

## RESEARCH

## Complementizer agreement with coordinated subjects in Polish

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This paper examines complementizer and verbal agreement with coordinate subjects in Polish. It shows that while certain patterns are possible, others (logically equally plausible ones) are not. The possible patterns are: (i) Resolved Agreement on both the verb and the complementizer, (ii) mixed agreement (Resolved Agreement on the verb and First Conjunct Agreement on the complementizer, and (iii) sandwiched agreement (First Conjunct Agreement on the complementizer and Last Conjunct Agreement on the verb). The differences between Resolved Agreement and Single Conjunct Agreement are attributed to two distinct ways Agree can operate; either as a sequence of Singular Agree operations, or as one instance of Multiple Agree, with Multiple Agree yielding Resolved Agreement and Singular Agree requiring feature conflict resolution at PF.

**Keywords:** complementizer agreement; coordinated subjects; sandwiched agreement; Polish; feature resolution

## 1 Puzzle

The purpose of this paper is to contribute to the growing body of literature on the patterns of agreement with coordinated subjects (see, among others, Kallas 1974; Corbett 1983; 1991; Bošković 2009; 2010; Ruda 2011; Willim 2012; Franks & Willer-Gold 2014; Marušič, Nevins & Badecker 2015; Nevins & Weisser 2018). However, instead of focusing on verbal agreement with such subjects, I focus on complementizer agreement and its interaction with verbal agreement, which, by comparison, has received less attention in the literature (see, however, Van Koppen 2007; Haegeman & Van Koppen 2012; Murphy & Puškar 2018). Drawing on the data from Polish, I discuss what happens when the coordinated subject is “sandwiched” between the complementizer and the verb, both of which can in principle agree with the subject.<sup>1</sup>

(1) **COMP**<sub>AGR?</sub> [<sub>&P</sub> DP<sub>1</sub> and DP<sub>2</sub>] **VERB**<sub>AGR?</sub>

The choices known from the literature on verbal agreement alluded to above are Resolved Agreement (**RA**) (plural agreement resulting from resolution rules to be discussed in Section 3.2), First Conjunct Agreement (**FCA**) and Last Conjunct Agreement (**LCA**). Given the presence of two agreement-bearers, the verb and the complementizer, there are a number of ways verbal and complementizer agreement can interact. The logical possibilities are given in (2a–f); in the next section, we will see that only a small subset, bolded in (2), is possible.

<sup>1</sup> Marušič, Nevins & Saksida (2007) note the sandwiched pattern in Slovenian constructions with multiple auxiliaries (see also Marušič & Nevins 2018 for a more recent analysis).

- (2)
- |    |   |   |  |
|----|---|---|--|
| a. | <b>COMP</b> <sub>RESOLVED AGR</sub>       | [ <sub>&amp;P</sub> DP <sub>1</sub> & DP <sub>2</sub> ] | <b>VERB</b> <sub>RESOLVED AGR</sub>      |
| b. | *COMP <sub>RESOLVED AGR</sub>             | [ <sub>&amp;P</sub> DP <sub>1</sub> & DP <sub>2</sub> ] | VERB <sub>FIRST CONJUNCT AGR</sub>       |
| c. | *COMP <sub>RESOLVED AGR</sub>             | [ <sub>&amp;P</sub> DP <sub>1</sub> & DP <sub>2</sub> ] | VERB <sub>LAST CONJUNCT AGR</sub>        |
| d. | <b>COMP</b> <sub>FIRST CONJUNCT AGR</sub> | [ <sub>&amp;P</sub> DP <sub>1</sub> & DP <sub>2</sub> ] | <b>VERB</b> <sub>RESOLVED AGR</sub>      |
| e. | ?*COMP <sub>FIRST CONJUNCT AGR</sub>      | [ <sub>&amp;P</sub> DP <sub>1</sub> & DP <sub>2</sub> ] | VERB <sub>FIRST CONJUNCT AGR</sub>       |
| f. | <b>COMP</b> <sub>FIRST CONJUNCT AGR</sub> | [ <sub>&amp;P</sub> DP <sub>1</sub> & DP <sub>2</sub> ] | <b>VERB</b> <sub>LAST CONJUNCT AGR</sub> |
| g. | *COMP <sub>LAST CONJUNCT AGR</sub>        | [ <sub>&amp;P</sub> DP <sub>1</sub> & DP <sub>2</sub> ] | VERB <sub>RESOLVED AGR</sub>             |
| h. | *COMP <sub>LAST CONJUNCT AGR</sub>        | [ <sub>&amp;P</sub> DP <sub>1</sub> & DP <sub>2</sub> ] | VERB <sub>FIRST CONJUNCT AGR</sub>       |
| i. | *COMP <sub>LAST CONJUNCT AGR</sub>        | [ <sub>&amp;P</sub> DP <sub>1</sub> & DP <sub>2</sub> ] | VERB <sub>LAST CONJUNCT AGR</sub>        |

## 2 Complementizer agreement with coordinated subjects

The agreement markers that are the focus on this paper are bolded in the examples in (3a–b). In (3a), the agreement marker is attached to the verb (technically, a verbal participle), whereas in (3b) it is attached to the complementizer.<sup>2</sup> The complementizer agrees with the subject in number and person, whereas the verbal participle agrees with the subject in number and gender.

- (3)
- a. Wiem, że wygrali-**śmy**/ły-**śmy**.  
 know.1SG that win.PART.VIR.PL-1PL/PART.NVIR.PL-1PL  
 ‘I know that we won.’
- b. Wiem, że-**śmy** wygrali/ły.  
 know.1SG that-1PL win.PART.VIR.PL/PART.NVIR.PL  
 ‘I know that we won.’

The complementizer that I focus on here is the conditional complementizer *żeby*. What distinguishes it from the declarative complementizer *że* ‘that’ in (3a–b) above is that agreement is obligatorily realized on this complementizer, as shown by the contrast in (4a–b):

- (4) Migdalski (2006: 252)
- a. Chcę, że-**byś** przestał mi przeszkadzać.  
 want.1SG that-COND-2SG stop.PART.M.SG I.DAT disturb.INF  
 ‘I want you to stop disturbing me.’
- b. \*Chcę, że przestał-**byś** mi przeszkadzać.  
 want.1SG that stop.PART.M.SG-COND-2SG I.DAT disturb.INF  
 ‘I want you to stop disturbing me.’

The morphological paradigms, with the relevant agreement markers bolded, for both the subjunctive complementizer and the verbal participle, are given in Tables 1 and 2.

An important question is whether it is appropriate to analyze the agreement on C in (3b) and (4a) as true complementizer agreement, rather than so-called floating inflection (i.e. person number agreement realized on the complementizer instead of the verb).<sup>3</sup> The fact that

<sup>2</sup> Polish has two genders in the plural, one for masculine personal nouns and the other one for all other nouns. This distinction is referred to in the literature as *virile* vs. *nonvirile* distinction, and glossed here as VIR and NVIR, respectively.

<sup>3</sup> I thank the anonymous reviewers for asking me to be explicit about this question. The phenomenon of floating inflection has received a lot of attention in the literature (see Booij & Rubach 1987; Embick 1995; Franks & Bański 1999; Bański 2000; 2001; Franks & King 2000; Migdalski 2006, among many others), and I cannot do justice here to all arguments that have been levied in favor of (or against) treating the inflectional markers in question as affixes vs. clitics. Migdalski (2006) provides an excellent summary of the evidence

**Table 1:** Subjunctive complementizer *żeby*.

	SINGULAR	PLURAL
1	żeby- <b>m</b>	żeby- <b>śmy</b>
2	żeby- <b>ś</b>	żeby- <b>ście</b>
3	żeby	żeby

**Table 2:** Verbal participle of *wygrać* ‘to win’.

	SINGULAR			PLURAL	
	MASCULINE	FEMININE	NEUTER	VIRILE	NONVIRILE
1	wygrał- <b>em</b>	wygrał- <b>am</b>		wygrali- <b>śmy</b>	wygrały- <b>śmy</b>
2	wygrał- <b>eś</b>	wygrał- <b>aś</b>		wygrali- <b>ście</b>	wygrały- <b>ście</b>
3	wygrał	wygrał- <b>a</b>	wygrał- <b>o</b>		

the realization of person morphology on the complementizer blocks the realization of person morphology on the verb, as shown by the contrast between the grammatical (4a) and the ungrammatical (6) below, seems more compatible with a floating clitic analysis. However, number morphology is realized on *both* the complementizer and the verbal participle.

- (5) \*Chcę, że-**by-ś** przestał-**eś** mi przeszkadzać.  
 want.1SG that-COND-2SG stop.PART.M.SG I.DAT disturb.INF  
 ‘I want you to stop disturbing me.’

While (3b) lends itself to a floating inflection analysis (given the alternation between (3a) and (3b)), agreement in (4a) is “less floating” for the following two reasons.<sup>4</sup> First, agreement in this case is obligatorily realized on the subjunctive complementizer.<sup>5</sup> Second, the agreement on the complementizer *can* be distinct from the agreement on the verb; this is what can happen with coordinate subjects, as we will see shortly (see also Haegeman & Van Koppen 2012).

This brings us to the question of what happens when the subject is a conjoined DP. There are a number of possibilities to consider. First, the complementizer and the verb can both show Resolved Agreement (i.e. agreement with both conjuncts). This is shown in (6).<sup>6</sup>

- (6) Maria chce, **żebyśmy** ja i mój sąsiad **wyszli**.  
 Maria wants that.COND.1PL I and my neighbor.M.SG left.VIR.PL  
 ‘Maria wants me and my neighbor to leave.’

that the agreement markers are affixes when they are attached to the verb (see also Rappaport 1988; Franks & Bański 1999). For example, they trigger penultimate stress (*przeCZYTAł-am* ‘I read’ NOT *przeCZYtał-am*), which is not what we would expect if we were dealing with a clitic.

<sup>4</sup> In this respect, I follow Franks & Bański (1999), who take the agreement marker in question to be an affix when it appears on the participle and a clitic when it appears elsewhere. However, they do not discuss the complementizer *żeby*.

<sup>5</sup> More specifically, it is the *-by* irrealis marker, which is part of the complementizer, that obligatorily realizes the agreement affix. I will continue to refer to *żeby* as an agreeing complementizer. However, my proposal is consistent with *-by* originating in a different position. Migdalski (2006), for example, takes *-by* in subjunctive *żeby* clauses to occupy ModP (below C), and distinguishes it from the conditional *-by*, which occupies a lower position. What matters for the purpose of this paper is that there are two elements where subject agreement can be realized.

