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Personality Disorders: The PCC and Two Kinds of Clitic Reordering in Slovenian*

Adrian Stegovec
University of Connecticut

Traditionally, the *Person-Case Constraint* (PCC), also **me lui* constraint (Perlmutter 1971), is seen as a surface restriction on phonologically weak pronominal elements like clitics and weak pronouns which bans them from co-occurring when they have specific case and person values. The standard descriptive generalization for the PCC is the following:

PCC [strong version]:[1] When a weak direct object (DO) and indirect object (IO) co-occur, the DO must be 3rd person (3P) (cf. Bonet 1991:182)

The PCC can be illustrated for Greek with (1a,b). In Greek *double-object constructions* (DOC), the IO and DO may both be expressed with pronominal clitics. However, the DO clitic is restricted to 3P. This is seen in (1a,b) where 1st/2nd person (1P/2P) DO clitics are ungrammatical.

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[1] The weak version (*weak PCC*), where 1st/2nd person weak objects may co-occur, but a 1st/2nd person weak DO cannot co-occur with a 3rd person weak IO, will not be discussed in detail. See Anagnostopoulou (2005); Bonet (1991) for discussion. Unless explicitly noted otherwise, the PCC refers to the strong version (*strong PCC*) throughout.

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

Anagnostopoulou (2003) and Béjar and Řezáč (2003) have reanalyzed the PCC in minimalist terms as the result of locality restrictions on the operation Agree and consequently Case assignment (Chomsky 2000). But with the exception of some discussion by Anagnostopoulou (2003; 2008), the focus remains mainly on languages with rigid and predictable relative orders of weak pronominal object. This is why the discussion of PCC effects in colloquial Slovenian is relevant: object clitics in DOCs appear to occur in either IO » DO or DO » IO order, and the person restriction is different with the two orders. Furthermore, the person restriction itself is sensitive to the matrix/embedded distinction in imperatives. I argue that this shows that the PCC cannot result from case or grammatical function asymmetries. I propose instead that it arises because deficient pronouns are inherently unspecified for person feature values and must be valued via Agree with a functional head. Within this approach, the Slovenian PCC paradigm, where person restrictions are sensitive only to the relative order of clitics and sentence type, results from processes unrelated to person valuation: a reordering of object clitics in narrow syntax, and a post syntactic PF clitic reordering.

The paper is organized as follows: Section 1 presents the Slovenian PCC paradigm. Section 2 reviews an existing analysis of the PCC, shows why the Slovenian PCC paradigm is problematic for it, and presents a new account which can also derive the problematic Slovenian inverse PCC pattern. Section 3 presents an analysis of the absence of PCC effects in Slovenian matrix imperatives. Section 4 concludes the paper.

1 The Slovenian PCC Pattern

Object clitics typically cluster in the 2nd clausal position in Slovenian, and in canonical DOCs the DO clitic is accusative (ACC) while the IO clitic is marked with dative case (DAT). For most speakers, the presence of a 3P.DAT object clitic blocks the use of a 1/2P.ACC object clitic. This ban is illustrated in (2), an example which parallels the Greek (1a).

(2) * Mama **mu** **me/te** bo predstavila.
mom 3P.M.DAT 1P/2P.ACC will introduce
int.: 'Mom will introduce me/you to him.'

A short note about the data is in order here. The bulk of the data is based on an online grammaticality survey which involved 40 native Slovenian speakers.[2] Though not reported in traditional prescriptive and descriptive grammars (Toporišič 2000, Herrity 2000), the survey showed that the order of object clitics is not fixed in colloquial Slovenian; both DAT » ACC and ACC » DAT are possible, as illustrated for two 3P objects in (3). 22/40 speakers judged both orders as grammatical in out-of-the blue contexts, and even speakers who did not fully accept (3b) in the survey, accepted it when given more specific contexts in follow up informal elicitations.

(3) a. Mama **mu** **ga** je opisala.
mom 3P.M.DAT 3P.M.ACC is described
b. Mama **ga** **mu** je opisala.
mom 3P.M.ACC 3P.M.DAT is described
'Mom will introduce me/you to him.'

The survey also revealed that despite some variation in the specific restricted combinations,[3] object order and person restrictions interact. With speakers that exhibit a *3P.DAT » 1/2P.ACC clitic ban, an equivalent of the ungrammatical (2) is possible with ACC » DAT, as illustrated in (4).

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[2] Although speakers vary in the restrictiveness of possible object clitic combinations, no clear correlation to known dialectal groups was revealed by the pilot survey. I must thus leave the issue of the geographic distribution of the restriction types for future surveys.

[3] *Strong*, *weak*, and *me-first PCC* (Nevins 2007) were attested. Some speakers also find the 2P ban stronger than the 1P ban (Anagnostopoulou (2008) also notes this for German).

(4) Mama **me/te** **mu** bo predstavila.
mom 1P/2P.ACC 3P.M.DAT will introduce
'Mom will introduce me/you to him.'

But person restrictions are not entirely absent with ACC » DAT. Speakers that allow (3b) and (4) still ban *3P.ACC » 1/2P.DAT clusters, shown in (5a). The same combination is fine with DAT » ACC, as given in (5b).

