

Pronominal doubling in Greek: a head-complement relation

Dimitra Papangeli

In this paper I will argue that pronouns may take a DP as their complement in Greek: the two elements start out as a constituent and they are thus jointly assigned the internal theta-role of the verb. The pronoun cannot contain features that clash with those on the double, since the two elements are part of a single extended projection. Moreover, this is allowed only in languages with a rich case paradigm on nouns. A pronoun may also be associated with a phrase in apposition (i.e. adjunct position) through co-reference, established outside the module of syntax.

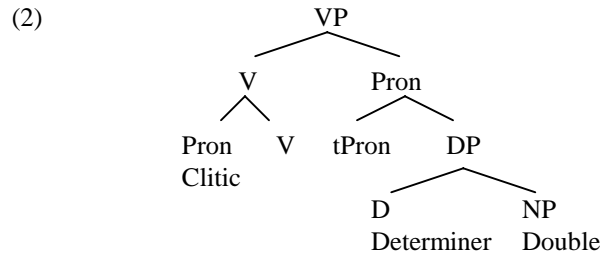
1. Introduction

In the case of clitic doubling two elements, a pronoun and a DP, seem to compete for the same theta-role:

- (1) *Ton idha to Yani hthes.*
CL-3SGM-ACC saw-1SG the-Yani-ACC yesterday
'I saw Yani yesterday.'

In (1) the pronoun *ton* 'him' and the DP *to Yani* '(the) Yani' are potential arguments of the verb. However, the assumption that both receive the same theta-role would lead to the violation of the theta-criterion. Sportiche (1992, 1998), (also Agouraki 1992 and Anagnostopoulou 1994 for Greek) has argued that the pronoun is merged in the (extended) verbal projection and so it is never assigned the internal theta-role of V. He is forced to assume, though, that the verbal complement position is filled by a pro in the absence of a double. As we will see, there is no independent evidence for the presence of object pro in Greek. Uriagereka (1995) and Torrego (1998), on the other hand, have proposed that the pronoun and its double start out as a constituent: the pronoun is a D-head that takes the double as its specifier. It can thus be assumed that the two elements are jointly assigned the internal theta-role of V. I will argue that a pronoun may take a DP as its complement. This is related to theories of object clitics as elements that select for a pro complement (Borer 1984, Jaeggli 1984).

I am proposing that pronouns can select for an overt DP. If the pronoun is a clitic, it then moves and adjoins to the verb:



A pronoun may also be co-referential with a phrase in an adjunct position. In this case though, only the pronoun is assigned a theta-role from V. It can be assumed that the pronoun is associated with its double through co-reference, established outside the module of syntax (Reinhart 1983):

- (3) a. *Lo vimos a Juan.* (Spanish)
 CL-3SGM-ACC saw-3PL P Juan
 'We saw Juan.'
- b. *L' abbiamo vista # la sorella di Maria.* (Italian)
 CL-3SGF-ACC have-1PL seen-F the-sister of Maria
 'We have seen her, Maria's sister.'
- c. *I Maria # tin idha na erhete.* (Greek)
 the-Maria CL-3SGF-ACC saw-1SG SUBJ come-3SG
 'Maria, I saw her coming.'
- d. *Tu Yani # tu ipa tin alithia.* (Greek)
 the Yani-GEN CL-3SGM-GEN said-I the truth¹
 'Yani, I told him the truth.'

My aim is to argue that a pronoun and its double are related syntactically only when they start out as a constituent (cf. 1). The distinction between doubling in syntax and doubling outside the module of syntax (cf. 3) is necessary to capture the different empirical properties that are attested.

Doubling in syntax should be possible with full pronouns as well. This is borne out in Greek: full pronouns may take a DP as their complement. In this case, no adverbial can intervene between the pronoun and its double. Reduced pronouns must incorporate to the verb, while full pronouns can remain in situ and be adjacent to their double. Moreover, it is possible to extract from the DP-double of a reduced pronoun in Greek, indicating that the DP occupies a complement position, namely it is the complement of the pronoun.