(i) Migdalski (2006: 256)  
 [<sub>CP</sub> [<sub>ModP</sub> **BY**<sub>SUBJ</sub> [<sub>TP</sub> [<sub>MoodP</sub> **BY**<sub>COND</sub> ]]]]

<sup>6</sup> For the examples involving 1<sup>st</sup> person pronoun *ja* ‘I’, I take the speaker to be female. Thus, in singular contexts, the pronoun (even though it is not explicitly marked as either masculine or feminine) will result in feminine agreement on the verb, and in plural contexts it will result in virile agreement when the pronoun is conjoined with a masculine personal noun and nonvirile agreement otherwise.

Attested examples are given in (7a–d), with (7b–d) also compatible with FCA on C.

- (7) a. **żebyśmy** ja i mąż **wytrwali**  
 that.COND.1PL I and husband persevered.VIR.PL  
 ([http://www.smbf.pl/index.php?option=com\\_vitabook&limitstart=525](http://www.smbf.pl/index.php?option=com_vitabook&limitstart=525))
- b. **żeby** on i Pierwsza Dama **mogli** wysłuchać  
 that.COND.3SG/PL he and First Lady could.VIR.PL listen.INF  
 postulatów  
 demands  
 (<https://i-d.vice.com/pl/article/9kba4p/rihanna-rozdaje-stypendia-i-rowery-dziewczynkom-w-malawi>)
- c. **żeby** mama i babcia **mogły** normalnie  
 that.COND.3SG/PL mother and grandmother could.NVIR.PL normally  
 żyć  
 live.INF  
 ([czestochowa.naszemiasto.pl/.../osiedlowa-wojna-na-wyczerpach,14...](https://czestochowa.naszemiasto.pl/.../osiedlowa-wojna-na-wyczerpach,14...))
- d. **żeby** świat i miasto **zapadły** w gruzy  
 that.COND.3SG/PL world and city fell.NVIR.PL in rubble  
 ([https://pl.wikisource.org/wiki/Quo\\_vadis/Tom\\_I/Rozdział\\_11](https://pl.wikisource.org/wiki/Quo_vadis/Tom_I/Rozdział_11))

The second option, illustrated in (8), is for the complementizer to agree with the first conjunct, and for the verb to agree with both conjuncts.

- (8) Maria chce, **żeby** ja i mój sąsiad **wyszli**.  
 Maria want.3SG that.COND.1SG I and my neighbor.M.SG left.VIR.PL  
 ‘Maria wants me and my neighbor to leave.’

Attested examples of this pattern are given in (9a–c).

- (9) a. **żeby** ja i moje dziecko **miały** zabezpieczoną  
 that.COND.1SG I and my child.N.SG had.NVIR.PL secured  
 przyszłość  
 future  
 (<https://slubowisko.pl/topic/37589/?page=5>)
- b. **żeby** ja i mój brat **przejęli** jego  
 that.COND.1SG I and my brother.M.SG took.over.VIR.PL his  
 “imperium”  
 empire  
 (<https://www.wattpad.com/161199533-spaces-tłumaczenie->)
- c. **żebyś** Ty i Twoja córka **miały** lepsze  
 that.COND.2SG you and your daughter.F.SG had.NVIR.PL better  
 życie  
 life  
 (<https://anonimowe.pl/8ySd8>)

This is the pattern discussed by Van Koppen (2007) for dialects of Dutch, illustrated in (10). What distinguishes Polish from Tegelen Dutch, however, is the fact that First Conjunct Agreement on the complementizer is optional; we saw in examples (6–7) above that Resolved Agreement is possible as well.<sup>7</sup>

<sup>7</sup> In Van Koppen’s account, the choice of the form depends on the morphology of the language; the more specific affix is inserted in accordance with the Subset Principle.

- (10) *Tegelen Dutch* (adapted from Van Koppen 2007: 122 & 135)  
 Ich dink **de-s/\*det** doow en ich ôs **kenne** treffe.  
 I think that-2SG/that you.2SG and I each.other can.PL meet  
 ‘I think that you and I can meet.’

And the third pattern is what I refer to sandwiched agreement (following Marušić, Nevins & Badecker’s 2015 terminology), in which the complementizer agrees with the first conjunct, and the verb agrees with the last conjunct. This pattern is illustrated in (11) and (12a–c). Example (11) involves the intended sandwiched agreement pattern if the speaker is female, which means the masculine agreement that we see on the verb is agreement with the second conjunct.<sup>8,9</sup>

- (11) Maria chce, **żebym** ja i mój sąsiad **wyszedł**.  
 Maria wants that.COND.1SG I and my neighbor.M.SG left.M.SG  
 ‘Maria wants me and my neighbor to leave.’
- (12) a. **żebyście** wy i ten przedział **był** zdolny  
 that.COND.2PL you.2PL and this compartment.M.SG was.M.SG fit  
 do użytku.  
 for use  
 (<http://hermiona-granger-lamour-est-difficile.blogspot.com/2015/04/>)
- b. **żebym** ja i dziecko **czuło**  
 that.COND.1SG I and child.N.SG felt.N.SG  
 (<http://afterkorpo.pl/zdrowe-rodzicielstwo-dzieciokonsumpcjonizm-v-1/>)
- c. **żebyśmy** my i nasza praca **była** traktowana z  
 that.COND.1PL we and our work.F.SG was.F.SG treated with  
 szacunkiem  
 respect  
 ([www.eesc.europa.eu/.../alina-badowska-polish-care-worker-workin...](http://www.eesc.europa.eu/.../alina-badowska-polish-care-worker-workin...))

<sup>8</sup> I focus here on sandwiched agreement cases where one of the Probes is a complementizer (see Marušić, Nevins & Saksida 2007; Marušić & Nevins 2018 for a discussion of other sandwiched patterns).

<sup>9</sup> One of the reviewers raises the question of how processes like extraposition affect agreement. The example in (i), brought to my attention by the same reviewer, shows Resolved Agreement on both the complementizer and the verb when the subject is extraposed. This is compatible with agreement being determined before or after extraposition, since the same agreement is possible in a non-extraposed variant.

- (i) Maria chce, **żebyśmy** **wyszli**, ja i mój sąsiad.  
 Maria wants that.COND.1PL left.VIR.PL I and my neighbor.M.SG  
 ‘Maria wants me and my neighbor to leave.’

Example (ii) below appears to be compatible with both sandwiched agreement and First Conjunct Agreement on both the complementizer and the verb (if the speaker is male). If it is sandwiched agreement, agreement would have to be determined before extraposition takes place.

- (ii) Maria chce, **żebym** **wyszedł**, ja i mój sąsiad.  
 Maria wants that.COND.1SG left.M.SG I and my neighbor.M.SG  
 ‘Maria wants me and my neighbor to leave.’

However, the ungrammaticality of (iii) is unexpected if agreement were *NOT* affected by extraposition (contrast it with the grammatical non-extraposed variant in (iv)).

- (iii) \*Maria chce, **żebym** **wyszli**, ja i moi sąsiedzi.  
 Maria wants that.COND.1SG left.VIR.PL I and my neighbors.M.PL  
 ‘Maria wants me and my neighbors to leave.’
- (iv) Maria chce, **żebym** ja i moi sąsiedzi **wyszli**.  
 Maria wants that.COND.1SG I and my neighbors.M.PL left.VIR.PL  
 ‘Maria wants me and my neighbors to leave.’

This brings us to logically possible, but ungrammatical patterns. First, it is impossible for the complementizer to have Resolved Agreement, but for the verb to agree with only one conjunct, either the first one or the last one. This is illustrated in (13a–b); in (13a) the verb agrees with the last conjunct, and in (13b), with the first one.

- (13) a. \*Maria chce, **żebyśmy** ja i mój sąsiad **wyszedł**.  
 Maria wants that.COND.1PL I and my neighbor.M.SG left.M.SG  
 ‘Maria wants me and my neighbor to leave.’  
 b. \*Maria chce, **żebyśmy** ja i mój sąsiad **wyszła**.  
 Maria wants that.COND.1PL I and my neighbor.M.SG left.F.SG  
 ‘Maria wants me and my neighbor to leave.’

What also seems to be impossible is for *both* the complementizer and the verb to agree with the same conjunct; in (14a) both agree with the first conjunct, and in (14b) with the last one.<sup>10</sup>

- (14) a. \*Maria chce, **żeby**m ja i mój sąsiad **wyszła**.  
 Maria wants that.COND.1SG I and my neighbor.M.SG left.F.SG  
 ‘Maria wants me and my neighbor to leave.’  
 b. \*Maria chce, **żeby** ja i mój sąsiad **wyszedł**.  
 Maria wants that.COND.3SG I and my neighbor.M.SG left.M.SG  
 ‘Maria wants me and my neighbor to leave.’

Example (14a) improves with a pause flanking the conjunction and the second conjunct, which I take to be indicative of a parenthetical structure. Analogous attested examples of First Conjunct Agreement on *both* the complementizer and the verb are given in (15a–b). Their parenthetical nature is reflected clearly by the punctuation in (15a).

- (15) a. **żeby**m ja (i mi podobni) siedziała po godzinach  
 that.COND.1SG I and I.DAT similar.M.PL sat.F.SG after hours  
 (<http://nuda-w-biurze.blogspot.com/2010/12/2.html>)  
 b. **żebyś** ty i bliska ci osoba **trafił**  
 that.COND.2SG you and close you.DAT person.F.SG found.way.M.SG  
 na Łąki Asfoldelowe  
 to meadows Asphodel  
 (<https://samequizy.pl/co-wolisz-percy-jackson-i-bogowie-olimpijscy/>)

The examples in (16) below could be another possible exception to the generalization that the complementizer and the verb cannot both agree with the same (single) conjunct; however, they are also compatible with a “sandwiched agreement” analysis.

- (16) a. **żebyś** Ty i każdy gość **czuł** się swobodnie  
 that.COND.2SG you and every guest.M.SG felt.M.SG REFL comfortable  
 (<http://moojconcept.com/baza-i-detel-przedpokoj-idealny/>)  
 b. **żeby**m ja i moja rodzina **była** zdrowa  
 that.COND.1SG I and my family.F.SG was.F.SG healthy  
 (<https://poranny.pl/uwielbiam-przebywac-w-lesie/ar/5066672>)

<sup>10</sup> Google searches for strings of the kind given in (i), in which the complementizer unambiguously would have to agree with the second conjunct, yielded zero hits.

