

Unagreement is an illusion

Apparent person mismatches and nominal structure

Georg F.K. Höhn¹

Received: 7 March 2013 / Accepted: 3 February 2015 / Published online: 2 September 2015
© Springer Science+Business Media Dordrecht 2015

Abstract This paper proposes an analysis of unagreement, a phenomenon involving an apparent mismatch between a definite third person plural subject and first or second person plural subject agreement observed in various null subject languages (e.g. Spanish, Modern Greek and Bulgarian), but notoriously absent in others (e.g. Italian, European Portuguese). A cross-linguistic correlation between unagreement and the structure of adnominal pronoun constructions suggests that the availability of unagreement depends on whether person and definiteness are hosted by separate heads (in languages like Greek) or bundled on a single head (i.e. pronominal determiners in languages like Italian). Null spell-out of the head hosting person features high in the extended nominal projection of the subject leads to unagreement. The lack of unagreement in languages with pronominal determiners results from the interaction of their syntactic structure with the properties of the vocabulary items realising the head encoding both person and definiteness. The analysis provides a principled explanation for the cross-linguistic distribution of unagreement and suggests a unified framework for deriving unagreement, adnominal pronoun constructions, personal pronouns and *pro*.

Keywords Unagreement · Subset control · Pronominal determiners · Adnominal pronouns · Person mismatch · Nominal structure · Distributed Morphology · Modern Greek

1 Introduction

The term agreement implies some form of harmony, or match between the properties of the elements that partake in the agreement relation. A prominent example of the

✉ G.F.K. Höhn
georg.hoehn.11@alumni.ucl.ac.uk

¹ University of Cambridge, Cambridge, Cambridgeshire, United Kingdom

application of the notion of agreement in linguistic theory is subject-verb agreement. In languages that morphologically mark it, the φ -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 properties person, number and gender are expressed on both the subject and the verb, the relevant markings may not be contradictory. Interestingly, languages occasionally seem to violate this requirement (cf. e.g. Corbett 2006, ch. 5).

One such apparent agreement mismatch has been described prominently for Spanish under the labels *unagreement*, *subset control*, *anti-agreement* and *disagreement* (Bosque and Moreno 1984; Hurtado 1985; Suñer 1988; Taraldsen 1995; Torrego 1996; Ordóñez and Treviño 1999; Ordóñez 2000; Saab 2007, 2013; Rivero 2008; Rodrigues 2008; Villa-García 2010; Ackema and Neeleman 2013). 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.
 DET.PL women denounced.1PL the injustices
 ‘We women denounced the injustices.’ (after Hurtado 1985, 187, (1))¹

This poses a problem for the common view that φ -features on the verb, represented by agreement morphology, are uninterpretable reflexes of the interpretable φ -features on the subject noun phrase. If *las mujeres* in the Spanish example is actually a third person plural subject, the origin of the first person plural agreement on the verb remains mysterious.

While most theoretical treatments of unagreement have focused on Spanish, it seems to be anything but an exceptional, language-specific quirk, as a small survey of languages that show unagreement(-like) configurations will show. The main goal of this paper is to propose an analysis of unagreement that can also account for at least part of its cross-linguistic distribution. The empirical focus will be on Modern Greek, and I will point out some differences between the range of unagreement structures in Greek and Spanish.

The basic hypothesis to be defended is that unagreement does not result from a special form or the lack of agreement between subject and verb. Instead, unagreement is the surface effect of zero spell-out of a functional head in the extended nominal projection (x_nP) that hosts person features. I argue that its cross-linguistic distribution, at least for languages with overt articles, results from the interaction between variation in the structure of the x_nP , particularly of adnominal pronoun constructions, and conditions on the null realisation of D. If person features are hosted on the same head that also encodes definiteness, unagreement cannot arise. On the other hand, unagreement is possible if person is encoded on a separate head.

In this paper I will not be concerned with the gender-mismatch phenomena often observed for Slavic languages (e.g. Corbett 2006, 158). I also distinguish unagree-

¹Glossing added and translation adapted.

ment from Collins and Postal's (2012) *imposters*. Imposters involve subjects that behave like third person DPs for agreement and lack any overt first or second person marking, but their denotation—somewhat exceptionally—involves the author or addressee of the utterance. Collins and Postal (2012) characterise this as a mismatch between “notional” and “grammatical” person of a DP. Unagreeing subjects, on the other hand, while also lacking overt first or second person marking, behave as one would expect them to based on their denotation, i.e. they trigger first or second person agreement. To adapt the above terminology, there is then no mismatch between “notional” and “grammatical” person of an unagreeing DP, but at best only between its grammatical and “morphological” person.

Similarly, I am going to leave aside Lichtenberk's (2000) Inclusive Pronominals. These seem to involve constructions with a non-singular pronoun and a singular nominal expression whose referent is included in the reference of the pronominal. Unagreement, to the extent that it is comparable, works the other way around, i.e. the plural nominal expression forming the subject is interpreted as including the speech act participant indicated by the verbal inflection. So while a comparison of these phenomena might be a fruitful area for future research, for the purpose of this paper I will focus on unagreement alone.

The article is structured as follows. I am going to present an overview of the cross-linguistic distribution of unagreement in the next section, and a more detailed survey of underdiscussed unagreement data from Modern Greek in Sect. 3. Section 4 outlines the theoretical issue raised by the phenomenon for theories of agreement. In Sect. 5, I specify the notion of adnominal pronoun constructions (APCs) and present a cross-linguistic correlation between their structure and the availability of unagreement. Section 6 presents the details of my analysis, as well as some predictions and consequences. Section 7 summarises the results and points out some open questions.

2 The cross-linguistic distribution of unagreement

There has been ample recognition in the literature of unagreement in Spanish, as well as a variety of analyses, cf. Bosque and Moreno (1984), Hurtado (1985), Suñer (1988), Taraldsen (1995), Torrego (1996), Ordóñez (2000), Saab (2007, 2013), Longobardi (2008), Rivero (2008), Rodrigues (2008), Villa-García (2010), Ackema and Neeleman (2013). Instances of unagreement in other languages have received less attention though, and to my knowledge there are very few accounts attempting to explain the cross-linguistic distribution of unagreement. Those previous accounts will be dealt with in Sect. 4 and 6.6 below.

As for further instances of unagreement, Norman (2001) and Osenova (2003) deal with Bulgarian, for Modern Greek the phenomenon is mentioned by Stavrou (1995, 236f., fn. 33) and analysed in more detail by Choi (2013, 2014b).² In the remainder of this section I am going to survey various instances of the unagreement phenomenon to identify factors relevant to its cross-linguistic distribution.

²Norman also notes previous treatments of Bulgarian by Stojanov (1964, 313) and Popov (1988, 11) and refers to Piper (1998, 28–29) for the availability of a similar construction in Slovenian and its absence in Bosnian-Croatian-Montenegrin-Serbian (BCMS).

The examples in (2) show five cases of unagreement following the Spanish pattern. The first three are from Romance. Catalan and Galician are found on the Iberian Peninsula, while Aromanian (or Vlach) is a minority language spoken in Greece. Furthermore, I provide an example of unagreement from each of Modern Greek and Bulgarian. Note that although each language allows for both first and second person plural subject agreement marking in these contexts, for reasons of space I will only give one example per language here. Unattributed examples were elicited by the author.

- (2) a. Els estudiants vam fer un pastís.
 DET.PL students AUX.1PL make a cake
 ‘We students made a cake.’ [Catalan]
- b. Os estudantes fixestes pan.
 DET.PL students made.2PL bread
 ‘You students made bread.’ [Galician]
- c. Pikurar-li adrem pini.
 shepherd-DET.PL made.1PL bread
 ‘We shepherds made bread.’ [Aromanian]
- d. Oi foitites ftiaksate keik.
 DET.NOM.PL students made.2PL cake
 ‘You students made cake.’ [Greek]
- e. Studenti-te izpekoxme keks.
 student-DET baked.1PL cake
 ‘We students baked a cake.’ [Bulgarian]

However, unagreement is not restricted to Indo-European languages as the examples in (3) from Swahili (Niger-Congo), Georgian (Kartvelian) and Warlpiri (Pama-Nyungan) show. It may be noticed that in contrast to the previous examples there are no overt definite articles involved here, clearly due to the general lack of definite articles in these languages.

- (3) a. Wa-nafunzi m-me-oka m-kate.
 PL-student 2PL-PST-bake SG-bread
 ‘You students baked a bread.’³ [Swahili]
- b. Monadire-eb-ma irem-i da-v-i-č`ir-e-t.
 hunter-PL-ERG deer-NOM PV-SUBJ.1-CV-catch-AOR-SUBJ.1.PL
 ‘We hunters caught the deer.’ [Georgian]
- c. Ngarka ka-rnalu purlami.
 man AUX-1PL shout
 ‘We men are shouting.’ [Warlpiri; after Lyons 1999, 144, (14c)]

All clear cases of unagreement that I am aware of involve languages with null subjects. As pointed out by a reviewer, French may pose a possible problem for that generalisation. While it is typically not assumed to allow pro-drop, at least some varieties of the language seem to allow constructions such as (4), which are reminiscent of unagreement.

³The plural marker *wa-* corresponds to noun class 2 in the Bantuist tradition.

- (4) a. Les étudiants, *(nous) avons ri.
 DET.PL students we have.1PL laughed
 ‘The students, we have laughed.’ [French]
- b. Les étudiants, *(on) a ri.
 DET.PL students ON AUX.3SG laughed
 ‘The students, we have laughed.’ [French]

Although I will not attempt to give an account of the French data here, it seems important to point out that a subject clitic, either the first plural *nous* or the impersonal *on* replacing *nous* in colloquial French, is mandatory in these expressions. If these clitics are indeed in subject position, this would suggest that the unagreeing DPs are actually (left-)dislocated, with the clitics representing resumptive pronouns. This would dissimilate these structures from standard unagreement, which is not restricted to left-peripheral “subjects” (see Sect. 3.1). While such an analysis would raise further questions as to the relation between the dislocated phrase and the resumptive pronoun, it should be noted that under the analysis to be proposed here French displays the appropriate nominal structure for unagreement (cf. Sect. 6.1), which could prove important for understanding the French facts above.

Alternatively, French subject clitics could actually represent subject agreement, in line with the proposal that colloquial French has null subjects (Zribri-Hertz 1994; Roberts 2010c; Culbertson 2010). In a similar vein, notice that Kayne (2009) proposes a silent first person plural pronoun NOUS for the analysis of the colloquial first plural use of impersonal *on*. In the current context, these analyses would suggest that some form of pro-drop is possible in French at least in the environment relevant for the phenomenon in (4), which in this case would indeed represent a form of unagreement.

Pending an analysis of the French data, I will tentatively assume that pro-drop is a necessary condition for unagreement (cf. also Choi 2013, 2014b for the same view). Crucially, however, pro-drop is clearly not a sufficient condition for unagreement, as pro-drop languages like Italian, European Portuguese (EP), Bosnian-Croatian-Montenegrin-Serbian (BCMS) and Turkish disallow the prototypical unagreement configuration, as illustrated in (5) and (6).

- (5) a. *Gli studenti lavoriamo molto.
 DET.PL students work.1PL much
intended: ‘We students work much.’ [Italian]
- b. *Os portugueses bebemos bom café.
 DET.PL Portuguese drink.1PL good coffee
intended: ‘We Portuguese drink good coffee.’ [EP]
- c. *A diákok megsütöttük a tortát.
 DET students baked.1PL the cake
intended: ‘We students baked the cake.’ [Hungarian]
- (6) a. *Studenti smo kupili krompire.
 students AUX.1PL bought.PL potatoes.PL
intended: ‘We students bought potatoes.’ [BCMS]
- b. *Kız-lar dans et-me-yi sev-er-iz.
 girl-PL dance make-INF-ACC like-AOR-1PL
intended: ‘We girls like to dance.’ [Turkish]

The presence of a definite article is a hallmark of the classical unagreement configurations in (2). Nevertheless, the existence of articleless languages with unagreement (3) and of languages with a definite article but without unagreement (5) suggests that unagreement is not related to the lack of an overt article *per se*. The relevance for unagreement of the definite article in those languages that have it will become clearer in Sect. 5, where I will argue that the availability of unagreement correlates with the presence of definiteness marking in adnominal pronoun constructions (APCs).

For the rest of this paper, I will only be concerned with null subject languages showing overt definite articles, i.e. the contrast between the languages in (2) and (5). The question of how the current analysis relates to the languages without articles in (3) will remain open for future research.

3 Unagreement in Modern Greek

For a more detailed view of the phenomenon, this section presents the contexts in which unagreement can be found in Modern Greek. I will also indicate where Greek unagreement behaves differently from what has been reported for Spanish in the literature.

3.1 Definite plural noun phrases

The prototypical unagreement configuration in Greek consists of a nominative definite plural DP and first or second plural agreement on the verb.⁴ As in Spanish, the DP may in principle appear pre- or postverbally, cf. (7) and (8).

- (7) (Oi odigo) de tha pioume (oi odigo) apopse.
 DET.NOM.PL drivers NEG FUT drink.1PL tonight
 ‘We drivers won’t drink tonight.’⁵
- (8) (Oi chimikoi) ftiaksate (oi chimikoi) ena oraio keik.
 DET.NOM.PL chemists made.2PL a good cake
 ‘You chemists made a good cake.’

Some speakers report a slight degradation with postverbal subjects. This seems to be mainly an information-structural effect due to independent restrictions on VSO orders (Roussou and Tsimpli 2006). In appropriate contexts, postverbal unagreeing subjects are accepted by those speakers as well. Consider a setting in which a group of students and professors occasionally have dinner together. Usually, everybody pays for themselves, but one day one of the professors might utter (9) to a student looking for her or his wallet.⁶

⁴For a brief discussion of potential cases of singular unagreement see the [Appendix](#).

⁵In 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.

⁶Thanks to Dimitris Michelioudakis for coming up with this example.

- (9) Min psaxneis to portofoli sou, tha plirosoume [oi
 NEG search.2SG DET wallet your FUT pay.1PL DET.NOM.PL
 kathigites] apopse.
 professors tonight
 ‘Don’t look for your wallet, tonight we professors are going to pay!’

An overt pronoun is optionally possible in unagreement constructions, cf. (10), and its use seems to be emphatic.

- (10) (Emeis) oi ergazomenoi tha antistathoume.
 we DET.NOM.PL workers FUT resist.1PL
 ‘We workers will resist.’

Further, DPs involving demonstratives are clearly disallowed in unagreement configurations, i.e. with first or second person plural agreement, as the contrasts in (11) show.

- (11) Aftoi oi odigoι de tha *pioume/*pieite/pioune.
 these DET.NOM.PL drivers NEG FUT drink.1PL/2PL/3PL
 only: ‘These drivers won’t drink.’

Finally, pronouns that are co-indexed with an unagreeing subject need to match the person marking on the verb, see (12). The same holds for Spanish (Olarrea 1994; Ordóñez and Treviño 1999, 59).

- (12) a. *Oi foitites_i fygame apo ti synantisi, afou
 DET.NOM.PL students left-1PL from DET.ACC.SG meeting after
 tous_i katigorisan.
 3PL.ACC accused-3PL
 b. Oi foitites_i fygame apo ti synantisi, afou
 DET.NOM.PL students left-1PL from DET.ACC.SG meeting after
 mas_i katigorisan.
 1PL.ACC accused-3PL
 ‘We students left the meeting after they accused us.’

3.2 Quantifiers

Most Greek quantifiers can appear as unagreeing subjects as shown in (13), rather similar to what has been observed for Spanish.

- (13) 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. Polloi/ oi perissoteroi/ merikoi/ ligoi/
 many.NOM.PL DET.NOM.PL most.NOM.PL some.NOM.PL few.NOM.PL
 pente mathites tha pame ekdromi.
 five pupils FUT go.1PL trip
 ‘Many/ most/ some/ few/ five (of us) pupils will go on a trip.’

In contrast to their Spanish counterpart *ninguno* in (14) however, Greek negative quantifiers (*kaneis*, *kanenas*) cannot participate in unagreement relations as shown in (15).⁷ The example in (15-c) seems slightly less degraded to some speakers. Since this type of sentence is nevertheless judged to be unacceptable, this may be a performance effect of the features of the restrictor “spilling over”, somewhat comparable to number attraction effects in English (**The key to the cabinets are on the table*), cf. e.g. Bock and Miller (1991) and Wagers et al. (2008).

