

# DIVISION OF PSYCHOLOGY AND LANGUAGE SCIENCES DEPARTMENT OF LINGUISTICS

## Unagreement is an Illusion

# The structure of the extended nominal projection and apparent agreement mismatches

in partial fulfillment of the requirements for the degree of

#### MRES IN LINGUISTICS

originally submitted September 14, 2012

November 27, 2012

— draft with minor revisions —

Georg Höhn supervisor:

georg.hoehn.11@ucl.ac.uk

Dr. Andrew Nevins

This thesis provides the first systematic investigation of unagreement in Modern Greek, a phenomenon observed in various languages, involving an apparently third person plural subject DP and first or second person plural subject agreement on the verb. I argue that unagreement does not involve an agreement mismatch, but null spell-out of a dedicated person head in the extended nominal projection. Nominal structures that encode person features on the same functional head as definiteness prevent unagreement. This is argued to account for the cross-linguistic distribution of unagreement, at least in Indo-European.

**keywords:** unagreement, pronominal determiners, agreement mismatch, Modern Greek

## Contents

A	cknow	ledgements	vi 1 eement 3								
Transliteration of Modern Greek											
Glosses and Abbreviations											
0	Intr	oduction	1								
1	The	phenomenon of unagreement	3								
	1.1	Overview of Spanish unagreement data	3								
		1.1.1 Definite plural noun phrases	3								
		1.1.2 Quantifiers	4								
		1.1.3 Focus-sensitive particles	5								
		1.1.4 Object unagreement	5								
	1.2	Unagreement in Modern Greek	6								
		1.2.1 Definite plural noun phrases	6								
		1.2.2 Singular unagreement	7								
		1.2.3 Quantifiers	8								
		1.2.4 Focus-sensitive particles	12								
		1.2.5 Object unagreement	13								
	1.3	Crosslinguistic observations	14								
2	The	oretical approaches to unagreement	18								
	2.1	The problem of unagreement	18								
	2.2	No identity of features	19								
	2.3	$\mathrm{DP}_{\mathrm{subj}}$ is not the agreement controller	23								
		2.3.1 Dislocation	24								
		2.3.2 Apposition	25								
		2.3.3 Agreement marker as subject	27								
	2.4	Hidden features	29								
3	Hide	len features extended	32								
	3.1	Pronouns and pronominal determiners	32								
	3.2	A cross-linguistic correlation	33								
	3.3	Nominal structure and unagreement	36								
	3.4	The semantics of unagreement	40								

4	Acc	ounting for further data	45
		Object unagreement	45
		Association with focus-sensitive particles	
	4.3	Quantifiers	47
	4.4	Number asymmetry	50
5	5 Conclusion		51
Re	ferer	nces	54

## Acknowledgements

First of all, I want to express my gratitude to my consultants for the investigated languages without whose help this thesis would have remained without foundation: Katerina Danae Kandylaki, Eleni Malideli, Sapfo Sitaridou, Maria Koliopoulou, Dimitris Michelioudakis, Konstantinos Tsaltas, Christos Zarkogiannis, Stavros Skopeteas, Konstantinos Papadopoulos, Giorgos Rodopoulos, Sotiris Voutsas and Giannis Fotiou for Greek, Mikel Babiano Lopez de Sabando for Basque, Nikoleta Mukareva for Bulgarian, Gianina Iordachioaia for Romanian, João Costa for European Portuguese, Cinzia Campanini for Italian, Hagit Borer for Hebrew, Rusudan Asatiani (and George Hewitt) for Georgian, Marko Perić for BCS, and Javier Fernández Sánchez for Catalan and, in particular, for his detailed Spanish judgements. Furthermore, thanks to the following persons that provided me with data that I could not include in the final version of the thesis: Dalina Kallulli for Albanian, O. Oğul Köseoğlu and Tamer Akan for Turkish, Ágoston Nagy for Hungarian and George Hewitt for Abkhaz.

I am obliged to Melita Stavrou for sending me her highly relevant articles, to Phoevos Panagiotidis for giving me access to his thesis, to João Costa for a draft of his as yet unpublished work and to Simona Mancini for providing me with Mancini et al. (2012). At different stages of my research I have received valuable input from Anna Roussou, Stavros Skopeteas, Phoevos Panagiotidis, João Costa, Mirjam Zumstein, Christopher Lucas, Hagit Borer, Winnie Lechner, George Hewitt, Ezekiel Panitz, Garrett Giffin and Philipp Weisser, which is hereby gladly acknowledged.

Thanks to Klaus Abels for LaTeX support. Concha Hoefler has been a big help by proof-reading and commenting on the first draft of the thesis.

Special thanks are due to Dimitris Michelioudakis for encouragement and lengthy discussions of empirical and theoretical aspects of the topic (though he may not necessarily share all the conclusions I have reached). I am very thankful to Ad Neeleman for suggesting the research topic and to Andrew Nevins for supervising the thesis. Naturally, I take responsibility for all remaining mistakes, misunderstandings and misconceptions.

Last but not least, I thank my parents for enabling me to study linguistics and everyone who helped making the past few months as overally enjoyable as they were.

## **Transliteration of Modern Greek**

I follow the transliteration guidelines of the UNGEGN Working Group on Romanization Systems in version 2.2 from January 2003 as reported on http://www.eki.ee/wgrs/rom1\_el.htm [accessed 13/09/2012].

## **Glosses and Abbreviations**

Small caps indicate abbreviations used in glosses.

1	first person	GEN	genitive
2	second person	INF	infinitive
3	third person	M	masculine
ABS	absolutive	NEG	negation
ACC	accusative	N	neuter
AOR	aorist	NOM	nominative
APC	adnominal pronoun construction	PL	plural
AUX	auxiliary	PronD	pronominal determiner
$\operatorname{CL}$	clitic	PROX	proximal plural
CV	causative	PV	preverb
DAT	dative	PRT	particle
DET	determiner	REL	relative pronoun
ERG	ergative	SBJ	subjunctive marker
EXPL	expletive	$_{ m SG}$	singular
F	feminine	SUBJ	subject marker
FUT	future		

## **0** Introduction

The term agreement implies, in fact entails, some form of harmony between the properties of the objects that partake in the agreement relation. A prominent example for the application of the notion of agreement in linguistic theory is subject-verb agreement. In languages that morphologically mark it, the  $\varphi$ -features (person, number, gender) expressed on the verb need to be compatible with those of the subject of the clause. This means that while not necessarily all of the categories person, number and gender are expressed on both the subject and the verb, it they may not bear contradictory markings in the same category. This is an idealization, of course, since languages occasionaly seem to to violate this requirement (cf. Corbett 2006:ch. 5).

One such apparent agreement mismatch has been described for Spanish under the labels "unagreement" and "subset control" (Bosque & Moreno 1984; Hurtado 1985; Taraldsen 1995; Torrego 1996; Rivero 2008; Rodrigues 2008; Ackema & Neeleman in prep.). Descriptively, unagreement configurations in Spanish involve first or second person plural agreement on the verb, while the apparent subject is a definite plural noun phrase. Since full DPs typically control third person agreement and have the interpretation that no participant of the conversation is partaking in the described event, a common assumption is that *las mujeres* in (1) is actually third person.

(1) Las mujeres denunciamos las injusticias.
the women denounced.1PL the injustices
'We women denounced the injustices.' (after Hurtado 1985:187, (1))<sup>1</sup>

This poses a problem under the common assumption that  $\varphi$ -features on the verb, represented by agreement morphology, are an uninterpretable reflex of the interpretable  $\varphi$ -features on the subject noun phrase. If *las mujeres* in the Spanish example is actually the subject and marked as third person plural, the origin of the first person plural agreement on the verb remains mysterious.

While most theoretical treatments of unagreement have focused on Spanish, the phenomenon is by no means exclusive to that language. Modern Greek also allows this type of agreement mismatch, as exemplified in (2). In section 1.3 I will give a brief survey of some further languages that show unagreement.

(2) Oi odigoi de tha pioume.

DET.NOM.PL drivers NEG FUT drink.1PL

'We drivers won't drink.'

<sup>&</sup>lt;sup>1</sup> Glossing added and translation adapted.

This thesis has three main goals based on the working hypothesis that there is a cross-linguistically comparable phenomenon of unagreement. The first is to give a rather detailed description of unagreement in Modern Greek, independent from specific theoretical assumptions, and to point out differences between Greek and Spanish in this respect. The second goal is to give a unified account of unagreement that begins to explain these differences. Finally, I want to identify the relevant factor underlying the unagreement phenomenon and explains its cross-linguistic distribution.

There are various approaches to the question of why apparent agreement mismatches are allowed in unagreement configurations. One is to give up the idea that subject-verb agreement is an asymmetric operation that relates interpretable  $\varphi$ -features on the subject to uninterpretable ones on the verb (or a functional head in the verbal projection) in order to provide them with a value for purely formal reasons. Instead, it might be a symmetric operation between the  $\varphi$ -feature sets on the subject and those on the verb, each of them interpretable, simply ensuring that the independent sets are compatible with each other, rather than *copying* values. Alternatively, it has been proposed that *las mujeres* and *oi odigoi* in the examples are not the subject, but stand in some sort of syntactic and interpretational relation to the actual, silent agreement controler (e.g. *pro*). Finally, the overt DPs might be subjects after all and actually bear first person instead of third person features, straightforwardly explaining the agreement facts.

I argue that the last view, involving "hidden features" (Ackema & Neeleman in prep.), is essentially correct. Unagreement does not result from lack of agreement between the subject and the verb. Instead, what causes the impression of unagreement is zero spell-out of the head in the extended nominal projection that bears person features. The cross-linguistic split between null subject languages that do or do not allow unagreement results from a structural difference in the extended nominal projection: in non-unagreement languages person features are hosted on the same head that also encodes definiteness, while unagreement languages encode person on a separate head.

The discussion is structured as follows. In the next section I am going to present an overview of the unagreement configurations that have been described for Spanish and continue with a more detailed description of unagreement configurations in Modern Greek. At the end of this first section, I will provide a brief cross-linguistic survey of some further languages that show unagreement. Section 2 contains a summary of the three general types of theoretical accounts of unagreement that have been entertained in the literature. Section 3 presents the details of my own proposal. In section 4, I discuss how specific aspects of unagreement are dealt with in the presented framework. Section 5 summarizes the results of the discussion as well as some open questions.

## 1 The phenomenon of unagreement

This section presents unagreement data from different languages. The first part on Spanish is mainly a summary of data noted in the literature (Bosque & Moreno 1984; Hurtado 1985; Taraldsen 1995; Torrego 1996, 1998; Rivero 2008; Rodrigues 2008; Ackema & Neeleman in prep.). Subsection 1.2 is, to my knowledge, the first survey of unagreement in Modern Greek and represents the central empirical contribution of this thesis. At the end of this section, the cross-linguistic distribution of the phenomenon will be discussed for some further languages.

In this section, I will try to keep to just the minimal set of standard assumptions necessary to achieve a useful description of the phenomena. The idea is for for this collection of data to stand on its own, regardless of too specific theoretical assumptions.

## 1.1 Overview of Spanish unagreement data

#### 1.1.1 Definite plural noun phrases

Spanish has unagreement between a definite plural lexical subject and first or second person plural agreement on the verb in preverbal position, cf. (3), as well as postverbally as in (4) and (5).

- (3) Los lingüistas me habéis estado molestando con vuestras estúpidas the linguists 1sg.acc have.2pl been molesting with your stupid preguntas.

  questions
  'You linguists have been annoying me with your stupid questions.'
- (4) Ayer llegamos los españoles.
  yesterday arrived.1PL the spaniards
  'Yesterday we Spaniards arrived.' (Rivero 2008:229, (30b))
- (5) Firmamos los lingüistas la carta. signed.1PL the linguists the letter 'The linguists among us signed the letter.'<sup>2</sup> (Torrego 1996:114, (6a))

DPs involving a demonstrative cannot enter into unagreement configurations in spite of their definiteness (6).

<sup>&</sup>lt;sup>2</sup> Gloss modified. The translation is Torrego's, cf. section 3.4 for discussion.

(6) \*Estos lingüistas me habéis estado molestando con vuestras estúpidas these linguists 1sg.acc have.2pl been molesting with your stupid preguntas questions

Compare the grammatical plural examples from Ackema & Neeleman (in prep.:15, (27)) given in (7) to their ungrammatical singular counterparts in (8).

- (7) a. ¡Qué desgraciadas somos las mujeres! how unfortunate are.1PL the women 'How unfortunate we women are!'
  - b. ¡Qué desgraciadas sois las mujeres! how unfortunate are.2PL the women 'How unfortunate you women are!'
- (8) a. \*¡Qué desgraciada soy la mujer! how unfortunate am.1sG the woman
  - b. \*¡Qué desgraciada eres la mujer! how unfortunate are.2sg the woman

The same holds for emotive expressions like *el idiota* or *el imbécil* 'the idiot', which we will later see to enter into unagreement relations in Greek. While they are acceptable as the third person subject of a sentence, they cannot appear in an unagreement configuration alongside first or second singular marking on a verb, cf. (9).

- (9) a. El imbécil se olvidó de comprar los tomates. the idiot SE forgot of buy.INF the tomatoes 'The idiot forgot to buy the tomatoes.'
  - b. \*El imbécil no compré/compraste los tomates! the idiot NEG bought.1SG/2SG the tomatoes

#### 1.1.2 Quantifiers

Unagreement occurs with quantifiers as well, as exemplified by the following examples from Ackema & Neeleman (in prep.:26, (52bd)).<sup>3</sup>

- (10) a. Algunos pacientes hemos/habéis llamado a la doctora. some patients have.1PL/2PL called the doctor 'Some of us/you patients have called the doctor.'
  - b. Todos niños creemos/creéis en los Reyes Magos. all kids believe.1PL/2PL in the Reyes Magos 'All of us/you kids believe in the Magi.'

<sup>&</sup>lt;sup>3</sup> Glosses modified.

With certain quantifiers, unagreement configurations can show a mismatch in number in addition to the characteristic person mismatch. This is exemplified in example (11) for *ninguno* 'no one' and in example (12) for *cada* 'each' and *la mayoría* 'the majority'.

- (11) Rivero (2008:230, (31bc))
  - a. Ninguno hablamos varios idiomas.
     no one.SG speak.1PL several languages
     'No one of us speaks several languages.'
  - b. A Ana no le gustamos ninguno.
    Ann.DAT NEG 3DAT like.1PL no one.SG
    'Ann does not like any of us.'
- (12) Ackema & Neeleman (in prep.:25, (48))
  - a. Cada alumno hablamos differente. each student.SG talk.1PL differently 'Each of us students talks differently.'4
  - b. La mayoría podemos/podéis conducir con una mano. the majority can.1PL/2PL drive with one hand 'Most of us/you can drive with one hand.'

Quantificational unagreement is possible with weak quantifiers such as *algunos* 'some' and *ninguno* 'no one' as well as with strong quantifiers like *cada* 'each'.

#### 1.1.3 Focus-sensitive particles

A piece of data that to my knowledge has not yet received theoretical attention is the availability of focus-sensitive particles like *solo* 'only' in the context of unagreement.

(13) Al final hicimos solo los alumnos un pastel. to.the end made.1PL only the students a cake 'In the end, only us students made a cake.'

#### 1.1.4 Object unagreement

Indirect objects in Spanish partake in clitic doubling (see Anagnostopoulou 2006 for an overview), that is, the lexical indirect object a Mafalda can be doubled by the dative clitic le in (14).

(14) Miguelito (le) regaló un caramelo a Mafalda.

