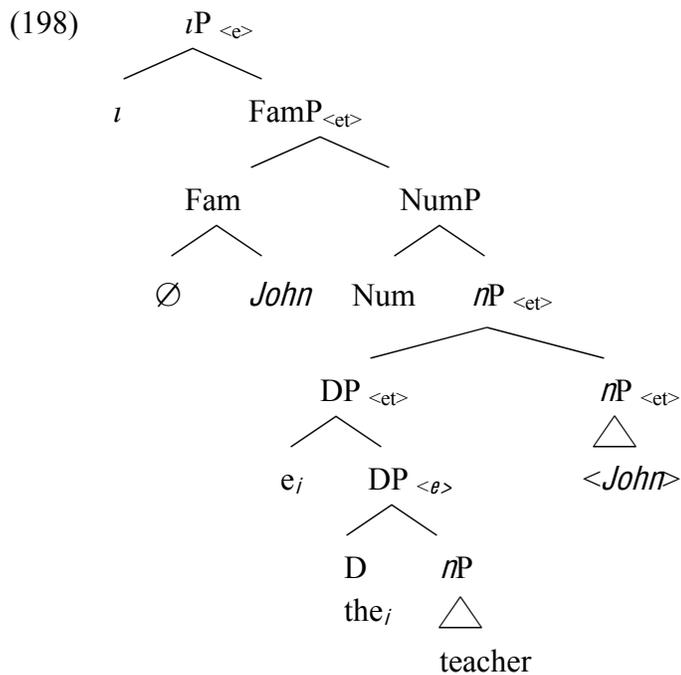
Although this analysis seems to work, the assumption that the DP modifier adjoins to nP is problematic for English. In English, the noun is assumed to move from N to n and the adjectives to adjoin to n (see Haegeman 1991, and Adger 2003). This provides us with two predictions

then: restrictive DPs should occur pre-nominally, and secondly, they should also co-occur with adjectives. Since proper names raise to D, we cannot test these predictions with proper nouns. However, other types of nominals that allow restrictive DPs do not raise to D. The possessive DPs with the pronominal determiner for instance, do not involve any movement to the DP. As shown below in (199a), a phrase like *my friend the accountant (not the teacher)* is ungrammatical if the restrictive DP is prenominal (such as in the specifier of FocP a in (199b)). Moreover, notice in (199c) that if we assume that the modifier is an adjunct to *n*P, and that the matrix noun stays in *n*, the ungrammatical **my the accountant friend* would be derived:

(199) a. My friend [*the accountant*] (not the teacher)
  b. *[*THE ACCOUNTANT*]$_i$ my friend t_i (not the teacher)
  c. *My [*the accountant*] friend

c'.

```
            ιP
          /    \
         ι     FamP<et>
              /     \
          NumP       \
          /\        /   \
         /  \     Fam    NumP
        My    Ø          /   \
                        /     \
                      Num    nP<et>
                           /      \
                        DP<et>    nP<et>
                        /  \        /\
                       /    \      /  \
                     e_i   DP<e>  friend
                          /  \
                         /    \
                        D     nP
                       the_i  /\
                             accountant
```
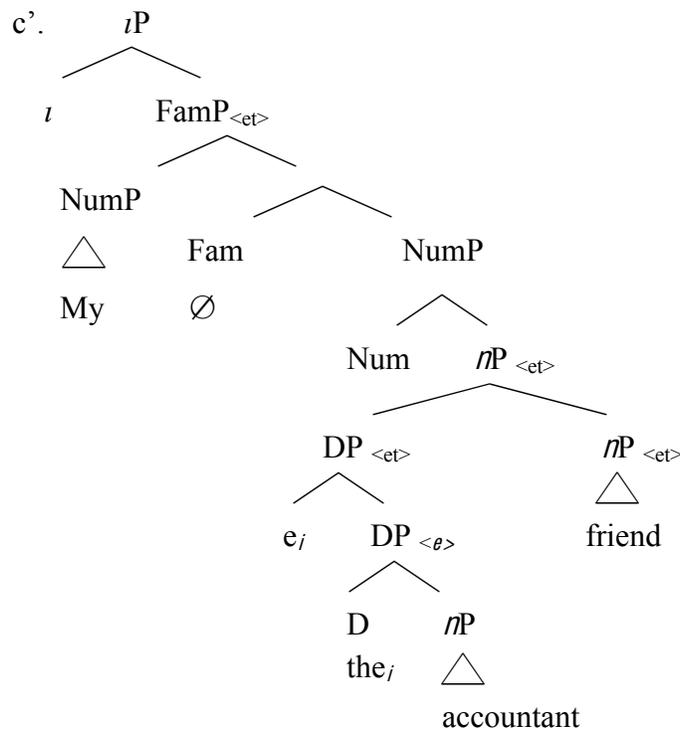
Hence, if the restrictive DP adjoins to the *n*P, ungrammatically results. Further evidence that the restrictive DP is not in the same position as adjectives, comes from the fact that they cannot co-occur in the same position, i.e. as adjuncts to the same functional projection. Thus, a phrase, such as *my friend*, cannot be modified by an adjective immediately followed by a restrictive DP, such as *the accountant* (see 200a). The only way to utter such a phrase would be if *the accountant* follows the noun as in (200b):

(200) a. *My good, *the accountant* friend
      b. My good friend *the accountant*

In conclusion, the restrictive DP and adjectives should not occupy the same structural position. A second possibility would be to assume that the restrictive DP adjoins lower to the NP, as (200b) suggests. This assumption would capture an interesting parallel between Greek and English. In Greek, adjectives adjoin higher up, to NumP, and restrictive DPs adjoin to *n*P. In English, adjectives adjoin to the *n*P and restrictive DPs to NP. In fact, nothing prevents us from assuming that the restrictive DP adjoins to NP.[56] Hence, when the noun moves to the *n*P, it moves past the restrictive DP and thus the correct order is derived:

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[56] It should be noted that other possibilities would be to assume either that the restrictive nominal adjoins to the right (and thus the Noun-DP$_{RESTR}$ order arises), or that the noun moves to Num. In the first case, such an assumption would be problematic since the position taken in this work is that adjuncts consistently left adjoin. In the second case, we would have to assume also that adjectives adjoin to NumP and not *n*P. Since striking evidence for both of these possibilities is lacking, I pursue here the possibility that DP modifiers adjoin low to NP.

(201) a. 'My friend the teacher'

b.
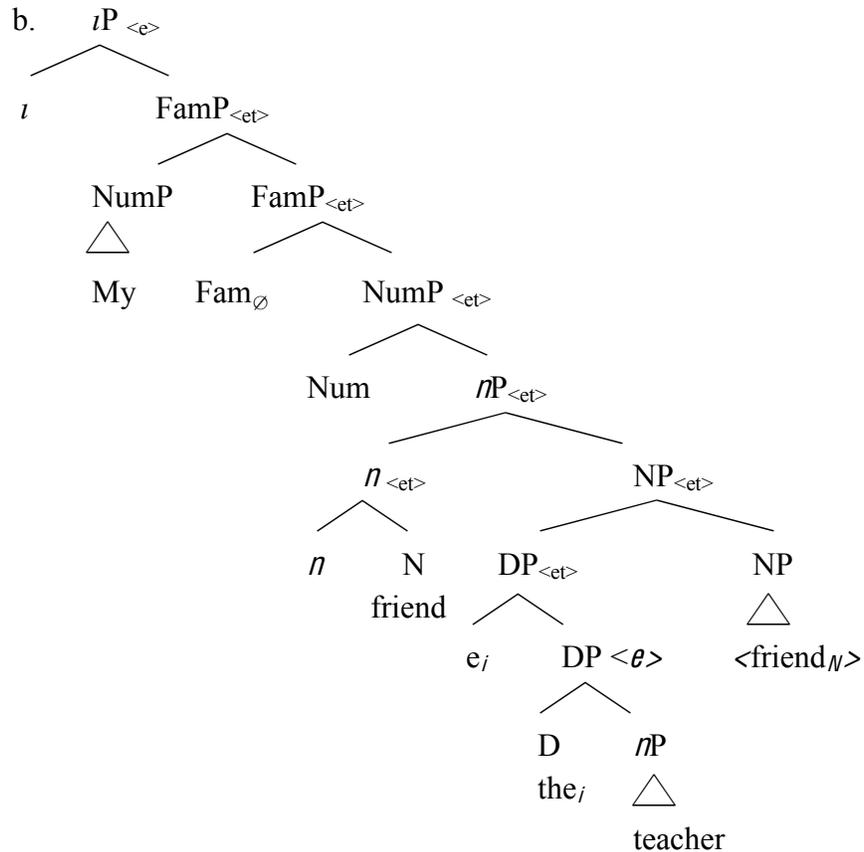
Under this structure, we can now easily derive the correct word order of the English modified nominals. Semantically too, this structure does not cause any problems for the interpretation of the nominal as an argument. The <et> modifier combines with the <et> NP. It is interpreted higher at LF, possibly in the specifier of Fam, i.e. higher than Fam but lower than ι. In this way, Fam could select the set containing the familiar entity *my friend the teacher*, and the ι operator will select the unique individual out of that set.

This mechanism is unable to derive ungrammatical constructions of the form *the teacher the chemist* because of interpretation effects. That is, the modifier, here *the chemist*, which adjoins low, cannot be interpreted higher, since the higher *the,* of type <<e,t>,e>, will compose with its

noun complement of type <et> and thus give us an argument DP. Hence, the modifier cannot compose with it at this point, and the derivation will crash. Therefore, a correct result is that matrix *the*-nominals of the form **the teacher the chemist* may not be derived.

In all, in this section I have argued that English modifying DPs introduced by *the* are <et> predicates in the same way other types of intersective nominal modifiers have been previously argued to be predicative. This type of predication is thus not a result of the lack of definiteness, since in all cases uniqueness is presupposed. The restrictive modifying DP is not a simple predicate though, since it can refer to only one entity. Rather, it is a referring expression that denotes a unique property. We have seen this to be 1:1 relation, i.e. a unique property is assigned to a unique entity, and a unique entity cannot be assigned more than one property. In contrast, we have seen for Greek that this relationship is one to many; that is, in Greek a unique entity can be assigned more than one property, since the matrix nominal may be modified by more than one restrictive nominal. Hence, the English modifying nominal differs from the Greek one that way. By this analysis though, this variation is nicely accounted for by the lexical difference between the English and Greek definite determiners.

4.3 Concluding on the definite determiner

In this chapter, I have proposed that the source for polydefinites is definiteness. I have argued in particular, that definiteness involves two main components: familiarity and uniqueness. In some languages, like Greek, this is encoded in two distinct projections. The Greek determiner only spells out familiarity. The uniqueness then arises when the null ι operator merges. Languages like English may manifest various ways of encoding definiteness. Depending on the type of the

determiner, definiteness might be spelled out by a single vocabulary item, as in the case of *the*. Here, there is no split in terms of definiteness, as *the* is fully specified. On the other hand, the English null determiner is shown to be underspecified, encoding only familiarity. English null D and Greek definite D are similar that way.

Hence, in both of these languages, FamPs are the phrases that can be modified by another nominal. This is accomplished by intersecting FamP and the modifying nominal, possibly at LF. Next, the *iota* phrase operates on their intersection and gives us the unique individual. With respect to the modifier, it is shown to be a FamP in Greek and a DP in English. Both are shown to be predicative and thus their intersection is possible. However, the modifiers occupy different structural positions in the two languages, i.e. the Greek modifying FamP is at *n*P and the English modifying DP is at NP. This is shown in (202):

(202)

ιP $_{<e>}$
 ├── ι
 └── FamP$_{<et>}$
      ├── Fam
      └── NumP $_{<et>}$
           ├── Num
           └── *n*P $_{<et>}$
                ├── FamP$_{Greek<et>}$
                └── *n*P $_{<et>}$
                     ├── *n*$_{<et>}$
                     └── NP $_{<et>}$
                          ├── DP$_{English <et>}$
                          └── NP
                               └── N
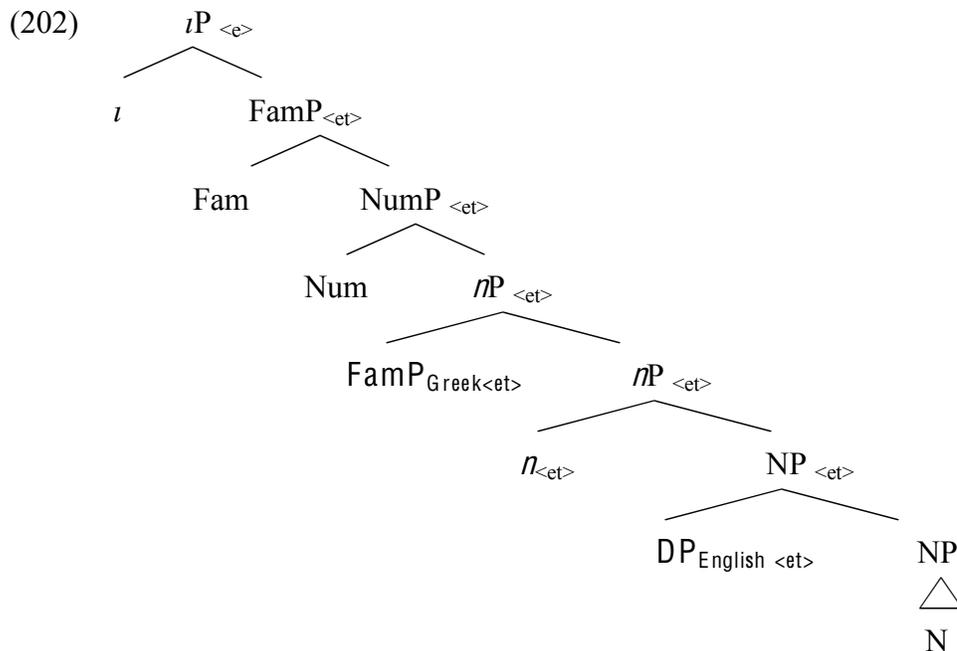
This syntactico-semantic analysis also captures why English proper names and possessive nominals show similar syntactic patterns. It also captures why Greek nouns, proper names and possessive nominals exhibit RMN. They are all FamPs and as such, they all behave alike.

