Taking Case out of the Person-Case Constraint[*]

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Abstract The Person-Case Constraint (PCC) is a restriction on co-occurring weak pronominal direct (DO) and indirect objects (IO) that restricts the person value of the DO. This article presents a previously unattested variant of the PCC found in Slovenian, where the canonical PCC operates alongside a REVERSE PCC, where the restriction applies to the IO. This pattern is not predicted by standard syntactic approaches to the PCC (which rely on inherent asymmetries between the IO and DO). It is argued that the PCC (in all its forms) arises with pronouns that are inherently unspecified for a person value and need to receive it externally from a functional head via Agree. The structurally higher pronoun blocks the structurally lower pronoun from receiving a person value, giving rise to the PCC. The REVERSE PCC then arises due to optional DO-over-IO clitic movement prior to person valuation. The proposed analysis is shown to capture cross-linguistic variation regarding the PCC including the STRONG/WEAK PCC split, which is attributed to a variation in the structure of pronouns. The article also establishes a cross-linguistic typology of the REVERSE PCC, where the REVERSE PCC exists exclusively as an optional pattern alongside the baseline PCC pattern.

Keywords Agree · clitic movement · deficient pronouns · minimal pronouns · Person-Case Constraint · Slovenian · unvalued interpretable features

1 Introduction

Person features stand out compared to other φ-features, like number, gender, or class features, by having the most restricted distribution. This was long acknowledged as a tendency, but recent cross-linguistic studies like Baker (2008) have revealed just how systematic the split is. A seemingly unrelated split exists with strong (tonic) pronouns versus deficient (reduced) pronouns, which consistently differ not only in form but also in syntactic distribution and interpretation (see, among many others, Cardinaletti

and Starke 1994; 1999). Interestingly, these two seemingly unrelated issues often turn out to interact. A case in point is the *me lui constraint* (Perlmutter 1971, Bonet 1991), now better known as the *Person-Case Constraint* (PCC) (Bonet 1994).

The PCC is typically characterized as a constraint that regulates the distribution of weak or reduced pronominal elements: clitic pronouns, weak pronouns, and agreement markers. Specifically, it is a constraint on co-occurring weak direct objects (DO) and indirect objects (IO), where their co-occurrence is restricted according to their person value. Although different iterations of the PCC have been noted, the most prevalent one is the STRONG PCC, which descriptively amounts to the generalization in (1).

(1)   **STRONG PCC.** *When a weak* DO *and* IO *co-occur, the* DO *has to be 3ʳᵈ person.*
      (based on: Bonet 1991:182)

A prototypical case of the STRONG PCC is found in Greek (Anagnostopoulou 2003; 2005). In Greek double-object ditransitives, both objects may be clitic pronouns, but only if the DO clitic is 3ʳᵈ person (3P), as in (2a).[1] As (2b) shows, a 1ˢᵗ/2ⁿᵈ person (1P/2P) DO clitic cannot co-occur with an IO clitic in the same syntactic context.

(2)   a. Tha **mu/su/tu to**   stilune.   1/2/3.IO – 3.DO
          FUT 1/2/3.M.DAT 3.N.ACC send.3PL
          'They will send it to me/you/him.'

      b. *Tha **mu/su/tu se/me**   sistisune.   *1/2/3.IO – 2/1.DO
          FUT 1/2/3.M.DAT 2/1.ACC introduce.3PL
          'They will introduce you/me to me/you/him.'
                                                        (Greek; Anagnostopoulou 2005:202)

Cross-linguistically, we find at least one other version of the constraint, the so called WEAK PCC (Bonet 1991; 1994, Anagnostopoulou 2005). In contrast to the STRONG PCC, the WEAK variant of the constraint allows for more object clitic combinations, as characterized in the descriptive generalization given in (3).

(3)   **WEAK PCC.** *When a weak* DO *and* IO *co-occur, if one of them is 3ʳᵈ person it has to be the* DO.   (based on: Bonet 1991:182)

An example of this version of the PCC is attested in Catalan. While both the STRONG and the WEAK PCC ban co-occurring 3P.IO and 1P/2P.DO clitics — see (2b) and (4), the latter variant does not ban co-occurring 1P and 2P object clitics, as seen in (5).[2]

(4) *A en Josep, **me/te li**   va recomenar la Mireia.   *3.IO – 1/2.DO
      to the Josep, 1/2.DO 3.DAT recommended the Mireia
      'She (M) recommended me/you to him (J).'   (Catalan; Bonet 1991:178–179)

(5)   a. **Te m'** ha venut el mercader més important.   1.IO – 2.DO
          2.DO 1.IO has sold   the merchant most important
          'The most important merchant has sold you to me.'

      b. **Vi ci**   manderá.   2.IO – 1.DO
          2.IO 1PL.DO send.FUT.3SG
          'S/he will send us to you (pl).'   (Catalan; Anagnostopoulou 2005:203)

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[1] In Modern Greek DAT and GEN are fused, so I mark IO clitics as DAT, despite the GEN morphology.

[2] Note that the 2P clitic also consistently precedes the 1P one. This is briefly discussed in Section 4.1.4.

Both variants of the PCC appear to be sensitive to the IO/DO distinction, which is reflected in the general consensus that the constraint should be tied to an asymmetry between the inherent grammatical properties of the IO and DO. In particular, in minimalist syntactic analyses of the PCC, like Anagnostopoulou (2003; 2005) and Béjar and Řezáč (2003), the constraint has been argued to follow from a direct connection between Case checking and φ-agreement as proposed by Chomsky (2000; 2001).

In this paper, I focus on a previously unnoticed restriction found in Slovenian. While the canonical PCC restricts the person of DO clitics co-occurring with IO clitics, in Slovenian the person restriction applies consistently to the linearly second clitic regardless of its case or grammatical function. The pattern is observable in Slovenian due to two possible clitic orders (IO » DO and DO » IO). I argue that not only should this restriction be treated on par with the PCC, but that the standardly assumed case-sensitivity of the PCC does not hold, which will be confirmed by languages other than Slovenian (including Haya, Maasai, and Zürich German). The PCC is then not a case of *defective intervention*, where an inherent Case argument (the IO) intervenes between a structural Case argument (the DO) and its Case-assigner (Béjar and Řezáč 2003, Anagnostopoulou 2003; 2005; a.o.), but arises due to a restriction on person features independent of Case-assignment. Specifically, I argue that the PCC results from clitic/weak pronouns being inherently underspecified for person values. Such pronouns can only be 1P/2P by receiving this value from a functional head (cf. Kratzer 2009, Zanuttini et al. 2012), where the person restriction arises due to the local nature of Agree (Chomsky 2000; 2001) and the configuration of one functional head and two arguments. The analysis thus divorces Case from φ-valuation, but retains the insight of Anagnostopoulou (2003; 2005) and Béjar and Řezáč (2003) that the PCC is essentially an intervention effect. It also derives the constraint directly from the feature make-up of the pronouns without stipulating extrinsic conditions on person feature licensing or φ-feature asymmetries between IO and DO, in contrast to previous works.

This approach can explain why the PCC in Slovenian is sensitive exclusively to the order of object clitics. Of course, descriptively this is not the pattern of most other languages, which I claim follows from the structure of *double-object constructions*, where the IO universally asymmetrically c-commands the DO in their base positions. The Slovenian PCC pattern only emerges in languages where clitics can undergo reordering at a very specific point in the derivation. This is supported by an asymmetry found in Slovenian imperatives, which shows that only a specific kind of narrow-syntactic reordering may interact with the PCC. In matrix, but crucially not embedded imperatives a post-syntactic reordering operates alongside the syntactic clitic movement, where the former effectively undoes the latter in PF, making it seem like there is no person restriction. Additionally, I discuss a number of other languages where object clitic order interacts with the person restriction, establishing a cross-linguistic typology of such interactions which shows several typological gaps.

The paper is organized as follows: Section 2 presents the Slovenian data, focusing on the existence of the REVERSE PCC. Section 3 reviews standard syntactic approaches to the PCC and shows that the REVERSE PCC is problematic for them. Section 4 proposes the new analysis of the PCC. Section 5 discusses the PCC-voiding imperatives in Slovenian, offering further support for the proposed analysis. Section 6 discusses cross-linguistic implications of the analysis. Section 7 concludes the paper.

2 The Slovenian clitic person restriction

In Slovenian, object clitics are generally part of the clitic cluster in the 2nd clausal position.[3] As was the case in Greek and Catalan above, both objects can be expressed as clitics in ditransitives. In such cases, the DO clitic is overtly marked as accusative (ACC) and the IO clitic as dative (DAT) regardless of its person, number, and gender value. Another parallel with Greek and Catalan is that Slovenian also appears to dissallow 3P.IO clitics to co-occur with 1P/2P.DO clitics, as illustrated by the contrast in (6).[4] However, we will see below that this is not always the case.

(6) a. Mama **mi/ti/mu ga**   bo predstavila.   1/2/3.IO » 3.DO
        mom 1/2/3.M.DAT 3.M.ACC will introduce
        'Mom will introduce him to me/you/him.'

     b. *Mama **mu**   **me/te** bo predstavila.   *3.IO » 1/2.DO
        mom   3.M.DAT 1/2.ACC will introduce
        'Mom will introduce me/you to him.'

The crucial contrast between Greek/Catalan and Slovenian is that the order of object clitics is flexible with the latter. Both IO » DO and DO » IO clitic orders are allowed. The two clitic orders are presented in (7) for 3P-only IO and DO clitic pairs.[5]

(7) a. Mama **mu**   **ga**   je opisala.   IO » DO
        mom 3.M.DAT 3.M.ACC is described

     b. Mama **ga**   **mu**   je opisala.   DO » IO
        mom 3.M.ACC 3.M.DAT is described
        'Mom described him to him.'

Interestingly, this alternation interacts with the restriction on 1/2P.DO clitics we have seen in (6); the DO » IO equivalents of (6b) are in fact grammatical, as shown in (8a). Furthermore, the DO » IO clitic order is not entirely devoid of person restrictions. As shown in (8b), a 1/2P.IO clitic is banned in the context of a 3P.DO clitic with the DO » IO order. Notice that this combination is allowed with the IO » DO order in (6b).

(8) a. Mama **me/te/ga mu**   bo predstavila.   1/2/3.DO » 3.IO
        mom 1/2/3.M.ACC 3.M.DAT will introduce
        'Mom will introduce me/you/him to him.'

     b. *Mama **ga**   **mi/ti** bo predstavila.   *3.DO » 1/2.IO
        mom   3.M.ACC 1/2.DAT will introduce
        'Mom will introduce him to me/you.'

When restricted to the IO » DO order, 3P and 1/2P clitics pattern identically with the standard (STRONG/WEAK) PCC shown in Section 1. However, with DO » IO we observe a pattern I will call the REVERSE PCC, a complete reversal of the canonical PCC.

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[3] Slovenian is less rigid in its 2nd position requirement than closely related languages like Bosnian/Croatian/Serbian. This is briefly addressed in Section 4.2.

[4] The data in this section are from a grammaticality judgment survey done with Google Forms on 29th/30th May 2014. 42 native speakers took part in the survey composed of 24 target and 24 filler sentences. The judgments in the rest of the paper are my own and verified informally with at least 4 other speakers.

[5] The two orders are not entirely equivalent in examples like (7). There seem to be discourse factors that influence the choice of one over the other. This will be briefly addressed in Section 4.1.1.

Notice that I have left out examples with exclusively 1/2P clitic combinations so far. This is because Slovenian speakers show variation with respect to such combinations parallel to the STRONG/WEAK PCC split, and this speaker variation is crucially observed with both the IO » DO and the DO » IO person restriction. Some speakers exhibit the equivalent of the WEAK PCC with the IO » DO order, allowing combinations of two 1P and 2P clitics (9) while still disallowing 1/2P.DO clitics in the presence of a 3P.IO clitic (cf. (6b)). Crucially, the same speakers also show a corresponding REVERSE pattern with DO » IO. They allow 1P.IO clitics in the presence of 2P.DO clitics (10), but disallow 1/2P.IO clitics specifically when the DO is 3P (cf. (8b)).[6]

(9) %Mama **mi/ti te/me** bo predstavila.   1/2.IO » 2/1.DO
    mom 1/2.DAT 2/1.ACC will introduce
    'Mom will introduce you/me to me/you.'

(10) %Mama **te mi** bo predstavila.   2.DO » 1.IO
    mom 2.ACC 1.DAT will introduce
    'Mom will introduce you to me.'

This kind of variation shows that not only does Slovenian exhibit a person restriction on co-occurring object clitics that is consistent with the PCC with the IO » DO clitic order, but also that it exhibits speaker variation along the same lines as observed for canonical STRONG and WEAK PCC languages in that speakers differ in whether they allow two local person (= 1/2P) object clitics to co-occur.

To clarify the main point, the full STRONG pattern of Slovenian is given in Table 1. By ignoring the case of the two object clitics (as in the third row of the table), we can see that there is essentially a single person restriction sensitive to the order of the two clitics, but not the case they bear. Such a pattern can only be observed in a language with the properties of Slovenian, where both IO » DO and DO » IO clitics orders are available. The emerging case-insensitive restriction, not typically found in canonical PCC languages, will be the key point in the re-analysis of the PCC in Section 4.

Table 1 Full pattern of object clitic person restrictions in Slovenian

STANDARD STRONG PCC:	3P.DAT	»	3P.ACC	1/2P.DAT	»	3P.ACC
	*1/2P.DAT	»	**2/1P.ACC**	***3P.DAT**	»	**1/2P.ACC**
REVERSE STRONG PCC:	3P.ACC	»	3P.DAT	1/2P.ACC	»	3P.DAT
	*1/2P.ACC	»	**2/1P.DAT**	***3P.ACC**	»	**1/2P.DAT**
COMBINED PATTERN:	3P.CL	»	3P.CL	1/2P.CL	»	3P.CL
	*1/2P.CL	»	**2/1P.CL**	***3P.CL**	»	**1/2P.CL**

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6 There is a contrast for 'WEAK speakers' between 2P.DO » 1P.IO and *1P.DO » 2P.IO (i). This is reminiscent of Nevins's (2007) "ultra-strong PCC", but differs from it in significant ways. In fact, I will argue in Section 4.1.4 that (i) is independent of the PCC (I put it aside pending the discussion below).

(i) *Mama **me ti** bo predstavila.   *1.DO » 2.IO
    mom 1.ACC 2.DAT will introduce
    'Mom will introduce you/me to me/you.'

2.1 The status of the Slovenian person restriction

Due to the seeming cross-linguistic robustness of the PCC's sensitivity to case, and the fact that most syntactic analyses of the constraint typically focus on case, θ-role, or φ-feature asymmetries between the two objects, one could argue that at least the DO » IO half of the Slovenian person restriction should not be equated to the PCC.

As pointed out by an anonymous reviewer, Slovenian in fact does not fit the descriptive generalizations in (1) or (3). Speakers with the STRONG restriction allow the DO clitic to be 1P or 2P in object clitic clusters, and those with a WEAK restriction likewise allow either the IO or DO clitic to be 3P when the other clitic is 1P or 2P. The person value of the two object clitics only restricts the order in which they appear.

One could thus view the restriction in question as a kind of positive templatic restriction where clitics are ordered by an extrinsic template, like (11),[7] where each "slot" (represented here by ☐) can only be filled by one clitic of the specified kind.[8]

(11)   a.   ☐1P|2P » ☐3P » ☐3P   STRONG template
       b.   ☐1P|2P » ☐1P|2P » ☐3P » ☐3P   WEAK template

This is essentially a variant of Perlmutter's (1971) original analysis of clitic order and co-occurrence restrictions, which is in itself not explanatory. There is no built-in restriction on the types of features that can be referenced by the slots, so there is no restriction on possible templates. Crucially, the canonical PCC can also be derived by adding case or grammatical function information to the slots. As Perlmutter himself noted, the PCC is only a more restricted version of his "global ordering constraints".

Unlike templatic approaches to clitic restrictions, the attested cross-linguistic variation in person restrictions is quite restricted. In his survey of 43 languages, Albizu (1997) observed that when syntactic person restrictions are active, the distribution of 3P is never more constrained than that of 1P or 2P, which needs to be explained.

We thus have two options: **(i)** to treat the PCC as a separate phenomenon from the Slovenian person restriction, thus missing a number of generalizations, including the fact that they both show the same STRONG/WEAK split, or **(ii)** to seek a principled unified account for both patterns,[9] thus explaining why they are similar in so many ways. The latter is more appealing conceptually, if of course it can be accomplished, and I will argue below that it can. In fact, I will argue that this option will allow us to understand better why such syntactic person restrictions behave the way they do.

The advantages of a principled syntactic analysis of the PCC have been pointed out by many authors before, and this article builds on those works. In the next section I therefore look more closely at one such account, which analyzes the PCC as a kind of Case-licensing failure. We will see the advantages of such a syntactic approach, but also that it encounters a serious problem if extended to the Slovenian person restriction, which we have seen is entirely case-insensitive.

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[7]   For ease of exposition the WEAK scale ignores the 1P vs. 2P asymmetry discussed in footnote 6.

[8]   One could also translate this into cartographic functional sequences, where slots correspond to specifiers of dedicated person (PersP), number (NumP), or case (KP) projections, and can only be filled by one element. This is essentially the approach adopted by Ciucivara (2009) and Cardinaletti (2008).

[9]   Under this approach, *Person-Case Constraint* is a misnomer, but I still use PCC as a cover term for all syntactic person restrictions in this article due to it being so ubiquitous and established in the literature.

3 The PCC as a syntactic intervention effect

The PCC seems to occur primarily with clitic clusters, which is why it was traditionally viewed as a representational (Perlmutter 1971) or a morphological constraint (Bonet 1991; 1994) on said clusters, sensitive to their person and case values. We have seen though that in Slovenian case does not play a role in the restriction. Rather, the order of the clitics does. Presumably, the two orders correspond to distinct structural configurations, which lends itself more readily to a syntactic approach to the PCC.

The standard minimalist syntactic approach to the PCC is to treat it as the result of locality restrictions which apply when two arguments must establish a syntactic dependency with a single functional head. Following the original proposal by Anagnostopoulou (1999; 2003) which analyzes the PCC s a type of an intervention effect, similar proposals that follow this general intuition were adopted by, among others, Béjar and Řezáč (2003), Adger and Harbour (2007), Nevins (2007; 2011), and Richards (2008). In fact, I will also argue in Section 4 that a variant of the intervention approach is needed to capture both the Slovenian PCC pattern and the canonical PCC.

The primary innovation of Anagnostopoulou (1999), and subsequent related approaches, is a fully syntactic treatment of the PCC by means of mechanisms introduced independently within the minimalist framework, in particular the operation Agree (Chomsky 2000; 2001). The core assumption is that the PCC arises when two Goals compete to enter Agree with a single Probe. I will use *one-Probe/two-Goals* as a cover term for all approaches based on this assumption. The basic idea here is that the PCC is a consequence of partial intervention: Agree takes place separately for person features ($[\pi]$) and number features ($[\#]$) (see also Taraldsen 1995), and in a *double-object construction* (DOC) the IO blocks Agree between the *v* head and DO for $[\pi]$ but not for $[\#]$ features, as shown in (12). The IO is the intervener for Agree in (12) because it asymmetrically c-commands the DO in its base position (or IO $\gg$ DO).[10]

(12) $[_{vP}$ *v* $[_{VP}$ $\boxed{\text{IO}}$ $[_{V'}$ V $\boxed{\text{DO}}$ $]]]$
    $[\pi]$ - - - - - $\rightarrow [\pi]$ ✓ $[\pi]$ ✗
             Agree
    $[\#]$ - - - - - - - - - - - - - - - - $\rightarrow [\#]$ ✓
                     Agree
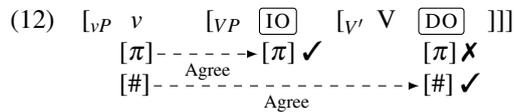
But intervention alone is not sufficient here. It must be explained why the lack of Agree with the DO's $[\pi]$ features matters, and related to this, why the issue arises with a 1/2P.DO and not a 3P.DO. The standard answer for the latter is that 3P is actually the realization of the lack of $[\pi]$ features (see also Kayne 2000) and thus a 3P.DO has no $[\pi]$ to be Agreed with.[11] In contrast, there are several proposals for why the lack of Agree for $[\pi]$ features leads to ungrammaticality. For ease of exposition, I will discuss only one analysis here, namely Béjar and Řezáč (2003) (BR), in order to facilitate the discussion of the problematic Slovenian clitic restriction.[12] Crucially, the issues that arise with their approach extend to all approaches to the PCC that rely on case or other kinds of non-structural asymmetries between the IO and DO.