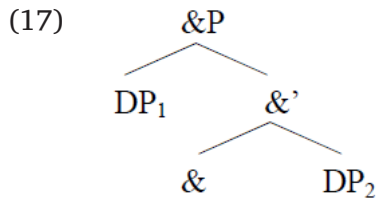
(i) **żebyś** on/ona/my i **ty**  
 that.COND-2SG he/she/we and you



### 3 Towards an analysis

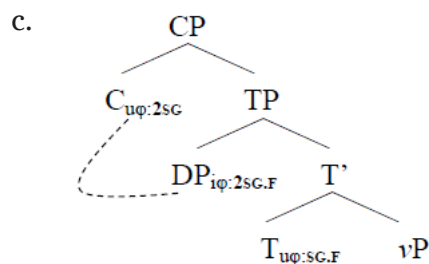
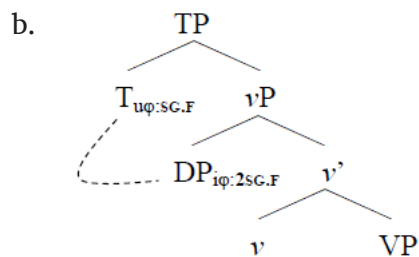
#### 3.1 Theoretical assumptions

Before delving into the analysis, let me spell out my theoretical assumptions. First, I assume an asymmetric structure for coordination of the kind proposed by Johannessen (1998), given in (17) (see also Munn 1993; Zoerner 1995; Progovac 1998a; b; and the references therein for other variants of such an asymmetric structure).



Second, I assume that agreement is the result of an Agree operation, indicated with a dotted line in what follows, between a Probe (T or C in cases considered here) and a Goal (the subject DP), resulting in the valuation of uninterpretable features.<sup>11</sup> In cases of complementizer agreement, the verb agrees with the subject in number and gender (as shown in (18b)) and the complementizer agrees with the subject in person and number (as shown in (18c)). Verbal agreement is mediated by T, which does not necessarily imply that the verb itself is in T.

- (18) a. Chcę żebyś przyszła na wykład.  
 want.1SG that.COND-2SG came.F.SG to lecture  
 ‘I want you to come to the lecture.’



Unlike some of the earlier approaches to First Conjunct Agreement (such as Aoun, Benmamoun & Sportiche 1994 or Citko 2004), I assume that all the agreement patterns under consideration here involve the same structure; there is no structural ambiguity.<sup>12</sup> While structural ambiguity approaches *could* in principle handle Resolved Agreement on both the complementizer and the verb and sandwiched agreement, the “mixed agreement” pattern, where the complementizer agrees with a single conjunct and the verb

<sup>11</sup> It is an issue of some debate whether grammatical (as opposed to natural gender) is interpretable or not, with some treating it as uninterpretable but valued (see Kramer 2015 for a recent discussion).

<sup>12</sup> Aoun, Benmamoun & Sportiche (1994) take one of the two structures to be bi-clausal (with each clausal conjunct containing a singular subject), which yields singular agreement. Citko (2004) takes one to be headed by a null plural pronoun, which yields plural agreement.

**Table 3:** Feature Resolution in Polish.<sup>15</sup>

NUMBER RESOLUTION	PERSON RESOLUTION	GENDER RESOLUTION
SG & SG = PL	1 & 2 = 1	masculine personal & masculine/feminine/
SG & PL = PL	2 & 3 = 2	neuter = virile/masculine personal
	3 & 3 = 3	<i>Elsewhere:</i> nonvirile/nonmasculine personal

shows Resolved Agreement, is problematic, since it would require two different structures simultaneously; one to get Resolved Agreement on the verb, and another one to get First Conjoint Agreement on the complementizer.<sup>13,14</sup>

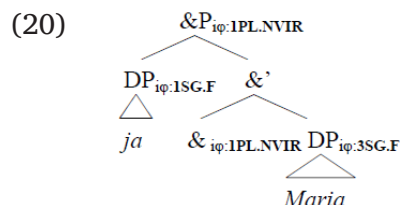
### 3.2 Feature resolution

When the subject is coordinate, well-studied feature resolution principles determine agreement (see Corbett 1983; 1991; Dalrymple & Kaplan 2000; Wechsler & Zlatić 2003; Van Koppen & Rooryck 2008; Ruda 2010; Prazmowska 2016, among others). Table 3 summarizes these principles for Polish.

These are the principles that in (19), for example, yield first person plural nonvirile agreement on verb:

- (19) Ja i Maria przyszliśmy na wykład.  
 I and Maria came.NVIR.PL to lecture  
 ‘I and Maria came to the lecture.’

Feature resolution is typically taken to be something that is mediated by the Conjunction Phrase (&P) or its head; either all phi-features are present on &P or a subset thereof. In (20), for example, all phi-features are present on &P, and in (21), due to Bošković (2009); Marušič, Nevins & Badecker (2015), among others, number *but not* gender is present on &P, presumably due to feature percolation and feature resolution on &P.<sup>16</sup>



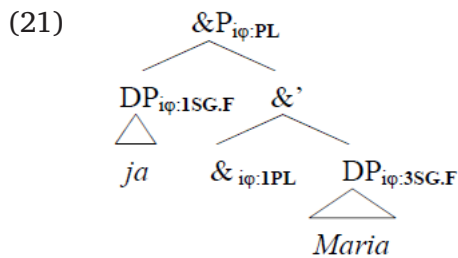
<sup>13</sup> Citko (2004), Franks & Willer-Gold (2014) also propose different structures for different agreement patterns. However, they differ from Aoun, Benmamoun & Sportiche (1994) in that neither structure involves clausal coordination. They face the same issue of how to account for the mixed agreement pattern. I also put Soltan’s (2007) Late/Counter-cyclic Merge proposal and Larson’s (2013) Late Merge proposal in this category. Space considerations prevent me from discussing these proposals in more detail.

<sup>14</sup> A different type of approach is the one developed by Murphy & Puškar (2018), who derive the possible agreement patterns from the relative ordering of the basic operations Move, Merge and Agree. Crucially, they assume that there are two types of Agree operations: Upward Agree, which is Agree with a specifier and Downward Agree, which is Agree with a complement. If Merge happens before Agree, the result is Resolved Agreement, since both conjuncts are present when Agree happens and, consequently, both have to agree with T. Agreement with a single conjunct is a result of one of the two Agree operations being ordered before Merge. Upward Agree before Merge yields Last Conjoint Agreement, since when Agree happens, the first conjunct is not there. And ordering Downward Agree before Merge yields First Conjoint Agreement; in this case the second conjunct is absent when Agree happens. Mixed agreement and sandwiched agreement also raise questions for this type of an account. Mixed agreement would require Merge before Agree to yield Resolved Agreement on the verb but Downward Agree before Merge to yield First Conjoint Agreement on the complementizer. Similarly, sandwiched agreement would require Merge before Downward Agree to yield Last Conjoint Agreement on the verb but Merge after Downward Agree to yield First Conjoint Agreement on the complementizer. Such orderings violate the principle Murphy & Puškar (2018) call Uniform Order of Operations, which requires the same ordering of operations to hold throughout the derivation.

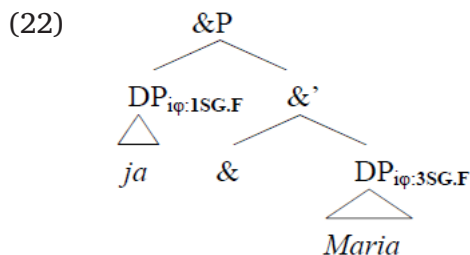
<sup>15</sup> See, however, Prazmowska (2016), for the role the [+/- human] feature plays.

<sup>16</sup> Bošković (2009) takes noun phrases to be NPs not DPs; this difference does not affect the point being made here.





Instead, I propose that neither &P nor its & head have any phi-features whatsoever; only individual conjuncts do. The structure is thus (22) instead of (20) or (21).<sup>17</sup>



This is what distinguishes my proposal from many alternatives, which also rely on a single structure, but allow the Probe to agree either with the entire Conjunction Phrase or just with the first conjunct. Some, such as Babyonyshev (1996) or Van Koppen (2007), take the first conjunct and the Conjunction Phrase to be equidistant from a higher Probe, which is what allows it to agree with either.<sup>18</sup> Other researchers allow &P to be underspecified with respect to some (or all) phi-features and/or probe differently for different types of phi-features (e.g. Bošković 2009; Ruda 2011; Marušič, Nevins & Badecker 2015). Bošković, for example, takes &P to be specified for number but not for gender. First Conjunct Agreement for him is thus the result of the Probe agreeing with the entire &P for number and with the first conjunct for gender.<sup>19</sup> Marušič, Nevins & Badecker (2015) also rely on the ability of the Probe to probe independently for number and gender. They further assume that the conjunction head has only number

<sup>17</sup> One of the reviewers wonders if anaphor binding examples of the sort given in (i), where the anaphor shows Resolved Agreement, might be taken to mean that &P has agreement features.

(i) He and I had to protect ourselves.

I would argue that this is not necessarily so, as anaphor binding can also be mediated by T (see, for example, Nikolaeva's 2014 account of binding, which relies on movement of an index to T, or Reuland's 2011 Agree-based account).

<sup>18</sup> Babyonyshev (1996) couches her proposal in terms of feature movement not Agree.

<sup>19</sup> An innovative aspect of his proposal is the account of Last Conjunct Agreement. Last Conjunct Agreement is a result of what Bošković refers to as Secondary Agree (i.e. Agree with the second conjunct), the availability of which he links to the fact that Serbo-Croatian allows violations of the Coordinate Structure Constraint. Bošković's account relies on equidistance; the &P and the first conjunct are equidistant from a higher Probe. The fact that in principle either the entire Conjunction Phrase or the first conjunct can move causes Lethal Ambiguity in the sense of McGinnis (2004). Secondary Agree provides the solution; the Probe undergoes Agree with the second conjunct, which subsequently pied-pipes the entire &P to [Spec, TP]. The sandwiched agreement pattern in Polish, with the relevant example repeated in (i), also involves Last Conjunct Agreement with the verb (in addition to First Conjunct Agreement with the complementizer). However, this case of Last Conjunct Agreement cannot be due to the Secondary Agree mechanism proposed by Bošković, since movement of the first conjunct, which is what triggers Secondary Agree, is impossible:

(i) Jan chce, żebym ja i mój sąsiad wyszedł.  
 Jan wants that.COND.1SG I and my neighbor.M.SG left.M.SG  
 'Jan wants me and my neighbor to leave.'