- (14) Ninguno hablamos varios idiomas.
no one.SG speak.1PL several languages
'No one of us speaks several languages.' (Rivero 2008, 230, (31b))
- (15) a. *Kaneis/ kanenas de tha pame ekdromi.
no.one no.one NEG FUT go.1PL trip
b. *Kanenas mathitis de tha pame ekdromi.
no.one pupil NEG FUT go.1PL trip
c. ?*Kaneis/ kanenas apo mas de tha pame ekdromi.
no.one no.one of us NEG FUT go.1PL trip

Furthermore, the contrast in (16) shows that the Greek distributive universal quantifier *kathe* ‘each’ also differs from its Spanish counterpart *cada* with respect to unagreement, irrespective of the presence of the optional definite article. For present purposes, I assume that Greek *kathe* does not regularly allow unagreement.⁸

- (16) a. Cada alumno hablamos diferente.
each student.SG talk.1PL differently
'Each of us students talks differently.'
(Ackema and Neeleman 2013, 315, (48))

⁷ *Kaneis* and *kanenas* differ wrt. whether they allow a nominal complement.

⁸ Examples such as (i) and (ii) are grammatical only in the presence of some phrase “supporting” their distributivity. Furthermore, the definite determiner with the quantifier *kathe* is dispreferred and there is a preference for the quantified phrase to be located postverbally in these cases (Dimitris Michelioudakis, personal communication).

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

Michelioudakis (2011, 110, fn. 27) notes that the Greek distributive quantifier behaves exceptionally in other respects as well. In Greek, indirect objects can be expressed either by PPs like *ston kathigiti* ‘to the professor’ or the genitive *tou kathigiti* ‘of the professor’. Usually, only a genitive indirect object can be doubled by a clitic, but if the PP contains the quantifier *kathe* paired with an indefinite distributee, it may exceptionally be doubled by a genitive clitic too, cf. (16) adapted from Michelioudakis (2011, 110f., (43a)).

- (iii) Tous anethesa 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.'

- b. *(O) kathe mathitis milame diaforetika.
 DET.NOM.SG each pupil speak.1PL differently

On a cross-linguistic note, it seems that Bulgarian and Aromanian pattern with Greek in ruling out unagreement with negative and (universal) distributive quantifiers. On the other hand, Galician and Catalan seem to behave similar to Spanish in allowing it. However, the relevant cases of unagreement with these quantifiers, while available, seem to be systematically more marked in Catalan than in Spanish (Javier Fernández Sanchez, personal communication).⁹ It remains an open question how the liberality of some Iberian languages as opposed to the restrictivity of the mentioned Balkan languages is explained or whether one of the options is more marked than the other.

To return to the Greek data at hand, 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*, which both share the same accusative form, qualify as weak quantifiers, since they occur in existential constructions like (17).

- (17) Den echei kanenan (mathiti) ston kipo.
 NEG has.3SG no.ACC.SG pupil in.the garden
 ‘There is no one/no pupil in the garden.’

On the other hand, the other quantifier that is at least restricted with respect to unagreement, universal *kathe*, is clearly strong, cf. (18). Furthermore, quantifiers like *ligoi* ‘few’ or *polloi* ‘many’ qualify as weak quantifiers just like negative *kaneis*, see (19), while still allowing unagreement.

- (18) *Echei kathe mathiti ston kipo.
 has.3SG each pupil in.the garden
- (19) Echei ligous/ pollous mathites ston kipo.
 has.3SG few.ACC.PL many.ACC.PL pupils in.the garden
 ‘There are few/many pupils in the garden.’

So while the weak-strong distinction does not seem to be a common denominator of the two types of quantifiers that disallow unagreement (negative quantifiers and distributive universal *kathe* ‘each’), the way they pattern with respect to “regular” third person agreement distinguishes them from the quantifiers that license unagreement. Both control singular agreement and have a singular restrictor as shown in (20) and (21) respectively. The remaining quantifiers, which allow unagreement, appear with plural restrictors and control plural agreement on the verb in third person readings as exemplified in (22). Since unagreement typically involves plural verbal agreement, the relevant difference between Greek and Spanish in this respect may have to do with the number specifications of the negative and distributive universal

⁹I have also found a speaker of Spanish raised in Venezuela who only allowed third person singular agreement with *cada* and *ninguno*. If this represents a stable pattern, one might speculate that some South American varieties of Spanish are more restrictive than Peninsular ones with respect to unagreeing negative and universal distributive quantifiers. Against this background, the comparable patterns found in Spanish, Catalan and Galician could be at least partly due to an areal effect.

quantifiers. While I cannot provide a full account here, I offer some speculations in Sect. 6.2.

- (20) Kanenas mathitis de tha paei/*pane ekdromi.
 nobody pupil NEG FUT go.3SG/3PL trip
 ‘No pupil will go on a trip.’
- (21) (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.’
- (22) 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.’

3.3 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). A similar mismatch phenomenon as with subject unagreement can also be found between an object and a co-referring clitic.

Example (23) 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 the object is clitic-doubled rather than just right-dislocated (Anagnostopoulou 2006, 546f.). Notice that it is possible for the direct object to contain an overt second plural pronoun *esas* in addition to the clitic. This version is more prone to displaying intonational breaks before and after the *esas tous protoeteis* constituent, but they are by no means obligatory.

- (23) Sas eide (esas) tous protoeteis enas fylakas na
 2PL.ACC saw.3SG you.PL.ACC DET.ACC.PL first.graders a guard SBJ
 ta kanete mantara sto grafeio tou diefthydi.
 3PL.ACC.N make.2PL mess in.the office DET.GEN.SG director
 ‘A guard saw you first graders making a mess in the director’s office.’

Indirect object doubling displays the same behaviour. Example (24) 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.

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

4 The theoretical challenge of unagreement

In this section, I outline the issues unagreement raises for asymmetric theories of agreement and the types of responses to them in the literature. In contrast to the symmetric view of agreement taken in lexicalist theories like LFG (Bresnan 2001, ch. 8) and HPSG (Müller 2008, ch. 13), where verbal and nominal φ -features are independently generated and their compatibility insured by unification, asymmetric theories of agreement treat subject-agreement morphology on the verb as dependent on, or controlled by, the φ -features of the subject. For concreteness, consider the *probe-goal* conception of Chomsky (2001, 2004, 2008) where a head acts as a probe by virtue of having an unvalued feature and enters into an Agree relation with the closest element with a corresponding valued feature in its c-command domain. The relevant value of this goal is then transferred onto the probe by a Match operation like (25), following Roberts (2010a, 60, (29)). In subject-verb agreement the valued φ -features of a subject DP are the source for the verbal ones on the unvalued probe T.

- (25) Given a well-formed Agree relation of which α and β are the terms (i.e., Probe or Goal) where α 's feature matrix contains [Att_i: ___] and β 's contains [Att_i: val], for some feature Att_i, copy val into ___ in α 's feature matrix.

Unagreement configurations present a challenge to this view since they seem to involve lexical DPs, by assumption third person, causing verbal first or second person agreement. Irrespective of the exact characterisation of the problem, which depends on the analysis of third person,¹⁰ this feature mismatch raises serious questions about the viability of asymmetric approaches to agreement.

There are two general approaches to this problem in the literature. One set of analyses treats unagreement as a real lack of agreement and as evidence for the need to revise the agreement mechanism (Ordóñez and Treviño 1999; Ordóñez 2000; Norman 2001; Osenova 2003; Villa-García 2010; Mancini et al. 2011; Ackema and Neeleman 2013). In contrast, a variety of alternative analyses identify the controller or goal of agreement as the key to explaining unagreement—either because the actual agreement controller in unagreement configurations is a silent pronoun rather than the overt “unagreeing” DP (Bosque and Moreno 1984; Hurtado 1985; Popov 1988; Suñer 1988; Torrego 1996; Rodrigues 2008), or because the overt subject DP actually contains the relevant φ -features (Stavrou 1995; Saab 2007, 2013; Choi 2013, 2014b), as I will also argue in Sect. 6. The remainder of this section will briefly discuss the alternative approaches.

¹⁰ If third person is a “non-person” (Benveniste 1971) marked by the *absence* of features relating to discourse participants (Harley and Ritter 2002; Panagiotidis 2002), then the verbal φ -features on T simply lack a nominal controller in unagreement configurations, cf. (i). If, on the other hand, third person corresponds to substantive features, e.g. [−author, −participant] (Nevins 2007, 2011), unagreement configurations display an outright mismatch between the φ -features on the subject and T, see (ii).

- (i) DP_{subj}{ φ : ___}... T{ φ : [participant]} [3rd = non-person]
 (ii) DP_{subj}{ φ : [−auth, −part]}... T{ φ : [+auth, +part]} [specified 3rd person]

4.1 Unagreement is related to the agreement mechanism

The hypothesis that unagreement involves an actual lack of agreement has been adopted by what I will call ALA (actual lack of agreement) accounts. They advocate two sorts of reactions to the presumed lack of agreement: either modification or rejection of asymmetric theories of agreement.

The former approach is represented by Villa-García's (2010) claim that unagreement and similar effects in the grammar of Spanish show that Chomsky's (2001) Maximize Matching Effects Condition may be violated in Spanish to the effect that exactly one φ -feature on a probing T may remain syntactically unvalued. This feature is then free to receive a value by other means, e.g. through pragmatics.

On the other hand, several analyses implicitly or explicitly reject the asymmetric view of agreement in favour of a symmetric one, where nominal and verbal φ -features are generated independently from each other,¹¹ for example Osenova's (2003) HPSG-based account of Bulgarian unagreement and Mancini et al.'s (2011) notion of "reverse Agree." The most detailed argument from unagreement for symmetric agreement is probably made by Ackema and Neeleman (2013).

They adopt a grammatical architecture of "mappings between semantics and LF, between LF and PF, and between PF and phonology" (Ackema and Neeleman 2013, 296) with specific well-formedness conditions on mappings and representations. Furthermore, φ -feature are represented by geometries as advocated by Harley and Ritter (2002), meaning that third person is radically underspecified for φ -features (cf. fn. 10 above) and hence less specific than first or second person. Feature hierarchies can be associated in the style of autosegmental phonology with DPs as well as verbs. These associations may be manipulated by syntactic operations. On this basis, Ackema and Neeleman (2013) propose that an operation of φ -feature spreading is responsible for unagreement by associating non-third person features base-generated on the verb with the DP as in (26). This is possible because the DP is assumed to be third person, which in this framework effectively equates to the absence of φ -features. For further details on the proposal the reader is referred to the original paper.

$$(26) \quad \varphi\text{-feature spreading (Ackema and Neeleman 2013, 302, (19))}$$

$$[\text{DP } \varphi] \dots [\text{V } \varphi] \rightarrow [\text{DP } \varphi] \dots [\text{V } \varphi]$$

$$\begin{array}{ccc} & & \swarrow \quad \searrow \\ & & \text{F} \quad \text{F} \\ & \downarrow & / \quad \backslash \\ & \text{F} & \end{array}$$

Finally, Ordóñez and Treviño (1999) and Ordóñez (2000) develop the hypothesis that unagreement involves a lack of agreement on the basis of Uriagereka's (1995) big DP analysis for clitic doubling. They suggest that subject agreement inflexion is a clitic heading a big DP containing the doubled subject. This big DP inherits the φ -features of the clitic and the doubled DP by Spec-head agreement, accounting for the fact that pronouns coindexed with an unagreeing DP have to agree in person with

¹¹For the interpretability of verbal φ -features cf. the hypothesis that in null subject languages verbal inflexion satisfies the EPP and receives the subject theta-role of the verb (Jelinek 1984; Borer 1986; Barbosa 1995; Alexiadou and Anagnostopoulou 1998).

the verbal inflexion (Sect. 3.1). Hence, this view implies that there is no direct Agree relation between the doubled subject and the verb.

This solution seems unattractive since the issue with unagreement is not a general lack of agreement. Some relationship between the subject agreement clitic and the doubled DP is still needed in order to rule out illicit feature mismatches, otherwise it is not clear why a third plural pronominal DP could not combine with first plural subject inflexion or the other way around as in (27) (for this line of argument and comparable Spanish examples cf. Saab 2013, 198f.).

- (27) a. *Aftoi katalavainoume.
 they understand.1PL
 b. *Emeis katalavainoun.
 we understand.3PL

An issue which concerns all ALA accounts is that they have not so far offered a satisfactory explanation for the cross-linguistic distribution of the phenomenon. Although Ackema and Neeleman (2013) suggest that the availability of feature spreading is what sets Spanish apart from Italian in that respect, the explanatory power of that approach seems rather limited. Unless feature spreading is shown to operate elsewhere in the grammar, it is basically a restatement of the fact that Spanish has unagreement and Italian does not.

The matter is further complicated by the observation that languages seem not to be necessarily uniform in their availability of unagreement. Although unagreement is not normally an option in European Portuguese as discussed in Sect. 2 and shown by (28-a), it turns out to be possible in constructions involving cardinal numbers as illustrated in (28-b), due to João Costa (personal communication).

- (28) a. Nós/*os portugueses bebemos bom café.
 we/the Portuguese drink.1PL good coffee
 ‘We Portuguese drink good coffee.’
 b. Ficamos os dois estudantes em casa.
 stayed.1PL the two students in house
 ‘We two students stayed at home.’

For ALA accounts, this would seem to suggest that EP has some operation like Ackema and Neeleman’s (2013) φ -feature spread or Villa-García’s (2010) pragmatic feature valuation after all, but it is not clear how it could be non-stipulatively restricted to apply only in the appropriate contexts. On the other hand, a structure-based account like the one to be advocated in Sect. 6 can link such language-internal variation to the presence of the definite article in adnominal pronoun constructions with a numeral in EP (Costa and Pereira 2013), see (29).

- (29) nós os dois
 we the two

Moreover, the variation between Spanish and Modern Greek with respect to the availability of unagreement with distributive and negative quantifiers, discussed in Sect. 3.2, is problematic for accounts of this type. With respect to the Spanish data, Ackema and Neeleman (2013) suggest that this possibility is a result of the lack of

contrasting plural forms for the quantifiers *ninguno* ‘nobody’ and *cada* ‘each’. Their principle of Maximal Encoding (essentially a variant of Kiparsky’s 1973 Elsewhere Condition or Halle’s 1997 Subset Principle) only blocks plural agreement morphology with singular subjects if there is an alternative plural form of the subject. This account runs into problems with the Greek data. Neither *kathe* ‘each’ nor *kaneis* ‘nobody’ (nor their variants discussed in Sect. 3.2) have a plural form, so Ackema and Neeleman’s (2013) account predicts the same pattern for Greek and Spanish—contrary to fact. Unagreement is strictly out with *kaneis* and restricted to very specific distributive contexts with *kathe* (cf. fn. 8). So while it may be possible to retain Ackema and Neeleman’s intuition that the relevant Spanish quantifiers are underspecified for number, the generalisation “that quantificational unagreement is allowed with plural quantifiers, and with singular quantifiers as long as they do not have a plural counterpart” (Ackema and Neeleman 2013, 317) cannot be quite correct. In addition to the controversial status of paradigms as a primitive of grammar (Bobaljik 2008), lack of a paradigmatic opposition turns out to be also empirically problematic as a predictor for quantificational unagreement in the face of the Greek data.

Finally, it is not clear that non-pronominal DPs necessarily have to be analysed as third person across languages, cf. the discussion in Sect. 4.2.2, although that assumption is crucial for the hypothesis that there is an actual lack of agreement in unagreement which would pose additional requirements on possible theories of agreement. Against this background, I will now turn to proposals that link the phenomenon to properties of the unagreeing DP itself.

4.2 Unagreement is related to properties of the DP

There are several alternative analyses of unagreement that do not view it as a lack of agreement, but explain it in terms of the make-up of the unagreeing DP. They fall into a group of accounts where the overt DP_{subj} is not in fact the subject, but related to the actual subject and agreement controller, typically *pro*, by means of either an A-Bar chain (Hurtado 1985; Torrego 1996) or apposition¹² (Bosque and Moreno 1984; Rodrigues 2008; according to Norman’s 2001 summary also Popov 1988 for Bulgarian), and a group that argues that the subject DP itself contains the φ -features expressed in the verbal agreement morphology—the “hidden feature” perspective in Ackema and Neeleman’s (2013) terminology.