In addition, following Grimshaw's (1991) theory of extended projection, it is predicted that pronouns (functional heads merged in the extended nominal

¹I am using the notion genitive as a cover term for both genitive and what sometimes is called dative. No theoretical implications are intended.

projection) will not contain features that clash with those of the noun-double (the lexical head). This is true in Greek: the pronoun and its double always carry the same features for case, number, gender, person and category, if they form a constituent. The situation is different with nouns taking a DP as their complement: two lexical heads project and so they can carry clashing features.

Lastly, I assume following Neeleman & Weerman (1999) that CASE is a functional head generated on top of every case-marked DP. According to their minimalist model of grammar, a variant of the ECP applies at PF (see also Aoun et al. 1987, Rizzi 1990). If CASE is not spelled out, the CASE-head has to meet the ECP. This is banned, though, in the presence of a pronominal phrase between the CASE P and its dominating VP. This is supported by the data: we cannot extract from the double of a clitic in Spanish, a language without morphological case on nouns.

2. Reduced pronouns above the VP

Sportiche (1992/1998) argues that clitics are functional heads generated in the extended verbal projection (Agouraki 1992, Anagnostopoulou 1994 argue for similar analyses in Greek). A phrase-double (XP*) is merged as the complement of the verb. It is thus assumed that the clitic is never assigned the internal theta-role of V. The clitic is related to its double after movement of the XP* (which is either overt or null) to the specifier of the projection headed by the clitic. There are some problems with this analysis.

Firstly, if movement of the double were always realised in overt syntax, we would expect it to immediately precede the clitic-head. This is not true:

- (4) a. *Tu Yani tu eho milisi.*
 the-Yani-GEN CL-3SG-M-GEN have-1SG talked
 'To Yani, I have talked.'
- b. *Tu Yani dhen tu eho milisi.*
 the-Yani-gen neg cl-3sg-m-gen have-1sg talked
 'To Yani, I haven't talked.'
- c. *Tu Yani poles fores tu eho milisi.*
 the-Yani-GEN many times CL-3SG-M-GEN have-1sg talked
 'To Yani, I have talked to (him) many times.'

Here the double is a topic base-generated in its surface position (Tsimplici 1995 following Cinque 1990 for Clitic Left Dislocation, CLLD).

So, Sportiche is forced to propose a filter, which guarantees that an overt functional head cannot simultaneously appear with an overt specifier, if they encode the same property. However, this is not always true:

- (5) a. *Chtel bych vedet co ze Marie cetta.* (Czech)
 Would-I like to-know what that Mary read

- b. Ik vraag me af *wat of* dat Jan gezien heeft.
 I wonder REFL part what if that John seen has
 (Dutch)
 (Ackema & Neeleman, 1998: 471, 475)

A wh-phrase can be adjacent to one or more C-heads: in (a) *co* ‘what’ is the wh-phrase and *ze* ‘that’ the C-head and *wat* ‘what’ is the wh-phrase and *of* ‘if’ and *dat* ‘that’ the C-heads in (b). This indicates that both the head C and its specifier are filled by elements encoding the same property, even if we allow more than one C. In the same vein, we would expect the Doubly Filled Voice Filter to be violated, contrary to fact.²

Moreover, in the absence of a DP-double, Sportiche is forced to assume a pro in the verbal complement position: the verb needs to assign its internal theta-role to an element that is merged as its complement. However, Greek seems to behave like English in that an understood object is not active in syntax: an empty object cannot act as a controller, it does not qualify as the antecedent of a reflexive, nor is it ever modified by a secondary predicate. These are tests put forth by Rizzi (1986). So, there seems to be no independent evidence for the presence of object pro (although Greek allows for subject pro). Italian allows for a phonologically null DO to act as the controller of a subject that is generated in an embedded clause:

- (6) Questo conduce ---- a [PRO concludere quanto segue].
 *This leads ---- to [PRO conclude what follows]
 (Rizzi 1986:503)

In Greek, on the other hand, a phonologically null DO is not a potential controller of the embedded subject:

- (7) a. *Afto kani ... na katalavun ti akoluthi.
 this makes/leads ... to understand-3PL what follows
 *‘This makes/leads ... to understand what follows.’
 b. Afto kani *tus anthropus* na katalavun ti
 this makes/leads the-people-acc to understand-3PL what
 akoluthi.
 follows
 ‘This makes/leads the people to understand what follows.’
 c. Afto *tus* kani na katalavun ti akoluthi.
 this CL-3PL-ACC makes/leads SUBJ understand-3PL what follows
 ‘This leads them to understand what follows.’