Definiteness is thus the key factor to this. Since then definiteness plays such an important role to RMN, i.e., restrictive modification by nominals, this suggests that RMN should be absent in indefinite nominals. That is, 'poly*in*definites', the indefinite matrix nominals with indefinite nominal modifiers, should not exist. As we will see in the following chapter, this prediction is borne out. Restrictive DP modifiers are not allowed in an indefinite nominal. If this type of restriction is a necessary ingredient to select a unique entity, it is not clear how it could exist in indefinites. We will see this in more detail next.

Chapter 5   Definite and Indefinite modifying DPs

In this chapter, I now consider the possibility of whether poly*in*definites, the indefinite counterpart of polydefinites, exist. As we will see, there are no indefinite nominals containing indefinite modifiers.

Briefly, multiple instances of the indefinite determiner are not possible, which suggests that there are no poly*in*definites. We will see however, that there is one type of nominal construction that could potentially be argued that it constitutes a case of poly*in*definites. This is an indefinite matrix nominal with a determiner-less modifying nominal. However, I show that the determiner-less nominal is not indefinite. Moreover, modifying nominals with overt indefinite determiners are possible, although they may only modify a definite matrix nominal.[57] I further argue that the modifying DP is in fact a definite non-restrictive appositive. In effect, this construction does not constitute a case of poly*in*definites. Therefore, there are no poly*in*definites in Greek.

In this Chapter, I also consider definite matrix nominals with indefinite modifiers. I argue that the indefinite modifying nominal is also non-restrictive. Using focus and pauses as diagnostics, I show that RMN, i.e. restrictive modification by nominals, is impossible. Under the proposed framework developed in Chapter 4, I predict that restrictive modification by indefinite nominals should not be possible, since indefinite nominals do not denote a unique, familiar entity.

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[57] Although we will see this in detail, an English example of a definite nominal with an indefinite restrictive nominal would be: **John [some student of mine]$_{DPrestr}$ (not a colleague).* An example of an indefinite nominal with an indefinite restrictive nominal would be: **A* student of mine [a linguist] $_{DPrestr}$ (not a chemist).

To determine whether there are poly*in*definites, I also consider the indefinite article and quantifiers. Moreover, many of them may co-occur with the definite article. I thus need to examine their distributional properties and determine their syntactic category. As we will see, I distinguish three types of quantifiers: *cardinality quantifiers* (i.e. Card heads) which may co-occur with the definite article, in which case they can also appear in polydefinites; *regular indefinite Ds*, which do not coccur with the definite article, and *phrasal quantifiers* (e.g. *oli* 'all), which function as modifying DPs. I then propose a unified analysis that accounts for their properties.

5.1 Indefinite modifying nominals: are there any?

In this section I examine whether indefinite nominals can be modifiers. We will see that they can, but that they must be non-restrictive. This is in accordance with the system developed so far. Restrictive nominal modifiers denote unique and familiar entities and are thus definite. Non-restrictive modifiers, on the other hand, need not denote a familiar or unique entity, and thus need not be definite. Let us first have a more detailed look at the main properties of indefinite nominals with adjectival modifiers.

5.1.1 Polyindefinites: Restrictive or non-restrictive modifying nominals

Alexiadou and Wilder (1998) first observed that indefinite DPs show the same distribution as polydefinites. They give the orderings in (203):

(203) a. Ena   meghalo   kokkino   vivlio
             A   big   red   book

        b. Ena   meghalo   vivlio kokkino
             A   big   book   red

        c. Ena   kokkino   vivlio meghalo
             A   red   book   big

        d. Ena   vivlio kokkino   meghalo
             A   book   red   big

        e. Ena   vivlio meghalo   kokkino
             A   book   big   red

As we can observe from these orderings, there is a considerable flexibility in the word order. This flexibility is also found in polydefinites, though not in monadic definites. Furthermore, although post-nominal adjectives are banned in monadic definites in Greek, indefinite nominals allow them just as polydefinites do (see section 1.2.1). Since indefinite constructions pattern in some respects like polydefinites, they may also contain indefinite nominal modifiers, forming what we might call poly*in*definites, the indefinite counterpart of polydefinites.

I will focus on the ordering patterns of the postnominal adjectives for now. Postnominal adjectives show more clearly that these form DPs, since, as mentioned, regular adjectives can only be prenominal. As with polydefinites, only intersective adjectives can appear in the modifying DP of the matrix indefinite nominal. Non-intersective adjectives are impossible, as Alexiadou and Wilder (1998) have shown for polydefinites (see section 2.2). The nominal in (204) below is the indefinite counterpart of the example they give to illustrate this restriction for polydefinites. Alexiadou and Wilder's treatment of such adjectives as predicates is primarily

motivated by the distribution of non-intersective adjectives such as *ipotiθemenos* 'alleged'. Such adjectives cannot occur in predicative positions and they are also excluded from the polydefinite constructions. Hence, as shown in (204), the adjective *ipotiθemenos* 'alleged' may occur in a monadic definite matrix nominal (cf. 204a), but it is unacceptable in a polydefinite, whether it is prenominal as in (204b) or postnominal as in (204c). Examples (204c,d,e) show that non-intersective adjectives are not possible postnominally in polydefinites, indefinites, or monadic definites.

(204)   a. o   ipotithemenos dolofonos
             the.m.nom   alleged.m.nom murderer.m.nom
             'The alleged murderer'(monadic definite construction)

         b. *o   ipotithemenos o   dolofonos
             the.m.nom   alleged.m.nom the.m.nom   murderer.m.nom
             'The alleged murderer' (polydefinite construction)

         c. *O   dolofonos   *o   *ipotithemenos*
             The.m.nom   murderer.m.nom   the.m.nom   alleged.m.nom
              'The alleged murderer' (or more accurately: *the murderer, the alleged one)

         d. *Enas   dolofonos   *ipotithemenos*
             A/One.m.nom murderer.m.nom   alleged.m.nom
              'An alleged murderer' (or more accurately: *a murderer, an alleged one)

         e. *O   dolofonos   *ipotithemenos*
             The.m.nom   murderer.m.nom   alleged.m.nom
              'The alleged murderer' (or more accurately: *the murderer alleged)[58]

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[58] Many thanks to Alana Johns (p.c.) for bringing this example to my attention.

Thus far, it seems that polydefinites and indefinite nouns with postnominal adjectives pattern alike: they show the same flexibility in the word-order, and they both ban non-intersective adjectives. Furthermore, the indefinite article and the adjective can also appear without an overt noun as polydefinites do. In (205) below, the indefinite article and the adjective appear without the noun as an answer to the question:

(205) A: Ti   xroma podhilato   aghorases?
           What   color.n bike   buy.aor.2s
           'What bike did you get?'

       B: Ena   *kokkino*/   *aghonistiko*
           A/Some.n   red.n/   racing
           'A red one/ a racing one'

The fact that the article and the adjective can appear without the noun is another indication that indefinite adjectives may form a modifying DP, whose head is a nominalized adjective.

In summary, indefinite nominals with postnominal bare adjectives pattern just like polydefinites in some respects: They both show the exact same word-orders, they both ban non-intersective adjectives, and finally, their adjectives can both appear without a noun. All these characteristics are typical of polydefinites. I therefore conclude that the indefinite nominal with the bare adjective is the indefinite counterpart of the polydefinite: it consists of a matrix nominal and a modifying nominal.

Two questions must be answered next. First, what type of modification (i.e. restrictive or non-restrictive) is possible in indefinites? Second, why does the indefinite article appear only once, rather than repeatedly as does the definite article in a polydefinite? Further examination of the

single occurrence of the indefinite article will reveal whether these indefinite constructions are poly*in*definites, i.e. whether both the modified and modifying nominals are indefinite. If both are indefinite, then these constructions will be the exact counterpart of polydefinites.

Considering first to the question of modification type, I first examine whether the modifying nominals are restrictive or non-restrictive or both. We have seen that restrictiveness is linked to focus in polydefinites in that it is always possible to contrastively focus a restrictive polydefinite modifier. I will therefore use the possibility of focus as a diagnostic to determine whether polyindefinites involve restrictive modification. If they involve restrictive modification, focus should be possible. If focus is impossible, this suggests that the modification is non-restrictive. As we can observe in the following example, focus – either contrastive or informational – is not possible with a postnominal modifier:

(206) ?/#Ena   aftokinito -   KOKKINO   (#OXI MAVRO)   molis perase
       A.n   car.n   red.n   not   black.n   just drove.by.3s
       'A car, a RED one (not a black one), just drove by.'

In contrast, if the adjective is prenominal, focus is possible:

(207) Ena   KOKKINO   (OXI MAVRO) aftokinito
       A.n   red.n   not black   car.n
       'A RED (not black) car'

The impossibility of focusing the post-nominal modifier follows semantically from the fact that it cannot be interpreted restrictively. The prenominal modifier in (207), which can be interpreted restrictively, might actually be a bare adjective phrase rather than a modifying nominal. That is, there is no evidence suggesting that it is a modifying DP. Ordinary adjectives in monadic nominals are typically prenominal, and both restrictive and non-restrictive readings are available.

Adjectives can also be focused. I propose that prenominal restrictive modifiers like the one in (207) are bare *adjective* phrases, while post-nominal modifiers like the one in (206) form modifying DPs. This follows the generalization drawn in section 1.2 that plain adjective phrases are typically banned from post-nominal positions. Thus only the postnominal adjective may form a DP, and it cannot be focused. It therefore should not be restrictive.

In addition, as mentioned in section 3.2.1, one of the criteria that tells us whether a nominal is restrictive or not, is whether it can be omitted without changing the extensional meaning of the nominal. As was argued, even though restrictive nominals are not syntactically required, they are important to the meaning. If omitted, they change the extensional meaning of the sentence. In contrast, non-restrictive modifiers do not have this effect. They are not crucial to the interpretation of the sentence and thus can be omitted. As we can observe in the following example, some or all adjectives can easily be omitted:

(208) Enas   kipos -   [omorfos,   (ghematos luludhia,   ke
       A.m.nom   garden.m.nom beautiful   full.m.nom flowers   and
       peripijmenos)] travaj   perisoteri   prosoxi
       trim.m.nom   attract.3s   more.f   attention.f
       'A garden, trim and beautiful, and full of flowers, attracts more attention.'

Thus, the indefinite constructions of this form involve non-restrictive modifying DPs. As we can observe from (208), such constructions also contain commas, i.e. they involve pauses. We have seen that pauses are characteristics of non-restrictive DPs. Furthermore, we also saw in (206) that postnominal nominals cannot be focused. As mentioned earlier, non-restrictive nominals are comments and comments cannot be focused. Taking all these into consideration, we can conclude that the modifying DP in an indefinite is a non-restrictive DP.

This conclusion is compatible with the analysis developed in this dissertation. The restrictive modifying nominals in definite phrases are possible because the definite determiner in Greek is specified only for familiarity and thus does not necessarily pick out the unique entity. In the case of indefinite nominals though, the indefinite determiner does not select a familiar entity. Rather, it introduces a new entity to the context. A presuppositional, i.e. familiar, restrictive modifier is thus not possible with indefinite matrix nominals. If nominal modification is possible, it can therefore only be non-restrictive. Non-restrictive modifiers do not carry such presuppositions, and thus do not help in picking out a unique and familiar entity. Rather, they simply add a property to whatever referent the matrix nominal has.

In sum, restrictive DP modifiers are not allowed with matrix indefinite nominals. We will now see more evidence from other types of indefinite modifiers, specifically those involving an overt noun.

5.1.2   Overt polyindefinites: Restrictive or not

Other types of modifying nominals further support the claim that restrictive nominals are not allowed in indefinite matrix DPs. These are modifying nominals with overt nouns, the only type that can have indefinite counterparts with overt determiners. This type of nominal modifier was discussed in section 3.4 with respect to definite DPs. An example is given in (209a), and the indefinite counterpart is shown in (209b):[59]

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[59] As can be observed, the modifying nominals in (209) are preceded by a pause, and as several native speakers of Greek confirmed, they are non-restrictive.

