

From Greek to Germanic:
Poly-(*in)-definiteness and weak/strong adjectival
inflection*

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Abstract. In this paper I will argue that adnominal adjectival modification involves a relative clause-like structure, and that the pre-adjectival definite marker sometimes has an embedded source (at least in Germanic and Greek), as the complementizer of that relative clause-like structure. This allows a unified view on Greek “poly-definiteness,” Scandinavian “double definiteness,” and the Germanic weak/strong adjectival declension alternation, on which Greek lacks “poly-indefiniteness” for the same reason that Germanic adjectives inflect strongly in non-definite DPs.¹

1 Greek Determiner Spreading (DS)

Greek is well known for having polydefinite DPs as in (1). The phenomenon of polydefiniteness, often also called Determiner Spreading (DS), means that in a modified definite DP more than one definite marker (*to* in (1)) is overtly present. DS correlates with relatively free constituent order (Androutsopoulou 1996, Alexiadou and Wilder 1998, Kolliakou 1999, Alexiadou 2001a, Androutsopoulou 2001, Campos and Stavrou 2004, Ioannidou and Den Dikken 2006).

- (1) a. to megalo (to) vivlio GRE
the big (the) book
b. to vivlio *(to) megalo
the book (the) big

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Alexiadou and Wilder (1998) propose an underlying relative clause structure for adjectives (Smith 1961, Kayne 1994) in polydefinite DPs.² Adopting some aspects of their proposal, I will argue that the idea of a relative clause-like structure for DP-internal adjectival modification holds more generally.

The asymmetry between N>A and A>N order with respect to the obligatoriness of a second definite marker in (1) suggests that polydefiniteness interacts with movement. Let us for the sake of argument assume that the output of plain DP-internal adjectival modification in Greek yields the linear order Adj>NP (but see Ioannidou and Den Dikken 2006 for an alternative view). The order NP>Adj (1b), which triggers obligatory DS, can only be derived by additional movement.³ The order Adj>NP (1a), which does not require but is compatible with DS, may but does not have to involve an additional movement. I propose that the appearance of an additional definite marker in (1) is related to an extra movement step. Observing with Melita Stavrou (reported in Cinque 2005:ft. 24) and Ioannidou and Den Dikken (2006) that the prenominal adjective in Greek polydefinite structures must be contrastively focused, I propose that the extra movement step (A) is DP-internal movement to a focus position, and (B) gives rise to an additional overt definite marker. The precise mechanics of this will be discussed below.

A puzzle I am setting out to solve is that in Greek indefinite DPs, while the freedom of constituent order obtains, no multiple indefinite articles are possible (2). In other words Greek does not have “poly-in-definiteness.”

- | | | | |
|-----|----|--------------------------|-----|
| (2) | a. | ena megalo (*ena) vivlio | GRE |
| | a | big (a) book | |
| | b. | ena vivlio (*ena) megalo | |
| | a | book (a) big | |

Summarizing the problem: A certain syntactic configuration in the (modified) Greek noun phrase leads to the overt appearance of multiple **definite** markers in definite DPs: up to one additional definite marker per adjective. In indefinite noun phrases, a comparable configuration, while possible, does not lead to the appearance of multiple **indefinite** articles.

What does the differential behavior of the definite marker and the indefinite article follow from?

A partial key to an answer lies, I believe, in the pattern of Germanic adjectival inflection. The relevance crystalizes, once we partially adopt the view on the strong/weak declension alternation of German adjectives proposed by Milner and Milner (1972), and combine it with the idea that adjectives derive from a clausal structure (Smith 1961).

2 Germanic Adjectival Inflection

Germanic adjectives inflect differently depending (at least in part) on the definiteness of the DP (Milner and Milner 1972, Zwicky 1986, Schlenker 1999, Müller 2002, Roehrs 2006):

In definite DPs adjectives inflect weakly (3a). In non-definite DPs adjectives inflect strongly (3b,c).⁴

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- (3) a. **d-er** schön-**e** Tisch GER
 the-AGRA pretty_{wk} table
 b. ein schön-**er** Tisch
 a pretty-AGRA table
 c. gut-**er** Wein
 good-AGRA wine

Milner and Milner (1972) observe that there is a strong degree of homonymy between non-definite adjectival inflection (i.e. strong inflection, (3b,c)) and the inflectional suffix on the definite marker, which correlates with the absence of strong inflection on the adjective (3a). Milner and Milner propose that the *-er* in (3a) and the *-er* in (3b) are the same morphosyntactic object, and that its linear order relative to the adjective is the result of a movement transformation involving the adjective and *-er* in (3b,c), but not in (3a).