(ii) \**Ja<sub>i</sub>* Jan chce, żebym *t<sub>i</sub>* i mój sąsiad wyszedł.  
 I Jan wants that.cond.1SG and my neighbor.M.SG left.M.SG  
 Lit. 'Me, Jan wants and my neighbor to leave.'

(and no gender) features, and that Agree is a two-step process, consisting of Agree-Link (which establishes the relevant relationship between the Probe and Goal) and Agree-Copy (which copies the actual values), the latter being post-syntactic.<sup>20</sup> Agree-Copy is relativized to the linearization procedure which turns hierarchical constituency to a flat string. If it happens before the linearization procedure (“flattening of the two conjuncts”), the result is agreement with the hierarchically closest conjunct. If it happens after the linearization procedure, the result is agreement with the linearly closest conjunct. The difference between Single Conjunct Agreement and Resolved (or default) Agreement lies in whether agreement targets the Conjunction Phrase only or “peeks” into the Conjunction Phrase. The “No Peeking Grammar”, in which it does not peek into the conjuncts and the & head has a value for number but not gender, results in default agreement.<sup>21</sup> The mixed agreement pattern is problematic, as it would require a conflicting feature specification on the Conjunction Phrase: the presence of number features on the Conjunction Phrase to get Resolved Agreement (“No Peeking Grammar” in Marušič, Nevins & Badecker’s terms) but the absence thereof in order to get First Conjunct Agreement on the complementizer (“Peeking Grammar”).<sup>22,23</sup>

Returning to the lack of phi-features on &P, an important aspect of my proposal, there seem to be no independent reasons for positing phi-features on the &P or the & head, other than capturing agreement with coordinate subjects. Furthermore, there are other more concrete reasons against positing phi-features on &P. First, it is not clear how they get there.<sup>24</sup> Second, we do not see overt realizations of these phi-features on conjunction heads or conjunction phrases, as shown by the ungrammaticality of the examples in (23a–b).<sup>25</sup>

- (23) a. \*Ja i-**śmy** Maria poszły na wykład.  
 I and-**1PL** Maria went.NVIR.PL to lecture  
 ‘Maria and I went to the lecture.’
- b. \*[Ja i Maria]-**śmy** poszły na wykład.  
 I and Maria-**1PL** went.NVIR.PL to lecture  
 ‘Maria and I went to the lecture.’

And third, Resolved Agreement is also possible with larger (non-DP) conjuncts, where the agreeing verb occupies a position above the coordination level, as shown schematically in (24). It is unlikely that in this scenario, phi-features would percolate all the way up to &P.

<sup>20</sup> Bhatt & Walkow (2013) also take Agree to be a two-step process, consisting of Match and Valuation in their terms.

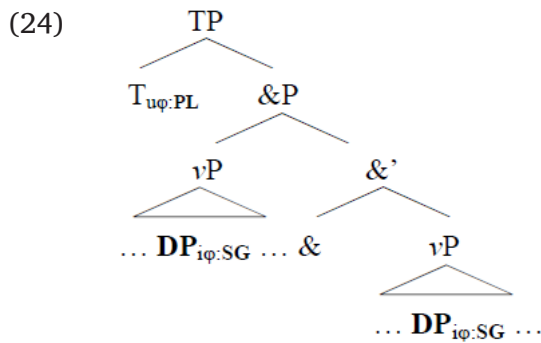
<sup>21</sup> If agreement targets &P for number and one conjunct for gender, with &P having a value for number (“The Peeking Grammar”), the result is plural number agreement and gender agreement with one conjunct.

<sup>22</sup> See, however, Marušič & Nevins (2018) for a concrete proposal of how to capture sandwiched agreement patterns.

<sup>23</sup> As suggested by one of the reviewers, in this system, mixed agreement could be captured if we assume that agreement between T and &P deactivates the features of &P, thus allowing C to agree with the first conjunct.

<sup>24</sup> Feature percolation could be one possibility. In other domains where the mechanism of feature percolation has been invoked (i.e. pied-piping), it has more recently been dispensed with. For example, Cable (2007; 2010), based on the data from Tlingit, shows that pied-piping involves movement of QP whose head (the Q particle) triggers movement, rather than the wh-word pied-piping the phrase it is contained within.

<sup>25</sup> Depending on how one analyzes the status of the bolded agreement markers, the ungrammaticality of (23a–b) could be due to the fact that conjunctions do not agree, or that inflectional clitics cannot attach to conjunctions, as noted by Migdalski (2006).



This is the configuration involved in a construction Kazenin (2002) assimilates to gapping, illustrated in (25), which is modeled on Kazenin’s Russian example (see also Citko 2018).

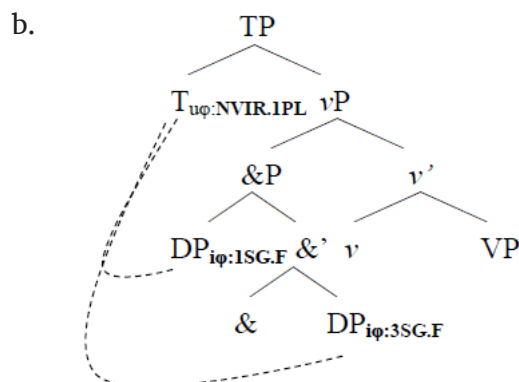
- (25) Wczoraj **kupili:** Jan książkę, a Piotr dictionary.  
 yesterday bought.VIR.PL Jan.M.SG book and Piotr.M.SG słownik  
 ‘Yesterday Jan bought a book and Piotr a dictionary.’

This is the so-called summative agreement (aka cumulative agreement), also found in Right Node Raising (RNR), illustrated in (26a–b) for English (see Postal 1998; Yatabe 2003; Chaves 2014; Grosz 2015; Citko 2018). In both (25) and (26a–b), the verb can be plural in spite of the fact that the two singular subjects are buried inside their respective conjuncts.<sup>26</sup>

- (26) a. Grosz (2015: 6)  
 [Sue’s proud that Bill\_\_]and [Mary’s glad that John **have** traveled to Cameroon].
- b. Postal (1998: 173)  
 [The pilot claimed that the first nurse \_\_], and [the sailor proved that the second nurse, **were** spies].

I follow Grosz (2015), who treats agreement with coordinate singular DPs as “completely analogous” to summative agreement in RNR and takes both to be a result of Multiple (Simultaneous) Agree between a single Probe (T/Participle) and two Goals (the two conjuncts), as shown in (27).

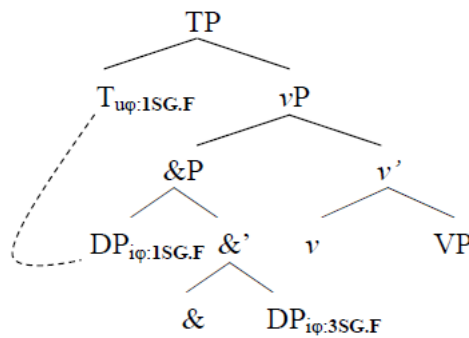
- (27) a. ja i Maria przyszliśmy na wykład.  
 I and Maria came.NVIR.1PL to lecture  
 ‘I and Maria came to the lecture.’



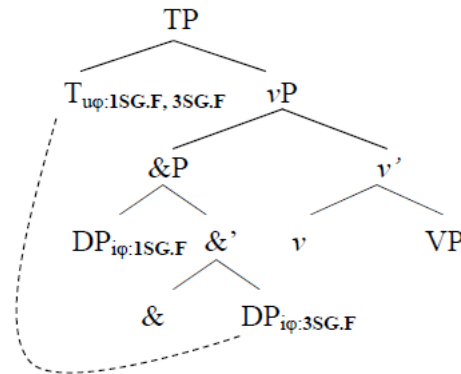
<sup>26</sup> Singular agreement is also possible. The precise analysis of RNR does not matter for our purposes here (see Citko 2017 for a recent overview of existing proposals).

Importantly, feature resolution happens on the Probe (T in this case) not on the Goal (the Conjunction Phrase).<sup>27</sup> In Grosz’s (2015) account, each DP enters the derivation with referential features, which he represents as numerical indices, with distinct indices encoding distinct reference. As part of the Agree operation, these indices are copied onto T. If two distinct indices are copied (as is the case when T undergoes Multiple Agree with two DPs), the result is Resolved Agreement. However, I depart from Grosz in arguing that there is another option, which is the option that will yield agreement with a single conjunct: First or Last Conjunct Agreement. T, instead of undergoing Multiple Agree with both conjuncts simultaneously, could instead agree with DP<sub>1</sub> first and DP<sub>2</sub> next. As a result of these two “Singular” Agree operations, T ends up with two distinct agreement values, as shown in (28a–b).<sup>28,29</sup> The two types of agreement are similar in spirit to what Shen (this volume) refers to as distributive and summative agreement, respectively.

(28) a. Agree between T and DP<sub>1</sub>



b. Agree between T and DP<sub>2</sub>



The presence of two conflicting feature values on T is resolved at PF. Resolution can be achieved in two ways; either via syncretism (if the Lexicon contains a single form that can realize these two features) or via proximity whereby the value of the linearly closest conjunct is the one that is realized. Which one it is will thus depend on the position of the Conjunction Phrase relative to the agreeing head; with preverbal conjoined subjects, it is going to be the last conjunct (as shown in (29a)), whereas with postverbal conjoined

<sup>27</sup> Strictly speaking, the Conjunction Phrase is not the Goal, since it lacks phi-features.

<sup>28</sup> Given the existence of Singular Agree, it is also possible for T to agree with just one conjunct. It will always be the closest one to it. Agreement with the second conjunct is possible only if T has agreed with the first conjunct first.

<sup>29</sup> The question that arises here is whether the sequence of Singular Agree operations is needed, given the existence of Multiple Agree. I assume Singular Agree to be the standard type of Agree, and since I do not see an easy way to exclude it, I take it to be one of the possibilities.

subjects, it is going to be the first conjunct (as shown in (29b)).<sup>30</sup> As one of the reviewer points out, T has to be able to “know” which set of features came from which conjunct, and suggests that the mechanism of index copying that Grosz proposes for summative agreement can capture it. I follow this suggestion; for Grosz referential features of both conjuncts are encoded as numerical indices. Agree between T and a conjoined subject DP copies these two different sets of indices. These indexes will then identify which conjunct the relevant features came from.