(5) a. * Mama **ga** **mi/ti** bo predstavila.
mom 3P.M.ACC 1P/2P.DAT will introduce
b. Mama **mi/ti** **ga** bo predstavila.
mom 1P/2P.DAT 3P.M.ACC will introduce
'Mom will introduce him to me/you.'

For this group of speakers, combinations of 3P and 1/2P clitics pattern as a PCC pattern with the DAT » ACC order, as illustrated in (6), but with ACC » DAT the pattern is essentially an *inverse PCC*, as illustrated in (7).[4] In contrast to canonical PCC languages, Slovenian speakers with two object clitic orders show person restrictions either on the DO or IO clitic, where the restriction always applies to the linearly second clitic. The relation of the restriction to the order of object clitics crucially also holds for speakers with different person restriction patterns (see footnote 3).

(6) a. 3.DAT » 3.ACC b. 1/2.DAT » 3.ACC
c. ***1/2.DAT » 2/1.ACC** d. ***3.DAT » 1/2.ACC**
(7) a. 3.ACC » 3.DAT b. 1/2.ACC » 3.DAT
c. ***1/2.ACC » 2/1.DAT** d. ***3.ACC » 1/2.DAT**

Slovenian person restrictions differ from canonical PCC in one more way: for some speakers the restriction disappears in imperatives, where clitics typically appear post-verbally in order to satisfy the 2nd position requirement. Clitics can again occur with both DAT » ACC and ACC » DAT orders, but no person restriction applies in either, as illustrated in (8,9).[5]

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[4] I set aside non-signular clitics, as they seem to pattern differently for some speakers, possibly because they are essentially homophonous with their strong counterparts. See also Ciucivara (2009) for cases where plural clitics also pattern differently in Romance.

[5] In Slovenian imperatives, 2P pronouns are substituted with reflexives. As pointed out by a reviewer, 2P pronouns in "wax museum scenarios" are an exception (see footnote 8).

(8) a. Predstavi **mu** **me**! b. Predstavi **me** **mu**!
introduce.IMP 3P.M.DAT 1P.ACC introduce.IMP 1P.ACC 3P.M.DAT
'Introduce me to him!' 'Introduce me to him!'

(9) a. Predstavi **mi** **ga**! b. Predstavi **ga** **mi**!
introduce.IMP 1P.DAT 3P.M.ACC introduce.IMP 3P.M.ACC 1P.DAT
'Introduce him to me!' 'Introduce him to me!'

But Slovenian imperatives can also be syntactically embedded (see, among others, Sheppard and Golden 2002). Imperatives are embedded in speech reports with the complementizer *"da"*, which occupies the 1st clausal position in C^0, causing the clitics to surface in the 2nd clausal position pre-verbally. Curiously, object clitics in this configuration again display the person restrictions observed in declaratives, as (10,11) show.[6]

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

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

Unlike the declarative examples, imperative examples were only checked with consultants informally. And while not all consultants void person restrictions in matrix imperatives, those who do, retain the person restriction in embedded imperatives. The fact that the variation exists independently of the declarative restriction seems to be showing that an independent phenomenon is interfering with the person restriction. An analysis of this additional asymmetry will be discussed in Section 3.

[6] Consultants perceive the person restriction as weaker than in declaratives (it seems to be, however, much stronger with feminine 3P clitics; it is unclear why this is so).

1.1 The Status of the Slovenian Person Restriction

Due to the apparent cross-linguistic robustness of the canonical PCC, one might see the Slovenian person restriction, at least with the ACC » DAT order, as an entirely separate constraint. A stronger form of this view is to do away with the PCC completely and treat both patterns as unconnected to the PCC. But recall that the pattern is identical to the PCC with the DAT » ACC order, and that the ACC » DAT order displays an exact mirror pattern. Furthermore, speakers vary with respect to the banned clitic combinations (see footnote 3) along the same lines as it has been observed for canonical PCC (Nevins 2007). Crucially, corresponding standard (with DAT » ACC) and inverse (with ACC » DAT) patterns are always exist in spite of this variation. If the Slovenian person restriction were to be treated separately from the PCC, all of these similarities would remain unexplained and attributed to an accidental similarity, I show below that it is in fact possible to treat both clitic restrictions as the same phenomenon, and that under this view the inverse PCC can be explained with an object clitic reordering at a very specific point in the derivation (unavailable in canonical PCC languages). This also means that "Person-Case Constraint" becomes a misnomer, as the constraint cannot be case-sensitive. However, I still use PCC throughout due to the term being ubiquitous and well established in the literature.

2 The PCC as an Intervention Effect

Most current syntactic approaches to the PCC link the pattern to configurations where one syntactic head must establish a long distance dependency with two arguments. In Chomsky's (2000) framework, the long distance dependency in question is Agree, and the configuration corresponds to that of one Probe and two Goals. One such analysis is that of Béjar and Řezác (2003) (B&R). B&R propose that the PCC arises due to a difference in the licensing requirements of 1P/2P and 3P features, stated in (12), which limits the distribution of person features on arguments in the aforementioned "one Probe/two Goals" configuration.

(12) *Person Licensing Condition (PLC)*:
An interpretable 1st/2nd person feature must be licensed by entering into an Agree relation with a functional category.