To account for the fact that the presence of a definite marker voids the availability of the order *Adj>AgrA*, Milner and Milner propose that the definite marker *d-* and the adjective compete for the same position in some sense. Let me propose that it is the adjective that moves to the left of *AgrA*, unless *d* is merged. Hence merger of *d-* blocks⁵ movement of the adjective to the left of the strong inflection, and gives rise to a definite structure.

Milner and Milner (1972) further assume that the *-er* in (3) is the same morphosyntactic object that is also present in the non-modified DP:

- (4) **d-er** Tisch GER
 the_{Infl} table

I will disagree with this and argue that the *-er* in all examples in (3) is an instance of adjectival agreement and is part of the syntactic structure associated with DP-internal adjectival modification. In (4), the inflectional suffix is a different morphosyntactic object, which we can call *AgrN*.⁶

One reason is that the strong inflectional morpheme is not present in all DPs. In the indefinite DPs in (5), for instance, it is typically absent, unless the DP contains an adjective and hence an adjectival modification structure:

- (5) a. ein (schön-er) Tisch GER
 a (pretty-AGRA) table
 b. ein (schön-es) Haus
 a (pretty-AGRA) house

Another argument, from Swiss German, is presented in the next subsection.

2.1 The Swiss German *d/di*-alternation

A strong argument for the distinction between *AgrA* and *AgrN* and for the syntactic nature of the distribution of *AgrA*, is presented by the Swiss German *d/di*-alternation (Weber 1964, Leu 2001), exemplified in (6).⁷

-
- | | | | |
|-----|----|---|-----|
| (6) | a. | d rosä
the rose | SWG |
| | b. | d-*(i) rot rosä
the-(AGRA) red rose | |
| | c. | ä rot-i rosä
a red-AGRA rose | |

(6a) is a plain definite DP with a feminine head noun. The definite marker *d-* is not followed by an overt inflectional morpheme. In (6b) an adjectival modifier has been added. The addition is obligatorily accompanied by the appearance of the inflectional morpheme *-i* following the definite marker. In the indefinite counterpart (6c), *-i* follows the adjective, which identifies it as an instance of strong adjectival agreement, AgrA.

I propose that in both (6b) and (6c) the inflectional morpheme *-i* is adjectival agreement. It is part of a chunk of structure that is present only when adjectival modification occurs. This adjectival modification structure (which I will label CP_{mod}) hence includes at least a thematic layer (including the base position of the adjective) and an inflectional layer (including AgrA).

2.2 The Scandinavian Ø/det-alternation

A comparable and further revealing picture obtains in Swedish, Norwegian, and Danish (Delsing 1993, Svenonius 1994, Vangsnes 1999, Embick and Noyer 2001, Hankamer and Mikkelsen 2002, Holmberg and Platzack 2005, Julien 2005, Roehrs 2006).

- | | | | |
|-----|----|--|-----|
| (7) | a. | hus-et
house-DEF | SWE |
| | b. | (de-t stora) hus-et
(the-AGRA big) house-DEF | |
| | c. | ett (stor-t) hus
a (big-AGRA) house | |

(7a) is a plain definite DP. There is no DP-initial definite marker morpheme present. Instead there is a suffix on the head noun which is usually glossed *DEF*. Adding an adjectival modifier as in (7b) triggers the presence of a DP-initial inflected definite marker.⁸ In the indefinite counterpart, this inflectional morpheme follows the adjective (7c), which identifies it as an exponent of strong adjectival agreement.

Hence again, the addition of an adjective brings about the addition of functional morphology (and structure), overtly to the right of the adjective in non-definites, and to its left in definite DPs. The additional morphology to the left of the adjective in the definite (7b) includes a definite marker morpheme.

The parallelism between Swiss German (West Germanic) and Swedish (North Germanic) is striking. Interpreting the data such as to maximize this parallelism, I propose that the Germanic

pre-adjectival definite marker *d-* should be divorced from the D position⁹, and analyzed as a definite complementizer (cf. the notion of “adjectival determiner” in Androutsopoulou 2001). Note that there are two proposals here (explicated in the next subsection):

- (A) The pre-adjectival definite marker in Mainland Scandinavian “double definiteness” structures is the complementizer of the adjectival modification clause and forms a constituent with the following adjective (to the exclusion of the noun).
- (B) The situation overtly observed in Mainland Scandinavian obtains in guise also in Swiss German (and beyond).

Hence the adjectival modification structure CP_{mod} , i.e. the structure associated with DP-internal adjectival modification, involves a thematic layer (including the base position of the adjective), an inflectional layer (including AgrA), and a left periphery (including a position in which a *d-* morpheme can be merged).