(209) a. O   aetos –   to   puli

               The.m.nom   eagle.m.nom   the.n   bird.n

               'The eagle – the bird' (polydefinite)

      b. Ena   puli – o   aetos

          A.n   bird.n the.m.nom   eagle.m.nom

          lit.'A bird, the eagle' (the more specified 'eagle' noun follows here)

Interestingly, the articles cannot both be indefinite:[60]

(210) a. *<u>Ena</u>   puli   <u>enas</u>   aetos

          A.n   bird.n a.m.nom   eagle.m.nom

          lit.'A bird an eagle' (the more specified 'eagle' noun follows here)

      b. *Enas   aetos   ena   puli

          A.m.nom   eagle.m.nom a.n   bird.n

          lit. 'An eagle a bird'(the more specified 'eagle' noun precedes here)

Regardless of the order of the nominals, i.e. whether the more specified noun precedes or follows, two indefinite determiners are not possible. However, if one of the determiners is definite, then the phrase is grammatical. I return to this finding in the next section. For now, notice that the nominal that follows in each case seems to be acting as the modifier. In (211a) the relevant nominals is *enas simathitis mu* 'a schoolmate of mine'; and in (211b) the relevant nominal is *o Ghiannis* 'John':

(211) a. O   Ghiannis #(-) [*enas*   *simathitis*   *mu*]_{Mod}

          The.m.nom   John.m.nom a.m.nom   classmate.m.nom   my

          'John, a schoolmate of mine' (non-restrictive modifying nominal)

---

[60] Note that the articles cannot be absent either. Recall from 1.2.1, that they are obligatory with count nouns.

b. Enas   simathitis   mu   [o   *Ghiannis*] _{Mod}

A.m.nom   classmate.m.nom   my   the.m.nom   John.m.nom

'A schoolmate of mine, John' (non-restrictive modifying nominal)

Consider the indefinite nominal *enas simathitis mu* 'a schoolmate of mine'. There are two observations to be made here. First, when it is the second nominal in the construction, as in (a), it is interpreted as the modifier. When *enas simathitis mu* 'a schoolmate of mine' appears first, as in (b), it must be interpreted as the matrix nominal. In 3.2.1, we have seen that non-restrictive nominal modifiers cannot appear prenominally while definite prenominal restrictive modifiers are possible. The fact thus that the indefinite nominal *enas simathitis mu* 'a schoolmate of mine' is necessarily interpreted as the matrix nominal, can be explained if the indefinite nominal is not a modifier, restrictive or non-restrictive. First, it cannot be a non-restrictive modifier since these do not occur prenominally. Secondly, it cannot be a restrictive modifier, either. As it can be observed in (211a) there is a pause, again suggesting that the indefinite modifier in the definite nominal is non-restrictive. But most importantly, it cannot be focused. To remind the reader, focus serves as diagnostics to determine whether a restrictive reading is possible or not. If the modifier is restrictive, then focus, which is an essential property of restrictive nominals, should be possible. As we can see in (212), the indefinite nominal *enas simathitis mu* cannot be focused, whether it appears in the beginning of the nominal construction or not:

(212) a. #ENAS   SIMATHITIS   MU   o   Ghiannis

A.m.nom   classmate.m.nom   my   the.m.nom   John.m.nom

'A SCHOOLMATE OF MINE, John'

b.#O   Ghiannis - [ENAS   SIMATHITIS   MU]

The.m.nom John.m.nom a.m.nom classmate.m.nom my

'John, A SCHOOLMATE OF MINE'

I conclude thus that the indefinite modifying nominal is non-restrictive when it contains an overt noun, too. The modifier is always post-nominal, there is a pause, and it cannot be focussed. We thus conclude that in Greek there are no poly*in*definites with restrictive indefinite modifiers.

This answers the first of our two questions posed in the previous section: indefinite nominal modifiers are only non-restrictive. I now turn to the question of why there are no multiple occurrences of the indefinite article in polyindefinites.

5.2 Indefinite Quantifiers

5.2.1 The indefinite article in polyindefinites

In this section, I examine why the indefinite article can only appear once in polyindefinites with non-restrictive modifying nominals. Along with other indefinite quantifiers, I then determine its structural position and syntactic category, considering whether it is a D head or a numeral.

 As shown in 5.1.2, multiple instances of the indefinite article are banned. The indefinite article can only appear once:

(213) <u>Enas</u>   kipos, *(<u>enas</u>) omorfos, *(enas) gematos

A.m.nom garden.m.nom   beautiful.m.nom, full-of.m.nom

luludhia, ...

flower.n.pl

lit. 'A garden - beautiful, full of flowers'

The only instance of the indefinite article *enas* allowed is the first one. Since we saw in the previous section that the non-restrictive modifying nominal always follows the modified noun, it seems to be the modifier that lacks an indefinite article. As mentioned earlier, when the noun in the modifier is overt and the modified nominal is indefinite, the modifying nominal must be definite:

(214) a. Sinantisa   *ena*   sinadhelfo   –   *to*   Ghianni.
     Met.1s   a   colleague.m   the.m   John
     'I met with a colleague – John'

   b. Sinantisa   *to*   Ghianni   –   *ena*   sinadhelfo.
     Met.1s   the.m   John   a   colleague.m
     'I met with John – a colleague'

   c. * Sinantisa   *ena*   sinadhelfo   –   *ena*   ghlosologho.
     Met.1s   a   colleague.m   a   linguist.m
     'I met with a colleague – a linguist'

   d. * Enas   aetos   –   ena   puli
     A.m.nom   eagle.m.nom   a   bird.n
     'An eagle – a bird'

Also, if the modifier contains an overt noun but no overt article, the phrase is ungrammatical:

   e. *Enas   aetos,   ∅   puli
     A.m.nom   eagle.m.nom   bird.n
     'An eagle – bird'

Hence, it seems that in these constructions only one nominal can be headed by the indefinite article. Furthermore, unlike constructions such (213) with determiner-less modifiers, the indefinite article can appear on the modifying nominal provided that the modified noun is

definite (as in (214b)). Therefore, these examples show that there can only be one indefinite nominal in a complex nominal construction. This suggests that the modifier with the nominalized head as in (213) must be definite, since the matrix nominal is indefinite.

In conclusion, I have argued that indefinite constructions with modifying nominals exist in Greek. The difference from polydefinites is that the modifier can only be non-restrictive, whether it is indefinite in a definite matrix or definite in an indefinite matrix. In the case of an indefinite matrix nominal in particular, I have suggested that the determiner-less modifier is not in fact indefinite. Evidence for that came from nominal constructions with an overt determiner in the modifier. But if the modifier is some sort of definite DP then why is the article not pronounced? One possibility is that the article is a null anaphoric head corresponding in meaning to a wh-element such as *which*. As it appears in indefinite matrix nominals only, i.e. in environments which only allow non-restrictive nominals, it could be that this null D heads non-restrictive nominals. As the focus of this dissertation is on restrictive nominals, I will leave this question open. What is important is that we know why there are no multiple instances of the indefinite article as there are with polydefinites: The indefinite modified noun is followed by a definite modifier. In other words, there are no true poly*in*definites. I now turn to the structure and examine where the indefinite articles go.

5.2.2   Indefinite quantifiers and what they do

I now consider the distribution of the indefinite article and other quantifiers, which may co-occur with the definite article. In particular, I distinguish them in three categories. The first group contains quantifiers that can follow the definite article. The second group contains those that may

not co-occur with the definite article, and the third one is a singleton group containing the collective quantifier *oli* 'all', which co-occurs with the definite article, but like English *all*, *oli* precedes the article and cannot follow it. Based on their distinct syntactic distribution, I will propose that they are found in distinct syntactic positions.

I consider first the group of quantifiers that may co-occur with the definite article, in which case they follow it. The indefinite article *enas* 'a/one' is one of them. Following Roussou and Tsimpli (1994), I assume that the indefinite article *enas* is a numeral. *Enas* can be used as a numeral or as an indefinite article, and is sometimes ambiguous as in (215):[61]

(215)   Perimeni   enas   fititis   na   se   dhi.
              Wait.3s   a/one.m.nom student.m.nom to   you.acc   see.3s
              'Some/ A/ One student is waiting to meet with you'

When *enas* appears with the definite article, it is obligatorily interpreted as a numeral. In such cases it appears that a partitive meaning is available, although an actual partitive construction is also possible as in (216b):

---

[61] Note that stress might often be used as an indication that the indefinite article functions as a numeral, and not as an indefinite determiner. This is reminiscent to the Turkish indefinite article, where prosody determines whether it is used as a numeral or an an indefinite article. Many thanks to Professor Brian Joseph for pointing out this fact.

(216) a.   Efighe *o*   *enas*   *fititis.*

             Left.3s the.m.nom   one.m.nom   student

             'One of the students left.'

   Or   'The one student left.'

b.   Efighe o   *enas*   *apo*   *tus*   *fitites.*

             Left.3s the.m.nom   one.m.nom   of   the.acc.pl   student.pl

             'One of the students left.'

Enas seems to be similar to English *one*. However, *enas* does not appear in exactly the same contexts as *one*. The reason is that English *one* is ambiguous between a numeral and a *pronominal*, while *enas* is ambiguous between a numeral and an *indefinite article*. Hence, in Greek one cannot answer A's question '*which dress did you buy?*' in (217) by '*the one…*'. Instead, the pronominal demonstrative will be used (cf. 217B):

(217) A: Pjo   forema   aghorases?

          Which.n dress.n   bought.2s

          Which dress did you buy?

     B: {*To   ena}/ Afto   me   tin   ble   kordhela

          The.n one.n/ This.n with   the.f.acc   blue   ribbon

          'The one with the blue ribbon'

Enas cannot appear on its own as a type of pronominal element like *afto* 'this (one)' can. As opposed to *one*, even though *enas* may occur with the definite determiner it does not act like a nominal. Rather, it must itself be followed by a noun.

Enas is thus able to function both as a pure determiner and as a numeral. It is not pronominal or adjectival. It is a quantifier, and like other quantifiers, it can co-occur with the definite determiner. In such cases a partitive reading may result.

Other quantifiers that co-occur with the definite article are *lighi* 'few', *poli* 'many' and *kathe* 'every'. They can also appear on their own, i.e., without the definite article:

(218)a.   *Lighi/ Poli*   anaghnostes   apoghoiteftikan   apo   to   telefteo
        Few/   Many.pl   reader.pl   be-disappointed.3pl   from   the   recent
        tu   vivlio.
        his   book
        'Few/ Lots of readers were disappointed by his recent book.'

      b.   I   *lighi/poli*   anaghnostes   apoghoiteftikan   apo   to   telefteo
          The   few/ many.pl   reader.pl   be-disappointed.3pl   from   the   recent
          tu   vivlio.
          his   book
          'The few/ majority of readers were disappointed by his recent book.'

(219)a.   *Kathe* praghmatiko   ergho texnis ine   monadhiko.
        Every   true.n   work.n art.gen be.3s   unique.n
        'Every true work of art is unique.'

      b.   *To*   *kathe* praghmatiko   ergho texnis ine   monadhiko.
          The   every   true.n   work.n art.gen be.3s   unique.n
          'Every true work of art is unique.'

As with the indefinite article, when these quantifiers appear with the definite article, then the meaning is slightly different. When *kathe* 'every' co-occurs with the definite article, a distributive reading over distinct events is enforced. In such cases, its meaning corresponds to English *each*. As Giannakidou (2004) observes, the result is a strong distributive quantifier, which like English *each*, but unlike *all* and Greek *oli*, is incompatible with collective predicates:

(220) a. *To kathe   pedhi   sigendrothike.

The.n each   child.n gathered.3s

*'Each child gathered'

b.   Ola   ta   pehdia   sigendrothikan

All.n.pl the.n.pl.   child.n.pl.   gathered.3pl

'All the children gathered.'   (Giannakidou, 2004: 8)

The quantifiers *lighi* 'few' and *poli* 'many' receive a partitive interpretation when they appear with the definite article. In (221a) thus the nominal *i lighi pelates* 'the few customers' refers to the small subset of the remaining customers, while in (221b), the nominal *i poli pelates* 'the majority of customers' refers to a subset of the customers set:

(221) a.   *I*   *lighi*   pelates   (pu   apeminan)   dhen

The.m.pl   few.m.pl   customer.m.pl that   remained.3pl   Neg

arkun.

suffice.3pl

'*The few customers (that remained)* are not enough'

b.   *I*   *poli*   pelates   protimun   ta   ikologhika.

The.m.pl   many.m.pl   customer.m.pl prefer.3pl   the.n.pl organic.n.pl

(oxi ta   viomixanika)

Neg the.n.pl.   conventional.n.pl

'*The majority of customers* prefer the organic (and not the conventional) foods.'

Note that the partitive reading may not be absent when the article accompanies the quantifiers. Hence, the example below will sound strange if the partitive reading is absent:

(222) # *I*   *lighi/* *I*   *poli*   anaghnostes apoghoiteftikan   apo   to

The   few/   the   many.pl reader.pl   be-disappointed.3pl   from   the

telefteo tu vivlio.

recent his book

'The few/ the many readers were disappointed by his recent book.'

The nominal *i lighi/ i poli anaghnostes* 'the few/ many readers' is necessarily interpreted as partitive. This partitive reading is raised by the definite article.

Summing up, the quantifiers *lighi* 'few', *poli* 'many', *kathe* 'every' and the indefinite numeral *enas* 'a/one' may all appear following the definite article. When the definite article is present, a different quantifying meaning arises, either a partitive or a distributive one. These observations suggest that these quantifiers should appear in a lower position than the definite article.

Let us turn now to the second group, i.e. quantifiers that do not co-occur with the definite article. These are the indefinite quantifier *kapjos* 'some' and the indefinite, but more partitive, quantifier *meriki* 'some (of)'. As shown in (223) these never co-occur with the definite article, not even if a specific interpretation is involved:

(223) a. Kapji/ meriki   sinadhelfi   su   efighan idhi.
Some.m.nom.pl   colleague.m.nom.pl your.gen.cl left.3pl already
'Some (of your) colleagues have already left.'

b. (*I)   kapji/ meriki (*i)   sinadhelfi   su   efighan
The.m.nom.pl some.m.nom.pl   colleague.m.nom.pl your.gen.cl left.3pl
idhi.
already
'Some (of your) colleagues have already left.'

These data thus suggest that quantifiers of this type should appear in a different syntactic position from quantifiers of the first group.