Miguelito 3DAT gave.3SG a candy to Mafalda

'Miguelito gave Mafalda a piece of candy.' (Anagnostopoulou 2006:520, (2))

<sup>&</sup>lt;sup>4</sup> Gloss adapted.

This configuration gives rise to a phenomenon parallel to (subject) unagreement. In (15) the first person plural dative clitic *nos* doubles the DP *a los familiares* 'to the relatives'. The interpretation entails that the speaker is one of the relatives.

(15) La policia nos dio a los familiares las malas noticias. the police 1PL gave to the PL relatives the PL bad PL news PL 'The police gave us relatives the bad news.'

Clitic doubling of direct objects is generally allowed only in some (Southern American) variants of Spanish. Interestingly, however, direct object unagreement turns out to be licit in all dialects, as shown in (16), paralleled by the sentence in (17) with the overt pronoun *nosotras* 'we'.

- (16) Nos denunciaron a las mujeres.

  1PL denounced.3PL to the.PL women

  'They denounced us women.' (Hurtado 1985:202, (20a))
- (17) Nos denunciaron a nosotras las mujeres.

  1PL denounced.3PL to us the.PL women

  'They denounced us women.'

### 1.2 Unagreement in Modern Greek

#### 1.2.1 Definite plural noun phrases

Greek unagreement patterns may consist of definite plural DPs marked for nominative case and first or second plural marking on the verb, cf. (18) and (19). As in Spanish, the unagreeing DP can also appear postverbally.

- (18) (Oi odigoi) de tha pioume (oi odigoi).

  DET.NOM.PL drivers NEG FUT drink.1PL

  'We drivers won't drink.'
- (19) (Oi chimikoi) ftiaxate (oi chimikoi) ena oraio keik.

  DET.NOM.PL chemists made.2PL a good cake

  'You chemists made a good cake.'5

DPs involving demonstratives, however, while allowed with regular third person plural agreement (20), are disallowed in unagreement configurations, cf. (21).

<sup>&</sup>lt;sup>5</sup> In the interest of readability, I will mark case and number only on the article in the Greek examples. I will not mark gender, except where it is central to the argument.

- (20) (Aftoi oi odigoi) de tha pioune (aftoi...). these DET.NOM.PL drivers NEG FUT drink.3PL 'These drivers won't drink'.'
- (21) \*(Aftoi oi odigoi) de tha pioume/pieite (aftoi...). these DET.NOM.PL drivers NEG FUT drink.1PL/2PL

#### 1.2.2 Singular unagreement

At first sight, there is no unagreement with singular DPs in Greek, just as observed in (8) for Spanish. Upon closer inspection, though, there seem to be specific cases of singular unagreement in Greek after all. They mainly involve emotive expressions like malakas 'jerk, idiot' or vlakas 'stupid, idiot' as in (22c) and (23b).

- (22) a. We wanted to meet early in the morning for our day trip...
  - b. \*...alla o odigos argisa. but DET.NOM.SG driver was.late.1SG intended: 'but I, the driver, was late.'
  - c. ...ma o malakas argisa.
    but DET.NOM.SG idiot was.late.1SG
    'but stupidly I [=\*I idiot] was late.'
- (23) a. I went to the market to buy some vegetables...
  - b. ...kai xechasa o vlakas tis domates. and forgot.1sg Det.nom.sg idiot Det.acc.pl tomatoes 'and I stupidly [=\*I idiot] forgot the tomatoes.'

While "regular" common nouns are usually excluded from singular unagreement, there seems to be a restricted possibility for them to appear in this configuration if they can be related in specific ways with the context.

- (24) a. I went to the bookstore...
  - b. ...kai pali xechastika o glossologos sto orofo me ta and again got.lost.1sg Det.nom.sg linguist in.the floor with the lexika.

dictionaries

'... and I, linguist that I am, lost myself again on the floor with the dictionaries.'  $^{6}$ 

A note of warning regarding the acceptability of second person unagreement is in order. For many speakers, there seems to be interference from the vocative, which is used frequently in Modern Greek, particularly in contexts involving emotives like

<sup>&</sup>lt;sup>6</sup> Example provided by Dimitris Michelioudakis.

vlakas 'stupid, idiot'. The already rather restricted singular unagreement seems to lose the competition against the common vocative construction for these speakers. This is illustrated in (25). The particle re indicates familiarity (Karachaliou 2010; Tsoulas & Alexiadou 2005 for a wider survey).

- (25) a. ?\*O vlakas den pires tis domates.

  DET.NOMSG idiot NEG took.2SG DET.ACC.PL tomatoes intended: 'You idiot didn't take the tomatoes!'
  - b. Re vlaka, den pires tis domates!

    PRT idiot.VOC NEG took.2SG DET.ACC.PL tomatoes
    'You idiot, you didn't take the tomatoes!'

Nonetheless, in carefully prepared contexts speakers may accept second person singular unagreement as well. In (26) speaker A is infatuated with C and talks to B about how he is always missing chances to talk to her. The utterance of speaker B should be understood as a continuation of A's incomplete sentence. There is no intonational break after *efyges*. Section 4.4 contains some further thoughts on singular unagreement.

- (26) a. A: ...Just when I had to leave the house to attend the talk of Prof. L. Inguist, she came in. Just like last time...!
  - b. B: Ti? Pali efyges o malakas? what again left.2sg Det.nom.sg idiot 'What? You idiot left again?'

#### 1.2.3 Quantifiers

Most Greek quantifiers can enter into unagreement relations, rather similar to what was observed for Spanish. The quantificational expressions in (27) involve plural morphology – on the restricting noun phrase, the quantifier itself or on both – and control plural agreement on the verb in third person readings. The corresponding forms in (28) show that these quantifiers are compatible with unagreement patterns (exemplifying only the first person plural).

- (27) a. Oloi oi mathites tha pane/\*paei ekdromi. all.NOM.PL DET.NOM.PL pupils FUT go.3PL/3SG trip 'All pupils will go on a trip.'
  - b. Oi perissoteroi mathites tha pane/\*paei ekdromi.

    DET.NOM.PL most pupils FUT go.3PL/3SG trip
    'Most pupils will go on a trip.'

<sup>&</sup>lt;sup>7</sup> Thanks again to Dimitris Michelioudakis for this example.

- c. Polloi mathites tha pane/\*paei ekdromi. many.NOM.PL pupils FUT go.3PL/3SG trip 'Many pupils will go on a trip.'
- d. Merikoi mathites tha pane/\*paei ekdromi. some.NOM.PL pupils FUT go.3PL/3SG trip 'Some pupils will go on a trip.'
- e. Ligoi mathites tha pane/\*paei ekdromi. few.NOM.PL pupils FUT go.3PL/3SG trip 'Few pupils will go on a trip.'
- f. Pente mathites tha pane/\*paei ekdromi. five pupils FUT go.3PL/3SG trip 'Five pupils will go on a trip.'
- g. Pano apo pente mathites tha pane/\*paei ekdromi. above from five pupils FUT go.3PL/3SG trip 'More than five pupils will go on a trip.'
- h. Oi pente mathites tha pane/\*paei ekdromi.

  DET.NOM.PL five pupils FUT go.3PL/3SG trip

  'The five pupils will go on a trip.'
- (28) a. Oloi oi mathites tha pame ekdromi. all.NOM.PL DET.NOM.PL pupils FUT go.1PL trip 'All of us pupils will go on a trip.'
  - b. Oloi oi mathites tha pame ekdromi. [all (the) students]
    Oi perissoteroi mathites ha pame ekdromi. [most students]
    Polloi mathites tha pame ekdromi. [many students]
    Merikoi mathites tha pame ekdromi. [some students]
    Ligoi mathites tha pame ekdromi. [(a) few students]
    Pano apo 5 mathites tha pame ekdromi. [more than 5 students]
    5 mathites tha pame ekdromi. [5 students]

tha pame ekdromi. [the 5 students]

In contrast, the negative quantifiers *kaneis* and *kanenas* 'no one, nobody' regularly control singular agreement and have a singular restrictor. An example is given in

(29) Kanenas mathitis de tha paei/\*pane ekdromi. nobody pupil NEG FUT go.3SG/3PL trip 'No pupil will go on a trip.'

Oi 5 mathites

(29).

Crucially, and in contrast to their Spanish counterpart ninguno, these negative quantifiers cannot participate in unagreement relations. This is shown in (30). The example containing the first plural pronoun mas as a restrictor is slightly more acceptable to

some speakers. Since those sentences are nevertheless rated as unacceptable, this is probably a performance effect.<sup>8</sup>

(30) a. ?\*Kaneis apo mas de tha pame ekdromi. Nobody of us NEG FUT go.1PL trip

?\*Kanenas apo mas

de tha pame ekdromi.

The distributive universal quantifier *kathe* 'each', finally, follows the (in this case optional) article. Like the negative quantifiers it has a singular restrictor and controls singular agreement in the third person, cf. (31).

(31) a. (O) kathenas tha paei/\*pane ekdromi.

DET.NOM.SG each.one FUT go.3SG/3PL trip
'Each one is going to go on a trip.'

b. (O) kathe mathitis tha paei/\*pane ekdromi.

DET.NOM.SG each pupil FUT go.3SG/3PL trip
'Each pupil is going to go on a trip.'

The contrast in (32) shows that Greek *kathe* is more restricted than its Spanish counterpart cada with respect to unagreement, irrespective of the presence of the article.

(32) a. Cada alumno hablamos differente. each student.SG talk.1PL differently.' 'Each of us students talks differently.'

[Spanish]

[no one from us]

b. \*(O) kathe mathitis milame diaforetika.

DET.NOM.SG each pupil speak.1PL differently

In order for *kathe* to allow unagreement, the distributivity of the phrase needs to be expressed overtly. Hence, the examples in (33) and (34) are grammatical only in the presence of some phrase "underlining" their distributivity. Furthermore, for the unagreement cases the definite determiner with the quantifier *kathe* is dispreferred and there is a preference for the quantified phrase to be located postverbally (Dimitris Michelioudakis p.c.).

<sup>&</sup>lt;sup>8</sup> Possibly comparable to attraction effects in English \*The key to the cabinets are on the table investigated by Bock & Miller (1991) and Wagers et al. (2008).

- (33) Milame (?o) kathe mathitis \*(diaforetiki glossa).

  speak.1PL DET.NOM.SG each pupil different.NOM.SG language
  'Each of us students speaks a different language.'
- (34) The pame ekdromi (?o) kathe mathitis \*(se alli chora). FUT go.1PL trip to other.NOM.SG country DET.NOM.SG each pupil 'Each of us students will go on a trip to a different country.'

For present purposes, I assume that Greek *kathe* does not regularly allow unagreement. The exceptional availability of unagreement in "distributive-enough" contexts may be a result of the semantics of these readings. I suspect that the observed word order preference also plays a role here. Dimitris Michelioudakis (p.c.) notes that the Greek distributive quantifier behaves exceptional in other respects as well. In Greek, either PPs like *ston kathigiti* 'to the professor' or the genitive *tou kathigiti* 'of the professor' can be used to express an indirect object. Clitic doubling is usually only allowed with a genitive indirect object, but if the PP contains the quantifier *kathe* paired with an indefinite distributee, it can exceptionally be doubled by a genitive clitic too, cf. (35) adapted from Michelioudakis (2011:110f., (43a)).

(35) Tous anathesa ena arthro ston kathena.
CL.GEN.PL assigned.1SG a.ACC.SG article to.DET.ACC.SG each.ACC.SG
'I assigned them an article each.'

The variation in the availability of unagreement with different quantifiers is probably not related to the distinction between weak and strong quantifiers. Kanenas and  $kaneis^9$  qualify as weak quantifiers, as they occur in existential constructions like (36).

(36) Den echei kanena (mathiti) ston kypo.

NEG has.3SG no.ACC.SG pupil in.the garden

'There is no pupil/no one in the garden.'

Other quantifiers that allow unagreement, like *ligoi* 'few' or *polloi* 'many', qualify as weak quantifiers as well though, see (37). It therefore seems improbable that the strong/weak distinction is related to the lack of unagreement effects with negative quantifiers in Greek.

(37) Echei ligous/ pollous mathites ston kypo. has.3sG few.ACC.PL many.ACC.PL pupils in the garden 'There are few/many pupils in the garden.'

 $<sup>^9</sup>$  The existential construction in Greek involves accusative case and the accusative forms of kanenas and kaneis are homophonous.

The other quantifier that is at least restricted in the availability of unagreement, universal *kathe*, is clearly strong:

(38) \*Echei kathe mathiti ston kypo. has.3sG each pupil in.the garden

So while weak vs. strong is no common denominator of the two groups of quantifiers disallowing unagreement, the way they pattern with respect to "regular" third person agreement clearly is. Both control singular agreement and have a singular restrictor as shown in (29) and (31) respectively, while the remaining quantifiers, which allow unagreement, appear with plural restrictors and control third person plural agreement. The crucial difference from Spanish seems to lie in the way that number mismatches are handled with these quantifiers (sec. 4.3).

#### 1.2.4 Focus-sensitive particles

Just like in Spanish, unagreeing DPs in Greek can be associated with focus sensitive particles. While they may contain a full pronoun corresponding to the verbal  $\varphi$ -marking, this is not necessary. I give examples for the focus particles *akoma kai* 'even', *mono* 'only' and *kai* 'also' in (39)-(41).

- (39) Akousame akoma kai (emeis) oi eparchiotes afta heard.1PL even we DET.NOM.PL province.people these ta nea.

  DET.ACC.PL news 'Even we people from the provinces have heard these news.'
- (40) Anarotiomaste kau (emeis) oi glossologoi, pos tha lythei wonder.1PL also we DET.NOM.PL linguists how FUT be.solved.3SG afto to provlima.
  this.NOM.SG DET problem
  'We linguists also wonder how this problem is going to be solved.'
- (41) Mono (emeis) oi Thessalonikioi echoume mia toso oraia thea. only we DET.NOM.PL Thessalonikians have.1PL a so good view 'Only us Thessalonikians have such a great view.'

It is important to notice that, for most speakers, the focused constituents form a natural part of the intonational phrase. There is no need for special intonational around the focused constituents which could indicative an appositional structure.

#### 1.2.5 Object unagreement

While clitic doubling of direct objects is restricted to certain varieties of Spanish, Greek generally allows clitic doubling of direct and indirect objects (e.g. Anagnostopoulou 2006).

Example (42) has a second person plural accusative clitic coreferring with the direct object DP, yielding the apparent person mismatch characteristic of unagreement. The word order is VOS with the subject bearing main stress in order to ensure that we are dealing with true clitic doubling and not with a right-dislocated object (Anagnostopoulou 2006:546f.). Notice that it is possible for the direct object to contain an overt second plural pronoun in addition to the clitic as in (43). This version is more prone to displaying intonational breaks before and after the esas tous protoeteis constituent, but they are by no means obligatory.

- (42) Sas eide tous protoeteis enas fylakas na ta 2PL.ACC saw.3SG DET.ACC.PL first.graders a.NOM.SG guard SBJ 3PL.ACC.N kanete mantara sto grafeio tou diefthydi.

  make.2PL mess in.the bureau DET.GEN.SG director

  'A guard saw you first graders making a mess in the director's bureau.'
- (43)Sas eide protoeteis fylakas esas tous enas 2PL.ACC saw.3SG 2PL.ACC DET.ACC.PL first.graders a.NOM.SG guardian SBJ mantara sto grafeio tou diefthydi. kanete 3PL.ACC.N make.2PL mess in.the bureau DET.GEN.SG director 'A guardian saw (you,) you first graders, making a mess in the director's bureau.'