2.3 Proposal

The *-i/-t* in (6b) and (7b), respectively, are exponents of the strong adjectival inflection and hence correspond to AgrA. The position of AgrA relative to the adjective is a function of movement of (a constituent containing) the adjective to the left of AgrA in some cases, and blocking of that movement in others. Adjective movement takes place in the indefinite examples (6c), (7c). It is blocked in the definite counterpart (6b), (7b). This is schematically represented below.

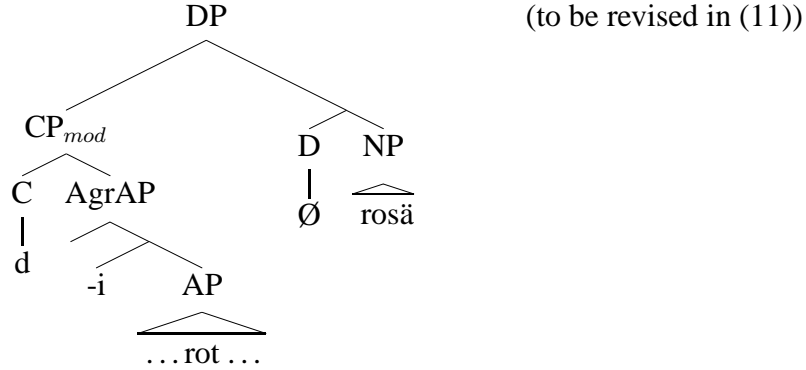
(8) Non-def: $[CP_{mod} \text{ Adj} \dots \text{AgrA} \dots \text{Adj} \dots]$

(9) Def: $[CP_{mod} \text{ } d- \dots \text{AgrA} \dots \text{Adj} \dots]$

Merger of *d-* in C_{mod} blocks movement of the adjective (or a constituent containing it) to Spec, CP_{mod} . The complementary distribution of *d-* merger and adjective movement may be thought of in terms of projection activation (Koopman 1997).

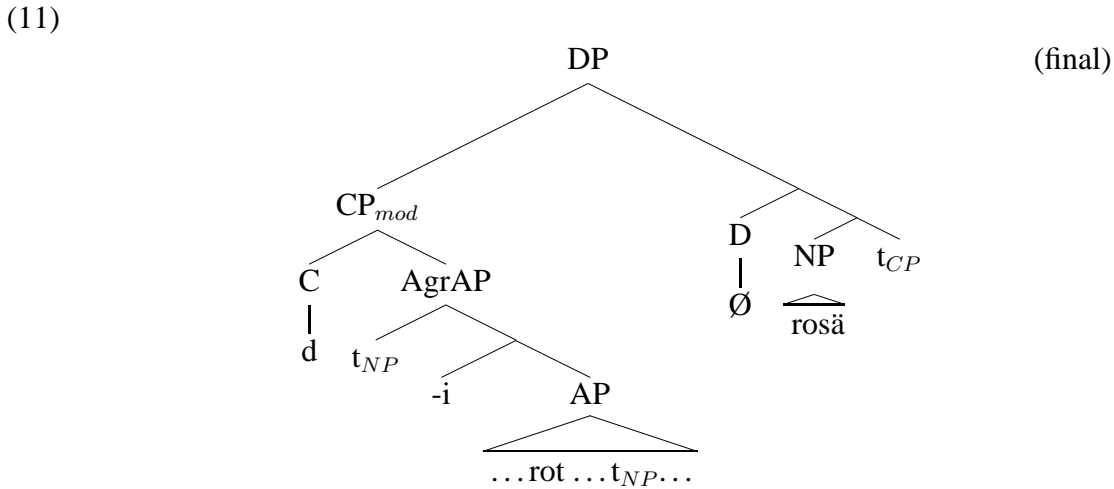
If this is right, and if we adopt the standard assumption (strongly supported by evidence from quantifier float, see section 3) that the adjective and the inflectional suffix following it (e.g. *[rot-i]* (= CP_{mod}) in (6c)) form a constituent excluding the noun, then it follows that *[d-i rot]* (= CP_{mod}) in (6b) also is a constituent excluding the noun, as represented in (10):

(10) d-i rot rosä = (6b)
 the-AGRA red rose



(10) represents a modified definite DP, where a definite modification structure (CP_{mod}), including a lexical layer, an inflection layer, and a left periphery, sits in the specifier of DP, where it licenses the non-pronunciation of the head D, in a way reminiscent of the Doubly-Filled-Comp filter (cf. Koopman 1997, Giusti 1997).¹⁰

From this, two standard assumptions each lead to the conclusion that adjectival modifiers have an underlying (“head”-internal, cf. Vergnaud 1974) relative clause-like structure (Smith 1961, Kayne 1994): The first assumption is that NP and Adj are in a local thematic relation at some (an early) point in the derivation (see e.g. Den Dikken 2006). The second assumption is that phi-feature agreement between NP and AgrA is established in a c-command configuration (whether Spec-Head or Agree). For either requirement to be fulfilled, the NP must originate within CP_{mod} . Revising (10) accordingly, I propose that adjectival modification involves the structure in (11), reminiscent of the promotion analysis of relative clauses (Vergnaud 1974, Kayne 1994).