B&R crucially also assume a particular version of Agree: *Cyclic Agree*, where φ-features trigger Agree in a cyclic fashion: Person ([π]) first, followed by Number ([#]). Their derivation of the PCC is given in (13), where v^0 has an uninterpretable [π] ([uπ]) and an uninterpretable [#] feature ([u#]), both of which will act as Probes for matching interpretable features in their c-command domain. The IO and DO also both have interpretable [π] ([iπ]) as well as interpretable [#] features ([i#]), which means that the structure in (12) has a one Probe/two Goals configuration.

(13) [$_{vP}$ v^0 [$_{VP}$ DAT [$_{V'}$ V DO]]]

[uπ]	◄ match / *Agree ►	[iπ]		[iπ]
[u#]	◄	[~~i#~~]	*match ►	[i#]

During the first cycle of Agree, shown in (13), the [uπ] on v^0 probes and matches the closest [iπ], which is on DAT. However, for B&R an inherent Case like DAT blocks Agree with outside Probes, so the [uπ] on v^0 cannot establish Agree with the [iπ] on DAT, and must thus receive a default value. The IO itself can still have 1/2P features, since B&R assume that they can be licensed by the inherent Case assigner itself.[7] Note also that any φ-features on DO are inaccessible for Agree with v^0 in (13) due to the presence of matching intervening features on DAT. The second cycle of Agree can only be successful if, as shown in (14), DAT moves above v^0 leaving behind a trace, which is not an intervener (Anagnostopoulou 2003; Chomsky 2000). The [u#] on v^0 can then enter Agree with the [i#] on DO, assigning it ACC Case (Chomsky 2000). But Agree is only for [#] features in this cycle, so the PLC (see (12)) cannot be satisfied for 1/2P features on DO. This derives the PCC, as the DO clitic must then be 3P.

(14) [$_{vP}$ DAT v^0 [$_{VP}$ t_{DAT} [$_{V'}$ V $\underline{ACC}_{DO}$]]]

[iπ]	[~~uπ~~]		[iπ]
[i#]	[u#]	Agree ►	[i#]

The PCC pattern is thus predicted by B&R to arise only in cases where an intervening clitic blocks Agree for [π] features between v^0 and a structurally Case-marked clitic; which then must be 3P or the PLC would not be satisfied. But recall that in Slovenian the person restriction

[7] For Béjar and Řezác (2003), inherent/lexical Case is assigned via Agree with a silent applicative P^0, which is always local to the IO, and nothing can intervene between them.

actually occurs on the DAT clitic with the ACC » DAT clitic order, and that for B&R, 1/2P features on DAT can be licensed by the inherent Case assigner itself. So if the reordering is post-syntactic, the pattern is incorrectly predicted to be standard PCC, while if the reordering occurs in the syntax prior to the probing by v^0 there should be no restriction as DAT no longer intervenes between v^0 and ACC, and 1/2P features on DAT are licensed by inherent Case assignment. This makes the inverse PCC problematic for B&R's approach, as well as other approaches focusing on the DO/IO asymmetry, such as Anagnostopoulou (2003). We will see below, however, that by making some modifications to the one Probe/two Goals approach, the Slovenian PCC pattern including the problematic inverse PCC can in fact be derived as a syntactic intervention effect.

2.1 Clitic Person Restrictions as Failed Valuation

In the proposed alternative analysis, I depart from B&R and divorce φ-feature valuation from Case assignment. The main new assumption is, however, that the (interpretable) person features of deficient (clitic/weak) pronouns begin the derivation unvalued, and must be valued via Agree. This is inspired by the treatment of bound pronouns in Kratzer (2009), where pronouns may enter the derivation with unvalued φ-features. The proposal thus combines this intuition with the approaches to feature valuation of Pesetsky and Torrego (2007) and Bošković (2011). The specific assumptions I either adopt or propose are listed below:

[A1] Defective pronouns have <u>unvalued</u> [iπ] features that must be valued before Spell-Out (cf. Bošković 2011; Pesetsky and Torrego 2007);

[A2] [$i\pi_{uval}$] is valued: **(a)** via Agree with a valued [π], or **(b)** by getting a default value ([d:__]), which is 3P, when option (a) is impossible;

[A3] Unvalued features are Probes, and matching valued features act as their Goals (Bošković 2011);

[A4] Agree cannot occur between Probe and Goal in the presence of a matching intervener (Chomsky 2000);

[A5] Traces and clitic-doubled DPs do not count as interveners (Anagnostopoulou 2003; Chomsky 2000).

These assumptions derive the effect of B&R's PLC as the result of the defective pronouns [iπ] underspecification.[8] Crucially, having unvalued [iπ] does not equate to not having [iπ] features, it only means that [iπ] must acquire its value externally and may express person contrasts morphologically once valued. Similarly, 3P is not equivalent to the lack of [π] (see Nevins 2007 for arguments), it corresponds to a [π] with no positive *author* or *participant* specification. I take **[A1–5]** to hold universally, with the different PCC patterns emerging due to independent processes interacting with [π] valuation. I propose that the inverse PCC results from an object clitic reordering before a functional head with a valued [π] enters the derivation. It is unclear what specifically makes this in Slovenian. However, it has been noted in the literature that clitic placement clitic placement in Slovenian is much less restricted than in other closely related South Slavic languages. Bošković (2001) observes that among other things Slovenian clitics are: **(i)** losing a rigid 2nd position requirement in some environments, **(ii)** clitic clusters can be split up by non-clitic material, **(iii)** can under certain conditions attach both to the right (enclitics) or the left edge (proclitics) of the same host, and **(iv)** even occur in enclitic-proclitic pairs without a host at all. It is possible that the source of this uncharacteristic behavior is also the reason why object clitics may reorder analogously to full NPs in DOCs, where both object orders are also found in Slovenian. Whatever the reason behind the clitic reordering is, we have seen that it is possible, and that it changes the nature of the clitic person restriction. In the following I show how this is derived within the current approach.