In addition, in Italian, a phonologically empty object is a potential antecedent for a reflexive:

²A possible rendition of the theory would be that clitics are related to their double through the operation *Agree*. However, it is hard to understand why this operation should only be realised covertly.

- (8) La buona musicariconcilia ---- con se stessi.
 'Good music reconciles ---- with one self.'
 (Rizzi 1986:504)

In Greek, the reflexive is bound only by a phonologically realised object:

- (9) a. *I kali musiki simfilioni --- me toneafto tus.
 the-good music reconciles --- with the-self- cl-3pl-m-gen
 *'Good music reconciles --- with themselves.'
 b. I kali musiki simfilioni *tus anthropus* me
 the-good-music reconciles the-people-ACC with
 toneafto *tus*.
 the-self- CL-3PL-M- GEN
 'Good music reconciles people with themselves.'
 c. I kali musiki *tus* simfilioni me toneafto *tus*.
 the-good-music CL-3PL-ACC reconciles with the-self-CL-3PL-GEN
 'Good music reconciles them with themselves.'

In addition, a phonologically null object can be the subject of a secondary predicate in Italian:

- (10) Questa musica rende [.... *alegri*].
 this music renders happy ([+pl])
 (Rizzi 1986:505-507)

The situation is different in Greek. The object, which is modified by the secondary predicate, must be phonologically realised:

- (11) a. Afti i musiki kani *tus anthropus* eftihismenus.
 this- the-music makes the-people-ACC happy-PL-M-ACC
 'This music renders/makes people happy.'
 b. *Afti i musiki kani ... eftihismenus.
 this-the-music makes ... happy-PL-M-ACC
 *'This music renders/makes ... happy.'

A possible assumption would be that the clitic-head licenses and identifies pro in Greek. In other words, object clitics and subject agreement play the same role as far as pro licensing is concerned (Roussou p.c.). However, such a hypothesis would be unfalsifiable. In addition, agreement is not required in Italian for the presence of the object pro (as illustrated by Rizzi's examples above). It is thus not clear why object clitics should be viewed on a par with subject agreement in Greek.

In this section, we saw two basic arguments against Sportiche's analysis of clitics. Firstly, in doubling constructions the double has to be banned from moving to the specifier of the clitic-head in overt syntax. This is only guaranteed through assumptions that would not have been motivated otherwise.

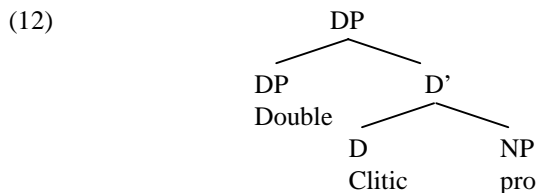
Secondly, Sportiche is forced to assume an object *pro*, in constructions without doubling. This *pro* is assigned the internal role of the verb. However, Greek lacks any independent evidence for the existence of object *pro*.

The alternative is to assume that pronouns are merged VP-internally.

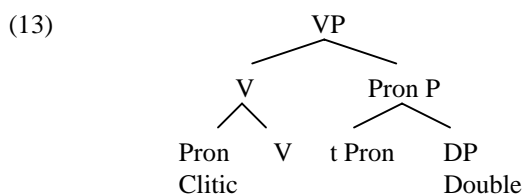
3. Reduced pronouns in the verbal complement position

In this section it is argued that pronouns start out, as complements of V. A DP-double may either be the specifier or the complement. The former is argued in Uriagereka (1995), based on Torrego (1998). I will argue for the latter.

Uriagereka (1995) argues that at least some clitics are Determiners that take the double as their specifier and a *pro* as their complement (the clitic moves to its surface position). The clitic and its double are presumably related through spec-head licensing and they are jointly assigned the internal theta-role of V:



Another possible hypothesis is that pronouns are functional heads that take a DP as their complement. The two are related through an operation of feature sharing that applies between the elements of a single extended projection. It is assumed that the clitic moves to its surface position. This movement is only possible if the clitic is the highest head in the extended nominal projection, due to the Head Movement Constraint:



Both analyses share the prediction that the double can be a DP (and not necessarily a NP). Reduced pronouns in Greek are not in complementary distribution with Determiners and the clitic obligatorily selects for a DP:

- (14) a. *Ton idha to Yani.*
 CL-3SG-M-ACC saw-1SG the-Yani-ACC
 'I saw Yani.'
- b. **Ton idha Yani.*
 CL-3SG-M-ACC saw-1SG Yani-ACC

So the Determiner is first merged with the NP and the pronoun is then merged with the DP (Tsimpili 1999 argues that genitive clitics in Greek are recursive Determiners).