Turning to non-definite modified noun phrases like (6c), here the adjective precedes the AgrA morpheme. Assuming the derivation to start out the same way as in (6b), I propose that in (6c) the adjective (or a constituent containing it) moves across AgrA. The fact that the so moved adjective can be preceded by an indefinite article shows that, unlike the definite article, the indefinite article

(12) ä rot-i rosä
 a red-AGRA rose

Abstracting away from additional syntactic activity in the clause, in both the adjectival modification structure (13) as well as in the clause (14) merger of a *d*- morpheme (a subordinator, thinking of Szabolcsi (1994)) in the left periphery alternates with fronting of (a constituent containing the “head” of) the predicate.

This strongly supports the present proposal for the structure of adjectival modification, and indirectly supports the idea that D is the nominal counterpart of C.¹²

2.5 Intermediate conclusion

Adnominal adjectival modification involves a relative clause-like adjectival modification structure CP_{mod} . The C-layer of CP_{mod} is lexicalized either by merger of a definite complementizer, resulting in a definite CP_{mod} , or by movement of the AP (in which case the definiteness of the CP_{mod} depends on properties of the adjective). A definite CP_{mod} moves to Spec,DP where it licenses the non-pronunciation of the definite marker (plus suffixal agreement morpheme, AgrN). Thus structurally there are multiple definite markers present even if only one is pronounced.

3 Re-emerging *d*-morphemes

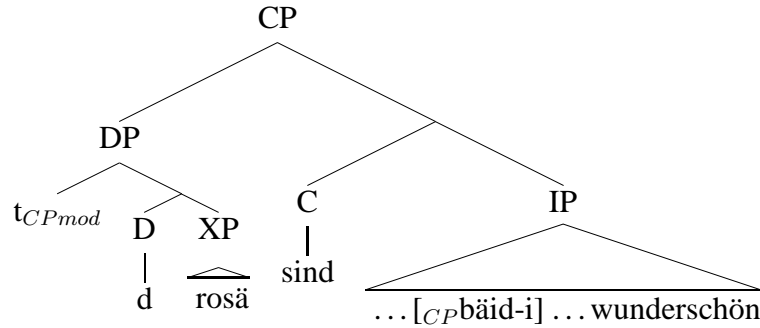
In the proposal for adjectival modification in definite DPs above, an adjectival modification structure CP_{mod} sits in Spec,DP. The initial morpheme in CP_{mod} (and hence in DP) is a definite marker *d*-. Definite CP_{mod} in Spec,DP was said to license the non-pronunciation of D, host of the (overt) definite marker in non-modified definite DPs.

If this is correct, and if it were possible to remove CP_{mod} from Spec,DP, we would expect to find an overt *d*- re-emerging in D. Removing CP_{mod} from Spec,DP is indeed possible in a very limited range of cases in Swiss German (and other Germanic languages). The expectation of a re-emerging *d*- is indeed borne out.¹³

A case in point is the dual *bäid*- (‘both’).¹⁴ Swiss German *bäid*- can surface as an adjective - with weak inflection and preceded by a definite marker (15a). It can also surface as a “determiner,” where it is strongly inflected and not itself preceded by a definite marker (15b).¹⁵ The analysis of (15b) is that, in the CP_{mod} associated with the modifier *bäid*-, no *d*- morpheme is merged and hence (a constituent containing) *bäid*- moves to the left of AgrA. Being intrinsically definite, *bäid*- (i.e. the CP_{mod} containing it) will move to Spec,DP, where it licenses the non-pronunciation of D at spell-out.¹⁶ Now *bäid-i* (i.e. the CP_{mod} containing *bäid*- and AgrA) can extract from Spec,DP under Q-float. This is exemplified in (15c).¹⁷ In that case, the CP_{mod} is no longer in Spec,DP and hence no longer in a position from which it would license the non-pronunciation of D, yielding the overt re-emergence of a definite marker in D.

- | | | | | |
|------|----|--|-------------------------------------|-----|
| (15) | a. | [_{DP} d-i bäidä rosä]
the-AGRA both _{wk} roses | sind wunderschön.
are beautiful. | SWG |
| | b. | [_{DP} bäid-i rosä]
both-AGRA roses | sind wunderschön.
are beautiful. | |

- c. $[_{DP} d \text{ rosä}]$ sind bäid-i wunderschön.
the roses are both-AGRA beautiful.