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[10] I use $\gg$ to indicate asymmetrical c-command, in contrast to », which I use to mark linear precedence.

[11] Two notable exceptions are Nevins (2007; 2011) and Adger and Harbour (2007). Both argue for a one-Probe/two-Goals approach that does not require that 3P corresponds to a lack of $[\pi]$ features.

[12] The discussion of other one-Probe/two-Goals approaches will mostly be conflated with the discussion of Béjar and Řezáč (2003), but key issues will be addressed when the relevant predictions differ.

In BR, the ungrammaticality of (12) and thus the PCC is due to the following:

(13)   ***Person Licensing Condition* (PLC)**. *An interpretable* 1P*/*2P *feature must be licensed by entering into an Agree relation with a functional category.*
<div align="right">(Béjar and Řezáč 2003:53)</div>

Another important assumption BR make is that arguments bearing *inherent/lexical* Case are not accessible Goals for Agree with functional heads like *v* or T, a prerequisite for *structural* Case assignment (see Chomsky 2000; 2001).[13] As I discuss in Section 3.1, this introduces a problem for BR's system when applied to Slovenian.

Having introduced the necessary mechanisms, we can now look at BR's derivation of the PCC more closely, using the French examples in (14) (adapted from BR:53).

(14)   a. Je **le   leur**   ai   presenté.   b. *Je **te   leur**   ai   presenté.
           I   3.DO 3PL.DAT have introduced   I   2.DO 3PL.DAT have introduced
           'I introduced him to them.'   'I introduced you to them.'

BR propose that the *v* head hosts a split φ-Probe with an uninterpretable $[\pi]$ ($[u\pi]$) and an uninterpretable $[\#]$ feature ($[u\#]$), both of which must probe for matching interpretable features in their c-command domain. In DOCs like those in (14), both IO and DO carry interpretable $[\pi]$ ($[i\pi]$) as well as interpretable $[\#]$ features ($[i\#]$), which in relation to the Probes on *v* yields a one-Probe/two-Goals configuration.

The $[u\pi]$ feature on *v* probes first, matching with the closest Goal, which is $[i\pi]$ on the IO (= DAT_{IO}), as shown in (15a).[14] But Agree cannot be established between them. BR follow Chomsky (2000) and assume that Agree is possible only with Goals that have not been assigned Case previously (i.e. the *Active Goal Hypothesis*; Řezáč 2003). Since the IO already bears inherent DAT Case, it is not an active Goal and *v* cannot Agree with it. At the same time, DAT_{IO} is also an intervener for Agree between both Probes on *v* and their matching counterparts on the DO, which is illustrated in (15b).

(15)   a. $[_{vP}$ *v* $[_{VP}$ DAT_{IO} $[_{V'}$ V $\boxed{DO}$ $]]]$
               $[u\pi]\leftarrow$ - - - $\underset{\text{*Agree}}{\overset{\text{match}}{-----}}$ - - - $\rightarrow[i\pi]$ $[i\pi]$

        b. $[_{vP}$ *v* $[_{VP}$ DAT_{IO} $[_{V'}$ V $\boxed{DO}$ $]]]$
               $[u\pi]\leftarrow\cdots\cdots\cdots|[i\pi]|\cdots\cdots\cdots\rightarrow[i\pi]$
               $[u\#]\leftarrow\cdots\cdots\cdots|[i\#]|\cdots\cdots\cdots\rightarrow[i\#]$

The intervention in (15b) can be resolved with the cliticization of DAT_{IO}, as illustrated in (16).[15] This leaves behind a trace, and traces do not count as interveners for Agree (see Chomsky 2000, Anagnostopoulou 2003, Bošković 2011b). Note also that since

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[13] Following the standard convention, "Case" refers to abstract syntactic case. I do not make a distinction between Case-checking and Case-assignment. What matters for the discussion at hand is that Case-checking/assignment is a reflex of Agree in BR's system for both structural and inherent/lexical Case.

[14] Note that the French surface clitic order in (14) does not reflect their position in (15). It is crucial for BR (and for the proposal in Section 4) that the configuration is IO $\gg$ DO at least at the stage when *v* probes. See Section 6.2 for a brief discussion of the relation between clitic order and the PCC cross-linguistically.

[15] The cliticization can be a reflex of Agree itself, as has been suggested in much subsequent work (see, for example, Preminger 2009; 2014, Kalin and van Urk 2015), although it must then be explained why cliticization is possible in spite of DAT_{IO} being a "defective" Goal. The other option is that cliticization is independent of Agree, which yields the same result with respect to removing the IO as an intervener.

[uπ] on v is never checked in (15a), BR assume that it must get a default value. The PCC then arises during the [#]-cycle of Agree, which is also shown in (16).

(16) [$_{vP}$ DAT$_{IO}$ v [$_{VP}$ t$_{IO}$ [$_{V'}$ V   ACC$_{DO}$]]]
        [iπ]   [u̶π̶]   *[iπ]
        [i#]   [u#]- - - - - - - - - - - - - -▸[i#]
                          Agree

Because the IO's trace is not an intervener for Agree in (16), the [u#] on v can now Agree with the closest matching Goal, the [i#] on DO. Agree for [#] features between v and the DO is sufficient to result in structural ACC Case assignment. However, due to the PLC (cf. (13)) the DO must be 3P, or the derivation crashes. Recall that 3P is assumed to correspond to a lack [π] features, while 1/2P requires the presence of [π] features. This means that the [π] features on a 1/2P.DO need to be licensed via Agree due to the PLC, but as Agree is only established for [#] in this cycle, this is not possible. This is why the 3P.DO in (14a) is grammatical and the 2P.DO in (14b) is not.

The question is then why the DAT$_{IO}$ can be of any person value even though it cannot Agree with v in (15a). For BR, the answer lies in its inherent Case: the DO gets structural ACC via Agree with v, whereas the IO gets inherent DAT via Agree with a silent applicative P(reposition) selected by the ditransitive verb. This P takes the IO as a complement, so unlike with v and the DO, Agree between the P and the IO is guaranteed for all φ-features, thus also guaranteeing satisfaction of the PLC. The derivation is ultimately driven by Case: all DPs must be Case-licensed, either as a reflex of Agree between the DP and a functional head (Chomsky 2000; 2001) or a P. BR therefore predict that the PCC can arise if the following holds: given the configuration φ-Probe $\gg$ DP$_1$ $\gg$ DP$_2$, DP$_1$ bears inherent Case and DP$_2$ bears structural Case.

The gist of the account is that in DOCs the DO can only be 3P when the IO intervenes for ([π]) Agree between the DO and v, since then the PLC is not satisfied. With the IO, the PLC is satisfied inherently by inherent Case, so the IO can have any person value, even if the DO were to intervene between v and the IO. BR thus successfully derive the PCC as an intervention effect, which is important because they do not make use of extrinsic person hierarchies (Rosen 1990) or morphological constraints (Bonet 1991; 1994). But we will see below that this type of analysis cannot be extended to the Slovenian REVERSE PCC (which, admittedly, was not known at the time of BR).

3.1 Implications of the Slovenian person restriction

The main problem with extending BR's analysis to Slovenian is in the role of inherent DAT Case. Recall that the silent P Case assigner also licenses the IO's [π] features, allowing it to be of any person value. Recall also that with the REVERSE PCC, it is actually the IO whose person value is restricted. In order to better understand the issue, let us look at two possible derivations of the REVERSE PCC in BR's system.

The most straightforward option is to assume the DO » IO clitic order is derived through clitic movement in narrow syntax before v can probe, as shown in (17).[16]

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[16] I assume roughly along the lines of Kayne (1994) that asymmetric c-command maps to precedence, making » and $\gg$ essentially equivalent (*modulo* post-syntactic changes in order — see Section 5).

(17)   a. [$_{vP}$ v [$_{VP}$ [$_{PP}$ P $\boxed{\text{IO}}$] [$_{V'}$ V $\boxed{\text{DO}}$]]]]   (DOC)

      b. [$_{vP}$ v [$_{VP}$ $\boxed{\text{DO}}$ [$_{PP}$ P $\boxed{\text{IO}}$] [$_{V'}$ V t$_{DO}$]]]]   (DOC + DO-movement)

In (17b), the status of IO and DO in terms of the closest accessible Goal to v is reversed, making DO the intervener. But note that DAT is still assigned to IO by the silent P, and that this licenses the presence of 1/2P features on IO. This predicts that with the DO » IO order, all person combinations should be possible; the licensing of 1/2P features on the IO is guaranteed through Case assignment by P, and with no intervener between v and DO, 1/2P features on the DO can also be licensed. But this is not borne out in Slovenian, where the IO is person restricted with the DO » IO clitic order.

    Another option is to analyze the DO » IO order as a realization of a *prepositional dative construction* (PDC) with a silent P and the structure in (18). But the problem is still the same as in (17b): there is no intervener for Agree between v and the DO, and [π] on the IO can be licensed by P. This again wrongly predicts no person restriction.

(18)   [$_{vP}$ v [$_{VP}$ $\boxed{\text{DO}}$ [$_{V'}$ V [$_{PP}$ P $\boxed{\text{IO}}$]]]]   (PDC)

The only way to derive the REVERSE PCC while staying narrowly within BR's framework is to stipulate that <u>only</u> with the DO » IO clitic order, the DO bears inherent ACC Case, and the IO bears structural DAT Case assigned by v. Apart from lacking conceptual appeal, and the fact that the authors also explicitly assume that in ditransitives ACC is structural and DAT inherent, this assumption also makes wrong predictions regarding ditransitive passives, where Slovenian also exhibits the cross-linguistically common restriction against DAT arguments becoming subjects of passives.

    In Slovenian DOCs, ACC alternates with NOM in passives, but DAT never does. The passive counterparts of (19), which are given in (20), show not only that the DAT on the GOAL never alternates with NOM, but also that the GOAL is never the passive subject. In DOC passives, the GOAL can never bind the subject oriented anaphor *'svoj'*, which is always bound by the THEME. Even if the linear order of GOAL and THEME is changed, as in (20b), the facts remain the same: the subject of passives is the ACC object of the active counterpart. Thus, ACC must be structural and DAT is always inherent in Slovenian (see also Stegovec 2016b; in preparation).

(19)   Sestro$_i$ so   predstavili   { Roku.   / svojemu$_i$ bratu.   }
      sister.F.ACC are.M.PL introduced.M.PL   Rok.DAT / self's   brother.M.DAT
      'They introduced the sister$_i$ to Rok / her$_i$ brother.'

(20)   a. Sestra$_i$ je bil<u>a</u>   predstavljen<u>a</u> { Roku.   / svojemu$_i$ bratu.   }
         sister.F.NOM is been.f introduced.f   Rok.DAT / self's   brother.M.DAT
         'The sister$_i$ was introduced to Rok / her$_i$ brother.'

      b. Roku   je bil<u>a</u>$_i$ predstavljen<u>a</u> { sestra.   / *svoja$_i$ sestr<u>a</u>.   }
         Rok.DAT is been.f introduced.f   sister.F.NOM / self's sister.F.NOM
         'The sister / His$_i$ sister was introduced to Rok$_i$.'

Even ditransitive verbs like *'expose'* (cf. (21)), which require a DO » IO default object order (see Marvin and Stegovec 2012), pattern with the canonical DOC seen above; the THEME is always the subject in (22). So even if the DO » IO clitic order were to correspond to an alternative construction, the status of DAT and ACC is always the same; they are respectively always an inherent and a structural Case in Slovenian.

(21)   Vodič   je Ano   izpostavil smradu.
       guide.M.NOM is Ana.ACC exposed.M stench.M.DAT
       'The guide exposed Ana to the stench.'

(22)   a. Ana$_i$ je bil<u>a</u>   izpostavljen<u>a</u> { smradu.   / svojim$_i$ strahovom. }
           Ana.NOM is been.F exposed.F   stench.M.DAT / self's   fears.M.DAT
           'Ana$_i$ was exposed to the stench / her$_i$ fears.'

       b. Psu$_i$ je bil<u>a</u>   izpostavljen<u>a</u> { Ana.   / *svoja$_i$ lastnic<u>a</u>.   }
           dog.M.DAT is been.F exposed.F   Ana.NOM /   self's owner.F.NOM
           'Ana / Its owner$_i$ was exposed to the dog$_i$.'

Although it is ultimately BR's use of inherent case as a [π]-licensor that proves to be problematic for the Slovenian data, the issue extends to any other one-Probe/two-Goals analysis that relies on asymmetries between the IO and DO beyond their different structural positions. For instance, Anagnostopoulou (2003) proposes that all IOs are defective for [#] features whereas DOs differ with respect to [π] features — 1/2P.DOs have them and 3P.DOs do not. The IO checks v's [uπ] against its [iπ] first, as it is the closer Goal. Following this, a 3P.DO can Agree with v for all its φ-features, meaning [i#], whereas a 1/2P.DO cannot, as its features include [iπ], whose counterpart on v has already been checked off. Given Anagnostopoulou's assumption that Case-checking is only possible when all of the φ-features on the Goal are Agreed with, any 3P.DO can be Case-licensed, but a 1/2P.DO may not, which derives the canonical PCC.

Turning to the DO » IO clitic order in Slovenian, the predicted pattern is again not the REVERSE PCC. When the DO is 1/2P, the IO cannot be Agreed with, leaving its Case unchecked (23a), but when the DO is 3P, v can Agree with the IO (23b). The analysis therefore incorrectly predicts a canonical PCC, where the DO must be 3P.[17]

(23)   a. [$_{vP}$ v [$_{VP}$ $\boxed{\text{DO}}$ [$\boxed{\text{IO}}$ [$_{V'}$ V   t$_{\text{DO}}$]]]]   (DO = 1/2P)
              [uπ]- - - - →[iπ]   *[iπ]
              [u#]- $\overset{\text{Agree}}{\text{- - -}}$ →[i#]
                  $\underset{\text{Agree}}{}$

       b. [$_{vP}$ v [$_{VP}$ $\boxed{\text{DO}}$ [$\boxed{\text{IO}}$ [$_{V'}$ V   t$_{\text{DO}}$]]]]   (DO = 3P)
              [u#]- - - - →[i#] |
              [uπ]- $\overset{\text{Agree}}{\text{- - - - - - - - -}}$ →[iπ]
                  $\underset{\text{Agree}}{}$

The issue is more generally that in Slovenian, the IO and DO have the same status with respect to the PCC: both can be the target of the person restriction and (assuming an intervention approach) both are potential interveners for Agree.

Despite the issues outlined in this section, I will argue in Section 4.1 that a modified version of the intervention approach can in fact derive both the REVERSE and canonical PCC as a unified phenomenon. The basic idea is that it is not the different Case status of the two Goals that matters (nor is it a differing φ-set), but the "deficient" status of the relevant pronouns. This brings the analysis back to the initial intuitions of Perlmutter (1971) and Bonet (1991; 1994), albeit deriving the restriction as a syntactic one.

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[17] In Anagnostopoulou's (2003) analysis of PCC in Swiss German (see Section 6.2), she suggests that with a DO » IO order of weak pronouns, the IO may check only definiteness and/or phonological features. This predicts no person restrictions on the IO — the same prediction BR's account would make (see above).

3.2 WEAK PCC and Multiple Agree

In this section so far we have only seen cases of the STRONG PCC, which is because
BR's analysis can only derive this version of the PCC. Since the DO can only Agree with
v in [#] features, it will always be 3P because of the PLC. Recall though that the WEAK
PCC also exists, where 1/2P clitic combinations are allowed, but *3P.IO ≫ 1/2P.DO is
still disallowed, or *3P.IO ≫ 1/2P.DO in the case of the REVERSE version.

  This is addressed by Anagnostopoulou (2005), who proposes a derivation of the
WEAK PCC where it results from *Multiple Agree* (Hiraiwa 2001; 2004), an operation
where one head can Agree with multiple arguments. Anagnostopoulou explains the
STRONG/WEAK split through a Multiple Agree parameter.[18] With STRONG PCC, Agree
for [π] features is established only with the higher object, while with WEAK PCC,
Agree is established with both objects simultaneously. By allowing [uπ] on *v* to Agree
with both objects, both can be 1/2P. However, the ungrammaticality of *3P ≫ 1/2P
still needs to be explained. For that, Anagnostopoulou proposes the condition in (24).

(24) ***Condition on Multiple Agree.*** *Multiple Agree can take place only under non-*
      conflicting feature specifications of the agreeing elements.

                                                    (Anagnostopoulou 2005:221)

Anagnostopoulou further argues that 3P and 1/2P are conflicting feature specifications,
so Multiple Agree is not possible when the clitic pair has those person values.[19] In that
case, regular Agree takes place for [π] features and the higher object again acts as an
intervener between *v* and the lower object, resulting in the person restriction. Crucially,
this makes the contrast between *3P ≫ 1/2P and 1/2P ≫ 3P combinations fall out
the same way as the STRONG PCC, which also means the issues with the Slovenian
paradigm are carried over. We shall see, however, in Section 4.1.3 that WEAK PCC can
be derived without reference to IO/DO (Case) asymmetries or Multiple Agree.

4 Revisiting the Person-(*Case) Constraint

The Slovenian REVERSE PCC is actually not the only example of the PCC existing
outside the canonical *inherent case ≫ structural case* mold. As noted by Ormazabal
and Romero (2007), Bantu languages may exhibit the PCC with object markers even
though the inherent/structural case distinction appears to be inactive there. Furthermore,
comparable restrictions are also found cross-linguistically with subject-object pairs.
One such case is Christian Barwar (Neo-Aramaic) (Kalin and van Urk 2015), where

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[18] Anagnostopoulou's proposal is important as Bonet (1991) originally only noted the existence of the
split without providing an analysis, and BR set the WEAK PCC pattern aside completely.

[19] A similar principle is used by Nevins (2007; 2011), who proposes that both STRONG and WEAK
PCC (and other versions; see below) arise via Multiple Agree. The idea is that what counts as a set of
conflicting feature values is parameterized, not the option of Multiple Agree itself. When both objects have
non-conflicting [π] values, the Probe Agrees with both, triggering clitic-doubling. In cases where the higher
object has a conflicting [π] value, Agree is impossible with the lower one, yielding the PCC. Crucially, Agree
never takes place with 3P Goals in his system. This creates an issue though, as clitic-doubling must also
take place with 3P objects, or 3P clitics would never surface. This approach is then at odds with Preminger's
(2009) insight that failed Agree always results in the lack of clitic-doubling, never "default" clitic-doubling.

the person restriction applies on the object marker in the presence of a subject marker despite the subject not bearing inherent case.[20] The latter kind of restriction is also notable, as it shows that PCC-like restrictions exist outside DOCs, and hence cannot be tied exclusively to the IO ≫ DO configuration. At the other extreme are Digor and Iron Ossetic, for which Erschler (2014) observes that the PCC can occur with clitic pairs where each clitic bears a distinct inherent case. In (25), this is shown for *ablative* (ABL) and *superessive* (SUP) clitics, which in Iron Ossetic conform to the STRONG PCC. These clitics do not fit an IO/DO mold, and the two inherent cases can occur independently of each other (Erschler 2014), suggesting two distinct case assigners.[21]

(25) a. ɐmɐ=**myl**=šɐ   Mɐdinɐ jettɐmɐ niči   ɐwwɐndy.   1.SUP – 3.ABL
          and=1.SUP=3PL.ABL Madina besides nobody believes
          'No one of them believes me, but Madina.'

      b. *ɐmɐ=**jyl**=nɐ   Mɐdinɐ jettɐmɐ niči   ɐwwɐndy.   *3.SUP – 1.ABL
          and=3.SUP=1PL.ABL Madina besides nobody believes
          'No one of us believes them, but Madina.' (Iron Ossetic; Erschler 2014:6)

The two main reasons why the Slovenian PCC paradigm matters despite these previous observations are: **(i)** the REVERSE PCC arises in a *structural case ≫ inherent case* configuration, the exact opposite of the canonical PCC context, and **(ii)** there is a direct correlation in Slovenian between the person restriction and clitic order. Furthermore, unlike some other cases of the REVERSE PCC I discuss in Section 6.2, both clitics are expressed overtly and show the DAT/ACC case contrast across the whole paradigm.