Lastly, both analyses rule out pronominal doubling with subjects: subjects are islands for extraction. So, a reduced pronoun in subject position is probably related to its double through co-reference, which is not established in syntax. The situation is different with full pronouns: no extraction is needed.

As we will see in 3.1., the data in Greek support the idea that pronouns may form a constituent with their double. In 3.2., we will see evidence for generating the double as the complement of the reduced pronoun.

3.1. The similarity of full and reduced pronouns

I will now argue that the kind of doubling we find with reduced pronouns is also attested with full pronouns (i.e. they can also form a constituent with a DP).

Firstly, there is a strong morphological similarity in Greek between reduced pronouns and full personal pronouns: the former are usually identical to parts of the latter (either to an affix or to a part of the root):³

(15)

		Full forms		Reduced forms	
		Gen	Acc	Gen	Acc
1sg		emena(ne)	emena(ne)	mu	me
2sg		esena(ne)	esena(ne)	su	se
3sg	masc	aftu	afton(e)	tu	ton(e)
	fem	aftis	afti(n)(e)	tis	ti(n)(e)
	neut	aftu	afto	tu	to
1pl		emas	emas	mas	mas
2pl		esas	esas	sas	sas
3pl	masc	afton	aftus	tus	tus
	fem	afton	aftes	tus	tis - tes
	neut	afton	afta	tus	ta

(table based on Drachman 1997:221)

In addition, reduced and full pronouns appear in similar configurations: they can either replace a DP or appear together with it. In the latter, the full pronoun has a deictic interpretation (Holton, Mackridge & Philippaki-Warbuton (1997:318) provide examples where *aftos* ‘he’ functions as a demonstrative).

³A possible way of developing this is to say that they are all Ds. I am not going to pursue this any further in this paper.

Full pronouns can remain in situ and may appear adjacent to their double, while reduced pronouns always undergo movement:

- (16) a. O Yanis idhe ton andhra.
 the-Yanis saw-3SG the-man-ACC
 ‘Yanis saw the man.’
 b. O Yanis idhe afton.
 the-Yanis saw-3SG him-ACC
 ‘Yanis saw him.’
 c. O Yanis ton idhe.
 the-Yanis CL-3SG-M-ACC saw-3SG
 ‘Yanis saw him.’
 d. O Yanis idhe afton ton andhra.
 the-Yanis saw-3SG him/this- the- man-ACC
 ‘Yanis saw this man.’
 e. O Yanis ton idhe ton andhra.
 the-Yanis CL-3SG-M-ACC saw-3SG the- man-ACC
 ‘Yanis saw the man.’⁴

Furthermore, neither reduced nor full pronouns can precede a NP:

- (17) a. *O Yanis idhe afton andhra.
 the-Yanis saw-3SG him/this-man-ACC
 ‘Yanis saw this man.’
 b. *O Yanis ton idhe andhra.
 the-Yanis CL-3SG-M-ACC saw-3SG man-ACC
 ‘Yanis saw man.’

In addition, no adverbial can intervene between the pronoun and its co-referential DP, indicating that they form a constituent:

- (18) a. *O Yanis idhe aftus hthes tus anthropus.
 the-Yanis saw-3SG them/these yesterday the-men
 ‘Yanis saw these men yesterday.’
 b. O Yanis idhe (hthes) aftus tus anthropus (hthes).
 the-Yanis saw (yesterday) them/these- the-men (yesterday)
 ‘Yanis saw (yesterday) these men (yesterday).’

⁴A reduced and a full pronoun may also occur simultaneously with a DP:

O Yanis ton idhe afton ton andhra.
 the-Yanis cl-3sg-acc saw-3sg him/this- the-man-acc
 ‘Yanis saw this man.’