In other words, removing $[_{CP} \text{bäid-i}]$ from the position preceding *rosä* in (15b) leads to (15c), the re-emergence of an overt definite marker preceding *rosä*.

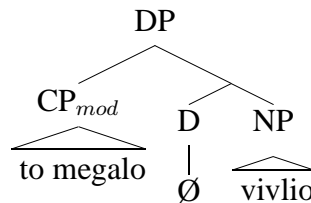
The picture that emerges is that in modified definite DPs, multiple definite markers are structurally present, but are licensed to remain silent if they have a definite CP_{mod} in their specifier.

4 Back to Greek

4.1 Polydefiniteness

The analysis of Germanic suggests that in Greek modified definite DPs as well multiple definite markers are always present, but remain silent when a definite CP_{mod} is in their Spec. In Greek, derivations that end up with a definite CP_{mod} that is not in Spec,DP are in fact more readily available than in Germanic.¹⁸

- (16) a. to megalo vivlio GRE
the big book
b.

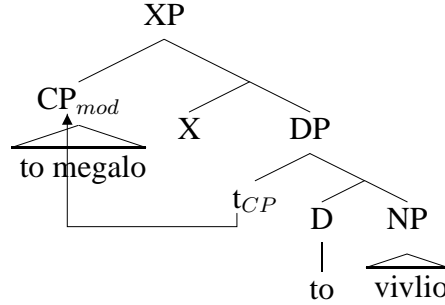


In other words, (16) structurally contains two definite markers. But only the one inside the adjectival modification structure CP_{mod} is overt. The one in D is licensed to be silent.

Consider next (17). This overtly poly-definite example is derived by movement of CP_{mod} out of Spec,DP to a left-peripheral position.

- (17) a. to megalo to vivlio GRE
the big the book

b.



On the semantic side, this movement is associated with contrastive focus.¹⁹ On the PF side it has the effect of disrupting the licensing configuration for the non-pronunciation of the definite marker in D. The result is what is called “polydefiniteness.”

The order *to vivlio* *(*to*) *megalo* (which also requires multiple definite markers) may in principle be analyzed either as involving an additional movement step, fronting [*to vivlio*], or alternatively as the spell-out of a structure in which the CP_{mod} [CP *to megalo*] has not fronted to Spec,DP in the first place (see Ioannidou and Den Dikken (2006) for arguments in favor of the latter possibility).

4.2 Non-poly-in-definiteness

On this picture, the absence of poly-in-definiteness in Greek becomes perfectly parallel to the fact that Germanic adjectives inflect strongly in non-definite contexts. Recall the account of the Germanic weak/strong adjectival declension alternation:

(18) Non-def: [CP Adj ... AgrA ... Adj ...]

(19) Def: [CP *d-* ... AgrA ... Adj ...]

Definite CP_{mod} s feature a definite marker at the left edge, blocking movement of the adjective/AP to the left of AgrA. In both Swiss German and Greek, non-definite CP_{mod} s do not feature an indefinite article. Put another way, an “indefinite article” cannot lexicalize the C-layer of CP_{mod} . Hence the adjective/AP will move to the left of AgrA, lexicalizing the C-layer of CP_{mod} .

Thus removing a non-definite CP_{mod} from whatever Spec it is in will not yield the emergence of an additional indefinite marker.^{20,21}

Summarizing the main comparative claim of this paper: Greek lacks poly-in-definiteness for the same reason that Germanic adjectives inflect strongly in non-definite DPs.

4.3 Non-predicative adjectives?

A note regarding non-predicative adjectives is in order here. The traditional idea that adjectives derive from an underlying relative clause (Chomsky 1957, Smith 1961, Kayne 1994) has been

criticized in view of the fact that some adjectives cannot appear in predicate position, yet they are available DP-internally (and vice versa) (Winter 1965, Alexiadou 2001b, Yamakido 2005, Cinque 2005, among others). The criticism is valid with respect to the original variants of the proposal involving copular predication and *whiz*-deletion (as formalized by Smith (1961)).

- (20) a. the former president
b. * the president *who is* former

Indeed *former* is not possible as the predicate of a copular sentence. And hence (20a) cannot be derived from (20b). However, this does not warrant the conclusion that the structure of adjectival modification must be entirely different from that of relativization. Note that the present proposal does not assume anything like *whiz*-deletion. Inside the AP, the adjective and the N(P) enter into the appropriate semantic relation (which may well be different depending on lexical properties of the adjective). The morpho-syntactically interesting part of the derivation begins afterwards.

A crucial observation is that in Swiss German and German, non-predicative adjectives, e.g. *ehemalig* ‘former’, have the same inflectional morphology as any ordinary adjective like *schön* ‘pretty’ (21). In the indefinite noun phrase (21a) the adjective precedes the strong agreement morpheme AgrA. In the definite (21b) the adjective is preceded by the AgrA morpheme.