4.2.1 DP_{subj} is not the agreement controller

One way of analysing unagreement is to assume that the overt DP in unagreement configurations is left dislocated and forms an A-Bar chain with the silent pronominal subject of the clause. Sentence initial full DP subjects in null-subject languages have indeed been argued to be left dislocated (e.g. Alexiadou and Anagnostopoulou 1998; Ordóñez and Treviño 1999). The fact that unagreement is not restricted to sentence

¹²Den Dikken (2001) also assumes an appositive analysis for British English “plurals” of the *the committee have decided* type and Costa and Pereira (2013) adopt it to explain how European Portuguese *a gente* ‘we’ (literally ‘the people’) comes to trigger first plural agreement.

initial subjects, however, is problematic for an account relying on left-dislocation and I refer to Ackema and Neeleman (2013, 311–313) for further discussion.

The appositive analysis, on the other hand, capitalises on the optionality of an overt pronoun in the core unagreement cases, cf. e.g. (30) repeated from (10) above, and holds that unagreement involves the same structure with *pro* in place of an overt pronoun. Crucially, this relies on an appositive analysis of *we linguists*-type adnominal pronoun constructions (Cardinaletti 1994), which I will argue against in Sect. 5 where I will also propose a modified version of the pronominal determiner analysis (Postal 1969) instead.

- (30) (Emeis) oi ergazomenoi tha antistathoume.
 we DET.NOM.PL workers FUT resist.1PL
 ‘We workers will resist.’ [Greek]

4.2.2 Hidden features

According to the hidden-feature view, which I am defending in this paper, the impression of a mismatch arises because the relevant non-third person features are not overtly expressed on the agreement controlling DP. This type of account is explicitly rejected by Norman (2001) and Ackema and Neeleman (2013, 310f.). The latter raise the four points of criticism in (31). I will briefly address them here with the exception of (31-d), which will be the subject of Sect. 6.

- (31) a. psycholinguistic data indicating a three-way distinction between agreement, unagreement and failure of agreement (Mancini et al. 2011)
 b. the absence of R-expressions with inherent person features in Spanish
 c. the “apparent universal absence of a spell-out of such [i.e. person] features on R-expressions” (Ackema and Neeleman 2013, 310)
 d. difficulties in accounting for the cross-linguistic variation of unagreement

The first issue concerns an ERP experiment on Spanish by Mancini et al. (2011) that showed a three-way distinction in the processing of items with an agreement mismatch, regular agreement and unagreement. Ackema and Neeleman (2013) follow them in interpreting this as indication of a “reverse agreement” mechanism. Considering that Mancini et al.’s (2011) experimental material only contained preverbal subjects though, their results can at least as plausibly be interpreted as an issue of performance as of competence grammar (cf. in particular Neeleman and van de Koot 2010). Since the subject *x*nP is parsed before the verbal inflection and lacks overt person marking, assigning it third person by default is a plausible parsing strategy. Upon encountering the verbal inflection the parser will be forced to amend the structure (and interpretation) of the subject *x*nP, while in “regular” agreement no such recovery mechanism is required, accounting for the difference in behaviour between both types of agreement. Importantly, the default nature of third person is a property of the parser on this interpretation, not of all non-pronominal DPs.

Regarding (31-b) notice that, 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 (cf. e.g. Heim 2008). An R-expression with inherent person features would denote an entity that is *inherently* speaker, addressee or non-participant in any speech context. Maybe Portuguese *a gente* ‘the people’ in its first person plural use (Costa and Pereira 2013) could be viewed as such a case, but the scarcity of the phenomenon does not seem very surprising.

Finally, contrary to Ackema and Neeleman’s claim in (31-c), overt person marking on DPs is actually attested. Lyons (1999, 143) gives the examples in (32) for person marked DPs in Khoekhoe/Nama (Khoesan). For more details compare also Haacke (1976).

(32)	saá kxòè-ts	(you person-2SG+M)	‘*you man’
	tii kxòè-ta	(I person-1SG+M)	‘*I man’
	saá kxòè-ts	(you person-2SG+M)	‘*you man’
	kxòè-p	(person-3SG+M)	‘the man’
	sií kxòè-ke	(we person-1PL+M)	‘we men’
	saá kxòè-kò	(you person-2PL+M)	‘you men’
	kxòè-ku	(person-3PL+M)	‘the men’

Rust (1965, 18) explicitly relates them to adnominal pronoun constructions, which I discuss in the next section:

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 can also be connected with the suffixes of first and second person.*
 [...] *We have similar expressions in German like “I man”, “you man”, “we*
shepherds” etc.)

Moreover, similar markers seem to be attested in Alambak (East Sepik; cf. Bruce 1984, 96f.), and the so-called proximate plural in Basque (Hualde and Ortiz de Urbina 2003, 122; Areta 2009, 67) may also be related to a comparable category. In conclusion, the criticism directed at the hidden feature account does not seem to be sufficient to dismiss it.

The main difference between the hidden feature proposals in the literature is where the person features of the unagreeing subject are located: on the same head as the definite article (Saab 2007, 2013), on a head distinct from it (Stavrou 1995; the present account), or on a phrasal constituent in SpecDP (Choi 2013, 2014b).

Saab’s (2007, 2013) analysis builds on the classical pronominal determiner account (cf. Postal 1969 and next section). In contrast to English, Spanish simply does not realise the D head with its person features by a pronominal. However, this account does not address the cross-linguistic distribution of unagreement nor the problem that the pronominal determiner analysis does not transfer to the analysis of Spanish adnominal pronoun constructions (cf. Sect. 5.3).

Choi (2013, 2014b), on the other hand, rejects the pronominal determiner analysis and locates person features in a separate, silent pronominal DP in the specifier of an unagreeing DP. The differences from the present account are discussed in more detail in Sect. 6.6.

Finally, the analysis sketched briefly by Stavrou (1995, 236f., fn. 33) suggests that the structure of the unagreeing subject in (33) is something like (34).

- (33) Oi kalitechnes agapame ti fysi.
 DET.NOM.PL artists love.1PL DET.ACC.SG nature
 ‘We artists love nature.’¹³

- (34) [DP [D *pro*] [DEFP [DEF oi] [NP kalitechnes]]]

Although she does not detail her assumptions about the nature of *pro*, this sketch clearly locates person and definiteness features on separate functional heads in the same *x*nP and thereby represents a direct predecessor of the line of thought to be further developed in Sect. 6. In preparation for that, the next section discusses structural variation in adnominal pronoun constructions.

5 Adnominal pronoun constructions (APCs)

In this section, I present a cross-linguistic generalisation regarding the expression of adnominal pronoun constructions (APCs) and the availability of unagreement and argue for a distinction between two types of APCs. After summarising the main arguments for a pronominal determiner analysis (in the sense of Postal 1969 and Abney 1987) of one type of APCs in Sect. 5.2, I argue for a modified version of that analysis for the other relevant type of APC in Sect. 5.3. This second type of APC will play an important role in the analysis of unagreement to be proposed in Sect. 6.

The term APC is used here as a cover term for referring expressions involving at least a pronoun and a noun, sometimes also described as pronoun-noun collocations or constructions.¹⁴ Crucially, I limit this term to expressions that involve a single extended nominal projection (*x*nP), that is, excluding various kinds of “apposition” as will become clear later in this section.

5.1 A cross-linguistic generalisation

Restricting attention to languages with overt articles as indicated in Sect. 2, the following two patterns emerge from our small sample. In the null subject languages without unagreement discussed in Sect. 2 APCs exclude the definite article. I will call these type I APCs.

- (35) Languages without unagreement
 noi (*gli) studenti [Italian]
 nós (*os) estudantes [European Portuguese]
 mi (*a) diákok [Hungarian]
 we DET.PL students

The null subject languages showing unagreement, on the other hand, require a definite article in APCs. I will refer to these as type II APCs.

¹³Spelling adapted. Stavrou has the more literal translation “the artists we love the nature.”

¹⁴The term *adnominal pronoun* is borrowed from Rauh (2003).

- (36) Languages with unagreement
- | | | | | |
|----|-----------|---------------------|-------------|-------------|
| a. | emeis | oi | foitites | [Greek] |
| | nosotros | los | estudiantes | [Spanish] |
| | nosaltres | els | estudiants | [Catalan] |
| | nos | os | estudantes | [Galician] |
| | we | DET.PL | students | |
| b. | nie | studenti- te | | [Bulgarian] |
| | noi | pikurar- li | | [Aromanian] |
| | we | students-DET.PL | | |

From these observations emerges a tentative generalisation of the following form:¹⁵

- (37) Null subject languages with definite articles
- show unagreement if they have a definite article in APCs, and
 - do not show unagreement if they have no definite article in APCs.

In the remainder of this section I will discuss the syntactic structures of both types of APCs, before presenting an analysis of unagreement drawing on this generalisation in Sect. 6.

5.2 Type I APCs and the pronominal determiner analysis

Most previous research on APCs has focused on type I APCs, which exclude a definite article as illustrated in (35) above and additionally for German and English below.¹⁶

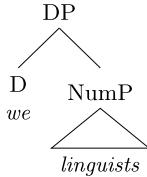
- (38) wir Studenten [German]
we students

Postal's (1969) classical "pronominal determiner" analysis treats the pronoun in these APCs as an instance of the definite article. This analysis, illustrated in (39), has since been argued for by Pesetsky (1978), Abney (1987), Lawrenz (1993), Lyons (1999), Déchaine and Wiltschko (2002), Panagiotidis (2002), Rauh (2003) and Roehrs (2005). A competing analysis, sketched in (40), takes the lexical noun to be an apposition to the pronoun. Variants of this "appositional" analysis have been assumed by Delorme and Dougherty (1972), Olsen (1991), Cardinaletti (1994), Ackema and Neeleman (2013), and all appositional analyses of unagreement that I am aware of (cf. Sect. 4.2.1).

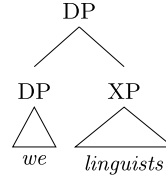
¹⁵Choi (2013) makes basically the same observation. As with most descriptive generalisations, there are potential complications for this one. Arabic, Hebrew and Romanian have articles in APCs, yet lack standard unagreement. The special nature of definiteness marking in these languages may turn out to be crucial for understanding these restrictions.

¹⁶I am not going to address here some issues specific to English, such as the preference of many speakers for the accusative form of the pronoun (*us students*) or the restricted occurrence of apparent type II APCs (*we the people*). For an approach to the first issue see Parrott (2009).

(39) pronominal determiner



(40) apposition



In order to substantiate the decision to adopt the pronominal determiner analysis here, this section summarises several of the arguments from the literature showing that APCs differ from appositions in various ways. I will start by discussing a series of differences between APCs and “loose” apposition, which seems to be the option most widely considered in the literature, before going on to provide some reasons to distinguish APCs from “close” appositions as well (for the distinction between two types of apposition cf. Burton-Roberts 1975 and Stavrou 1995).

5.2.1 Differences between type I APCs and loose apposition

One difference between APCs and appositional constructions can be observed in the behaviour of pronominal objects of particle verbs, which generally have to precede the particle, cf. (41) after Pesetsky (1978, (15)). Pesetsky’s (1978) example (16), reproduced here in (42), shows that the same holds when the pronoun is accompanied by an apposition or a relative clause (a-c), but crucially not for the APC in (d), which behaves like a “regular” full DP in being able to follow the particle.

- (41) a. He looked us up in the phone book.
 b. *He looked up us in the phone book.
- (42) a. *He looked up us, the local officers of the Elks.
 b. *He looked up us, who were living in France then.
 c. *He looked up us who sounded Kalmyk in the phone book.
 d. He looked up us linguists in the phone book.

Moreover, the variation in case marking of the pronoun mentioned in fn. 16 is restricted to APCs and not attested in appositional constructions, as shown in the following examples from Pesetsky (1978, 355, (17)).

- (43) a. We, linguists from conviction, abhor computers.
 b. *Us, linguists from conviction, abhor computers.
 c. We linguists abhor a vacuum.
 d. Us linguists abhor a vacuum.

A further point raised by Pesetsky (1978, 354, (12)) exploits a scope variability of appositions which is lacking in APCs. The *some of... others of...* construction relates two complementary subsets of a set, and requires the restrictors of both quantifiers to be identical. The example in (44-a) is felicitous because the restrictor of both quantifiers is the same group containing the speaker, while the appositions attach high, at the quantifier level, giving a salient property for each of the two subsets determined

by the construction. The resulting reading is that of a ‘we’ group consisting of (at least) linguists and philosophers, with members of the former subgroup thinking that members of the latter are crazy. The APCs in (44-b), on the other hand, do not allow that option. The nouns have to scope low, leading to two non-identical restrictors—a group of philosophers and another one of linguists—accounting for the lack of a coherent interpretation.

- (44) a. Some of us, linguists, think that others of us, philosophers, are crazy.
 b. *Some of us linguists think that others of us philosophers are crazy.

Lawrenz (1993, ch. 6) produces several further arguments in favour of a pronominal determiner analysis. While her discussion is focused on German, most of her arguments can be easily transferred to English examples.

1. Reinforcers like *here* or *there* are allowed in the context of the definite article or of an adnominal pronoun, but they are ruled out in appositions consisting of an articleless, indefinite noun phrase:
they, the girls there and *we girls here* vs. **they, ∅ girls there* or **we, ∅ girls here*
2. The article obligatorily accompanying certain proper names may be replaced by an adnominal pronoun, but must not be dropped in cases of apposition:
The/you Wright brothers are brilliant vs. **∅ Wright brothers are brilliant* and *they, *(the) Wright brothers, ...*
3. Certain adverbials that are licensed in appositions are out in the context of the definite article as well as with adnominal pronouns:
*the/you (*formerly) admirers of modern art... vs. you, formerly admirers of modern art, ...*
4. Restrictive post-nominal modifiers are obligatorily located after the complete pronoun-noun complex of an APC, while they can intervene between a pronoun and an apposition, presumably because the apposition scopes over the pronoun + modifier expression (cf. Pesetsky’s 1978 argument from the *some of... , others of ...* construction):
you rich boys with your fancy dresses vs. **you with your fancy dresses rich boys*; cf. *you with your fancy dresses, rich boys, ...*
5. APC are available in right-dislocated contexts where “loose apposition” constructions would be infelicitous:
Back then we had dreams, we simple folks vs. %*Back then we had dreams, we, simple folks*
6. APCs lack a comma intonation. An expression in construction with a pronoun requires the comma intonation indicative of appositions if there is a morphosyntactic number mismatch:
 **we father and son... vs. we, father and son, ... ; but: we fathers and sons*

Furthermore, the pronominal determiner analysis also seems to be in a better position to explain why APCs are incompatible with indefinite expressions, cf. the contrast

in (45) where only an appositional structure, marked by a clear comma intonation and optionally accompanied by *that is*, licenses the phrase in (45-a).

- (45) a. we, (that is) some students from California
 b. *We some students from California

5.2.2 Differences between type I APCs and close apposition

The above diagnostics focus on the distinction between APCs and “loose” apposition. Let me now turn to so-called “close” apposition as in *the poet Burns*, which, in fact, seems to pattern with APCs in some respects—e.g. the final three diagnostics quoted from Lawrenz (1993) or the definiteness restriction of (45).

Nevertheless, there are good reasons to distinguish APCs from close apposition. Burton-Roberts (1975, 397) notes that close apposition has to involve a proper name (in fact, his analysis treats the first noun as a modifier of the proper name, parallel to *the ingenious Chomsky*). APCs, on the other hand, are not restricted in this way.

Even if one were to claim that the pronominal part of APCs fulfilled the role of a proper noun for the purpose of that restriction, one would inevitably run into a further problem. While the pronominal element in APCs invariably comes first, the proper name comes last in the unmarked form of close apposition. While the latter allows an inverted variant with some form of contrastive interpretation (*Burns the poet*; cf. Burton-Roberts 1975, 402), APCs arguably only allow one order (**linguists you*).

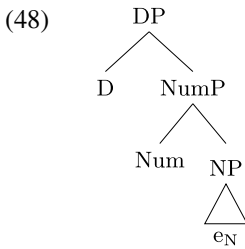
Finally, Roehrs (2005) notes that adjectival modifiers cannot intervene between the first and the second noun in close appositions, cf. (46). On the other hand, in APCs they need to interfere in the pronoun-noun complex, as illustrated in (47).