This may again be analysed as a recursive D position (see also foot. 3)

If, on the other hand, the DP is in apposition, an adverbial may intervene between the pronoun and its double. This is the case in (20) where the appositional structure is marked by a long intonational break:

- (19) O Yanis idhe esas **hthes** # tus naftikus
 the-Yanis saw-3SG you-PL-ACC yesterday the-sailors-ACC
tu nisiu.
 the-island-GEN
 ‘Yanis saw you yesterday, the sailors of the island.’⁵

So, we have seen evidence that full pronouns may form a constituent with a DP-double. We will now investigate the position of the double.

3.2. Pronouns take a DP-double as their complement

The evidence I have presented so far is neutral between an analysis of clitic doubling where the double is the specifier of the clitic-head and an analysis that assumes that the double is the complement of the clitic. In this section I will argue that the double is the complement of the pronoun.

If we accepted Uriagereka’s proposal, namely that the double is the specifier, we would expect to find constructions where the clitic/Determiner takes a full NP as its complement and a full DP as its specifier. This prediction is not borne out:

- (20) *Ton katalava ton andhra proedhro.
 CL-3SGM-ACC understood-1SG the-man-ACC president-ACC
 ‘I understood the man president.’

It seems necessary to assume that clitics do not take phonologically overt complements. However, there is no independent motivation for this.

In addition, we would expect the N-head merged in the complement position (or the Determiner) to assign a theta-role to the DP in the specifier position, on a par with possessives:

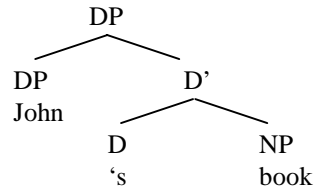
⁵The situation is different in a language without morphological case, like Italian:

- i) Gianni I’ ha visto # I’ uomo con I capelli lunghi.
 Gianni CL-3SG-M-ACC has seen # the man with the hair long
 ‘Gianni has seen the man with the long hair.’
 ii) Gianni ha visto lui # I’ uomo con I capelli lunghi.
 Gianni has seen him # the man with the hair long
 ‘Gianni has seen him, the man with the long hair.’

The only available option is that reduced and full pronouns are co-referential with a DP in apposition. Moreover, a demonstrative can only precede a NP (not a DP), unlike Greek:

- iii) Ho visto quell’ uomo.
 have-I seen this man
 ‘I have seen this man.’

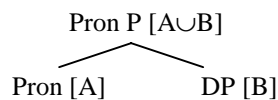
(21)



In pronominal doubling, though, only one lexical head is generated: the noun-double of the pronoun. In the absence of a second lexical head no operation of theta-role assignment is expected to be active within the DP. The functional heads that are merged in the extended nominal projection cannot contain features that clash with those of the lexical head (Grimshaw 1991). So, the operation of feature sharing that applies within a single projection allows for the pronoun and its double to be interpreted as a single argument (visibility).

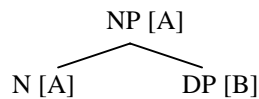
To sum up, the pronoun cannot contain features that clash with those of the noun-double. In particular, it can be argued that two sets of features A and B are unified in one $A \cup B$:

(22)



In the case of a noun taking a DP as its complement, on the other hand, two lexical projections are involved and two operations of feature sharing are active. The crucial point is that no operation of feature sharing applies between the elements of different projections, so they are allowed to carry non-matching features. In this case, only the features of the N-head percolate upwards:

(23)



So, in Uriagereka's analysis of clitic doubling two extended projections are merged, implicating that the pronoun and its double are allowed to carry clashing features. Given that in general there does not need to be spec-head agreement in DPs (like in possessives which either carry genitive, even if the D-head carries accusative, or dative in German dialects in examples like *dem Mann sein Buch* 'the man's book'). If the pronoun is a functional head in the extended nominal projection, on the other hand, it is predicted that the pronoun and its double always have identical grammatical features. This is borne out:

- (24) a. **Tu idha to Yani.* Case
 CL-3SG-M-GEN saw-1SG the-Yani-ACC
 'I saw Yani.'