- (29) a.  $[DP_{i\phi:1SG.F[6]} \& DP_{i\phi:3SG.F[8]}] T_{u\phi:3SG.F[8]}$   
 b.  $T_{u\phi:1SG.F[6]} [DP_{i\phi:1F.SG[6]} \& DP_{i\phi:3SG.F[8]}]$

An important question, brought to my attention by one of the reviewers, is what determines the choice between different types of resolution strategies I have employed in this paper. I have linked the two types of resolution to different type of Agree; Multiple Agree leads to resolution by the principles in Table 3, and Singular Agree leads to resolution by syncretism or proximity. A related question concerns the point in the derivation where these resolution rules apply. The view I take here is that Multiple Agree, which is a syntactic process, is what gives rise to feature resolution. This in turns suggests that feature resolution can take place in the syntax. The reviewer further asks “why repair via syncretism/spell-out of a single feature set is not available with Multiple Agree, and why resolution rules cannot be used to repair a feature set that results from Singular Agree.” I take the answer to be related to the fact that two instances of Singular Agree copy two distinct feature sets at two different points in the derivation, whereas Multiple Agree copies them simultaneously.

Another potential question that the mechanism of multiple instances of Singular Agree proposed here raises concerns intervention effects. I assume that T cannot agree with  $DP_2$  without agreeing with  $DP_1$  first;  $DP_1$  does not act as a defective intervener (see, for example, Broekhuis 2007; Bruening 2014; Moreno & Petersen 2017, for a discussion of the issues the concept of Defective Intervention raises, and a reanalysis of the relevant facts in a way that does not rely on Defective Intervention).<sup>31,32</sup> I will thus proceed on the assumption that two separate instances of Agree are in principle possible and result in two separate sets of values on T, without incurring a violation of Defective Intervention.

An alternative that avoids the issue altogether would be for T to always undergo Multiple Agree with both conjuncts, which would always yield two distinct sets of phi-feature specifications on T. The actual PF realization of this multiple feature

<sup>30</sup> For the role linear order and proximity plays in determining agreement, see also Marušič, Nevins & Saksida (2015); Marušič & Nevins (2018), and Bhatt & Walkow (2013) on Hindi object agreement (see, however, Murphy & Puškar 2018 for a discussion of problems with accounts of Single Conjunct Agreement sensitive purely to linear order). Al Khalaf (2015) also makes a convincing case for Closest Conjunct Agreement being sensitive to linear order.

<sup>31</sup> Hiraiwa (2001) proposes Multiple Agree as a mechanism to solve the Defective Intervention issue (see also Zeijlstra 2004; Hiraiwa 2005; Ussery 2008; Nevins 2011; Despić, Hamilton & Murray 2017, among others, for proposals that employ the mechanism of Multiple Agree to explain a variety of syntactic phenomena).

<sup>32</sup> A related question is how T “knows” when to stop agreeing. If there are three conjuncts, it will agree with all of them. But the Agree operation between T and the conjuncts also values case on the conjuncts, so if there are three conjuncts but T agrees with only two of them, one conjunct will have its case feature unvalued. However, Singular Agree with just the first conjunct is possible, which raises the question is how the second conjunct gets its case valued. One way to account for it is to assume that the second conjunct gets case valued by the conjunction itself (as in Johannessen’s analysis). Alternatively, we could take Case and Gender/Number/Person Agree to be independent processes. This makes a plausible prediction that in examples involving more than two conjuncts, all of them will get case from the same Probe, but Gender/Number/Person agreement will be sensitive to linear order; it will be possible with the closest conjunct (either the first or the last one, depending on the position of the Probe) but not with the middle one. Thank you to the editors for bringing this prediction to my attention.

specification could then be determined in any of the following ways: via insertion of a syncretic form if the lexicon contains such a form, via feature resolution rules (yielding Resolved Agreement) or via proximity (resulting in the spell-out of the agreement value of the closer conjunct).<sup>33</sup>

- (30) a. *Resolved Agreement*  
 $T_{u\phi:1SG.F,3SG.F} [DP_{i\phi:1SG.F} \& DP_{i\phi:3SG.F}] \rightarrow T_{u\phi:1PL.NVIR} [DP_{i\phi:1SG.F} \& DP_{i\phi:3SG.F}]$   
 b. *First Conjunct Agreement*  
 $T_{u\phi:1SG.F,3SG.F} [DP_{i\phi:1SG.F} \& DP_{i\phi:3SG.F}] \rightarrow T_{u\phi:1SG.F} [DP_{i\phi:1SG.F} \& DP_{i\phi:3SG.F}]$   
 c. *Last Conjunct Agreement*  
 $[DP_{i\phi:1SG.F} \& DP_{i\phi:3SG.F}] T_{u\phi:1SG.F,3SG.F} \rightarrow [DP_{i\phi:1SG.F} \& DP_{i\phi:3SG.F}] T_{u\phi:3SG.F}$

While such an account would be simpler in that it would only need a single Agree mechanism (i.e. Multiple Agree), it would not be able to exclude all the patterns we want to exclude.

With this as background, we turn to deriving the possible patterns, and ruling out the impossible ones. This is the topic of the next section.

#### 4 Deriving the (dis)agreement patterns

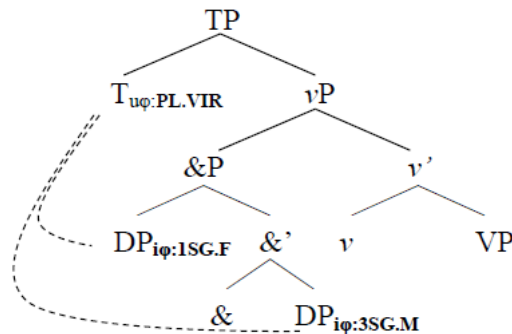
##### 4.1 Possible agreement patterns

Resolved Agreement on both the complementizer and the verb, illustrated in (31), is the most straightforward one to account for.

- (31) Maria chce, **żebyśmy** ja i mój sąsiad **wyszli**.  
 Maria wants that.COND.1PL I and my neighbor.M.SG left.VIR.PL  
 ‘Maria wants me and my neighbor to leave.’

Its derivation is schematized in (32a–c). First, T undergoes Multiple Agree with both conjuncts, which will yield Resolved Agreement on the verb. Next, &P moves to [Spec, TP]. This is possible because T has agreed with both conjuncts. And, finally, C undergoes Multiple Agree with both conjuncts, which will yield Resolved Agreement on the complementizer.

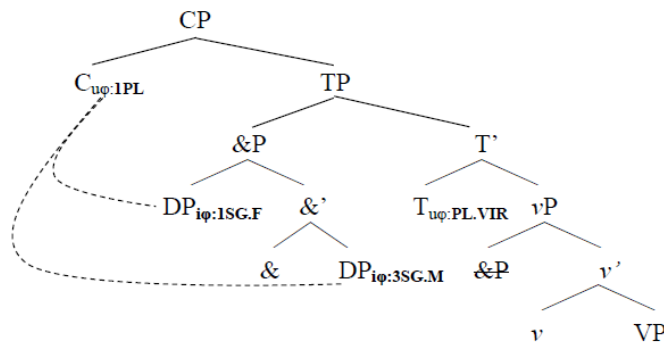
- (32) a. T undergoes Multiple Agree with DP<sub>1</sub> and DP<sub>2</sub>



- b. &P moves to [Spec, TP]  
 c. C undergoes Multiple Agree with DP<sub>1</sub> and DP<sub>2</sub>

<sup>33</sup> Linear proximity (or adjacency, to be more specific) plays an important role in Fuß’s (2014) account of Bavavian complementizer agreement, which he treats as a postsyntactic feature insertion mechanism. I thank one of the reviewers for bringing Fuß’s work to my attention.



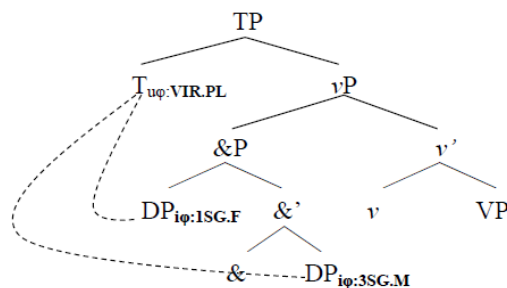


However, the complementizer, instead of showing Resolved Agreement, can agree with the first conjunct instead, as shown in (33).

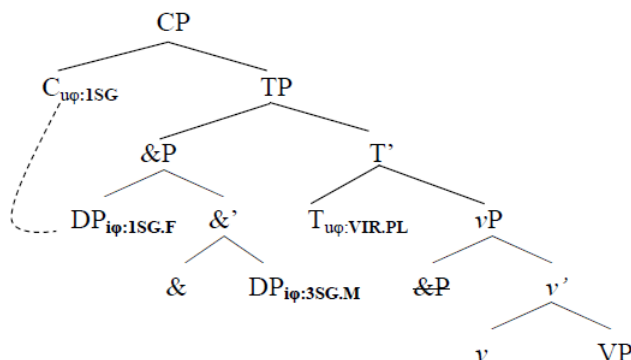
- (33) Maria chce, **żeby** ja i mój sąsiad **wyszli**.  
 Maria wants that.COND.1SG I and my neighbor.M.SG left.VIR.PL  
 ‘Maria wants me and my neighbor to leave.’

The only difference between this case and the case we just considered is that the complementizer, instead of undergoing Multiple Agree with both conjuncts simultaneously, agrees only with the first conjunct. This derivation is given in (34a–c); Multiple Agree between T and the two conjuncts yields Resolved Agreement on the verb, and Singular Agree between C and the first conjunct yields First Conjunct Agreement on the complementizer. This is essentially the sequence of operations Van Koppen (2007) proposes for Dutch; however, Van Koppen allows T to agree with the entire &P. As pointed out by two of the reviewers, C agreeing with both conjuncts (with feature resolution determined by proximity) would yield the same result. Since agreement with only one conjunct is sufficient, I assume this is all that needs to take place.