- (46) a. the famous poet Burns, the interesting number 5, the famous Brothers Grimm
 b. *the poet skillful Burns, *the number interesting 5, *the brothers famous Grimm
- (47) a. *famous you poets, *clever we/us kids, *hazardous you social-networking junkies
 b. you famous poets, we/us clever kids, you hazardous social-networking junkies

5.2.3 The structure of type I APCs

I conclude that type I APCs, those lacking an overt definite article, are properly analysed as pronominal determiners. I assume that they parallel the structure of simple (strong) pronouns in that in both cases D bears definiteness and person features, which are eventually spelled out as a pronoun.¹⁷ Following the analysis of pronouns in (48) proposed by Panagiotidis (2002, 2003), the crucial difference is that in simple pronouns a silent empty noun, e_N , forms the core of the xnP instead of the full noun found in APCs (cf. also Elbourne 2005). The functional head Num is assumed to host number features (Ritter 1995).

¹⁷Following Roehrs (2005, 2006), the pronominal determiner may move to D from a lower art head.



5.3 Extending the pronominal determiner analysis to type II APCs

The pronominal determiner analysis does not carry over directly to the type II APCs found in unagreement languages (Greek, Spanish etc.), since these require the presence of the definite article instead of the complementary distribution between article and pronoun characteristic for type I APCs (cf. Sect. 5.1).¹⁸ So considering that several of the arguments listed above for a pronominal determiner analysis of type I APCs build on the lack of an overt definite article, an appositional analysis might seem more promising for type II APCs.

In this section, I argue that, just like type I APCs, type II APCs should nevertheless be distinguished from loose and close apposition. However, I am not going to take the co-occurrence of the definite article and the pronoun in type II APCs as an argument against the pronominal determiner analysis *per se*. Instead, I propose an extension of that analysis, which retains the view that the adnominal pronoun is part of the same extended nominal projection as the noun, but places person features on a separate functional head higher than D in type II APCs, rather than on D itself as in type I.

5.3.1 Differences between APCs and loose apposition in Greek

This section establishes the distinction between close and loose apposition in Greek and presents arguments against treating type II APCs as cases of loose apposition.

Stavrou (1995) presents a series of reasons to distinguish between two types of apposition also in Modern Greek, illustrated by string-equivalent sequences like *o aetos to pouli* ‘the eagle (which is) a bird’ and *o aetos, to pouli* ‘the eagle, the bird’ (cf. also Stavrou 1990–1991, Lekakou and Szendrői 2012 and references cited there).¹⁹ The differences she discusses include, among others, different intonational patterns (i.e. comma intonation in loose apposition), the restrictions of discourse markers like *diladi* ‘namely’ to loose apposition and the fact that only loose appositions may involve an indefinite DP (cf. also the discussion of (54) below):

- (49)
- a. close apposition:
*enas kathigitis o Georgiadis! *o Georgiadis enas kathigitis
 - b. loose apposition:
enas kathigitis, diladi o Georgiadis ‘a professor, namely Georgiadis’

¹⁸This has been used as an argument against the pronominal determiner analysis in general (Choi 2013).

¹⁹She calls the two types “non-appositions” and *epexegetis*—from the Greek grammatical term *επεξήγηση* ‘explanation, comment’. These seem to correspond to the notions of close and loose apposition respectively, cf. Lekakou and Szendrői (2007, 2012).

The distinction between the two constructions is also evident in the contrast between the close apposition in (50-a) and the structure involving loose apposition in (50-b), based on Stavrou (1995, 221). She observes that in loose apposition “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, (50-b) is deviant because it is tantamount to saying *??Den eida to Gianni, alla to Gianni* ‘I didn’t meet John, but John.’

- (50) a. Den eipa oti eida to Gianni to filo
 NEG said.1SG that saw.1SG DET.ACC.SG Giannis DET.ACC.SG friend
 mou, alla to Gianni 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 Gianni, to filo
 NEG said.1SG that saw.1SG DET.ACC.SG Giannis DET.ACC.SG friend
 mou, alla to Gianni, 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.’

APCs, on the other hand, pattern with close apposition in this respect as shown by the contrast of the APCs in (51-a) with the string-equivalent loose appositions in (51-b).

- (51) a. De xasame mono emeis oi akadimaikoi, alla oloi emeis
 NEG lost.1PL only we DET.NOM.PL academics but all we
 oi polites.
 DET.NOM.PL citizens
 ‘Not only us academics lost, but all of us citizens.’
- b. #De xasame mono emeis, oi akadimaikoi, alla oloi emeis,
 NEG lost.1PL only we DET.NOM.PL academics but all we
 oi polites.
 DET.NOM.PL citizens

Further, Pesetsky’s (1978) argument from the wider scope options of loose apposition, discussed for type I APCs in Sect. 5.2.1, can be adapted to type II APCs. In addition, Greek allows for a more fine-grained manipulation of the attachment site of the apposition, since appositions match the case of the element they characterise. In (52-a), the loose apposition—marked prosodically and detectable by the availability of *diladi* ‘that is’—matches the case of the pronoun, yielding a contradictory low attachment interpretation where “us” is simultaneously exhaustively characterised as consisting of “the linguists” and “the physicists”. In contrast, when the apposition case-matches the whole quantifier phrase as in (52-b), the resulting high attachment interpretation is fine like in Pesetsky’s (1978) English example in (44-a). Notice that, while only the second sentence is felicitous, both attachment possibilities are grammatical for loose appositions.

- (52) a. #Merikoi apo mas, (diladi) tous fysikous,
 some.NOM.PL of us.ACC that.is DET.ACC.PL physicists
 pisteuoume, oti alloi apo mas, (diladi) tous
 believe.1PL that others.NOM.PL of us.ACC that.is DET.ACC.PL
 glossologous, einai treloi.
 linguists are crazy
 ‘Some of us, namely of the physicists, believe that others of us, namely
 of the linguists, are crazy.’
- b. Merikoi apo mas, (diladi) oi fysikoi,
 some.NOM.PL of us.ACC namely DET.NOM.PL physicists
 pisteuoume, oti alloi apo mas, (diladi) oi
 believe.1PL that others.NOM.PL of us.ACC namely DET.NOM.PL
 glossologoi, einai treloi.
 linguists are crazy
 ‘Some of us, (namely) the physicists, believe that others of us, (namely)
 the linguists, are crazy.’

APCs also yield an infelicitous low attachment reading under case matching between the pronominal and the following DP, cf. (53-a). Crucially, however, the high attachment configuration involving case matching with the quantifier is not even grammatical as illustrated in (53-b). This represents a further clear contrast between loose apposition and APCs.

- (53) a. #Merikoi apo mas tous fysikous pisteuoume, oti
 some.NOM.PL of us.ACC DET.ACC.PL physicists believe.1PL that
 alloi apo mas tous glossologous einai treloi.
 others.NOM.PL of us.ACC DET.ACC.PL linguists are crazy
 ‘Some of us physicists believe that others of us linguists are crazy.’
- b. *Merikoi apo mas oi fysikoi pisteuoume, oti
 some.NOM.PL of us.ACC DET.NOM.PL physicists believe.1PL that
 alloi apo mas oi glossologoi einai treloi.
 others.NOM.PL of us.NOM DET.NOM.PL linguists are crazy

Finally, the definiteness effect observed above in (45) for type I APCs holds for type II as well. An indefinite phrase can be attached to a pronoun as a loose apposition in (54-a), but cannot appear in an APC as shown in (54-b).

- (54) a. emeis, (diladi) kapoioi foitites apo Patra
 we that.is some students from Patras
 ‘we, (that is) some students from Patras’
- b. *emeis kapoioi foitites apo Patra
 we some students from Patras

This all strongly suggests that type II APCs must be distinguished from loose apposition, and in several respects behave rather similarly to close apposition. However, in spite of the similarity in terms of the tight structural coherence displayed by these two constructions, there are reasons not to view type II APCs as simply a special form of close apposition either, as I will discuss next.

5.3.2 Differences between APCs and close apposition in Greek

Lekakou and Szendrői (2007, 2012) observe that close apposition involves a symmetric relationship between two nominal phrases, so that “neither subpart of a close apposition is the unique head of the construction” (Lekakou and Szendrői 2012, 114; cf. also Roehrs 2005 for a different implementation of that insight), and note an important contrast with APCs in that respect. Consider the examples from Lekakou and Szendrői (2012, 114, (12); transliteration adapted) given in (55). While a predicative adjective can agree in gender with either component of the appositive irrespective of their linear order, the APC in (55-c) exclusively triggers first plural agreement on the verb. If the APC consisted of a close apposition of two DPs, first plural agreement and third plural *oi glossologoi*, we would instead expect a similar alternation in agreement possibilities for person as in the other two examples for gender.

- (55) a. O aetos to pouli einai megaloprepos/megaloprepo.
 the.M eagle.M the.N bird.N is majestic.M/majestic.N
 b. To pouli o aetos einai megaloprepos/megaloprepo.
 the.N bird.N the.M eagle.M is majestic.M/majestic.N
 ‘The eagle that is a bird is majestic.’
 c. Emeis oi glossologoi peiname/peinane.
 we.NOM the linguists.NOM are.hungry.1PL/are.hungry.3PL
 ‘We linguists are starving/hungry.’

Another effect highlighting the asymmetry between the pronominal and the “full” nominal part of APCs is that only one linear order is possible, i.e. the pronominal must be phrase-initial as shown in (56).

- (56) a. Gia afto stenaxorimaste emeis oi foitites.
 for that worry.1PL we DET.NOM.PL students
 ‘That’s why we students are worried.’
 b. *Gia afto stenaxorimaste oi foitites emeis.
 for that worry.1PL DET.NOM.PL students we

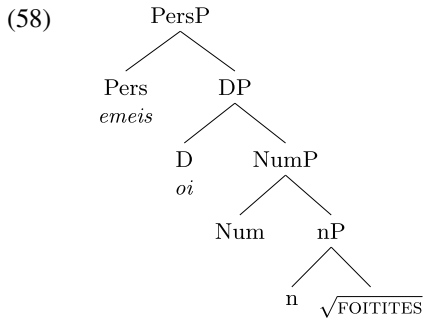
I follow Lekakou and Szendrői’s conclusion that APCs are not close appositions and that “arguably the pronominal part is the unique head” (Lekakou and Szendrői 2012, 114) in Greek APCs.

5.3.3 The structure of type II APCs

Remember that type II APCs require the presence of the definite article in addition to the pronoun, and that the pronoun strictly precedes the noun and the article, see the examples in (57).

- (57) a. emeis oi glossologoi
 we DET.PL linguists
 b. *emeis glossologoi
 c. *oi emeis glossologoi
 d. *oi glossologoi emeis

Building on the aforementioned proposal by Stavrou (1995, 236f., fn. 33) for Greek, I suggest a modification of the pronominal determiner analysis for type II APCs. While both types of APC consist of one xnP , in type II person is encoded in a functional head distinct from the one hosting the definite article. Departing from Stavrou, I assume that the definite article is located in D, while (interpretable) person features are hosted by a higher functional head Pers as illustrated in (58). Like D, Pers agrees with the Num head for number.



The central idea is that APCs do not arise from combining a third person DP *oi foitites* ‘the students’ with a pronominal DP like *emeis* ‘we’, i.e. two separate xnP constructions. Instead, the pronoun simply spells out the person features of the one xnP , just like in type I APCs. The crucial difference is that in type I definiteness and person are encoded on the same head, whereas in type II person is encoded on a separate functional head higher than D. The following section shows how this view of APCs helps to shed light on the analysis of unagreement.

6 Nominal structure and unagreement

In this section, I develop a hidden feature analysis of unagreement that relates the cross-linguistic variation of unagreement to the variation in the structure of APCs discussed in the previous section. The analysis adopts the framework of Distributed Morphology (Halle and Marantz 1993; Harley and Noyer 1999; Embick 2010), in particular the late insertion hypothesis: functional heads contain no phonological matrix until after spell-out, when vocabulary insertion takes place.

I argue that unagreement arises from type II APCs whose Pers head receives null spell-out and discuss some predictions of this analysis. The restrictions against unagreement in languages with type I APCs are related to the interaction of their structure and spell-out restrictions of the D head. On this basis, I finish by sketching a null-spell-out account of so-called *pro* in NSLs of both types. As a consequence, *pro* is analysed as internally complex just like overt pronouns.

6.1 Deriving unagreement from type II APCs

The essence of a hidden feature analysis of unagreement is that the apparently unagreeing subject DP actually carries the φ -features reflected by the verbal agreement

morphology, thereby resembling the analyses of APCs proposed in Sect. 5. For further support of this parallel consider (59). In an afterthought or self-correction context, an appositive first plural pronoun may clarify that the author of the utterance is a member of the group denoted by the subject.

- (59) Stenaxorethikan oi foitites, (diladi) emeis, gia afto.
 worried.3PL DET.NOM.PL students namely we for DEM.ACC.SG
 ‘The students, (namely) us/we, got worried about this.’

In contrast, in both the APC in (60) and the unagreement construction in (61) such an apposition is infelicitous. This is easily explained if the subject DP already encodes the author’s membership in its denotation in both cases, making the apposition redundant.

- (60) #Stenaxorethikame emeis oi foitites, (diladi) emeis, gia afto.
 worried.1PL we DET.NOM.PL students namely we for
 afto.
 DEM.ACC.SG
 ‘We students, (namely) us, got worried about this.’
- (61) #Stenaxorethikame oi foitites, (diladi) emeis, gia afto.
 worried.1PL DET.NOM.PL students namely we for DEM.ACC.SG
 ‘We students, (namely) us, got worried about this.’

Moreover, in accordance with the number asymmetry cross-linguistically observed for APCs, unagreement seems to be most readily available in the plural. Spanish, for instance, rules out singular unagreement altogether, with regular nouns (62) as well as epithets (63).

- (62) *El estudiante trabajé muchas horas ayer.
 the student worked.1SG many hours yesterday
- (63) *El imbécil no compré/compraste los tomates.
 the idiot NEG bought.1/2SG the tomatoes
 intended: ‘I/you idiot didn’t buy the tomatoes.’

Greek also shows a general preference for plural unagreement, although it also seems to have some cases of singular unagreement. These and potential parallels to German singular APCs are discussed in the [Appendix](#).

In Sect. 2 I have identified pro-drop as a necessary condition for unagreement. It seems a reasonable hypothesis, then, that unagreement relates to APCs like a “dropped” pronoun relates to an overt one. In the present analysis that means that the functional head encoding person features in APCs is not spelled out in unagreement. But what determines this difference between APCs and unagreement? I will suggest here that demonstrativity—or deicticity—plays a central role.

In null subject languages, the use of overt pronouns is typically associated with emphasis. The same appears to hold for the use of APC constructions over unagreement. Consider, for example, a comment by de Bruyne (1995, 145) on cases of una-

greement in Spanish noting that “the use of the subject pronouns [i.e., an APC; *author*] would have an emphatic effect.” Demonstratives present one way of indicating emphasis.

In this context it is worth pointing out an observation by Sommerstein (1972, 204) regarding example (64) from Postal (1969, 219), probably with stress on *you*. Arguably, this can only be reported using a demonstrative as in (65), but not with a plain definite article as in (66).

- (64) You troops will embark but the other troops will remain.
 (65) He said that those troops would embark but the other troops would remain.
 (66) *He said that the troops would embark but the other troops would remain.

This suggests that English “pronominal determiners” can actually correspond to demonstratives and not only definite articles. On this basis, Rauh (2003, 415–418) proposes that stressed pronominal determiners in German and English carry a [demonstrative] feature, while unstressed ones, which pattern with definite articles, lack this property.

Now consider the Greek example in (67) where some out of a larger group of pupils are sent on a tour, while the complement set are told that they can leave. In this context, the use of the adnominal pronoun is obligatory in order to establish a complement set of pupils. Notice that the second occurrence of *mathites* ‘pupils’ is preferably elided, but is included here to stress that the relevant interpretation is one where the group of ‘others’ consists of other pupils (rather than of non-pupils, in which case the adnominal pronoun would be optional). In parallel to the English example above, reporting this utterance also requires the use of a demonstrative, see (68).

- (67) *(Eseis) oi mathites tha pate ekdromi kai oi
 you.PL DET.NOM.PL pupils FUT go.2PL tour and DET.NOM.PL
 ypoloipoi (mathites) mporoun na fygoun.
 remaining pupils can.3PL SBJ leave.3PL
 ‘You pupils will go on a tour and the other pupils can leave.’
- (68) Eipe oti *(aftoi) oi mathites tha pane ekdromi, eno
 said.3SG that DEM.PL DET.NOM.PL pupils FUT go.3PL tour whereas
 oi ypolypoi (mathites) mporoun na fygoun.
 DET.NOM.PL remaining pupils can.3PL SBJ leave.3PL
 ‘She said that these pupils will go on a tour whereas the remaining pupils
 can leave.’