The take away message from the Slovenian PCC paradigm is that (inherent) Case-assignment does not guarantee the licensing of 1/2P, not even when the Case-assigner and relevant argument are structurally adjacent. Similarly, the PCC cannot be the result of any asymmetry between the IO and DO other than their structural positions.

The analysis I develop below therefore does not rely on differences between IO and DO pronouns. It focuses instead on what they have in common: the pronouns sensitive to person restrictions are *reduced/deficient*. This brings the analysis closer to the intuition of Perlmutter (1971) and Bonet (1991; 1994), who saw pronoun type as the key factor in the constraint. More recently, Nevins (2011) also adopted a similar view, limiting the PCC to clitic pronouns. Like his, my analysis follows the logic of the one-Probe/two-Goals approaches outlined in Section 4, but also differs from them in significant ways. My point of departure is that the person restriction results primarily from the φ-feature composition of the relevant Probe and Goals, as opposed to a universal condition on Agree with $[\pi]$ features (BR, Baker 2008) or a "fine-tuning" of the probe/Agree operation itself (Nevins 2007; 2011). Lastly, even though my analysis was developed in response to the Slovenian PCC data, it can be easily extended to the canonical PCC by treating the latter as a subset of the full Slovenian PCC paradigm that arises when the options for object clitic displacement are more limited.

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[20] Although the restriction is only observed in perfective clauses in Christian Barwar, the authors show it is not the result of an "ergative split", where one could argue that the subject bears inherent ergative case.

[21] In Stegovec (2015), I discuss the relevance of two more examples of case-insensitive PCC in O'Odham (Hale 1959, Zepeda 1983) and Warlpiri (Perlmutter 1971, Hale 1973). The former is like Bantu in that it has the PCC despite showing no evidence of the inherent/structural case split, while the latter exhibits the PCC in canonical DAT ≫ ACC ditransitives, as well as in ditransitives where both objects are DAT.

4.1 Deriving the PCC as a failed valuation of interpretable features

The analysis of the PCC proposed here is inspired by the analysis of bound pronouns in Kratzer (2009) and the analysis of jussive clause subjects in Zanuttini et al. (2012). The idea is that there exist *minimal pronouns* which enter the derivation without a φ-feature value and only receive it in the course of the derivation from a functional head with matching valued φ-features. This implies an approach to feature valuation in the spirit of Pesetsky and Torrego (2007) and Bošković (2007; 2011a), where interpretable features may enter the derivation unvalued and uninterpretable features may likewise enter the derivation valued (contra Chomsky 2000; 2001).

I propose that PCC-sensitive pronouns (henceforth pro_{DF}) are deficient pronouns in the sense of Cardinaletti and Starke (1994; 1999) (i.e. clitic or weak pronouns) which enter the derivation with unvalued [iπ] features, and further that some functional heads, like v, enter the derivation with valued [uπ] features (cf. Kratzer 2009, Zanuttini et al. 2012). The PCC arises similarly as with other intervention accounts, albeit with a twist: it is the pronouns that must be [π]-valued, not v. This is illustrated in (26). Given a single pro_{DF} and functional head X hosting a valued [uπ], as in (26a), the pronoun can receive any [π] value from X. In contrast, in a structure with two pro_{DF}, as in (26b), only the higher pro_{DF} can receive any [π] value from X. In doing so, it blocks the [π]-valuation of the lower pro_{DF}, which then gets a default value, that is: 3P.

(26) a.
$$\text{XP}$$

X pro_{DF}

[uπ: *val*] - - - -> [iπ: <u>1/2/3P</u>]

   b.
$$\text{XP}$$

X   ...

[uπ: *val*]

     pro_{DF} ...

     $\vdash$ → [iπ: <u>1/2/3P</u>]

               pro_{DF} ...

     └ - - -✗- - -> [iπ: __] ⇒ 3P
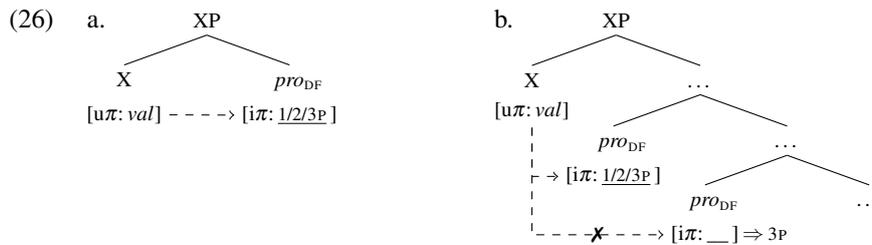
Here I follow Béjar and Řezáč (2009) and Preminger (2014) in assuming that default 3P is not different from its valued counterpart; 3P is simply a [π] feature with no positive speaker or participant specification. This is not to be confused with the lack of a [π] feature or an unvalued [π] feature — which crucially has the status of an active Probe (see Bošković 2011a). So, a [π] valued by a matching 3P [π] and a (default) [π] that failed to be valued both count as 3P at the interfaces (see also Section 4.1.3).

In short, the PCC arises in configurations like (26b) due to these key assumptions:

(27)   a. A pro_{DF} has unvalued [iπ] features that must be valued before spell-out because an unvalued [iπ] is illicit at LF (Pesetsky and Torrego 2007);

      b. An unvalued [π] can get a value either: **(i)** via Agree with a valued [π], or **(ii)** by getting a default 3P value iff valuation via Agree is impossible.

The result is that the PCC does not arise because a [iπ] fails to be licensed via Agree with a matching [uπ], but rather because an <u>unvalued</u> [iπ] fails to be valued by a matching <u>valued</u> [uπ]. The limited distribution of 1/2P then does not result from specific configurations of Case-assigning heads and arguments, but due to a mismatch in the number of functional heads with valued [uπ] and pronouns with unvalued [iπ].

There is also independent evidence against treating the PCC exclusively in terms of narrow-syntactic conditions like Case-licensing or BR's PLC. As Charnavel and Mateu (2015) note, the PCC is voided in French when a 1P clitic is not read *de se*. This also holds for Slovenian. In cases like (28) with two 1P clitics (brought to my attention by S. Franks), speakers must interpret the DO as non-*de se* ("my traits") to avoid a Condition B violation. The PCC is then voided in (28) even for STRONG PCC speakers.

(28) #Janez **mi   me**   je pojasnil.
     Janez 1.DAT 1.ACC is explained
     'Janez explained <u>me</u> (= my traits) to me.'

If the PCC arises simply because the DO's [iπ] is not being Agreed with, then the interpretation of the DO should not matter. Conversely, under the proposed analysis, the PCC boils down to the possible values the [iπ] itself can receive, opening the door for an explanation here in terms of the DO's [iπ] not being a "true" 1P at LF.[22]

Similarly, the claim made here that PCC-sensitive pronouns are minimal pronouns in the sense of Kratzer (2009) is motivated by their behavior in binding contexts. Bound subject pronouns must be null in many *pro*-drop languages (Montalbetti 1984), and as (29a) shows, this also holds for Slovenian. However, when the bound pronoun is an object, it must be a clitic as opposed to a strong pronoun, as shown in (29b).

(29) a. Nihče$_i$ ne misli, da je { ⟨*pro$_i$*⟩ / on$_{k,*i}$ } neumen.
           no one not thinks, that is   ⟨ he ⟩ / he.NOM   stupid.MASC.SG.
           'No one$_i$ thinks that he$_{i,k}$ is stupid.'

      b. Nihče$_i$ ne misli, da { **ga$_i$** } bo strela   udarila { njega$_{k,*i}$ }.
           no one not thinks, that   3.M.ACC   will lightning strike   him.ACC
           'No one$_i$ thinks that lightning will strike him$_{i,k}$.'

The different behavior of the two pronoun types in (29b) can be explained in terms of Kratzer (2009) by assuming that clitic but not strong pronouns are minimal pronouns. According to Kratzer, binding triggers φ-valuation of the minimal pronoun, resulting in the antecedent and the bound pronoun having the same φ-feature values. Binding itself is mediated by functional heads — either *v* or C, which introduce the valued φ-features that value their counterparts on the bound minimal pronoun. Crucially for her, such *v*/C-mediated binding (and the resulting φ-valuation) is in complementary distribution with Agree for φ-features between *v*/C and pronouns, which is seen as an extension of the *Anaphor Agreement Effect* (Rizzi 1990, Woolford 1999); i.e. anaphors are always in a complementary distribution with agreement controllers.

I take this as a key point in my analysis. The PCC, like binding in (29b), applies only to clitic and not strong pronouns.[23] I argue that the parallel behavior follows from

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[22] While I do not provide an analysis of non-*de se* 1P here due to space constraints, my analysis is in principle compatible with approaches to LF/PF feature mismatches like Smith (2015) or Messick (2016), where a non-*de se* 1P pronoun would essentially have 3P [iπ] features but 1P [uπ] features.

[23] There is another link between the PCC and binding, noted by Ormazabal and Romero (2007) (attributing it to Roca 1992): in some languages animate DO clitics cannot be bound in the presence of an IO clitic. Bhatt and Šimík (2009) also note for Slovenian that with the DO » IO clitic order, the binding ban applies to the IO clitic (parallel to the REVERSE PCC). I take the constraint as additional support for analyzing the PCC in terms of Kratzer (2009) (but see Charnavel and Mateu (2015) for an alternative view).

the minimal pronoun nature of pro_{DF}. A $[\pi]$ value can be supplied to pro_{DF} either via binding or via Agree with the functional head that otherwise mediates binding, where the two options are in complementary distribution (cf. Anaphor Agreement Effect).

The crucial assumption regarding the PCC is that in the absence of binding, the relevant functional head only bears valued $[u\pi]$ features, whereas all remaining φ-features on it are unvalued. Likewise, only the $[i\pi]$ features of the pro_{DF} are unvalued. Here I build on Kratzer's (2009) idea that valued φ-features on the v and C phase heads encode a speaker or addressee perspective and link *Speech Act Participants* to the arguments of a clause. Since an antecedent and the bound pronoun must match in all φ-features, the mediating phase head can introduce any kind of valued φ-feature. I suggest that when binding is not involved, the same head only introduces the valued features sufficient for encoding a Speech Act Participant perspective, that is: $[\pi]$ features. We will see below why this is crucial for the derivation of the PCC, and how it further drives the STRONG/WEAK PCC split in the current system.[24]

4.1.1 A note on the Slovenian ACC » DAT clitic order

In Section 3.1, I suggested that the DO » IO clitic order in Slovenian results from DO-over-IO movement below v. While this did not derive the REVERSE PCC within BR's or Anagnostopoulou's (2003) accounts, we will see that such DO-over-IO movement derives the correct restriction pattern within the proposed account. However, it first has to be clarified where the possibility of this kind of clitic movement comes from.

In Slovenian, when both object clitics are 3P, their order is sensitive to information-structure: the DO » IO order is used when the DO clitic is a salient topic established in a previous utterance, as in (30), or when DO » IO parallels the order of full NP objects (which is in principle free) in a previous utterance, as in (31).

(30)   a.   *Klobuk*? Od kdaj pa **on**   nosi   **klobuk**?
             hat   from when PRT he.NOM wears hat.ACC
             '*A hat*? Since when does he wear *a hat*?'

         b.   Odkar   **ga**   **mu**   je   žena   kupila.
             ever since 3.M.ACC 3.M.DAT AUX.3 wife.NOM bought.F
             'Ever since his wife bought it for him.'

(31)   a.   Kdo je   pa **klobuk** dal   **Davidu**?
             who AUX.3 PRT hat.ACC gave.M David.DAT
             'And who gave *a hat* to David?'

         b.   Jana **ga**   **mu**   je   dala.
             Jana 3.M.ACC 3.M.DAT AUX.3 gave.F
             'Jana gave it to him.'

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[24] Importantly, the deduction of the PCC given below can also be extended to clitic-doubling languages by assuming a version of the Big-DP approach to clitic-doubling (Torrego 1988, Uriagereka 1995, Nevins 2011), where the doubling pronoun starts as the head of the DP, with the doubled DP as its complement and is then derivationally separated from its double. The difference is that in my analysis the doubling pronoun must be a pro_{DF} with a DP complement and must therefore also receive a $[\pi]$ value externally. Similarly to Nevins (2011), I assume that the DP complement is itself a phase and therefore inaccessible to the pro_{DF} clitic. Because of this, the pro_{DF} cannot be $[\pi]$-valued by the $[\pi]$ feature of the complement DP's head.

Interestingly, the DO » IO order does not require a special information-structure context with 1/2P.DO » 3P.IO specifically, where reordering is used to yield a licit equivalent of *3P.IO » 1/2P.DO. This mirrors (with clitic order) Perlmutter's (1971) observation that in clitic pronoun languages the use of strong pronouns is pragmatically marked, but that strong pronouns are unmarked if used to avoid banned sequences of clitics.[25]

Unlike Slovenian, other South Slavic languages lack the IO » DO/DO » IO alternation with clitics. However, Slovenian clitics also display other idiosyncrasies which can be related to the availability of the alternation. As noted, among others, by Bošković (2001): Slovenian clitics can be both proclitics and enclitics, and clitic clusters can even be split under special conditions (see also Section 4.2). It is possible that this clitic placement freedom is also what allows the object clitics to in effect parallel object scrambling (subject to similar information-structure considerations).[26]

The fact that this clitic movement feeds into person restrictions reveals its place in the derivation: it must occur before the [iπ] features of the clitics/pro_{DF} can be valued, that is: before the relevant functional head with valued [uπ] features enters the derivation. In the following sections I show that this assumption is enough to derive both the STRONG and WEAK version of the REVERSE PCC in the current system.

4.1.2 Deriving the STRONG PCC

I assume, following Anagnostopoulou (2003; 2005), that DOC ditransitives are applicatives[27] where the IO is introduced in the specifier of an ApplP projection that dominates the VP containing the DO. Like in the derivations from Section 3, this yields a base IO ≫ DO configuration, with both objects in the probing domain of *v*.

The derivation of the canonical STRONG PCC in the current system is presented in (32) (to be spelled out below). Recall that this is the only person restriction pattern in languages like Greek or French, and the pattern associated with an IO » DO clitic order in Slovenian, where the DO clitic must be 3P in the presence of any IO clitic.

(32) [$_{vP}$ *v*   [$_{ApplP}$ IO   Appl   [$_{VP}$ V   DO   ]]]

$$\begin{bmatrix} \text{u}\Gamma: \underline{\quad} \\ \text{u}\pi: val \end{bmatrix} \text{-}\text{-}\underset{\text{value}}{\overset{\text{Agree}}{\text{-}\text{-}\text{-}}}\text{-}\begin{Bmatrix} \blacktriangleright \text{i}\Gamma: val \\ \rightarrow \text{i}\pi: \underline{1/2/3\text{P}} \end{Bmatrix} \qquad \begin{bmatrix} \text{i}\Gamma: val \\ \text{i}\pi: \underline{\quad} \end{bmatrix} \Rightarrow \underline{3\text{P}}$$

Like Kratzer (2009), I assume that *v* may bear valued uninterpretable φ-features. But recall that I propose that not all φ-features have the same status regarding valuation in the absence of binding: [uπ] alone is valued, any other φ-features on *v* distinct from [π] (henceforth [Γ]) enter the derivation unvalued. Similarly, only the [iπ] feature of pro_{DF} is unvalued in such contexts, its remaining [iΓ] features are valued. This split is crucial for the derivation of the PCC in the current system because it derives the lack of comparable "Number/Gender-Case Constraints", which are unattested.[28]

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[25] See also Řezáč (2011: Ch. 4) for a more recent discussion of the same facts.

[26] The parallel between the REVERSE PCC yielding object clitic reordering and object scrambling actually extends beyond Slovenian. As I discuss in Section 6.2, the REVERSE PCC only exists cross-linguistically as an optional pattern alongside the corresponding canonical PCC pattern, which follows from the REVERSE PCC always resulting from optional "scrambling-like" DO-over-IO clitic movement.

[27] See also Marantz (1993), Pylkkänen (2002; 2008), Georgala (2011).

[28] Number restrictions only seem to arise due to language specific morphological properties of the relevant markers (Ciucivara and Nevins 2008, Nevins 2011), whereas the PCC may occur even when object marking

Following standard assumptions, I assume unvalued features act as Probes, while matching valued features act as their Goals (see e.g. Bošković 2011a). This means that once v enters the derivation in (32), its unvalued [uΓ] must probe for the closest available matching Goal, which is the valued [iΓ] on the IO. Since the IO is a pro_{DF}, it also has an unvalued [iπ] feature. This feature can be valued by the corresponding valued [uπ] on v, once Agree is established between v and IO. This kind of parasitic valuation results due to the economy condition on valuation in (33).

(33) **Maximize Agree.** *If Agree holds between heads* X *and* Y *for any feature, then <u>all</u> the unvalued features on* X *and* Y *must be valued by any matching features on the other element regardless of the direction of valuation.*[29]

Since the [π] and [Γ] features are located on the same head with both v and the IO in (32), the unvalued [iπ] on the IO can be valued by the c-commanding valued [uπ] as a result of the Agree cycle established for [Γ] features.[30] Similar economy conditions have also been invoked for other φ-Agree phenomena, as in Bošković's (2009) analysis of Serbo-Croatian first and last conjunct agreement, which like the current analysis assumes the option of both valued uninterpretable and unvalued interpretable features.

Returning to the derivation in (32), after [uΓ] on v has entered Agree with [iΓ] on IO, the [uΓ] is valued and therefore no longer a Probe. Even if IO were to move above v, leaving behind an inactive trace and removing iself as an intervener (like in BR's analysis), v could not enter Agree with DO (also a pro_{DF}), as it has been satisfied as a Probe. The unvalued [iπ] on DO therefore cannot be valued via Agree with v, which means DO must get a default 3P value as a last resort, yielding the STRONG PCC.

Since this analysis of the PCC is completely independent of Case-assignment, the REVERSE version of the STRONG PCC can be derived just as easily. The only extra assumption that is required is the existence of DO-over-IO clitic movement below v (see Section 4.1.1). The REVERSE version is thus possible in Slovenian, but not in Greek or French, due to the option of this clitic reordering — allowed in the former but not the latter. The relevant derivation is presented in (34) and discussed below.