Finally, considering the last group, the quantifier *Oli* 'all' can precede or follow not just the definite article but the whole definite phrase:

(224) *Oli*   [i   sinadhelfi   su]   *oli*   efighan

      All.m.nom.pl   the.m.nom.pl. colleague.m.pl   your.gen.cl   all   left.3pl

      'All your colleagues are gone.'

The distribution of *oli* is similar to that of the modifying nominals we have been looking at. It can co-occur either before or after a modifying demonstrative. *Oli* and the demonstrative can both precede the matrix nominal in either order as shown in (225a) and (225b), or follow it as shown in (225c). Or, one may precede and one may follow as in (225d, e). Finally, can appear on its own just like the demonstrative (225f):

(225)a. Afti   (edho) *oli*   i   fitiites

      These here   all.pl the.pl student.pl

      'All these students'

b. *Oli*   afti   (edho) i   fitites

      All.pl these here   the.pl student.pl

      'All these students'

c. I   fitites   {*oli*   afti}

      The.pl student.pl   all.pl   these

      'All these students'

d. *Oli*   i   fitites   afti   (edho)

      All.pl the.pl student.pl   these here

      'All these students'

  e. Afti (edho) i   fitites   *oli*

      These here the.pl student.pl all.pl

      'All these students'

  f. Oli   ine edho simera.

      All.pl.nom be.3s here today

      'Everyone is here today.'

From these word orders we conclude that *oli* and the modifying nominals have the exact same distribution: *oli* ('all') can appear on its own, and it can co-occur with definite DPs, which it may precede or follow. This strongly suggests that both *oli* behaves like a polydefinite modifier, and that it is phrasal.

Summing up, we seem to have three groups of quantifiers in Greek: Some like *kapji* 'some', and *meriki* 'some (of)' never appear with a determiner. They only combine with a noun. Others, like *kathe* 'each', *enas* 'one', *lighi* 'few', and *poli* 'many', combine with a noun and may be preceded by the definite article. Finally, *oli* 'all' patterns like a polydefinite modifier. Let us consider each in more detail and determine its syntactic category. In this way we will be able to account for the cases where these quantifiers may cooccur with the definite article.

5.2.3 Indefinite heads: Ds, Cards and DPs

In this section I investigate the syntactic category of the three types of quantifiers and propose some possible structures that account for their interaction with the definite article. As we will see, I distinguish three categories for them, Ds, Cardinality heads and DPs.

Let us briefly consider the group of indefinite quantifiers such as *kapjos* ('some/someone') and *meriki* ('some/ some people'). This group behaves quite straightforwardly. As we have seen, they never co-ccur with the definite article (cf. 223). They thus function like regular indefinite determiners and should be D heads.[62]

In contrast, the members of the second group, such as *lighi* ('few') and *poli* ('many') seem to pattern less like Ds. Giannakidou and Etxeberria (2010) also argue that *lighi* and *poli*, but not *kathe* ('each'), are lower than D. They claim that weak quantifiers in Greek are (cardinality) predicates generated lower than QP. Following Longobardi (1994) and others, Giannakidou and Etxeberria argue that Q is occupied by an empty existential operator which gives force to the weak QP. This way Giannakidou and Etxeberria account for the fact that *lighi* and *poli* are ambiguous between cardinal readings and presuppositional proportional readings (Von Fintel 1998, Partee 1988).

Like Giannakidou and Etxeberria, I do not assume that *lighi* and *poli* are simple predicates. I also adopt their assumption that *lighi* and *poli* appear lower than D. As we will see, in our analysis this position will be below D but higher than NumP. The reason they should appear lower than D is because they can immediately follow the article, but they precede adjectival modifiers. Omitting the labels for now, this would give us roughly the following structure:

---

[62] Note that *meriki* and *kapjos* may sometimes appear without a noun. As opposed to the demonstrative though, they do not co-occur with another DP. I assume that examples such as the one below are cases of nominalization:

e.g.　Kapjos　　　　se　　pire　　tilefono.
　　　Someone.m.nom　you.acc　took.3s　phone
　　　'Someone called you on the phone.'

(226)   *I lighi anaghnostes* (the few readers)

```
            I
         the     lighi
                 few     anaghnostes
                         readers
```
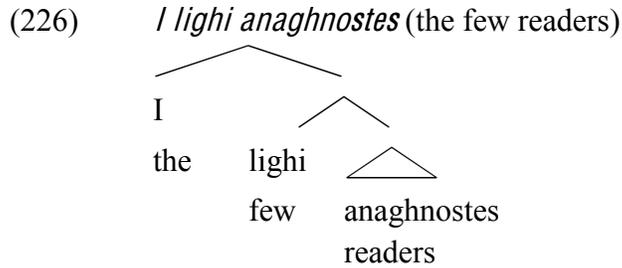
Turning to *kathe* 'each', Giannakidou claims that it forms a complex quantifier along with D as shown below:

(227)   QP

```
             Q              NP
          D      Q          fititis
          o    kathe        student
         the   every
```
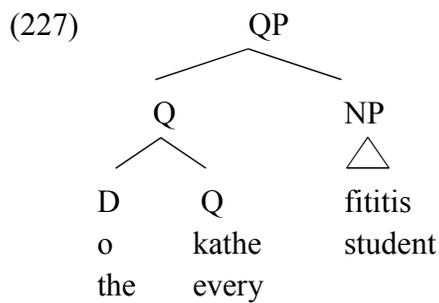
For Giannakidou, the definite article D directly adjoins to Q, because D does not create a DP. [63] She argues that nominals of the form *o kathe + N* are not similar to DPs like *i tris fitites* 'the three students', which are of type e:

(228)   DP$_e$

```
         D$_{et,e}$        NP$_{et}$
         I                 tris fitites
         the               three students
```

---
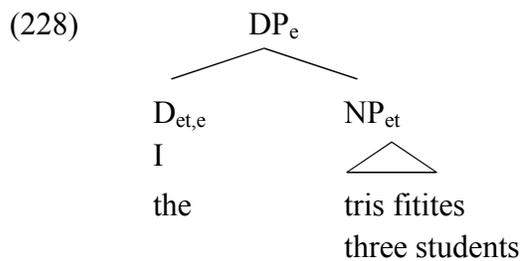
[63] Giannakidou (2004) and later in Giannakidou and Etxeberria (2010) do not go into further details about how D ends up in QP, but they do mention briefly that either incorporation or adjoin operation is possible.

Giannakidou provides two arguments for the structural difference between (227) and (228): first, as shown in (229b) below, the QP containing *kathe* does not co-occur with the demonstrative, which normally combines with a DP (229a). Secondly, there are no polydefinites with *kathe* (cf. 229c):

(229) a.　Aftos　*o*　　*fititis*
　　　　　this　　the　　student
　　　　　'This student'

　　　b.　*Aftos　o　　kathe　fititis
　　　　　this　　the　　every　student

　　　c.　*O　　　kathe　o　　fititis
　　　　　The　　every　the　　student

Since *o kathe* does not occur with the demonstrative or polydefinites, Giannakidou concludes that it forms a Quantifier phrase (QP), and not a DP. I adopt the view that *kathe* heads a QP-like category, but I differ with Giannakidou in that I do not treat the determiner and *kathe* 'each' as forming a complex head. First, it is not clear why D incorporates or adjoins to QP, i.e. the motivation behind this operation is not provided. Secondly, it is not clear either what prevents D from adjoining in a different position.

Moreover, it is not argued adequately for why the determiner and QP form a single unit. Giannakidou (2004: 10) argues claims that *o kathe* is a complex determiner, that incorporates or adjoins to Q. If *o kathe* formed a single unit as Giannakidou suggests, then we would expect it to be somehow reflected in the morphology and phonology. In phonology, one diagnostic of a compound could be *stress*. In a compound, the stress may shift, as in the case of *copulative*

compounds.[64] For example, *ghinekópedha* 'women and children' is formed by the noun *ghinékes* 'women', which normally has stress in the penult and *pedjá* 'children', which is stressed in the final syllable. When the two nouns form a compound, the stress appears on the antepenult. Looking at *o kathe* then, if this formed a copulative compound, there should be stress shift. This is not the case though, since *o + káthe* are pronounced in exactly the same way as *o fititis* 'the student'. From a morphological perspective, if *o kathe* formed a single lexical item, inflection should not be possible for both elements. As shown in (230), both the determiner and *kathe* can be fully inflected. If the article and *kathe* formed a single lexical item, this form would not be possible. Also, notice in the same example that the article is also incorporated to a preposition, clearly forming a separate lexical item from *kathe*:

(230) Edhose   apo   ena triandafilo *ston*   *kathéna*   akroati.

Gave.3s   from   one rose   to-the.m.acc every.m.acc   listener.m.acc

'S/he gave one rose to each member of the audience.'

Notice further, that *káthe* may appear with the incorporated *énas* 'one' giving in this case truly a single word *kathénas* 'everyone'. As expected, *kathénas* has a different stress pattern from *káthe* (i.e. from *káthe* we have *kathénas*). This is also shown in (231) below:

(231) *Ston* *kathéna*   aresi mia   kali   tenia

to-the everyone   like.3s a.f   good.f movie.f

'Everyone enjoys a good movie.'

---

[64] In the case of determinative compounds, the stress does not shift (e.g. *ilio-mavrisménos* 'sun-burnt'), as Professor Brian Joseph pointed out to me (p.c.).

Hence, there is no independent support for the claim that *kathe* forms a complex Q head with the definite determiner. Rather they seem to be two distinct lexical heads. I propose that *kathe* originates in a functional head below the definite article. It is therefore not surprising that *kathe* co-occurs with the definite article. This approach makes it possible to treat *kathe, lighi* 'few', *poli* 'some', and *enas* 'a/one' in a unified way. These three can all appear with the definite determiner, always following it, and in each of these cases a distinct interpretation arises. In addition, they are in complementary distribution with one another.

To determine the type of this projection, let us consider what else can occur in it. Numerals seem to originate in the same projection as the quantifiers *lighi* (few), *poli* (many) and *kathe* (each). First, they can optionally occur with the determiner (as shown in (a) below). Secondly, numerals always precede adjectival modifiers (cf. (a, b)); and finally, they cannot co-occur with any of these quantifiers, i.e. *lighi, poli,* and *kathe* (cf. c):

(232) a.　(Ta)　　　　*dhio*　kokkina　　　podhilata
　　　　　The.n.pl.　　two　red.n.pl.　　bike.n.pl.
　　　　　'The two red bikes'

　　b.　*(Ta)　　　　kokkina *dhio*　podhilata
　　　　　the.n.pl.　　red.n.pl. two　bike.n.pl.
　　　　　'The two red bikes'

　　c.　*Ligha*　　　　*dhio*　kokkina　　　podhilata
　　　　　Few　　　　　two　red.n.pl.　　bike.n.pl.
　　　　　'Few two red bikes'

The only example we have where *kathe* 'each' can co-occur with a numeral is with *enas*. However, in such a case *kathe* and *enas* obligatorily form a single item, and *ena* loses its numeral interpretation:

(233)   Ston   *kathéna*   aresi mia kali tenia

           to-the everyone   like.3s a.f   good.f movie.f

           'Everyone enjoys a good movie.'

The word *kathéna* constitutes a clear case of incorporation, which can be easily accounted for if we assumed that both *kathe* 'every' and *ena* 'one' are in the same position. In a different case, i.e. if we assumed Giannakidou's claim that *o kathe* forms a unit, we would have to assume that also *ena* moves to *kathe*. Moreover, we would additionally have to account for the determiner which has incorporated in the preposition *s(e)* 'in' and explain why this is also in QP. Finally, it is not clear, how the accusative marking on both the determiner and *kathena* is accomplished if these are found at the same position. This example thus provides more support for the claim that quantifiers like *lighi, poli* and *kathe* and numerals should be found in the same position. Assuming, with Giannakidou, in that these elements are cardinal, I propose that the category these quantifiers head is a Cardinality Phrase (CardP). The elements that can appear in it are *lighi* 'few', *poli* 'many', *kathe* 'each', *enas* 'a, one', and *kathenas* 'everyone':

(234)   *I kathe ghineka* (every woman)*/*
        I lighi fitites (the few students)

```
              /\
             /  \
            i    CardP
           the    /\
                 /  \
              Card   NumP
            kathe/lighi  /\
            every/ few  /  \
                   ghineka/ fitites
                   woman/  students
```

We have seen that when the definite article co-occurs with these quantifiers, a strong distributive or partitive interpretation arises, suggesting that the definite determiner bears a quantifying force. However, the definite article in other contexts does not have this quantifying force. We can thus

conclude that there should be two entries for the definite article: i.e. one where it functions as D and its type is $<<et>e>$, and a second one where it functions as a type of generalized quantifier (GQ), of type $<<e, t>, <<e, t>,t>>$ (see Giannakidou and therein for references). As Giannakidou mentions, quantificational determiners (Qs) combine with a nominal (NP) constituent (of type $<et>$) to form a quantificational argumental nominal (QP). This QP denotes a GQ, a set of sets. In English, the syntax of a QP like *every woman* is as follows:

(235)

$$\text{QP}_{<<e, t>, t>}$$

$$\text{Q}_{<<e, t>, <<e, t>,t>>} \qquad \text{NP}_{<e, t>}$$
$$\text{every} \qquad \qquad \text{woman} : \lambda x. \text{ woman } (x)$$
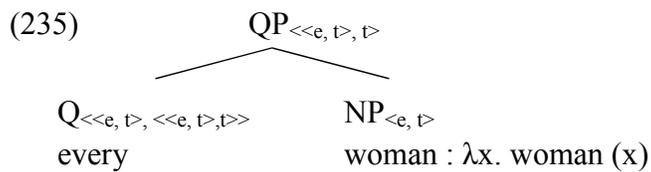
Here, the quantifier *every* combines with the NP predicate *woman*, the domain of *every*, and the Q expresses a relation between this domain and the set denoted by the VP, which merges next.