- b. *Idha ton kipo tu spitu.*
 saw-1SG the- garden-ACC the-house-GEN
 'I saw the garden of the house.'
- c. **Ton idha ti Maria.* Gender
 CL-3SG-M-ACC saw-I the-Maria-ACC
 'I saw Maria.'
- d. *Idha ton patera tis Marias.*
 saw-I the- father-ACC the-Maria-GEN
 'I saw Maria's father.'
- e. **Ton idha tus andhres.* Number
 CL-3SG-M-ACC saw-1SG the-men
 'I saw the men.'
- f. *Idha ton patera ton koritsion.*
 saw-1SG the- father-ACC the- girls-GEN
 'I saw the father of the girls.'
- g. **Se idha to Yani.* Person
 CL-2SG saw-1SG the-Yani-ACC
 'I saw Yani.'
- h. *Idha ton patera su.*
 saw-1SG the- father-ACC your-GEN
 'I saw your father.'

If the reduced pronoun does not have the same grammatical features as its double, the configuration is ungrammatical (see Philippaki (1987) for a similar observation). If, on the other hand, a noun takes a DP as its complement the two elements are allowed to have clashing features.

In the same vein, it is predicted that the pronoun always has the same categorial feature as its double. This is borne out in Greek: the IO is expressed either with a DP carrying genitive case or with a PP:

- (25) *Edhosa tu Yani / sto Yani ta lefta.*
 gave-1SG the-Yani / P-the- Yani the-money-ACC
 'I gave (to the) Yani the money.'

The presence of syntactic material (i.e. the DO) following the IO shows that both the DP *tu Yani* 'the-Yani-gen' and the PP *sto Yani* 'to-the-Yani' are not in a right dislocated position, but presumably they are merged VP internally.

However, it is only possible to double a reduced pronoun by an IO DP:

- (26) *Tu edhosa tu Yani (*sto Yani) ta lefta.*
 CL-3SG-GEN gave-1SG the-Yani-GEN P-the- Yani the-money-ACC
 'I gave Yani the money.'

If P-heads are not nominal (Neeleman 1997) the presence of a pronoun in the extended projection is banned: the two elements would carry clashing categorial features. So, a pronoun can only take a DP as its complement.

We will now see further evidence for the DP-double being a complement: it is possible to extract from the DP-double of a reduced pronoun in Greek:⁶

- (27) a. O Yanis *to* *troi to pastitsio* *apo*
 the-Yanis CL-3SG-N-ACC eats the-pastitsio-ACC from
ti mana tu.
 the-mother-ACC his
 ‘Yanis eats the pastitsio of his mother’s.’
- b. *Apo ti mana tu* o Yanis *to troi*
 from the-mother-ACC his the-Yanis CL-3SG-N-ACC eats
to pastitsio.
 the-pastitsio-ACC
 ‘From his mother Yanis eats pastitsio.’

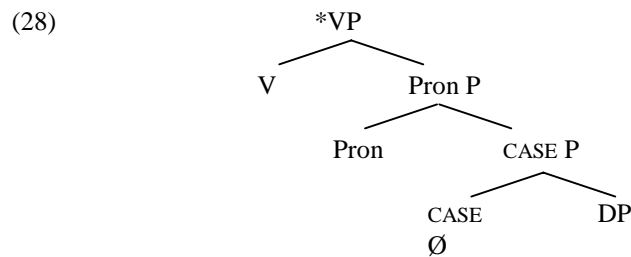
The PP *apo ti mana tu* ‘from his mother’ is extracted from the DP *to pastitsio apo ti mana tu* ‘the pastitsio from his mother’.

We will now see that pronominal doubling in syntax is only possible in languages with a rich case paradigm on nouns.

4. The relevance of morphological case

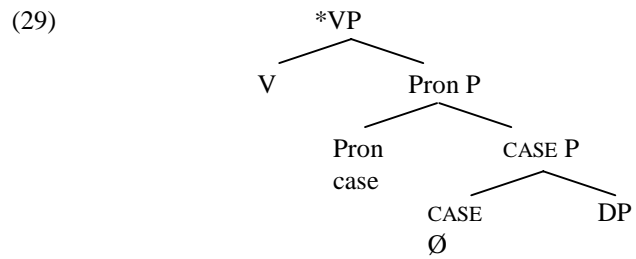
I assume following Neeleman & Weerman (1999) that CASE is a functional head generated on top of every case-marked DP. Neeleman & Weerman develop a minimalist model of grammar, which contains a variant of the ECP, which applies at PF, its natural locus given the assumptions of Chomsky (1995) (see also Aoun et al. 1987 and Rizzi 1990). The implication is that if CASE is not spelled out the CASE-head has to meet the ECP.