(34) $[_{vP}$ v $[_{ApplP}$ $\boxed{\text{DO}}$ $[$ $\boxed{\text{IO}}$ Appl $[_{VP}$ V t_{DO} $]]]]$

$$\begin{bmatrix} \text{u}\Gamma: \underline{\quad} & - \\ \text{u}\pi: val & - \end{bmatrix} \begin{array}{c} - \\ - \end{array} \begin{bmatrix} - & \overline{\text{Agree}} & - \\ - & \overline{\text{value}} & - \end{bmatrix} \begin{array}{c} - \\ - \end{array} \begin{bmatrix} \blacktriangleright \text{i}\Gamma: val \\ \rightarrow \text{i}\pi: \underline{1/2/3\text{P}} \end{bmatrix} \quad \begin{bmatrix} \text{i}\Gamma: val \\ \text{i}\pi: \underline{\quad} \end{bmatrix} \Rightarrow \underline{3\text{P}}$$

The derivation in (34) proceeds the same way as the one in (32), except with the roles of IO and DO being reversed. DO moves across IO before v is merged. This means that

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is consistently null (Albizu 1997, Ormazabal and Romero 2007, Riedel 2009) and therefore not subject to any morphological restrictions. I do not, however, exclude the possibility of PCC-like restrictions sensitive to animacy and definiteness/specificity (Ormazabal and Romero 2007). If Richards (2008) is correct, these notions are manifestations of [π] features; such restrictions should then also follow from my proposal.

[29] This version of *Maximize Agree* is based on that of Řezáč (2004:477).

[30] The [π] vs. [Γ] split in terms of valued status is also supported by the lack of PCC effects with reflexive clitics in Bulgarian (Rivero 2004) and Slovenian (Stegovec 2016a). Unlike the reflexive clitics in languages where these are sensitive to the PCC (Anagnostopoulou 2003; 2005), those in Bulgarian and Slovenian seem to lack [iΓ] features (they never show number/gender contrasts) and are therefore not eligible Goals for the [uΓ] Probe on v. Because of this, a reflexive IO does not intervene for [Γ]-Agree between v and a non-reflexive DO, which can then be valued as 1/2P parasitically on [Γ], voiding the PCC. In Slovenian, this holds for both STRONG and WEAK PCC, and crucially DO » IO orders with reflexive DOs (Stegovec 2016a).

when v enters the derivation, DO and not IO is the closest Goal for any Agree operation triggered by v. Because of this, [uΓ] on v now enters Agree with the [iΓ] on DO as opposed to the one on IO. Once Agree is established, the valued [uπ] on v also values the unvalued [iπ] on DO as 1/2/3P due to *Maximize Agree*. Following this, the [uΓ] on v is no longer a Probe, so even if DO moved above v, creating an inactive trace, the [iπ] on IO can no longer be valued via Agree with v, which means that it must get a default 3P value, resulting in a STRONG restriction on the IO.

The derivations in (32,34) show that both the canonical and REVERSE STRONG PCC can be derived with the proposed analysis. The PCC crucially arises due to a mismatch in the number of pro_{DF} objects and the source of valued [uπ]. Basically, adding an ApplP to a clause adds another pro_{DF} object within vP, but it does not also add another valued [uπ] feature, which means that v is still the only source of valued [uπ] for both pro_{DF} objects. Both kinds of STRONG PCC can thus be derived relatively simply. Recall though that they are not the only PCC patterns. We will see in the next section that a small change in the φ-feature make-up of pro_{DF}, keeping everything else the same, results in a drastically different person restriction pattern: WEAK PCC.

4.1.3 Deriving the WEAK PCC

Recall that the difference between STRONG and WEAK PCC is that with the latter, $1/2P \gg 2/1P$ clitic clusters are possible. In Section 3.2 we saw that Anagnostopoulou (2005) derives this possibility through Multiple Agree, so that both clitics may Agree with v. But as noted above, her approach faces similar issues as BR's with respect to the REVERSE PCC, namely it fails to derive the person restriction on the IO clitic.

In the spirit of my general approach to the PCC, I will show that the STRONG/WEAK variation can also be derived from the feature composition of the pronouns themselves, and without invoking Multiple Agree.[31] The gist of the proposal is that due to differences in the internal structure of the pro_{DF}, languages differ in terms of where and how the [iπ] of the pronouns is valued: **(i)** valuation occurs when both pro_{DF} are in situ and their [iπ] is valued parasitically to [Γ] as in (35a) (STRONG PCC), or **(ii)** valuation takes place only when both pro_{DF} move to the Specs of the valued [uπ] bearing head and their [iπ] is valued directly in a Spec-Head configuration as in (35b) (WEAK PCC).

(35) a.   b.
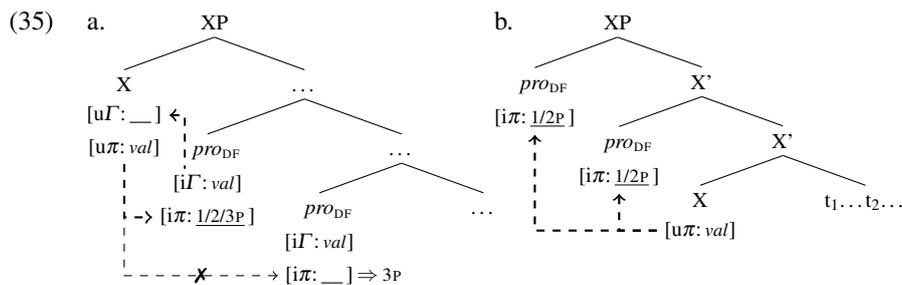
The split in (35) appears to require two distinct operations: Agree and Spec-Head agreement, which may be problematic in view of recent arguments against the Spec-Head

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[31] I do not argue against Multiple Agree as a possible operation, I simply show that it is not needed to derive the WEAK PCC (but see Haegeman and Lohndal 2010 for explicit arguments against its existence).

relation as an operation distinct from Agree (Chomsky 2000). But actually there is no need for a distinct Spec-Head operation in the current approach. The STRONG/WEAK split can be captured while employing Agree in both cases. Specifically, I propose that the WEAK PCC arises solely from pro_{DF} having a richer internal structure, where $[i\pi]$ and $[i\Gamma]$ reside on distinct heads. This alone is enough to prevent the application of *Maximize Agree* (33), and consequently block the possibility of $[i\pi]$ being valued parasitically to $[\Gamma]$. The lack of parasitic valuation means that after v Agrees with pro_{DF} in $[\Gamma]$ features, pro_{DF}'s $[i\pi]$ remains unvalued and therefore a Probe. In order for pro_{DF} to receive a $[\pi]$ value, it must c-command a matching valued $[u\pi]$ feature — in the structure of DOCs, v is the only such head. This means a pro_{DF} of this kind can only receive a $[\pi]$ value if it moves to Spec$v$P (this kind of valuation-driven movement has been proposed independently by Bošković 2007). The parameterization of $[\pi]$ valuation, which results from a difference in pro_{DF}'s internal structure, is summed up in (36); the underlined features are those which initiate the Agree relation that results in the valuation of $[i\pi]$ — in (36a) parasitically to $[\Gamma]$-valuation and in (36b) directly.

(36) a. STRONG PCC: v $[u\pi: val; \underline{u\Gamma:\_\_}]$ (Probe) | pro_{DF} $[i\pi:\_\_; \underline{i\Gamma: val}]$ (Goal)

     b. WEAK PCC: pro_{DF} $[\underline{i\pi:\_\_}]$ $[i\Gamma: val]$ (Probe) | v $[u\pi: val; u\Gamma: val]$ (Goal)

A specific proposal regarding the lexical split posited here will be given in Section 4.2. Pending that, it should be noted that framing the split as lexical, which is what I propose, has an advantage over the Multiple Agree parameter (Anagnostopoulou 2005). Speaker variation between STRONG and WEAK PCC is notoriously fine-grained (Bonet 1991), which is not characteristic of parameters restricting core operations like Agree. Furthermore, Anagnostopoulou (2008) observes a striking generalization concerning the WEAK PCC, namely: languages with weak pronouns and no clitic pronouns only exhibit the WEAK PCC. I will suggest in Section 4.2 that Anagnostopoulou's observation can be directly tied to the lexical parameterization proposed here.

    Let us now take a closer look at the details of the derivation of the WEAK PCC. The derivation of the canonical WEAK PCC pattern is given in (37) below, where I assume the same DOC structure as in the derivation of the STRONG PCC in (32,34).

(37) a. $[_{vP}$ $\boxed{\text{IO}}$ v $[_{ApplP}$ t_{IO} Appl $[_{VP}$ V $\boxed{\text{DO}}$ $]]]$
          $[i\pi:\underline{1/2/3P}] \leftarrow \frac{\text{value}}{\text{Agree}} \blacktriangleright [u\pi:val]$ $[i\pi:\_\_\_]$

     b. $[_{vP}$ $\boxed{\text{IO}}$ $[$ $\boxed{\text{DO}}$ v $[_{ApplP}$ t_{IO} Appl $[_{VP}$ V t_{DO} $]]]]$
          $[i\pi:\underline{1/2/3P}]$ $[i\pi:\underline{1/2/3P}] \leftarrow \frac{\text{value}}{\text{Agree}} \blacktriangleright [u\pi:val]$

In (37a), the $[i\pi]$ feature on IO has not been valued parasitically on $[\Gamma]$ for the reasons discussed above. That makes it an active Probe. As IO's unvalued $[i\pi]$ does not c-command an eligible matching Goal in its base-position, it must move to Spec$v$P, where v hosts a matching valued $[u\pi]$. After that, $[i\pi]$ probes and Agree is established, so it can be valued by the $[u\pi]$ in v. The unvalued $[i\pi]$ on DO also does not c-command a matching Goal in its in situ position, so it must move to Spec$v$P as well. It does so, as shown in (37b), by *tucking in* (Richards 1997; 2001) below IO, where it can successfully probe, enter Agree with $[u\pi]$ on v, and be valued. The reason why DO tucks in also follows from the current approach; as valuation occurs not via Spec-Head

but regular Agree, it obeys the same locality restrictions. So in order to be valued, DO must merge to a Spec closer to v than the Spec already occupied by IO. If DO were to move to a higher Spec, IO would be an intervener for Agree between DO and v.[32]

With (37) we have successfully derived the possibility of $1/2\text{P} \gg 2/1\text{P}$ combinations, which are grammatical with the WEAK PCC. There is just one configuration that still remains to be ruled out, namely $*3\text{P} \gg 1/2\text{P}$ — recall that Anagnostopoulou (2005) also needs a special matching condition to exclude it. In the current system of valuation we need a mechanism that captures the descriptive generalization in (38).

(38)   A [F:*val*] feature on X^0 can value the [F:__] of α and β in specifiers of XP iff valuation results in non-conflicting values of [F] on α and β.

In (38) I use the notion of non-conflicting values assumed also by Anagnostopoulou (2005), who invokes it to constrain Multiple Agree. But the question is what constitutes a set of conflicting $[\pi]$ values, and what it follows from. A possible answer is available with privative approaches to φ-features, which decompose $[\pi]$ (Harley and Ritter 2002, McGinnis 2005, Béjar and Řezáč 2009); such a system is given in Table 2.

Table 2 A sketch of a privative $[\pi]$ feature value system

1st person (1P)		2nd person (2P)	3rd person (3P)
$[\pi]$		$[\pi]$	$[\pi]$
[PARTICIPANT]	(= [PART])	[PARTICIPANT]	
[AUTHOR]	(= [AUTH])		

Valuation within such a privative system corresponds to the copying/sharing of the atomic [PART] and [AUTH] features under Agree between an unvalued $[\pi]$-Probe and a valued $[\pi]$-Goal. Multiple Probes in an Agree relation with the same Goal both acquire any atomic $[\pi]$ features the Goal has. For example, since v can either have or not have a [PART] feature as part of its $[\pi]$ set, if two Probes stand in an Agree relation with it, v cannot share [PART] with just one of its Specs (making it 1/2P) and withhold it from the other (making it 3P). As a consequence, all *pro*$_{\text{DF}}$ in Spec$v$Ps (and in an Agree relation with v) will be valued as 1/2P if the valued [uπ] on v is specified for [PART], while if the v's [uπ] lacks [PART] they will all be restricted to 3P.

Of course, a 1P value is composed of both [PART] and [AUTH] (see Table 2). But the PCC is at its core a restriction on the distribution of [PART], and within such a privative $[\pi]$ system, [AUTH] is dependent on [PART]. The [PART] atom is a prerequisite for [AUTH], so if the [iπ] of a *pro*$_{\text{DF}}$ already lacks [PART] it cannot be valued for [AUTH]. Consequently (pending the discussion of some 1P vs. 2P asymmetries below), limiting the discussion to the distribution of [PART] will suffice for the issue at hand.

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[32] A reviewer asks what prevents the unvalued [iπ] on DO from being valued by [iπ] on IO. I follow the standard assumption that direct Agree between arguments does not occur. This is a necessary stipulation in any approach that posits unvalued features on arguments, though it may be possible to derive it with a modified version of Kratzer's (2009) approach to binding. Thus, in Wurmbrand's (2017) approach, binding corresponds to direct Agree between NPs/DPs and pronouns. The complementary distribution of agreement and binding (cf. Anaphor Agreement Effect; see above) then results from the former corresponding to Agree between a functional head and an argument and the latter to Agree between arguments themselves. I leave it for future work to explore the consequences of this for the overall approach to the PCC presented here.

As we will see, this feature system derives (38) as a consequence of the timing of syntactic operations (movement and valuation) in conjunction with the special nature of valued uninterpretable features. Because valuation is obligatory whenever the conditions for it are met, combinations of two 1/2P clitics are derivable through valuation in Spec$v$Ps whenever v hosts a [PART] feature, as in (39a). Crucially, valuation cannot be withheld in this configuration of pro_{DF} and v, which means that neither of the clitics can end up as 3P here: (39b) and (39c) are impossible derivations because valuation is withheld for one of the Spec$v$Ps, and (39d) because it is withheld for both Spec$v$Ps.

(39) a. ✓ [$_{vP}$ pro_{DF1} [pro_{DF2} [v c. ✗ [$_{vP}$ pro_{DF1} [pro_{DF2} [v
              [iPART]   [iPART]   [uPART]   [i∅]   [iPART]   [uPART]

      b. ✗ [$_{vP}$ pro_{DF1} [pro_{DF2} [v d. ✗ [$_{vP}$ pro_{DF1} [pro_{DF2} [v
              [iPART]   [i∅]   [uPART]   [i∅]   [i∅]   [uPART]

The open question is, how can 1/2P ≫ 3P combinations be derived? Recall that these are the combinations where in Anagnostopoulou's (2005) system Multiple Agree must not apply; instead regular Agree takes place with only the higher clitic.

In the current system, such combinations can be derived due to the special status of valued uninterpretable features. The issue here is what happens to uninterpretable features when they enter Agree/get checked (cf. Chomsky 1995). While generally such features are assumed to be deleted right after checking, Bošković (1999) notes that some uninterpretable features must remain accessible even after checking (they are not deleted right after checking; cf. in this respect the relevant feature on interrogative C in multiple wh-fronting languages like Bulgarian). I propose that valued uninterpretable features specifically are special with respect to checking and deletion: they <u>can</u> be, but <u>need not</u> be, deleted right after Agree (see also Bošković 2011a regarding the special status of valued uninterpretable features in this respect). The latter option, where they remain accessible for further checking, is what we saw in (39a) with 1/2P ≫ 2/1P clitic combinations, where [uπ] must be accessible to both pro_{DF}. The former option, on the other hand, is what derives 1/2P ≫ 3P clitic combinations.

The derivation yielding 1/2P ≫ 3P is given in (40). After pro_{DF1} moves to Spec$v$P and is valued by v's [uπ], the [uπ] is checked and deleted (40a). This means that when pro_{DF2} also moves to Spec$v$P to be valued, v no longer hosts a matching valued [uπ], and pro_{DF2} can therefore only get a default 3P value as last resort (40b).

(40) a. [$_{vP}$ pro_{DF1} [v [… t$_1$ … pro_{DF2} …]]]
              [iPART]   [~~uPART~~]   [i____]

      b. [$_{vP}$ pro_{DF1} [pro_{DF2} [v [… t$_1$ … t$_2$ …]]]]
              [iPART]   [i∅]   [ ]

The unattested *3P ≫ 1/2P combinations are thus underivable because getting a default 3P value is allowed only as last resort and because multiple pro_{DF} movement to Spec$v$P occurs in a set order: the higher pro_{DF} first, followed by the lower pro_{DF}. The movement of pro_{DF} is then driven purely by [π]-valuation in WEAK PCC languages. Whenever a pro_{DF} <u>can</u> receive a [π] value via Agree, it <u>must</u> probe (hence move to probe). The fact that in (40) checking/deletion of [uπ] on v effectively "bleeds" [π]-valuation of pro_{DF2} does not change that. From the perspective of pro_{DF2} in situ, the movement to Spec$v$P

is blind with respect to whether there is a valued [uπ] on v; there is no "lookahead" with valuation-driven movement of this kind (see also Bošković 2007).[33]

To reiterate, the full WEAK PCC pattern arises due to the options available for the [π]-valuation of two pro_{DF} in Spec$v$P: **(i)** 1/2P $\gg$ 2/1P arises when v hosts [PART] (and [AUTH]; see next section) and v's [uπ] is not deleted after valuing the first pro_{DF} (cf. (39)), **(ii)** 1/2P $\gg$ 3P arises when v hosts [PART] (and optionally [AUTH]) and v's [uπ] is deleted after valuing the first pro_{DF} (cf. (40)), and finally **(iii)** 3P $\gg$ 3P arises when the [uπ] on v is bare (i.e. it has neither [PART] nor [AUTH]). The higher of the two pro_{DF} can only be 3P when v's [uπ] is bare, in which case the lower pro_{DF} must also be 3P, as it has no other source of valued [uπ] in vP. This captures the descriptive generalization of WEAK PCC: "*If the* IO *is* 3P*, the* DO *is also* 3P".

Notice that the derivation does not reference Case in any way and that the IO and DO have equal status. This means the REVERSE version of the WEAK PCC is derivable according to the same mechanism as the REVERSE STRONG PCC: DO-over-IO movement before v merges into the structure. The derivation is given in (41).

(41)   a. $[_{vP}$ $\boxed{\text{DO}}$ v $[_{ApplP}$ t$_{\text{DO}}$ [$\boxed{\text{IO}}$ Appl $[_{VP}$ V t$_{\text{DO}}$]]]]
            [iπ:<u>1/2/3P</u>] $\leftarrow \frac{\text{value}}{\text{Agree}} \blacktriangleright$ [uπ:*val*]   [iπ:___]

      b. $[_{vP}$ $\boxed{\text{DO}}$ [$\boxed{\text{IO}}$ v $[_{ApplP}$ t$_{\text{DO}}$ [t$_{\text{IO}}$ Appl $[_{VP}$ t$_{\text{DO}}$]]]
            [iπ:<u>1/2/3P</u>] [iπ:<u>1/2/3P</u>] $\leftarrow \frac{\text{value}}{\text{Agree}} \blacktriangleright$ [uπ:*val*]

Just like before, the DO-over-IO movement reverses the roles of IO and DO. The DO (a pro_{DF}) needs to probe due to its unvalued [iπ] feature, but like the IO in (37), it cannot be valued by v in situ. It therefore moves to Spec$v$P, where v hosts the matching valued [uπ]. Under Agree, the DO's [iπ] is valued (41a). After this, IO must also move to Spec$v$P, tucking in under DO where it can successfully probe v, and gets valued via Agree with its [uπ] for a value which does not conflict with the value that was given to DO's [iπ] (41b) (see discussion above for the implementation).

This subsection showed that both the canonical and the corresponding REVERSE WEAK PCC can be derived within the current approach to the PCC. Again, Case valuation does not feature in the derivation, which is a prerequisite for deriving any REVERSE PCC pattern. Also, the STRONG/WEAK PCC variation was derived lexically, by treating the pro_{DF} in WEAK PCC systems as a (minimally) distinct lexical entry.

