Between *you* and *me*: Two Crosslinguistic Generalizations on Person Restrictions

Adrian Stegovec

1. Introduction

In many languages, the person value of a pronoun can be restricted when it stands in a particular structural configuration with respect to other pronominal arguments. A famous case of this is the PCC:[1]

(1) *The Person-Case Constraint* (PCC): When a clitic/weak *indirect object* (IO) and *direct object* (DO) pronoun co-occur, the DO cannot be **1/2P**.   (Perlmutter, 1971; Bonet, 1994)

The PCC can be observed in Greek, where object clitics can co-occur in *double-object constructions* (DOC) (2), but as we can see in (3), not all object clitic combinations are grammatical: a DO clitic cannot be first (1P) or second person (2P) in the presence of an IO which is also a clitic pronoun.

(2) 1/2/3P.IO ≫ 3P.DO:[2]

    a. Tha mu to stilune.
        FUT 1.GEN 3.N.ACC send.3.PL
        'They will send it to me.'

    b. Tha su to stilune.
        FUT 2.GEN 3.N.ACC send.3.PL
        'They will send it to you.'

    c. Tha tu to stilune.
        FUT 3.GEN 3.N.ACC send.3.PL
        'They will send it to him.'

(3) 1/2/3P.IO ≫ ***1/2P.DO**:

    a. *Tha mu se sistisune.
        FUT 1.GEN 2.ACC introduce.3.PL
        'They will introduce **you** to me.'

    b. *Tha su me sistisune.
        FUT 2.GEN 1.ACC introduce.3.PL
        'They will introduce **me** to you.'

    c. *Tha tu me / se stilune.
        FUT 3.GEN 1.ACC/2.ACC send.3.PL
        'They will send **me/you** to him.'
        (Anagnostopoulou, 2003: 252)

A different kind of person restriction is found in languages like Ojibwe/Nishnaabemwin (Algonquian). As shown in (4), the order of pronominal markers does not reflect their grammatical function. The subject or object status of the two markers is encoded by the direct/inverse morpheme (DIR/INV).

(4) a. n- wa:bm -a: -g   1P.SU ≫ 3P.O ⇔ DIR
        1- see -DIR -3
        'I see them.' ('*They see me.')

    b. n- wa:bm **-igo:** -g   3P.SU ≫ **1P.O** ⇔ **INV**
        1- see -INV -3
        'They see **me**.' ('*I see them.')   (Valentine, 2001: 287)

Interestingly, the INV morpheme occurs in environments which are a subset of those excluded by the PCC (cf. (3c) and (4b)), albeit with subject (SU) and object (O) markers instead of IO and DO. The insertion of INV can thus be seen as a repair strategy for person restrictions, as described in (5).[3]

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1 Non standard abbreviations: A, B, C (class A, B, C; Kiowa-Tanoan); C1, C2, C3 (class 1, 2, 3); DJ (disjunct).
2 '≫' indicates asymmetric c-command. I assume IO ≫ DO is the base relation in DOCs (Anagnostopoulou, 2003).
3 DIR also surfaces when O is more 'topical' than SU with 3P ≫ 3P contexts. According to Richards (2008) specificity/definiteness is also a manifestation of person, so this too can be seen as a type of person restriction.

(5) *The* DIR-INV *alternation:* In configurations where the ⬚O⬚ "outranks" the ⬚SU⬚ in terms of person value (as with: 3P.SU ≫ **1P.O**), *inverse morphology* (**INV**) must be inserted.

There is a lot of discussion in the literature regarding person restrictions with internal arguments (IA) (like the PCC in Greek) and person restrictions between IAs and the external argument (EA) (like the DIR-INV system of Ojibwe) individually, but very little on the interaction between the two restrictions. Albizu (1997) suggests they may be the same phenomenon, but does not provide an analysis.

In this paper I present the results of a cross-linguistic survey where I took both kinds of person restrictions into consideration (§2). The survey identifies: **(i)** an implicational relation between EA-IA and IA-IA person restrictions (§2.1) and **(ii)** an implicational relation between STANDARD and REVERSE PCC (§2.2). I also show that (i) and (ii) actually follow from a system where phase heads C/v are the loci of valued person features and deficient pronouns must get their person values via Agree with C/v (§3).

