

Copy Spell Out as a Minimally Specified Form: Evidence from the Nominal Domain

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1 Introduction

We want to offer an analysis for Greek **nominal demonstrative structures** which

- ❶ derives the *distributional* properties of demonstrative and article,
- ❷ develops recent theoretical proposals deriving *locality* relations,
- ❸ and allows a *comparison* across unrelated languages.

Proposal: The *article* is a **grammatical formative** inserted into the derivation as the **spelled out** copy of an **anti-locally** moved *demonstrative* within the left periphery of DP.

If correct, this offers further evidence for the operation **Copy Spell Out**, which applies to movement dependencies in too close a relationship (**Anti-Locality**) — and the case of such (Greek) “**demonstrative doubling**” in particular may shed some light on what such spelled out copies must look like: they are **minimally specified forms** provided by the grammar.

2 Demonstrative Issues within the Greek DP

Nominal expressions in Greek have the general surface structure [DP **D** > **A** > **N** > DP_{GEN}]. Determiners, quantifiers, and adjectives agree for ϕ -features (**gender, number**) and **Case**. Panagiotidis (2000): analysis for co-occurrence of *overt demonstrative* and *apparent article*.

(1) **afta** ta nea fenomena [DEM > D > A > N]
DEM.NEUT.PL the.NEUT.PL new.NEUT.PL phenomenon.NEUT.PL

(2) ta nea **afta** fenomena [D > A > **DEM** > N]
the.NEUT.PL new.NEUT.PL DEM.NEUT.PL phenomenon.NEUT.PL
‘these new phenomena’ [Case = NOM/ACC]

(1) is the result of **demonstrative raising** in order to give the DP a *deictic interpretation* (3); alternatively (2) a **null demonstrative operator** occurs resulting in an *anaphoric reading* (4). (See e.g. Brugè 1996, Bernstein 1997, Giusti 1997 on DEM-raising in Romance and beyond.)

(3) [**afta** [ta [nea [~~afta~~ [fenomena]]]]]]
 DEM the new phenomena

(4) [**OP** [ta [nea [**afta** [fenomena]]]]]]
 the new DEM phenomena

- **base-generated position** of DEM: within the **nominal middle field** (agreement layer): demonstrative in base shows up between adjective and noun (outside *nP/NP*)
- no **remnant movement** analysis: *ta+nea* don't form one constituent, so that D+A alone could never move, and **too many unmotivated steps** would have to be assumed
- demonstrative *afta* and apparent article *ta* (i) can **co-occur** and (ii) may be **adjacent**

Call the two occurrences of the demonstrative **DEM_{HI}** (1) and **DEM_{LO}** (2). Panagiotidis agrees with this analysis, but throws up the question **why the demonstrative may move**. Answer:

- (5) a. **DEM_{HI}**: **deictic interpretation** (which is encoded in the nominal left periphery)
 b. **DEM_{LO}**: **anaphoric interpretation** (hence an anaphoric demonstrative operator)

Panagiotidis' analysis invokes **two additional ingredients**

- (6) a. **Demonstrative-Criterion** [Spec-head relation between identical [+th]-elements]
 b. **"Demonstrative Article"** [definite and expletive + a new demonstrative article]

We'll (i) argue **against any criterion-based approach** (cf. Campbell 1996) and (ii) propose an analysis which **doesn't posit a new type of article** (pace Roussou & Tsimpli 1994).

3 Intermezzo: The Anti-Locality Hypothesis

3.1 "Too Close" or Anti-Local Dependencies

Desideratum:

The structure of grammar is determined by **(virtual) conceptual necessity** (Chomsky 1995).

Consequence:

Much of **GB-machinery** should be reconsidered (Hornstein 2001).

Regarding **ungrammaticality of (7a-c)**: explore the possibility of an alternative explanation, i.e. one without evoking filters of sorts (such as Theta Criterion, Case Filter, Affect Criteria, etc.):

- (7) a. * John likes.
 b. * Him kissed her.
 c. * Who, Mary detests?