4.1.4 1P *vs.* 2P *asymmetries*

The derivation in (41) gives us the REVERSE WEAK PCC, and predicts the restrictions with DO » IO should be fully symmetric with the DO » IO restrictions. This is very close to the actual pattern, however the two are not entirely symmetric for Slovenian WEAK

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[33] A reviewer asks what prevents pro_{DF2} from raising to Spec$v$P and be valued in STRONG PCC derivations. In canonical PCC languages this would mean DO-over-IO movement prior to valuation, which must be independently blocked in such languages anyway or there would be no variation between them and languages with the REVERSE PCC. In languages like Slovenian, on the other hand, this alternative is blocked because DO-over-IO movement occurs as early as possible — before v has merged. The existence of a derivation where DO is valued by moving above IO early blocks an alternative one where DO waits until v has merged. The non-existence of the alternative derivation thus follows from *earliness* and the cyclicity of derivations.

PCC speakers (see footnote 6), for whom 2P.DO » 1P.IO is possible but *1P.DO » 2P.IO is not (see Table 3 below). There is a 1P versus 2P asymmetry on top of the WEAK PCC. The rest of the pattern conforms to the predictions of the derivations in (37,41).

Table 3 Predicted and actual clitic combinations with the DO » IO order in Slovenian

PREDICTED:	3P.DO	»	3P.IO	1/2P.DO	»	3P.IO	*3P.DO	»	1/2P.IO
	1P.DO	»	2P.IO	2P.DO	»	1P.IO			
ACTUAL:	3P.DO	»	3P.IO	1/2P.DO	»	3P.IO	*3P.DO	»	1/2P.IO
	*1P.DO	»	2P.IO	2P.DO	»	1P.IO			

However, there is good independent evidence that the extra asymmetry is independent from the restriction on [PART] valuation that is at the core of the PCC. Such 1P/2P asymmetries can in fact easily be found independently of STRONG or WEAK PCC. In Bosnian/Croatian/Serbian (B/C/S), there is no STRONG or WEAK PCC restriction (Migdalski 2006) and object clitics have a rigid IO » DO order. However, B/C/S speakers allow 1P.IO ≫ 2P.DO combinations, shown in (42a), but still not *2P.IO ≫ 1P.DO, shown in (42b).[34] So although B/C/S does not restrict 1P and 2P clitics as a class, it does show an asymmetry between 1P and 2/3P clitics, as evidenced also by (43).

(42)   a.   Toplo **mi te** preporučuje.   1.IO – 2.DO
                     warmly 1.DAT 2.ACC recommend.3
                     'He warmly recommends you to me.'

           b.   ??(*)Toplo **ti me** preporučuje.   *2.IO – 1.DO
                     warmly 2.DAT 1.ACC recommend.3
                     'He warmly recommends me to you.'

(43)   a.   Toplo **mu te** preporučujem.   3.IO – 2.DO
                     warmly 3.M.DAT 2.ACC recommend.1
                     'I warmly recommend you to him.'

           b.   ??(*)Toplo **mu me** preporučuje.   *3.IO – 1.DO
                     warmly 3.M.DAT 1.ACC recommend.3
                     'He warmly recommends me to him.'   (B/C/S; Runić 2013)

This provides evidence that restrictions on [AUTH] can be independent of restrictions on [PART], which I argued above is at the core of the PCC (i.e. the failure of [PART] valuation by *v*). It should be noted that 1P/2P asymmetries are treated by some as distinct PCC patterns. B/C/S corresponds to Nevins' (2007) ME-FIRST PCC, which he derives through relativized probing by a single Probe. However, the Slovenian 1P/2P asymmetry is inconsistent with such an approach, as it would incorrectly predict either: **(a)** both 2P.IO » 1P.DO and *1P.DO » 2P.IO to be ungrammatical (if only the base IO ≫ DO configuration is relevant), or **(b)** both 1P.IO » 2P.DO and *1P.DO » 2P.IO to be ungrammatical (if only the serialization of clitics is relevant). Furthermore, the ungrammaticality of *1P.DO » 2P.IO but not 2P.DO » 1P.IO in Slovenian actually constitutes a type of "YOU-FIRST" pattern, as the 2P clitic must appear before/above the 1P one, and Nevins (2007) shows that such patterns are not derivable in his system.

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[34] Interestingly, some speakers I consulted actually judge DO » IO clitic orders as slightly improved when the IO » DO clitic order would result in a banned combination such as *2P.IO » 1P.DO.

I suggest below that the Slovenian 1P vs. 2P asymmetry does not arise from person valuation, but that nonetheless [AUTH] valuation can be constrained independently of [PART] valuation with other kinds of 1P vs. 2P asymmetries. But before this can be discussed, we need to see how [AUTH] valuation works in the current system.

I propose that valuation of [PART] and [AUTH] is cyclic in that the former must always precede the latter due to a dependency relation: [AUTH] does not occur in the absence of [PART] (see Table 2). Then, after Agree occurs between a $[\pi]$-Probe and a $[\pi]$-Goal, [PART] is copied first, followed by [AUTH]. So, when multiple Probes are in an Agree relation with one Goal, as with WEAK PCC, all Probes must get [PART] before [AUTH] can be copied. Such a derivation is illustrated in (44,45).

(44) a. $[_{vP} \, pro_{DF1} \, [\quad v \quad [\ldots t_1 \ldots pro_{DF2} \ldots]]$ [PART]-copy #1
      [iPART]   [uPART]   [i____]
      [i____]   [uAUTH]   [i____]

    b. $[_{vP} \, pro_{DF1} \, [\, pro_{DF2} \, [\quad v \quad [\ldots t_1 \ldots t_2 \ldots]]$ [PART]-copy #2
      [iPART]   [iPART] [uPART]
      [i____]   [i____] [uAUTH]

(45) a. $[_{vP} \, pro_{DF1} \, [\, pro_{DF2} \, [\quad v \quad [\ldots t_1 \ldots t_2 \ldots]]$ 1P ≫ 2P
      [iPART]   [iPART] [uPART]
      [iAUTH]   [i∅]   [uAUTH]

    b. $[_{vP} \, pro_{DF1} \, [\, pro_{DF2} \, [\quad v \quad [\ldots t_1 \ldots t_2 \ldots]]$ 2P ≫ 1P
      [iPART]   [iPART] [uPART]
      [i∅]   [iAUTH] [uAUTH]

After both pronouns have moved to Spec$v$Ps, establishing Agree with v and receiving [PART], as shown in (44), v may copy [AUTH] to either pro_{DF1} (45a) or pro_{DF2} (45b). This is possible since both already stand in an Agree relation to v. Copying [AUTH] to both is presumably blocked to avoid a Condition B violation (see also (28) above).

This, however, does not capture the *1P.DO » 2P.IO ban in Slovenian, which I suggest may be related to a restriction found in Japanese with the IO-empathy form of 'give', *'kure-ru'*. In Japanese, which does not show PCC effects, *'kure-ru'* (as opposed to the subject-empathy *'yar-u'*) must be used when the IO is 1P, mirroring the only grammatical combination of 1P and 2P clitics with DO » IO in Slovenian. Following Kuno (1987), this restriction on *'kure-ru'*, a verb expressing empathy with the IO, follows from 1P being ranked highest in the *empathy hierarchy*. Charnavel and Mateu (2015) independently argue that *clitic empathy loci* (IO clitics) as well as *discourse participant clitics* (1/2P clitics) are licensed via a local relation with a logophoric operator in the left periphery. Thus, the licensing of two 1/2P clitics is blocked as both cannot be local to the operator.[35] But such sequences are allowed in WEAK PCC languages, so I suggest a backup strategy must be used then. Namely, if both clitics in a DOC are 1/2P, then: **(i)** only IO (empathy locus) must be local to the operator (satisfied with IO » DO), and **(ii)** if the former is not satisfied, IO must be 1P, because 1P ranks highest in the empathy hierarchy. This correctly excludes only *1P.DO » 2P.IO. Note

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[35] Charnavel and Mateu (2015) argue that the PCC should in fact be reduced to this restriction — the IO clitic intervenes between the operator and the 1/2P clitic. But this excludes both the WEAK PCC and the REVERSE PCC, which shows the PCC should not simply be reduced to logophoric licensing.

also that (ii) would not be required if not for the DO-over-IO clitic movement, which may be why this particular asymmetry is observed in Slovenian.

There is further evidence that this Slovenian asymmetry is not a sub-type of the PCC, and most likely related to the licensing of perspective or empathy loci. Crucially, the pattern of the 1P/2P asymmetry changes in questions, as shown in (46,47).

(46) a. **Ti   me**   je pokazal?   (47) a. ***Mi   te**   je pokazal?
         2.DAT 1.ACC is shown.M   1.DAT 2.ACC is shown.M

      b. ***Me ti**   je pokazal?   b. **Te   mi**   je pokazal?
         1.ACC 2.DAT is shown.M   2.ACC 1.DAT is shown.M
         'Has he shown me to you?'   'Has he shown you to me?'

In polar questions, both IO » DO (46a,47a) and DO » IO (46b,47b) clusters are restricted to 2P » 1P. Such declarative/interrogative shifts with 1P or 2P restrictions are not limited to Slovenian, as the restrictions on Japanese *'kure-ru'* crucially also change in questions. Another case of this is found in *conjunct-disjunct marking* languages (Pearson 2012, Wechsler 2017), where a special conjunct verbal paradigm is used with 1P subjects in declaratives, but 2P subjects in questions, showing a declarative/interrogative shift. Such 1P/2P asymmetries, unlike the PCC, all appear to be sensitive to the perspective shift between declarative and interrogative clauses. So although a full account of the Slovenian 1P/2P asymmetry goes beyond the scope of this paper, its interaction with the declarative/interrogative shift further shows that it is independent from the PCC, which results solely from restrictions on feature valuation.

In spite of this, I do not exclude the possibility that there exist true syntactic restrictions on [AUTH] valuation. In fact, Franks (2016) argues for such an account of the B/C/S restriction based on a proposal in an earlier version of this paper. Another case is the Catalan 2P » 1P clitic ordering restriction (see (5)) which acts in parallel to the WEAK PCC. Under most analyses (also Nevins 2007; 2011) it must be treated as an arbitrary restriction on clitics, but in the current approach it can be derived as a syntactic restriction on person valuation — by assuming that, in Catalan, [AUTH] (but not [PART]) valuation is delayed until either IO or DO moves from SpecvP to a head above v.[36] Due to the two possible structural configurations after [PART]-valuation in SpecvP, the clitic that remains in SpecvP will intervene for the delayed [AUTH]-valuation of the moved clitic, making *1P » 2P sequences underivable.

4.2 Lexico-structural variation in pronouns and how it interacts with the PCC

The basic strategy for voiding the PCC involves realizing at least one of the two objects of a banned combination as a strong pronoun (see Perlmutter 1971, Řezáč 2011). BR argue that this is due to the presence of an additional projection on top of strong pronouns which licenses 1/2P features via Agree between the pronoun and the head of the projection — assumed to be either a focus projection (FocP) or a PP.[37]

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[36] See also Ordóñez (2002) for a discussion of IO » DO and DO » IO clitic orders in Romance (including Catalan) in terms of whether both object clitics adjoin to the same head or to two distinct heads. In the current approach only the latter is predicted to result in intervention and blocked [PART/AUTH]-valuation.

[37] Anagnostopoulou (2003; 2005) alternatively argues that in such cases strong DO pronouns simply do not check their features against v, as they do not enter into a Move/Agree relation with v. This means

There are at least two empirical issues that arise from this view. The focus licenser analysis predicts that strong pronouns should always be focused, but this does not hold (Cardinaletti and Starke 1994; 1999), as strong pronouns can surface as both semantically and prosodically non-focused. Even if the added licenser is not focus, it is unclear why it should only be present with strong pronouns. I will argue here for an approach where the difference in person restrictions between strong and deficient pronouns actually follows from word-internal structural differences, roughly along the lines of Cardinaletti and Starke (1994; 1999), who observe a number of distributional, interpretational, and prosodic properties associated with different types of pronominal elements, which require a split into three classes: **(i)** clitic pronouns, **(ii)** weak pronouns, and **(iii)** strong pronouns. Generally, the PCC occurs only with so called deficient pronouns,[38] which Cardinaletti and Starke take to be structurally deficient; i.e. lacking a layer of projection that strong pronouns have (they show that as a result of this strong but not deficient pronouns can surface in A-positions, be coordinated, have their own semantic range, and they resist phonological reduction).

I capitalize here especially on the semantic split between strong and deficient pronouns, namely regarding what Cardinaletti and Starke call *range*. Strong pronouns always bear their own range-restriction, while deficient pronouns are incapable of bearing their own range restriction; they are either range-less or associated to the range of an element prominent in the discourse. Another way to implement Cardinaletti and Starke's notion of range deficiency is *referential deficiency*. In the current system, referential deficiency is associated with unvalued [iπ] features. I assume that D, which is restricted to non-deficient pronouns, has valued [iπ] features that make the pronoun fully referential. Like Cardinaletti and Starke, I propose there is a three-way structural split between pronouns, albeit with some differences in the implementation. The proposal is illustrated in (48), and elaborated on below (also w.r.t. D(π_{val}) in (48c)).

(48) a. <u>Clitic:</u>   b. <u>Weak:</u>   c. <u>Strong:</u>

                $\{\pi + \Gamma\}$ π π

          π_{uval} Γ_{val} π_{uval} Γ_{val} π_{uval} Γ

                                                              Γ_{val} D(π_{val})
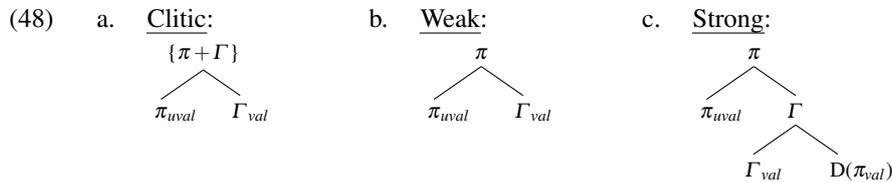
Both (48a) and (48b) lack D, but differ in terms of projection. Merging two heads presents an issue for the *Labeling Algorithm* (LA) of Chomsky (2013), where when X^0 and YP merge X^0 projects (determines the label), but when X^0 and Y^0 merge none can project. In Chomsky (2015), the latter can only occur when *roots* merge with category defining heads like v, in which case roots are too weak to project and v projects. But it has been observed, through cross-linguistic patterns of suppletion (Moskal 2015), that pronouns must lack both roots and category defining heads, in which case the internal

that Case-checking must not be a requirement for strong pronouns, see (Anagnostopoulou 2003:316–321). While this captures the facts, it is difficult to see why strong pronouns should be exempt from Case-checking, especially with cases like Slovenian where clitic and strong forms show the same case contrasts.

[38] One potential exception to this generalization is Icelandic, where strong NOM object pronouns are restricted to 3P in the presence of a DAT subject (Taraldsen 1995). However, as Schütze (2003) argues, there is evidence that this actually results from the ineffability of the agreement marker itself. I discuss the relevance of the difference between the PCC and this Icelandic person restriction in Stegovec (2016a).

structure of pronouns requires a non-trivial LA resolution. I therefore assume that the difference between clitic (48a) and weak pronouns (48b) lies in the strategy used to resolve the LA conflict caused by merging two heads: π and Γ.[39]

In the case of clitic pronouns (48a), both π and Γ project together, resulting in a head bundle, not unlike what was assumed about INFL before Pollock (1989), namely that it was a bundle of T and AGR. Consequently, clitics are not regular heads, which goes along nicely with Chomsky's (1995) conception of clitics as ambiguous XP/X^0 elements (see also Bošković 2002). With weak pronouns, the labeling conflict is alternatively resolved with π determining the label of the complex head (48b).

Strong pronouns (48c) differ from deficient pronouns in that they contain a referential D with a valued [iπ]. The valued [π] features on D serve as a pronoun-internal Goal for the unvalued [iπ] of the π head. This is the reason why strong pronouns do not show PCC effects; they do not require external valuation of their [iπ] features. I suggest that the valued status of [iπ] is a consequence of the referential status of D. Referentiality is inherently incompatible with underspecification of [π], as having a specific referent requires reference to a particular [π] feature value.

The structures in (48) also derive the lexical split I proposed above as the source of the STRONG/WEAK PCC variation. *Maximize Agree* (cf. (33); pg. 18) ensures that Agree between unvalued [uΓ] on v (which also hosts valued [uπ]) and a head with both valued [iΓ] and unvalued [iπ] will result in [Γ] and [π] valuation in the same cycle of Agree, yielding STRONG PCC. This in fact follows from the pronoun structure in (48a), where π and Γ are bundled and count as a single head. Compare now (48a) to (48b). In (48b), Agree between [uΓ] on v and [iΓ] on a pro_{DF} cannot result in the parasitic valuation of [π], as π and Γ are not bundled in (48b). The unvalued [iπ] on the pronoun must then function as a Probe, resulting in the movement of the pronoun to Spec$v$P, a position from where it c-commands the [uπ] of v, so it can be valued, which results in the derivation of the WEAK PCC proposed in Section 4.1.3.

This also explains Anagnostopoulou's (2008) generalization: WEAK PCC is the only PCC variant found in exclusively weak pronoun languages.[40] The structure for weak pronouns in (48b) can in fact only give rise to the WEAK PCC. On a more speculative note, there is also a more interesting possibility offered by this approach, namely that <u>all</u> languages which reportedly conform to WEAK PCC with clitics really lack true clitics and only have weak pronouns instead. Languages where speakers are transitioning from a clitic to an exclusively weak pronoun system might then be expected to display the sort of inter-speaker variation regarding STRONG and WEAK PCC reported in the literature. This kind of speaker micro-variation is also found in Slovenian, and, as noted above, Slovenian clitics display properties not found in other South-Slavic clitic systems. Bošković (2001) observes that Slovenian clitics are among other things: **(i)** losing the rigid 2nd position requirement in some environments, **(ii)** clitic clusters can be split by non-clitic material, **(iii)** can under certain conditions

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[39] The following, however, does not fully conform to Chomsky's (2013, 2015) conception of the LA.

[40] A reviewer suggests English as a potential counterexample, as it appears to have the STRONG PCC (Richards 2008). But it is not entirely clear that English deficient pronouns are not clitics. As Bošković (2004a) points out, at least pronouns that license quantifier float cannot be coordinated and must be unstressed ('*Mary hates you, him, and her all'; '*Mary hates THEM all' vs. 'Mary hates them all'), which are properties associated with clitics (see also Lasnik 1999 regarding clitic pronouns in English).

attach both to the right (enclisis) or the left edge (proclisis) of the same host, and **(iv)** even occur completely stranded. This relaxation of otherwise cross-linguistically very consistent requirements on clitics, which used to be present in Slovenian, may indicate that Slovenian clitics are being reanalyzed by some speakers as weak pronouns (cf. also Franks 2016), bringing along the WEAK PCC pattern. However, a closer examination of how much the presence of these idiosyncratic clitic-placement properties correlates with the presence of WEAK PCC will be left for future work.

The current proposal predicts that pronoun type correlates not only to whether the PCC is active or not (deficient vs. strong pronouns), but also to the type of the PCC pattern (clitic pro_{DF} = STRONG PCC; weak pro_{DF} = WEAK PCC). What remains to be discussed are languages with "true" object agreement, which have also been reported to show PCC restrictions. I return to discuss such languages briefly in Section 6.1.

4.3 Interim summary

I have argued for an analysis of the PCC which divorces it from Case. This move was necessary due to the existence of the REVERSE PCC. In this approach the PCC arises because deficient pronouns are underspecified for a $[\pi]$ value, and must receive their value externally from a functional head via Agree, or receive a default 3P value as last resort. As locality restrictions on Agree make the lower object clitic inaccessible for valuation, this clitic must always be 3P, resulting in STRONG PCC. The analysis also extends to the STRONG/WEAK PCC split, which can be derived as lexical variation. I argued that deficient pronouns in STRONG PCC languages act as Goals for Agree, while (due to a different internal structure) deficient pronouns in WEAK PCC languages act as Probes, hence need to move to SpecvP to be valued. Because multiple pronouns can move to SpecvP, the additional clitic combinations allowed with WEAK PCC can be derived. I have also proposed that the REVERSE PCC is possible in Slovenian simply because of optional DO-over-IO clitic movement before v enters the structure. In the next section, I discuss an additional asymmetry that arises with imperatives in Slovenian, and show that it provides more evidence for the syntactic object clitic reordering through its complex interaction with a post-syntactic one.