2.2 Deriving Standard and Inverse PCC

The derivation of both standard and inverse PCC assumes a IO » DO base order for DOCs, with Slovenian allowing optional ACC-over-DAT clitic movement before v^0 enters the derivation.[9] The derivation of the standard PCC, observed also in canonical PCC languages like Greek and French, is given in (16), for which I assume the same structure for DOCs as Anagnostopoulou (2005); the DO is the complement of V and the IO

[8] This relates to the fact that the PCC is voided with non *de se* readings of 1P (Charnavel and Mateu 2015), which also ties to the observation of an anonymous reviewer that in so called "wax museum scenarios" 1P + 1P object clitic pairs are possible in Slovenian.

[9] The derivation of inverse PCC is also compatible with a free base-generation approach.

is in SpecApplP, and ApplP is the complement of v^0. I follow Kratzer (2009), who proposes v^0 carries valued φ-features for binding purposes. But I propose that not all φ-features of v^0 have the same status with respect to valuation; the [uπ] component of the φ-feature set on v^0 is valued, while other φ-features on v^0 distinct from [π] (henceforth [Γ]) are unvalued, and hence still function as Probes (see **[A3]**).

(16) $[_{vP}$ v^0 $[_{ApplP}$ DAT Appl^0 $[_{VP}$ V ACC $]]]$

$[u\Gamma:\_\_]$ ····Agree····▶ $[i\Gamma_{val}]$ $[i\Gamma_{val}]$

$[u\pi_{val}]$ ····value····▶ $[i\pi:\underline{1/2/3}]$ $[i\pi:\_\_]$ => $[d:\underline{3}]$

When v^0 enters the derivation in (16), the $[u\Gamma_{uval}]$ on v^0 is unvalued and must therefore probe and enter Agree with the closest available Goal, which is the $[i\Gamma_{val}]$ on DAT. After Agree is established between the two, the $[u\pi_{val}]$ feature on v^0 can also value the $[i\pi_{uval}]$ on DAT. This follows from the assumption in (17), similar to Řezác's (2004) *Maximize Agree*.

(17) If Agree is established between X^0 and Y^0 for feature [α], all $[F_{uval}]$ features on X^0 and Y^0 receive the value from matching $[F_{val}]$ on the (Agree-ing) opposing head regardless of the direction of valuation.

After the step in (15), the [uΓ] on v^0 is valued and thus no longer a Probe. The $[i\pi_{uval}]$ on ACC can then no longer be valued via Agree with $[u\pi_{val}]$ on v^0. This means ACC must get a default 3P value, which yields a traditional PCC pattern. Canonical PCC languages like Greek or French only have this pattern, but the inverse pattern is also possible in Slovenian due to the clitics reordering before v^0 is merged. This derivation is given in (18).

(18) $[_{vP}$ v^0 $[_{ApplP}$ ACC DAT Appl^0 $[_{VP}$ V t_{ACC} $]]]$

$[u\Gamma:\_\_]$ ····Agree····▶ $[i\Gamma_{val}]$ $[i\Gamma_{val}]$

$[u\pi_{val}]$ ····value····▶ $[i\pi:\underline{1/2/3}]$ $[i\pi:\_\_]$ => $[d:\underline{3P}]$

As in (17) ACC c-commands DAT before v^0 is merged, the $[u\Gamma_{uval}]$ Probe on v^0 must enter Agree with $[i\Gamma_{val}]$ on ACC (now the closest accessible Goal). Because of the condition on valuation in (17), the $[u\pi_{val}]$ on v^0 then also values the $[i\pi_{uval}]$ on ACC. The [uΓ] on v^0 is now valued and no longer a Probe, so the $[i\pi_{uval}]$ on DAT can no longer be valued via Agree, which means DAT must get a default 3P value, yielding the inverse PCC

pattern. The derivation of the inverse PCC thus requires only that the ACC-over-DAT movement that yields the ACC » DAT clitic order takes place before v^0 is merged. The absence of this type of movement in a language means that only standard PCC patterns can arise in DOCs.

The advantage of the analysis is two-fold. It can derive both the canonical PCC and inverse PCC, as it is not based around any IO/DO asymmetry, and it is not necessarily limited to the *strong PCC*[10] or person restrictions where 1P and 2P have equal status – in principle, multiple heads may bear valued [π] features, and *participant* and *author* (or *participant* and *hearer*) values may be distributed over more than one functional head. This could then derive the more complex clitic person restrictions, but the exact details need to be spelled out in future work.