2. Two novel generalizations

The survey is based on previous cross-linguistic studies of syntactic person restrictions like Albizu (1997) and Haspelmath (2004) and expanded to more languages, including those that were previously not treated as having PCC-like restrictions. In total, 97 languages from 23 distinct families, including 3 isolates were reviewed,[4] but this does not mean that *all of them* showed syntactic person restrictions.

I focused on variation with respect to the arguments involved in the person restriction (restrictions with EA-IA combinations vs. IA-IA combinations), and variation in terms of the restrictions' "strength". The former was already illustrated in the introduction, while the latter can be illustrated by comparing Greek with Sambaa (Bantu). As shown by the examples in (6), in Sambaa DOCs, the ⬚IO⬚ and ⬚DO⬚ object markers can co-occur in the same combinations as object clitics in Greek (cf. (2)).

(6) a. A-   za-   ⬚m-⬚ ⬚ni-⬚ onyesha.   1/2/3P.IO ≫ 3P.DO
         SU.1- PRF.DJ- C1- 1- show
         'He pointed her/him out to me.'

     b. A-   za-   ⬚m-⬚ ⬚ku-⬚ onyesha.
         SU.1- PRF.DJ- C1- 2- show
         'He pointed her/him out to you.'

     c. N-   za-   ⬚chm-⬚ ⬚m-⬚ nka Stella   kitabu.
         SU.1- PRF.DJ- C7-   C1- give C1.Stella C7.book
         'I gave Stella a book.'   (Riedel, 2009: 76, 140)

However, only in Sambaa, ⬚IO⬚ and ⬚DO⬚ object markers can also co-occur if they are both 1/2P (7). The only impossible combinations in Sambaa are when the ⬚DO⬚ is **1/2P** and the ⬚IO⬚ is 3P (8).

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[4] <u>Indo-European:</u> Spanish, French, Catalan, Italian, Romanian, German, Zürich German, Swiss German, Dutch, Swedish, English, Icelandic, Slovenian, Serbo-Croatian, Czech, Polish, Bulgarian, Macedonian, Greek, Albanian, Kurdish, Pashto, Iron Ossetic, Digor Ossetic, Kashmiri; <u>Basque;</u> <u>Uralic:</u> Hungarian, Eastern Mansi, Khanty (Ostyak), Tundra Nenets; <u>Afro-Asiatic:</u> Modern Standard Arabic, Classical Arabic, Cairene Arabic, Maltese, Senaya, Christian Barwar, Migama, Baraïn; <u>Nilo-Saharan:</u> Maasai/Maa; <u>Niger-Congo:</u> Sambaa, Haya, Swahili, Nyaturu/Rimi, Limbum; <u>Kartvelian:</u> Georgian; <u>North-West Caucasian:</u> Abhkaz; <u>Sino-Tibetan:</u> Hakha Chin, Chepang, Jyarong, Nocte, Tangut; <u>Austronesian:</u> Kambera, Manam, Tagalog; <u>Sepik-Ramu:</u> Yimas, Manambu; <u>Toricelli/Monumbo:</u> Monumbo; <u>Pama-Nyungan:</u> Djaru, Warlpiri; <u>Chukotko-Kamchatkan:</u> Chukchi, Koryak, Alutor, Itelmen; <u>Penutian:</u> Sahaptin, Takelma; <u>Algic:</u> Algonquin, Blackfoot, Cree, Delaware, Fox, Mi'kmaq, Ojibwe, Passamaquoddy, Potawatomi; <u>Kiowa-Tanoan:</u> Southern Tiwa, Picurís, Tewa, Kiowa; <u>Iroquoian:</u> Cherokee; <u>Uto-Aztecan:</u> Tetelcingo Nahuatl, Classical Nahuatl, O'odham; <u>Zuni;</u> <u>Mayan:</u> Tzotzil, Kaqchikel; <u>Salish:</u> Bella Coola, Clallam, Lummi, Halkomelem, Squamish, Lushootseed; <u>Kutenai;</u> <u>Dené-Yeniseian:</u> Koyukon, Navajo; <u>Eskimo-Aleut:</u> Inuktitut (Labrador), Inuktitut (South Baffin); <u>Araucanian:</u> Mapudungun (due to the strict page limit I can not list the references in the paper; the full list and additional relevant materials are available upon request).