5 A PCC repair and what it tells us about the REVERSE PCC

Slovenian differs from canonical PCC languages in one more way. Namely, person restrictions are not observed in imperatives. Slovenian clitics appear post-verbally in imperatives to satisfy the 2nd position requirement. Interestingly, in this construction the order of clitics is not constrained by their person value, as (49,50) show (2P clitics are not found with imperatives in Slovenian; they are replaced by reflexive clitics).

(49) a. Predstavi **mu me**!
          introduce.IMP 3.M.DAT 1.ACC

      b. Predstavi **me mu**!
          introduce.IMP 1.ACC 3.M.DAT
          'Introduce me to him!'

(50) a. Predstavi **mi ga**!
          introduce.IMP 1.DAT 3.M.ACC

      b. Predstavi **ga mi**!
          introduce.IMP 3.M.ACC 1.DAT
          'Introduce him to me!'

There is also an additional complication, as Slovenian allows imperatives in reported speech. In such cases clitics are pre-verbal; embedded imperatives are introduced by the standard subordinating complementizer, which occupies the 1st clausal position in C, hence clitics must surface pre-verbally. Curiously, in this configuration clitics display the same person restrictions as those observed in declaratives (51,52).[41]

(51)	a.	*?Rekla je, da **mu** **me** predstavi.	*3.IO » 1.DO
		said is that 3.M.DAT 1.ACC introduce.IMP	
	b.	Rekla je, da **me** **mu** predstavi.	1.DO » 3.IO
		said is that 1.ACC 3.M.DAT introduce.IMP	
		'She said that you should introduce me to him!'	

(52)	a.	Rekla je, da **mi** **ga** predstavi.	1.IO » 3.DO
		said is that 1.DAT 3.M.ACC introduce.IMP	
	b.	*?Rekla je, da **ga** **mi** predstavi.	*3.DO » 1.IO
		said is that 3.M.ACC 1.DAT introduce.IMP	
		'She told you that you should introduce him to me!'	

In the following I give an account of these facts in a theory where clitics leave copies when they move. This allows pronunciation of their lower copies (see Bošković 2001), which will be the key in explaining the lack of PCC in matrix imperatives.

5.1 The case of the Greek clitic switch

Alternative serializations of object clitics can be restricted in some languages to specific constructions. One such case is Greek, where object clitics allow both IO » DO and DO » IO orders with imperatives (53), but not with finite clauses (54) (Warburton 1977, Joseph and Philippaki-Warburton 1987, Terzi 1999, Bošković 2004b).

(53)	a.	Diavase **mou to**!	(54)	a.	**Mou to** diavase.
		read.IMP 1.DAT 3.N.ACC			1.DAT 3.N.ACC read.3
	b.	Diavase **to mou**!		b.	***To mou** diavase.
		read.IMP 3.N.ACC 1.DAT			3.N.ACC 1.DAT read.3SG
		'Read it to me!'			'S/he is reading it to me.'
					(Greek; Bošković 2004b:291–293)

Bošković (2004b) analyses the Greek imperative clitic switch as a consequence of *lower copy pronunciation* (LCP) forced by an adjacency requirement between V and a functional head (Bobaljik 1995, Bošković 2001). Building on Miyoshi (2002), Bošković ties the Greek clitic switch to a particular analysis of the ban on negative imperatives. The ban is at its core a prohibition on negation occurring with a particular verb form. For example, in English, negation is banned with finite main verbs, as in (55a). In such cases, an infinitive verbal form with *Do-Support* must be used (55b).

| (55) | a. | *John not laughed. | b. | John did not laugh. |

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[41] The PCC violation is perceived as weaker than in declaratives in these cases (it is, however, much stronger with feminine 3P clitics; it is unclear why this is so).

Miyoshi's (2002) insight was to treat (55) and the ban on negative imperatives as the same phenomenon. In both, negation blocks *affix hopping/PF merger*.[42] The ban on negative imperatives then results from the imperative functional head F[43] requiring affixation to V under PF adjacency (*Stranded Affix Filter*). The presence of negation blocks *PF merger* of F and V, resulting in ungrammaticality (56a). The ban can be voided by using an infinitive, which does not require *PF merger* (cf. (55b) vs. (55b')).

(56) a. *Den/mi diavase!   b.   F [+affix]   *NEG   V
          NEG   read.IMP   b.'   [+IMP]   den/mi   diavázo.INF
          'Don't read!'   (Greek; Bošković 2004b:288)

This analysis allows a uniform syntax for declarative pre-verbal and imperative post-verbal clitics. In both cases, the head of the chain formed by clitic movement is in the same position (57a), which is the copy pronounced in declaratives (57b). However, the highest copy remains unpronounced in imperatives as the Stranded Affix Filter triggered by F forces LCP (57c). The algorithm for copy pronunciation used here is the one argued for by Bobaljik (1995), Franks (1998/2010), Bošković (2001), where the highest copy of a moved element is pronounced unless a PF violation is induced by such a pronunciation, in which case the next highest available copy is pronounced (see also Bošković and Nunes (2007) for an overview of arguments for this approach).

(57) a. $clitic_2$ V $clitic_1$ COPY/INTERNAL MERGE
      b. $clitic_2$ V   ~~$clitic_1$~~ $\Rightarrow$ *pre-verbal* (PF)
      c. [F=] ~~$clitic_2$~~ [=V] $clitic_1$ LCP $\Rightarrow$ *post-verbal* (PF)

But how does LCP derive the switch in Greek imperatives? For Bošković (2004b), clitics must left-adjoin to V when V moves to a position that c-commands them, and the two orders of object clitics in (53) result from an additional head movement step of the complex head $\{DO + V\}$ before IO is merged to it. When the LCP is triggered by imperative F, this results in the configuration shown in (58a). Conversely, the order preserving derivation involves an additional intermediate step where $\{DO + V\}$ moves to X^0 within XP and the order is preserved with LCP (58b). Crucially, this step is optional in Greek (see Bošković 2004b: for the details of the analysis).

(58) a. **F** [{ ~~IO~~ +{~~DO~~ **V** }} [{ [DO] ~~V~~ } [[IO] …
      b. **F** [{ ~~IO~~ { ~~DO~~ **V** }} { [IO] +{ [DO] ~~V~~ }} [$_{XP}$ {{ ~~DO V~~ }+X^0} [~~IO~~ …

As Greek displays the PCC, we can test how the switch interacts with it. (59) shows that unlike clitic reordering in Slovenian, the Greek clitic switch does not void the PCC. This is in fact compatible with the two clitic orders only emerging at PF.[44]

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[42] The account of the English ban is essentially Chomsky's (1957) analysis in terms of affix hopping. The analysis has been revived more recently, in particular by Halle and Marantz (1993), Bobaljik (1995).

[43] For Miyoshi (2002) the head is an imperative C. But as embedded imperatives do occur cross-linguistically with both overt C and imperative morphology (also in Slovenian), it seems more likely the head is a modal operator (see e.g. Kaufmann 2012) positioned somewhere above V and below C.

[44] Interestingly, Anagnostopoulou (2016) reports that with plural clitics, which are syncretic for DAT and ACC, the PCC goes away with the reversed DO » IO order (she compares this to a Swiss German paradigm; see Section 6.2). It would be interesting to see whether this can also be seen as a PF phenomenon, given the ambiguous IO » DO/DO » IO parse that results from the interaction of the clitic switch and case syncretism.

(59) a. *Sistis   **tu**   **me**!   b. *Sistis   **me** **tu**!
          introduce.IMP 3.M.DAT 1.ACC   introduce.IMP 1.ACC 3.M.DAT
          'Introduce me to him!'   'Introduce me to him!'

Bošković stipulates that IO cannot also adjoin to X^0 due to *"Dative Sickness"*, the cross-linguistic tendency of DAT-marked arguments to not tolerate feature checking with TP. In the following section I give a more general account of the delayed clitic movement, which is also explains why the PCC is voided in Slovenian matrix imperatives.

5.2 Interaction between the PCC and the PF clitic switch

Chomsky's (1995) claim about clitics being ambiguous XP/X^0 elements implies that clitics should be able to both XP-move and head-move. Then, if a clitic (CL) head-moves to a head X^0, it can only undergo further movement as part of the complex head $\{CL + X^0\}$. But as an XP/X^0 ambiguous element it should also be able to XP-move successive cyclically before head-adjoining to its final landing site. The latter is actually what I assumed in the derivations so far, and is illustrated for IO and DO clitics in (60). Heads move successive cyclically forming increasingly larger complex heads, while the clitics move like XPs to Spec*v*P to use it as an escape hatch on their way to their final landing site, since *v*P is a phase (Chomsky 2000; 2001).

(60) $[_{vP}$ IO$_1$ DO$_1$ $\{\{$ <u>V Appl</u> $\}$ $v\}$ $[_{ApplP}$ IO$_0$ $\{$ V $_{\circ}$ Appl $\}$ $[_{VP}$ V DO$_0$ $]]]$

So far, clitics were assumed to XP-move within *v*P in the derivation of the PCC, but crucially the option of head-movement inside of *v*P does not affect anything in the previous discussion. In the derivation of the Slovenian DOC imperative in (60), the IO clitic can only move to Spec*v*P (the phase edge) via XP-movement, while DO can move to *v* in two ways: **(i)** by left adjoining to the first asymmetrically c-commanding X^0 or complex head (in this case: $\{V + Appl\}$) and piggyback on it to *v* (61) (and higher), or **(ii)** XP-move to Spec*v*P directly (60). Crucially, with derivation (i), the head-movement must occur as early as possible, while with derivation (ii) the clitic head-adjoins only to its final landing site (I simply assume here this is T), as clitics must be part of a complex head in their final position. Both options still result in DO having to leave *v*P without being valued, hence spelling-out with a default 3P value.

(61) $[_{vP}$ IO$_1$ $\{\{$ DO$_2$ $\{$V Appl$\}\}$ $v\}$ $[_{ApplP}$ IO$_0$ $\{$<u>DO$_1$</u> $\{$ V $_{\circ}$ Appl $\}\}$ $[_{VP}$ V DO$_0$ $]]]$

The difference between the two options becomes relevant as the derivation continues. If the derivation began with (61), DO is then adjoined to $\{V + Appl\}$, and can only move further as part of the complex head, as in (62a). The IO must then head-adjoin to T directly from Spec*v*P, resulting in IO » DO. But if the derivation began with (60), the cyclic head movement of the verbal complex continues all the way to T, which is where IO and DO directly head-adjoin, resulting in the same IO » DO order as in (62b).

(62)   a.
$[_{TP} \{ \text{IO}_2 \{ \{ \text{DO}_4 \text{ V} \ldots v \} \text{ T} \} \} \; [_{AspP} \{ \{ \text{DO}_3 \text{ V} \ldots \} \circ \text{Asp} \} \; [_{vP} \text{ IO}_1 \{ \text{DO}_2 \text{ V} \ldots \} \} \ldots]]]$

b.
$[_{TP} \{ \text{IO}_2 \{ \text{DO}_2 \{ \{ \text{V} \ldots v \} \text{ T} \} \} \} \; [_{AspP} \{ \{ \text{V} \ldots \} \circ \text{Asp} \} \; [_{vP} \text{ IO}_1 \text{ DO}_1 \{ \text{V} \ldots \} \} \ldots]]]$

Both derivations yield the same final clitic order in the syntax, with two different patterns of intermediate IO and DO copies. The differences are only noticeable at PF when the imperative F forces LCP because the next highest IO and DO copies, which are pronounced when the highest cannot be, are different in (62a,b). As seen in (63a), the derivation in (62a) leads to a clitic switch at PF. The derivation in (62b), in contrast, results in the order of clitics being the same at PF, even after LCP, as (63b) shows.

(63)   a. $\mathbf{F} \, [_{TP} \{ \cancel{\text{IO}}_2 \; \cancel{\text{DO}}_4 \; \mathbf{V} \} \; [_{AspP} \{ \boxed{\text{DO}_3} \; \cancel{\text{V}} \} \; [_{vP} \boxed{\text{IO}_1} \{ \cancel{\text{DO}}_2 \; \cancel{\text{V}} \} [\ldots]]]]$
       b. $\mathbf{F} \, [_{TP} \{ \cancel{\text{IO}}_2 \; \cancel{\text{DO}}_2 \; \mathbf{V} \} \; [_{AspP} \{ \cancel{\text{V}} \} \; [_{vP} \boxed{\text{IO}_1} \; \boxed{\text{DO}_1} \{ \cancel{\text{V}} \} [\ldots]]]]$

The lack of PCC effects in matrix imperatives follows since the <u>syntactic</u> clitic reordering that is responsible for the REVERSE PCC results in <u>four</u> distinct copy configurations in a DOC. As (64,65) show, all four attested clitic combinations are derived via PF-switch[45] from the two combinations that are grammatical in syntax: 1P.IO $\gg$ 3P.DO in (64) and the syntactically derived (via DO-movement) 1P.DO $\gg$ 3P.IO in (65).

(64)   a. $\mathbf{F} \, [_{TP} \{ \cancel{\text{1.IO}}_2 \; \cancel{\text{3.DO}}_4 \mathbf{V} \} \; [_{AspP} \{ \boxed{\text{3.DO}_3} \; \cancel{\text{V}} \} \; [_{vP} \boxed{\text{1.IO}_1} \{ \cancel{\text{3.DO}}_2 \cancel{\text{V}} \} [\ldots]]]]$ [=(63a)]
       b. $\mathbf{F} \, [_{TP} \{ \cancel{\text{1.IO}}_2 \; \cancel{\text{3.DO}}_2 \mathbf{V} \} \; [_{AspP} \{ \cancel{\text{V}} \} \; [_{vP} \boxed{\text{1.IO}_1} \; \boxed{\text{3.DO}_1} \{ \cancel{\text{V}} \} [\ldots]]]]$ [=(63b)]

(65)   a. $\mathbf{F} \, [_{TP} \{ \cancel{\text{1.DO}}_3 \; \cancel{\text{3.IO}}_3 \mathbf{V} \} \; [_{AspP} \{ \boxed{\text{3.IO}_2} \; \cancel{\text{V}} \} \; [_{vP} \boxed{\text{1.DO}_2} \{ \cancel{\text{3.IO}}_1 \cancel{\text{V}} \} \; [_{ApplP} \cancel{\text{1.DO}}_1 \; \cancel{\text{3.IO}}_0 \; [\cancel{\text{V}} \; \cancel{\text{1.DO}}_0]]]]]$
       b. $\mathbf{F} \, [_{TP} \{ \cancel{\text{1.DO}}_3 \; \cancel{\text{3.IO}}_2 \mathbf{V} \} \; [_{AspP} \{ \cancel{\text{V}} \} \; [_{vP} \boxed{\text{1.DO}_2} \; \boxed{\text{3.IO}_1} \{ \cancel{\text{V}} \} \; [_{ApplP} \cancel{\text{1.DO}}_1 \; \cancel{\text{3.IO}}_0 \; [\cancel{\text{V}} \; \cancel{\text{1.DO}}_0]]]]]$

The PF-switch basically makes a grammatical syntactic sequence look like an ungrammatical one at PF, giving the appearance of the PCC being inactive. This leaves us with the last piece of the puzzle, which is explaining why the PCC is active in embedded imperatives. In embedded imperatives, additional clitic movement occurs to satisfy the 2nd clausal position requirement (Bošković 2001, Franks 1998/2010), as in (66): as the highest copy must be pronounced unless a PF factor interferes, the clitic copy that intervenes between F and V in (64,65) is anyway not pronounced here (not being the highest), therefore the Stranded Affix Filter is satisfied without LCP. As this additional movement is also order preserving, the order of clitics at PF will always match their vP-internal order. So, in this context, a PCC-compliant order at PF also always means a PCC-compliant clitic cluster in the syntax, as in (66a). Because there are no syntax-PF mismatches induced by LCP, the PF order in (66b) must also reflect the PCC-violating syntactic order and so the PCC is observed. The lack of LCP in embedded imperatives thus correctly derives the PCC asymmetry in Slovenian matrix/embedded imperatives.

(66)   a. $[_{CP} \mathbf{C} \{ \boxed{\text{1.IO}_3} \; \boxed{\text{3.DO}_5} \; \cancel{\text{V}} \} \; [\mathbf{F} \, [_{TP} \{ \cancel{\text{1.IO}}_2 \; \cancel{\text{3.DO}}_4 \mathbf{V} \} \; [_{AspP} \{ \cancel{\text{3.DO}}_3 \cancel{\text{V}} \} \; [_{vP} \cancel{\text{1.IO}}_1 \{ \cancel{\text{3.DO}}_2 \cancel{\text{V}} \} [\ldots]]]]]]$
       b. $*[_{CP} \mathbf{C} \{ \boxed{\text{3.IO}_3} \; \boxed{\text{1.DO}_3} \; \cancel{\text{V}} \} \; [\mathbf{F} \, [_{TP} \{ \cancel{\text{3.IO}}_2 \; \cancel{\text{1.DO}}_2 \mathbf{V} \} \; [_{AspP} \{ \cancel{\text{V}} \} \; [_{vP} \mathbf{*3.IO}_1 \; \mathbf{*1.DO}_1 \{ \cancel{\text{V}} \} [\ldots]]]]]]$

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[45] I use the term "PF-switch" only for sake of convenience. Notice that there is actually no PF reordering in this account. The mismatch in order between narrow syntax and PF results exclusively from LCP.

It is crucial for the current analysis that the option for clitics to head-adjoin early (or late) is not case-discriminating, as it is for Bošković (2004b). The descriptive generalization that holds for Slovenian is given below in (67).

(67)   If two clitics, CL_1 and CL_2, XP-move and head-move respectively, it is always the XP-moving CL_1 that asymmetrically c-commands the head-moving CL_2.

This generalization in fact follows from a specific view on syntactic linearization. The derivations in (68) provide all the logical combinations for clitic movement from vP to T, assuming clitics can either head-move or XP-move as long as a clitic head-adjoins either: **(i)** as soon as possible, or **(ii)** as late as possible (as proposed above).

(68)   a. $[_{TP}\{CL_1\{CL_2\{\{v \ldots\} T\}\}\} \ldots [_{vP} CL_1 CL_2\{v \ldots\} [\ldots]]]$

        b. $[_{TP}\{CL_1\{\{CL_2\{v \ldots\}\} T\}\} \ldots [_{vP} CL_1\{CL_2\{v \ldots\}\} [\ldots]]]$

        c. $[_{TP}\{\{CL_1\{CL_2\{v \ldots\}\}\} T\} \ldots [_{vP}\{CL_1\{CL_2\{v \ldots\}\}\} [\ldots]]]$

        d.   *$[_{TP}\{\underline{CL_2}\{\{CL_1\{v \ldots\}\} T\}\} \ldots [_{vP}\{CL_1\{v \ldots\}\} [\underline{CL_2} [\ldots]]]]$

The derivation where both clitics only head-adjoin to T after XP-moving to SpecvP (as late as possible) is given in (68a), the derivation in which only the lower clitic (CL_2) head-adjoins to the verbal complex within vP (as soon as possible) is shown in (68b),[46] and the derivation where both head-adjoin to the verbal complex within vP (as soon as possible) is given in (68c). These derivations are all attested and conform to what we have seen above. Only the derivation in (68d) must be ruled out.