3 Explaining the Imperative Asymmetry

The open issue now is that the PCC can be voided in matrix imperatives in Slovenian. Ciucivara (2009) observes a similar pattern in Romanian: in declaratives, where pronominal clitics are pre-verbal, 1P clitics must precede other pronominal clitics. This restriction is lifted in imperatives. Ciucivara proposes that the asymmetry follows from imperatives lacking a TP. Because of this, clitics do not move to TP where they would occupy a pre-verbal position and potentially give rise to the ordering restriction. Ciucivara's argumentation builds on Zanuttini's (1997) proposal of a correlation between the presence of negation and TP: in languages where negative imperatives are banned this follows from the lack of a TP in imperatives. But Slovenian imperatives can in fact occur with negation, both in matrix (19) and embedded environments (20); recall also that PCC effects are observed in embedded imperatives (see (10,11) above).

[10] In Stegovec (2015), I show that weak PCC (see footnotes 1 and 3) including the inverse pattern can also be derived within this approach. I propose that with the weak PCC [iπ] valuation is restricted to Spec-Head configurations with v^0 due to independent factors.

(19) a. Ne pokaži **mu** **ga**!
not show.IMP 3P.M.DAT 3P.M.ACC
b. Ne pokaži **ga** **mu**!
not show.IMP 3P.M.ACC 3P.M.DAT
'Don't show it to him!'

(20) a. Rekla je, da **mu** **ga** ne pokaži!
said.F.SG is that 3P.M.DAT 3P.M.ACC not show.IMP
b. Rekla je, da **ga** **mu** ne pokaži!
said.F.SG is that 3P.M.ACC 3P.M.DAT not show.IMP
'She said that you should not show it to him!'

Slovenian thus either entirely lacks true imperatives; both matrix and embedded imperatives are *surrogate imperatives* with TPs (in Zanuttini's (1997) terminology), or a different analysis for the presence of negation in imperatives is needed. In any case, the examples in (19) and (20) show that the lack of PCC effects in matrix imperatives cannot be explained in terms of the absence or presence of the TP layer.

3.1 The Greek Clitic Switch

In some varieties of Greek, object clitics may occur with both DAT » ACC and ACC » DAT orders in imperatives (21), but they are restricted to the DAT » ACC order in finite clauses (22) (see Terzi 1999; Bošković 2004).

(21) a. Diavase **mou** **to**! b. Diavase **to** **mou**!
read.IMP 1P.DAT 3P.N.ACC read.IMP 3P.N.ACC 1P.DAT
'Read it to me!' 'Read it to me!'

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

Bošković (2004) proposes that the Greek clitic switch results from lower copy pronunciation (LCP) forced by an adjacency requirement between V and a functional head (Bobaljik 1995; Bošković 2001). Building on Miyoshi (2002), Bošković (2004) links the clitic switch to a particular analysis of the ban on negative imperatives in Greek (23). The ban is at its core a prohibition of negation occurring with a particular verb form. Note that in English negation is similarly banned with a particular verb

form – finite main verbs, as illustrated by (24a). In such cases English must make use of an infinitive verbal form with *Do-Support* (24b).

(23) * Den/mi diavase!
NEG read$_{IMP}$
int.: 'Don't read!' (Greek; Bošković 2004:288)

(24) * a. John not laughed.
b. John did not laugh.

Miyoshi's (2002) insight is to treat the Greek and English ban on negation as essentially the same phenomenon; the presence of negation is blocking affix hopping/PF merger.[11] The ban on negative imperatives thus results from the functional head F^0,[12] responsible for imperative formation, requiring affixation to V under PF adjacency (*Stranded Affix Filter*) in order for F^0 and V^0 to spell-out as a single word. Negation blocks their merger at PF, causing ungrammaticality (25). The ban can be voided by using a form which does not require PF merger, as in (24b).

(25) F [+affix] *NEG V
[+IMP] den/mi diaváz<u>o</u> ('read')

This analysis makes possible a uniform syntax for Greek 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 (26a), which is the copy pronounced in declaratives (26b), but this copy remains unpronounced in imperatives as the PF merger of F^0 forces LCP (26c). The algorithm for copy pronunciation used here is the one argued for by Bobaljik (1995); Franks (2010): the highest copy is pronounced unless a PF violation is triggered by the position of the highest copy, in which case the next available copy in the chain must be pronounced.

[11] The account of the English ban is essentially Chomsky's (1957) analysis in terms of affix hopping, revived more recently, by a.o. Halle and Marantz (1993); Bobaljik (1995).
[12] For Miyoshi (2002) F^0 is an imperative C^0. But embedded imperatives do in fact occur crosslinguistically with both overt C^0 and imperative morphology (also in Slovenian), it is more likely that F^0 is a modal operator (cf. Kaufmann 2012) located between V^0 and C^0.

(26) a. clitic$_2$ V clitic$_1$ COPY/INTERNAL MERGE
b. clitic$_2$ V ~~clitic~~$_1$ → pre-verbal
(PF)
c. **F^0=** ~~clitic~~$_2$ **=V** clitic$_1$ LCP → post-verbal (PF)

For Bošković (2004), clitics left adjoin to V when V moves to a c-commanding position, and the two clitic orders in Greek imperatives (see (21)) result for Bošković from an additional head-movement step of the complex head {ACC + V} before DAT merges to it. The LCP triggered by F^0 then results in the configuration given in (27a). The order preserving derivation has an additional intermediate step where {ACC + V} moves to X^0 within XP, while DAT cannot, and the order is preserved with LCP (27b). Crucially, this step is optional, but the nature of X^0 (target of the additional head-movement) is not elaborated on by Bošković (2004).