Similarly, I will assume that the Greek definite article also has a quantificational type, since not only is it present in quantificational nominals, but it has a quantificational force. In such cases, it combines with CardP, which is of type $<et>$, returning a nominal of type $<<et>t>$. This is demonstrated below:

(236)

$$\text{QP }_{<<et>t>}$$

$$\text{Q}_{<<e, t>, <<e, t>,t>>} \qquad \text{CardP}_{<et>}$$
$$\text{i}$$
$$\text{the} \qquad \qquad \text{Card}_{<et>} \qquad \text{NumP}_{<et>}$$
$$\qquad \qquad \qquad \textit{kathe}/\underline{\text{lighi}}$$
$$\qquad \qquad \qquad \text{every/ few} \qquad \textit{ghineka}/ \underline{\text{fitites}}$$
$$\qquad \qquad \qquad \qquad \qquad \text{woman/ students}$$
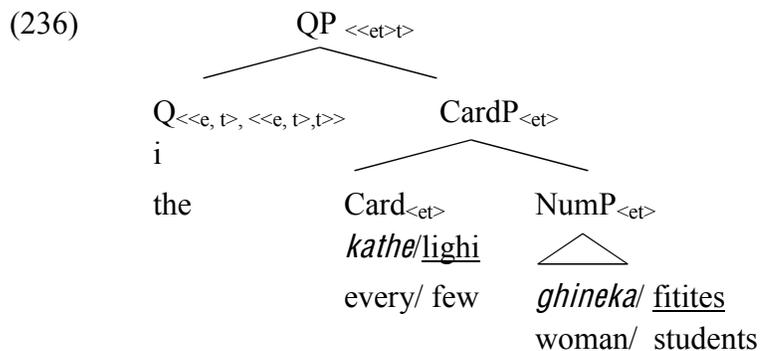
According to the *presuppositionality hypothesis* (Strawson 1950, Heim and Kratzer 1998), which requires that all lexical items of type <<e, t>, <<e, t>,t>> are presuppositional, the Greek article, which is here also of type <<e, t>, <<e, t>,t>> is the one carrying the existence presupposition. The question then is what about the quantifiers in Card? I propose that since the article carries the existence presupposition, the quantifiers themselves do not.

As Heim and Kratzer (1998) argue, weak quantifiers may in some contexts be non-presuppositional. They also argue that non-presuppositional quantifiers are of type <et>. Since *kathe, lighi,* etc. do not carry the existence presupposition when preceded by the definite article I will also assume that they are of type <et>. Card thus is of type _{<et>}. It merges with NumP which is also of type <et>, and thus via predicate modification we get a CardP of <et> type. QP merges next, and we get an <<et>t> phrase which can next take the predicate VP merging next as its argument.

This analysis can also explain why the demonstrative does not cooccur with the definite article and *kathe.* The phrase *i kathe ghineka* 'every woman' is a QP and thus the demonstrative does not combine with it, since it may only intersect with Fam. That is, the demonstrative is an intersective modifier, and thus of type <et>.[65] On the other hand, Q is of type <<e,t> <<e,t>,t>>. Since they are of different types, DemP and Q may not intersect.[66] Thus the nominal in (237) is excluded:

---

[65] This suggests that the demonstrative is of <et> type when it functions as a restrictive modifier, and not an argument. The type-shifting operation that takes place here is predicate abstraction. In other words, the Greek demonstrative is similar to English DPs, i.e., they are arguments, which function predicatively when they are used as restrictive modifiers.

[66] Note that if a different operation applied, such as functional application, and Q would take DemP we would incorrectly get a truth value, since Q also combines with the matrix <et> noun.

(237)   *Aftos o   kathe fititis

This   the   every student

Hence, although in a different manner from Giannakidou and Etxeberria (2010: 10), the impossibility of (237) is accounted for. Notice that we now additionally correctly predict that QPs should not allow polydefinites at all:

(238)a. *[O   EKSIPNOS]_{MOD} o   kathe fititis

The.m.nom   smart.m.nom the.m.nom   every student.m.nom

'Every smart student'

b. *O   kathe fititis   [o   eksipnos]_{MOD}

The.m.nom   every student.m.nom the.m.nom   smart.m.nom

'Every smart student'

Similar to the demonstrative, the predicative modifying nominal *o eksipnos* 'the smart one' may only intersect with a nominal of the same time, i.e. FamP. It may not intersect with QP, since again these are of different semantic types. Notice that other nominals of the same form containing quantifiers like *lighi* 'few' and *poli* 'many' do not allow polydefinites, either:

(239)a. I   LIGI/   POLI   kali   fitites

The.m.pl   few.m.pl/   many.m.pl   good.m.pl   student.m.nom

'The few good students'/ 'Many good students'

b. *I   LIGI/   POLI   i   kali

The.m.pl   few.m.pl/   many.m.pl   the.m.pl   good.m.pl

fitites

student.m.nom

'The few good students'/ 'Many good students'

The only possible way to utter a phrase like *the few/many good students* is in a monadic construction like in (239a). Although more research on this is necessary, it seems plausible thus that modifying DPs do not combine with QPs for interpretive purposes.

Let us now turn to *oli* 'all'. *Oli* may precede or follow a whole DP or even appear on its own. I will thus assume that it is a DP. In more detail, following Brisson (2003) and Giannakidou (2004), I assume that it is not a quantifier, but also add that *oli* patterns with modifying DPs, i.e. it acts like a modifying nominal itself. I assume in particular, that when it is restrictive, it adjoins to *n*P but may raise higher, to the specifier of FocP. We can thus explain the identical distribution of *oli* with the modifying nominals. Notice further that like those, *oli* can be stressed (contrastively or not), as shown below in (240), while it can also appear on its own, as in (241):

(240)   OLI   i   fitites   itan   parontes.
         All.m.pl   the.m.pl.   student.m.pl   were   present.pl
         'All the students were present.'

(241) A: Posi   irthan   sto   parti?
          How-many.pl   came.3pl   to-the   party
          'How many came to the party?'

      B: *Oli*   itan   eki.
          All.pl were/was   there
   'Everyone was there.'

By treating *oli* 'all' like a polydefinite modifier, it now directly follows that *oli* only appears with definite nominals. This is the desired result, since nominal phrases with *oli* only combine with a definite nominal. Thus, the following is not possible, since *oli* combines with an indefinite DP, and the same holds for English:

(242)   *Oli   [kapji   fitites]

        All.pl   some.m.pl   student.m.pl

        *'All some students'

Turning to the structure then, I assume that *oli* adjoins to *n*P. Like the demonstrative, it forms a

phrase of its own, with no internal structure, which is focused when it is prenominal. Hence, a

phrase containing *oli* would have the structure in (243a) before any movement, and (243b) after

oli moves to the specifier of FocP and NP to the specifier of NumP:

(243) a. Oli   i   fitites

           All.m.pl   the.m.pl   student.m.pl

           'All the students'

       b.   FocP

FocP
├── Foc
└── ɩP
    ├── ɩ
    └── FamP
        ├── Fam
        │   i
        │   (the)
        └── NumP
            ├── Num
            └── *n*P
                ├── DP_mod
                │   *oli* (all)
                └── *n*P
                    ├── *n*
                    └── NP
                        └── N
                            fitites
                            (students)

c.

```
                    FocP
                   /    \
              DP_mod     \
              /  \        \
             △   Foc      ιP
            oli          /  \
           (all)        ι    FamP
                             /  \
                          Fam    NumP
                          i     /    \
                        (the)  NP     \
                               |    /    \
                               N  Num     nP
                            fitites      /   \
                           (students) <DP_mod>  nP
                                              /  \
                                             n   <NP>
```
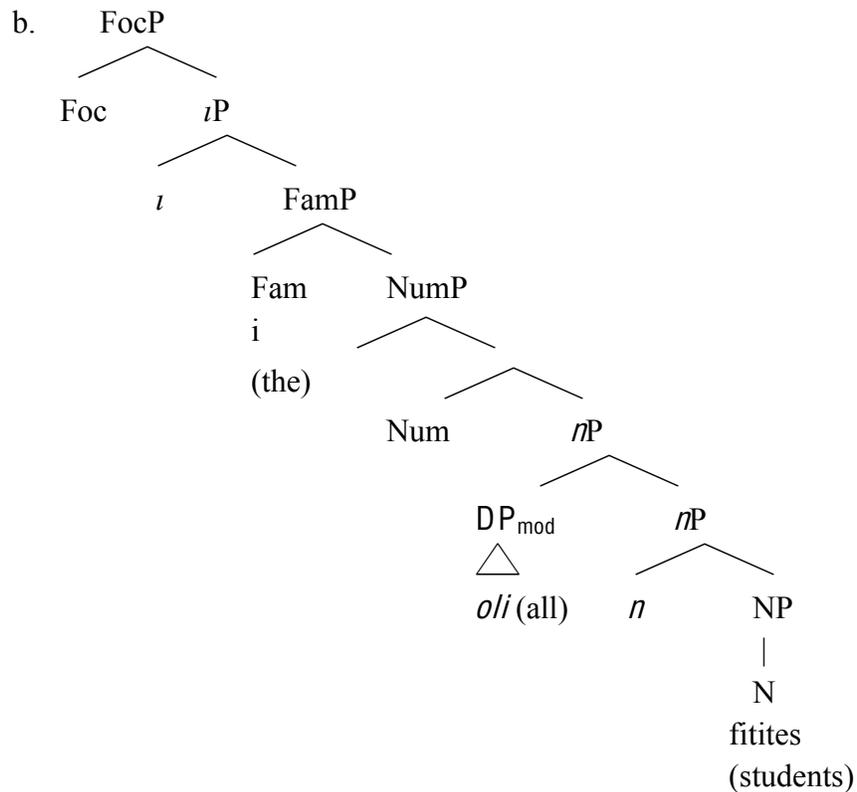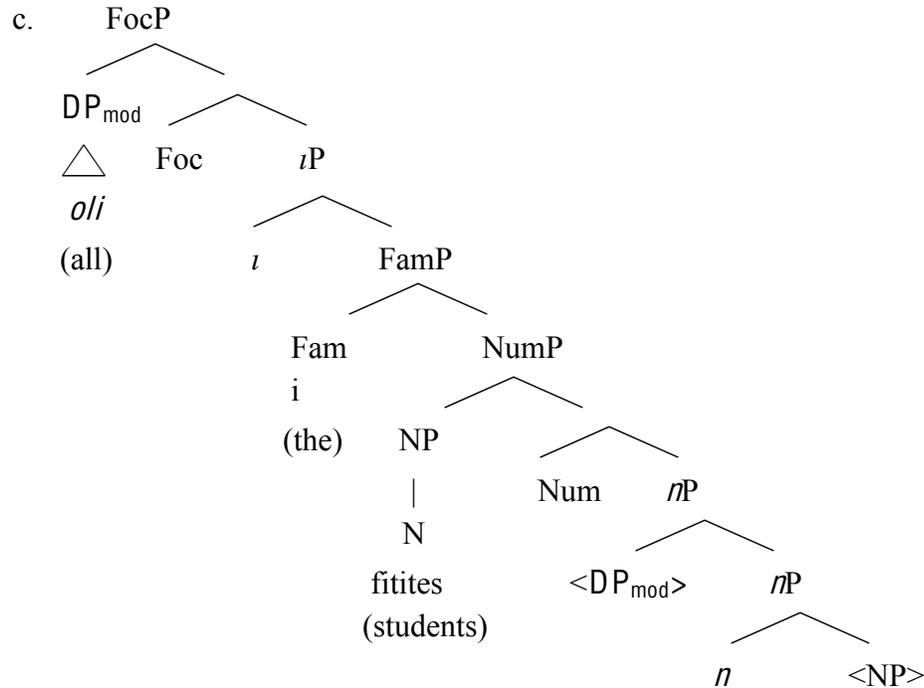
In conclusion, we have looked at the indefinite determiner and quantifiers. Based on their distribution, I divided them into three groups which reflect their syntactic properties summarized in Table 5: [67]

TABLE: 5	Indefinite heads	
(D +) Card	**D**	**DP (+DP)**
enas 'a/one'	kapjos 'some'	oli 'all'
ligi 'few'	meriki 'some people'	
poli 'many'		

---

[67] *Kapjos* and *meriki* may also be DPs when they are used as 'someone' and 'some people'.

The groups that co-occur with the definite article head a cardinality phrase, CardP. The majority of these quantifiers seem to be more adjectival-like, and thus lower than D, since they may co-occur with the definite article. Those that are in complementary distribution with the definite article are regular D heads and thus originate in D. Finally, the quantifier *oli* is a restrictive modifying nominal, which can appear in various positions. The fact that *oli* only appears in definite nominals now follows, since restrictive nominals are not allowed in indefinites. Hence we have now an account for the quantifiers of Greek as well.

With respect to the definite article, I have argued that it has two entries, one where it functions as a determiner and is thus of type <<e,t>,e> and one where it functions as a generalized quantifier of type <<e,t>,<<e,t>,t>>. Like Giannakidou then, we end up with a QP, and not a DP, which is the desired result. By having a QP as the end result, not only we can account for the different quantificational meanings involved, but most importantly for why real QPs do not allow polydefinites.