Indirect object doubling show the same behaviour. Example (44) shows unagreement between the first person plural genitive clitic *mas* and the genitive object *ton foititon*. Just as with direct object doubling, the doubled indirect object may – but need not – contain a full pronoun in addition to the doubling clitic.

O kathigitis mas edose (emas) ton kainourgion DET.NOMPL professor 1PL.GEN gave.3SG 1PL.GEN DET.GEN.PL new foititon merikes plirofories gia to mathima. students some information about DET.ACC.SG course 'The professor gave us new students some information about the course.'

### 1.3 Crosslinguistic observations

In conclusion of the data section, I will discuss some further languages displaying unagreement. Within the Romance languages, Catalan resembles Spanish with respect to unagreement. As shown in (45), the noun phrase may "unagree" with the first person plural auxiliary. The corresponding pronoun *nosaltres* is optional.

(45) (Nosaltres) els estudiants vam fer un pastís.

we the students AUX.1PL make a cake

'We students baked a cake.' [Catalan]

Nevertheless, unagreement is not a common feature of Romance, nor even of null subject Romance languages. Apart from non-pro-drop French, there are several Romance pro-drop languages that do not allow unagreement either (cf. also Hurtado 1985), for example Italian, European Portuguese (further EP) and Romanian, cf. (46)-(48).

(46) Noi/\*gli studenti abbiamo fatto una torta. we/the students have.1PL made a cake 'We students baked a cake.'

[Italian]

(47) Nós/\*os portugueses bebemos bom café. we/the portuguese drink.1PL good coffee 'We portuguese drink good coffee.'

[EP]

- (48) a. \*Am gatit (noi) studenti-i o galeata de sarmale.

  have.1PL cooked we students-the a bucket of dumplings
  - b. Am gatit noi, studenti-i, o galatea de sarmale.
    have.1PL cooked we students-the a bucket of dumplings
    'We, the students, have cooked a bucket of dumplings.' [Romanian]

In Italian and EP, a full pronoun needs to be present alongside the DP – a pronominal determiner (Postal 1969). In contrast to their Spanish, Catalan and Greek counterparts, these adnominal pronoun constructions (APCs) do not contain a regular determiner. Romanian does not allow even this configuration, the only acceptable option seems to be real apposition of the DP to the overt pronoun, cf. (48b). These observations will be crucial to my proposal in section 3.

Another language with unagreement is Basque, geographically close but genetically unrelated to Spanish. The absolutive DP neska grezarriak in (49) co-occurs with a second person plural marking on the auxiliary. The personal pronoun displayed in brackets is not necessary.

(49) (Zu-ek) neska greziarr-ak polit-ak zarete. you-ABS.PL girl Greek-DET.PL.ABS beautiful-DET.PL.ABS AUX.2PL.ABS 'You Greek girls are beautiful.' [Basque]

For first plural unagreement in (50), a special form of the plural is used, the so called proximal plural (-ok). As before, the personal pronoun is optional.

(50) (Gu-k) ikasle-ok lan handi-a dugu.
we-ERG.PL student-PROX.ERG work big-DET.ABS AUX.3SG.ABS.1PL.ERG
'We students have a lot of work.' [Basque]

The proximal plural in Basque is mentioned in passing by Torrego (1996:114, fn. 8) in her discussion of Spanish unagreement and it forms the basis of Mancini et al.'s (2012) ERP study on agreement mismatches in Basque. Apart from that, the phenomenon has received little attention in the literature to my knowledge. Hualde & Ortiz de Urbina (2003:122) and Areta (2009:67) each have a short section on the proximate plural article, where they claim that proximal plural forms like gizon-ok do not only have the proximal reading 'the men here' and the "first plural" reading 'we men', but also a second person plural interpretation 'you men' (cf. also Arregi & Nevins 2012:ch. 2.2.1 who, in a related discussion of Basque clitic doubling, assume a head hosting a [+participant] feature and c-commanding D). This seems at odds with the compatibility of the non-proximal form with second person plural unagreement in (49) as provided by my consultant (a speaker from Gipuzkoa). I will leave this issue to future investigation.

Moving to the Balkans, Bulgarian is an example of a Slavic pro-drop language with unagreement. This is illustrated in (51), which is perfectly fine without the bracketed pronoun.

(51) (Nie) studenti-te izpekoxme keks. we student-DET baked.1PL cake 'We students baked a cake.'

[Bulgarian]

Bulgarian has clitic doubling, and seems to parallel Greek and Spanish in the availability of object unagreement, cf. (52).

(52) Včera vi vidjax studenti-te v ofisa. yesterday 2.PL saw.1SG students-the in office 'Yesterday, I saw you students in the office.'

[Bulgarian]

Notice that, in addition to clitic doubling, Bulgarian has what Hauge (1999:207f.) characterizes as doubled subjects, cf. the example in (53). Definite subjects may be doubled by a personal pronoun, which needs not be adjacent to the noun phrase. Furthermore, he notes that "[i]n writing, the noun phrase may be separated by commas, analogously to the way appositions are indicated in the orthography, but the commas do not represent any pause in the pronounciation of the sentence."

(53) Tja žena mi kazva, če tezi svešči bərzo izgarjat.
3SG.F wife my say.3SG that these candles quickly burn.down.3PL
'My wife, she (sic!) says that these candles burn down quickly.'

Norman (2001) gives a good overview of the phenomenon from a Slavonic perspective, noting previous treatments of Bulgarian by Stojanov (1964:313) and Popov (1988:11). He refers to Piper (1998:28-29) for the availability of a similar construction in Slovenian and its absence in Bosnian/Croatian/Serbian (BCS; see below). Osenova (2003) proposes an HPSG-model for the treatment of different agreement mismatches in Bulgarian. She also mentions unagreement configurations, which qualify as cases of "partly expressed Subject-Verb patterns" in her system.

As alluded before, unagreement is not available in all Balkan languages, or South-Slavic pro-drop languages for that matter. Bosnian/Croatian/Serbian (BCS) is a clear counterexample. Subject agreement on the auxiliary is sufficient to license the lack of an overt subject pronoun (54a). The sentence in (54b) exemplifies the lack of articles in BCS and the different placement of the clitic auxiliary when a lexical subject is present. Example (54c) demonstrates a sentence involving a pronominal determiner structure. Finally, the ungrammaticality of (54d) shows that unagreement does not occur in BCS.

(54) a. Kupili smo kronpire. bought.PL AUX.1PL potatoes.ACC 'We bought potatoes.'

[BCS]

- b. Studenti su kupili kronpire. students AUX.3PL bought.PL potatoes.PL '(The) students bought potatoes.'
- c. Mi studenti smo kupili kronpire. we students AUX.1PL bought.PL potatoes.ACC 'We students bought potatoes.'
- d. \*Studenti smo kupili kronpire. students AUX.1PL bought.PL potatoes.PL

Georgian (Kartvelian) represents a further non-Indo-European language with unagreement. The sentences in (55) represent instances of subject as well as object unagreement (due to Rusudan Asatiani and George Hewitt respectively). Georgian differs from the languages allowing unagreement observed above by its lack of overt articles.

- (55) a. (čven,) monadire-eb-ma irem-i
  we.ERG.PL hunter-PL-ERG deer-NOM
  da-v-i-č'ir-e-t
  PV-SUBJ.1-CV-catch-AOR-SUBJ.1.PL
  'We hunters caught the deer.'
  - b. (tkven čven) utsxoel-eb-s ra-s mo-gv-ts-em-t you.PL us foreigner-PL-DAT what-DAT PV-us-give-THEMATIC-PL 'What will you(pl) give us foreigners?' [Georgian]

Like Georgian, Warlpiri (Pama-Nyungan) lacks articles and allows unagreement as seen in (56) adapted from Lyons (1999:142,144).<sup>10</sup> Interesingly, these examples suggest that singular unagreement is entirely unproblematic in Warlpiri.

- (56) a. Ngarka (ngatju) ka-rna purlami. man I AUX-1SG shout '\*I man am shouting.'
  - b. Ngarka (njuntu) ka-npa purlami. man you-SG AUX-2SG shout '\*You man are shouting.'
  - c. Ngarka (nganimpa) ka-rnalu purlami. man we AUX-1PL shout 'We men are shouting.'

[Warlpiri]

Three tentative cross-linguistic generalizations crystallize out of the observations in this section.

- 1. Pro-drop might be a necessary condition for unagreement, since I am not a aware of any non-null subject language with unagreement. It cannot be a sufficient condition for unagreement as evidenced by the lack of unagreement in Italian, Romanian, EP and BCS.
- 2. Where there is subject unagreement and clitic doubling, there is object unagreement (Greek, Bulgarian, Spanish, Georgian). Conversely, languages that have clitic doubling, but no subject unagreement, disallow it with objects as well, cf. Romanian (cf. also Hurtado 1985).

 $<sup>^{10}</sup>$  He does not use this term, but treats these examples alongside the corresponding Spanish patterns.

3. At least for the Indo-European languages surveyed, there seems to be a correlation between the availability of unagreement and the expression of adnominal pronoun constructions of the we linguists type (in the following APC). In languages that have unagreement, a definite article has to be present alongside the pronoun. I will return to this point in section 3.<sup>11</sup>

## 2 Theoretical approaches to unagreement

## 2.1 The problem of unagreement

Agreement mismatches such as unagreement represent a serious challenge to the widespread view that subject-agreement morphology on the verb is dependent on, or controlled by, properties of the subject, in particular its  $\varphi$ -features. If full DPs are indeed third person, the first or second person agreement in unagreement configurations is entirely unexpected.

On the common assumption that third person is actually a "non-person" (Benveniste 1971), and therefore marked by the the *absence* of features relating to discourse participants (Harley & Ritter 2002; Panagiotidis 2002), verbal  $\varphi$ -features (by assumption located on a T head) in unagreement configurations simply lack a nominal controller, cf. (57a). If, on the other hand, third person corresponds to an actual feature marking, e.g. [-author, -participant] (Nevins 2007, 2011), unagreement configurations involve a contradiction between the  $\varphi$ -features on the subject and T, see (57b).

(57) a. 
$$DP_{subj}\{\varphi: \}...T\{\varphi: [participant]\}$$
 [unspecified 3rd]  
b.  $DP_{subj}\{\varphi: [-auth, -part]\}...T\{\varphi: [+auth, +part]\}$  [specified 3rd]

Either of these configurations is not only problematic for pretheoretical expectations

<sup>&</sup>lt;sup>11</sup> Hebrew seems to present a complication for the second as well as the third generalization. In spite of co-exponence of an adnominal pronoun and the definite article (ia), it seems that subject unagreement is disallowed (ib). Nevertheless, object unagreement seems to be possible (ic). I have no explanation for this at the moment and leave the issue for further research. I thank Hagit Borer (p.c.) for the data.

<sup>(</sup>i) a. Anaxnu ha-studentim afinu uga gdola. we the-students baked.1PL cake big 'We students baked a big cake.'

b. \*Ha-studentim afinu uga gdola. the-students baked.1PL cake big

c. 'ani makira 'otxem ha-politikaim I know.1sg you.PL.ACC the-politicians 'I know you politicians.'

raised by the term agreement, but also for asymmetric theories of agreement usually assumed in the Principles & Parameters framework, e.g. in the *probe-goal* conception of Chomsky (2001, 2004, 2008).

In this view, a head acts as a probe by virtue of having an unvalued feature and enters into an Agree relation with the closest element c-commanded by it with a corresponding valued feature. This value is then transferred onto the probe, e.g. by the Feature-Copying mechanism of Radford (2004:285, (7)), reproduced in (58).

#### (58) **Feature-Copying**

If  $\alpha$  is valued for some feature [F] and  $\beta$  is unvalued for [F] and if  $\beta$  agrees with  $\alpha$ , the feature-value for [F] on  $\alpha$  is copied onto  $\beta$ .

In this view, the  $\varphi$ -features on the subject DP are interpretable, while those on the verb (or rather on T) are uninterpretable and enter the derivation unvalued, making it a probe. Obviously, this conflicts with the configurations in (57a) and (57b), since there the features on T are either absent on the DP or different from the ones found there, implying that no copying of features has taken place. This dilemma can be faced in three ways:

- a) Challenge the asymmetry between verbal and nominal  $\varphi$ -features.
- b) Challenge the notion that what is labelled as DP<sub>subj</sub> is really the subject.
- c) Challenge the claim that there is a  $\varphi$ -feature mismatch between DP<sub>subj</sub> and T.

The first option entails a symmetric view of agreement, allowing the verb to be specified for features the subject DP is not as long as they are not contradictory. As we will see in the next section, this view relies on the analysis sketched in (57a). The gist of b) and c) is to show that unagreement configurations do not involve a feature mismatch after all, so that asymmetric, probe-goal type agreement works out. In the following, I will outline these three approaches in more detail. In section 3, I will argue for a specific implementation of the last option, involving a dedicated functional head Pers in the extended nominal projection as the carrier of (eventually not so) "hidden" person features.

## 2.2 No identity of features

Proponents of this approach assume a real feature mismatch in unagreement. In the words of Lyons (1999:144), in Spanish "the verb's inflection need not agree with the subject" (similarly Norman (2001) for Bulgarian). While this might be more of a

descriptive statement, Osenova (2003) and Ackema & Neeleman (in prep.) propose more explicit treatments of the unagreement problem. They assuming that third person is radically underspecified for person-features, that  $\varphi$ -features are generated on the verb independent from the subject and that agreement is symmetric. I will review Ackema & Neeleman (2012; henceforth A&N), since they focus on unagreement.

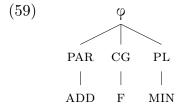
A symmetric view of agreement is typically adopted in lexicalist theories like LFG (Bresnan 2001:ch. 8) and HPSG (Müller 2008:ch. 13). Here, both the verb and the subject may carry independent, interpretable<sup>12</sup> φ-features in cases of pronominal agreement (in the absence of a lexical subject). Grammatical, i.e. non-pronominal agreement with a subject DP is possible

provided that its agreement features are *compatible* with those of the inflection. [...] The agreement inflection thus 'doubles' a syntactic argument, in the sense that the f-structures [functional structures; GH] of the two are identified.

(Bresnan 2001:146)

Consequently, if the subject is specified for first person, the corresponding feature on the verb cannot be specified for second person.

For the representation of  $\varphi$ -features, A&N adopt a simplified and slightly modified version of Harley & Ritter's (2002) feature geometry, cf. (59) corresponding to their (3).<sup>13</sup> In this scheme, dominance implies dependency, so a node can only be present if its mother is present. The reference of the root node  $\varphi$  is radically underspecified, PAR restricts this to a 'participant in the speech act', ADD further restricts this to the addressee. Similarly, PL enforces a plural reference and MIN restricts this to dual. The gender features CG (Common Gender) and FEM will not be relevant here.



Their system yields the analysis in (60) for a three person  $\varphi$ -system with singular, plural and dual.<sup>14</sup>

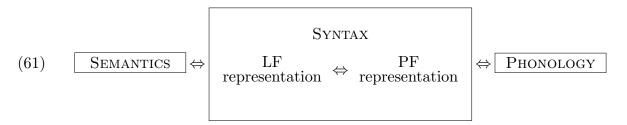
<sup>&</sup>lt;sup>12</sup> To the extent that this notion is meaningful in these frameworks.

<sup>&</sup>lt;sup>13</sup> In Harley & Ritter's version the subtree responsible for gender (CLASS) is a *daughter* of the INDIVID-UATION node and thereby a sister to the nodes responsible for number distinctions.

<sup>&</sup>lt;sup>14</sup> The dual will be irrelevant for the further discussion.