(27) a. **F^0** [{ ~~DAT~~ + { ~~ACC~~ **V** } } [{ **ACC** ~~V~~ } [**DAT** …
b. **F^0** [{~~DAT~~{~~ACC~~ **V**}} {**DAT** +{**ACC** ~~V~~}} [{{~~ACC~~ ~~V~~}+X^0} [~~DAT~~ …

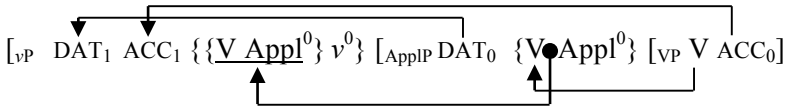
Bošković (2004) stipulates that the DAT clitic cannot adjoin to X^0 within XP due to *"Dative Sickness"* – the cross-linguistic tendency of DAT arguments to not tolerate feature checking with TP. At the end of the following section I derive a more general and principled account of the delayed clitic movement, but for now it suffices to say that the relevant generalization is not that DAT clitic movement is delayed, but that early head-movement of the linearly first clitic is consistently banned. This generalization is put to use in the next section, where the lack of PCC in Slovenian matrix imperatives is derived as the result of a PF-switch.

3.2 Interaction Between the PCC and the PF Clitic Switch

Chomsky (1995) notes that clitics are ambiguous XP/X^0 elements. If this view is correct, it also implies that it should be possible for clitics to either XP-move or head-move. Thus, if a clitic head-moves to a head X^0 (and excorporation out of complex heads is banned), the clitic can only undergo further movement as part of the complex {clitic + X^0} head. But as an XP/X^0 ambiguous element a clitic also has another option, namely: to XP-move successive cyclically before head-adjoining to its landing site. The latter has been tacitly assumed in all derivations so far, and is

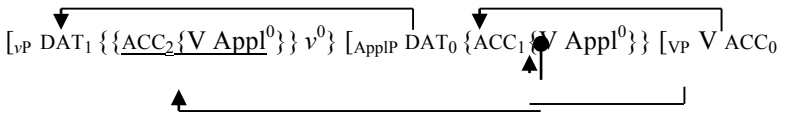
illustrated for ditransitive clitics in (28). Heads move successive cyclically forming larger complex heads along the way, while the two clitics move like XPs to Spec*v*P essentially to use it as an escape hatch on their way to their final landing site, as *v*P is a phase (Chomsky 2000).

(28)



So far, the clitics were assumed to XP-move within *v*P in the derivation of PCC. But crucially, as we shall see, the option of head-movement of clitics inside *v*P will not affect anything in the previous discussion. In the derivation of a Slovenian ditransitive DAT » ACC imperative, illustrated in (28), the DAT clitic can only move to Spec*v*P (the phase edge) via XP-movement, while ACC can move to Spec*v*P by either: **(i)** XP-moving to Spec*v*P directly, as in (28), or **(ii)** by left adjoining to the first asymmetrically c-commanding X^0 or complex head (here: {V + $Appl^0$}) and "piggybacking" on it to v^0 (and eventually T^0), as in (29).

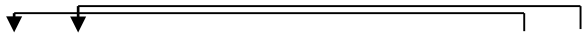
(29)

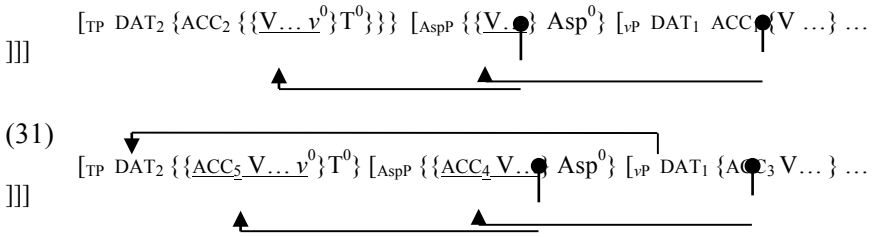


]]]

Crucially, with option (ii), head-movement occurs as early as possible, while with option (i) the clitic head-adjoins only to its final landing site. With both options the ACC clitic must leave *v*P without being valued (spelling-out as 3P) because DAT intervenes for Agree between ACC and v^0 at the point when v^0 merges. The difference between the two options will become crucial as the derivation continues. If the derivation begins as in (28), the cyclic head movement of the verbal complex must continue all the way to T^0, and both DAT and ACC directly head-adjoin to T^0, as shown in (30). But if the derivation begins as in (29), ACC is adjoined to {V + $Appl^0$}, so it can only move further as part of the complex head, as shown in (31). The DAT clitic, in contrast, adjoins directly to T^0 directly from Spec*v*P, yielding a DAT » ACC order. Note that both derivations result in the same final DAT » ACC clitic order.

(30)





And while both (30) and (31) have the same final clitic order in narrow syntax, they give rise to two distinct orders at PF under LCP. As illustrated by (32a), the derivation in (30) leads to order preservation under LCP forced by the imperative F^0. But the derivation in (31) leads to a PF clitic order switch under LCP, as illustrated by (31b).