5.3 Conclusions

To conclude this chapter, I have looked here at the indefinite nominals showing that there are no restrictive poly*in*definites parallel to polydefinites. The modifying nominals of indefinite matrix nominals are definite, while the indefinite modifying nominals of definite matrixes are non-restrictive. This is in accordance with the framework developed here. As we have argued in 5.1.1, the indefinite modifiers can only be non-restrictive. The indefinite determiner in the modifier introduces a new, and thus not familiar, entity to the context. It does not carry any presupposition, but rather, it adds a property to the referent of the matrix nominal. Further

evidence that the indefinite modifier can only non-restrictive came also from focus. As shown, the modifier may not be stressed and thus may not be restrictive.

In this chapter, I also looked at the indefinite article and quantifiers. I argued that the indefinite article is a quantifying cardinality head. I also examined the distribution and the main properties of other quantifiers in Greek. I concluded that there are three types: Ds, which include quantifiers like *kapjos* 'some' and *meriki* 'some/some people'; Cards, which include all the quantifiers that may cooccur with the article; and *oli,* which is argued not to be a quantifier, but a DP which can modify the noun.

Interesting questions arise from these conclusions that would be worth examining in future research. One concerns the determiner-less modifying DPs. It would be interesting to examine their structure in more detail, especially from a semantic point of view, and determine the properties of the definite null head. Also, with respect to quantifiers, it would be interesting to further explore the properties of the quantificational determiner and examine whether it appears in other types of nominals. Finally, with respect to Cardinality Phrase, we have sufficient syntactic evidence for this projection. It is worth investigating in more detail its semantics, as well.

In conclusion, I have proposed a mechanism that accounts for the properties of the nominals I consider in this work. Crucially, we have seen that indefinites do not permit restrictive modifying nominals, i.e. there are no poly*in*definites.

Chapter 6 The account: Consequences and Conclusions

In this chapter, I review the core proposals made in this dissertation and unify the overall account. I then discuss the consequences of this account, as well as its contribution to the theory. Finally, I briefly discuss a few interesting questions are raised that are worth pursuing in future research offering some suggestions for a first approach.

6.1. Unifying the account

One of the main purposes here has been to provide a straightforward syntactic account of polydefinites that is both descriptive and explanatory. The ultimate purpose was to show that polydefinites are a subtype of restrictive modifying nominals, a common phenomenon of language.

Earlier accounts of Greek polydefinites, presented in Chapter 2, served as a good starting point to set the first theoretical questions and assumptions. Chapter 3 presented the main structural account of polydefinites. Starting from a typical DP in Greek, I showed that the noun starts off in *n*P but moves, in contrast to previous accounts, to NumP. Evidence from this came from genitives. We saw that genitives are divided into two syntactic types: DP genitives, which can be either possessors or internal arguments; and bare genitives, which can only be internal arguments. Bare genitives were shown to be of category NumP. The noun (or the nominalized root) always surfaces to the left of the possessor, which I argued was in the specifier of *n*P. This provides strong evidence that the noun moves. Since the bare genitive moves along with the noun, I concluded that the whole NP, containing the noun and the bare genitive, moves to the

specifier position in NumP. NumP is to Greek what nP is to English. The NP always moves to this position, and adjectives in Greek adjoin to NumP in the same way English adjectives adjoin to *n*P.

Turning to polydefinites, I distinguished two types of polydefinite constructions, those containing restrictive modifying nominals and those containing non-restrictive ones. Non-restrictive polydefinite modifiers can only be postnominal, while restrictive nominals can be either prenominal or postnominal. When they are prenominal, their restrictive interpretation arises from focus, either contrastive or simply informational. I proposed that restrictive modifiers start off post-nominally, in the specifier of the *n*P. If they carry informational or contrastive focus, they further move to a Focus projection, and surface in a prenominal position.

Looking further at the internal structure of the nominal modifier, I argued that it contains at most the determiner and a nominalized adjective. In this respect, I argued that it forms a reduced nominal phrase. I also considered other types of modifying nominals, arguing that they also involve restrictive nominal modification. They all behave uniformly: they are all necessary to the meaning, they all can be focused, and they all have to be small. I thus propose that they all originate in the same position adjoined to *n*P, as shown in (244):

(244)

```
                          FP
                         /\
                          FP
                         /\
                      Foc   DP
                           /\
                          D   NumP
                             /\
                          AP   NumP
                              /\
                           Num   nP
                                /\
                    Nominal_MOD-RESTR   nP
                                       /\
                              Possessor  /\
                                       n   NP
                                          /\
                                         N   Possessum
```
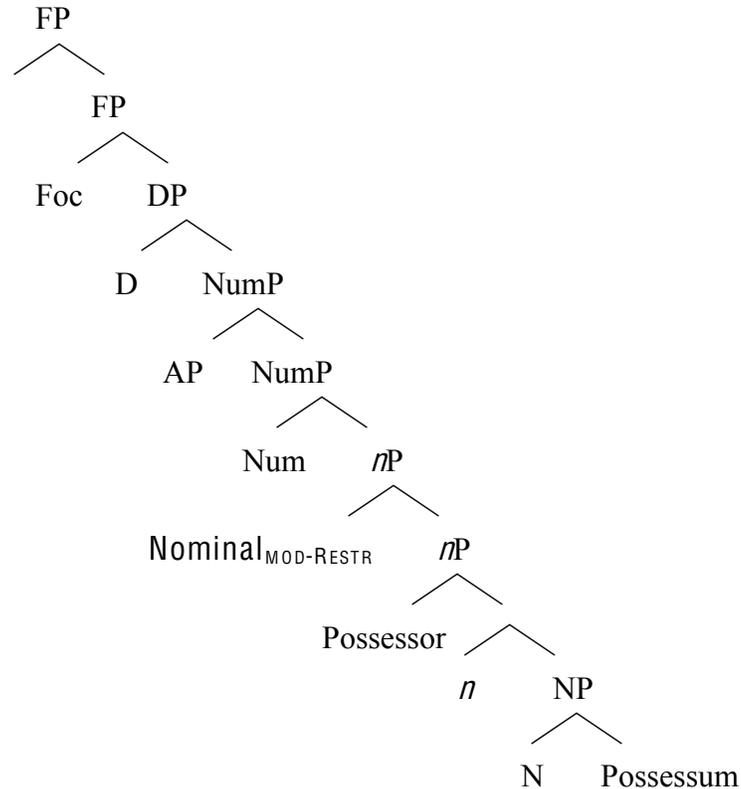
Based on the account developed in Chapter 3, Chapter 4 explored what makes modifying nominals possible and proposed a more formal approach. It was argued here that definiteness involves two semantic components: uniqueness and familiarity. In Greek, these two components are mapped into two distinct syntactic projections, and the Greek definite article spells out one component, familiarity. In contrast, the English definite article *the* spells out both familiarity and uniqueness. It follows that restrictive nominals should not be possible in English *the*-nominals, but should be fine in Greek: In Greek, the definite determiner, Fam, introduces a set of familiar entities, and as such it can intersect with the restrictive nominal modifier which also denotes a set. Next, the iota operator picks out the unique entity, which results from the intersection of the set of FamP and the set of the modifying nominal.

In all, if a determiner spells out only Fam, restrictive nominals should possible. However, if the determiner spells out both Fam and *iota*, restrictive modifiers should not be possible in the nominal construction. We therefore, have an account of why structures of this sort are so prevalent in Greek.

This account further explains why the definite determiner is obligatory with Greek generic nominals and provides a good argument against the expletive analysis of definite determiners. Standard definitions of definiteness are shown to be insufficient for the constructions under investigation since they cannot capture the contribution of the determiner in generics. By the proposed account though, we can also easily derive constructions involving the definite generics. They carry the same element of Familiarity, but as opposed to an iota operator, a Gen operator has scope over the nominal. Both of these properties are captured by this analysis. Furthermore, we correctly predict that restrictive nominal modifiers may appear with generics.

Going back to English, the proposed analysis also accounts for English nominals which allow RMN. We saw in particular that other definite determiners, such as the possessive and null determiners, easily allow restrictive nominal modification. This suggests that the possessive and null determiners are underspecified in the same way the Greek definite determiner is. These spell out Fam and thus, select a set of familiar entities, and not a unique entity as *the* does. The unique entity will be picked out by the iota operator. Hence, the system proposed here sheds light on the English constructions, as well.

The modifying nominal is a FamP in Greek, while in English it is a full definite DP with an internally licensed pronoun. This assumption is in accordance with the idea that modifiers carry an index. The English modifying nominal adjoins lower, i.e., to the NP, which accounts for why it must follow any adjectival modifiers and the noun, which moves to *n* in English. Under this

assumption, we have a full parallel between English and Greek. In English, the noun moves to *n*, adjectives adjoin to *n*P, and modifying DPs adjoin to NP. In Greek, the noun moves to NumP, adjectives adjoin to NumP, and modifying DPs adjoin to *n*P.

Overall, the generalized proposed structure for a restrictive polydefinite is the following:

(245) a. Greek restrictive polydefinites

```
                ιP<e>
              /      \
            ι        FamP<et>
                    /      \
                  Fam     NumP<et>
                         /     \
                       Num     nP<et>
                              /     \
                          FamP<et>   nP<et>
                                    /     \
                                 n<et>    NP<et>
                                           |
                                           N
```

b. English restrictive polydefinites

```
              ιP<e>
            /      \
          ι       FamP<et>
                 /      \
               Fam     NumP<et>
             D∅,Poss   /     \
                     Num     nP<et>
                            /     \
                          n<et>   NP<et>
                                 /     \
                              DP<et>    NP
                                         |
                                         N
```
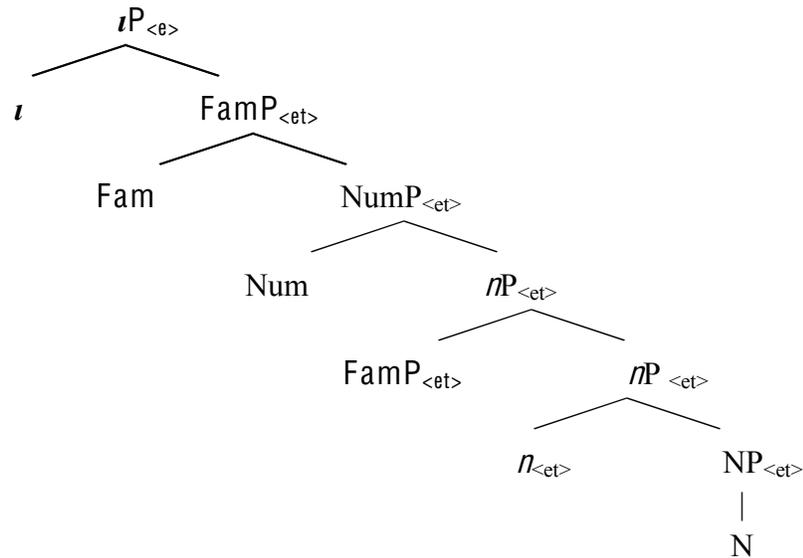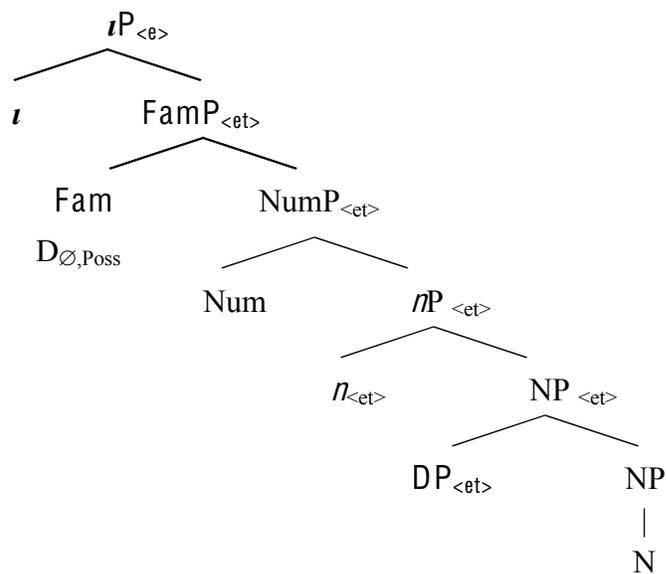
Chapter 5 dealt with indefinite nominals. The main proposal of this Chapter was that modifying indefinite nominals exist, and that they share certain properties with polydefinites. Since modifying indefinite nominals exist, the question addressed next was why there are no nominals with multiple occurrences of the indefinite article. I showed that in the nominal construction only one indefinite nominal is allowed, either the matrix nominal or the modifier. When the modifier is indefinite, the matrix noun must be definite. When the matrix noun is indefinite, the modifier can be either a definite nominal or a bare adjective. Furthermore, indefinite modifying nominals are shown to always be non-restrictive. As non-restrictive modifiers, the impossibility of focusing indefinite modifiers easily follows, as well as the fact that they can be omitted with no effect in the semantics. These facts can easily be explained if indefinite nominal modifiers are taken to be comments, i.e. non-restrictive modifiers. There are no restrictive indefinite nominal modifiers, and thus no restrictive poly*in*definites. Other types of nominals provided further support for these findings.

We also saw that the indefinite article in Greek is not parallel to the indefinite determiner in English, but is rather a quantifying cardinality head. Further support for CardP comes from other quantifiers, such as *lighi* (few), *poli* (many) and *kathe* (each). As was shown, they can all co-occur with the definite article and thus originate in a lower quantity-denoting head, the Cardinality head. Other quantifiers with purely indefinite interpretations, such as *kapjos* (some), *meriki* (some-plural) may not co-occur with the definite article. I proposed that these originate higher, in D.