A reduced pronoun merged in the highest head of the extended nominal projection rules out licensing the CASE-head by the verb. The pronoun cannot license the double, due to its nominal character: the empty head can only be licensed by a head of a different category (Neeleman & Weerman 1999):

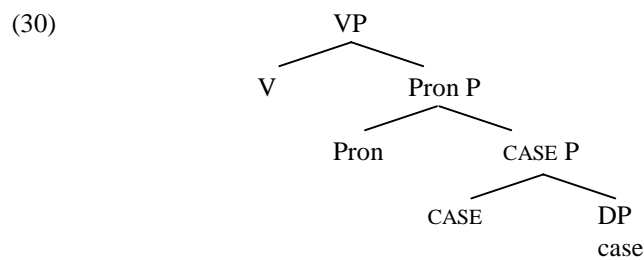


⁶Alexiadou & Anagnostopoulou (2000) also argue that the double of a clitic may occupy a complement position, but it is the complement of V. There is another option: the double may appear in a right dislocated position. In this case, it can be argued that the pronoun is associated with the DP through co-reference, established outside the module of Syntax.

The presence of morphological case on the reduced pronoun does not license the CASE-head on the assumption that features percolate upwards:



We may thus assume that doubling is allowed only in languages with a rich case paradigm on nouns:



The prediction is borne out: extraction from the double of a pronoun is ruled out in Spanish, a language without morphological case on nouns:

- (31) a. *La vimos a la hermana de Juan.*
 CL-3SG-F-ACC saw-1PL P the sister of Juan
 ‘We saw Juan’s sister.’
 b. **De Juan la vimos a la hermana.*
 of Juan CL-3SG-F-ACC saw-1PL P the sister
 ‘Juan’s we saw the sister.’

Extraction of the PP *de Juan* ‘of Juan’ from the complex PP *a la hermana de Juan* ‘to the sister of Juan’ is ruled out. This is consistent with an analysis of the PP as an adjunct.

Extraction is possible only in the absence of a reduced pronoun:

- (32) a. *Vimos a la hermana de Juan.*
 saw-1PL P the sister of Juan
 ‘We saw Juan’s sister.’
 b. *De Juan, vimos a la hermana.*
 of Juan saw-1PL P the sister
 ‘Juan’s we saw the sister.’

In this case, we may assume that the PP is generated in the verbal complement position.⁷

5. Conclusion

I have argued that pronominal clitics (i.e. reduced pronouns) are functional heads that may take a DP as their complement. The two elements start out as a constituent and they are thus jointly assigned the internal theta-role of the verb.

An immediate prediction is that the clitic cannot contain features that clash with those of the double. This is borne out in Greek: the pronoun and the DP-double carry identical grammatical features and they have to be of the same category. That is, a clitic cannot be doubled by a PP.

In addition, we saw that the same kind of doubling is available with other pronouns: a full pronoun in Greek may also form a constituent with a DP. Full pronouns can remain in situ so they appear adjacent to their double, while reduced pronouns need to undergo movement. A pronoun may also be associated with a DP in apposition through co-reference, established outside the module of syntax.

Lastly, it has been argued that the clitic may take a DP-double as its complement only in languages with a rich case paradigm on nouns. This is borne out: extraction from the DP-double is possible in Greek, a language with morphological case on nouns. However, extraction is ruled out in Spanish, a language without morphological case on nouns. So, the double is a complement in Greek (the complement of the clitic-head), while it is an adjunct in Spanish.