(31) a. **F^0** [TP ~~DAT~~$_2$ ~~ACC~~$_2$ [**V**]] [AspP [~~V~~] [*v*P **DAT$_1$** [**ACC$_3$** [~~V~~]] …]]]
b. **F^0** [TP ~~DAT~~$_2$ [~~ACC~~$_5$ [**V**]] [AspP [**ACC$_4$** [~~V~~]] [*v*P **DAT$_1$** [~~ACC~~$_3$ [~~V~~]] …
]]]

This PF-switch analysis predicts the PCC should still be active in Greek imperatives. In narrow syntax, only the ACC clitic can get default 3P in Greek due to the rigid DAT » ACC order at *v*P, so the PF-switch cannot repair impossible clitic pairs. And as shown in (32), this is borne out.

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

Unlike in Greek, the PCC may be voided by some speakers in matrix imperatives (see (8,9) above). This can actually be connected to the clitic reordering behind the inverse PCC. Assuming both the syntactic reordering and the PF-switch, there are four distinct derivations of ditransitive imperatives, given in (33,34). The LCP triggered by F^0 can thus obscure the order of the two highest clitic-copies (which matches the final *v*P-internal order). The four combinations in (33,34) are possible at PF because the PF-switch can also apply to the two grammatical *v*P-internal orders: 1P.DAT » 3P.ACC and 1P.ACC » 3P.DAT.

(33) a. **F⁰** [$_{TP}$ ~~1P.DAT~~$_2$ [~~3P.ACC~~$_5$ [**V**]] [$_{AspP}$ [**3P.ACC**$_4$ [~~V~~]] [$_{vP}$ **1P.DAT**$_1$ [~~3P.ACC~~$_3$ [~~V~~]] …]]]

b. **F⁰** [$_{TP}$ ~~1P.DAT~~$_2$ [~~3P.ACC~~$_2$ [**V**]] [$_{AspP}$ [~~V~~] [$_{vP}$ **1P.DAT**$_1$ [**3P.ACC**$_1$ [~~V~~]] …]]]

(34) a. **F⁰** [$_{TP}$ ~~1P.ACC~~$_2$ [~~3P.DAT~~$_5$ [**V**]] [$_{AspP}$ [**3P.DAT**$_4$ [~~V~~]] [$_{vP}$ **1P.ACC**$_1$ [~~3P.DAT~~$_3$ [~~V~~]] …]]]

b. **F⁰** [$_{TP}$ ~~1P.ACC~~$_2$ [~~3P.DAT~~$_2$ [**V**]] [$_{AspP}$ [~~V~~] [$_{vP}$ **1P.ACC**$_1$ [**3P.DAT**$_1$ [~~V~~]] …]]]

The last piece of the puzzle is why PCC effects are observed in Slovenian embedded imperatives. We have seen in (19,20) above that both matrix and embedded negative imperatives are possible,[13] but that the position of negation is different in the two with respect to object clitics: negation precedes the verb and clitics in matrix imperatives, and comes after the clitics and before the verb in embedded ones. I take this to indicate that further clitic movement occurs in embedded imperatives to satisfy the 2nd position requirement (cf. Bošković 2001). As the highest copy must be pronounced if no PF factor interferes (Bobaljik 1995; Franks 2010), the clitic-copies that intervene between F^0 and V in (33,34) remain unpronounced, thus trivially satisfying the Stranded Affix Filter. As this further movement is order preserving, the order of clitics at PF also matches the *v*P-internal order. This means that if the derivation begins with a possible clitic combination, as in (35a), the final PF order will have to match it, but also that a PCC violating order at PF has to match a PCC violating *v*P-internal clitic order, which correctly derives the Slovenian matrix/embedded imperative PCC asymmetry.

(35) a. [$_{CP}$ C^0 [**1P**$_3$ [**3P**$_6$ [~~V~~]]] **F⁰** [$_{TP}$ ~~1P~~$_2$ [~~3P~~$_5$ [**V**]] [$_{AspP}$ [~~3P~~$_4$ [~~V~~]] [$_{vP}$ ~~1P~~$_1$ [~~3P~~$_3$ [~~V~~]] …]]]

b. *[$_{CP}$ C^0 [**3P**$_3$ [**1P**$_3$ [~~V~~]]] **F⁰** [$_{TP}$ ~~3P~~$_2$ ~~1P~~$_2$ [**V**] [$_{AspP}$ [~~V~~] [$_{vP}$ *~~3P~~$_1$ *~~1P~~$_3$ [~~V~~] …]]]

This analysis explains the asymmetry without a distinct syntax for imperative clitic constructions. However, it is crucial for the analysis that the option of early (or late) clitic head-adjunction is not case-sensitive

[13] The *affix hopping* analysis of the negative imperatives ban (Miyoshi 2002; Bošković 2004) does not mean there is a bidirectional correlation between the ban and LCP driven post-verbal clitics. In fact Macedonian, like Slovenian, allows both negative imperatives and post-verbal clitics derived through LCP. See Bošković (2001) for Macedonian.