- (34) a. T undergoes Multiple Agree with DP<sub>1</sub> and DP<sub>2</sub>



- b. &P moves to [Spec, TP]  
 c. C undergoes Agree with DP<sub>1</sub>

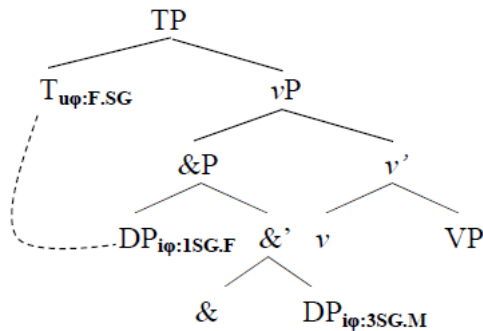


The sandwiched agreement pattern, where the complementizer agrees with the first conjunct and the verb agrees with the last conjunct, is illustrated in (35).

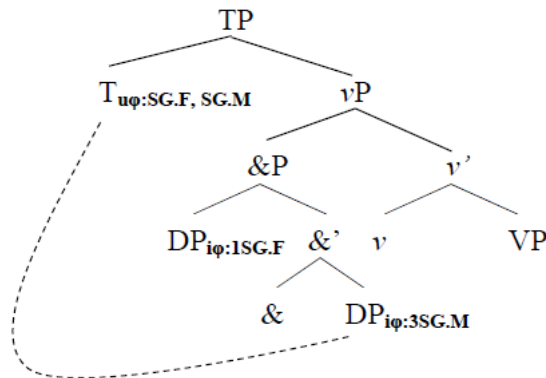
- (35) Maria chce, **żebym** ja i mój sąsiad **wyszedł**.  
 Maria wants that.COND.1SG I and my neighbor.3SG.M left.M.SG  
 ‘Maria wants me and my neighbor to leave.’

Its derivation is schematized in (36a–e). Since both T and C undergo two instances of Singular Agree (with DP<sub>1</sub> first and with DP<sub>2</sub> next), both T and C end up with two sets of conflicting values.

- (36) a. T undergoes Agree with DP<sub>1</sub>

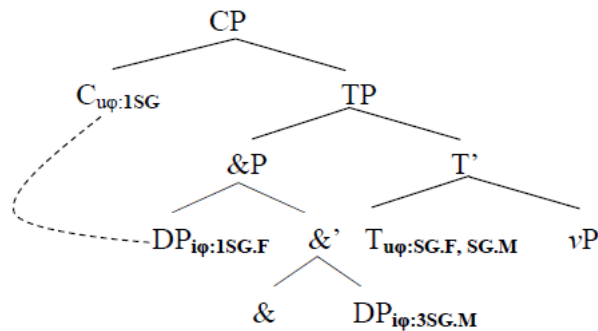


- b. T undergoes Agree with DP<sub>2</sub>

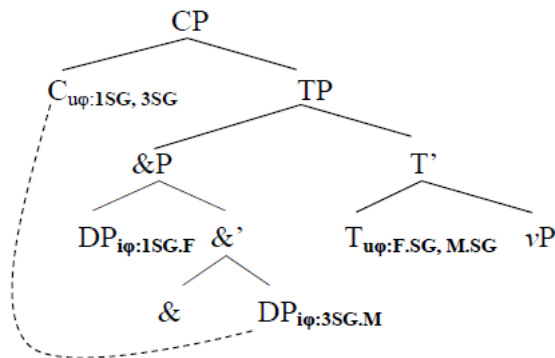


- c. &P moves to [Spec, TP]

- d. C undergoes Agree with DP<sub>1</sub>



e. C undergoes Agree with DP<sub>2</sub>



Since the lexicon does not contain an appropriate syncretic form for either the verb (i.e. there is no past tense verb form that would be simultaneously feminine and masculine) or the complementizer (i.e. there is no complementizer form that would be simultaneously first and third person), resolution is sensitive to linear proximity. This yields the sandwiched pattern; the verb agrees with the last conjunct and the complementizer with the first one:

- (37) a.  $[DP_{iφ:1SG.F} \ \& \ DP_{iφ:3SG.M}] \ T_{uφ:F.SG, M.SG} \rightarrow [DP_{iφ:1SG.F} \ \& \ DP_{iφ:3SG.M}] \ T_{uφ:M.SG}$   
 b.  $C_{uφ:1SG, 3SG} [DP_{iφ:1SG.F} \ \& \ DP_{iφ:3SG.M}] \rightarrow C_{uφ:1SG} [DP_{iφ:1SG.F} \ \& \ DP_{iφ:3SG.M}]$

This concludes the discussion of the possible patterns; we have seen that they can all be derived without phi-features being present on the Conjunction Phrase or the Conjunction head. In the next section, I turn to the discussion of the impossible agreement patterns.

#### 4.2 Impossible agreement patterns

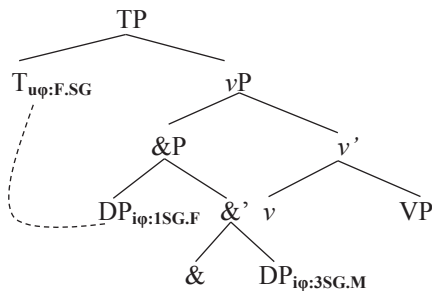
The first pattern we want to exclude is one in which both the complementizer and the verb agrees with a single conjunct, but, crucially, with the same conjunct. In (38) below, both agree with the first conjunct.

- (38) \**Maria chce, **żebym** ja i mój sąsiad **wyszła**.*  
 Maria wants that.COND.1SG I.F.SG and my neighbor.M.SG left.F.SG  
 ‘Maria wants me and my neighbor to leave.’

As we saw in the previous section, First Conjunct Agreement could be the result of the relevant Probes (C and T in this case) undergoing Singular Agree with just the first conjunct or Singular Agree with both conjuncts. Let us consider these two possibilities in turn. If T agrees with the first conjunct without agreeing with the second conjunct, as shown in (39), the derivation stops. Given that Agree is a prerequisite for movement in that only elements that have undergone Agree can move, the entire Conjunction Phrase cannot move to [Spec, TP].<sup>34</sup>

<sup>34</sup> I assume here that one conjunct cannot pied-pipe the entire Conjunction Phrase. Thus, in order for &P to move to [Spec, TP], both conjuncts have to agree with T. One of the reviewers raises the question of why Agree between T and the two conjuncts (as opposed to the entire &P) should pied-pipe the entire &P, as opposed to moving the two conjuncts independently. I assume this could be ruled out by the Coordinate Structure Constraint, as it would result in the coordination of null conjuncts.

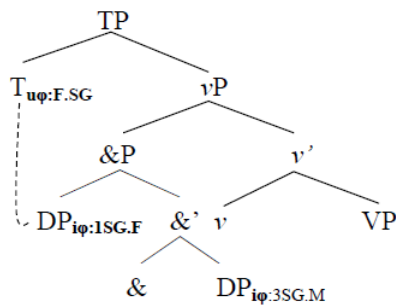
- (39) a. T undergoes Agree with DP<sub>1</sub>



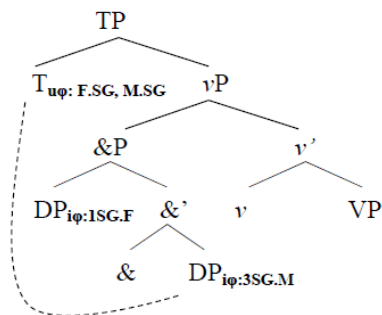
- b. movement to [Spec, TP] blocked

If, instead, T undergoes Agree with both conjuncts (as in (40a–b)), the Conjunction Phrase can move to [Spec, TP], but this will not yield First Conjunct agreement on the verb. Now the Conjunction Phrase is preverbal (see (40c)), which means that the resolution of the conflicting feature specification on T ( $T_{uφ:F.SG, M.SG}$ ) will get determined by the conjunct that is closer to T, which is the last conjunct *not* the first one. This will yield First Conjunct Agreement on the complementizer but *not* on the verb.

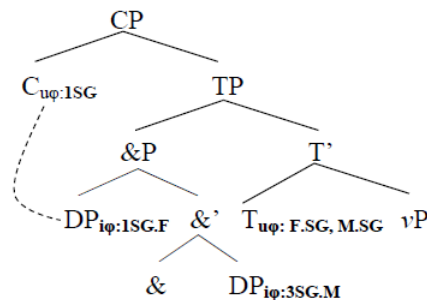
- (40) a. T undergoes Agree with DP<sub>1</sub>



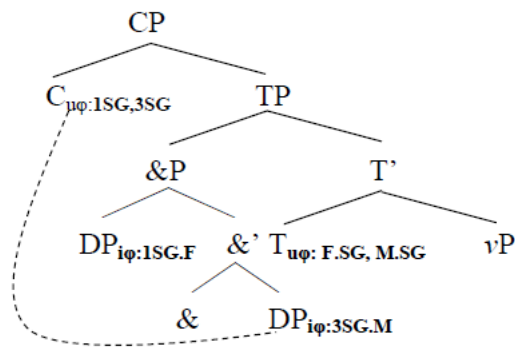
- b. T undergoes Agree with DP<sub>2</sub>



- c. &P moves to [Spec, TP]  
 d. C undergoes Agree with DP<sub>1</sub>



- e. C undergoes Agree with DP<sub>2</sub>



The next agreement pattern we want to exclude is the one illustrated in (41), where both the complementizer and the verb agree with the last conjunct.

- (41) \*Maria chce, **żeby** ja i mój sąsiad **wyszedł**.  
 Maria wants that.COND.3SG I and my neighbor.M.SG left.M.SG  
 ‘Maria wants me and my neighbor to leave.’

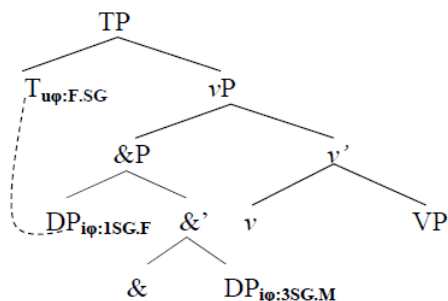
Here, we face the opposite problem. The sequence of operations given in (40a–e) will yield Last Conjunct Agreement on the verb but *not* on the complementizer. Thus, there does not seem to be any way for both the verb and the complementizer to agree with the same conjunct.

The next two patterns we want to exclude involve Resolved Agreement on the complementizer and single conjunct agreement on the verb. In (42), the complementizer has Resolved Agreement, and the verb agrees with the first conjunct.