	1st	2nd	3rd
$\operatorname{sg}$	φ	φ	φ
	PAR	PAR	
		ADD	
PL	φ	φ	φ
	PAR PL	PAR PL	PL
		ADD	
DU	φ	φ	φ
	PAR PL	PAR PL	PL
	MIN	ADD MIN	MIN

A&N assume a grammatical architecture of "mappings between semantics and LF, between LF and PF, and between PF and phonology," cf. (61), which are generally non-directional, but may be "asymmetric in that they take one representation as a given and then impose a particular restriction on a second representation" Ackema & Neeleman (in prep.:5).



Since, e.g., the radically underspecified  $\varphi$  of 3rd singular can, *prima facie*, be mapped onto any person-number interpretation, in their (8) and (9) A&N introduce the following restriction on mapping along with the auxiliary definition in (63):

#### (62) Maximal Encoding

A mapping  $R \rightarrow R^*$  is licit only if  $R^*$  is the maximal expression of R at the relevant level of representation.

(63) R\* expresses R maximally if there is no alternative R' that encodes more properties of R or encodes these properties in more locations.

The crucial condition for the licensing of  $\varphi$ -features is stated in (64), their (10).

(64) At LF, each φ-feature F must be licensed in each position L with which it is associated. F is licensed in L iff (i) F is inherent in L's lexical specification, or (ii) F receives a semantic interpretation in L.

Since φ-features can only be inherently specified for nouns, A&N suggest to deal with their (morpho-phonological) presence on verbs in the following way. Borrowing from autosegmental phonology, A&N suggest the operations in (65). φ-feature identification identifies two (compatible) φ-features F associated to DP and V respectively, yielding a configuration with the same feature associated to both nodes. Dissociation severs the link between a feature and its host. Applied to the link between V and F, this leads to the configuration in (66a) with F linked to DP only. There it is licensed according to sentence (ii) of (64). Other results may be produced, e.g. in (66b), but are subsequently ruled out by (64) because F is unlicensed in the resulting configuration.

(65) a.  $\varphi$ -feature identification (Ackema & Neeleman in prep.:8, (11))

$$\begin{bmatrix} _{DP} \; \phi \end{bmatrix} \ldots \begin{bmatrix} _{V} \; \phi \; \end{bmatrix} \rightarrow \begin{bmatrix} _{DP} \; \phi \; \end{bmatrix} \ldots \begin{bmatrix} _{V} \; \phi \; \end{bmatrix}$$

b. **Dissociation** (Ackema & Neeleman in prep.:8, (12))

$$\begin{array}{c} \phi \to \phi \\ \\ F & F \end{array}$$

$$(66) \quad a. \quad F \quad F \quad F$$

$$*[DP \ \varphi] \dots [V \ \varphi] \rightarrow [DP \ \varphi] \dots [V \ \varphi]$$

$$b. \quad F \quad F$$

The crucial operation for unagreement is  $\varphi$ -feature spreading (67). Initially, V but not the subject DP is associated with a feature F, which is not licensed by (64). By hypothesis, F associates to the subject DP at LF, yielding the same output as feature identification above. Subsequently, dissociation of F from V again yields the licit configuration in (66a).

(67) 
$$\varphi$$
-feature spreading (Ackema & Neeleman in prep.:11f., (19)) 
$$[DP \ \varphi] \dots [V \ \varphi] \rightarrow [DP \ \varphi] \dots [V \ \varphi]$$

Maximal Encoding (62) ensures that feature spreading is can only obtain otherwise inavailable interpretations as observed by A&N in (23), given here in (68).

(68) If F\* can be generated on both the controller and the target, giving rise to interpretation I, then generation of F\* on the target only must give rise to an interpretation distinct from I. If such an interpretation is not available, the structure is ruled out as semantically incoherent.

This also accounts for the interpretation of unagreement configurations, since the verbal  $\varphi$ -features can only be licensed by semantic interpretation, i.e. sentence (ii) of (64). Finally, by assumption, feature spreading takes place at LF, so the feature F is not present on the controller DP at PF. Therefore, the DP is expected not to show internal agreement for F.

To sum up, this approach analyses unagreement as in (57a). A third-person controller DP is not specified for person, while the non-third-person marking on the verb corresponds to specific person features. The price to pay for this analysis is the abandonment of asymmetric agreement. Instead of copying nominal to verbal  $\varphi$  features, symmetric agreement only ensures their compatibility. Unagreement is based on the spreading of  $\varphi$ -features from the verb to the subject.

## 2.3 DP<sub>subj</sub> is not the agreement controller

An alternative approach claims that the overt DP is not the subject or the agreement controller. Instead, it is related either to a silent pronoun *pro*, the actual subject and agreement controller, or to the (pronominal) agreement suffix itself. Ackema & Neeleman (in prep.) discern two variants of the former approach depending on the relation between the overt DP and *pro*: an A-Bar chain (sec. 2.3.1) or apposition (sec. 2.3.2). An analysis that takes the agreement subjects themselves to be pronominal subjects, based on Panagiotidis (2002), is sketched in section 2.3.3. There is no problem for an asymmetric theory of agreement in the former two analyses, while the last one dispenses, at least to some extent, with the notion of verbal agreement.

#### 2.3.1 Dislocation

According this view, the overt DP in unagreement configurations is in an A-Bar chain with the pronominal subject. The theories of Hurtado (1985) and Torrego (1996, 1998) seem to fall broadly within this category. Sentence initial full DP subjects in null-subject languages have indeed been argued to be left dislocated (e.g. Alexiadou & Anagnostopoulou 1998). The data in section 1 show, however, that unagreement is not restricted to sentence initial subjects, making an account relying solely on left-dislocation hardly defendable.

Drawing on the object unagreement data in (16) above, Ackema & Neeleman (in prep.:22) also discuss and reject a hypothetical 'low dislocation' configuration, distinct from hanging-topic and clitic left-dislocation, "in which a null subject is doubled by a full DP." If this does not require feature matching and if the doubled DP can appear clause-internally, this might indeed capture the facts. However, A&N note that such an analysis merely shifts the problem of  $\varphi$ -feature mismatches to a different location. In typical dislocation contexts, these  $\varphi$ -mismatches are disallowed, as the Dutch examples in (69) shows (their 39ab). Why should a feature mismatch be allowed between the head of a 'low-dislocation' A-Bar chain and its foot, while being disallowed in other relations of that sort?

(69) a. De jongens, ze zijn aan elkaar gewaagd. the boys, they are to each other weighed 'The boys, they are well matched.'

[Dutch]

b. \*De jongens, we zijn aan elkaar gewaagd.
the boys, we are to each other weighed

Ackema & Neeleman (in prep.:28f.) also note cross-linguistic data indicating that negative quantifiers cannot be dislocated, cf. Spanish (70). This poses a problem for a dislocation analysis of unagreement with, e.g., *ninguno* 'nobody' in Spanish (sec. 1.1.2).

- (70) a. Juan<sub>1</sub>, nosotros lo<sub>1</sub> vimos.

  Juan we him saw.1PL

  'As for John, we saw him.'
  - b. \*Nadie<sub>1</sub>, nosotros lo<sub>1</sub> vimos. no.one we him saw.1PL

#### 2.3.2 Apposition

A related approach views the overt DP in unagreement configurations as an apposition to the silent pronominal subject of the clause. Bosque & Moreno (1984) and probably Rodrigues (2008) follow this approach for Spanish and so does, judging by Norman's (2001) summary, Popov (1988) for Bulgarian. Costa & Pereira (to appear) adopt this approach for European Portuguese a gente 'the people' triggering first person plural agreement<sup>15</sup> and den Dikken (2001) for British English "pluringulars" of the the committee have decided type. The authors following this approach assume that PronDs as in we linguists should be analyzed as 'close' apposition (Cardinaletti 1994) so that apposition appears to be basically adjunction.

This analysis has been criticized on several grounds. Norman (2001) notes that the intonational break characteristic for appositions is absent and that the account offers no explanation for the lack of corresponding singular unagreement. Under the hypothesis that null pronouns behave like weak pronouns (Cardinaletti & Starke 1999), Ackema & Neeleman (in prep.) raise a further issue. Based on Dutch and German data, they suggest that apposition is not allowed with weak pronouns (cf. Dutch strong wij studenten 'we students' vs. weak \*we studenten). If apposition to weak pronouns is disallowed and null pronouns are weak pronouns, apposition to a null pronoun cannot be the correct analysis for unagreement.

Expanding on Burton-Roberts's (1975) discussion and on the basis of Greek data, Stavrou (1995) offers a critique of the unclear usage of the term apposition. She suggests that sequences like o aetos to pouli 'the eagle (which is) a bird' are fundamentally different from the apparently equivalent o aetos, to pouli 'the eagle, the bird'. The first group is dubbed "non-appositions," only the latter are real cases of apposition, which she proposes to replace by the "less guilty" term epexegesis (Stavrou 1995:219). She lists several differences between them (cf. also Stavrou 1990-1991), among others different intonational patterns, the availability of discourse markers like, e.g., diladi 'namely' with epexegesis only, restrictions on stacking for non-appositions and the fact that only epexegesis may involve an indefinite DP: \*enas kathigitis o Georgiadis/\*o Georgiadis enas kathigitis vs. enas kathigitis, diladi o Georgiadis 'a professor, namely Georgiadis.' A strong point for this distinction is also made by the contrast between the non-appositive sentence in (71a) and the one involving epexegesis in (71b), quoted from Stavrou (1995:221).

<sup>&</sup>lt;sup>15</sup> Interestingly, from this perspective EP has (a very limited kind of) unagreement after all.

 $<sup>^{16}</sup>$  The term is borrowed from traditional Greek grammar, επεξήγηση means explanation or comment.

<sup>&</sup>lt;sup>17</sup> Throughout, her transliteration is modified to conform to present usage.

- (71) a. Den eipa oti eida to Ganni to filo

  NEG said.1SG that saw.1SG DET.ACC.SG Giannis DET.ACC.SG friend

  mou, alla to Ganni ton kathigiti.

  my but DET.ACC.SG Giannis DET.ACC.SG professor

  'I didn't say I saw John my friend, but John the professor.'
  - b. ??Den eipa oti eida to Ganni, to filo NEG said.1SG that saw.1SG DET.ACC.SG Giannis DET.ACC.SG friend mou, alla to Ganni, ton kathigiti.

    my but DET.ACC.SG Giannis DET.ACC.SG professor
    'I didn't say I saw John, my friend, but John, the professor.'

She observes that in epexegesis "the first definite noun phrase [...] itself denotes a specific referent already established in the linguistic context or uniquely retrievable from the situation of discourse" (Stavrou 1995:221). Accordingly, (71b) is deviant because it is tantamount to saying ?? Den eida to Gianni, alla to Ganni 'I didn't meet John, but John.'

Epexegesis might be analyzed in terms of intersecting, three-dimensional syntactic structures (Espinal 1991) as suggested by Stavrou, or involve multi-dominance as proposed by Heringa (2012). What is important here is to distinguish non-apposition and epexegesis for *emeis i foitites* 'we students' vs. *emeis, i foitites* 'we, the students' as well; only the latter should be analyzed as epexegesis.

Returning to the behaviour of weak pronouns, German allows real epexegesis to a weak pronoun after all. Modelled after A&N's (44), the sentences in (72) establish  $wa^{18}$  as a weak pronoun that cannot be coordinated and show epexegesis to it, marked by the discourse marker *also*. Therefore, the deviance of \*wa Studenten 'we students' can probably not result from a ban of "apposition" to a weak pronoun.

- (72) a. Ich hoffe, dass wir/\*wa und die Studenten uns dann amüsieren können. I hope that we and the students us then amuse can 'I hope that we and the students can amuse ourselves then.'
  - b. Ich hoffe, dass wir/wa, also  $\;$  die Studenten, uns dann amüsieren I hope that we  $\;$  that.is the students  $\;$  us then amuse können.

can

'I hope that we, that is the students, can amuse ourselves then.' [German]

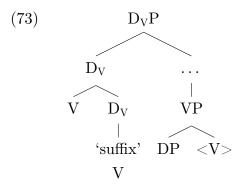
In summary, the observed similarity between we linguists structures and unagreement does not necessitate an appositive structure of unagreement, as assumed by many authors. I will discuss the alternative pronominal determiner analysis in section 3.1.

 $<sup>^{18}</sup>$  The dialectal difference to Klaus Abels' weak pronoun ma in A&N's examples seems irrelevant here.

#### 2.3.3 Agreement marker as subject

An interesting variant of this approach is conceivable on the basis of Panagiotidis (2002:chs. 3-4). He rejects the classical account of Rizzi (1986) for null subject languages in terms of an empty category pro that needs to be licensed by an appropriate X<sup>0</sup> and identified by either features on the licensor, control or discourse information (Rizzi 1997:282) on empirical and conceptual grounds. For example, a conceptual problem with assuming the need to license pro is that this essentially makes a syntactic relation subject to the (absence of a) phonological matrix of a syntactic object: "there are no other lexical items whose phonological properties cause them to be subject to some special syntactic requirement" (Speas 1996:201). For further discussion the reader is referred to Panagiotidis (2002:ch. 3).

Modifying and extending a proposal by Alexiadou & Anagnostopoulou (1998), he suggests that two functional heads in the verbal spine encode interpretable person and number features,  $D_V$  and (verbal) Num respectively (cf. also Taraldsen 1995). He suggests that  $D_V$  gets assigned the highest  $\theta$ -role by the verb, recasting the EPP "as the obligatory presence of  $D_V$  in a sentence" (Panagiotidis 2002:160). While English has a strong zero  $D_V$  that attracts the subject DP to its specifier, null subject languages like Spanish, Greek, Italian etc. have weak  $D_V$ s, overtly realized in the form of the personal endings. They carry a strong [V] feature which attracts the verb, accounting for their suffixal character. This is illustrated in (73), adapted from Panagiotidis (2002:147, (21d)).



Due to the weakness of  $D_V$  itself, a full DP cannot be moved to  $Spec, D_VP$  in these languages. A lexical subject, however, may be generated in Spec, vP and assigned case – and potentially be attracted – by T as usual. Setting aside the general question about the nature of the connection between  $D_V$  and the subject DP in these cases, unagreement could thus be analyzed as a configuration where a first or second person specification of the "true" subject in  $D_V$  interacts with the DP in Spec, vP.

While this intuition seems rather attractive, I see two serious problems with an approach of this kind. First, considering that the Romance pro-drop languages and Greek are assumed to make use of the same structure, it remains unclear why languages like Italian lack unagreement. Secondly, there may be a problem with a central part of the argumentation for the  $D_V$  structure of Greek.

A central goal of Panagiotidis' dissertation is to show that pronouns are full DPs with the internal structure in (74), projected around a silent empty noun e<sub>N</sub> which carries gender, politeness and honorific features.

(74) 
$$\left[ \text{DP D} \left[ \text{NumP Num} \left[ \text{NP e}_{\text{N}} \right] \right] \right]$$

Some subject clitics in North Italian dialects are marked for gender (e.g. Poletto 1995, Poletto 1996, Poletto 2000:ch. 2) and a radical pro-drop language like Japanese has gender, honorific and politness marking on verbs with zero subjects. Panagiotidis argues that in these cases the subject has the full pronominal structure in (74) because  $e_N$  needs to provide the necessary features. Subject clitics are analyzed parallel to object clitics, i.e. D adjoins to a silent  $D_V$ , while radical pro-drop languages generally lack overt articles, making a complete lack of spell-out for (74) plausible. He claims that the apparent insensitivity of Greek agreement suffixes provides an argument against a similar analysis. Instead, overt  $D_V$  alone (the "agreement" suffix) represents the subject.