The observation that the definite article co-occurs with the quantifiers is considered next. As shown, not only is a quantificational reading available, but it is different from the one that arises in the absence of the determiner. I proposed that the definite article is in fact a generalized

quantifier, and thus can give its own quantificational readings. I thus assume that there are two entries for the definite article: one where it functions as a typical definite article; and another where it functions as a quantifier. We thus capture the distributional and interpretive properties of the Greek definite article and quantifiers. The structures proposed for quantifiers as in (246a, b) and (247):

(246)   Structure of Quantity-denoting Quantifiers

    a. Definite article + Quantifiers

$$
\begin{array}{c}
QP_{<<et>t>} \\
\diagup \qquad \diagdown \\
Q_{<<e,\,t>,\,<<e,\,t>,t>>} \qquad CardP_{<et>} \\
i \qquad\qquad\qquad \diagup \quad \diagdown \\
the \qquad\qquad Card \qquad NumP_{<et>} \\
\qquad\qquad\quad \textit{kathe}/\underline{lighi} \qquad \triangle \\
\qquad\qquad\quad every/\ few \qquad \textit{ghineka}/\ \underline{fitites} \\
\qquad\qquad\qquad\qquad\qquad\quad woman/\ students
\end{array}
$$

    b. Bare Quantity-denoting Quantifiers

$$
\begin{array}{c}
QP_{<<et>t>} \\
\diagup \qquad \diagdown \\
Q_{<<e,\,t>,\,<<e,\,t>,t>>} \qquad CardP_{<et>} \\
\varnothing \qquad\qquad\qquad \diagup \quad \diagdown \\
\qquad\qquad <Card> \qquad NumP_{<et>} \\
\qquad\qquad \textit{kathe}/\underline{lighi} \qquad \triangle \\
\qquad\qquad every/\ few \qquad \textit{ghineka}/\ \underline{fitites} \\
\qquad\qquad\qquad\qquad\qquad woman/\ students
\end{array}
$$
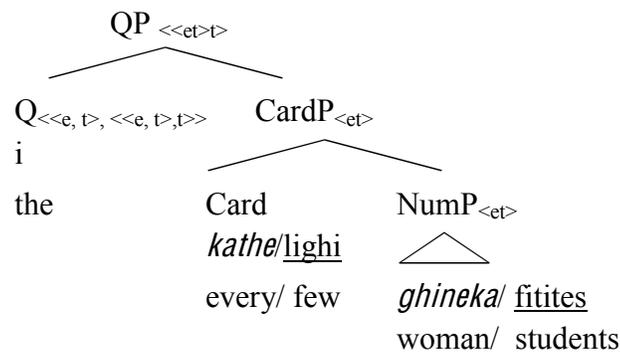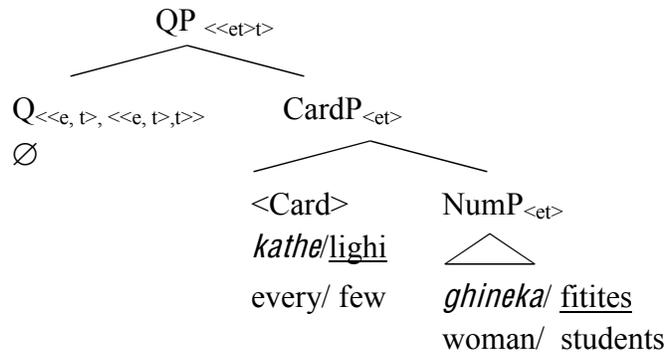
(247)   Structure of indefinite Quantifiers

QP $_{<<et>t>}$

Q$_{<<e, t>, <<e, t>,t>>}$ NumP$_{<et>}$
kapji (some)

ghineka/ fitites
woman/ students
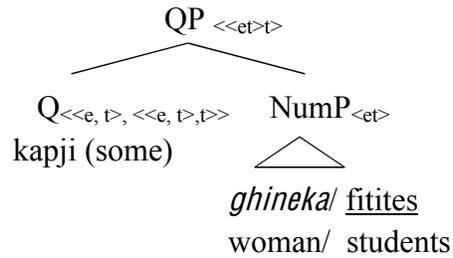
6.2. Consequences and further research questions

Starting from the main proposals presented in Chapter 3, I have argued that there are different types of restrictive nominals. These are the DP with the nominalized root, count nouns and proper nouns, and demonstrative pronouns. In many respects, they all behave alike: they are necessary to the meaning, they can carry focus, and they are all found to be reduced nominals.

However, they do not have identical distributions. For instance, it appears that the restrictive proper DP in Greek preferably appears post-nominally, i.e. a proper name is not easily contrastive prenominally. In English, restrictive modifying nominals are always postnominal, and thus the first nominal is always the matrix, and the second nominal the modifier. In (248) the proper name *i Elia* 'Elia' is best interpreted as the matrix nominal and *i adherfi mu* 'my sister' as the modifier (cf. 248b). Thus, (248a) is not as acceptable, since the proper noun phrase *i Elia* cannot be the focused nominal modifying the matrix *i adherfi mu.*

(248) a. ?/*I   ELIA i   adherfi   mu   zi   stin   Athina

          The.f.nom   Elia the.f.nom sister.f   my.cl live.3s in-the Athens.f

          oxi   i   Elena.

          not   the.f Elena

      * 'ELIA - my sister lives in Athens and not Helena.'

      (√ 'Elia MY SISTER, not my cousin')

    b.   I   adherfi mu   i   ELIA zi   stin   Athina   oxi

         The.f.nom   sister.f my.cl the.f.nom Elia live.3s in-the Athens.f   not

         i   Elena.

         the.f   Elena

      'My sister ELIA lives in Athens and not Helena.'

It would be interesting to further examine the limits of the similarities among the various kinds of restrictive nominals. A second question concerns the size and content of the modifying nominal. We saw that they are reduced, suggesting that nominals of this type are indeed different from typical matrix nominals, thus providing support for the predicative semantic type of nominal modifiers.

With respect to adjectives, and in particular the possessive adjective, I have proposed that the possessive adjective and the clitic form a PossP, which merges above the NumP. This assumption easily accounts for why the possessive adjective always precedes other adjectives. The possessive pronominal clitic is in the same position as the independent Genitive, i.e. the specifier of nP, and can then cliticize onto the possessive adjective to satisfy the uninterpretable person features of the PossP.

Turning to the proposal presented in Chapter 4, we saw that the definite determiner is underspecified in Greek. It would be interesting to examine other languages where the definite determiner also appears with proper names and is commonly assumed to be expletive. Some

research suggests that indeed, other languages seem to also use the definite article as Greek does. In Scottish English for instance, it appears that the definite determiner *the* can in fact appear with names. In particular, in Modern Scots, a variety of English spoken in Lowland Scotland, the definite article is used in more contexts than in Standard English. For example, it can appear before the names of seasons and days of the week. It is also often used instead of a possessive pronoun (Grant and Dixon, 1921), which we have seen to be underspecified in Standard English. This suggests that Scottish *the* is underspecified in definiteness as opposed to *the* in other dialects of English. Indeed Scottish *the* appears in exactly the same contexts as the Greek definite article. As shown below, in (249a) *the* appears in exactly the same context as the pronoun *my* would. Example (249b) is similar to most English varieties, i.e. the modifier *the doctor* may contain *the*; example (249c) is similar to (249a). This is a context where the possessive pronoun would normally occur giving *my friend the football player*. Finally, example (249d) is an identical example to Greek polydefinites, an example that would not be possible of Standard English:[68]

(249) a. I saw the uncle Clyde – not Alan!
   b. I meant Clyde the doctor not the pharmacist.
   c. I saw the friend the footballer, not the engineer.
   d. I met with the student, the tall one, not the short one.

Therefore, the definite determiner in Modern Scots seems to be underspecified in the same way as the Greek definite article. It seems thus that we have solid arguments against the expletive account. It would be worthwhile to conduct a wider cross-linguistic comparison to see whether

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[68] Many thanks to Edward Humphries for providing me with these data.

similar facts hold cross-linguistically. If they do, then perhaps definiteness plays a bigger role in DPs than previously thought, a role that would be worth exploring further.

Finally, it would be interesting to work out the exact semantics of such constructions. As this dissertation focuses primarily on the syntactic structure, we now need to sharpen the exact semantic types of the syntactic categories. For the sake of simplicity, I have assumed that FamP for instance is <et>. However, there is certainly a more complex semantics involved. A subsequent question is whether we can have ιP without FamP in a language.[69] This would imply that a type of specific indefinite could arise. Indeed, as Professor Brian Joseph pointed out (p.c.), Kazazis and Pentheroudakis (1976: 400) show that Greek has such constructions:

(250)   Su   to   pleko   ena   pullover
         To-you it   knit.1s one   sweater
         'I'm knitting you (*it) a sweater.'

As Kazazis and Pentheroudakis have argued, one of the meanings available is '*as for a sweater (as opposed to the other items you've mentioned), I'll knit you one (but I won't knit you anything else)*. It would be interesting thus to define the semantic dependency between *iota* and Fam. Similarly, for generics, a question that is raised concerns the semantic scope, and where Gen is generated exactly. Hence, there are interesting semantic consequences of the proposed analysis that remain to be investigated further.

Another question that merits closer investigation concerns the non-restrictive modifier. Preliminary investigation here shows that it cannot be contrastively focused, it does not have to be reduced, and as a comment, it can appear in various post-nominal positions. It would be

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[69] Thank you to Daniel C. Hall for this question.

interesting to determine exactly which positions these are and exactly what its internal structure is. With respect to constructions of the form [ena aftokinito [kokkino]] (lit. 'a car red') it would also be interesting to examine what exactly the interpretation is. That is, it would be interesting to see whether the function and meaning of the adjective is parallel to that of a non-restrictive relative clause. Finally, the prosody of non-restrictive modifiers is a large area that now offers more research. Pauses are shown to play a decisive role and it would be interesting to measure these, as well as the rises and falls of pitch involved.[70]

6.3. Overall concluding remarks

To conclude this thesis, we have uncovered here a phenomenon that seems to be pervasive in human language. It is shown that polydefinites, i.e. definite nominal constructions with restrictive or non-restrictive modifying nominals, are an instance of a common cross-linguistic phenomenon and not a parametric property of Greek. Investigation has revealed that such nominals, and specifically those containing restrictive nominals, essentially constitute a whole area in the DP that has not been discussed so far. Modifying nominals are shown to be a distinct type of DPs that are worth further investigation.

More specifically, we now have a unified account for such constructions both cross-linguistically and within Greek. That is, I have identified different types of restrictive modifiers in Greek and English that behave alike and thus unified them under the same account.

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[70] Many thanks to Professor Brian Joseph for this interesting observation.

I have also argued that polydefiniteness is not a unique property only of Greek or other languages with 'rich' inflection. Rather, it is a universal property of language that is encoded in different ways cross-linguistically. Evidence for this comes from English, where such constructions are also shown to exist despite practically non-existent nominal inflection.

A further consequence of the proposed account is that these constructions shed light on the nature of definiteness. That is, we have seen here that both familiarity and uniqueness must be involved. Standard definitions of definiteness are insufficient for such constructions, and thus cannot explain their properties. Had we assumed that definiteness only involves one of these two features, then it would not be possible to fully explain the pervasive presence of the Greek determiner.

It is shown here that the Greek determiner is not an expletive. It is underspecified, but context, by means of the uniqueness operator, fills out the specification. It is correctly predicted then that in languages which have polydefinites, the determiner will be underspecified in terms of definiteness, and vice versa. Languages with no polydefinites on the other hand, may have a fully specified determiner. Moreover, it is shown that within a single language the definite determiners may also differ from each other. The Standard English *the* is fully specified and thus typically disallows polydefinites. The possessive and null determiners are underspecified in definiteness and thus may appear with polydefinites. In all, this account offers an interesting cross-linguistic parallel and offers new ways of exploring nominal modifiers.

References

Abney, Steven Paul. 1987. The English noun phrase in its sentential aspect. Doctoral dissertation, MIT.

Adger, David. 2003. *Core Syntax. A minimalist approach*. New York: Oxford University Press.

Adger, David & Ramchand, Gillian. 2003. Predication and Equation. *Linguistic Inquiry*, 34:325-359.

Alexiadou, Artemis. 1997. *Adverb placement: a case study in antisymmetric syntax*. Amsterdam: John Benjamins.

_____. 2004. Possessors and (in)definiteness. *Lingua*, special issue edited by R. Zamparelli. 115: 787-820.

_____. 2005. Adjective Syntax and (the absence of) noun raising in the DP. In *Syntax at Sunset*, Proceedings of the Workshop of Head-movement.   UCLA, 1-39.

Alexiadou, Artemis, Haegemann, Liliane & Stavrou. Melita. 2007. *Noun Phrase in the Generative Perspective*. New York: Mouton de Gruyter Press.

Alexiadou, Artemis & Stavrou, Melita. 1998a. On derived nominals in Greek.   In *Themes in Greek Linguistics* II, 101-130, eds. B. Joseph, G. Horrocks & I. Philippaki-Warburton, Amsterdam: John Benjamins.

_____.1998b. Revisiting Partitives and Pseudopartitives in Greek. *Studies in Greek Linguistics*, Thessaloniki, 19: 1-13.

Alexiadou, Artemis & Wilder, Chris. 1998. Adjectival Modification and Multiple Determiners. In *Possessors, Predicates and Movement in the Determiner Phrase*, 303-332, eds. A. Alexiadou & C. Wilder. Amsterdam: John Benjamins.

Androutsopoulou, Antonia. 1995. The Licensing of adjectival modification. In *Proceedings of the West Coast Conference on Formal Linguistics*, 13: 17-31.

Androutsopoulou, Antonia. 2001. Adjectival determiners in Albanian and Greek. In *Comparative syntax of Balkan languages*, 161-199, eds. M. L. Rivero & A. Ralli. Oxford: Oxford University Press.

