

## When determiners abound: implications for the encoding of definiteness

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### 1. Introduction

- Greek has a definite determiner, which seems to be doing its regular work in contributing semantic definiteness. In argument position, definite noun phrases obligatorily have a definite article:
  - (1) a. O kathijitis eftase protos.  
the teacher arrived first  
'The teacher arrived first.'
  - b. O Janis ine kathijitis.  
the John is teacher  
'John is a teacher.'
- Polydefinites (term due to Kolliakou 2004) involve multiple instances of the definite determiner:
  - (2) a. i asimenia i pena  
the-FEM.NOM silver the-FEM.NOM pen
  - b. i pena i asimenia  
the-FEM.NOM pen the-FEM.NOM silver  
'the silver pen'
- What is the nature (syntax and semantics) of the Greek definite article, such that the existence of polydefinites is possible?
- What is the nature (syntax and semantics) of polydefinites?

### 2. Polydefinites (Lekakou and Szendroi *to appear*)

Differences between polydefinites and 'regular' adjectival modification:

- Monadic definites only allow the adjective in prenominal position:
  - (3) a. i asimenia pena  
the silver pen  
'the silver pen'
  - b. \*i pena asimenia  
the pen silver
- Adjectives in the polydefinite construction are obligatorily interpreted restrictively (Alexiadou & Wilder 1998, Kolliakou 2004, Campos & Stavrou 2004):

(4) Idame tis dilitiriodis (#tis) kobres.  
 saw.1PL the-PL.ACC poisonous-PL.ACC the-PL.ACC cobras-PL.ACC  
 ‘We saw the poisonous cobras.’

- There is no counterpart of the polydefinite construction with indefinites (cf. Alexiadou & Wilder 1998, Stavrou 2009, Velegrakis 2011):

(5) a. \*mia pena mia asimenia  
 a pen a silver  
 b. \*mia asimenia mia pena  
 a silver a pen

- Lekakou & Szendroi (2007, to appear): polydefinites are instances of close apposition, as in (6) (cf. Kolliakou 2004, Stavrou 1995).

(6) a. o aetos to puli  
 the eagle the bird  
 b. to puli o aetos  
 the bird the eagle  
 ‘the eagle that is a bird’

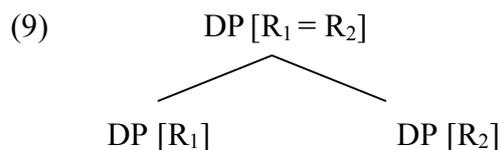
Like polydefinites, close appositives show freedom in word order and involve a restrictive interpretation.

(7) \*i sikaminja i murja (Stavrou 1995)  
 the blueberry tree<sub>dial</sub> the blueberry tree<sub>stand</sub>

Close appositives too are only possible with the definite determiner (Stavrou 1995):

(8) a. \*enas aetos ena puli  
 one eagle one bird  
 b. \*ena puli enas aetos  
 one bird one eagle

- Both polydefinites and close appositives consist of multiple DPs.
- In polydefinites one of the two DPs contains noun ellipsis.<sup>1</sup>
- An operation of identification of R(eferential)-roles (Williams 1981, Zwarts 1993, Baker 2003) takes place between these DPs:



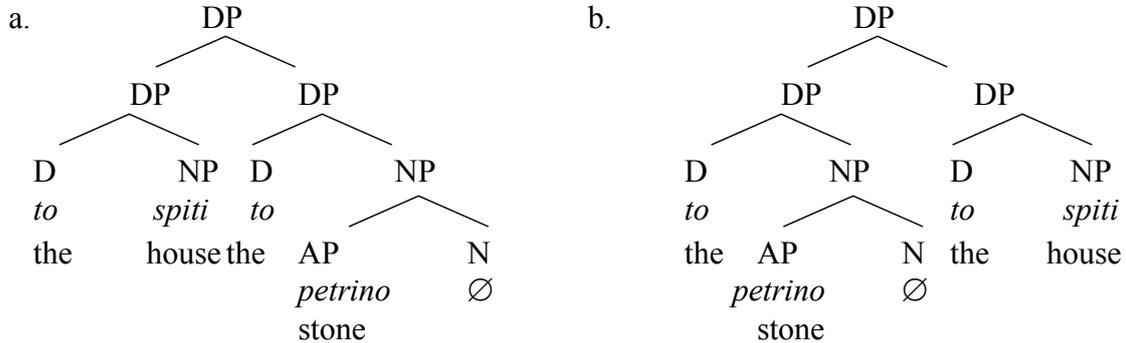
- Semantically this operation is tantamount to set intersection; *o aetos to puli* is something that is both an eagle and a bird.