Nevertheless, configurations like (75) seem to me to necessitate the presence of  $e_N$  after all. The modifier  $moni \ mu/monos \ mu$  'alone, on my own' agrees in case, number and gender with the subject. Crucially, this is also the case in (75c), where no lexical subject is present. The source of the gender features is unclear in the  $D_V$  analysis.

- (75) a. I Eleni tha paei mon-i tis/
  DET.NOM.SG Eleni FUT go.3SG alone-NOM.SG.F 3SG.GEN.F
  \*mon-os tou.
  alone-NOM.SG.M 3SG.GEN.M
  'Eleni will go alone.'
  - b. O Giorgos tha paei \*mon-i tis/
    DET.NOM.SG Giorgos FUT go.3SG alone-NOM.SG.F 3SG.GEN.F
    mon-os tou.
    alone-NOM.SG.M 3SG.GEN.M
    'Giorgos will go alone.'
  - c. Tha pao mon-i/ mon-os mou.

    FUT go.1SG alone-NOM.F.SG alone-NOM.M.SG 1SG.POSS
    'I (male/female) will go on my own.'

Admittedly, the alternative analyses are not unproblematic either. Object clitic doubling, for instance, is incompatible with focus in Greek, lexical subjects are not, which makes a subject clitic analysis improbable. Assuming a null spell-out of (74) raises the problem that zero articles are not attested elsewhere in Greek, which enforces overt articles even with proper names. In section 3.3 I will discuss the latter option.

#### 2.4 Hidden features

This approach assumes regular asymmetric agreement, contra A&N. In contrast to the approaches in section 2.3, the overt DP in unagreement configurations is viewed as the actual agreement controller. In this view, the only apparently third-person DP actually contains the  $\varphi$ -features expressed in verbal agreement.

While I am not aware of any analysis that explicitly endorses this view, Torrego (1996:114) mentions an inclusive person feature as one possible account for Spanish unagreement, referring to the Basque proximal plural (sec. 1.3). Apart from that, the following passage from Stavrou (1995) probably come closest a hidden feature analysis. Discussing her analysis of non-appositions, illustrated in (76), she remarks:

Given the 'basics' underlying this structure, an interesting point for further exploration is the possibility of accounting for cases like *i kalitekhnes aghapame tin fisi* (the artists we love the nature) by assuming that the *i kalitekhnes*, being a DEFP, is next (a sister of) to the head D of the upper DP, which in this case is a *pro* (in complementary distribution with *aftos, emis, enas*). *Pro* in this case is 1st pl, in agreement with the verb, and, besides, it is definite; *i kalitekhnes* (which being a noun phrase is assumed to be marked by default as 3rd person) agrees with *pro* (through head-head (or head-complement) agreement).

(Stavrou 1995:236f., fn. 33)

(76) 
$$\left[ DP D \right] DEF \left[ NP N DP \right] ^{19}$$

This implies the structure in (77) for unagreeing DPs. Insofar as pro is the head of the same DP that contains the unagreeing noun, its  $\varphi$ -features could reasonably be described as "hidden features" of the DP.

(77) 
$$\left[_{DP}\left[_{D}\ pro\right]\right]\left[_{DEFP}\left[_{DEF}\ oi\right]\left[_{NP}\ kalitechnes\right]\right]^{20}$$

<sup>&</sup>lt;sup>19</sup> This illustrates my understanding of her discussion. Her (15) differs, probably due to type-setting problems.

<sup>&</sup>lt;sup>20</sup> Spelling adapted.

A hidden feature account is explicitly rejected by Norman (2001) and Ackema & Neeleman (in prep.:19f.). The latter adduce four points of criticism:

- 1. the absence of R-expressions with inherent person features in Spanish
- 2. the "apparent universal absence of a spell-out of such features on R-expressions" (Ackema & Neeleman in prep.:20)
- 3. difficulties in explaining the cross-linguistic differences in the availability of unagreement
- 4. psycholinguistic data indicating a three-way distinction between agreement, unagreement and failure of agreement (Mancini et al. 2011)

I will address their first two points, deferring a discussion of the psycholinguistic data to the conclusion. Section 3 will show that the third criticism is unfounded for my interpretation of the hidden features account.

Point 1 does not seem particularly troublesome to me. In contrast to gender and number, person is a discourse-related property, dependent on the role of the denoted entity with respect to the speech act. A descriptive noun with inherent person features would denote an entity that is *inherently* speaker, addressee or non-participant. Maybe Portuguese a gente 'the people' in its first person plural use (Costa & Pereira to appear) is such a case, but I find the scarcity of the phenomenon unsurprising.

The possible absence of inherent person specification, however, does not entail that person is not marked on DPs at all. In fact, examples like (78), where the first person plural anaphora *ourselves* is anteceded by the generic plural *anthropologists*, may imply that even English R-expressions can bear person features.

(78) Again, I'm only grazing the tip of the iceberg here, but what I mean to suggest is that the critique that Graeber's leveling against certain forms of economic thought is hardly unusual; *anthropologists* do it **to ourselves** all the time.<sup>21</sup>

Compare Collins & Postal's (2012) detailed discussion of so called "imposters" for further examples. They characterize an imposter as "a notionally n person DP which is grammatically m person,  $n \neq m$ " in their (9), and suggest to derive them from what they call 'precursor' structures, basically epexegeses like we, the present authors. I do not believe that unagreement configurations involve imposters, since unagreeing DPs in Spanish and Greek are notionally and grammatically of the same person. The

 $<sup>^{21}\,</sup> http://blogs.plos.org/neuroanthropology/2011/10/15/david-graeber-anthropologist-anarchist-financial-analyst/ [retrieved <math display="inline">17/05/2012$ ]

unagreeing DP denotes a plural set including the speaker, hence it is notionally first person. At the same time, it controls first person agreement, making it grammatical first person as well. The imposter analysis assumes a complex DP consisting of a pronominal DP and a lexical DP to account for the characteristic mismatch between notional and grammatical person. Since it seems to me that the issue in unagreement is just "morphological" person, i.e. the lack of morphological marking, an imposter analysis seems to me unnecessarily complex compared to the analysis proposed in the next section. Nevertheless, aside from the details of Collins & Postal's (2012) analysis, the data might also be described as involving DPs with a "hidden" person feature. Further discussion of the relationship between imposters and unagreement is beyond the scope of the present work.

Overt person marking on DPs provide an even stronger argument for a hidden feature analysis contrary to A&N's claim in 2 above. One example is the Basque proximal plural marker mentioned in section 1.3. Nama/Khoekhoe (Khoi-San) provides an even more impressive example. Rust (1965:18) notes:

Das Substantiv wird auch mit den Suffixen der 1. und 2. Person verbunden. [...] Wir haben ja auch im Deutschen solche Verbindungen wie 'ich Mann', 'du Mann', 'wir Hirten' u.s.w.

(The noun is also linked with the suffixes of first and second person. [...] We have similar expressions in German like "I man", "you man", "we sheperds" etc.)

Haacke (1976:88, Table V) lists these nominal suffixes as follows.

### (79) Nominal designants, Non-nasal $N^d$

m	$\operatorname{Sg}$	DI	PΙ	
I	-ta	-khom	-ge	
II	-ts	-kho	-go	
III	-b/(-xa)	-kha	gu	
f				
I	-ta	-m	-se	
II	-S	-ro	-so	
III	-S	-ra	-di	
c/n				
I	_	-m	-da	
II	_	-ro	-du	
III	-'i	-ra	-n	

Lyons (1999:143) gives the examples in  $(80)^{22}$  for person marked DPs. Somewhat simplified, first and second person nouns need to be accompanied by an article agreeing with the person marking (Haacke 1976:85). Pronouns consist of an article and the corresponding nominal designant (79).

```
'*I man'
(80)
       tii kxòe-ta
                    (I person-1SG+M)
                                           "vou man"
       saá kxòe-ts
                    (you person-2SG+M)
       kxòe-p
                    (person-3SG+M)
                                           'the man'
       sií kxòe-ke
                    (we person-1PL+M)
                                           'we men'
                    (you person-2PL+M)
       saá kxòe-kò
                                           'you men'
                    (person-3PL+M)
                                           'the men'
       kxòe-ku
```

Independently of the details of the analysis, Nama shows even more clearly than the Basque proximal plural that person marking of nouns is possible. In the following section I will argue that the PronD in we linguists is an expression of person features on DP, too (cf. also the quotation from Rust 1965).

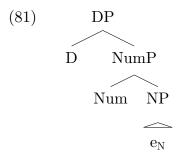
## 3 Hidden features extended

In this section, I develop a "hidden feature" analysis of unagreement in parallel to adnominal pronoun constructions (APCs) like we linguists. First, I outline the pronominal determiner analysis of APCs along with a summary of Panagiotidis' (2002) analysis of the structure of pronouns. Then I will point out a cross-linguistic correlation between the expression of APCs and the availability of unagreement. In section 3.3 I propose a structural account of unagreement based on this correlation, while section 3.4 details the semantic interpretation of unagreement.

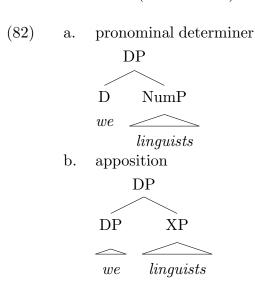
# 3.1 Pronouns and pronominal determiners

I largely adopt the internal stucture proposed for pronouns by Panagiotidis (2002), mentioned in section 2.3.3. According to his analysis, a silent empty noun (e<sub>N</sub>) provides the structural basis for the extended nominal projection forming pronouns, cf. (81). Num carries a number feature, D bears definiteness and person features, which are eventually spelled out as a pronoun (but cf. section 3.3).

 $<sup>^{22}\,\</sup>mathrm{His}$  spelling differs from Haacke's.



This view parallels the pronominal determiner analysis for APCs, illustrated in (82a). Postal (1969) first argued that pronouns are determiners, an analysis endorsed more recently by Lawrenz (1993), Lyons (1999), Rauh (2003) and Roehrs (2005). The competing analysis sketched in (82b) assumes that the pronoun heads a DP to which a nominal constituent (DP or NP) is adjoined. This view is taken by Cardinaletti (1994) and den Dikken (2001), as well as all appositional analyses of unagreement that I am aware of (cf. sec. 2.3.2).



As discussed in section 2.3.2, I take the appositional view to be wrong on the basis that APCs lack the specific properties associated with appositional/epexegetic structures, most notably the so-called comma intonation. While apposition of this kind is arguably possible, for regular APCs the pronominal determiner analysis seems to me to be more adequate.

# 3.2 A cross-linguistic correlation

An important question for any analysis of unagreement is what determines its availability. Put in comparative terms: why do some languages display unagreement and others do not? To my knowledge, few accounts of unagreement have proposed an explicit solution. Ackema & Neeleman (in prep.:20) suggest that the availability of feature spreading is what sets Spanish apart from Italian in that respect. The explanatory power of that statement seems, however, rather limited to me. Unless feature spreading is shown to operate elsewhere in the grammar, this is basically a restatement of the fact that Spanish has unagreement and Italian does not.

Norman (2001) mentions the non-homogenous semantics of first and second person plural as a crucial factor in Bulgarian unagreement. While this may play a role for the singular-plural asymmetry of unagreement, it has nothing to say about its general availability: the peculiarities of plural semantics are certainly not exclusive to unagreement languages.

Another hypothesis is that null subjects play a role in unagreement. Indeed all unagreement languages I know of have null subjects. However, as also noted by A&N, this does not hold the other way around: there are null subject languages without unagreement, notably Italian, Romanian, EP and BCS. Consequently, null subjects may be a necessary, but cannot be a sufficient condition for unagreement.

I believe that an observation made at the end of section 1.3 is crucial to the understanding of unagreement. The unagreement languages illustrated in (83) all happen to need an overt definite article alongside the *adnominal pronoun*<sup>23</sup> in APCs. I take this independent exponence of definiteness and person to be the crucial factor for unagreement.

- (83) a. emeis oi foitites we the PL students [Greek]
  - b. nosotros los estudiantes we the PL students [Spanish]
  - c. nosaltres els estudiants we the PL students [Catalan]
  - d. nie studenti-te we students-the [Bulgarian]
  - e. gu ikasle-ok we students-the.PROX [Basque]

In contrast, the non-unagreement languages depicted in (84) take an article only in epexegetic constructions. Romanian does not allow even a regular PronD, cf. (85).

<sup>&</sup>lt;sup>23</sup> Considering the analysis outlined in the next section, the term pronominal determiner (PronD) is properly applied only to non-unagreement languages. I borrow the term adnominal pronoun from Rauh (2003) as a descriptive cover term for the pronoun in APCs in both unagreement and non-unagreement languages.

- (84) a. \*nós os estudantes vs. nós, os estudantes we the.PL students we the.PL students [EP]
  - b. \*noi gli studenti vs. noi, gli studenti we the students we the PL students [Italian]
  - c. \*noi studenti-i vs. noi, studenti-i we students-the.pl we students-the.pl [Romanian]
- (85) a. nós estudantes we students [European Portuguese]
  - b. noi studenti we students [Italian]
  - c. \*noi studenti we students [Romanian]

Costa & Pereira (to appear) note that EP allows pronouns with a following determiner in some restricted cases as shown in (86a). Strikingly, these nominal constituents allow unagreement in EP as an exception to the observations above, cf. (86b).<sup>24</sup> This provides additional support to the hypothesis that the availability of unagreement is dependent on the structure of nominal phrases, and in particular on the independence of the exponence of person and definiteness features.

- (86) a. nós os dois we the two
  - b. Ficamos os dois estudantes em casa. stayed.1PL the two students in house 'We two students stayed at home.'

The careful reader will have noticed that I have not mentioned Georgian, Warlpiri or BCS. They complicate the picture insofar as they do not have overt definite articles, although the first two allow unagreement. While a more detailed investigation may be able to discover further relevant factors refining the above correlation, for the moment I restrict the discussion to languages with overt definite determiners.<sup>25</sup> At least for the Indo-European languages we can observe a strong correlation between the co-occurrence of a definite article in APCs and the availability of unagreement. I take this as an indication that the key to unagreement lies in the structure of the nominal domain.

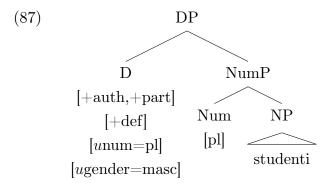
<sup>&</sup>lt;sup>24</sup> Thanks to João Costa for the relevant judgement.

<sup>&</sup>lt;sup>25</sup> Cf. also the problematic data from Hebrew noted in fn. 11.

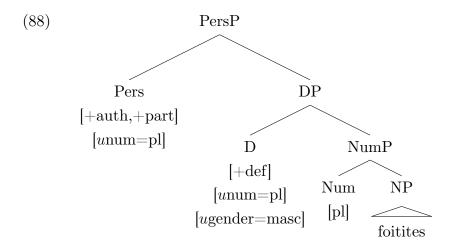
### 3.3 Nominal structure and unagreement

For my analysis, I adopt the framework of Distributed Morphology (Halle & Marantz 1993; Harley & Noyer 1999), in particular the late insertion hypothesis: functional heads contain no phonological matrix until after spell-out, when vocabulary insertion takes place. On the basis of the correlation observed in the previous section, I propose that differences in the structure of the extended nominal projection (xnP) account for the status of a language wrt. unagreement.

I analyze Italian-style APCs like *noi studenti* 'we students' as in (87). Person features and definiteness are both located on D. It agrees with the Num and the nominal to value its uninterpretable number and gender features (cf. Panagiotidis 2002), yielding the spell-out *noi* 'we.' The derivation of the plural noun form is orthogonal to the current discussion and I will not deal with it here.