- (42) \*Maria chce, **żebyśmy** ja i mój sąsiad **wyszła**.  
 Maria wants that.COND.1PL I and my neighbor.M.SG left.F.SG  
 ‘Maria wants me and my neighbor to leave.’

The problem with this example is that there is no way to get First Conjunct Agreement on the verb with the conjoined subject being preverbal; if T agrees with DP<sub>1</sub>, the Conjunction Phrase cannot move to [Spec, TP], as shown in (43a–b).

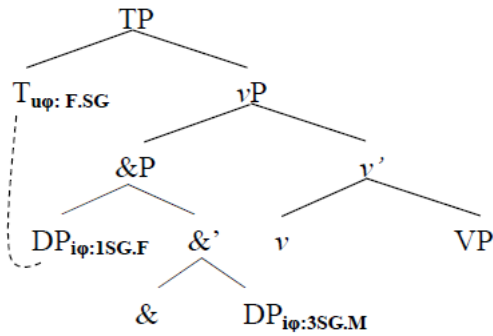
- (43) a. T undergoes Agree with DP<sub>1</sub>



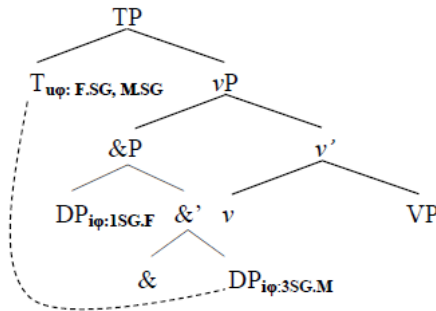
- b. Movement to &P impossible

If T agrees with both conjuncts instead, as shown in (44a–b) below, the entire &P can move, but this can only yield Last Conjunct Agreement on the verb, since the last conjunct is the one closer to the verb. Resolved Agreement on the complementizer is not a problem; it is the result of Multiple Agree between C and the two conjuncts, illustrated in (44d).

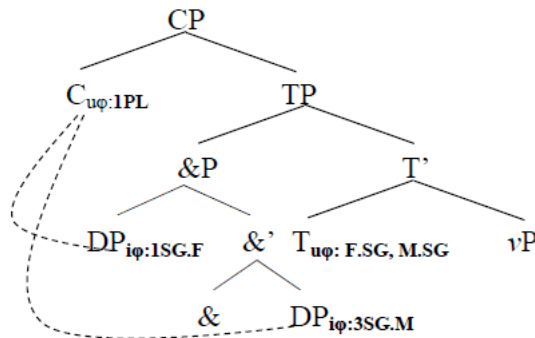
- (44) a. T undergoes Agree with DP<sub>1</sub>



- b. T undergoes Agree with DP<sub>2</sub>



- c. &P moves to [Spec, TP]  
 d. C undergoes Multiple Agree with DP<sub>1</sub> and DP<sub>2</sub>



However, this sequence of operations yields Resolved Agreement on the complementizer and Last Conjoint Agreement on the verb, which is the ungrammatical pattern in (45a), which we also want to exclude. In (44a–c), T undergoes Singular Agree with DP<sub>1</sub> and DP<sub>2</sub>, which will lead to Last Conjoint Agreement on the verb, and C undergoes Multiple Agree with DP<sub>1</sub> and DP<sub>2</sub>, which will lead to Resolved Agreement on the complementizer. The issue with (45a) cannot be the issue of Resolved Agreement co-occurring with Closest Conjoint Agreement, since we saw that the opposite, Resolved Agreement on the verb and Closest Conjoint Agreement on the complementizer, is possible. The relevant example is repeated in (45b).

- (45) a. \*Maria chce, **żebyśmy** ja i mój sąsiad **wyszedł**.  
 Maria wants that.COND.1PL I and my neighbor.M.SG left.M.SG  
 ‘Maria wants me and my neighbor to leave.’



- b. Maria chce, **żeby** ja i mój sąsiad **wyszli**.  
 Maria wants that.COND.1SG I and my neighbor.M.SG left.VIR.PL  
 ‘Maria wants me and my neighbor to leave.’

The question then is how to exclude the derivation in (44a–d). In essence, we want to allow a sequence of operations in which Singular Agree follows Multiple Agree, but *disallow* one in which Multiple Agree follows Singular Agree. General economy principles provide one plausible solution: the possible sequence yielding Resolved Agreement on the verb and First Conjunct Agreement on the complementizer involves two Agree operations (Multiple Agree between T and the two conjunct DPs, and Singular Agree between C and DP<sub>1</sub>), whereas the impossible sequence yielding Resolved Agreement on the complementizer and Last Conjunct Agreement on the verb involves three Agree operations (Singular Agree between T and DP<sub>1</sub>, Singular Agree between T and DP<sub>2</sub> and Multiple Agree between C and the two conjunct DPs). This in turn raises the question of why a sequence of two Singular Agree operations is ever possible, given the availability of Multiple Agree. What I have argued for here is that both have to be in principle possible. Their interaction, however, is constrained in that Singular Agree on the lower Probe cannot be followed by Multiple Agree on the higher Probe. At this point, I can only offer a speculation on why this should be the case. Given the general economy considerations, I take the ungrammaticality of the pattern in (46d) to mean that the choice of the less economical Singular Agree option on the lower Probe means that the more economical Multiple Agree option for some reason is not available. This could be linked to Feature Inheritance if we assume that in addition to phi-features, T also inherits the ability to probe in a Multiple vs. Singular fashion from C. If C “chooses” the more economical Multiple Agree option, T has to inherit this option. The reverse is not necessarily the case; the availability of the less economical Singular Agree option on C does not preclude the availability of the more economical Multiple Agree option. This is what allows the pattern in (46b).

- (46) a. C<sub>Mult Agr</sub> T<sub>Mult Agr</sub>  
 b. C<sub>Sing Agr</sub> T<sub>Mult Agr</sub>  
 c. C<sub>Sing Agr</sub> T<sub>Sing Agr</sub>  
 d. \*C<sub>Mult Agr</sub> T<sub>Sing Agr</sub>

## 5 Conclusion

This paper examined complementizer and verbal agreement with coordinate subjects in Polish. It showed that while certain patterns are possible and attested, others (logically equally plausible) are not. The three patterns I focused on were: (i) Resolved Agreement on both the verb and the complementizer, (ii) mixed agreement (i.e. Resolved Agreement on the verb and First Conjunct Agreement on the complementizer), and (iii) sandwiched agreement (Last Conjunct Agreement on the complementizer and First Conjunct Agreement on the verb). The differences between Resolved Agreement and Single Conjunct Agreement were attributed to two distinct ways Agree can operate; either as a sequence of Singular Agree operations (each with a single DP) or one instance of Multiple Agree, with Multiple Agree yielding Resolved Agreement and Singular Agree requiring PF conflict resolution, sensitive to proximity. The remaining possibilities, First or Last Conjunct Agreement on both the complementizer and the verb, Resolved Agreement on the complementizer but Single Conjunct Agreement (either First or Last) on the verb, were all excluded. The paper also evaluated representative existing accounts of agreement with

coordinate subjects, with an eye towards determining whether they could capture the grammatical patterns and exclude the ungrammatical ones. The account developed in this paper does not rely on positing two distinct structures to capture different agreement patterns, distinguishing it from some of the existing accounts. Perhaps more significantly, the account developed here does not require phi-features to be present on the conjunction head itself (or the conjunction phrase via the mechanism of feature percolation).

### Abbreviations

1 = first person, 2 = second person, 3 = third person, AUX = auxiliary, COND = conditional, DAT = dative, F = feminine, FCA = First Conjunct Agreement,  $i\phi$  = interpretable phi-features, LCA = Last Conjunct Agreement, M = masculine, N = neuter, NVIR = nonvirile, PART = participle, PL = plural, RA = Resolved Agreement, RNR = Right Node Raising, SG = singular,  $u\phi$  = uninterpretable phi-features, VIR = virile

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### Competing Interests

The author has no competing interests to declare.

### References

- Al Khalaf, Eman. 2015. *Coordination and linear order*. Newark, DE: University of Delaware dissertation.
- Aoun, Joseph, Elabbas Benmamoun & Dominique Sportiche. 1994. Agreement, word order, and conjunction in some varieties of Arabic. *Linguistic Inquiry* 25. 195–220.
- Babyonyshev, Maria. 1996. *Structural connections in syntax and processing: Studies in Russian and Japanese*. Cambridge, MA: MIT dissertation.
- Bański, Piotr. 2000. *Morphological and prosodic analysis of auxiliary clitics in Polish and English*. Warsaw: Uniwersytet Warszawski dissertation.
- Bański, Piotr. 2001. Last resort prosodic support in Polish. In Gerhild Zybatow (ed.), *Current issues in Slavic linguistics*, 179–186. Frankfurt am Main: Peter Lang.
- Bhatt, Rajesh & Martin Walkow. 2013. Locating agreement in grammar: An argument from agreement in conjunctions. *Natural Language and Linguistic Theory* 31. 951–1013. DOI: <https://doi.org/10.1007/s11049-013-9203-y>
- Booij, Geert E. & Jerzy Rubach. 1987. Postcyclic versus postlexical rules in Lexical Phonology. *Linguistic Inquiry* 18. 1–44.
- Bošković, Željko. 2009. Unifying first and last conjunct agreement. *Natural Language and Linguistic Theory* 27. 455–496. DOI: <https://doi.org/10.1007/s11049-009-9072-6>
- Bošković, Željko. 2010. Conjunct-sensitive agreement: Serbo-Croatian vs Russian. In Gerhild Zybatow, Philip Dudchuk, Serge Minor & Ekaterina Pshehotskaya (eds.), *Formal studies in Slavic linguistics: Proceedings of formal descriptions of Slavic languages* 7(5). 31–48. Frankfurt am Main: Peter Lang.
- Broekhuis, Hans. 2007. Does defective intervention exist? In Bettelou Los & Marjo van Koppen (eds.), *Linguistics in the Netherlands*, 49–61. Amsterdam/Philadelphia: John Benjamins Publishing Company.