- (21) a. en ehemalig-i / schön-i sänger SWG
a former-AGRA / pretty-AGRA singer_{fem}
b. d-i ehemalig / schön sänger
the-AGRA former / pretty singer_{fem}

I conclude that, as far as inflectional morphology is concerned, *ehemalig* ‘former’ and *schön* ‘pretty’ in (21) have the same derivation. Hence if the present proposal is on the right track, it follows that non-predicative adjectives like *ehemalig* ‘former’ also derive from an underlying relative clause-like structure.

This leads to a prediction for Greek: If non-predicative adjectives also have an underlying relative clause-like structure, and if it is this structure that allows polydefiniteness (given the right discourse context), it is predicted that, *ceteris paribus*, the Greek counterpart of *former* also allows polydefiniteness. This is indeed borne out for some speakers.^{22, 23}

- (22) % Ohi, o proighoumenos o prothipourghos pethane. GRE
no, the former the prime minister died.

A similar (possibly the same) speaker variation obtains with regard to the additional movements in indefinites:

- (23) a. enas proighoumenos prothipourghos GRE
a former prime minister
b. % enas prothipourghos proighoumenos
a prime minister former

Similarly for other non-predicative adjectives (cf. Androutsopoulou 2001:191), Cinque 2005):²⁴

- (24) a. o kaimenos o mathitis GRE
 the pitiable the student
 b. *Aftos o mathitis ine kaimenos
 this the student is pitiable

If a relative clause-like derivation is the correct analysis for polydefinites, then it must also be available with non-predicative adjectives. For speakers who do not accept (22), (23b) and (24a), something must be preventing left-peripheral movement in these cases (see also Ioannidou and Den Dikken (2006) for an analogous conclusion). Why this should be the case, I don't know.

5 Conclusion

In this paper I proposed that the pre-adjectival definite article (in Germanic and Greek) has an embedded source as the complementizer of a relative clause-like structure that is argued to obtain in adjectival modification (CP_{mod}). This view allows a unified analysis of the basic pattern of Greek “polydefiniteness,” Scandinavian “double definiteness,” and the Germanic weak/strong adjectival declension alternation. I argued that Greek lacks poly-in-definiteness for the same reason adjectives inflect strongly in non-definite DPs in Germanic. The proposal incorporates a movement approach to the weak/strong adjectival declension alternation, in which inflectional morphemes head their own projection in the syntax.

Notes

¹ There is no universal ban on “poly-in-definiteness.” In fact within Germanic, some Northern Mainland Scandinavian dialects have instances of multiple occurrence of indefinite articles with adjectival modifiers (see Holmberg and Platzack 2005). Also in West Germanic (e.g. Swiss German) there are instances of multiple indefinite articles with degree words (Leu 2001, Kallulli and Rothmayr (to appear)). Importantly though, these don’t seem to occur in exactly the same (i.e. counterpart) environment as multiple definite markers.

² DS has been argued to be available only with predicative adjectives (but see section 4.3). The proposal in Alexiadou and Wilder (1998), Alexiadou (2001a) with a clausal origin for DS DPs and an NP-adjunction origin for non-DS DPs is intended to capture this. The present proposal displaces the locus of such contrasts. See below.

³ Or alternatively by lacking the movement step which fronts the adjective.

⁴ Terminology: I am glossing strong inflection as *AgrA*, mnemonic for “adjectival agreement.”

⁵ Perhaps by merely rendering it unnecessary.

⁶ *AgrA* and *AgrN* are often homophonous. Relevant to this issue may be the distinction between what Katzir 2006 in his discussion of Icelandic labels C2 and C1 respectively.

⁷ The contrast observed in (6a) versus (6b) overtly holds in feminine and in plural DPs that are structurally Case-marked (Weber 1964, Leu 2001). In all other cases, *d-* is always overtly inflected. The *AgrN* in (6a) is null.

⁸ The examples present an idealization. In present day SWE/NOR/DA, the *AgrA* morpheme in *de-t* is only orthographic, while being pronounced when preceded by the adjective.

⁹ I.e. from the head of DP which is commonly thought of as part of the extended projection of the head noun.

¹⁰ Cf. Koopman’s (1997) notion of *head drop*.

¹¹ The parallel is especially striking if we think of V2 in the way proposed by Nilsen (2002) and Müller (2004), where the V2 verb is part of a clause-initial constituent.

¹² For further relevant discussion and arguments see Szabolcsi 1983/84, 1994, Melvold 1991, and Koopman 2003 among others.

¹³ A clausal parallel to this may be found in the analysis by Rosenbaum (1967) of clausal arguments like *It_j is obvious [that adjectival determiners are really complementizers]_j* where removing

the CP from the pre-tense position results in overt *it*.