(7) 1/2P.IO ≫ 1/2P.DO :

    a. A- za- ku- ni- onyesha.
       SU.1- PRF.DJ- 2- 1- show
       'He pointed <u>you</u> out to <u>me</u>.'

    b. A- za- ni- ku- onyesha.
       SU.1- PRF.DJ- 1- 2- show
       'He pointed <u>me</u> out to <u>you</u>.'

(8) 3P.IO ≫ *1/2P.DO :

    a. *A- za- **ni-** mu- onyesha.
       SU.1- PRF.DJ- 1- C1- show
       'He pointed **me** out to <u>her</u>.'

    b. *A- za- **ku-** mu- onyesha.
       SU.1- PRF.DJ- 2- C1- show
       'He pointed **you** out to <u>her</u>.'

<div align="right">(Riedel, 2009: 140)</div>

The PCC in Sambaa is thus "weaker" than in Greek; more combinations of object weak/clitic pronouns are allowed. This variation is described as WEAK PCC (9) versus STRONG PCC (10)/(1). There is even more variation regarding the strength of restrictions, as illustrated in Table 1,[5] where the restricted element is canonically either DO (IA-IA combinations) or O (EA-IA combinations). However, due to space limitations, I will treat WEAK, MIXED, and ME-FIRST all uniformly as WEAK person restrictions.

(9) WEAK PCC: when a clitic/weak IO and DO co-occur, if there is one **3P**, it has to be the DO

(10) STRONG PCC: when a clitic/weak IO and DO co-occur, the DO cannot be **1/2P** (Bonet, 1994)

STRONG:	3P ≫ 3P	2P ≫ 3P	1P ≫ 3P	1P ≫ 2P	2P ≫ 1P	3P ≫ 2P	3P ≫ 1P
MIXED I:	3P ≫ 3P	2P ≫ 3P	1P ≫ 3P	1P ≫ 2P	2P ≫ 1P	3P ≫ 2P	3P ≫ 1P
MIXED II:	3P ≫ 3P	2P ≫ 3P	1P ≫ 3P	2P ≫ 1P	1P ≫ 2P	3P ≫ 2P	3P ≫ 1P
WEAK:	3P ≫ 3P	2P ≫ 3P	1P ≫ 3P	1P ≫ 2P	2P ≫ 1P	3P ≫ 2P	3P ≫ 1P
ME-FIRST:	3P ≫ 3P	2P ≫ 3P	1P ≫ 3P	1P ≫ 2P	3P ≫ 2P	2P ≫ 1P	3P ≫ 1P

Table 1: Attested syntactic person restrictions with respect to strength (shaded = ungrammatical)

2.1. Generalization I: The domain-strength implication

In a number of languages both EA-IA and IA-IA person restrictions coexist. For instance in Southern Tiwa (Kiowa-Tanoan), as shown in (11), SU and O (expressed by a portmanteau marker) conform to a WEAK restriction, while the restriction between IO and DO in DOCs (with all three arguments encoded in the portmanteau marker) is a STRONG one, as seen in (13) ('**xxx**' = no corresponding marker).

(11) 1/2P.SU ≫ 1/2P.O

    a. I- mũ -ban.
       1>2 see -PAST
       '<u>I</u> saw <u>you</u>.'

    b. Bey- mũ -ban.
       2>1 see -PAST
       '<u>You</u> saw <u>me</u>.'

(12) 3P.SU ≫ *1/2P.O

    a. Ti- musa- muũ -ban.
       1>3.A- cat.A- see -PAST
       '<u>I</u> saw <u>the cat</u>.'

    b. *'Uide **xxx-** mũ -ban.
       child.A 3.A>2- see -PAST
       '<u>The child</u> saw **you**.'