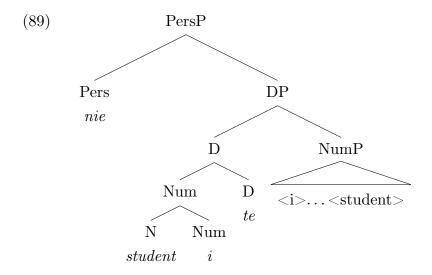
Building on the aforementioned proposal by Stavrou (1995:236f., fn. 33), I propose that unagreement languages like Greek encode person in a functional head distinct from the one hosting the definite article. Departing from Stavrou, I assume that the article is located in D, while (interpretable) personal features are hosted by a higher Pers head as illustrated in (88). Like D, Pers agrees with the Num head for number in order to be spelled out as *emis* 'we.'



Notice that that non-unagreement languages might start out with the structure in (88) as well, but differ from unagreement languages in that D undergoes head-movement to and fusion with Pers, yielding a single head combining the features of Pers and D. I will not try to decide between these two options here, but assume the one illustrated in (87) for concreteness.

The structures in (87) and (88) account for the APC data in (85) and (83) respectively, with the exception of Romanian. I suspect that the lack of PronDs in Romanian is a consequence of the affixal nature of Romanian determiners. Notice that EP and Italian articles are DP-initial clitics (Italian gli studenti, EP os estudantes), while in Romanian they are suffixed to the noun (studenti-i). However this is generated (possibly by head-movement of N to D), rather than \*noi studenti one should expect a form like \*studenti-noi, with the PronD suffixed to the noun. The inavailability of PronDs in Romanian could be a result of the lack of an appropriate Vocabulary Item (VI) to realize a suffixal, non-third person article.

This nicely contrasts with Bulgarian which has suffixal articles within APCs, cf. (83d) above. Adopting the structure in (89), the suffixhood of the morpheme realizing D is independent of the expression of person, which realizes a distinct head. Hence, N could, for example, move up to D to form a complex head, yielding suffixation of the article as usual, while Pers is free to be (optionally) realized as a personal pronoun.



How can this structural difference account for the presence or absence of unagreement? Unagreement can be analyzed straightforwardly as zero spell-out of Pers. Rauh (2003:415-418) suggests that stressed PronDs in German pattern with demonstrative pronouns and carry a [demonstrative] feature, while unstressed ones pattern with definite articles in lacking this property. Let us assume that the overtness of Pers is regulated by the same mechanism, for concreteness, I assume that there is a binary feature [ $\pm$ dem]. The VIs for Pers are sensitive to [ $\pm$ dem] as in (90). Crucially, this is independent of the realization of the DP complement. The [-dem] VI is massively underspecified, since all person-number feature combinations on Pers receive a zero spell-out.

(90) 
$$\operatorname{Pers}[-\operatorname{dem}] \leftrightarrow \emptyset$$
  
  $\operatorname{Pers}[+\operatorname{auth}, +\operatorname{part}, \operatorname{pl}, +\operatorname{dem}] \leftrightarrow emeis$ 

In non-unagreement languages like Italian, on the other hand, a sentence like (91a) can never arise. If the VI realizing the definite article is specified as third person, e.g. [-auth,-pers], it does not even compete for insertion into a D node specified for [+auth,+part]. But even if it were not specified for person features, the subset principle (Halle 1997; Harley & Noyer 1999) dictating the insertion of the more specific of two VIs competing for insertion into the same node would lead to insertion of *noi*. The relevant VIs are given in (92). This straightforwardly accounts for the absence of unagreement configurations in languages with the xnP structure in (87).

<sup>&</sup>lt;sup>26</sup> Since Italian behaves like German with respect to PronDs, I assume that the VI noi is underspecified for [ $\pm$ dem]. Alternatively, there would be two VIs differentiated by intonational properties.

### (91) Italian

- a. \*Gli studenti lavoriamo molto. the.PL students work.1PL much
- b. \*(Noi) studenti lavoriamo molto. we students work.1PL much 'We students work a lot.'
- (92) Italian  $D[+\text{auth},+\text{part},+\text{def},\text{pl}] \leftrightarrow noi$   $D[(-\text{auth},-\text{part},)+\text{def},\text{pl},\text{masc}] \leftrightarrow gli^{27}$

The ungrammatical alternative in (91b) raises a further question however: why can we not get zero spell-out of the PronD instead? After all, this might be needed for simple pro-drop configurations anyway (cf. sec. 2.3.3). That relates to one of the arguments (Panagiotidis 2002:126f.) adduces against assuming pronouns with a radical zero spell-out as the subject in languages like Greek: they seem to have only indefinite zero determiners. As mentioned at the end of section 2.3.3, I believe that radical zero spell-out might be a promising hypothesis even for Greek and the likes after all, in spite of the issues raised by Panagiotidis. While I cannot explore the topic at length here, the descriptive generalization regarding the possibility of a null definite article in these languages seems to be the following under the present hypothesis: the definite determiner can be silent iff no overt material follows the article within the DP, i.e. neither an overt noun nor an adjective.

Under the assumption that grammar is organized in modules, the nature of this restriction cannot be syntactic, since it relies on the phonological properties of the members of DP. Hence, it has to apply after spell-out on the way to PF.

This could possibly be formalized in terms of contextually conditioned allomorphy, in the spirit of Embick's (2010)  $\mathbb{C}_1$ -LIN theory. One might assume the VI in (93) for a null determiner/pronoun in Italian. Just like null Pers, it is underspecified for person and number. Zero insertion in (91b) is blocked by the condition that there be no other overt material to the right of D in the same phonological cycle. Since nodes with a zero exponent are "pruned" in Embick's system – that is, they do not count for adjacency – a null Num and  $e_N$  can be pruned, placing D at the right edge of the phonological cycle. This allows a zero spell-out only with a completely empty NumP, which is not given in (91b).

(93) 
$$D[+def,-dem] \leftrightarrow \emptyset \mid \underline{\hspace{0.2cm}}]_{\varphi}$$
 [Italian]

 $<sup>^{27}</sup>$  Leaving aside the phonological conditions governing the use of gli vs. i.

In Greek, the same mechanism allows zero definite articles in overt and covert personal pronouns, cf. (94). The overtness of the pronoun depends only on the  $[\pm dem]$  setting on Pers.

(94) 
$$D[+def] \leftrightarrow \emptyset \mid \_]_{\varphi}$$
  $D[+def,pl,masc] \leftrightarrow i$  [Greek]

To conclude, the structural analysis outlined in this section explains the connection between APCs and unagreement. Furthermore, it accounts for the connection between null subjects and unagreement and offers a principled explanation for the fact that not all null-subject languages allow unagreement.

## 3.4 The semantics of unagreement

Norman (2001:83) gives the following characterization of the meaning of unagreement in Bulgarian:

Совокупный грамматический субъект – «мы» – формально здесь выражен флексией глагольного сказуемого, а его лексическая детализация (кто именно «мы»?) происходит при помощи существительного или целой именной группы, занимающей позицию подлежащего.

(The joint subject – "we" – is formally expressed here by the inflection of the verbal predicate, while its lexical specification (who exactly are "we"?) is brought about through a noun or a whole nominal phrase which takes the place of the subject.)

This implies that the overt DP in unagreement configurations delimits the otherwise only contextually defined "we" group. The discussion in this section aims to show that Norman's quote is descriptively adequate, but that there is no independent "we" group referred to in the truth conditions of unagreement sentences. Instead, the DP itself will be argued to denote the plural subject of the predicate. The impression of a "we" (or "you") group results from the presuppositions to the effect that the denotation of the subject has to include the speaker or the hearer, regularly introduced by person features. This analysis will be defended against an alternative that assumes two distinct plural entities to be complicit in determining the subject of an unagreement sentence: the "we" group and a proper subset of it, denoted by the overt DP.

Following Heim (2008:37), I assume that person features denote partial identity functions introducing a presupposition concerning the denotation of their argument. For concreteness, I use Nevins's (2007) person features, yielding the denotations in

(95) for first and second person. The symbol h<sub>c</sub> denotes the hearer in the discourse context c, s<sub>c</sub> the speaker. The discussion will be restricted to first and second person, ignoring the distinction between inclusive and exclusive first person plurals.

These functions are defined only under the condition that the entity x fulfills the condition imposed on it. Hence, Functional Application of a head containing a set of person features to a semantic object of the appropriate type  $\langle e \rangle$ , an entity, effectively imposes the respective conditions on the denotation of the entity. Otherwise, the function is undefined.

For illustration, consider the simplified structure in (96) and the denotation of the DP in (97). According to (95), Functional Application of [+auth,+part] to the DP is defined only if the speaker is included in the denotation of the DP, yielding the denotation in (98) for PersP.

- (96) [PersP = [+auth, +pers] [DP oi foitites]]
- (97) [ [DP] ] oi foitites [DP] or foiting [DP] or foitites [DP] or foitites [DP] or foiting [DP]
- (98)  $[ (96) ]^c = [\lambda x_e:x \text{ includes } s_c.x]$  (the unique set of students salient in c) = The unique set S of students salient in c iff  $s_c \in S$ , undefined otherwise.

Contrary to this analysis, Torrego (1998:fn. 12) claims "that Spanish floating definite plurals do not have the appositive reading we linguists has in English." She does not state explicitly, what she means by "appositive reading," but her discussion of (99) – her (6a) – makes things clearer.

(99) Firmamos [los linguistas] la carta. signed.1PL the linguists—the letter 'The linguists among us signed the letter.'

Torrego (1996:114f.) suggests that "the los-NP is interpreted as a subgroup of individuals included in the reference of the first person plural pronoun 'we' ... [(99)] implies that at least one of the members of the first person plural pronoun 'we' is not a linguist." Her characterization leaves open the question of the relation of the speaker to the two groups. According to the reading closest to the English translation as the X among us, it should be possible for the speaker to only be a member of the 'we' group,

but not of the X group. An alternative, more restricted reading of her analysis also requires the speaker to be a member of the X group.

Adopting the first interpretation, Rodrigues (2008:227) claims that "the controller in inverse partial control [cf. (100a), her (39)] is not understood as one of the participants of the event denoted by the embedded predicate." A semi-formal denotation of (100a), leaving intensional operators unanalyzed for simplicity, is given in (100b).

- (100) a. No sabemos si ir los linguistas.

  NEG know.1PL if go.INF the linguists

  'We don't know whether the linguists among us should go.'
  - b. [a.] = 1 iff the salient set of people P in c does not know if the salient group of linguists L in c, such that  $L \subset P$ , should go, undefined if  $s_c \notin P$ .<sup>28</sup>

Crucially, under this analysis the proposition is compatible with a situation where the speaker is not a linguist (i.e.  $s_c \notin L$ ). According to my consultant, this is not the case: the speaker needs to be a linguist in order for (100a) to be uttered felicitously. Consequently, the first reading of Torrego's claim seems to be out on empirical grounds.

To illustrate the crucial difference between my proposal and the second reading of Torrego's the X among us, consider the semi-formal truth conditions of (99) given in (101).

(101) 
$$[ (99) ]^c = 1 \text{ iff}$$

a. the salient set of people P in c signed the salient letter in c and there is a salient set of linguists L in c, such that  $L \subset P$ , undefined if  $s_c \notin P$ .

[the X among us, v.1]

b. the salient set of people P in c signed the salient letter in c and there is a salient set of linguists L in c, such that  $L \subset P$ , undefined if  $s_c \notin L$ .

[the X among us, v.2]

c. the salient set of linguists L in c signed the salient letter in c, undefined if  $s_c \notin L$ . [we X]

I have discarded the first denotation as empirically inadequate in the discussion of (100a), which is confirmed here. According to my consultant, the speaker uttering (99) needs to be a linguist, while the truth conditions in (101a) are compatible with a situation where the speaker is no linguist.

<sup>&</sup>lt;sup>28</sup> The conditions for when the function is undefined only include the presupposition included by the personal pronoun. Note that including a condition  $s_c \in P$  into the assertion instead would be even more problematic as I show further down.

In (101b) the speaker is required to be a linguist, just as in the we~X analysis. Their difference lies in the way the event participants are referred to. In we~X the external argument is introduced as one entity, namely the set L of linguists, while in (101b) the set P denoted by 'we' is the agent and a second set L of linguists is introduced as a proper subset of the agent set. Consequently, (101b) is more restrictive than the we~X analysis: since L  $\subset$  P, the assertion is that there are members of the set of agents that are no linguists.

Notice that while such a situation is compatible with (101c) as well, it is not part of the assertion there. This can be illustrated by reformulating the we X analysis to the very similar (102). The weaker condition  $L \subseteq P$  allows for the same situations as (101b) plus those where L and P are identical.

(102)  $[ (99) ]^c = 1$  iff the salient set of people P in c signed the salient letter in c and there is a salient set of linguists L in c, such that  $L \subseteq P$ , undefined if  $s_c \notin L$ . [we X, v.2]

The difference between (102) and the simpler denotation proposed in (101c) is that using the latter to describe the situation denoted by (101b), including non-linguists as co-signers, is pragmatically marked. The only group directly included in the proposition are the linguists, hence if there are further relevant signers that are not mentioned, the conversational maxim of quantity is violated.

The difference between (101b) and (101c) is hard to diagnose since it hinges on the status of people that are not explicitly mentioned (namely the complement of L in P, P\L). However, since according to (101b) the speaker of (99) asserts that L  $\subset$  P, it should be possible to test if the sentence is felicitous in a context where this relation does not hold because  $P \setminus L = \emptyset$ .

To the extent that this is a legitimate diagnostic, the Spanish and Greek sentences in (103) contradict the predictions of the the X among us analysis. The first part of the Spanish sentence is identical to (99), the continuation establishes that the linguists were the only people who signed the letter. A similar situation is described by the Greek example: an entomologist may utter that kind of complaint if only she and her colleagues cleaned up after a university party.

(103) a. Firmamos los linguistas la carta, pero nadie más se signed.1PL the linguists the letter but nobody more REFL interesó.

interested.3sg

'We linguists signed the letter, but nobody else cared.'

b. Ta mazevoume oi entomologoi ta
ACC.PL.N collect.1PL DET.NOM.PL entymologists DET.ACC.PL
skoupidia, afou apo tous allous kaneis den
rubbish since from DET.ACC.PL others nobody.NOM.SG NEG
dinei dekara.
give.3SG tenner
'We entomologists are collecting the rubbish because of the others nobody gives a damn.'

In both cases the 'we' group and the group denoted by the overt DP subject are identical, a situation excluded under the  $L \subset P$  provision implied by Torrego. I take this as an argument in favour of the  $we\ X$  analysis, which makes the correct predictions.

The present analysis also predicts that the membership of the relevant discourse participant in the entity denoted by the DP is a presupposition instead of an assertion. This can be shown by means of Kai von Fintel's wait-a-minute test (Matthewson 2004:402). Presuppositions cannot be negated directly, but can be challenged with an expression of surprise like *wait a minute*. This is illustrated with English pronominal determiners in (104), and extends straightfordly to Greek pronominal determiners and unagreement, irrespective of the overtness of the pronoun, cf. (105).

- (104) We linguists have a lot to say.
  - a. No, you don't.

[assertion denied]

b. #No, you are no linguist(s).

[presupposition not cancellable]

c. Wait a minute, I don't think you're a linguist/linguists!

[presupposition challenged]

- (105) (Emeis) oi foitites eimaste poly epimeleis. we DET.NOM.PL students are.1PL very diligent 'We students are very diligent.'
  - a. Ochi, den eiste katholou epimeleis.
    - no NEG are.2PL at.all diligent
    - 'No, you aren't diligent at all.'