¹⁴ Another instance where a *d*- morpheme overtly re-appears is found in Mainland Scandinavian demonstratives (Julien 2005), in ways parallel to Greek *afto to vivlio* ('*this the book*') (Androutsopoulou 2001:p.165 and p.191), see Leu (in press) for discussion.

¹⁵ Note that on the present proposal, the notion “determiner” does not have any theoretical status and hence is misleading. The elements that are traditionally called “determiners” (other than the articles) are instances of CP_{mod} whose adjective has certain special (quantificational/deictic) properties. See Leu (in preparation) for discussion.

¹⁶ In effect it licenses the non-pronunciation of both the definite marker and the inflectional suffix (if any) on the latter.

¹⁷ This clearly shows that *bäid* and *-i* form a constituent, cf. section 2.3.

¹⁸ As far as I am aware, Germanic has no “ordinary” instances of polydefinites like *the nice the house* or *the house the nice*, setting aside cases of *Restrictive Elliptical Appositives*, which also allows the repetition of a preposition (Riemsdijk 1998). However, Swiss German has *%dr vil dr bessr choch* '*the much the better cook*', which is interesting but which I will not discuss here (see Penner and Schönenberger 1995 for relevant discussion).

¹⁹ In Albanian as well, adjectives receive a focus interpretation when moved to the DP left-periphery (Androutsopoulou 2001:p.164).

²⁰ This must be distinguished from multiple indefinite articles occurring with some degree modifiers in e.g. Bavarian, see Kallulli and Rothmayr (to appear).

²¹ Some Northern Scandinavian varieties pose a possible challenge in that they have multiple indefinite articles with multiple adjectives (cf. note 1). Some Northern Scandinavian varieties have adjective incorporation in definite DPs (see Delsing 1993, Holmberg and Platzack 2005). Possibly the two sets of varieties overlap in interesting ways.

²² Facilitating context: News story is that the former prime minister died. Someone misunderstands and says “What, the prime minister died?” You react: (22).

²³ See also Androutsopoulou (1996:p.24).

²⁴ I don't know whether there is speaker variation with respect to example (24a).

References

- Alexiadou, A. (2001a). Adjective Syntax and Noun Raising: Word Order Asymmetries in the DP as the Result of Adjective Distribution. *Studia Linguistica* 55(3), 217–148.
- Alexiadou, A. (2001b). *Functional Structure in Nominals: Nominalization and Ergativity*. Linguistik Aktuell. Amsterdam: John Benjamins.
- Alexiadou, A. and C. Wilder (1998). Adjectival Modification and Multiple Determiners. In A. Alexiadou and C. Wilder (Eds.), *Possessors, Predicates and Movement in the DP*. Amsterdam: Benjamins.
- Androutsopoulou, A. (1996). Licensing of adjectival modification. In J. Camacho, L. Choueiri, and M. Watanabe (Eds.), *Proceedings of the fourteenth West Coast Conference of Formal Linguistics*, pp. 17–31.
- Androutsopoulou, A. (2001). Adjectival Determiners in Albanian and Greek. In M. L. Rivero and A. Ralli (Eds.), *Comparative Syntax of Balkan Languages*, pp. 161–199. Oxford: Oxford University Press.
- Campos, H. and M. Stavrou (2004). Polydefinite constructions in Modern Greek and in Aromanian. In O. M. Tomić (Ed.), *Balkan Syntax and Semantics*, Linguistik Aktuell, pp. 137–174. Amsterdam: John Benjamins.
- Chomsky, N. (1957). *Syntactic Structures*. The Hague: Mouton.
- Cinque, G. (2005). The dual source of adjectives and phrasal movement in the Romance DP. Ms. Venice.
- Delsing, L.-O. (1993). *The Internal Structure of Noun Phrases in Scandinavian Languages*. Ph. D. dissertation, Lund.
- Den Dikken, M. (2006). *Relators and Linkers: The Syntax of Predication, Predicate Inversion, and Copulas*. Cambridge: MIT Press.
- Embick, D. and R. Noyer (2001). Movement Operations and Syntax. *Linguistic Inquiry* 32, 555–595.
- Giusti, G. (1997). The categorial status of determiners. In L. Haegeman (Ed.), *The new comparative grammar*, pp. 95–123. London: Longman.
- Hankamer, J. and L. Mikkelsen (2002). A morphological analysis of definite nouns in Danish. *Journal of Germanic Linguistics* 14, 137–175.
- Holmberg, A. and C. Platzack (2005). The Scandinavian Languages. In *The Oxford Handbook of Comparative Syntax*. Oxford.
- Ioannidou, A. and M. Den Dikken (2006). P-drop, D-drop, D-spread. Ms. draft CUNY.
- Julien, M. (2005). *Nominal phrases from a Scandinavian perspective*. Amsterdam: John Benjamins.
- Kallulli, D. and A. Rothmayr (to appear). Determiner doubling in Bavarian German. *Journal of Comparative Germanic Linguistics*.
- Katzir, R. (2006). Scope marking, morpheme economy, and the structure of certain Germanic noun phrases. Ms. draft MIT.
- Kayne, R. S. (1994). *The Antisymmetry of Syntax*. Cambridge, MA: MIT Press.