Against this background, I propose that unagreement corresponds to the version with an unstressed pronoun in lacking a demonstrativity feature, and the type II APC to the stressed counterpart by virtue of being demonstrative.

There are two further principal pieces of evidence in favour of the view that adnominal pronouns and demonstratives form a class. First, demonstratives are in com-

plementary distribution with adnominal pronouns. This holds for type I APCs like English **these we/us linguists* as well as for Greek or Spanish type II APCs:

(69) (*aftoi) emeis (*aftoi) oi glossologoi (*aftoi)
 DEM.PL we DET.NOM.PL linguists
 ‘we linguists’ [Greek]

(70) (*esos) nosotros (*esos) los lingüistas (*esos)
 DEM.PL we DET.PL linguists
 ‘we linguists’ [Spanish]

Second, APCs and DPs containing a demonstrative each enforce a different, specific verbal agreement corresponding to their feature specification, i.e. they both block unagreement as illustrated for Greek in (71).

- (71) a. Emeis oi odigoi de tha pioume/*pieite/*pioune.
 we DET.NOM.PL drivers NEG FUT drink.1PL/2PL/3PL
only: ‘We drivers won’t drink.’
- b. Eseis oi odigoi de tha *pioume/pieite/*pioune.
 you DET.NOM.PL drivers NEG FUT drink.1PL/2PL/3PL
only: ‘We drivers won’t drink.’
- c. Aftoi oi odigoi de tha *pioume/*pieite/pioune.
 these DET.NOM.PL drivers NEG FUT drink.1PL/2PL/3PL
only: ‘These drivers won’t drink.’

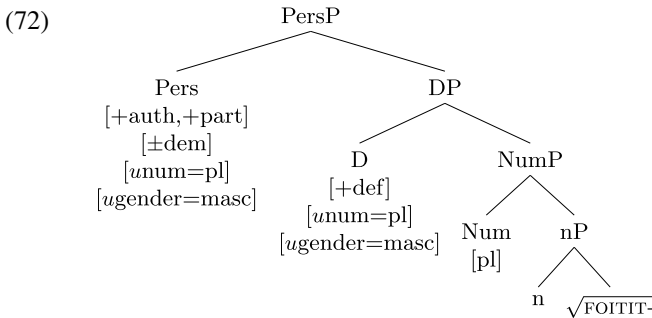
These observations suggest that deictic demonstratives are simply the third person variant of adnominal pronouns, and therefore realise the same head Pers,²⁰ as illustrated in (72). For concreteness, I assume here that demonstrativity is represented by a binary feature [\pm dem] on Pers and will make crucial use of both feature values. It remains for future work to determine whether treating the feature as privative would be preferable. The notation [$uF=Val$] is used for convenience in order to indicate the initially unvalued, i.e. probing, features modeling xnP internal agreement. It is not intended as a commitment to a distinction between interpretable and uninterpretable

²⁰On this view, one could entertain the hypothesis that postnominal anaphoric demonstratives are derived by movement of DP to Spec,PersP. Such an analysis offers a potential account for why in Spanish the definite article shows up with postnominal, but not prenominal demonstratives (*estos (*los) estudiantes* vs. **(los) estudiantes estos* ‘these students’). Assuming that its absence with prenominal demonstratives is due to a morpho-phonological linear adjacency effect between Pers and D, movement of DP would bleed the necessary structure for this effect to apply.

A (maybe not very attractive) way to retain a phrasal analysis of demonstratives in this framework might be to assume that they move to Spec,PersP and that the realisation of Spec and head of PersP is subject to some contemporary version of the doubly filled COMP filter, e.g. the Edge(X) condition of Collins (2007) as stated by Terzi (2010, 180):

- (i) a. Edge(X) must be phonetically overt.
 b. the condition in (a) applies in a minimal way, so that either the head or the Specifier, but not both, are spelled out overtly.

unvalued features.



The Pers and D heads agree for number and gender with the relevant interpretable features inside the x nP. The vocabulary item (VI) corresponding to a $[-\text{dem}]$ Pers head is null in NSLs²¹ and underspecified for any φ -features, while a $[\text{+dem}]$ specification leads to insertion of the specified forms as sketched in (73). Notice that the null spell-out of Pers is an independent point of variation, so there can be non-NSLs with the structure in (72), French maybe being a case in point (*nous les étudiants* ‘we students’; cf. also the brief discussion in Sect. 2).

- (73) Pers $[-\text{dem}] \leftrightarrow \emptyset$
 Pers $[\text{+auth}, \text{+part}, \text{pl}, \text{+dem}] \leftrightarrow \textit{emeis}$
 Pers $[-\text{auth}, -\text{part}, \text{pl}, \text{masc}, \text{+dem}] \leftrightarrow \textit{aftoi}$

This accounts for the lack of unagreement with APCs and demonstratives insofar as they are the $[\text{+dem}]$ counterparts to otherwise syntactically identical unagreeing noun phrases.

Furthermore, the proposal predicts that unagreement is not a feature of a language *per se*, but results from the spell-out possibilities facilitated by the structural configuration of type II APCs. If a null subject language expresses definiteness and person separately in some cases only, those cases should allow unagreement. This is borne out as discussed in Sect. 4.1 for European Portuguese, which exceptionally shows unagreement effects with numerals. In the current account, this is expected since numerals give rise to a type II pattern in APCs.

Before I go on to discuss the absence of unagreement in languages like Italian, the following two subsections will deal with two further predictions of the proposed account. The first one concerns quantificational unagreement and the second one the fact that if unagreement is traced to properties of the nominal domain, it should be detectable in other instances of verbal agreement such as object agreement or clitic doubling.

²¹Some additional provision is needed to restrict this effect to positions that are φ -identified by a probe, cf. e.g. Roberts and Holmberg (2010), to prevent overgeneration of null objects.

6.2 Quantificational unagreement and [-dem]

The fact that quantificational unagreement configurations (Sect. 3.2) do not have counterparts with overt pronouns seems to undermine the correlation between APCs and unagreement. Ackema and Neeleman (2013) identify this as a problem for appositional and hidden feature accounts of unagreement, which are built on this correlation. The present account, however, actually predicts this pattern.

The quantificational unagreement configuration in (74) is ungrammatical with an overt pronoun, but well-formed in its absence. The verbal inflexion is for first person plural in accordance with the interpretation of the sentence. Under present assumptions this indicates that the subject actually contains the relevant person features.

- (74) (*Emeis) merikoi mathites tha pame ekdromi.
 we some students FUT go.1PL trip
 ‘Some of us students will go on a trip.’

Let us assume that [\pm dem] is indeed connected to demonstrativity as suggested in Sect. 6.1 with reference to Rauh’s (2003) [demonstrative] feature. It seems plausible that definite reference is a precondition for demonstrativity/deicticity and that quantified phrases as in (74) do not involve definite reference.²² Consequently, they cannot sustain a [+dem] feature either, cf. (75). Since only [+dem] Pers receives overt spell-out, overt pronouns are consequently ruled out in this configuration.²³

- (75)
-
- ```

graph TD
 PersP --> Pers
 PersP --> QP_DP[QP/DP]
 Pers --- Pers_feats["[-dem]/*[+dem]
[+auth, +part]"]
 QP_DP --- Triangle
 Triangle --- merikoi_glossologoi["merikoi glossologoi"]

```

Numerals of the type *emeis oi dyo foitites* ‘we the two students’, where Pers can receive an overt spell-out, do not constitute an exception, but rather underline the role definiteness plays in this context. They obviously involve a “real” definite DP, 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* ‘we two students’. The difference in the semantics of these phrases is illustrated by the contrast between (76-a) and (76-b).

- (76) a. Tha pame pente mathites sto teatro kai oi  
 FUT go.1PL five pupils in.the theatre and DET.NOM.PL  
 ypoloipoi tha %pame/pane sto sinema.  
 remaining.PL FUT go.1PL/3PL to.the cinema

<sup>22</sup>Note that Ackema and Neeleman’s (2013) contrast between “quantificational” and the simple “referential” unagreement is presumably based on exactly this property.

<sup>23</sup>A potential, if limited, correlate of these considerations is the overall absence of determiners with these kinds of quantifiers in Greek. Against this background, the somewhat unexpected obligatory definite article in *oi perissoteroi* ‘most’ deserves further attention.

‘Five of us pupils will go to the theatre and we/the others will go to the movies.’

- b. Tha pame oi pente mathites sto teatro kai  
 FUT go.1PL DET.NOM.PL five pupils in.the theatre kai  
 oi ypoloipoi tha \*pame/pane sto sinema.  
 DET.NOM.PL remaining.PL FUT go.1PL/3PL to.the cinema  
 ‘We five pupils 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. Most of my consultants accept the first sentence with first plural agreement on both verbs as a felicitous utterance in a situation where 5 out of a group of pupils will go to the theatre and the rest, including the speaker, will go to the movies.<sup>24</sup> The corresponding sentence in (76-b), with the numeral in the scope of the article, is incoherent for all speakers.

This is explained if the articulated 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: the speaker is only presupposed to be a student by quantificational unagreement, but not necessarily a member of the group going to the theatre.<sup>25</sup>

Notice further that floating quantifiers are more permissive than the remaining quantifiers with respect to the realisation of Pers. The Greek and Spanish sentences in (77) both allow an overt person marker.

- (77) a. (Emeis) oi foitites pigame oloi ekdromi.  
 we DET.NOM.PL students 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 Sect. 6 directly extends to the floating quantifier cases. The restrictor of the quantifier is a regular PersP subject to the presupposition introduced by Pers. The crucial point is that the overt realisation of Pers is supported by a definite article in these expressions, in contrast to the quantifiers discussed above.

### 6.3 Object unagreement

The object unagreement data in Sect. 3.3 have shown that, in addition to subject unagreement, Greek also allows (apparent) person mismatches between objects and

<sup>24</sup>One consultant found this reading marginal, hence the % marking. Note that the sentence is unacceptable with past tense, plausibly for semantic reasons.

<sup>25</sup>As noted in fn. 24, this underspecification of the utterance author’s belonging to one group or the other is only possible in future contexts. For some discussion of the semantics of unagreement, cf. Höhn (2014).



object clitics. Similar facts hold for Spanish, as exemplified in (78) by the relation between the first person plural clitic *nos* and the indirect object *a los familiares* ‘to the relatives’, and in the Bulgarian example in (79), where the direct object *studentite* ‘the students’ is doubled by a second person plural clitic.

- (78) 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.’ [Spanish]
- (79) 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]

Note that usually only certain southern American varieties of Spanish (Rio-Platense) allow clitic doubling of non-pronominal direct objects, while all varieties require doubling of pronominal objects. In that context, the observation in (80) that even Peninsular Spanish allows object unagreement with direct objects suggests that the object  $xnP$  shares some relevant property with pronouns. This is highly compatible with the current proposal, where the  $xnP$  carries person features.

- (80) Nos denunciaron a las mujeres.  
 1PL denounced.3PL to the.PL women  
 ‘They denounced us women.’ (Hurtado 1985, 202, (20a))

It is worth noting that, independently of clitic doubling, object unagreement can also be found in cases that more clearly involve object agreement, cf. the Georgian example in (81) due to George Hewitt (personal communication).

- (81) (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]

These instances of object unagreement do not come as a surprise under the present analysis. As far as languages with object agreement are concerned, a probe with unvalued  $\varphi$ -features agrees with the features encoded within the object  $xnP$ , just as in subject unagreement and the same considerations as above apply. Under an analysis of clitic doubling as a form of object agreement (e.g. Sportiche 1996; Franco 2000), nothing more needs to be said.

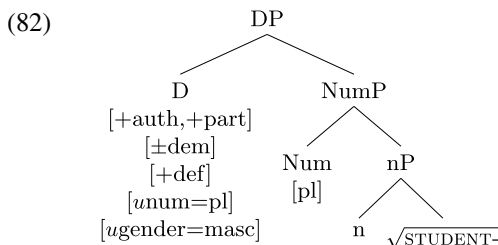
An alternative line of research (e.g. Uriagereka 1995; Papangeli 2000) relates clitics to determiners, suggesting that they head an argument DP. These D heads receive a theta-role from the verb and eventually head-adjoin to the verb, accounting for their clitic properties. Clitic doubling is explained 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).

The big DP hypothesis raises some questions as to whether first and second person clitics in unagreement languages start out in Pers instead of D, in which case we would actually be dealing with a big PersP, or whether they are special D heads with unvalued  $\varphi$ -features that agree with those in the doubled object. The common argument for the big DP hypothesis from the parallels in form between articles and third person clitics seems to favour the latter view, as does the fact that in the present

discussion Pers has so far only been taken to spell out full rather than clitic pronouns.<sup>26</sup> In this case, the clitic D head simply agrees with the  $\varphi$ -features of the  $x$ nP in its specifier or complement, while the Pers features in that  $x$ nP can remain silent as discussed.

#### 6.4 Type I APCs and the lack of unagreement

Let us now turn to the absence of unagreement in languages like Italian with type I APCs. Adopting the  $[\pm\text{dem}]$  feature yields the structure in (82) for the  $x$ nP of type I APCs. This is independent of whether a given language shows pro-drop, as it is also found in APCs in German and English. However, for the purpose of investigating unagreement I will focus on null subject languages with this configuration, in particular on the example of Italian.<sup>27</sup>



As discussed in Sects. 2 and 5.1, this language lacks the typical unagreement configuration. Given (82), there appear to be two potential ways of getting to an unagreement-like configuration in principle. Either D could be realised by the definite article, which would give the string-equivalent of the basic unagreement construction with a definite plural noun phrase and non-third person verbal agreement. This is ungrammatical as shown earlier, and a pronominal determiner would be required instead as in (83). Alternatively, one might consider the option of zero spell-out of the head bearing person features which is central to the analysis of unagreement in Sect. 6.1. On the basis of (82) this would result in a bare noun, which is also ungrammatical as shown in (84). I will discuss the absence of both options of deriving unagreement in turn.

- (83) Noi/ \*gli studenti lavoriamo molto.  
 we the.PL students work.1PL much  
 ‘We students work a lot.’ [Italian]
- (84) \*Studenti lavoriamo molto.  
 students work.1PL much  
 intended: ‘We students work a lot.’

<sup>26</sup>An empirical argument against attempts to reduce object unagreement to a configuration where the Pers head in a simple  $x$ nP head-adjoins to the verb as a clitic comes from the fact that the clitic doubled argument can also be a full APC, cf. Sect. 3.3.

<sup>27</sup>Notice that (82) might be derived from the structure of type II APCs in (72) by head-movement of D to Pers and subsequent fusion, or alternatively it could be an effect of Svenonius’ (2012) spanning or indicate that there is cross-linguistic variation in which functional head person features associate with. I will not further discuss this question here, since the representation in (82) is sufficient for present purposes.

I propose that the fact that definiteness and person are encoded on the same head in the structure in (82) is crucial for understanding the data in (83). In this configuration, the definite article and pronominal determiners are competing for insertion into the same node, deriving the facts in (83) as follows.

As pointed out in the discussion surrounding the English example (66) in Sect. 6.1, pronominal determiners can correspond not only to the definite article, but also to a demonstrative. The same holds for Italian as shown in (85). In order to report an utterance contrasting two groups of students, one of which contains the speaker like in (85-a), a demonstrative needs to be used in place of the pronominal determiner, cf. (85-b).<sup>28</sup>

- (85) a. Noi studenti andremo al cinema e gli altri (studenti)  
 we students go.1PL to.the cinema and the other students  
 andranno a casa.  
 will.stay.3PL in home  
 ‘We students will go to the cinema and the other students will go home.’
- b. Dice che (questi/ \*gli) studenti andranno al cinema e gli  
 said.3SG that these the students go.3PL to.the cinema and the  
 altri (studenti) andranno a casa.  
 other students will.stay.3PL in home  
 ‘She said that (these/\*the) students will go to the cinema and the other  
 students will go home.’

While in many contexts where the definite article can be used to report a pronominal determiner, it is in principle possible to use a demonstrative as well, generic contexts block the demonstrative. This is the case in (86) in a situation where an Italian student mentions (86-a). In order to report this utterance, someone who is not a student would use the definite article rather than a demonstrative in place of the pronominal as shown in (86-b).

- (86) a. Noi studenti italiani pensiamo che i professori lavorino molto.  
 we students Italian believe.1PL that the professors work.3PL much  
 ‘We Italian students believe that the professors work a lot.’
- b. Dice che (\*questi/ gli) studenti italiani pensano che i  
 said.3SG that these the students Italian believe.3PL that the  
 professori lavorino molto.  
 professors work.3PL much  
 ‘She said that (\*these/the) Italian students believe that the professors  
 work a lot.’