- Bruening, Benjamin. 2014. Defects of defective intervention. *Linguistic Inquiry* 45. 707–719. DOI: [https://doi.org/10.1162/LING\\_a\\_00171](https://doi.org/10.1162/LING_a_00171)
- Cable, Seth. 2007. *The grammar of Q: Q-particles and the nature of Wh-fronting, as revealed by the Wh-questions of Tlingit*. Cambridge, MA: MIT dissertation.
- Cable, Seth. 2010. Against the existence of pied-piping: Evidence from Tlingit. *Linguistic Inquiry* 41. 563–594. DOI: [https://doi.org/10.1162/LING\\_a\\_00013](https://doi.org/10.1162/LING_a_00013)
- Chaves, Rui P. 2014. On the disunity of right-node raising phenomena: Extraposition, ellipsis, and deletion. *Language: Journal of the Linguistic Society of America* 90. 834–886. DOI: <https://doi.org/10.1353/lan.2014.0081>
- Citko, Barbara. 2004. Agreement asymmetries in coordinate structures. In Olga Arnaudova (ed.), *Formal approaches to Slavic linguistics: The Ottawa meeting, 2003*, 91–108. Ann Arbor, MI: Michigan Slavic Publications.
- Citko, Barbara. 2017. Right node raising. In Martin Everaet & Henk Van Riemsdijk (eds.), *The Wiley-Blackwell companion to syntax*, 3839–3871. 2<sup>nd</sup> Edition; Wiley-Blackwell. DOI: <https://doi.org/10.1002/9781118358733.wbsyncom020>
- Citko, Barbara. 2018. On the relationship between backward gapping and right node raising. *Syntax* 21. 1–36. DOI: <https://doi.org/10.1111/synt.12150>
- Corbett, Greville G. 1983. *Hierarchies, target and controllers: Agreement patterns in Slavic*. London: Croom Helm.
- Corbett, Greville G. 1991. *Gender*. Cambridge: Cambridge University Press. DOI: <https://doi.org/10.1017/CBO9781139166119>
- Dalrymple, Mary & Ronald M. Kaplan. 2000. Feature indeterminacy and feature resolution. *Language* 76. 759–798. DOI: <https://doi.org/10.2307/417199>
- Despić, Miloje, David Michael Hamilton & Sarah E. Murray. 2017. Multiple and Cyclic Agree: Person/number marking in Cheyenne. In Aaron Kaplan, Abby Kaplan, Miranda K. McCarvel & Edward J. Rubin (eds.) *Proceedings of the 34th West Coast Conference on Formal Linguistics*, 167–176. Somerville, MA: Cascadilla Proceedings Project.
- Embick, David. 1995. Mobile inflection in Polish. In Jill N. Beckman (ed.), *Proceedings of NELS* 25. 127–142. Amherst, MA: Graduate Linguistics Students Association.
- Franks, Steven & Jana Willer-Gold. 2014. Agreement strategies with conjoined subjects in Croatian. In Jacek Witkoś & Sylwester Jaworski (eds.), *New insights into Slavic linguistics*, 91–115. Frankfurt am Main: Peter Lang. DOI: <https://doi.org/10.3726/978-3-653-04359-4>
- Franks, Steven & Tracy Holloway King. 2000. *A handbook of Slavic clitics*. Oxford: Oxford University Press.
- Fuß, Eric. 2014. Complementizer agreement (in Bavarian). Feature inheritance or feature insertion? In Günther Grewendorf & Helmut Weiß (eds.), *Bavarian syntax: Contributions to the theory of syntax*, 51–82. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Grosz, Patrick Georg. 2015. Movement and agreement in Right-Node-Raising constructions. *Syntax* 18. 1–38. DOI: <https://doi.org/10.1111/synt.12024>
- Haegeman, Liliane & Marjo van Koppen 2012. Complementizer Agreement and the relation between C° and T°. *Linguistic Inquiry* 43. 441–54. DOI: [https://doi.org/10.1162/LING\\_a\\_00096](https://doi.org/10.1162/LING_a_00096)
- Hiraiwa, Ken. 2001. Multiple agree and the defective intervention constraint in Japanese. *MIT Working Papers in Linguistics* 40. 67–80.
- Hiraiwa, Ken. 2005. *Dimensions of symmetry in syntax: Agreement and clausal architecture*. Cambridge, MA: MIT dissertation.
- Johannessen, Janne Bondi. 1998. *Coordination*. Oxford: Oxford University Press.

- Kallas, Krystyna. 1974. O zdaniach *Pachniał wiatr i morze., Andrzej i Amelia milczeli.* [On sentences *There smelled wind and sea. Andrew and Amelia were silent.*] *Studia z Filologii Polskiej i Słowiańskiej* [Studies in Polish and Slavic Philology] 14. 57–71.
- Kazenin, Konstantin. 2002. Gapping and some agreement puzzles. Ms. Moscow State University and University of Tübingen.
- Kramer, Ruth. 2015. *The morphosyntax of gender.* Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/acprof:oso/9780199679935.001.0001>
- Larson, Bradley. 2013. Arabic conjunct-sensitive agreement and primitive operations. *Linguistic Inquiry* 44. 611–631. DOI: [https://doi.org/10.1162/LING\\_a\\_00140](https://doi.org/10.1162/LING_a_00140)
- Marušič, Franc L. & Andrew Nevins. 2018. Distributed agreement in participial sandwiching configurations. Ms. [lingbuzz/003957](http://lingbuzz/003957).
- Marušič, Franc L., Andrew Nevins & Amanda Saksida. 2007. Last-conjunct agreement in Slovenian. In Richard Compton, Magdalena Goledzinowska & Ulyana Savchenko (eds.), *Formal approaches to Slavic linguistics: The Toronto meeting, 2006*, 210–227. Ann Arbor, MI: Michigan Slavic Publications.
- Marušič, Franc L., Andrew Nevins & William Badecker. 2015. The grammars of conjunction agreement in Slovenian. *Syntax* 18. 39–77. DOI: <https://doi.org/10.1111/synt.12025>
- McGinnis, Martha. 2004. Lethal ambiguity. *Linguistic Inquiry* 35. 47–95. DOI: <https://doi.org/10.1162/002438904322793347>
- Migdalski, Krzysztof. 2006. *The syntax of compound tenses in Slavic.* Tilburg: Tilburg University dissertation.
- Moreno, Mihaela Marchis & Carolina Petersen. 2017. Is there any defective intervention in the syntax? In Aaron Kaplan, Abby Kaplan, Miranda K. McCarvel & Edward J. Rubin (eds.), *Proceedings of the 34th West Coast Conference on Formal Linguistics*, 355–363. Somerville, MA: Cascadilla Proceedings Project.
- Munn, Alan. 1993. *Topics in the syntax and semantics of coordinate structures.* College Park, MD: University of Maryland dissertation.
- Murphy, Andrew & Zorica Puškar. 2018. Closest conjunct agreement is an illusion: Evidence from gender agreement in Serbo-Croatian. *Natural Language and Linguistic Theory*. DOI: <https://doi.org/10.1007/s11049-017-9396-6>
- Nevins, Andrew. 2011. Multiple agree with clitics: Person complementarity vs. omnivorous number. *Natural Language and Linguistic Theory* 29. 939–971. DOI: <https://doi.org/10.1007/s11049-011-9150-4>
- Nevins, Andrew & Phillip Weisser. 2018. Closest conjunct agreement. *Annual Review of Linguistics* AA. 1–25.
- Postal, Paul M. 1998. *Three investigations of extraction.* Cambridge, MA: MIT Press.
- Prażmowska, Anna. 2016. Full agreement with coordinate subjects in Polish: Gender resolution rules revisited. *Roczniki Humanistyczne* LXIV(11). 71–86. DOI: <https://doi.org/10.18290/rh.2016.64.11-5>
- Progovac, Ljiljana. 1998a. Structure for coordination: Part 1. *GLOT International* 3(7). 3–6.
- Progovac, Ljiljana. 1998b. Structure for coordination: Part 2. *GLOT International* 3(8). 3–9.
- Rappaport, Gilbert. 1988. On the relationship between prosodic and syntactic properties of pronouns in the Slavic languages. In Alexander M. Schenker (ed.), *American Contributions to the Tenth International Congress of Slavists*, 301–327. Bloomington, IN: Slavica.
- Reuland, Eric J. 2011. *Anaphora and language design.* Cambridge, MA: MIT Press.
- Ruda, Marta. 2010. *Coordinate subject-verb agreement in English and Polish. A minimalist analysis.* Kraków: Jagiellonian University MA thesis.
- Ruda, Marta. 2011. On coordinate subject-verb agreement in Polish. Handout of *ConSOLE XIX* Presentation. University of Groningen.



- Shen, Zheng. This volume. The multi-valuation agreement hierarchy. *Glossa*.
- Soltan, Usama. 2007. On agree and postcyclic merge in syntactic derivations: First conjunct agreement in Standard Arabic revisited. In Elabbas Benmamoun (ed.), *Perspectives on Arabic Linguistics XIX*, 191–213. Amsterdam: John Benjamins
- Ussery, Cherlon. 2008. What it means to agree: The behavior of case and phi features in Icelandic Control. In Charles B. Chang & Hannah J. Haynie (eds.), *Proceedings of the 26th West Coast Conference on Formal Linguistics*, 480–488. Somerville, MA: Cascadilla Proceedings Project.
- van Koppen, Marjo. 2007. Agreement with coordinated subjects: A comparative perspective. *Linguistic Variation Yearbook* 7. 121–161. DOI: <https://doi.org/10.1075/livy.7.05kop>
- van Koppen, Marjo & Johan Rooryck. 2008. Resolving resolution: Underspecification and the law of coordination of likes. Ms. Utrecht University and University of Leiden.
- Wechsler, Stephen & Larisa Zlatić. 2003. *The many faces of agreement*. Stanford, CA: Center for the Study of Language and Information.
- Willim, Ewa. 2012. Concord in Polish coordinate NPs as agree. In Markéta Ziková & Mojmír Docekal (eds.), *Slavic languages in formal grammar: Proceedings of FDSL 8.5, Brno 2010*, 233–253. Frankfurt am Main: Peter Lang.
- Yatabe, Shûichi. 2003. A linearization-based theory of summative agreement in peripheral-node raising constructions. In Jong-Bok Kim & Stepehn Wechsler (eds.), *Proceedings of the 9th international conference on head-driven phrase structure grammar*, 391–411. Stanford, CA: Center for the Study of Language and Information.
- Zeijlstra, Hedde 2004. *Sentential negation and negative concord*. Utrecht: LOT dissertation.
- Zoerner, Edward Cyril. 1995. *Coordination: The syntax of &P*. Irvine, CA: University of California dissertation.

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