Acknowledgements

I would like to thank Ad Neeleman for all his help. Also thanks to Michael Brody, Dirk Bury, Hans van de Koot, Anna Roussou, Ourania Sinopoulou, Neil Smith and Dimitra Teofanopoulou for their comments, Jane Grimshaw, Irene

⁷Similar is the situation in Italian:

- i) Abbiamo vista *la sorella di Maria*.
 have-1PL seen-F the sister of Maria
 'We have seen the sister of Maria.'
- ii) *Di Maria* abbiamo vista *la sorella*.
 of Maria have-1PL seen-F the sister
 'Maria's, we have seen the sister'
- iii) *L* abbiamo vista # *la sorella di Maria*.
 CL-3SG-F-ACC have-1pl seen-F the sister of Maria
 'We have seen the sister of Maria.'
- iv) **Di Maria*, l' abbiamo vista *la sorella*.
 of Maria CL-3SG-F-ACC have-1PL seen-F the sister
 'Maria's, we have seen the sister.'

The contrast between the examples ii) and iv) indicates that the DP is in a complement position in i) and ii) but not in iii) and iv) In the latter it is in a right dislocated position.

Philippaki and Tanya Reinhart for some discussions. This paper is an abbreviation of Papangeli, D. (2001). Pronominal doubling in Greek: a head-complement relation. Ms, University College London.

References

- Abney, P.S. (1987). *The English noun phrase in its sentential clause*. Diss, MIT, Cambridge, MA.
- Ackema, P. & A. Neeleman (1998). Optimal questions. *Natural Language and Linguistic Theory* 16:3, pp. 443-490.
- Agouraki, Y. (1993). *Spec-head licensing: The case of foci, clitic-constructions and polarity items: A case study of Modern Greek*. Diss, University College London.
- Alexiadou A. & E. Anagnostopoulou (2000). Clitic-doubling and (non-) configurationality. *NELS* 30.
- Anagnostopoulou, E. (1994). *Clitic dependencies in Modern Greek*. Diss, Universität Salzburg.
- Aoun, J., N. Hornstein, D. Lightfoot & A. Weinberg (1987). Two types of locality. *Linguistic Inquiry* 18, pp. 537-577.
- Borer, H. (1984). *Parametric syntax: Case studies in Semitic and Romance Languages*. Foris, Dordrecht.
- Chomsky, N. (1995). *The minimalist program*. MIT Press, Cambridge, MA.
- Cinque, G. (1990). *Types of A-bar dependencies*. MIT Press, Cambridge, MA.
- Drachman, G. (1997). Some properties of clitics (with special reference to modern Greek). Alexiadou A. & A. Hall (eds.), *Studies on Universal Grammar and typological variation*. *Linguistik Aktuell* 13, pp. 219-248.
- Grimshaw, J. (1991). Extended Projection. Ms, Brandeis University.
- Holton, D., P. Mackridge & I. Philippaki-Warbuton (1997). *Greek: A comprehensive grammar of them modern language*. Routledge, London.
- Jaeggli, O. (1984). Subject extraction and the null subject parameter. *NELS* 14.
- Neeleman, A. (1997). PP-complements. *Natural Language and Linguistic Theory* 15, pp. 89-137.
- Neeleman, A. & F. Weerman (1999). *Flexible syntax. A theory of case and arguments*. Kluwer, Dordrecht.
- Philippaki-Warbuton, I. (1987). Empty categories and the pro-drop parameter in Greek. *Journal of Linguistics* 23, pp. 289-318.
- Reinhart, T. (1983). *Anaphora and semantic interpretation*. Croom Helm Linguistics Series.
- Rizzi, L. (1990). *Relativized minimality*. MIT Press, Cambridge, MA.
- Rizzi, L. (1986). Null objects in Italian and the theory of pro. *Linguistic Inquiry* 17, pp. 501-557.
- Sportiche, D. (1992/1998). Clitic constructions. Ms, UCLA. / *Partitions and atoms of the clause structure. Subjects, case and clitics*. Routledge Leading Linguists, pp. 244-307.
- Torrego, E. (1998). *The dependencies of objects*. MIT Press, Cambridge, MA.
- Tsimpli, I.-M. (1995). Focusing in modern Greek. Kiss E. K. (ed.), *Discourse configurational languages*. Oxford University Press, New York, pp. 176-206.
- Tsimpli, I.-M. (1999). Null operators, clitics and identification: a comparison between Greek and English. Alexiadou, A., J. Horrocks, & M. Stavrou (eds.), *Studies in Greek syntax*. Kluwer, Dordrecht, pp. 241-262.
- Uriagereka, J. (1995). Aspects of the syntax of clitic placement in western romance. *Linguistic Inquiry* 26, pp. 79-123.