<sup>1</sup> Noun ellipsis has several effects (e.g. ensuring that it is the ‘adjectival’ DP that is restrictive on the other one), among which effects that have, mistakenly, in our view, been taken to involve a FocusPhrase inside the DP. See Lekakou & Szendroi (2007, to appear) for extensive discussion.

- The operation is restricted by a ban against vacuous application: it applies only when its output is not identical to (part of) its input.

The structure of polydefinites (to be revised):

(10)



What does the restrictive interpretation tell us about the definite determiner? Consider the following context (Kolliakou 2004):

- (11) a. Speaker A: *Ti pires tu Janni ja ta christujena?*  
 what took.2SG the Jannis.GEN for the christmas  
 ‘What did you get Jannis for Christmas?’
- b. Speaker B: *(Tu pira) tin asimenia pena.*  
 him.GEN took.1SG the silver pen  
 ‘(I got him) the silver pen.’
- c. Speaker A: *Ti pires tis Marias?*  
 what took.2SG the Maria.GEN  
 ‘What did you get for Maria?’
- d. Speaker B: *(Tis pira) tin pena ti chrisi.*  
 her.GEN took.1SG the pen the golden  
 ‘(I got her) the golden pen.’

The polydefinite *tin pena ti chrisi* ‘the pen the golden’ in (11d):

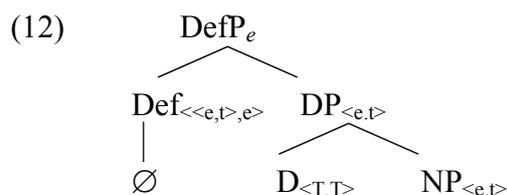
- refers to a unique golden pen
- is not the unique pen in the context
- unlikely to be the unique golden entity in the context

→ Neither determiner seems semantically real, even though the construction as a whole is definite.

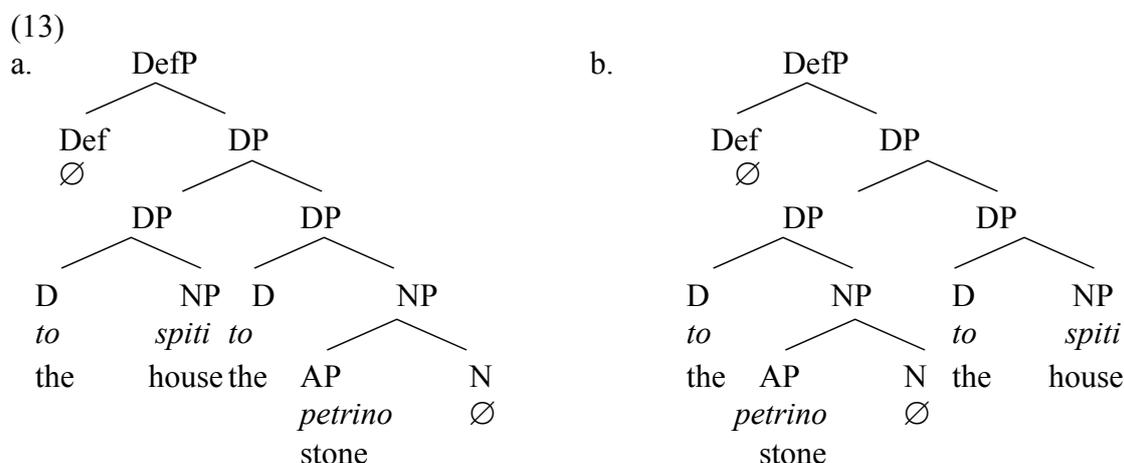
### 3. Expletive determiners: the radical solution

- We propose that definiteness is not contributed by the overt determiner in Greek, but by a phonologically null element scoping over DP.
- This applies to polydefinites and to monadic definites alike.
- This kind of approach was initially pursued by Zeijlstra (2004) for negation in strict negative concord languages (like Greek).