Under the **copy theory** of movement, take (8) to be the structures at the relevant points:

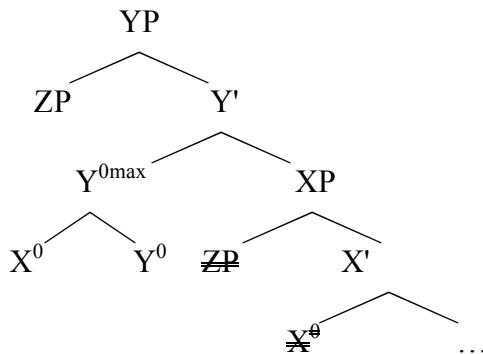
(13) **Condition on Domain Exclusivity (CDE)**

An object O in a phrase marker must have an exclusive Address Identification AI per Prolific Domain $\Pi\Delta$, unless duplicity yields a drastic effect on the output.

- i. An AI of O in a given $\Pi\Delta$ is an occurrence of O in that $\Pi\Delta$ at LF.
- ii. A drastic effect on the output is a different realization of O at PF.

The **CDE** applies to all and only **XP-dependencies** within a Prolific Domain, but it allows head movement (which changes the PF-matrix of the two heads involved by definition):

(14)



Traditional approach to head movement viz. X⁰-adjunction (see Ian Roberts' talk earlier this afternoon for comprehensive/critical discussion of current arguments).

3.3 **Exclusivity and Copy Spell Out**

A further prediction of the CDE: if an anti-local dependency involves two **different PF-matrixes**, the dependency should be well-formed. Take **contrastive left dislocation (CLD)**:

- (15) a. [*Seinen_i Vater*], *den* mag jeder_i Junge.
his.ACC father RP.ACC likes every boy
 'His father, every boy likes.'
- b. [_{CP} *seinen Vater* C⁰ [_{TopP} *den mag-Top⁰* [_{TP} *jeder Junge T⁰ ...*]]]

The **CLDed XP** and the resumptive pronoun **RP** are in the same Prolific Domain ($\Omega\Delta$). Moreover, (15) allows a *bound variable reading* and aside from such absence of Weak Crossover effects, CLD displays *other signs of reconstruction* of the left-dislocated phrase (presence/absence of Condition A/C effects, idiom chunks, etc.).

All this and more stands in sharp contrast to **hanging topic left dislocation**, as in (16):

- (16) a. [*Sein_i Vater*], jeder_{*i/k} Junge mag *den/ihn*.
his.NOM father every boy likes RP/him.ACC
 'His father, every boy likes him.'
- b. [_{CP} *sein Vater* [_{CP} C⁰ [_{TP} *jeder Junge mag-T⁰ den/ihn...*]]]

By CDE, this difference can be understood as the result of **Copy Spell Out** ('↻') in CLD, changing the PF-matrix of the lower of the two copies that are in the same Prolific Domain:

- (17) [_{CP} *seinen Vater* C⁰ [_{TopP} ~~*seinen Vater*~~ ↻ *den mag-Top⁰* [_{TP} *jeder Junge T⁰...*]]]

3.4 Remarks on Resumption

If RPs in left dislocation structures can be reasonably analyzed as a derivational result, rather than fully lexical items part of the numeration/lexical array, **two relevant questions** arise:

- ❶ *Do we find other instances of resumption that could be analyzed as Copy Spell Out?*
- ❷ *Do we find other occurrences of pronouns that could be understood as resumption?*

Claim: Resumptive elements are **grammatical formatives** that are inserted to legitimize a dependency whose members would otherwise be too close/too far away to be licitly licensed (reminiscent of a **Last Resort approach** to resumption as proposed in e.g. Shlonsky 1992).

[The pronoun-qua-grammatical-formatives view has recently been integrated into a derivational approach for **local anaphors** by Hornstein (2001). (See also Lidz & Idsardi 1997, Kayne 2002 for proposals in the same spirit, and Lees & Klima 1963 for historical precursors; for other instances of resumption, see e.g. Aoun & Benmamoun 1998, Aoun & Choueiri 2000, and Aoun, Choueiri, & Hornstein 2001, Boeckx 2003.). As relevant for the Anti-Locality Hypothesis: **reflexives** are employed to legitimize a too-close dependency. **Construal** is taken as base-generation (but see Boeckx 2003, Boeckx & Grohmann 2004, forthcoming).]