(*contra* Bošković 2004). The generalization regarding when the two object clitics can undergo different types of movement pertains to structural positions; it is only possible if the XP-moving CL_1 c-commands the head-adjoining CL_2, and not vice versa. This effectively follows from a particular view of linearization. There are four logically possible options for two clitics to move from *v*P to T^0, if clitics can either head-move or XP-move according to the rules laid out above, namely: a clitic head-adjoins either: **(i)** as late as possible, or **(ii)** as soon as possible. The derivation in which both clitics only head-adjoin to T^0 after XP-moving to Spec*v*P (as late as possible) is given in (36a), the derivation in which only the lower of the two clitics (CL_2) head-adjoins to the verbal complex in *v*P (as soon as possible) is given in (36b),[14] and the derivation in which both clitics head-adjoin to the verbal complex in *v*P (as soon as possible) is given in (36c). All these derivations are possible and lead to correct predictions regarding the PF clitic switch, only (36d) must be ruled out.

(36) a. $[_{TP}\ \{CL_1\ \{CL_2\ \{\{v^0\ \ldots\}\ T^0\}\}\}\ \ldots\ [_{vP}\ CL_1\ CL_2\ \{v^0\ \ldots\}\ [\ldots]]]$
b. $[_{TP}\ \{CL_1\ \{\{CL_2\ \{v^0\ \ldots\}\}\ T^0\}\}\ \ldots\ [_{vP}\ CL_1\ \{CL_2\ \{v^0\ \ldots\}\}\ [\ldots]]]$
c. $[_{TP}\ \{\{CL_1\ \{CL_2\ \{v^0\ \ldots\}\}\}\ T^0\}\ \ldots\ [_{vP}\ \{CL_1\ \{CL_2\ \{v^0\ \ldots\}\}\}\ [\ldots]]]$
d. ***$[_{TP}$ {CL_2 {{CL_1 {v^0 …}} T^0}} … $[_{vP}$ {CL_1 {v^0 …}} [CL_2 […]]]**

Note that in (36d), CL_1 head-adjoins to *v*P to the exclusion of CL_2. As the derivation proceeds at the CP level, the CL_1 clitic moves to T^0 via successive cyclic head-movement, while CL_2 head adjoins directly to T^0, resulting in a reverse order of clitics at the vP and CP levels. This is precisely the kind of reordering banned by Fox and Pesetsky's (2005) approach to linearization. Fox and Pesetsky (2005) propose that ordering statements are determined at the phase level, and that ordering statements added in higher phases cannot contradict with existing ones; an ordering statement at the *v*P level cannot be contradicted at the CP level. This is in

[14] See Anagnostopoulou (2003) for a discussion of why *tucking in* (Richards 2001) only occurs when both elements are head-moving or XP-moving, but never with disparate kinds of movement, regardless of the order of the two movement operations. I assume, as does she, that when an element head-moves to X^0, and another element XP-moves to SpecXP, the latter must precede the head-moved element, and cannot tuck in.

fact what we see in (36d), where the ordering at the CP level is CL_2 » CL_1, which conflicts with the CL_1 » CL_2 order established at the *v*P level.[15]

This section provides additional motivation for the *v*P-internal object clitic reordering proposed in Section 2. Because the reordering exists, the PF-switch can serve as a PCC repair. What seems at PF as a cluster banned by the standard PCC, may be a grammatical cluster of the inverse PCC in the syntax, and vice versa. Of course, not all speakers allow this repair, and there are at least two possible explanations. One is that it is harder processing-wise for some speakers to interpret a surface string as involving both narrow syntactic and PF reordering. The other is that the two groups of speakers actually differ in their grammars – one has true verb movement of the imperative verb (no repair), and the other produces the same PF-string via LCP (repair). The two options make different predictions and it should be possible to tease them apart in the future.

4 Conclusion

In this paper I presented a previously unattested pattern of clitic person restrictions found in Slovenian. Unlike with the canonical PCC, the person restriction applies either to the DO (as in the canonical PCC) or to the IO clitic, depending on their relative order. The latter restriction cannot be explained by standard syntactic analyses of the PCC, which are designed to only derive person restrictions on DO. I have proposed an alternative analysis where the PCC results from the failed valuation of person features on pronominal clitics. This occurs when Agree with a head bearing valued person features (v^0) is impossible due to the presence of an intervening pronominal clitic. Within this approach it is possible to derive the Slovenian *inverse* PCC as the consequence of a specific syntactic clitic reordering. Furthermore, the fact that some Slovenian speakers may void the PCC was tied to an interaction of this syntactic clitic reordering with an additional PF clitic switch. Though the

[15] The cyclic linearization approach of Fox and Pesetsky (2005) also offers a straightforward explanation for why "default 3P" clitics must also move through Spec*v*P. If the final landing site of pronominal clitics is T^0, where they surface as pre-verbal, then the only way for them to move to T^0 and not create a conflicting ordering statement at the CP level, is if they are ordered CL_1 » CL_2 » V at the *v*P level. This can only be achieved without early head movement if CL_2 moves to Spec*v*P despite not entering Agree with v^0.

full extent of variation found in Slovenian with person restrictions could not be addressed in the paper, the proposal laid the groundwork for future research focusing on the parameterization of clitic person restrictions.

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adrian.stegovec@uconn.edu