    Note that in (68d), CL_1 head-adjoins to v to the exclusion of CL_2. As the derivation proceeds to the CP phase, CL_1 moves to T via successive cyclic head-movement, while CL_2 head-adjoins directly to T, resulting in a reverse order of clitics at the vP and CP phases. This is exactly the kind of reordering banned by Fox and Pesetsky's (2005) approach to linearization. For them, linearization is determined at the phase level: a linearization established at a phase XP cannot contradict a pre-existing one. Consequently, a linearization established at the vP phase cannot be contradicted at the CP phase. This is exactly what occurs in (68d), where the ordering of clitics at the CP level is CL_2 » CL_1, which conflicts with CL_1 » CL_2 at the vP level.

    The discussion in this section provided an explanation for the lack of PCC effects in Slovenian matrix imperatives, also providing additional motivation for syntactic DO-over-IO movement below v, as the absence of PCC effects can only be derived if the syntactic DO-over-IO movement and LCP act in concert. What seems at PF to be a cluster which should be banned with respect to the canonical PCC may then be a grammatical cluster with respect to the REVERSE PCC in the syntax, and vice versa. The take away message here is that the two types of optional reordering alone cannot void the person restriction. This is only possible when both coexist, and one can effectively undo the other. A similar kind of interaction will come into play again in the next section, where I review some of the implications of the current approach to the cross-linguistic distribution of the REVERSE PCC. Crucially, we will see that the options for clitic movement that can interact with person valuation are rather limited.

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[46] Tucking in can only occur when both moving elements are head-moving or XP-moving, never with disparate kinds of movement (see Anagnostopoulou 2003 for discussion). In short, since a SpecXP target always precedes an X^0 target, if one element head-moves to X^0 and the other element XP-moves to SpecXP, the latter will always precede the head-moved element regardless of the order in which they move.

6 Notes on cross-linguistic variation

6.1 A note on the PCC in "agreement languages"

The proposed analysis of the PCC is tied directly to clusters of pro_{DF}, deficient pronouns lexically unspecified for a $[\pi]$ value. The analysis in fact predicts that the PCC should only occur with deficient pronouns. However, some languages with object agreement have also been reported to show the PCC, where if both IO and DO agree with the verb, only the IO can be 1/2P (see Baker 2008). Crucially, object agreement markers in the relevant languages, henceforth agreement languages, generally behave differently from canonical agreement affixes.[47] This is the main intuition behind analyses of agreement languages in the vein of Jelinek (1984) or Baker (1988; 1996), where NPs/strong pronouns (traditionally agreement controllers) play only a peripheral role (as adjuncts) and the agreement markers adopt the functions traditionally attributed to arguments (cf. *Pronominal Argument Hypothesis*; Jelinek 1984). A straightforward way of accounting for this is to say that the object agreement markers are actually deficient pronouns.[48] This would not only explain why the markers behave more like arguments than traditional affixes, but also why they pattern with other deficient pronouns in relation to the PCC. A similar claim has also been made previously by Nevins (2011), who gives a morphological argument against treating the relevant markers as object agreement. He notes that PCC-sensitive markers never have tense-conditioned allomorphs (see also Arregi and Nevins 2012), but true agreement affixes often do, suggesting that the PCC does not occur with true agreement affixes.

The suggestion made here is that we should be open to the possibility that agreement languages are not homogeneous in terms of the status of object markers. Consider from this perspective a common pattern of object agreement in DOCs where the DO marker is not expressed in the presence of an IO marker at all. This is, for instance, the case in Itelmen (Bobaljik and Wurmbrand 2002) and Chukchi (Comrie 1979, Mel'čuk 1988) (both Chukotko-Kamchatkan). In Itelmen the non-marked object is unrestricted with respect to its person. But this is not the case in Chukchi, where it is reported that the non-marked object must always be 3P (STRONG PCC). If my analysis of the PCC is correct, this can be made to follow from Itelmen having true object agreement (with the DO-marker either being null or simply absent due to non-agreement) and Chukchi having object clitic-doubling (with pro_{DF} clitics), resulting in the same surface paradigm but an underlying difference in the possible person values the DO can have. If both involved agreement, it would be much harder to explain the split. Suppose that in both, the DO is simply not agreed with in DOCs, what should then cause the Chukchi DO to be person restricted while the Itelmen DO is not? Similarly, if both were null

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[47] We are dealing here with the thorny issue of distinguishing agreement affixes from clitics. This is a long standing issue that has received much attention again recently (see e.g. Preminger 2009 for a syntactic take and Nevins 2011 for a morphological one — see below), and one far too complex to be discussed here. It also needs to be stressed that the clitic/agreement distinction might be too coarse to begin with. For example, we know that clitic-doubling exists in different forms in different languages (obligatory, specificity/animacy based, etc.), and that agreement also exists in different forms (see discussion in Jelinek 1984, Baker 1988; 1996). The status of the relevant markers therefore must be established on a language by language basis.

[48] Or alternatively: that the agreement markers always license null deficient pronouns here (cf. Baker 1996). However, I choose the option without null-element licensing due to parsimony.

"abstract" agreement, there is again no clear reason why they should differ this way. In contrast, the agreement vs. *pro*$_{DF}$ split can capture this, and it might be that other differences between agreement languages may be explained in a similar way.

6.2 A note on the PCC and clitic order cross-linguistically

I argued above that Slovenian exhibits the REVERSE PCC because of the possibility of DO-over-IO clitic movement below *v*. The possibility of this kind of movement is reflected (except in matrix imperatives) by two distinct clitic linearizations: IO » DO (yielding the standard PCC) and DO » IO (yielding the REVERSE PCC). However, this does not mean that DO » IO clitic orders will always be derived through Slovenian style DO-movement. In fact, I will suggest that clitic movement can take place at different stages in the derivation, interacting (or not) in distinct ways with the PCC.[49]

The PCC was initially conceived specifically as a restriction on DO clitics in the presence of IO clitics, since in most languages clitic order does not interact with the constraint. This is reflected also in the early name for the constraint — *me lui*, where the banned French clitic cluster has a DO » IO order. DO » IO has been argued to be the default order in French, as it occurs when both clitics are 3P, as shown in (69).

(69) Paul **la**   **lui** présentera.   DO » IO
      Paul 3.F.DO 3.DAT will introduce
      'Paul will introduce her to him.'   (French; Kayne 1975:173)

But this DO » IO clearly does not have the same status as in Slovenian, as there is no REVERSE PCC in French. In fact, DO » IO is not found outside examples like (69). In grammatical combinations of 3P and 1/2P clitics, only IO » DO is possible, as in (70).

(70) a. Il { **me** / **te** } **l'**   envoya.   1/2.IO » 3.DO
          he   1.IO / 2.IO   3.M.DO sent.

      b. *Il **le**   { **m'** / **t'** } envoya.   *3.DO » 1/2.IO
          he 3.M.DO   1.IO / 2.IO   sent.
         'He sent him to me/you.'   (French; Nicol 2005:142–143)

Unlike in Slovenian, the DO » IO order in French is obligatory in nature. This is the only order possible with two 3P clitics, and furthermore a DO pronoun must be a clitic whenever the IO is a clitic (Kayne 1975:174). Crucially, there are also languages with DO » IO across the whole DOC paradigm that only have the canonical PCC. This is, for instance, the pattern with object markers in Sambaa (Bantu) (Riedel 2009). I suggest that such patterns (as well as the French "restricted" DO » IO order) arise with the reordering of IO and DO <u>after</u> their [π]-valuation takes place.

This kind of relationship between object clitic order and the PCC appears to be the most common cross-linguistically, but yet the REVERSE PCC is not just a quirk of Slovenian. Recall that in Chukchi only one object is overtly doubled in DOCs. The doubled object may in fact be either the IO or the DO, restricting the other one to 3P (Comrie 1979, Mel'čuk 1988). Chukchi thus has both a canonical and REVERSE

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[49] For ease of exposition the term "clitic" encompasses all deficient pronouns and pronominal markers.

PCC: DO must be 3P when IO is marked (canonical PCC), and IO must be 3P when DO is marked (REVERSE PCC). In the current system this means that there must be two pro_{DF} underlyingly (the structurally higher one is overt and the lower one null), and the REVERSE PCC results from Slovenian style DO-over-IO clitic movement.

Another interesting case of the canonical/REVERSE alternation is found in Maasai (Eastern Nilotic) (Lamoureaux 2004:19–20), where object marking may consist only of inverse markers. These are often ambiguous for different argument combinations, which can lead to subject/IO ambiguity, as in (71a), or IO/DO ambiguity, as in (71b).

(71) a. **kɨ́**-ishɔ́   ɛn-kɨ́tɛ́ŋ   b. **kɨ́**-ishɔ(r)   ɔl-payían
         3>2.SG/2>1.SG-give F-cow.ACC   3>2.SG-give M-man.ACC
         'They will give you_{sg} a cow.'   'They will give you_{sg} the man.'
         'You will give me a cow.'   'They will give the man you_{sg}.'

Whenever IO is registered by the inverse marker, DO must be 3P (canonical PCC), and likewise when DO is registered, IO must be 3P (REVERSE PCC). This can be captured in the current system by assuming that both pro_{DF} in the DOC can be silent, but that they also allow reordering prior to [π]-valuation like in Slovenian.

We also find languages, other than Slovenian, where the REVERSE PCC is found with two overt markers. An interesting example is Haya (Bantu) (Duranti 1979:40), where the default order of markers is DO » IO (like in Sambaa; see above), which may be reanalyzed as IO » DO if the objects are interpreted as a 3P.IO and a 1/2P.DO, a combination banned by the canonical PCC. In (72), we see that Haya is a mirror picture of Slovenian; the first marker is person restricted, whether it marks the DO or IO.[50]

(72) a. A- ka- **mu- n**deetela.   b. *A- ka- **n- mu-** leetela.
         SM.C1 PAST.3 OM.C1 OM.1.bring.APPL   SM.C1 PAST.3 OM.1 OM.C1 bring.APPL
         'He brought him to me.'   int.: 'He brought him to me.'
         %'He brought me to him.'   or.: 'He brought me to him.'

A closer parallel to Slovenian is found in Czech (Sturgeon et al. 2012) and Zürich German (Werner 1999:81). In both languages two clitic orders are allowed (IO » DO and DO » IO), the choice being constrained by their person values. In (73), we see a PCC violating sequence banned with IO » DO (73a),[51] but possible with DO » IO (73b). The other side of the pattern is seen in (74). Here the IO » DO order is needed because of a 1P.IO and a 3P.DO (74a), while the DO » IO equivalent is banned (74b).

(73) a. ??De Max hät **em   mi**   voorgschtellt.   *3.IO » 1.DO
             the Max has 3.M.DAT 1.ACC introduced
      b. De Max hät **mi   em**   voorgschtellt.   1.DO » 3.IO
             the Max has 1.ACC 3.M.DAT introduced
             'Max has introduced me to him.'

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[50] A similar pattern is found in (standard) German. As Anagnostopoulou (2008:29) reports, WEAK PCC occurs with weak pronouns in the Wackernagel position of embedded clauses, but while their order is "[...] *DO-IO for most speakers,* [...] *speakers attempt to resort to the alternative IO-DO serialization in order to rescue combinations that would otherwise yield a PCC effect. Furthermore, when the IO and DO are both 1st and 2nd person* [...]*, speakers tend to accept the IO-DO serialization along with the DO-IO one.*"

[51] As far as I could gather, Werner (1999) uses '??' to mark unacceptability in (73a) because the speakers he consulted tend to replace the weak pronoun forms with strong ones to ameliorate the construction.

(74) a. … das d' **mer en**   halt morn   bringsch.   1.IO » 3.DO
          that 2.NOM 1.DAT 3.M.ACC PRTCL tomorrow bring

      b. *… das d' **en   mer** halt morn   bringsch.   *3.DO » 1.IO
          that 2.NOM 3.M.ACC 1.DAT PRTCL tomorrow bring

      '… that you just bring him to me tomorrow then.'

The difference between the Slovenian paradigm and the Zürich German/Czech paradigm
is only that when both objects are 3P the IO » DO/DO » IO alternation can occur in the
former paradigm but not in the latter. That aside, the pattern fits canonical PCC with
the IO » DO order (73a,74a) and REVERSE PCC with the DO » IO order (73b,74b).[52]

There is also another pattern reported for Swiss German (Bonet 1991:188, ftn. 12)
that appears to be a mix between PCC-insensitive reordering and the REVERSE PCC
yielding kind. I call this the MIXED PCC: a combination of weak pronoun 1P/2P.IO
and 3P.DO may appear either with an IO » DO or a DO » IO order, as in (75), whereas a
combination of a 3P.IO and a 1P/2P.DO is restricted to the DO » IO order, as in (76).

(75) a. D' Maria zeigt **mir en**.   (76) a. D' Maria zeigt **mi   em**.
          the Maria shows 1.DAT 3.M.ACC   the Maria shows 1.ACC 3.M.DAT

      b. D' Maria zeigt **en   mir**.   b. *D' Maria zeigt **em   mich**.
          the Maria shows 3.M.ACC 1.DAT   the Maria shows 3.M.DAT 1.ACC
          'Maria shows him to me.'   'Maria shows me to him.'

Interestingly, a small number of the consulted speakers of Slovenian also had sim-
ilar judgments to those in (75) and (76), which like the two patterns reported for
Swiss/Zürich German indicates that a minor parametric difference is at play here.

I would like to argue that the object order-PCC interactions just described exhaust
all the available options, and that they can all be derived in the current system by
varying only the timing of the reordering and whether the reordering is optional. Thus,
the French/Sambaa style PCC-insensitive DO-movement occurs after [π]-valuation
(hence lands above v), as in (77).[53] Because of when the DO-movement occurs, the
PCC pattern reflects the base order (cf. (77a)) and not the derived one (cf. (77b)).

(77) a. [$_{vP}$ v [IO] [$_{VP}$ DO]]]   base: IO » DO
      b. [$_{vP}$ DO [v [IO] [$_{VP}$ DO]]]]   post [π]-valuation: DO » IO

The second option is Slovenian style optional DO-movement, which results in two
possible orders of IO and DO prior to [π]-valuation (hence below v), shown in (78a)
and (78b). This yields the by now familiar canonical/REVERSE PCC alternation, which
we saw is also attested in Czech, Zürich German, Chukchi, and Maasai.

(78) a. [$_{vP}$ v [IO] [$_{VP}$ DO$_{\#1}$]]]   b. [$_{vP}$ v [DO$_{\#2}$] [IO] [$_{VP}$ DO]]]]

The Haya pattern then combines these options: it is the result a Slovenian style optional
reordering (78) feeding obligatory reordering of the French/Sambaa type (77). The
DO in-situ option (78a) feeds into DO-movement after [π]-valuation, as in (79a), while
DO-movement below v (78b) feeds into IO-movement after [π]-valuation, as in (79b).

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[52] From the data provided by Werner (1999) it is impossible to discern whether the restriction is STRONG
or WEAK or some other type of PCC. Czech conforms to WEAK PCC with an additional 1P » 2P restriction.

[53] Any sort of post-syntactic reordering of course also counts as taking place after [π]-valuation.

(79) a. $[_{vP}$ $\boxed{\text{DO}_{\#1}}$ $[$ v $[$ $\boxed{\text{IO}}$ $[_{VP}$ $\boxed{\text{DO}_{\#1}}$ $]]]]$ post $[\pi]$-valuation: DO » IO
      b. $[_{vP}$ $\boxed{\text{IO}}$ $[$ v $[$ $\boxed{\text{DO}_{\#2}}$ $[$ $\boxed{\text{IO}}$ $[_{VP}$ $\boxed{\text{DO}}$ $]]]]]$ post $[\pi]$-valuation: IO » DO

As the optional reordering takes place <u>before</u> and the obligatory reordering <u>after</u> $[\pi]$-valuation, the former interacts with the PCC and the latter does not. Therefore, the end result is the same canonical/REVERSE PCC alternation we find in Slovenian.

Finally, the MIXED PCC pattern of Swiss German also combines both Slovenian style reordering and French/Sambaa style reordering. However, unlike in French/Sambaa (cf. (77b)) and Haya (cf. (79a)), the reordering above v is also optional here. This means that there are three alternating IO/DO configurations: the base IO » DO in (80a), the Slovenian style DO » IO in (80b), and French/Sambaa style DO » IO in (80c).

(80) a. $[_{vP}$ v $[$ $\boxed{\text{IO}}$ $[_{VP}$ $\boxed{\text{DO}_{\#1}}$ $]]]$ base: IO » DO
      b. $[_{vP}$ v $[$ $\boxed{\text{DO}_{\#2}}$ $[$ $\boxed{\text{IO}}$ $[_{VP}$ $\boxed{\text{DO}}$ $]]]]$ pre $[\pi]$-valuation: DO » IO
      c. $[_{vP}$ $\boxed{\text{DO}_{\#3}}$ $[$ v $[$ $\boxed{\text{IO}}$ $[_{VP}$ $\boxed{\text{DO}}$ $]]]]$ post $[\pi]$-valuation: DO » IO

The consequence is that (80b), which occurs prior to $[\pi]$-valuation, yields the REVERSE PCC, while (80c), which occurs after $[\pi]$-valuation, yields the canonical PCC just like the base IO » DO order in (80a). There are thus two PCC patterns associated with the DO » IO order, and only one with the IO » DO order; as attested in (75,76).

Consider now all the logically possible IO/DO reordering options, given in Table 4 together with the PCC type they predict and the languages where they are attested.

Table 4 Possible options of object clitic reordering

Below v	Above v	PCC type	Languages
no	no	canonical	Greek
no	obligatory	canonical	French (3P+3P), Sambaa
no	optional	canonical	**unattested**
obligatory	no	REVERSE	**unattested**
obligatory	obligatory	REVERSE	**unattested**
obligatory	optional	REVERSE	**unattested**
optional	no	canonical + REVERSE	Slovenian, Czech, Zü. German, Chukchi, Maasai
optional	obligatory	canonical + REVERSE	Haya, German (standard; see ftn. 50)
optional	optional	MIXED	Swiss German, Slovenian (some speakers)

On a technical level, (77–80) show that all the attested options of object order-PCC interaction can be captured in the current approach by assuming a universal IO ≫ DO structure for DOCs and limited variation in clitic movement within the vP phase.[54] On the empirical side, what is interesting is that the REVERSE PCC is only attested in languages where reordering is optional. In other words, no language has obligatory REVERSE PCC, the REVERSE PCC always alternates with a parallel canonical PCC.[55] Recall from Section 4.1.1 that the REVERSE PCC yielding DO-over-IO clitic movement in Slovenian was likened to object scrambling. What the cross-linguistic distribution of

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[54] Within contextual approaches to phasehood (see, among others, Bobaljik and Wurmbrand 2005, Bošković 2014) this may also include (under right conditions) some projections immediately above vP.

[55] This holds for PCC-like restrictions with subject-object markers as well. There are languages with the equivalents of both canonical and REVERSE PCC (e.g. Kaqchikel; Preminger 2014), but there seem to be no languages with just a REVERSE restriction (i.e. a consistent person restriction on subjects of transitives).

the REVERSE PCC suggests is that this is the case universally: only optional DO-over-IO movement ever yields the REVERSE PCC. This makes the MIXED PCC very interesting, as it involves the only instance of optional IO/DO reordering above *v*. The interesting part is that no language only has this kind of optional reordering, it only exists in conjunction with the optional reordering below *v*. If optional IO/DO reordering above *v* existed in isolation, we would expect a canonical PCC and a free IO » DO/DO » IO alternation, an unattested pattern. Similarly, if obligatory IO/DO reordering below *v* were possible, we would expect the unattested obligatory REVERSE PCC.

The generalizations are then the following: **(i)** the REVERSE PCC can only result from optional DO-over-IO movement below *v*, and **(ii)** optional DO-over-IO movement above *v* is possible iff optional DO-over-IO movement below *v* is possible. The reason why the reordering of deficient object pronouns is constrained this way remains to be determined, but the generalizations stand, and the preliminary analysis presented here should offer a starting point in the search for what lies behind the generalizations.