Beghelli, Filippo & Stowell, Tim. 1997. Distributivity and Negation: The Syntax of Each and Every. In *Ways of Scope Taking*, ed. Szabolcsi, Anna. Dordrecht: Kluwer Academic.

Bernstein, J.B. & C. Tortora. 2005. Two types of possessive forms in English. *Lingua* 9.115: 1221-1242.

Borer, H. 2005. *Structuring Sense. Volume I: In Name Only*. Oxford: Oxford University Press.

Brisson, C. 2003. ''Plural', 'all', and the nonuniformity of collective predication'. *Linguistics and Philosophy* 26:129-184.

Campos, Hector & Stavrou, Melita. 2004. Polydefinite constructions in Modern Greek and in Aromanian. In *Balkan syntax and semantics*, 137-144, ed. O. Tomic. Amsterdam: John Benjamins.

Carlson, Gregory N. and Francis Jeffry Pelletier. 1995. *The Generic Book*. Chicago and London: The University of Chicago Press.

Chung, Sandra and William A. Ladusaw. 2004. *Restriction and saturation*. Cambridge, MA: MIT Press.

Chomsky, Noam. 1977. On wh-movement. In *Formal Syntax,* 71–132, eds. Peter Culicover, Thomas Wasow, and Adrian Akmajian. New York: Academic Press.

_____. 1995. *The Minimalist Program*. Cambridge: MIT Press.

_____. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, eds. Roger Martin, David Michaels, & Juan Uriagereka. Cambridge: MIT Press.

Cinque, Guglielmo. 1994. On the Evidence for Partial N-Movement in the Romance DP. In *Paths Towards Universal Grammar. Studies in Honor of Richard S. Kayne*, eds. Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi, and Raffaella Zanuttini, Georgetown Studies in Romance Linguistics. Washington, DC: Georgetown University Press. p. 85–110.

Cowper, Elizabeth. 2005. A note on number. *Linguistic Inquiry* 36(3): 441–455.

Cowper, Elizabeth & Daniel Currie Hall. 2009. Argumenthood, pronouns, and nominal feature geometry. In *Determiners: Variation and universals,* 97–120, eds. Jila Ghomeshi, Ileana Paul & Martina Wiltschko. Amsterdam: John Behnjamins.

_____. 2003. The syntactic manifestation of nominal feature geometry. In *Proceedings of the 2002 Annual Conference of the Canadian Linguistic Association*, 55–66, eds. S. Burelle & S. Somesfalean. Montreal: Canadian Linguistic Association.

De Vries, Mark. 2006. The syntax of appositive relativization: On specifying coordination, false free relatives, and promotion. *Linguistic Inquiry*, 37(2):229-270.

Déchaine, Rose-Marie & Martina Wiltschko. 2002. Decomposing pronouns. *Linguistic Inquiry* 33(3): 409–422.

Den Dikken, Marcel. 2006. *Relators and Linkers: the Syntax of Predication, Predicate Inversion, and Copulas*. Cambridge, MA: MIT Press.

Giannakidou, Anastasia. 2004. Domain restriction and the arguments of quantificational determiners. In *Proceedings of SALT 14*. Dept. of Modern Languages, Cornell University, Ithaca, NY, 110-128.

Giannakidou, Anastasia and Urtzi, Etxeberria. 2010. Definiteness, contextual domain restriction, and quantifier structure: a crosslinguistic perspective. Unpublished manuscript. URL: http://home.uchicago.edu/~giannaki/.

Gillon, Carrie. 2006. *The Semantics of Determiners: Domain restriction in Skwxwu7mesh*. Doctoral Dissertation, University of British Columbia.

_____. 2009. The Semantic Core of Determiners: Evidence from Skwxwú7mesh. In *Determiners: Variation and Universals*, eds. Jila Ghomeshi, Ileana Paul and Martina Wiltschko, Linguistik Aktuell. Amsterdam: John Benjamins.

Ghomeshi, Jila & Massam, Diane. 2009. The proper D connection. In *Determiners,Universals and variation*, 67-96, eds. Jila Gomeshi, Ileana Paul and Martina Wiltschko. Amsterdam: John Benjamins.

Gorrie, Colin, Kellner, Alexandra & Massam, Diane. 2006. Determiners in Niuean. Presented at Canadian Linguistics Association annual meeting, and at the 10th International Conference on Austronesian Languages.

Grant, William, and Dixon, James. 1921. *Manual of Modern Scots*. Cambridge: University Press.

Haegeman, Liliane. 1991. *Introduction to Government and Binding Theory*. Oxford: Blackwell.

Harley, Heidi. 2005. Bare Phrase Structure, Acategorial roots, one-replacement and unaccusativity. In *Harvard Working Papers in Linguistics,* Vol. 9, eds. Slava Gorbachov and Andrew Nevins.

Heim, Irene. 1982. The Semantics of Definite and Indefinite Noun Phrases. Doctoral dissertation, University of Massachusetts at Amherst.

Heim, Irene and Kratzer, Angelika. 1998. *Semantics in Generative Grammar*. Blackwell Publishing.

Heycock, Caroline. 1991. Layers of Predication: The nonlexical syntax of clauses. Doctoral dissertation, University of Pennsylvania.

Holton, D., P. Mackridge & I. Philippaki-Warburton . 1997. *Greek. A comprehensive Grammar of the Modern Greek Language*. London, New York: Routledge.

Horrocks, Geoffrey & Stavrou, Melita. 1987. Bounding Theory and Greek syntax: evidence for wh-movement in Greek. *Journal of Linguistics*, 23: 79-108.

Jackendoff, Ray. 1977. *X-bar syntax*. Cambridge MA: MIT Press.

Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge MA: MIT Press.

Kazazis, Kostas & Pentheroudakis, Joseph. 1976. Reduplication of Indefinite Direct Objects in Albanian and Modern Greek. *Language*, 52(2): 398– 403.

Kolliakou, Dimitra. 1995. Definites and Possessives in Modern Greek. An HPSG Syntax for Noun Phrases. Doctoral dissertation, University of Edinburgh.

_____1997. An HPSG approach to definite concord and elliptical nominals. In *The Tbilisi symposium: Selected papers*, 125-148, eds. J. Ginburg, Z. Kjasidashvili, C. Vogel, J-J. Levy & E. Vallduvi. Stanford, CA: CSLI Publications.

_____2003. *Nominal Constructions in Greek: implications for the architecture of grammar*. Stanford: CSLI Publications/ Chicago: University of Chicago Press.

_____2004. Monadic definites and polydefinites: their form meaning and use. *Journal of Linguistics*, 40: 263-333.

Larson, Richard K. 1988. On the Double Object Construction. *Linguistic Inquiry*, 19: 335–391.

Lazaridou-Chatzigoga, Dimitra. 2007. Greek generic noun phrases involving the Free Choice Item *opjosdhipote*. Presented at Workshop on Greek syntax and semantics at MIT.

Lekakou, M. & K. Szendrői. 2007. Eliding the noun in close apposition or Greek polydefinites revisited. Presented at University College London Working Papers in Linguistics.

_____. 2008. The crosslinguistic distribution of polydefinites: case and expletive determiners. Presented at *NELS 40*. In Proceedings of *NELS 40*. Boston, MA: MIT Press, 2010.

_____. 2010. Polydefinites in Greek: Ellipsis, Close Apposition, and Expletive Determiners. Online manuscript: http://ling.auf.net/lingbuzz/@zmsxfcNCRpZvwYDk/pOHlMnpv?3.

Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry*, 25: 609-665.

_____.1996. The Syntax of N-raising: A Minimalist Theory. Ms. University of Venice.

Lyons, Christopher. 1999. *Definiteness*. Cambridge: CUP.

Mackridge, P. 1990. The Modern Greek Language: Descriptive Analysis of Standard Modern Greek [in Greek]. Athens: Ekdoseis Pataki.

Marmaridou, A. Sophia S. 1984. *The Study of reference, attribution and genericness in the context of English and their grammaticalization in M. Greek noun phrases*. Doctoral dissertation, University of Cambridge.

Marinis, Theodoros. 2002. Subject-Object Asymmetry in the Acquisition of the Definite Article in Modern Greek. *Essex Research Reports*, 39:31-60.

Marinis, Theodoros. 2003. The acquisition of the DP in Modern Greek. Doctoral dissertation, University of Potsdam 2000. In *Language Acquisition & Language Disorders*, 31, Amsterdam: John Benjamins.

Massam, Diane. 1996. Clause Structure in Niuean. In P. Koskinen, ed., *Toronto Working Papers in Linguistics,* 14(2): 83-102.

Massam, Diane and Caroline Smallwood. 1996. Essential Features of Predication in Niuean and English. In *Proceedings of NELS 27, GLSA*, 236-272, ed. K. Kusumoto, University of Massachusetts, Amherst.

Massam, Diane. 2001. Pseudo Noun Incorporation in Niuean. *Natural Language and Linguistic Theory,* 19(1):153-197. Kluwer Academic Publishers.

Mathieu, Eric. 2009. From local blocking to Cyclic Agree: The role and meaning of determiners in the history of French. In *Determiners*, Ghomeshi, Jila, Ileana Paul and Martina Wiltschko (eds.), 123–157.

Matthewson, Lisa. 1998. Determiner Systems and Quantificational Strategies: Evidence From Salish. The Hague: Holland Academic Graphics.

Panagiotidis, Foevos. 2000. Demonstrative determiners and operators: The case of Greek. *Lingua*, 110: 717 – 742.

Partee, Barbara H. 1988. Semantic Facts and Psychological Facts. *Mind and Language*, 3(1):43-52.

Paul, Ileana. 2009. On the presence versus absence of determiners in Malagasy. In *Determiners*, 215–242, eds. Ghomeshi, Jila, Ileana Paul and Martina Wiltschko.

Pollock, J.Y. 1989. Verb Movement, UG, and the Structure of IP. *Linguistic Inquiry*, 20(3): 365-424.

Potts, C. 2005. *The Logic of Conventional Implicatures*. Oxford Studies in Theoretical Linguistics 7, Oxford: Oxford University Press.

Quinn, Kenneth, 1963. *Latin explorations: critical studies in Roman literature*. London: Routledge and Kegan Paul.

Ralli, Angela. 1994. Feature representations and feature-passing operations in Greek Nominal inflection. In *Proceedings of the 8th Symposium on English and Greek Linguistics*, Thessaloniki, Aristotelian University of Thessaloniki, 19-46.

_____. 2000. A feature-based analysis of Greek nominal inflection. In *Glossologia*, 11-12: 201-227.

_____. 2002. The role of morphology in gender determination: evidence from Modern Greek. *Linguistics*, 40(3): 519-551.

Rezac, Milan. 2004. Elements of cyclic syntax: Agree and Merge. Doctoral dissertation, University of Toronto.

Ritter, Elizabeth, 1991. Two functional categories in noun phrases: evidence from modern Hebrew. *Syntax and Semantics*, 25: 37–62.

_____. 1992. Cross-linguistic evidence for number phrase. *Canadian Journal of Linguistics* 37(2):197-218.

_____. 1993. Where's Gender? *Linguistic Inquiry*, 24(4):795-803. Cambridge, MA: MIT Press.

Rudin. C. 1988. On multiple questions and multiple Wh-fronting. *Natural Language and Linguistic Theory*, 6: 455-501.

Roussou, Anna. 1991. Nominalized Clauses in the Syntax of Modern Greek. *UCL Working Papers in Linguistics*, 3: 77-100.

Roussou, Anna & Tsimpli, Ianthi-Maria. 1994. On the interaction of case and definiteness in Modern Greek. In *Themes in Greek Linguistics*, 69-76, eds. I. Philippaki-Warburton, K. Nicolaidis & M. Sifianou. Amsterdam: John Benjamins.

Stavrou, Melita. 1996. Adjectives in Modern Greek: Am instance of predication or an old issue revisited. *Journal of Linguistics*, 32: 79-112.

_____. 1999. The position and serialization of APs in the DP: evidence from Greek. In *Studies of Greek Syntax*, eds. A. Alexiadou, G. Horrocks & M. Stavrou, 201-225. Dortrecht: Kluwer.

Strawson, P.F. 1950. On referring. *Mind*, 59: 320-34.

Tsimpli, I.-M. & S. Stavrakaki. 1999. The effects of a morphosyntactic deficit in the determiner system: The case of a Greek SLI child. *Lingua*, 108: 31-85.

Tzartzanos, A. 1945. *Νεοελληνική Σύνταξις της Κοινής Δημοτικής*. [Modern Greek Syntax of Dhemotic]. Thessaloniki: Kyriakidis.

Τριανταφυλλίδης, Μανόλης. 2004. *Νεοελληνική Γραμματική. Αναπροσαρμογή της Μικρής Νεοελληνικής Γραμματικής*. Οργανισμός Εκδόσεως Διδακτικών Βιβλίων, Σελίδες 252. ΑΘΗΝΑ.

Velegrakis, Nikolaos. 2011. *The Syntax of Greek polydefinites*. Doctoral dissertation, University College London.

Von Fintel, Kai. 1998. Quantifiers and *if*-clauses. *The Philosophical Quarterly*, 48: 209–214.

Williams, Edwin. 1981. Argument structure and morphology. *The Linguistic Review*, 1:81–114.

_____. 1989. The anaphoric nature of theta-roles. *Linguistic Inquiry*, 20: 425–256.

Wiltschko, Martina. 2009. What's in a determiner and how did it get there? In *Determiners*, 25–66, eds. Ghomeshi, Jila, Ileana Paul and Martina Wiltschko.