[assertion denied]

- b. #Ochi, den eisai foitits/ eiste foitites.
  - no NEG are.2SG student are.2PL students
  - 'No, you are no student(s).' [presupposition not cancellable]
- c. Perimene, ma den eisai foitits/ eiste foitites!
  wait.IMP but NEG are.2SG student are.2PL students
  - 'Wait a minute, but you are no student(s)!' [presupposition challenged]

In this section, I have argued for a presuppositional analysis of person interpretation in unagreement and APCs.

# 4 Accounting for further data

## 4.1 Object unagreement

If unagreement is indeed rooted in the structure of the extended nominal projection, object unagreement does not come as a surprise. The topic of clitic doubling is too complex for a detailed discussion here, so I will just sketch the interaction of either of the two main contending analyses for clitic doubling with my analysis of unagreement.

One type of analysis (e.g. Sportiche 1996; Franco 2000) views clitics as a type of object agreement, while an alternative line of research (e.g. Uriagereka 1995; Papangeli 2000) relates clitics to determiners, suggesting that they head the argument DP. They receive the theta-role from the verb and eventually head-adjoin to the verb, accounting for their clitic properties. Clitic doubling is explained in terms of a "big DP", where the doubled DP is located either in the specifier of the clitic determiner (Uriagereka 1995) or in its complement (Papangeli 2000). It might be the case that both analyses are adequate for different types of clitics (Bleam 1999; Anagnostopoulou 2006).

If clitic doubling is treated as agreement, the present "hidden feature" analysis treats object unagreement just like subject unagreement. For the big DP hypothesis, some additional questions arise. It seems that under this view first- and second-person clitics in unagreement languages should start out in Pers instead of D. The observation in section 1.1.4 that even Peninsular Spanish allows object unagreement with direct objects, whereas clitic doubling is usually restricted to indirect objects in this variety, is an interesting indication that object unagreement might indeed differ in some way from regular clitic doubling.

# 4.2 Association with focus-sensitive particles

The problem posed by focus-sensitive particles (FPs) in unagreement configurations (sections 1.1.3 an 1.2.4) relates to Cardinaletti & Starke's (1999) hypothesis that null pronouns are weak, as noted in section 2.3.2. A crucial correlate of null pronouns is that they are not focused. So the only way an apposition-based analysis of unagreement (sec. 2.3.2) could accommodate data like (106) seems to be by assuming that the FP is not associated with the null pronoun, but is part of the appositional phrase as in (107).

(106) Akousame akoma kai oi eparchiotes afta ta nea. heard.1PL even DET.NOM.PL provincials these DET.ACC.PL news 'Even we provincials have heard these news.'

(107) Akousame [pro], akoma kai [\*pro] oi eparchiotes, afta ta nea.

As noted repeatedly, apposition/epexegesis implies a comma intonation. While this is possible in (107), it was observed in section 1.2.4 that is not necessary in these configurations. On the other hand, the intonational break is indeed necessary if an overt pronoun precedes the FP, cf. (108).<sup>29</sup> Furthermore, consider the different contexts of epexegesis to an overt pronoun and the *pro*-apposition in (107). As one might expect with Greek being a null subject language, the overtness of the pronoun needs to be licensed, in this case by contrasting it with a second person plural pronoun. This is a correlate of the fact that there are two references established, a we group and the provincial group, which are indicated as co-extensive by means of epexegesis. Since *emeis* 'we' without the focused constituent is the single subject here, its overtness needs to be licensed independently of the focus associated with the FP. This might be the reason why there is no minimal pair with a null subject and an obligatory intonational break.

(108)Ta akousame emeis, (??diladi) akoma kai oi CL.3PL.ACC heard.1PL we that.is even DET.NOM.PL eparchiotes, afta ta nea, kai mou les oti eseis provincials these DET.ACC.PL news and CL.1SG.GEN tell.2SG that you.PL den pirate champari? NEG take notice 'We, (that is) even the provincials, have heard these news, and you're telling me you guys didn't take notice?'

The sentence in (106) without a comma intonation, on the other hand, has the minimal counterpart in (109) with an overt pronoun adjacent to the DP, hence inside the scope of the FP. Since this alternation is possible, the overtness of the pronoun appears not to be directly dependent on focus and the FP. In the present theory, the  $[\pm dem]$  feature adopted from Rauh (2003:415-418) in section 3.3 determines the overtness of Pers. This probably interacts with focus, e.g. a [-dem] Pers might be allowed only if unfocused (with focus on the DP alone).

<sup>&</sup>lt;sup>29</sup> Not all speakers accept (108), and for the others it is marginal. If it is ungrammatical, my argument is further strengthened because the parallel between unagreement and overt structures at the basis of the apposition approach breaks down. For my account this is no problem, as I assume the relevant parallel to be the one in (109).

(109) Akousame akoma kai emeis oi eparchiotes afta ta heard.1PL even we DET.NOM.PL provincials these DET.ACC.PL nea.

news
'Even we provincials have heard these news.'

To the extent that the theory of weak and strong pronouns has something to say about the nominal structures examined here, the possibility of a null Pers can be explained as follows. Cardinaletti & Starke (1999:156-159) argue that the semantic defectivity of weak pronouns is the result of their lack of a range – a delineation of the set of individuals they refer to – within their structure, which has to be provided by context instead. In the present account, at least on a certain reading, the range for Pers is provided by its DP argument. PersP is therefore not semantically defective, and hence not expected to be subject to the restrictions for weak pronouns.

### 4.3 Quantifiers

The fact that quantifiers unagree is among the bigger challenges for any account of the phenomenon. While a few rough edges remain, the hidden-features theory seems generally well-equipped to handle quantifier unagreement.

Floating quantifiers are more permissive than the remaining quantifiers with respect to the realization of Pers: the Greek and Spanish sentences in (110) both allow an overt person marker.

- (110) a. (Emeis) oi mathites pigame oloi ekdromi. all we DET.NOM.PL pupils went.1PL all trip 'All of us students went on a trip.'/'We students all went on a trip.'
  - b. (Nosotros) los estudiantes vamos todos a la playa.

    we the students go.1PL all to the beach

    'All of us students go to the beach.'/'We students all go to the beach.'

As far as unagreement is concerned, the analysis from section 3.3 directly extends to the floating quantifier cases. The restrictor of the quantifier is a regular PersP subject to the presupposition introduced by Pers.

Note that Greek and Spanish seem to differ with respect to the possibility of the floating quantifier to appear with the PersP. While Greek allows *oloi emeis oi foitites*, Spanish does not allow *todos nosotros los estudiantes*, but only floated variants. I remain agnostic here as to whether floating quantifiers are (at some point) in constituency with their restrictor, but these data may point to an adverbial analysis instead, cf. also Tsakali (2008).

For the remaining quantifiers I suggest that Pers is merged higher in xnP than the quantifier. Under the assumption that the QP undergoes quantifier raising (QR) to a left-peripheral operator position at LF, the meaning of these unagreement structures can be derived as follows. The Pers head is stranded by QR and scopes over the variable bound by the raised quantifier. This variable is semantically composed with Pers, thereby becoming subject to the presupposition introduced by the person features.

Quantification may be viewed as establishing a relation between two sets. One is denoted by the predicate in the scope of the quantifier, the other is the restrictor. I assume that the restrictor corresponds to the intersection of the set of potential values for the bound variable (P) with the set denoted by the restrictor DP (R). P is the contextually restricted set of individuals in the discourse universe  $D_e$  and  $R \subseteq D_e$ . Therefore, for the presently discussed quantifiers over individuals  $P \cap R = R$ . I assume that the presupposition introduced by Pers holds for P and is projected to  $P \cap R$ . These assumptions are illustrated in (111b).

- (111) a. Merikoi mathites tha pame ekdromi. some pupils FUT go.1PL trip 'Some of us pupils will go on a trip.'
  - b.  $[\![ a. ]\!]^c = 1$  iff there is a contextually salient set P of entities and a set R of pupils in c and a set T of entities going on a trip in c and  $(P \cap R) \cap T \neq \emptyset$ , undefined if  $s_c \notin (P \cap R)$ .

This analysis makes correct semantic predictions. For (111a) to be uttered felicitously the speaker needs to be a pupil, but does not have to be going on a trip him- or herself, as evidenced by the possibility of (112).

(112) Merikoi mathites tha pame ekdromi kai merikoi tha katsoume spiti. some pupils FUT go.1PL trip and some FUT sit.1PL home 'Some of us pupils will go on a trip and some (of us) will stay home.'

Now why are there no quantificational unagreement with an overtly expressed Pers node as in simpler unagreement structures, i.e. why is (113) ungrammatical?

(113) \*Emeis merikoi mathites tha pame ekdromi.

An answer is provided by the hypothesis that overt spell-out of Pers is connected to a  $[\pm dem]$  feature, as suggested in section 3.3. Since quantified phrases are non-referential, it seems plausible that they cannot sustain a [+dem] feature either, thereby preventing the overt spell-out of Pers. A potential, if limited, correlate of these con-

siderations is the overall absence of determiners with these kinds of quantifiers in Greek. Against this background, the somewhat unexpected article in *oi perissoteroi* 'most' deserves further investigation.

Numerals of the type *emeis oi dyo foitites* 'we two students', where Pers can receive an overt spell-out, represent an only apparent exception. Here, a 'real' definite DP is involved, denoting a specific set of people. The numeral simply indicates its cardinality. This contrasts with properly quantifying numerals, which do not involve an article and cannot sustain overt Pers: \**emeis dyo foitites*. The difference in the semantics of these phrases is illustrated by the contrast between (114a) and (114b).

- (114) a. The pame pente mathites sto theatro kai oi FUT go.1PL five students in the theatre and DET.NOM.PL ypoloipoi the %pame/pane sto sinema. remaining.PL FUT go.1PL/3PL to the cinema 'Five of us students will go to the theatre and we/the others will go to the movies.'
  - b. The pame of pente mathites sto theatro kai FUT go.1PL DET.NOM.pl five students in the theatre and of ypoloipoi the \*pame/pane sto sinema.

    DET.NOM.PL remaining.PL FUT go.1PL/3PL to the cinema 'We five students will go the theatre and \*we/the others will go to the movies.'

Both sentences are fine with third person agreement in the second clause, but their status differs when there is first person unagreement in the second clause as well. At least some speakers of Greek accept the first sentence as a felicitous utterance in a situation where 5 out of a group of students will go to the theatre and the rest, including the speaker, will go to the movies.<sup>30</sup> The contrasting sentence with the numeral in the scope of the article is incoherent for all speakers.

This is explained if the articled version refers to a specific group of pupils including the speaker. Naturally, the speaker cannot simultaneously be a member of the "others" group going to the cinema, as presupposed by the use of first person unagreement in the second clause. For the first example this problem does not arise under the hypothesis that the speaker is only presupposed to be a student by quantificational unagreement, but not necessarily a member of the group going to the theatre.

Finally, unagreement with Spanish *cada* 'each' and *ninguno* 'nobody' deserves special mention. A&N suggest that this possibility is a result of the lack of contrasting

<sup>&</sup>lt;sup>30</sup> For my consultant that finds (114a) marginal with unagreement in the second part, the sentence is unacceptable in the past. This problem seems was absent for other speakers.

plural forms for these quantifiers, since their principle of Maximal Encoding (62) only blocks plural agreement morphology with singular subjects if there is an alternative form of the subject to encode the plural feature. This account runs into problems with the Greek data. Neither *kathe* 'each' nor *kaneis* 'nobody' (nor their variants discussed in sec. 1.2.3) have a plural form. Nevertheless, unagreement is strictly out with *kaneis* and restricted to specific distributive contexts with *kathe*. A&N's account predicts the same pattern for Greek and Spanish contrary to fact.

While I do not have a worked-out solution, I suspect that some difference in morphological features is responsible for these observations. If the Spanish quantifiers are unspecified for number, some form of semantic agreement could license plural agreement with a [+auth,+part] and [-auth,+part] PersP containing a quantifier. Their Greek counterparts might be strictly specified for singular,<sup>31</sup> blocking the number unagreement available in Spanish.

## 4.4 Number asymmetry

In the current account, the restriction of unagreement to plural contexts, as well as its partial obviation in Greek (sec. 1.2.2), finds a parallel in the cross-linguistic variation of pronominal determiner structures, which show a similar singular-plural asymmetry (Lyons 1999:141-145). English restricts singular PronDs to second person exclamations (\*I idiot, you idiot!, ?\*you linguist), they cannot be subjects of declarative sentences. This is reminiscent of the absence of singular unagreement in Spanish. In German, on the other hand, singular APCs can be subjects, whith emotive expressions (115) and less frequently also with common nouns, cf. (116) cited from (32) in Rauh (2004).

- (115) Ich Idiot hab vergessen die Tomaten zu kaufen!
  I idiot have forgotten the tomatoes to buy
  'I stupidly [\*I idiot] forgot to buy the tomatoes!'
- (116) Auf meinem Planeten gibt es Dinge, die **du Mensch** on my planet exist EXPL things REL you.NOM human dir gar nicht vorstellen kannst.

  yourself.DAT PRT not imagine can.2SG

  'There are things on my planet that you, being human, cannot even imagine.'

  [German]

 $<sup>^{31}\,\</sup>mathrm{This}$  is supported by my consultants' comments.

This in turn resembles Greek singular unagreement, cf. (117) and (118). In both languages, emotives are easily available in these constructions, while common nouns need some contextual cues.

- (117) a. I went to the market to buy some vegetables...
  - b. kai xechasa **o vlakas** tis domates. and forgot.1sg Det.nom.sg idiot Det.acc.pl tomatoes '... and I stupidly [=\*I idiot] forgot the tomatoes.'
- (118) a. I went to the bookstore...
  - b. kai pali xechastika **o glossologos** sto orofo me ta and again got.lost.1SG DET.NOM.SG linguist in.the floor with the lexika.

dictionaries

"... and I, linguist that I am, lost myself again on the floor with the dictionaries." [Greek]

Regarding the lack/scarcity of singular unagreement, Torrego (1996:115f.) notes that "[t]he fact that floating definites have to be plurals also seems to be rooted in semantics [...] Since singulars denote atomic individuals, they are entities that are not distributable." Based on a similar intuition, Rauh (2004) explains the restricted availability of singular APCs in German as an effect of the conversational maxims of relevance and quantity (Grice 1975). While plural APCs help to disambiguate reference, singular APCs need to add relevant, new information about speaker or hearer that cannot be contextually inferred. Within the current proposal, this explanation naturally extends to Greek singular unagreement. While an explanation of the complete lack of singular unagreement in Spanish is still outstanding, the present account implies that whatever explanation applies to the restrictions in English could extend here as well.

# 5 Conclusion

In this thesis, I have dealt with configurations involving an apparently third person plural subject and first or second person plural on the verb, known as unagreement. Previous discussions of the phenomenon were mostly restricted to Spanish. Divers unagreement data from Modern Greek have been presented here to extend the theoretical landscape. In contrast to Spanish, Greek also has limited singular unagreement. Spanish, on the other hand, allows unagreement with apparent singular quantifiers like cada 'each' and ninquno 'nobody'. A cross-linguistic overview has shown that

unagreement is not just an idiosyncracy of Spanish and Greek.

Three types of theoretical accounts of unagreement were identified. The first one is based on a symmetric theory of agreement and suggests that person features are transfered from the verb to the third person subject in unagreement. The second type assumes that the actual subject of unagreement sentences is a silent pronoun. The apparent subject DP is related to the actual subject by an A-bar chain or as an apposition. According to the third type, the subject has "hidden" person features explaining the first or second person agreement.