Monadic definites:



Polydefinites (revised (10)):



- This proposal is consonant with the semantics of polydefinites: since DPs do not denote entities but sets, set intersection can take place unproblematically within the polydefinite.
- This proposal also captures the fact that neither determiner is ‘real’ in a polydefinite, without assuming an ad hoc lexical ambiguity.
- Definiteness is treated uniformly in monadics and polydefinites.

Is there independent evidence for D being semantically expletive in Greek, and for a Def-D split (see also Karanassios 1992 and Tsimpli & Stavrakaki 1999)?

Yes: the obligatoriness of the definite determiner with proper names:

(14) \*(O) Janis ine kathijitis.  
 the John is teacher  
 ‘John is a teacher.’

- Assuming, in line with Kripke (1980) (and contra most recently Elbourne 2005 and Matushansky 2009) that names refer rigidly, and are consequently of type  $e$ , they cannot combine with a definite article of type  $\langle\langle e,t\rangle,e\rangle$ .
- Upon encounter with the proper name in Greek, the child (and the linguist) may conclude that the Greek definite determiner can be semantically inert.
- Once the determiner has been interpreted as capable of being semantically inert, it is best to assume that it is *always* inert.
- It then follows that the obligatory presence of articles on proper names is sufficient to trigger a split Def-D structure.

#### 4. Alternatives

- D is a regular semantic definite determiner
  - Velegrakis (2011): Polydefinites involve a special kind of composition rule that identifies individuals (in the absence of a copula).
- One determiner is ‘real’, the rest are not:
  - Alexiadou and Wilder (1998):

- (15) a. [DP the D [CP [IP [DP the book] [AP red] ]]]  
 b. [DP the D [CP [AP red] [IP [DP the book] t<sub>AP</sub>]]] ‘predicate raising’  
 c. [DP [DP the book] the D [CP [AP red] [IP t<sub>DP</sub> t<sub>AP</sub>]]] DP-raising to SpecDP

It is impossible for one and the same D to be the ‘real’ one across (15): in (15a) and (15b) the real D must be the external one, but in (15c) that cannot be the case.

It can also not be the case that it is the adjectival determiner which is real, because polydefinites can involve more than one adjective, with a concomitant increase in determiners; which of the two adjectival ones would be the ‘real’ one in e.g. (16)?

- (16) to podilato to kokino to kenurjo  
 the bicycle the red the new  
 ‘the new red bicycle’

- Accidental homonymy:
  - Campos and Stavrou (2004)

- (17) [DP the pen<sub>D</sub> [FP [PredP *pro the*<sub>Pred</sub> [AP silver ]]]] (Campos and Stavrou 2004: 157)

But why would Pred<sup>o</sup> be spelled out exactly as the determiner is?

- Ioannidou & den Dikken (2009)

- (18) [DP D [FocP Foc [DxP Dx<sup>PERSON</sup> [ .... N .... ]]]]

But why, in case Dx-to-D-(to-Foc)-raising occurs, the phonological shape of D is identical to that of Dx (and Foc)?

- Kariaeva (2004), following Androutsopoulou (1995):

- (19) [DeicticP [FocP [DP [NumP [NP ]]]]]

Adjectival modifiers can be inserted high, i.e. FocP, in which case by assumption they undergo definiteness agreement. But there is no definiteness agreement elsewhere in the grammar.

- Kolliakou (2004):  
HPSG framework allows for elegant solution to the problem that multiple instances of the determiner in a single DP give rise to a single definite meaning.

But the assumption that, phonologically, any N or A head can sport a clitic-like determiner is not independently motivated; genitive clitics, which display a similar freedom of placement within the DP, cannot be doubled.

- Summary:
  - In these alternative analyses, one occurrence of the determiner is semantically real, while the others are either (a) semantically expletive or (b) realize distinct syntactic heads.
  - So, the Greek definite determiner comes in two guises, one in which it contributes semantic definiteness and one where it doesn't.
  - Monadic DPs involve the former; polydefinites involve one instance of the former and one (or more) instance(s) of the latter.
  - But no independent justification is given for positing this lexical ambiguity or its specific distribution.