From these observations I conclude that pronominal determiners can correspond to both definite articles and demonstratives in Italian as well. Correspondingly, I assume that the VI *noi* is underspecified for [ $\pm$ dem]. Following Postal’s (1969) insights, the

<sup>28</sup>In order for the demonstrative to be mandatory in the reported sentence, the contrast should be between two subgroups of students, rather than between a group of students and another one of non-students. In order to indicate the required interpretation, the second occurrence of *studenti* ‘students’ is included in brackets, although it would normally undergo nominal ellipsis.

definite article is treated as third person, i.e. [−auth,−part]. Abstracting away from the phonological conditions governing the use of *gli* vs. *i* for the definite article, we can then assume the VIs in (87).

- (87) D[+auth,+part,+def,pl] ↔ *noi*  
 D[−auth,−part,+def,pl,masc] ↔ *i/gli*

In an APC like (82) D is syntactically specified as [+auth,+part]. Consequently, the VI of the definite article *i/gli* cannot be inserted as it is specified as [−auth,−part].<sup>29</sup> Instead, the properly specified *noi* wins, yielding the grammatical version of (83).

The second ungrammatical option of deriving unagreement, in (84), would have a definite bare plural as unagreeing subject. However, in Italian and other Romance languages bare plurals cannot be definite even where they arise, and are generally ruled out in subject position (Longobardi 1994; Chierchia 1998). So whatever rules out bare definites in Italian in general, rules them out in unagreement contexts. In the next section I will additionally discuss a way in which this issue links up to an approach to (full) null subject in both Italian- and Greek-type languages.

It has been pointed out to me that this view seems to retain the possibility of unagreement with bare nouns in languages with a freer distribution of bare nouns. That is not a bad result however, considering that languages like Swahili and Georgian appear to indeed allow unagreement, cf. Sect. 2. As discussed there, I leave open the question as to why some other languages that allow definite interpretations of bare nouns (Turkish, Bosnian-Croatian-Montenegrin-Serbian) do not allow unagreement.

## 6.5 The null spell-out of *pro*

In this section I am going to situate unagreement and its absence in a typology of the overtiness of parts of the extended nominal projection, based on an analysis of so-called *pro* subjects in Greek- and Italian-type languages in terms of radical zero spell-out of all heads in the  $x_nP$ .

While this type of analysis seems initially problematic due to the lack a silent definite article in those languages (Panagiotidis 2002, 126f.), I argue that there is a phonologically conditioned silent allomorph of the definite article which applies in the relevant contexts.

The Greek definite article is a phonological clitic, more specifically a proclitic. Hence it needs to be hosted by a prosodic word to its right. Under the hypothesis that pronouns and demonstratives involve Panagiotidis' (2002) empty noun  $e_N$ , cf. Sect. 5, we can observe a locality requirement that the host be—at least—a member of the same  $x_nP$  as the article. Consequently, the article cannot be final in the  $x_nP$  as illustrated in (88).<sup>30</sup>

<sup>29</sup>If it were underspecified for person features, on the other hand, the subset principle (Halle 1997; Harley and Noyer 1999) would trigger insertion of the most specific VI for a given node. Hence, the more specific *noi* should also be inserted. Note that on this view something would need to be said about the absence of gender specification in VI for the pronominal determiner.

<sup>30</sup>For this intuition compare also Ioannidou and den Dikken (2009, 399): “[...]the phonological properties of the MG definite articles are such that they demand something to their right within the complex noun phrase: being proclitic, they cannot be final in DP. [...] whenever [the article] is stranded in final position, the copy of the definite article in this [final] position must remain silent.”

- (88) a. aftoi oi tragoudistes  
 these.NOM.PL DET.NOM.PL singers  
 ‘these singers’
- b. aftoi oi diasimoi e<sub>N</sub>  
 these.NOM.PL DET.NOM.PL famous e<sub>N</sub>  
 ‘these famous ones’
- c. aftoi (\*oi) e<sub>N</sub> ‘these’

The same requirement of phonological material to the right of the definite article holds in Spanish and Portuguese, as observed in discussions of noun ellipsis (Raposo 2002; Kornfeld and Saab 2004; Ticio 2010, 184–186). Since it relies on the phonological properties of the members of DP, this is arguably not a syntactic, but a morpho-phonological restriction, which applies after spell-out.

For concreteness, I propose to model this in terms of contextually conditioned allomorphy, specifically Embick’s (2010) C<sub>1</sub>-LIN theory. Since the pronoun in Greek-type APCs forms a separate prosodic word, it seems a reasonable assumption that the DP defines a separate PF cycle in Embick’s terms. We can then say that the null VI in (89) is inserted iff no overt material (more specifically, no prosodic word) is contained in the same PF domain. This holds irrespective of the cliticisation direction of the article in the specific language, and therefore extends to Bulgarian and Aromanian.<sup>31</sup>

- (89) D[+def] ↔ ∅ /     ]PF cycle  
 D[+def,pl,masc] ↔ oi

This proposal follows the intuition of the ‘Stranded Affix’ filter of Lasnik (1981, 1995) as well as Embick and Noyer’s (2001) suggestion of a morphophonological requirement that “D<sub>[def]</sub> must have a host” (p. 581) in their account of Scandinavian definiteness marking. Interestingly, the cases discussed here seem to make use of a different strategy to avoid a violation of this constraint, namely non-spell out of D rather than insertion of a supporting morpheme as in *do*-support or Embick and Noyer’s (2001) analysis of Swedish and Danish.

Now remember the structure suggested for type II APCs, repeated in (90). According to the present analysis, the overtness of Pers and NumP is determined independently of their context but only by their inherent properties—namely by the specification of [±dem] for Pers and the lexical choice of the constituents of NumP respectively. As before, I will not be concerned with Num and assume that it is either null by default or gets realised by movement of N to Num. The overtness of definite D, on the other hand, is dependent on the phonological properties of its complement and hence contextually determined. This also accounts for the fact that there are no stranded definite articles in plain pronouns (e.g. Spanish *nosotras* (\**las*) ‘we.F (\*the.F.PL)’).

- (90) [PersP Pers [DP D [NumP Num [nP N/e<sub>N</sub> ] ] ] ]

<sup>31</sup>A less general alternative would be to state that no overt material may follow the head at vocabulary insertion. However, this would not account for Bulgarian and Aromanian.

The interaction between the two remaining independent variables of overttness maps onto attested constructions as in (91), illustrating the relation between APCs, pronouns, null subjects and unagreement in the current analysis.

(91) Possible realisations of  $xnP$  (90)

|                       | overt Pers | silent Pers                      |
|-----------------------|------------|----------------------------------|
| overt NumP            | APC        | <b>unagreement</b> (regular DPs) |
| silent NumP ( $e_N$ ) | pronoun    | <i>pro</i>                       |

Let us now consider the case of languages with type I APCs, where person features are encoded on D, yielding a classical pronominal determiner structure like (92).

(92) [DP D [<sub>NumP</sub> [<sub>NP</sub> N/ $e_N$  ] ] ]

I suggest that just like the languages discussed above, Italian has a null allomorph of the definite article which is triggered in contexts without other overt material in its spell-out domain, presumably also because of its procliticising nature. Due to the pronominal determiner structure of type I APC, this VI is also directly involved in the derivation of null subjects. By hypothesis, it is therefore sensitive to a [ $-dem$ ] feature as indicated in the VI entry in (93). For ease of reference, the VIs for the first person plural pronominal determiner and the definite article are also repeated in (94).

(93) D[+def,  $-dem$ ]  $\leftrightarrow \emptyset / \_ ]_{PF}$  cycle

(94) D[+auth, +part, +def, pl]  $\leftrightarrow noi$   
 D[ $-auth$ ,  $-part$ , +def, pl, masc]  $\leftrightarrow i/gli$

This also rules out definite bare plurals as a possible source of unagreement as in (84) above: once there is an overt noun (or adjective) in the  $xnP$ , the contextual condition for the null allomorph is not met and an overt VI, e.g. out of (94), is inserted.

It also facilitates a radical zero spell-out analysis of *pro*. In parallel to the above discussion of type II APCs, the overttness of NumP is intrinsically determined by the phonological properties of its constituents. The contextual restriction governing the silence of definite D is also essentially the same as the one discussed for type II APCs above. However, in type I APC structures this restriction simultaneously affects the spell-out of person features, which are encoded on the same head. Unlike in type II APCs, then, a [ $-dem$ ] specification is a necessary but not a sufficient condition for their silence. Only if the contextual condition is fulfilled, i.e. if NumP is silent, can a definite D with [ $-dem$ ] specification be silent too, yielding the phenomenon known as *pro* by not spelling out any head in  $xnP$ . Alternatively, a [+dem] specification leads to spell-out of D and hence an overt pronoun.

If NumP is overt, the contextual condition on the VI in (93) is not met. In this case, D necessarily receives overt spell-out, either as a pronominal determiner or a definite article according to its feature specification. In unagreement configurations NumP contains overt material by definition, which is why null spell-out of D cannot arise. This yields the impoverished range of spell-out options illustrated in (95), with a gap in the slot corresponding to unagreement in (91) above.

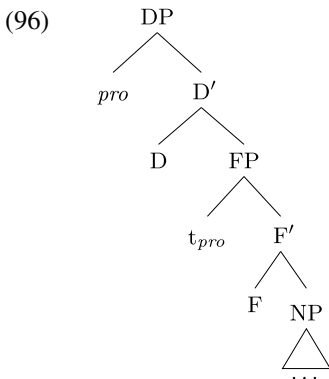
(95) Possible realisations of  $x_nP$  (92)

|                       | overt $D_{pers}$ | silent $D_{pers}$ |
|-----------------------|------------------|-------------------|
| overt NumP            | APC/regular DP   | —                 |
| silent NumP ( $e_N$ ) | pronoun          | <i>pro</i>        |

In this section, I have proposed a unified treatment of APCs, unagreement, pronouns and *pro* with vocabulary insertion restricted to terminal nodes (following Embick [forthcoming](#)). This analysis accounts for the connection between null subjects and unagreement and offers a principled explanation for a relevant part of the cross-linguistic variation in the availability of unagreement.

6.6 Phrasal *pro* vs. silent head

The account advocated by Choi (2013, 2014a,b) shares with the analysis proposed here the insight that the variation in APC structures is instrumental in understanding the cross-linguistic distribution of unagreement. One crucial difference is the assumption that the pronouns in APCs and *pro* in unagreement are phrasal constituents moved to Spec,DP as illustrated in (96).



A second difference lies in the way the cross-linguistic variation is captured. Choi (2013, (20)) suggests the two conditions in (97) for the licensing of *pro* by T. The second one importantly restricts unagreement to languages with type II APCs.

- (97)
- a. Condition on  $T^0$ :  
A given language must be a consistent *pro*-drop language. That is,  $T^0$ , as a result of agreement with the PNC [Pronoun-Noun Construction  $\Leftrightarrow$  APC; *author*] subject, must manifest inflectional morphology rich enough to license the conventional *pro*-drop.
  - b. Condition on  $D^0$ :  
 $D^0$  must be overtly realised by a definite article (but, being a mediating *pro*-drop licenser, may not be as fully specified with its *phi*-features as  $T^0$ ).

Choi leaves open at which point in the derivation the conditions in (97) apply. To the extent that these are syntactic conditions, (97-b) seems to imply that *pro* imposes a direct requirement on the phonological form of another syntactic element in

order to be licensed. This seems problematic in light of the idea that syntactic processes should be blind to phonological properties, and it moreover strongly implies a lexicalist view of grammar. The late insertion hypothesis assumed in non-lexicalist frameworks (Halle and Marantz 1993; Borer 2005) would preclude the possibility of syntax being sensitive to the realisation of functional morphemes.

Furthermore, there is another conceptual difference between Choi's and the present account. Choi treats *pro* as a silent phrasal category, requiring either its existence in the lexicon as a phrase or some kind of a phrasal spell-out account, e.g. in the spirit of Neeleman and Szendrői (2007). The analysis proposed here, on the other hand, adopts the hypothesis that spell-out applies to terminal nodes only (cf. in particular Embick forthcoming) and derives *pro* by null spell-out of all heads involved in an  $x_nP$ . Hence, it suggests a way to dispose of *pro* as a primitive of the theory (cf. also Holmberg 2005, Roberts 2010b and Barbosa 2013).

Empirically, both accounts appear to be on equal footing as far as coverage of basic unagreement is concerned. It is not clear, however, whether the licensing account can deal with quantificational unagreement data of the type discussed in Sect. 3.2. Several of those cases crucially lack an overt definite article, so according to (97-b) *pro* should not be licensed. In the present account, on the other hand, this type of unagreement finds an explanation as outlined in Sect. 6.2.

Similarly, the condition on  $D^0$  (97-b) in the licensing account would run into problems with respect to unagreement in languages without overt determiners (e.g. Georgian, Swahili, cf. Sect. 2). In the absence of a worked out account of these forms of unagreement in either framework, this issue has to remain open for the moment. While I have kept these data outside the scope of the present discussion as well, the account advocated above could potentially accommodate the availability of unagreement in Georgian and Swahili as opposed to its absence in Bosnian-Croatian-Montenegrin-Serbian by assuming a Greek-type structure for the former and an Italian type structure for the latter, since the absence of unagreement is not directly related to the overtness of *D*, but rather to the interaction of syntactic structure and the specification of vocabulary items.

## 7 Conclusion

In this paper, I have suggested an essentially morphosyntactic account of unagreement and (at least part of) its cross-linguistic distribution. On the basis of the cross-linguistic correlation between the structure of adnominal pronoun constructions like *we students* and the availability of unagreement, I have argued that the latter results from null spell-out of a functional head *Pers* distinct from *D*, encoding person and demonstrativity in the extended nominal projection. In languages like Italian with pronominal determiners these features are encoded directly on *D*. An interaction of this structure with morphophonological properties of the relevant vocabulary items leads to the observable restrictions on the non-spell-out of person in the latter structures.

Empirically, I have pointed out two differences between Greek and Spanish, the classical case study of unagreement. In contrast to Spanish, Greek has not only plural but also limited singular unagreement, which seems to parallel the singular APCs



found in German. Spanish, on the other hand, allows unagreement with quantifiers like *ninguno* ‘nobody’ and *cada* ‘each’, while their Greek counterparts are ungrammatical (or much more restricted in the case of *kathe* ‘each’).

The empirical generalisation in (98) appears to provide an approximate description of the correlation between unagreement and APCs, although it should be taken with care. As with many empirical generalisations, its most important use may lie in providing a heuristic to discover potential deviations which require further inquiry.

- (98) Null subject languages with definite articles
- a. show unagreement if they have a definite article in APCs, and
  - b. do not show unagreement if they have no definite article in APCs.

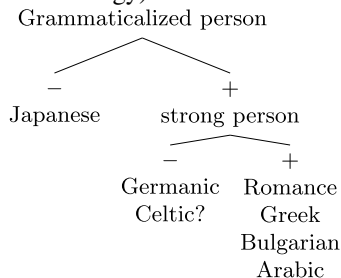
One potential exception to (98) may be provided by Southern Italian Romance varieties like Northern Calabrese. Preliminary data indicate that this language shows unagreement, although it seems to proscribe the definite article in APCs. Historically, this and other Southern Italian varieties have been in contact with Greek (e.g. Ledgeway 2013), which may provide a diachronic basis for the emergence of such a pattern. Synchronically, this may indicate that there is no syntactic problem of deriving unagreement from type I APCs. Instead, this could provide further support for the morphosyntactic approach advocated here, if the blocking of unagreement in languages like Standard Italian is due to a third person specification of the vocabulary item realising the pronominal determiner, while languages like Northern Calabrese could have developed a featurally underspecified vocabulary item instead. These issues are a subject of ongoing research.

The morphosyntactically based analysis proposed here could feasibly be extended to unagreement in languages without overt articles such as Georgian, Swahili and Warlpiri, although it remains for future research to work out the details. Moreover, the relation of unagreement to other phenomena of (apparent) agreement mismatches deserves further attention. This includes effects of gender mismatch observed, e.g., in Russian (Corbett 2006, 158), but also number mismatches with the Spanish quantifiers *cada* and *ninguno* and the restricted cases of unagreement with the Greek distributive quantifier *kathe*, as well as with collective nouns (e.g. Greek *emeis i palia genia* ‘we the old generation’ or British English *the committee have decided*).