(13) 1/2/3P.IO ≫ *1/2P.DO:

    a. Tow- wia -ban.
       1>3.A>3.C give -PAST
       '<u>I</u> gave <u>them</u> to <u>him/her</u>.'

    b. Bow- wia -ban.
       2>1>3.C give -PAST
       '<u>You</u> gave <u>them</u> to <u>me</u>.'

    c. ***xxx-** wia -ban.
       1>3.A>2 give -PAST
       '<u>I</u> gave **you** to <u>him/her</u>.'

<div align="right">(Rosen, 1990: 672–77)</div>

Even though EA-IA and IA-IA person restrictions of different strengths can coexist in a language, there are unattested combinations of EA-IA and IA-IA restrictions. This is illustrated in Table 2: **type**

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[5] Nevins (2007) argues that patterns where only 2P is restricted should not exist, but Jelinek & Demers (1983) report that only *3P ≫ **2P** combinations of SU and O are banned in active sentences in Halkomelem and Squamish.

A (Baraïn (Lovestrand, 2012), French (Perlmutter, 1971), Kiowa (Adger & Harbour, 2007), Manam (Lichtenberg, 1983), Tzotzil (Aissen, 1987), . . .), **type B** (Standard Arabic (Fassi-Fehri, 1993), Catalan (Bonet, 1994), Djaru (Tasaku, 1981), Hakha Chin (Peterson, 1998), Swahili (Riedel, 2009), . . .), **type C** (Abkhaz (Hewitt, 1989), *Basque (Albizu, 1997), *Classical Nahuatl (Andrews, 1975)),[6] **type D** (Cherokee (Scancarelli, 1987), Kashmiri (Wali & Koul, 1997), Passamaquoddy (Leavitt, 1996), Sahaptin (Rude, 1994), . . .), **type E** (Alutor (Mel'čuk, 1988)), and **type G** languages (Picurís (Nichols, 2001), Tangut (Kepping, 1979), Tewa (Kroskrity, 1985), . . .) are attested, but languages of **type F**, **H**, and **I** are not. This gap in the attested patterns is not random. In fact, the pattern obeys the generalization in (14).[7]

LANGUAGE:		$\boxed{\text{SU}} \gg \boxed{\text{O}} \Rightarrow$ EA-IA restriction	$\boxed{\text{IO}} \gg \boxed{\text{DO}} \Rightarrow$ IA-IA restriction
type A	✓	no restriction	STRONG
type B	✓	no restriction	WEAK
type C	✓	no restriction	no restriction
type D	✓	WEAK	STRONG
type E	✓	WEAK	WEAK
type F	✗	WEAK	no restriction
type G	✓	STRONG	STRONG
type H	✗	STRONG	WEAK
type I	✗	STRONG	no restriction

Table 2: Logically possible combinations of EA-IA and IA-IA person restrictions (shaded = unattested)

(14)   ***Generalization I*** (*EA-IA → *IA-IA):

    a.   Within a language, IA-IA person restrictions are never weaker than EA-IA person restrictions;

    b.   *Corollary:* If a language has an EA-IA restriction it will also have an IA-IA restriction.[8]

2.2. Generalization II: The REVERSE-STANDARD *implication*

As noted in Stegovec (2015), person restrictions in DOCs are not limited to the PCC as described in (1). In Slovenian, the STANDARD PCC, where the restriction applies to the $\boxed{\textbf{DO}}$, coexists with a REVERSE PCC, illustrated in (15), where the restriction applies to the $\boxed{\textbf{IO}}$. Crucially, the two patterns emerge with different object clitic orders: the former with $\boxed{\text{IO}} - \boxed{\textbf{DO}}$ order, and the latter with $\boxed{\text{DO}} - \boxed{\textbf{IO}}$ order.