## 5. More on the Greek determiner

- Longobardi (1994:620), via Alexiadou et al. (2007: 67-68): the number of determiners equals the number of referents

- (20) a. Irthe/ \*irthan o andiprosopos tis dikastikis arxis ke  
 came-3sg/ came-3pl the delegate the.gen court and  
 proedros tis eforeftikis epitropis.  
 chair the.genelective committee  
 'The representative of the court and chair of the elective committee has arrived.'
- b. Irthan/ \*irthe o andiprosopos tis dikastikis arxis ke  
 came-3pl/ came-3sg the delegate the.gen court and  
 o proedros tis eforeftikis epitropis.  
 the chair the.genelective committee  
 'The representative of the court and the chair of the elective committee have arrived.'

But Heycock and Zamparelli (2000: 2 ex 8) show that co-ordination below the definite determiner at least in English *can* involve reference to more than one individual.

- (21) a. the actor's work depends so much on the technical decisions of [the [director and editor]]  
 b. In today's preliminary hearings... [a [36-year-old farmer and 25-year-old X-ray technician]] both claim a right to asylum.  
 c. [My [mouth and throat]] went dry.

The property of allowing or not allowing so-called 'split' readings (i.e. as in (21)), correlates with a number of other properties of the noun phrase. So, an analysis

that simply equates the number of referents with the number of articles is, at least cross-linguistically, untenable.

- The determiner can go missing on proper names (Dora Alexopoulou, p.c.):

(22) I Dora den ine Xristina, na vafi ke na stolizi  
 the Dora NEG is Christina SUBJ paint-3SG and SUBJ decorate-3SG  
 pasxalina avga me tis ores.  
 easter eggs with the hours  
 ‘Dora is not like Christina, to spend hours painting and decorating Easter eggs.’

We assume type shifting involving e.g. (something like) Partee’s (1986) IDENT, taking individuals (type *e*) and lifting them to the singleton set containing them (type  $\langle e, \triangleright \rangle$ ) or to the ‘property of being that entity’ (Partee 1986: 122). Possibly, this type-shifter competes syntactically with the definite determiner, i.e. is merged directly with the proper name NP, whence the lack of the definite determiner in (22).

Note that an altogether different view of the structure of proper names does not solve the problem.

Matushansky (2009) ascribes to the proper name *Alice* of (23) the meaning in (24):

(23) I baptized the girl Alice.

(24) [Alice] =  $\lambda x \in D_e. \lambda R_{\langle e, \langle n, \triangleright \rangle \rangle}. R(x)$  (/ælis/)

where *n* is a sort of the type *e* (a phonological string)

- Proper names are two-place predicates, taking as arguments an individual and a naming convention *R* (in (23) the matrix verb *baptize* specifies the naming convention).
- Direct reference to the phonological string is crucial in capturing naming constructions, where such artificial predicates as “the set of individuals named Alice” would fail to deliver the right semantics.
- However, this does not derive the meaning of (22): the article-less proper name does not make reference to the phonological form, but rather to the property of being Dora(-like).

Besides, there are discrepancies between proper names and common nouns, which are unexpected under the view of the former as definite descriptions:

(25) a. I Maria ine i gramateas ke i sinergatis mu.  
 the Maria is the secretary and the collaborator me-GEN  
 ‘Maria is my secretary and my collaborator.’

b. I Maria ine i gramateas ke sinergatis mu.  
 the Maria is the secretary and collaborator me-GEN  
 ‘Maria is my secretary and collaborator.’

(26) a. O Spiros Alexiou ine o Petros Dimitriou ke o Alexis Nikolaou.  
 the Spiros Alexiou is the P D and the A N.  
 ‘Spiros Alexiou is Petros Dimitriou and Alexis Nikolaou.’

b. \*O Spiros Alexiou ine o Petros Dimitriou ke Alexis Nikolaou.  
 the Spiros Alexiou is the Petros Dimitriou and Alexis Nikolaou.

## 6. Summary

Relying on our analysis of polydefinites as an instance of close apposition, we propose that the Greek determiner is semantically expletive in the sense that it does not contribute an iota operator. This solution has the advantage of treating definiteness in Greek monadic and polydefinite noun phrases in the same way.

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