-
- Kolliakou, D. (1999). Non-monotone anaphora and the syntax of polydefiniteness. In *Empirical issues in formal syntax and semantics*, pp. 121–145. The Hague: Thesus.
- Koopman, H. (1997). The Doubly Filled C Filter, the Principle of Projection Activation, and Historical Change. Ms. UCLA.
- Koopman, H. (2003). Inside the noun in Maasai: Head movement and syntactic theory. In A. Mahajan (Ed.), *Syntax at sunset 3*, pp. 77–116. UCLA/Potzdham Working Papers.
- Leu, T. (2001). A Sketchy Note on the Article-Modifier Relation. *Generative Grammar in Geneva 2*, 55–69.
- Leu, T. (in preparation). *The structure of adjectives, determiners, and adjectival agreement (working title)*. Ph. D. dissertation, NYU.
- Leu, T. (in press). These HERE Demonstratives. In *Penn Working Papers in Linguistics 13.1: Proceedings of PLC 30*. Available at: <http://ling.auf.net/lingBuzz/000274>.
- Melvold, J. (1991). Factivity and definiteness. In L. L. S. Cheng and H. Demirdache (Eds.), *More Papers on WH-Movement*, Volume 15 of *MITWPL*, pp. 97–117. Cambridge.
- Milner, J. and J.-C. Milner (1972). *La morphologie du groupe nominal en allemand*. DRLAV 2. Université de Paris VIII.
- Müller, G. (2002). Remarks on Nominal Inflection in German. ms. IDS Mannheim.
- Müller, G. (2004). Verb-second as vP-first. *Journal of Comparative Germanic Linguistics* 7, 179–234.
- Nilsen, Ø. (2002). *Eliminating Positions*. Ph. D. dissertation, Utrecht University.
- Penner, Z. and M. Schönenberger (1995). The distribution of nominal agreement features in Swiss-German dialects and the strong DP/CP parallelism hypothesis. In Z. Penner (Ed.), *Topics in Swiss German Syntax*, pp. 331–346. Bern: Peter Lang.
- Riemsdijk, H. V. (1998). Categorical feature magnetism: The endocentricity and distribution of projections. *Journal of Comparative Germanic Linguistics* 2, 1–48.
- Roehrs, D. (2006). *The Morpho-Syntax of the Germanic Noun Phrase: Determiners MOVE Into the Determiner Phrase*. Ph. D. dissertation, Indiana University.
- Rosenbaum, P. (1967). *The grammar of English predicate complement constructions*. Cambridge, MA: MIT Press.
- Schlenker, P. (1999). La Flexion de l'Adjectif en Allemand: La Morphologie de Haut en Bas. *Recherches Linguistiques de Vincennes*, 28.
- Smith, C. S. (1961). A Class of Complex Modifiers in English. *Language* 37, 342–365.
- Smith, C. S. (1964). Determiners and Relative Clauses in a Generative Grammar of English. *Language* 40, 37–52.
- Svenonius, P. (1994). On the structural location of the attributive adjective. In *Proceedings of the 12th West Coast Conference on Formal Linguistics*, pp. 439–454. CSLI Publications.
- Szabolcsi, A. (1983/84). The possessor that ran away from home. *The Linguistic Review* 3, 89–102.
- Szabolcsi, A. (1994). The noun phrase. In F. Kiefer and K. Kiss (Eds.), *Syntax and Semantics 27: The syntactic structure of Hungarian*, pp. 179–274. San Diego: Academic Press.
- Vangsnes, Ø. A. (1999). *The Identification of Functional Architecture*. Ph. D. dissertation, Univer-

-
- sity of Bergen.
- Vergnaud, J.-R. (1974). *French Relative Clauses*. Ph. D. dissertation, MIT.
- Weber, A. (1964). *Zürichdeutsche Grammatik*. Zürich: Schweizer Spiegel Verlag. Second and revised edition.
- Winter, W. (1965). Transforms without kernels. *Language* 41, 484–489.
- Yamakido, H. (2005). *The Nature of Adjectival Inflection in Japanese*. Ph. D. dissertation, Stony Brook University.
- Zwicky, A. (1986). German Adjective Agreement in GPSG. *Linguistics* 24, 957–990.