7 Conclusion

I have presented a new analysis of the PCC that divorces it from case-based or similar asymmetries between object pronouns (contra Béjar and Řezáč 2003, Anagnostopoulou 2003). With special focus on Slovenian, I showed that this is necessary due to the existence of PCC patterns which alternate between the canonical and REVERSE PCC, where the person restriction crucially applies to the IO, not the DO, as it does with the canonical PCC. This pattern is not predicted by standard approaches. I proposed that the PCC arises because the relevant deficient pronouns are inherently unspecified for a person value and need to receive one externally from a functional head via Agree. The configuration of two deficient object pronouns then blocks the structurally lower one from receiving a person value, giving rise to the PCC. The difference between the Slovenian and the canonical PCC pattern is then due solely to the presence of optional syntactic DO-over-IO movement in Slovenian prior to person valuation.

Lastly, I discussed the implications of this approach for cross-linguistic variation regarding the PCC. The proposed analysis captures the STRONG/WEAK PCC split in terms of lexical variation in the structure of pronouns, and the predictions regarding the PCC with object agreement were also discussed. Perhaps the most interesting are are the implications concerning the REVERSE PCC cross-linguistically. The pattern is also found outside of Slovenian, but it occurs only under very specific conditions: the REVERSE PCC is always optional alongside the baseline PCC, therefore the DO-over-IO clitic movement that yields the REVERSE PCC must itself always be optional.

References

Adger, David, and Daniel Harbour. 2007. Syntax and syncretism of the Person Case Constraint. *Syntax* 10: 2–37.

Albizu, Pablo. 1997. The syntax of person agreement. PhD draft, USC, Los Angeles.

Anagnostopoulou, Elena. 1999. Person Restrictions. Paper presented at the 21st GLOW Colloquium, ZAS-Berlin, March 29, 1999. [*Glow Newsletter* 42: 12-13].

Anagnostopoulou, Elena. 2003. *The syntax of ditransitives: Evidence from clitics. Studies in generative grammar*. Berlin: De Gruyter.

Anagnostopoulou, Elena. 2005. Strong and weak person restrictions: A feature checking analysis. In *Clitic and affix combinations*, eds. L. Heggie and F. Ordóñez, 199–235. Amsterdam: John Benjamins.

Anagnostopoulou, Elena. 2008. Notes on the Person-Case Constraint in Germanic. In *Agreement restrictions*, eds. R. D'Alessandro, S. Fischer, and G. H. Hrafnbjargarson, 15–47. Berlin: De Gruyter.

Anagnostopoulou, Elena. 2016. The PCC, Word Order and Syncretism. Plenary talk at ConSOLE 24, University of York and York St. John University, January 7th, 2016.

Arregi, Karlos, and Andrew Nevins. 2012. *Morphotactics: Basque auxiliaries and the structure of spellout*. Dordrecht: Springer.

Baker, Mark C. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.

Baker, Mark C. 1996. *The polysynthesis parameter*. Oxford: Oxford University Press.

Baker, Mark C. 2008. *The syntax of agreement and concord*. Cambridge, UK: Cambridge University Press.

Béjar, Susana, and Milan Řezáč. 2003. Person licensing and the derivation of PCC effects. In *Romance linguistics: Theory and acquisition*, eds. A. T. Perez-Leroux and Y. Roberge, 49–62. Amsterdam: John Benjamins.

Béjar, Susana, and Milan Řezáč. 2009. Cyclic Agree. *Linguistic Inquiry* 40: 35–73.

Bhatt, Rajesh, and Radek Šimík. 2009. Variable binding and the Person-Case Constraint. Talk given at *IATL 25*. Ben Gurion, University of the Negev.

Bobaljik, Jonathan. 1995. Morphosyntax: The syntax of verbal inflection. PhD diss, MIT.

Bobaljik, Jonathan, and Susi Wurmbrand. 2002. Notes on agreement in Itelmen. *Linguistic Discovery* 1.

Bobaljik, Jonathan, and Susi Wurmbrand. 2005. The domain of agreement. *Natural Language & Linguistic Theory* 23 (4): 809–865.

Bonet, Eulalia. 1991. Morphology after syntax: Pronominal clitics in Romance languages. PhD diss, MIT.

Bonet, Eulalia. 1994. The Person-Case Constraint: A morphological approach. *MIT Working papers in Linguistics* 22: The Morphology-Syntax Connection: 33–52.

Bošković, Željko. 1999. On multiple feature checking: Multiple *Wh*-fronting and multiple head movement. In *Working minimalism*, eds. Samuel David Epstein and Norbert Hornstein, 159–187. Cambridge, MA: MIT Press. Chap. 7.

Bošković, Željko. 2001. *On the nature of the syntax-phonology interface: Cliticization and related phenomena*. Amsterdam: Elsevier.

Bošković, Željko. 2002. Clitics as non-branching elements and the linear correspondence axiom. *Linguistic Inquiry* 33 (2): 329–340.

Bošković, Željko. 2004a. Be careful where you float your quentifiers. *Natural Language & Linguistic Theory* 22 (4): 681–742.

Bošković, Željko. 2004b. On the clitic switch in Greek imperatives. In *Balkan syntax and semantics*, ed. O. M. Tomić, 269–291. Amsterdam: John Benjamins.

Bošković, Željko. 2007. On the locality and motivation of Move and Agree: An even more minimal theory. *Linguistic Inquiry* 38 (4): 589–644.

Bošković, Željko. 2009. Unifying first and last conjunct agreement. *Natural Language & Linguistic Theory* 27: 455–496.

Bošković, Željko. 2011a. On unvalued uninterpretable features. In *Proceedings of NELS 39*, eds. S. Lima, K. Mullin, and B. Smith, 109–120. Amherst, MA: GLSA.

Bošković, Željko. 2011b. Rescue by PF deletion, traces as (non)interveners, and the *That*-trace effect. *Linguistic Inquiry* 42: 1–44.

Bošković, Željko. 2014. Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45: 27–89.

Bošković, Željko, and Jairo Nunes. 2007. The copy theory of movement. In *The copy theory of movement*, eds. N. Corver and J. Nunes, 13–74. John Benjamins.

Cardinaletti, Anna. 2008. On different types of clitic clusters. In *The Bantu–Romance connection*, eds. C. De Cat and K. Demuth, 41–82. Amsterdam: John Benjamins.

Cardinaletti, Anna, and Michal Starke. 1994. The typology of structural deficiency: On the three grammatical classes. *Working Papers in Linguistics* 4 (2): 41–109. University of Venice.

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*, 145–233. New York: Mouton de Gruyter.

Charnavel, Isabelle, and Victoria Mateu. 2015. The clitic binding restriction revisited: Evidence for antilogophoricity. *The Linguistic Review* 32 (4): 671–701.

Chomsky, Noam. 1957. *Syntactic structures*. The Hague: Mouton.

Chomsky, Noam. 1995. *The minimalist program*. Cambridge: MIT Press.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on minimalism in honor of Howard Lasnik*, eds. R. Martin, D. Michaels, and J. Uriagereka, 89–155. Cambridge: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. M. Kenstowicz, 1–52. Cambridge: MIT Press.

Chomsky, Noam. 2013. Problems of projection. *Lingua* 130 (0): 33–49.

Chomsky, Noam. 2015. Problems of projection: Extensions. In *Structures, strategies and beyond: Studies in honor of Adriana Belletti*, eds. Elisa Di Domenico, Cornelia Hamann, and Simona Matteini, 1–16. Amsterdam: John Benjamins.

Ciucivara, Oana Săvescu. 2009. A syntactic analysis of pronominal clitic clusters in Romance: The view from Romanian. PhD diss, NYU.

Ciucivara, Oana Săvescu, and Andrew Nevins. 2008. An apparent Number Case Constraint in Romanian: The role of syncretism. In *Proceedings of the 38th LSRL*, eds. K. Arregi, Z. Fagyal, and S. Montrul, 185–203. John Benjamins.

Comrie, Bernard. 1979. The animacy hierarchy in Chukchee. In *The elements: A parasession on linguistic units and levels*, eds. P. R. Clyne, W. F. Hanks, and C. L. Hofbauer, 322–329. Chicago: Chicago Linguistic Society.

Duranti, Alessandro. 1979. Object clitic pronouns and the topicality hierarchy. *Studies in African Linguistics* 10: 31–45.

Erschler, David. 2014. Person Case Constraints beyond the Dative and Accusative: Evidence from Ossetic. Ms. Max Planck Institut/Tübinger Zentrum für Linguistik.

Fox, Danny, and David Pesetsky. 2005. Cyclic linearization of syntactic structure. *Theoretical Linguistics* 31: 235–262.

Franks, Steven. 1998/2010. Clitics in Slavic. Paper presented at the Comparative Slavic Morphosyntax Workshop, Spencer, Indiana. [Updated version published on-line in *Glossos 10: Contemporary Issues in Slavic Linguistics*].

Franks, Steven. 2016. Clitics are/become minimal(ist). In *Formal studies in Slovenian syntax. In honor of Janez Orešnik*, eds. Lanko Marušič and Rok Žaucer, 91–128. Amsterdam: John Benjamins.

Georgala, Effi. 2011. Applicatives in their structural and thematic function: A minimalist account of multitransitivity. PhD diss, Cornell Unversity.

Haegeman, Liliane, and Terje Lohndal. 2010. Negative concord and (Multiple) Agree: A case study of West Flemish. *Linguistic Inquiry* 41 (2): 181–211.

Hale, Kenneth Locke. 1959. A Papago grammar. PhD diss, Indiana University.

Hale, Kenneth Locke. 1973. Person marking in Walbiri. In *A festschrift for morris halle*, eds. S. R. Anderson and P. Kiparsky. New York: Holt, Rinehart and Winston.

Halle, Morris, and Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In *The view from Building 20*, eds. K. Hale and S. J. Keyser, 111–176. Cambridge: MIT Press.

Harley, Heidi, and Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78 (3): 482–526.

Hiraiwa, Ken. 2001. Multiple Agree and the defective intervention constraint in Japanese. *MIT working papers in linguistics* 40 (40): 67–80.

Hiraiwa, Ken. 2004. Dimensions of symmetry in syntax: Agreement and causal architecture. PhD diss, MIT.

Jelinek, Eloise. 1984. Empty categories, case, and configurationality. *Natural Language & Linguistic Theory* 2 (1): 39–76.

Joseph, Brian D., and Irene Philippaki-Warburton. 1987. *Modern Greek*. London: Croom Helm.

Kalin, Laura, and Coppe van Urk. 2015. Aspect splits without ergativity: Agreement asymmetries in Neo-Aramaic. *Natural Language & Linguistic Theory* 33 (2): 659–702.

Kaufmann, Magdalena. 2012. *Interpreting imperatives*. Berlin: Springer.

Kayne, Richard S. 1975. *French syntax*. Cambridge: MIT Press.

Kayne, Richard S. 1994. *The antisymmetry of syntax*. Vol. 25 of *Linguistic inquiry monographs*. Cambridge: MIT Press.

Kayne, Richard S. 2000. *Parameter and universals*. Oxford: Oxford University Press.

Kratzer, Angelika. 2009. Making a pronoun: Fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40 (2): 187–237.

Kuno, Susumu. 1987. *Functional syntax. anaphora, discourse and empathy*. Chicago: University of Chicago Press.

Lamoureaux, Siri van Dorn. 2004. Applicative Constructions in Maasai. MA Thesis.

Lasnik, Howard. 1999. Chains of arguments. In *Working minimalism*, eds. S. Epstein and N. Hornstein, 189–215. Cambridge, MA: MIT Press.

Marantz, Alec. 1993. Implications of asymmetries in double object constructions. In *Theoretical aspects of Bantu grammar 1*, ed. Sam A. Mchombo, 113–151. Stanford, CA: CSLI Publications.

Marvin, Tatjana, and Adrian Stegovec. 2012. On the syntax of ditransitive sentences in Slovenian. *Acta Linguistica Hungarica* 59 (1–2): 177–203.

McGinnis, Martha Jo. 2005. On markedness asymmetries in person and number. *Language* 81 (3): 699–718.

Mel'čuk, Igor. 1988. *Dependency syntax: Theory and practice*. Albany, NY: SUNY Press.

Messick, Troy. 2016. The morphosyntax of self-ascription: A cross-linguistic study. PhD diss, University of Connecticut.

Migdalski, Krzysztof. 2006. The syntax of compound tenses in Slavic. PhD diss, Tilburg University.

Miyoshi, Nobuhiro. 2002. Negative Imperatives and PF merger. Ms. UConn, Storrs.

Montalbetti, Mario. 1984. After binding: On the interpretation of pronouns. PhD diss, MIT.

Moskal, Beata. 2015. Domains at the border: between morphology and phonology. PhD diss, UConn.

Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. *Natural Language & Linguistic Theory* 25 (2): 273–313.

Nevins, Andrew. 2011. Multiple Agree with clitics: person complementarity vs. omnivorous number. *Natural Language & Linguistic Theory* 29 (4): 939–971.

Nicol, Fabrice. 2005. Romance clitic clusters: On diachronic changes and cross-linguistic contrasts. In *Clitic and affix combinations*, eds. L. Heggie and F. Ordóñez, 141–199. Amsterdam: John Benjamins.

Ordóñez, Francisco. 2002. Some clitic combinations in the syntax of Romance. *Catalan Journal of Linguistics* 1: 201–224.

Ormazabal, Javier, and Juan Romero. 2007. The object agreement constraint. *Natural Language & Linguistic Theory* 25: 315–347.

Pearson, Hazel. 2012. The sense of self: Topics in the semantics of de se expressions. PhD diss, Harvard.

Perlmutter, David. 1971. *Deep and surface structure constraints in syntax. Transatlantic series in linguistics*. New York: Holt, Rinehart and Winston.

Pesetsky, David, and Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In *Phrasal and clausal architecture: Syntactic derivation and interpretation. In honor of Joseph E. Emonds.*, eds. S. Karimi, V. Samiian, and W. K. Wilkins, 262–294. Amsterdam: John Benjamins.

Pollock, Jean-Yves. 1989. Verb movement, universal grammar and the structure of IP. *Linguistic Inquiry* 20 (3): 365–424.

Preminger, Omer. 2009. Breaking agreement: Distinguishing agreement and clitic doubling by their failures. *Linguistic Inquiry* 40 (4): 619–666.

Preminger, Omer. 2014. *Agreement and its failures*. Cambridge: MIT Press.

Pylkkänen, Liina. 2002. Introducing arguments. PhD diss, MIT.

Pylkkänen, Liina. 2008. *Introducing arguments. Linguistic inquiry monographs*. Cambridge: MIT Press.

Richards, Marc. 2008. Defective Agree, case alternations, and the prominence of person. In *Scales*, eds. M. Richards and A. Malchukov, 137–161. Universität Leipzig.

Richards, Norvin. 1997. What moves where when in which language? PhD diss, MIT.

Richards, Norvin. 2001. *Movement in language: interactions and architectures*. Oxford: Oxford University Press.

Riedel, Kristina. 2009. The syntax of object marking in Sambaa: A comparative Bantu perspective. PhD diss, Universiteit Leiden.

Rivero, María Luisa. 2004. Spanish quirky subjects, person restrictions, and the Person-Case Constraint. *Linguistic Inquiry* 35 (3).

Rizzi, Luigi. 1990. On the anaphor-agreement effect. *Rivista di Linguistica* 2: 27–42.

Roca, Francesc. 1992. On the licensing of pronominal clitics. The properties of object clitics in Spanish and Catalan. Master's thesis, Universitat Autónoma de Barcelona.

Rosen, Carol. 1990. Rethinking Southern Tiwa: The geometry of a triple-agreement language. *Language* 66 (4): 669–713.

Runić, Jelena. 2013. The Person-Case Constraint: A Morphological Consensus. Poster presented at the 87th Meeting of the Linguistic Society of America (LSA).

Schütze, Carson T. 2003. Syncretism and double agreement with Icelandic nominative objects. In *Grammar in focus: Festschrift for Christer Platzack*, eds. L. O. Delsing, C. Falk, G. Josefsson, and H. Á. Sigurðsson, Vol. 2, 295–303. Lund: Department of Scandinavian Languages.

Smith, Peter W. 2015. Feature mismatches: Consequences for syntax, morphology and semantics. PhD diss, UConn.

Stegovec, Adrian. 2015. It's not Case, it's personal! Reassessing the PCC and clitic restrictions in O'odham and Warlpiri. In *Proceedings of the poster session of the 33rd WCCFL*, ed. Pocholo Umbal. Vol. 5 of *SFU working papers in linguistics*, 131–140.

Stegovec, Adrian. 2016a. Not two sides of one coin: Clitic person restrictions and Icelandic quirky agreement. In *Formal studies in Slovenian syntax. In honor of Janez Orešnik*, eds. Lanko Marušič and Rok Žaucer, 283–312. Amsterdam: John Benjamins.

Stegovec, Adrian. 2016b. What we aren't given: The influence of selection on ditransitive passives in Slovenian. Talk given at FASL 25, Cornell University, May 13th 2016.

Stegovec, Adrian. in preparation. Ditransitives spill the beans: Insights from Slovenian ditransitive passives and idioms.

Sturgeon, Anne, Boris Harizanov, Maria Polinsky, Ekaterina Kravtchenko, Carlos Gómez Gallo, Lucie Medová, and Václav Koula. 2012. Revisiting the Person Case Constraint in Czech. In *Proceedings of FASL 19*, eds. J. Bailyn, E. Dunbar, Y. Kronrod, and C. LaTerza, 116–130. Ann Arbor, MI: Michigan Slavic Publications.

Taraldsen, Tarald. 1995. On agreement and nominative objects in Icelandic. In *Studies in comparative Germanic syntax*, eds. H. Haider, S. Olsen, and S. Vikner, 307–327. Dordrecht: Kluwer Academic.

Terzi, Arhonto. 1999. Clitic combinations, their hosts and their ordering. *Natural Language & Linguistic Theory* 17: 85–121.

Torrego, Esther. 1988. Pronouns and Determiners: A DP Analysis of Spanish nominals. Ms. University of Massechusetts, Boston.

Uriagereka, Juan. 1995. Aspects of the syntax of clitic placement in Western Romance. *Linguistic Inquiry* 26: 79–123.

Řezáč, Milan. 2003. The fine structure of Cyclic Agree. *Syntax* 6 (2): 156–182.

Řezáč, Milan. 2011. *Phi-features and the modular architecture of language*. Dordrecht: Springer.

Řezáč, Milan. 2004. The EPP in Breton: An uninterpretable categorial feature. In *Triggers*, eds. H. v. Riemsdijk and A. Breitbarth, 451–492. Berlin: De Gruyter.

Warburton, Irene. 1977. Modern Greek clitic pronouns and the 'surface structure constraint' hypothesis. *Journal of Linguistics* 13: 259–181.

Wechsler, Stephen. 2017. Self-ascription in conjunct-disjunct systems. In *Egophoricity*, eds. S. Floyd, E. Norcliffe, and L. San Roque, 471–492. Amsterdam: John Benjamins.

Werner, Ingegerd. 1999. *Die Personalpronomen im Zürichdeutschen*. Stockholm: Almqvist & Wiksell.

Woolford, Ellen. 1999. More on the anaphor agreement effect. *Linguistic Inquiry* 30 (2): 257–287.

Wurmbrand, Susi. 2017. Feature sharing or how I value my son. In *The pesky set: Papers for david pesetsky*, eds. Claire Halpert, Hadas Kotek, and Coppe van Urk, 173–182. Cambridge, MA: MIT Working Papers in Linguistics.

Zanuttini, Rafaela, Miok Pak, and Paul Portner. 2012. A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects. *Natural Language & Linguistic Theory* 30: 1231–1274.

Zepeda, Ofelia. 1983. *A Tohono O'Odham grammar*. Tuscon, AZ: University of Arizona Press.