The discussions elsewhere (Grohmann 2003) cover a **wider range of cases**, including *local reciprocals and reflexives in double object constructions, ECM-structures, small clauses*. All this might be barking up the wrong tree, but we take it as an **interesting alternative** and **apply it to the nominal layer** (fitting in with Grohmann & Haegeman 2003 and Ticio 2003).

4 Greek DP: Demonstratives, Articles, and Anti-Locality

4.1 The Clausal-DP Hypothesis

Grohmann & Haegeman (2003): application of Anti-Locality Hypothesis to nominal layer. One obvious similarity between nominal and clausal constructions concerns **left dislocation**:

- (18) a. [Über [Bundeskanzler Schröder]_i dem_i seine_i Fehler] haben wir geredet.
about Chancellor Schröder RP his mistakes have we talked
 ‘About Chancellor Schröder’s mistakes, we talked.’
- b. [Peter_i dem_i sein_i lockeres Mundwerk]
Peter RP his loose gab
 ‘Peter’s quick tongue’

- (i) If CLD involves **Copy Spell Out** in clausal layer, it should also do so in nominal layer.
- (ii) If Copy Spell Out in clause is due to **CDE**, DPs should also be sensitive to the CDE.

Since Abney’s (1987) DP-Hypothesis and Ritter’s (1991) suggestion of **agreement-related Num(ber)P** within DP, much evidence has been collected to align nominal DP-structure to clausal CP-structure, where **D⁰ plays the “nominal role” of C⁰** (e.g. Horrocks & Stavrou 1987, Kayne 1993, Cinque 1994, Szabolcsi 1994, Bernstein 2001, Haegeman 2004); let’s now replace **NumP** by **AgRP** (do same with **TP**) and adopt “little *n*” (Radford 1999, Adger 2003):

4.3 Consequences and Extensions

We want to zoom in on **three points of interest**:

- I the nature of the **article**
- II an **ontology** of Copy Spell Out
- III **cross-linguistic** expectations/outcomes

I — Note that we don't need to assume a third type of article: it's neither a definite (26a) nor an “expletive” article (26b), nor is it a demonstrative article — it's a **grammatical formative**.

• Giannakidou & Stavrou (1999): an **intensionality operator** analysis of “expletive” articles

- (26) a. Northern Greek: *u skilus* ‘the dog’ — Catalan: *el gos* ‘the dog’ [DEF]
 b. Northern Greek: *i Yans* ‘(the) Yannis’ — Catalan: *en Joan* ‘(the) Joan’ [I-OP]

As far as grammatical formatives go, homophony with the article is the **perfect candidate**: it's a **minimally pronounceable** form with just the **agreement markings** needed. Here's some more.

In the languages reviewed (Greek; below: Spanish, Macedonian, Romanian), the **DEM's Copy Spell Out** has the **form and the feature specification of the article**. This is the **minimally pronounceable form for PF purposes**, the interface forcing Copy Spell Out in the first place.

Nevertheless, something more needs to be said on the matter, namely on **which features must necessarily be expressed** on the Copy Spell Out. Consider the **demonstrative *afta***, used in the Greek examples above. Let's assume **this form marks the following features** (incl. / beyond ϕ):

- (27) *afta*: [DEIC] [PL] [NEUT]

Its Copy Spell Out marks only [PL] [NEUT]:

- (28) *ta*: [PL] [NEUT]

Nevertheless, it is not obvious that both [PL] and [NEUT] should be expressed on the minimally specified form. Indeed, an alternative pronounceable form, **marking just [NEUT]**, exists:

- (29) *to*: [NEUT]

This is used as an **elsewhere form in the singular and taking CP complements** (Roussou 1991). The question, in other words, is **how underspecified** a minimally specified form can be.

(Defining the appropriate form of the grammatical formative has nothing to do with segmental, surface similarities: the Copy Spell Out of *aftos* ([DEIC] [SG] [MASC] [NOM]) is *o* ([SG] [MASC] [NOM]). Something else is at work here.)

The **DEM's [DEIC] feature is never part of the grammatical formative**. This is so because [DEIC] is LF-interpretable; Copy Spell Out is a PF-driven process and no gratuitous proliferation of interpretable features in grammar is allowed anyway, on the grounds of **Full Interpretation**

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