My analysis is of the third type, involving regular agreement between a person marked subject and the verb and zero spell-out of the corresponding functional head in the extended nominal projection. On the basis of the cross-linguistic correlation between adnominal pronoun constructions like we students and the availability of unagreement, I have argued that unagreement depends on configurations where the personal features are hosted on a different functional head than definiteness features. When both are encoded on the same head, as in Italian, unagreement is impossible. The meaning of unagreement results from standard assumptions about the semantics of person features (Heim 2008).

Object unagreement, association of focus-sensitive particles with unagreeing phrases and quantificational unagreement have been shown to find natural explanations in the proposed framework. The plural-singular asymmetry and its apparent softening in Greek have been connected to similar phenomena with pronominal determiners. The overal empirical coverage of the present theory thus exceeds that of the alternative theories in these areas. The availability of unagreement is explained as a result of the observable differences in xnP structure. To my knowledge, this is the first theoretical account for the cross-linguistic distribution of the phenomenon.

There are various areas meriting further investigation. The role of unagreement languages without articles (Georgian, Warlpiri) for the proposed generalization should be clarified. For an assessment of the problematic Hebrew data, a closer look at APCs in Semitic languages seems sensible. Moreover, the relation of unagreement to other phenomena of (apparent) agreement mismatches calls for clarification. First of all, this concerns so called semantic agreement, e.g. observed in Russian for gender (Corbett 2006:158). This might also be responsible for "number unagreement" with the Spanish quantifiers cada and ninguno and the Greek distributive quantifier kathe, as well as with collective nouns (e.g. Greek emeis i palia genia 'we the old generation'). Furthermore, the relation between unagreement and Collins & Postal's (2012) imposters deserves further examination, since they seem at least superficially rather similar to unagreeing subjects. Also, it seems interesting whether Lichtenberk's (2000) Inclusory

Pronominals, pronouns accompanied by a DP denoting a subset of the pronominal reference, can be related to unagreement in some way.

Finally, regarding psycholinguistic investigations of unagreement (Mancini et al. 2011, 2012), the present analysis raises the possibility that the observed difference between agreement and unagreement results from the use of preverbal subjects in the experimental items. The overt person marking on the verb is therefore parsed after the subject has been encountered, so some form of "reverse agreement" mechanism (Mancini et al. 2011) is expected to recover the appropriate person features in xnP. To me, this seems rather like an issue of performance than competence. Against this background, it should be investigated whether postverbal unagreeing DPs give rise to the same difference in activation patterns as preverbal ones.

# References

- Ackema, Peter & Ad Neeleman. in prep. Subset controllers in agreement relations. Ms., University of Edinburgh and UCL.
- Alexiadou, Artemis & Elena Anagnostopoulou. 1998. Parametrizing Agr: Word order, V-movement and EPP-checking. *Natural Language and Linguistic Theory* 16. 491–539.
- Anagnostopoulou, Elena. 2006. Clitic doubling. In Martin Everaert & Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax*, vol. 1, chap. 14, 519–581. Malden (MA), Oxford: Blackwell.
- Areta, Mikel Martínez. 2009. The category of number in Basque: I. Synchronic and historical aspects. *Fontes Linguae Vasconum* 110. 63–98.
- Arregi, Karlos & Andrew Nevins. 2012. Morphotactics: Basque auxiliaries and the structure of spellout. Dordrecht: Springer.
- Benveniste, Emile. 1971. *Problems in general linguistics* chap. The nature of pronouns, 217–222. Coral Gables (FL): University of Miami Press.
- Bleam, Tonia. 1999. Leísta Spanish and the syntax of clitic doubling: University of Delaware dissertation.
- Bock, J.K. & C.A. Miller. 1991. Broken agreement. Cognitive Psychology 23. 45–93.
- Bosque, Ignacio & Joan-Carlos Moreno. 1984. A condition on quantifiers in Logical Form. *Linguistic Inquiry* 15. 164–167.
- Bresnan, Joan. 2001. Lexical-functional syntax. Malden (MA): Blackwell.
- Burton-Roberts, N. 1975. Nominal apposition. Foundations of Language 13. 391–419.
- Cardinaletti, Anna. 1994. On the internal structure of pronominal DPs. *The Linguis-tic Review* 11. 195–219.
- Cardinaletti, Anna & Michal Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In Henk van Riemsdijk (ed.), *Clitics in the languages of europe*, 145–233. Berlin, New York: Mouton de Gruyter.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), Ken Hale. A life in language, 1–52. Cambridge (MA), London: MIT Press.
- Chomsky, Noam. 2004. Beyond explanatory adequacy. In Adriana Belletti (ed.), Structures and beyond: The cartography of syntactic structures, vol. 3, chap. 3, 104–131. Oxford, New York: Oxford University Press.
- Chomsky, Noam. 2008. On phases. In R. Freidin, C. Otero & M. L. Zubizarreta (eds.), Foundational issues in linguistic theory, 133–166. Cambridge (MA): MIT Press.

- Collins, Chris & Paul Postal. 2012. Imposters: A study in pronominal agreement. Cambridge (MA): MIT Press. Cited after draft version available at https://files.nyu.edu/cc116/public/Manuscript August 2 (dist).pdf [retrieved June 2012].
- Corbett, Greville G. 2006. Agreement. Cambridge: Cambridge University Press.
- Costa, João & Sandra Pereira. to appear. a gente: pronominal status and agreement revisited. The Linguistic Review.
- den Dikken, Marcel. 2001. "Pluringulars", pronouns and quirky agreement. The Linguistic Review 18. 19–41.
- Embick, David. 2010. Localism versus globalism in morphology and phonology. Cambridge (MA): MIT Press.
- Espinal, M. T. 1991. The representation of disjunct constituents. *Language* 67(4). 726–762.
- Franco, Jon. 2000. Agreement as a continuum: The case of spanish pronominal clitics. In Frits Beukma & Marcel den Dikken (eds.), *Clitic phenomena in european languages*, 147–189. Amsterdam: John Benjamins.
- Grice, H. Paul. 1975. Logic and conversation. In P. Cole & J. L. Morgan (eds.), Syntax and semantics 3: Speech acts, 41–58. New York: Academic Press.
- Haacke, Wilfrid Heinrich Gerhard. 1976. A Nama grammar: the noun-phrase. University of Cape Town MA thesis.
- Halle, Morris. 1997. Distributed morphology: Impoverishment and fission. In Benjamin Bruening, Yoonjung Kang & Martha McGinnis (eds.), *Mitwpl 30: Papers at the interface*, 425–449. Cambridge (MA): MITWPL.
- Halle, Morris & Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In Kenneth Hale & Samuel Jay Keyser (eds.), *The view from building 20*, 111–176. Cambridge (MA): MIT Press.
- Harley, Heidi & Rolf Noyer. 1999. State-of-the-article: Distributed morphology. GLOT 4(4). 3–9.
- Harley, Heidi & Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78(3). pp. 482–526. http://www.jstor.org/stable/3086897.
- Hauge, Kjetil Rå. 1999. A short grammar of contemporary Bulgarian. Bloomington: Slavica.
- Heim, Irene. 2008. Features on bound pronouns. In Daniel Harbour, David Adger & Susana Béjar (eds.), *Phi theory. phi-features across modules and interfaces*, 35–56.

- Oxford, New York: Oxford University Press.
- Heringa, Herman. 2012. A multidominance approach to appositional constructions. Lingua 122. 554–581.
- Hualde, José Ignacio & Jon Ortiz de Urbina (eds.). 2003. A grammar of Basque. Berlin: de Gruyter.
- Hurtado, Alfredo. 1985. The unagreement hypothesis. In L. King & C. Maley (eds.), Selected papers from the thirteenth linguistic symposium on romance languages, 187–211. Amsterdam: John Benjamins.
- Karachaliou, Rania. 2010. Το  $\varrho\varepsilon$  ωσ δείκτησ οργάνωσης λόγου σε συνομιλιακές αφηγήσεις εφήβων. Ms., Panepistimio Patron. Paper presented at the 2nd Patras International Conference of Graduate Students in Linguistics.
- Lawrenz, Birgit. 1993. Apposition. Begriffsbestimmung und syntaktischer Status. Tübingen: Narr.
- Lichtenberk, Frantisek. 2000. Inclusory pronominals. Oceanic Linguistics 39. 1–32.
- Lyons, Christopher. 1999. Definiteness. Cambridge: Cambridge University Press.
- Mancini, S., N. Molinaro, S. Massol, J.A. Duñabeitia & M. Carreiras. 2012. When the speaker is present: processing different person specifications in basque subject-verb agreement. Poster presented at CNS in Chicago, Spring 2012.
- Mancini, Simona, Nicola Molinaro, Luigi Rizzi & Manuel Carreiras. 2011. When persons disagree: An ERP study of unagreement in Spanish. *Psychophysiology* 48. 1361–1371.
- Matthewson, Lisa. 2004. On the methodology of semantic fieldwork. *International Journal of American Linguistics* 70. 369–415.
- Michelioudakis, Dimitris. 2011. Dative arguments and abstract Case in Greek: University of Cambridge dissertation.
- Müller, Stefan. 2008. *Head-Driven Phrase Structure Grammar. Eine Einführung.* Tübingen: Stauffenburg Verlag 2nd edn.
- Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. *Natural Language & Linguistic Theory* 25(2). pp. 273–313. http://www.jstor.org/stable/20532983.
- Nevins, Andrew. 2011. Multiple agree with clitics: person complementarity vs. omnivorous number. Natural Language & Linguistic Theory 29. 939–971. http://dx.doi.org/10.1007/s11049-011-9150-4. 10.1007/s11049-011-9150-4.
- Norman, Boris. 2001. Substantivnoe podležaščee pri glagolax v 1-m lice množestvennogo čisla v bol'garskom jazyke (*Dvama studenti tərsim rabota*).

- In Alexander Kiklevič (ed.), Količestvennost' i gradual'nost'. Quantität und Graduierung in der natürlichen Sprache (Die Welt der Slaven 11), 77–86. München: Otto Sagner.
- Osenova, Petya. 2003. On subject-verb agreement in Bulgarian (an HPSG-based account). In Peter Kosta, Joanna Błaszczak, Jens Frasek, Ljudmila Geist & Marzena Żygis (eds.), Investigations into formal Slavic linguistics. Contributions of the fourth European conference on formal description of Slavic languages FDSL IV, 661–672. Frankfurt/Main: Peter Lang.
- Panagiotidis, Phoevos. 2002. *Pronouns, clitics and empty nouns*. Amsterdam: John Benjamins.
- Papangeli, Dimitra. 2000. Clitic doublin in Modern Greek: a head-complement relation. In Corinne Iten & Ad Neeleman (eds.), *Ucl working papers in linguistics* 12, vol. 12, 473–497. London: University College London.
- Piper, P. 1998. Lico prospekt srpskie sintakse u svetlu slovenske sintaksičke tipologije. In *Slavistika. kniga ii*, 22–29. Belgrade.
- Poletto, C. 1995. The diachronic development of subject clitics. In A. Battye & I. Roberts (eds.), *Clause structure and language change*, 285–322. Oxford: Oxford University Press.
- Poletto, Cecilia. 1996. Three kinds of subject clitics in Basso Polesano and the theory of pro. In A. Belletti & L. Rizzi (eds.), Parameters and functional heads: Essays in comparative syntax, 269–300. Oxford: Oxford University Press.
- Poletto, Cecilia. 2000. The higher functional field: Evidence from Northern Italian dialects. Oxford: Oxford University Press.
- Popov, K. 1988. Sintaktičnoto soglasuvanje v bolgarskija jezik. Sofia.
- Postal, Paul. 1969. On so-called "pronouns" in English. In David A. Reibel & Sanford A. Schane (eds.), *Modern studies in English: Readings in Transformational Grammar*, 201–226. Englewood Cliffs (New Jersey): Prentice Hall.
- Radford, Andrew. 2004. Minimalist syntax. Cambridge: Cambridge University Press.
- Rauh, Gisa. 2003. Warum wir Linguisten "euch Linguisten", aber nicht "sie Linguisten" akzeptieren können. Eine personendeiktische Erklärung. Linguistische Berichte 196. 390–424.
- Rauh, Gisa. 2004. Warum'Linguist' in 'ich/du Linguist' kein Schimpfwort sein muß. Eine konversationstheoretische erklärung. *Linguistische Berichte* 197. 77–105.
- Rivero, María Luisa. 2008. Oblique subjects and person restrictions in Spanish: A morphological approach. In R. D'Alessandro, S. Fischer & G.H. Hrafnbjargarson

- (eds.), Agreement restrictions, 215–250. Berlin: Mouton de Gruyter.
- Rizzi, Luigi. 1986. Null objects in italian and the theory of pro. Linguistic Inquiry 17. 501–557.
- Rizzi, Luigi. 1997. A parametric approach to comparatic syntax: properties of the pronominal system. In Liliane Haegeman (ed.), *The new comparative syntax*, 268–285. London: Longman.
- Rodrigues, Cilene. 2008. Agreement and floatation in partial and inverse partial control configurations. In William D. Davies & Stanley Dubinsky (eds.), *New horizons in the analysis of control and raising*, 213–229. Dordrecht: Springer.
- Roehrs, Dorian. 2005. Pronouns are determiners after all. In Marcel den Dikken & Christina M. Tortora (eds.), *The function of function words and functional categories*, 251–285. Amsterdam: John Benjamins.
- Rust, Friederich. 1965. Praktische Namagrammatik. Cape Town: A.A. Balkema.
- Speas, M. 1996. Null objects in functional projections. In J. Rooryck & L. Zaring (eds.), *Phrase structure and the lexicon*, Dordrecht: Kluwer.
- Sportiche, Dominique. 1996. Clitic constructions. In Johan Rooryck & Laurie Zaring (eds.), *Phrase structure and the lexicon*, 213–276. London/New York: Routledge.
- Stavrou, Melita. 1990-1991. Ονοματική παράθεση και επεξήγηση: μια ερμηνευτική προσέγγυση και προσδιορισμός των σχετικών φαινομένων [onomatiki parathesi kai epexigisi: mia ermineftiki prosengisi kia prosdiorismos ton sxetikon fenomenon]. Glossologia 9-10. 113–150.
- Stavrou, Melita. 1995. Epexegesis vs. apposition in Modern Greek. In *Scientific bulletin of the school of philology*, vol. 5, 217–250. Thessaloniki: Aristotle University.
- Stojanov, St. 1964. *Gramatika na belgarskija knižoven jezik. Fonetika i morfologija*. Sofia.
- Taraldsen, Knut Tarald. 1995. On agreement and nominative objects in Icelandic. In Hubert Haider, Susan Olsen & Sven Vikner (eds.), Studies in comparative germanic syntax, 307–327. Dordrecht: Kluwer.
- Torrego, Esther. 1996. On quantifier float in control clauses. *Linguistic Inquiry* 27. 111–126.
- Torrego, Esther. 1998. The dependencies of objects. Cambridge (MA): MIT Press.
- Tsakali, Vina. 2008. "Double" floating quantifiers in Modern Greek and Pontic. In *Microvariation in syntactic doubling*, Emerald Group Publishing.
- Tsoulas, George & Artemis Alexiadou. 2005. On the grammar of the Greek particle Re. A preliminary investigation. Ms., University of York and Uni-

- versität Stuttgart. http://www-users.york.ac.uk/~gt3/recent-mss/tsoulas-alexiadou.pdf [accessed 13/03/2012].
- Uriagereka, Juan. 1995. Aspects of the syntax of clitic placement in western romance. Linguistic Inquiry 26. 79–124.
- Wagers, Matthew W., Ellen F. Lau & Colin Phillips. 2008. Agreement attraction in comprehension: Representations and process. *Journal of Memory and Language* 61. 206–237.