(15)   REVERSE PCC:

    a.   Sestra $\boxed{\text{me / te}}$ $\boxed{\text{mu}}$ bo   predstavila. $\boxed{\text{DO}} - \boxed{\text{IO}}$
         sister   1.ACC/2.ACC   3.M.DAT   will introduce.F
         'The sister will introduce me/you to him.'

    b.   *Sestra $\boxed{\text{ga}}$ $\boxed{\textbf{mi / ti}}$ bo   predstavila. $\boxed{\text{DO}} - \boxed{\textbf{IO}}$
         sister   3.ACC   1.DAT/2.DAT   will introduce.F
         'The sister will introduce him to **me/you**.'

The REVERSE PCC s also found in other languages. However, its cross-linguistic distribution shows an interesting gap illustrated in Table 3. The attested patterns are: **type A** (see Type C above) **type B** (all STANDARD patterns — see above), **type C** (Chukchi (Comrie, 1979), Czech (Sturgeon et al., 2012), Haya (Duranti, 1979), Maasai/Maa (Lamoureaux, 2004), Slovenian (Stegovec, 2015), . . .). The only

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[6]   Classical Nahuatl is a reconstructed language and the PCC-less dialect of Basque reported by Albizu (1997) is also extinct (indicated by '*'); the surviving dialects of Basque actually do show PCC effects. Regarding Abkhaz, Mark Baker (p.c.) notes that $\boxed{\text{IO}}$ clitics surface as ergative in DOCs, which is highly unusual and might be connected to the apparent lack of person restrictions. There is thus a possibility that languages of **type C** are also unattested.

[7]   (14a) is hinted at as a possibility in a footnote in Albizu (1997), but he does not systematically investigate it.

[8]   That is, if ditransitives can be DOCs. There are languages with only EA-IA restrictions, but they invariably express ditransitives either only with prepositional datives or by demoting the $\boxed{\text{IO}}$ or $\boxed{\text{DO}}$ to a non-clitic(-doubled) oblique.

unattested pattern is **type D** — a REVERSE PCC without a corresponding STANDARD PCC pattern. This gap reveals another generalization concerning person restrictions, which is stated in (16).

LANGUAGE:		$\boxed{\text{IO}} - \boxed{\textbf{DO}} \Rightarrow$ STANDARD	$\boxed{\text{DO}} - \boxed{\textbf{IO}} \Rightarrow$ REVERSE
type A	✓	no restriction	no restriction
type B	✓	PCC	no restriction
type C	✓	PCC	PCC
type D	✗	no restriction	PCC

Table 3: Logically possible combinations of STANDARD, REVERSE, and no PCC (shaded = unattested)

(16)   ***Generalization II*** (REVERSE → STANDARD):
     a. If a language has REVERSE PCC it must also have STANDARD PCC;
     b. If both $\boxed{\text{IO}}$ and $\boxed{\text{DO}}$ are overt, REVERSE PCC arises with a reordering of $\boxed{\text{IO}}$ and $\boxed{\text{DO}}$.

3. Analysis

If syntactic person restrictions were entirely arbitrary, we would not expect to find the kind of systematic gaps we identified above. In this section I present a unified analysis of syntactic person restrictions which derives the two generalizations in conjunction with standard assumptions regarding arguments structure. The analysis is an extension of Stegovec (2015, 2016), which is itself a variant of approaches to the PCC that derive it as a syntactic intervention effect (see, a.o. Anagnostopoulou, 2003; Béjar & Řezáč, 2003). The gist of the analysis is summarized in (17).

(17)   a. *Deficient pronouns* (clitic/weak pronouns in the sense of Cardinaletti & Starke, 1999) are underspecified for a person value and need to receive it externally from a functional head;
     b. C and v (= phase heads) may host valued person features;