On a general note, the current proposal suggests a unified structural analysis of APCs, unagreement, pronouns (at least strong pronouns in the sense of Cardinaletti and Starke 1999) and *pro* on the basis of various possibilities of spelling out different parts of the proposed structure of the  $xnP$ .

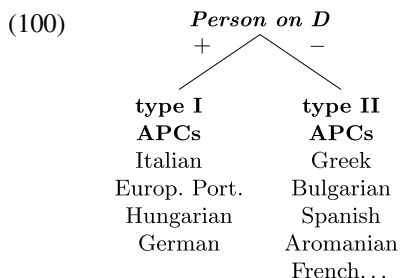
Independently of the current perspective, Longobardi (2008) advances the hypothesis that the denotation of individuals is facilitated by person and that the person head is represented by D. He suggests a distinction between strong and weak person languages, cf. (99). The former “refer to individuals [...] by overtly associating the lexical content of nouns to Person” (p. 204), whereas weak person languages do not have to establish the association overtly.

- (99) Generalized *nominal mapping parameter* (in Chierchia's 1998 perspicuous terminology) (Longobardi 2008, 207, (51))



He observes that unagreement is only found in strong person languages and speculates “that an implication exists between the parametric status of D as Person in nominals and its ability to control full-range (i.e. not necessarily 3rd person) agreement; namely, the latter property would be an option only among strong Person languages” (p. 204). If we assume some variant of the pronominal determiner analysis, this prediction seems to be too strong unless further qualified, since a weak person language like German arguably does in fact allow non-3rd person agreement with DPs involving a pronominal determiner (cf. *Ihr Linguisten schreib-t viel* ‘You linguists write-2PL a lot’).

The distinction between type I and type II APCs can be descriptively displayed as in (100). The analysis of unagreement proposed here, based on this distinction, cross-cuts Longobardi's (2008) classes of strong and weak Person languages. Weak Person languages like German and English as well as strong person languages like Italian can have type I APCs (and lack unagreement).



Notice, however, that languages do not have to consistently display only one type of APC, as suggested by the exceptional case of type II APCs with numerals in European Portuguese. In light of this, the languages mentioned in (100) are included only for orientation.

The connection between unagreement and strong Person as suggested by Longobardi may be on the right track insofar as it may be the case that only strong Person languages show unagreement. However, if unagreement can only be found among consistent NSLs, then the correlation between strong Person and unagreement might just be a side-effect of another correlation, namely the effect that most or all strong Person languages have referential null subjects (Longobardi 2008, 205).

Further research may give rise to extensions of the typology in (100) in terms of variable height of person features within the extended nominal projection and should lead to a better understanding of the nature of (100) and its relation to Longobardi's theory. Whether they turn out to be independent points of variation that interact with each other to derive the variability of unagreement phenomena and APCs, or whether they are in fact part of the same point of variation, the results of this branch of research should lead to a better understanding of the role of person (and other  $\varphi$ -)features in natural language.

**Acknowledgements** This research originated from my UCL master's thesis supervised by Andrew Nevins and the significant modifications and improvements it has undergone since were funded by the European Research Council Advanced Grant No. 269752 "Rethinking Comparative Syntax". A special thank you to Ad Neeleman for recommending unagreement as a research topic. I am indebted to my language consultants for sharing their linguistic intuitions with me and to the many people who helped me with their comments or by providing relevant material, i.a. Klaus Abels, Rusudan Asatiani, Ioanna Balamoti, András Bárány, Hagit Borer, Cinzia Campanini, João Costa, Emilia Dimitrova, Carmen Dobrovie-Sorin, Maia Duguine, Ricardo Etxepare, Javier Fernández Sánchez, Ion Giurgea, Aritz Irurtzun, George Hewitt, Concha Höfler, Anders Holmberg, Gianina Iordachioaia, Beste Kamali, Katerina Danae Kandylaki, Vital Kazimoto, Thomas Leu, Giuseppe Longobardi, Cristina Isabel López Sanjurjo, Eleni Malideli, Simona Mancini, Nikoleta Mukareva, Andrew Nevins, Eleana Nikiforidou, Phoebos Panagiotidis, Konstantinos Papadopoulos, Marko Perić, Aurelio Romero Bermúdez, Anna Roussou, Andrés Saab, Giuseppina Silvestri, Ioanna Sitaridou, Sapfo Sitaridou, Stavros Skopeteas, Vassilis Spyropoulos, Melita Stavrou, Konstantinos Tsaltas, Arhonto Terzi, Julio Villa-García, Philipp Weisser and Christos Zarkogiannis. I am particularly obliged to Dimitris Michelioudakis for detailed discussions of various aspects of the phenomenon, to Melita Stavrou for written comments on an early version of the manuscript and to Theresa Biberauer, Ian Roberts and Michelle Sheehan for their support throughout the production of this article. Last but not least, I am very grateful to three anonymous NLLT reviewers whose detailed comments have helped greatly to improve the article. All remaining shortcomings are my own.

## Appendix: Singular unagreement in Greek

Pronominal determiner structures, i.e. type I APCs, have been observed to show a rather consistent singular-plural asymmetry cross-linguistically (e.g. Delorme and Dougherty 1972; Pesetsky 1978; Lyons 1999, 141–145). While plural APCs seem to be readily available in many languages, their singular counterparts are usually highly restricted if at all available. English, for example, restricts singular pronominal determiners to second person exclamations (*\*I idiot, you idiot!*), they cannot be subjects of declarative sentences. To the extent that a singular APC like *you linguist!* is acceptable, it is likely to be construed as emotionally charged.

In German, on the other hand, singular APCs are less restricted. They can be used as arguments, most commonly with emotively marked expressions/epithets at the lexical core (101), but in principle also with "emotionally neutral" nouns, cf. (102) adapted from Rauh (2004, 96). There seem to be stricter contextual restrictions on the use of singular APCs as compared to plural ones (Rauh 2004), so in that sense a singular-plural asymmetry is attested here as well.

- (101) **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!'

- (102) Auf meinem Planeten gibt es Dinge, die **du** **Mensch**  
 on my planet exist EXPL things REL you.NOM.SG human  
 dir gar nicht vorstellen kannst.  
 you.DAT.SG PRT not imagine can.2SG  
 ‘There are things on my planet that you, being human, cannot even imagine.’  
 [German]

Against the background of the proposal that unagreement is basically a special form of APC, it is not surprising that there is a singular-plural asymmetry for unagreement as well, as indicated by the lack of singular unagreement in Spanish (cf. Sect. 6.1). Greek also prefers unagreement with plural subjects, however it also allows a few cases of singular unagreement, most readily with emotionally charged nouns like *vlakas* ‘stupid, idiot’ as in (103) or the expressions *o anthropos* ‘the human’ or *i gynaika* ‘the woman’, which indicate a certain emotional involvement as well, cf. (104). The same goes for nominalised adjectives as in (105).

- (103) I went to the market to buy some vegetables. . .  
 a. . . . 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.’
- (104) Ti travao i gynaika!  
 what suffer.1SG DET.NOM.SG woman  
 ‘What do I woman go through!’
- (105) . . . kai akoma o trelos kano  
 and still DET.NOM.SG.M crazy.person.NOM.SG make.1SG  
 ta idia lathi.  
 DET.ACC.PL same mistakes  
 ‘. . . and still I crazy person make the same mistakes.’<sup>32</sup>

As an aside, second person singular unagreement seems to be harder to access for many speakers. This is likely due to interference from the vocative, which is used frequently in Modern Greek, particularly in contexts involving emotives like *vlakas* ‘stupid, idiot’. The already rather restricted singular unagreement seems to lose the competition against the common vocative construction for these speakers, as illustrated in (106).<sup>33</sup> However, instances of second person singular unagreement can be found, cf. examples such as (107).<sup>34</sup>

- (106) a. ??O vlakas den pires tis domates?  
 DET.NOM.SG idiot NEG took.2SG DET.ACC.PL tomatoes  
 intended: ‘Didn’t you idiot take the tomatoes?’

<sup>32</sup>From the song “*Sto spiti mou xaramata*” by Giorgos Koinousis.

<sup>33</sup>The particle *re* indicates familiarity (see Karachaliou and Archakis 2012 and also Tsoulas and Alexiadou 2005).

<sup>34</sup>See <http://forum.eimaimama.gr/t11189p800-topic>; accessed 26 February 2013. I thank Dimitris Michelioudakis (personal communication) for this relaying this.

- 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!’
- (107) Ti travas i gynaika?  
 what suffer.2SG DET.NOM.SG woman  
 ‘What do you woman (have to) go through?’

The fact that emotively marked nouns are more readily available for unagreement is illustrated by the contrast in (108). Importantly, the German examples in (109) show a comparable pattern.

- (108) We wanted to meet early in the morning for our day trip. . .
- a. . . . alla o malakas argisa.  
 but DET.NOM.SG idiot was.late.1SG  
 ‘. . . but stupidly I [= I idiot] was late.’ [Greek]
- b. \* . . . alla o odigos argisa.  
 but DET.NOM.SG driver was.late.1SG  
 intended: ‘. . . but I, the driver, was late.’ [Greek]
- (109) a. . . . aber ich Trottel hab mich verspätet.  
 but I fool have.1SG myself be.late  
 ‘. . . but stupidly I [= I fool] was late.’ [German]
- b. \* . . . aber ich Fahrer hab mich verspätet.  
 but I driver have.1SG myself be.late  
 intended: ‘. . . but I, the driver, was late.’ [German]

Nevertheless, in both languages it is also possible to use less marked nouns if they can be related to the context as in (111)—the Greek version was kindly provided by Dimitris Michelioudakis (personal communication). In these examples, the subject indicating that the speaker is a linguist may provide a justification for the contextually relevant interest in dictionaries.

- (110) Yesterday, I went to the bookstore. . .
- a. . . . kai pali xechastika o glossologos ston orofo  
 and again got.lost.1SG DET.NOM.SG linguist in.the floor  
 me ta lexika.  
 with the dictionaries  
 ‘. . . and I linguist lost myself again on the floor with the dictionaries.’ [Greek]
- b. . . . und da hab ich (alter) Linguist mich mal wieder bei  
 and there have.1SG I old linguist myself PRT again at  
 den Wörterbüchern verlustiert.  
 the dictionaries spent.quality.time  
 ‘. . . and I old linguist spent some quality time on the floor with the  
 dictionaries again.’ [German]

Regarding the general lack of singular unagreement in Spanish, 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) suggests that the restricted availability of singular APCs in German results from the conversational maxims of relevance and quantity (Grice 1975). The noun in plural APCs is relevant insofar as it helps to disambiguate reference. In singular APCs, on the other hand, the complement nominal needs to add new information about speaker or hearer or highlight some property of the speaker/hearer that is contextually relevant. This explanation naturally extends to Greek singular unagreement under the current proposal.

Notice that the contrast between the unacceptability of the emotionally neutral nouns in (108) and (109) and the acceptability of (110) may not be accounted for by Rauh’s approach alone. It is at least feasible that the fact that the speaker was the designated driver for the trip in (108) would be relevant new information, since it would explain why it was particularly bad for him to be late. The distinction between stage-level and individual-level predicates may play an additional role here. Possibly, (108-b) and (109-b) are bad because the property the APC is based on is a stage-level property, i.e. it is not the speaker’s profession that is under discussion, but his temporal assignment as driver for the day trip.

In conclusion, these data illustrate a striking parallel between German singular APCs and Greek singular unagreement. In both languages, emotively marked nominal expressions are easily available in these constructions, while common nouns need some additional contextual cue. While an explanation for the lack of argumental singular APCs in English and singular unagreement in Spanish is still outstanding, the present view implies that an explanation for one of these phenomena would provide an account for the other one as well. I defer to future research the investigation of the relation of singular and plural constructions of these sorts to epithets, which seem to differ in their binding properties from both R-expressions and pronouns (cf. Lasnik 1991).

## References

- Abney, Steven. 1987. The English noun phrase in its sentential aspect. PhD diss., MIT.
- Ackema, Peter, and Ad Neeleman. 2013. Subset controllers in agreement relations. *Morphology* 23: 291–323.
- Alexiadou, Artemis, and 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 *The Blackwell Companion to Syntax*, eds. Martin Everaert and Henk van Riemsdijk, Vol. 1, 519–581. Oxford: Blackwell Sci. Chap. 14.
- Areta, Mikel Martínez. 2009. The category of number in Basque: I. Synchronic and historical aspects. *Fontes Linguae Vasconum* 110: 63–98.
- Barbosa, Maria do Pilar Pereira. 1995. Null subjects. PhD diss., MIT.
- Barbosa, Maria do Pilar Pereira. 2013. Pro as a minimal NP: Towards a unified approach to pro-drop. Ms. <http://ling.auf.net/lingbuzz/001949>.
- Benveniste, Emile. 1971. *Problems in general linguistics*, 217–222. Baltimore: University of Miami Press.
- Bobaljik, Jonathan David. 2008. Paradigms, optimal and otherwise: A case for skepticism. In *Inflectional identity*, eds. Asaf Bachrach and Andrew Nevins, 29–54. Oxford: Oxford University Press.
- Bock, Kathryn, and Carol A. Miller. 1991. Broken agreement. *Cognitive Psychology* 23: 45–93.
- Borer, Hagit. 1986. I-subjects. *Linguistic Inquiry* 17: 375–416.
- Borer, Hagit. 2005. *In name only*. Vol. 2 of *Structuring sense*. Oxford: Oxford University Press.

- Bosque, Ignacio, and Joan-Carlos Moreno. 1984. A condition on quantifiers in Logical Form. *Linguistic Inquiry* 15: 164–167.
- Bresnan, Joan. 2001. *Lexical-functional syntax*. Oxford: Blackwell Sci.
- Bruce, Les. 1984. *The Alambak language of Papua New Guinea (East Sepik)*. Canberra: The Australian National University.
- Burton-Roberts, Noel. 1975. Nominal apposition. *Foundations of Language* 13: 391–419.
- Cardinaletti, Anna. 1994. On the internal structure of pronominal DPs. *The Linguistic Review* 11: 195–219.
- Cardinaletti, Anna, and Michal Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In *Clitics in the languages of Europe*, ed. Henk van Riemsdijk, 145–233. Berlin: de Gruyter.
- Chierchia, Gennaro. 1998. Reference to kinds across languages. *Natural Language Semantics* 6: 339–405.
- Choi, Jaehoon. 2013. Pro-drop in pronoun-noun constructions. In *North East Linguistic Society (NELS) 42*, eds. Stefan Keine and Shayne Sloggett, 119–128. Amherst: GLSA.
- Choi, Jaehoon. 2014a. The locus of person feature and agreement. In *North East Linguistic Society (NELS) 43*, eds. Hsin-Lun Huang, Ethan Poola, and Amanda Rysling, 65–76. Amherst: GLSA.
- Choi, Jaehoon. 2014b. Pronoun-noun constructions and the syntax of DP. PhD diss., University of Arizona.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale. A life in language*, ed. Michael Kenstowicz, 1–52. Cambridge: MIT Press.
- Chomsky, Noam. 2004. Beyond explanatory adequacy. In *Structures and beyond: The cartography of syntactic structures*, ed. Adriana Belletti, Vol. 3, 104–131. Oxford: Oxford University Press.
- Chomsky, Noam. 2008. On phases. In *Foundational issues in linguistic theory*, eds. Robert Freidin, Carlos P. Otero, and Maria L. Zubizarreta, 133–166. Cambridge: MIT Press.
- Collins, Chris. 2007. Home sweet home. *NYU Working Papers in Linguistics* 1: 1–34.
- Collins, Chris, and Paul Postal. 2012. *Imposters: A study in pronominal agreement*. Cambridge: MIT Press.
- Corbett, Greville G. 2006. *Agreement*. Cambridge: Cambridge University Press.
- Costa, João, and Sandra Pereira. 2013. *a gente*: Pronominal status and agreement revisited. *The Linguistic Review* 30: 161–184.
- Culbertson, Jennifer. 2010. Convergent evidence for categorial change in French: From subject clitic to agreement marker. *Language* 86: 85–132.
- de Bruyne, Jacques. 1995. *A comprehensive Spanish grammar*. Oxford: Blackwell Sci. Adapted with additional material by Christopher J. Pountain.
- Delorme, Evelyn, and Ray C. Dougherty. 1972. Appositive NP constructions. *Foundations of Language* 8: 2–29.
- den Dikken, Marcel. 2001. “Plurilinguals”, pronouns and quirky agreement. *The Linguistic Review* 18: 19–41.
- Déchaine, Rose-Marie, and Martina Wiltschko. 2002. Decomposing pronouns. *Linguistic Inquiry* 33 (3): 409–442.
- Elbourne, Paul. 2005. *Situations and individuals*. Cambridge: MIT Press.
- Embick, David. 2010. *Localism versus globalism in morphology and phonology*. Cambridge: MIT Press.
- Embick, David. Forthcoming. On the targets of phonological realization. In *The morphosyntax-phonology connection: Locality and directionality*, eds. Vera Griбанова and Stephanie Shih.
- Embick, David, and Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32 (4): 555–595.
- Franco, Jon. 2000. Agreement as a continuum: The case of Spanish pronominal clitics. In *Clitic phenomena in European languages*, eds. Frits Beukma and Marcel den Dikken, 147–189. Amsterdam: John Benjamins.
- Grice, H. Paul. 1975. Logic and conversation. In *Syntax and semantics 3: Speech acts*, eds. Peter Cole and Jerry L. Morgan, 41–58. New York: Academic Press.
- Haacke, Wilfrid Heinrich Gerhard. 1976. A Nama grammar: The noun-phrase. Master’s thesis, University of Cape Town.
- Halle, Morris. 1997. Distributed morphology: Impoverishment and fission. In *MITWPL 30: Papers at the interface*, eds. Benjamin Bruening, Yoonjung Kang, and Martha McGinnis, 425–449. Cambridge: MIT Working Papers in Linguistics.
- Halle, Morris, and Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In *The view from building 20*, eds. Kenneth Hale and Samuel Jay Keyser, 111–176. Cambridge: MIT Press.

- Harley, Heidi, and Rolf Noyer. 1999. State-of-the-article: Distributed morphology. *Glott International* 4 (4): 3–9.
- Harley, Heidi, and Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78 (3): 482–526.
- Heim, Irene. 2008. Features on bound pronouns. In *Phi theory. Phi-features across modules and interfaces*, eds. Daniel Harbour, David Adger, and Susana Béjar, 35–56. Oxford: Oxford University Press.
- Holmberg, Anders. 2005. Is there a little pro? Evidence from Finnish. *Linguistic Inquiry* 36: 533–564.
- Hualde, José Ignacio, and Jon Ortiz de Urbina, eds. 2003. *A grammar of Basque*. Berlin: de Gruyter.
- Hurtado, Alfredo. 1985. The unagreement hypothesis. In *Selected papers from the Thirteenth Linguistic Symposium on Romance Languages*, eds. Larry King and Catherine Maley, 187–211. Amsterdam: John Benjamins.
- Höhn, Georg F. K. 2014. The semantics of adnominal pronoun constructions and unagreement. In *Complex visibles out there. Proceedings of the Olomouc Linguistics Colloquium 2014: Language use and linguistic structure*, eds. Ludmila Veselovská and Markéta Janebová, 175–191. Olomouc: Palacký University.
- Ioannidou, Alexia, and Marcel den Dikken. 2009. P-drop, d-drop, d-spread. In *The 2007 Workshop in Greek Syntax and Semantics at (MIT)*, eds. Claire Danielle Halpert, Jeremy Hartmann, and David Hill, 393–408. Cambridge: Department of Linguistics, MIT.
- Jelinek, Eloise. 1984. Empty categories, case and configurationality. *Natural Language and Linguistic Theory* 2: 39–76.
- Karachaliou, Rania, and Argiris Archakis. 2012. The Greek particle *re* as a marker of unexpectedness: Evidence from the analysis of conversational narratives [in Greek]. In *Studies in Greek linguistics. Proceedings of the 32nd Annual Meeting of the Department of Linguistics, Faculty of Philosophy, Aristotle University of Thessaloniki*, 172–183. Thessaloniki: Institute for Modern Greek Studies.
- Kayne, Richard. 2009. Some silent first person plurals. In *Merging features: Computation, interpretation, and acquisition*, eds. José M. Brucart, Anna Gavarró, and Jaume Solà, 276–292. Oxford: Oxford University Press.
- Kiparsky, Paul. 1973. “Elsewhere” in phonology. In *A festschrift for Morris Halle*, eds. Stephen R. Anderson and Paul Kiparsky, 93–106. New York: Holt, Rinehart and Winston.
- Kornfeld, Laura M., and Andrés Leandro Saab. 2004. Nominal ellipsis and morphological structure in Spanish. In *Romance languages and linguistic theory 2002: Selected papers from ‘Going Romance’, Groningen, 28–30 November 2002*, eds. Reineke Bok-Bennema, Bart Hollebrandse, Brigitte Kampers-Manhe, and Petra Sleeman, 183–198. Amsterdam: John Benjamins.
- Lasnik, Howard. 1981. Restricting the theory of transformations: A case study. In *Explanations in linguistics*, eds. Norbert Hornstein and David Lightfoot, 152–173. London: Longman.
- Lasnik, Howard. 1991. On the necessity of binding conditions. In *Principles and parameters in comparative grammar*, ed. Robert Freidin, 7–28. Cambridge: MIT Press.
- Lasnik, Howard. 1995. Verbal morphology: Syntactic structure meets the minimalist program. In *Evolution and revolution in linguistic theory: Essays in honor of Carlos Otero*, eds. Hector Campos and Paula Kempchinsky, 251–275. Washington: Georgetown University Press.
- Lawrenz, Birgit. 1993. *Apposition. Begriffsbestimmung und syntaktischer Status*. Tübingen: Narr.
- Ledgeway, Adam. 2013. Greek disguised as Romance? The case of Southern Italy. In *5th International Conference on Greek Dialects and Linguistic Theory, Patras*, eds. Mark Janse, Brian Joseph, Angela Ralli, and Metin Bagriacik, 184–227.
- Lekakou, Marika, and Kriszta Szendrői. 2007. Eliding the noun in close apposition, or Greek polydefinites revisited. *UCL Working Papers in Linguistics* 19: 129–154.
- Lekakou, Marika, and Kriszta Szendrői. 2012. Polydefinites in Greek: Ellipsis, close apposition and expletive determiners. *Journal of Linguistics* 48: 107–149.
- Lichtenberk, Frantisek. 2000. Inclusive pronominals. *Oceanic Linguistics* 39: 1–32.
- Longobardi, Giuseppe. 1994. Reference and proper names: A theory of n-movement in syntax and logical form. *Linguistic Inquiry* 25 (4): 609–665.
- Longobardi, Giuseppe. 2008. Reference to individuals, person, and the variety of mapping parameters. In *Essays on nominal determination: From morphology to discourse management*, eds. Henrik Høeg Müller and Alex Klinge, 189–211. Amsterdam: John Benjamins.
- Lyons, Christopher. 1999. *Definiteness*. Cambridge: Cambridge University Press.
- Mancini, Simona, Nicola Molinaro, Luigi Rizzi, and Manuel Carreiras. 2011. When persons disagree: An ERP study of unagreement in Spanish. *Psychophysiology* 48: 1361–1371.



- Michelioudakis, Dimitris. 2011. Dative arguments and abstract Case in Greek. PhD diss., University of Cambridge.
- Müller, Stefan. 2008. *Head-Driven Phrase Structure Grammar. Eine Einführung*. Tübingen: Stauffenburg Verlag.
- Neeleman, Ad, and Kriszta Szendrői. 2007. Radical pro drop and the morphology of pronouns. *Linguistic Inquiry* 38: 671–714.
- Neeleman, Ad, and Hans van de Koot. 2010. Theoretical validity and psychological reality of the grammatical code. In *The linguistics enterprise: From knowledge of language to knowledge in linguistics*, eds. Martin Everaert, Tom Lentz, Hannah de Mulder, Øystein Nilsen, and Arjen Zondervan, 183–212. Amsterdam: John Benjamins.
- Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. *Natural Language and Linguistic Theory* 25 (2): 273–313.
- Nevins, Andrew. 2011. Multiple agree with clitics: Person complementarity vs. omnivorous number. *Natural Language and Linguistic Theory* 29: 939–971.
- Norman, Boris. 2001. Substantivnoe podležaščee pri glagolax v 1-m lice množestvennogo čisla v bol'garskom jazyke (*Dvama studenti tærsim rabota*). In *Količestvennost' i gradual'nost'*. *Quantität und Graduierung in der natürlichen Sprache*, ed. Alexander Kiklevič. *Die Welt der Slaven*, 77–86. München: Otto Sagner.
- Olarra, Antxon. 1994. Notes on the optimality of agreement. Unpublished ms., University of Washington.
- Olsen, Susan. 1991. Die deutsche Nominalphrase als Determinansphrase. In *DET, COMP und INFL: Zur Syntax funktionaler Kategorien und grammatischer Funktionen*, 35–56. Tübingen: Niemeyer.
- Ordóñez, Francisco. 2000. *The clausal structure of Spanish: A comparative study*. New York, London: Garland.
- Ordóñez, Francisco, and Esthela Treviño. 1999. Left dislocated subjects and the pro-drop parameter: A case study of Spanish. *Lingua* 107: 39–68.
- Osenova, Petya. 2003. On subject-verb agreement in Bulgarian (an HPSG-based account). In *Investigations into formal Slavic linguistics. Contributions of the Fourth European Conference on Formal Description of Slavic Languages (FDSL) IV*, eds. Peter Kosta, Joanna Błaszczak, Jens Frasek, Ljudmila Geist, and Marzena Żygis, 661–672. Frankfurt/Main: Peter Lang.
- Panagiotidis, Phoevos. 2002. *Pronouns, clitics and empty nouns*. Amsterdam: John Benjamins.
- Panagiotidis, Phoevos. 2003. Empty nouns. *Natural Language and Linguistic Theory* 21: 381–432.
- Papangeli, Dimitra. 2000. Clitic doubling in Modern Greek: A head-complement relation. In *UCL Working papers in Linguistics 12*, eds. Corinne Iten and Ad Neeleman, Vol. 12, 473–497. London: University College London.
- Parrott, Jeffrey K. 2009. Danish vestigial case and the acquisition of vocabulary in Distributed Morphology. *BiLinguistics* 3.2-3: 270–304.
- Pesetsky, David. 1978. Category switching and so-called so-called pronouns. In *Chicago Linguistic Society (CLS)*, eds. Donka Farkas, Wesley M. Jacobsen, and Karol W. Todrys, Vol. 14, 350–360. Chicago.
- Piper, P. 1998. Lico prospekt srpskie sintakse u svetlu slovenske sintaksičke tipologije. In *Slavistika. Kniga II*, 22–29. Belgrade.
- Popov, K. 1988. *Sintaktičnoto soglasuvanje v bølgarskija jezik*. Sofia.
- Postal, Paul. 1969. On so-called “pronouns” in English. In *Modern studies in English: Readings in Transformational Grammar*, eds. David A. Reibel and Sanford A. Schane, 201–226. Englewood Cliffs: Prentice Hall.
- Raposo, Eduardo. 2002. Nominal gaps with preposition modifiers in Portuguese and Spanish: A case for quick spell-out. In *Cuadernos de lingüística ix*, eds. María Jesús Arche, Antonio Fábregas, and Augusto M. Trombetta, 127–144. Madrid: Instituto Universitario Ortega y Gasset.
- 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 konversations-theoretische Erklärung. *Linguistische Berichte* 197: 77–105.
- Ritter, Elizabeth. 1995. On the syntactic category of pronouns and agreement. *Natural Language and Linguistic Theory* 13: 405–443.
- Rivero, María Luisa. 2008. Oblique subjects and person restrictions in Spanish: A morphological approach. In *Agreement restrictions*, eds. Roberta D’Alessandro, Susann Fischer, and Gunnar Hrafn Hrafnbjargarson, 215–250. Berlin: Mouton de Gruyter.
- Roberts, Ian. 2010a. *Agreement and head movement: Clitics, incorporation, and defective goals*. Cambridge: MIT Press.

- Roberts, Ian. 2010b. A deletion analysis of null subjects. In *Parametric variation: Null subjects in Minimalist theory*, eds. Theresa Biberauer, Anders Holmberg, Ian Roberts, and Michelle Sheehan, 58–88. Cambridge: Cambridge University Press.
- Roberts, Ian. 2010c. Varieties of French and the null subject parameter. In *Parametric variation: Null subjects in minimalist theory*, eds. Theresa Biberauer, Anders Holmberg, Ian Roberts, and Michelle Sheehan, 303–327. Cambridge: Cambridge University Press.
- Roberts, Ian, and Anders Holmberg. 2010. Introduction: parameters in minimalist theory. In *Null subjects in minimalist theory*, eds. Theresa Biberauer, Anders Holmberg, Ian Roberts, and Michelle Sheehan, 1–57. Cambridge: Cambridge University Press.
- Rodrigues, Cilene. 2008. Agreement and floatation in partial and inverse partial control configurations. In *New horizons in the analysis of control and raising*, eds. William D. Davies and Stanley Dubinsky, 213–229. Dordrecht: Springer.
- Roehrs, Dorian. 2005. Pronouns are determiners after all. In *The function of function words and functional categories*, eds. Marcel den Dikken and Christina M. Tortora, 251–285. Amsterdam: John Benjamins.
- Roehrs, Dorian. 2006. The morpho-syntax of the Germanic noun phrase: Determiners move into the determiner phrase. PhD diss., Indiana University.
- Roussou, Anna, and Ianthi-Maria Tsimpli. 2006. On Greek VSO again! *Journal of Linguistics* 42: 317–354.
- Rust, Friederich. 1965. *Praktische Namagrammatik*. Rotterdam: Balkema.
- Saab, Andrés Leandro. 2007. Anti-agreement effects and null subjects in Spanish: A distributed morphology approach. Handout from IV Encuentro de Gramática Generativa, Mendoza, Argentina, July 26–28, 2007.
- Saab, Andrés. 2013. Anticoncordancia y sincretismo en Español. Unagreement and syncretism in Spanish. *Linguística* 29 (2): 191–229.
- Sommerstein, Alan H. 1972. On the so-called definite article in English. *Linguistic Inquiry* 3: 197–209.
- Sportiche, Dominique. 1996. Clitic constructions. In *Phrase structure and the lexicon*, eds. Johan Rooryck and Laurie Zaring, 213–276. London/New York: Routledge.
- Stavrou, Melita. 1990–1991. Ονοματική παράθεση και επεξήγηση: μια ερμηνευτική προσέγγιση και προσδιορισμός των σχετικών φαινομένων [onomatiki parathesi kai epexigisi: mia ermineftiki prosengisi kai 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 bolgarskija knizoven jezik. Fonetika i morfologija*. Sofia.
- Suñer, Margarita. 1988. The role of agreement in clitic-doubled constructions. *Natural Language and Linguistic Theory* 6 (3): 391–434.
- Svenonius, Peter. 2012. Spanning. Ms. University of Tromsø, available at [ling.auf.net/lingBuzz/001501](http://ling.auf.net/lingBuzz/001501).
- Taraldsen, Knut Tarald. 1995. On agreement and nominative objects in Icelandic. In *Studies in Comparative Germanic Syntax*, eds. Hubert Haider, Susan Olsen, and Sten Vikner, 307–327. Dordrecht: Kluwer.
- Terzi, Arhonto. 2010. On null spatial Ps and their arguments. *Catalan Journal of Linguistics* 9: 167–187.
- Ticio, M. Emma. 2010. *Locality domains in the Spanish determiner phrase*. Dordrecht: Springer.
- Torrego, Esther. 1996. On quantifier float in control clauses. *Linguistic Inquiry* 27: 111–126.
- Tsoulas, George, and Artemis Alexiadou. 2005. On the grammar of the Greek particle *Re*. A preliminary investigation. Ms., University of York and Universität 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.
- Villa-García, Julio. 2010. To agree or not to agree: Beyond quintessentially syntactic agreement in Spanish. In *Romance Linguistics 2009: Selected papers from the 30th Linguistics Symposium on Romance Languages (LSRL)*, Tucson, Arizona, March 2009, eds. Sonia Colina, Antxon Olarrea, and Ana Maria Carvalho, 249–266. Amsterdam: John Benjamins.
- Wagers, Matthew W., Ellen F. Lau, and Colin Phillips. 2008. Agreement attraction in comprehension: Representations and process. *Journal of Memory and Language* 61: 206–237.
- Zribi-Hertz, Anne. 1994. La syntaxe des clitiques nominatifs en français standard et en français avancé. In *Travaux de linguistique et de philologie*, eds. Georges Kleiber and Gilles Roques, 131–147. Strasbourg/Nancy: Klincksieck.