The intuition behind the analysis is that the type of pronoun/pronominal marker is the key for the presence/absence of person restrictions (see also Nevins, 2011). We know the use of strong pronouns or non clitic-doubling constructions voids person restrictions (Perlmutter, 1971); it has also been argued by Nevins (2011) that 'true' agreement markers do not give rise to person restrictions. This leaves *deficient pronouns* (clitic/weak pronouns) as the only class of pronouns involved in syntactic person restrictions.[9] I argue this is because they are *minimal pronouns* in the sense of Kratzer (2009). Specifically, their person features ([iπ]) are <u>interpretable</u> but <u>unvalued</u>, requiring external valuation. Following Kratzer (2009), phase heads C and v can enter the derivation with valued ϕ-features, which are <u>uninterpretable</u> but <u>valued</u>. A clause is then essentially built up with a 1P/2P perspective from the start. The valued [uπ] on C/v can provide a person value to deficient pronouns via Agree (Chomsky, 2000). Focusing on v, as shown in (18), $\boxed{\text{SU}}$ is first merged in Spec$v$P, while $\boxed{\text{IO}}$ and $\boxed{\text{DO}}$ are first merged below vP. The v thus stands in a different structural relation to $\boxed{\text{SU}}$ (Spec-Head) as opposed to $\boxed{\text{IO}}$ or $\boxed{\text{DO}}$ (Probe-Goal). Note also that in this configuration, the $\boxed{\text{IO}}$ is an intervener for (Probe-Goal) Agree between v and the $\boxed{\text{DO}}$.

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[9]   In a number of investigated languages, including Southern Tiwa (see (11–13) above), multiple arguments are expressed via a portmanteau marker. I assume such markers are essentially multiple clitics (= φ-feature bundles) that are merged together at some point in the derivation and expressed by a single morpheme at PF. This is similar to Adger & Harbour's (2007) *'pronominal argument'* analysis of Kiowa (a language related to Southern Tiwa).

(18)
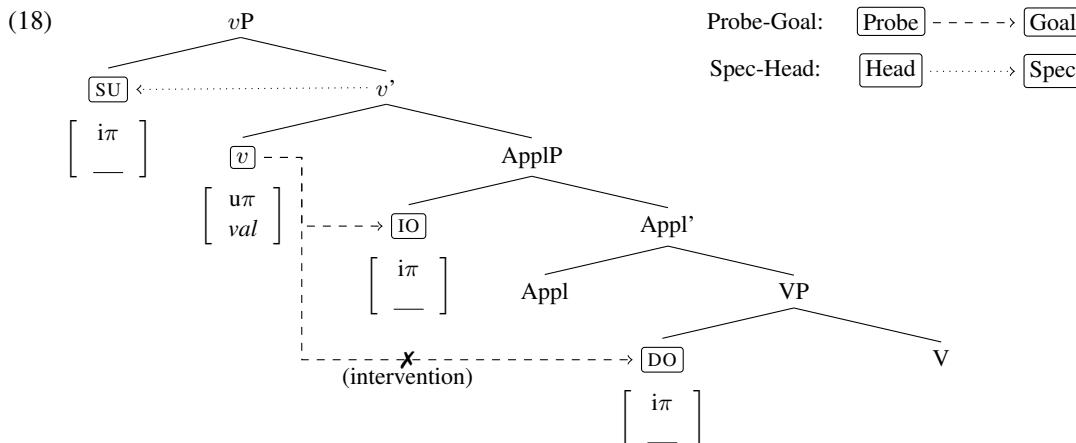
This asymmetry between the position of [SU] and [IO/DO] in relation to v (the locus of valued [uπ] features) will be crucial for deriving *Generalization I*, as it creates a natural split between EA-IA and IA-IA person restrictions. Similarly, we will see that the base positions of [IO] and [DO], where the former asymmetrically c-commands the latter, are likewise crucial for the derivation of *Generalization II*.

3.1. Deriving STRONG and WEAK PCC

Before deducing (14,16), consider how the standard PCC is derived in this approach. I assume that the DOC is an Appl(icative) construction where the [IO] is base generated in SpecApplP, asymmetrically c-commanding the [DO] in its base V-complement position (Anagnostopoulou, 2003). ApplP is in turn merged with v, a phase head, and the source of valued [uπ] features in the phase. I propose the following:

(19)   a.   A person feature consists of a person node [π], which optionally hosts privative sub-features: PART (*participant*) and AUTH (*author*);

   b.   A person node [π] can either be:
   - a bare [π], which corresponds to 3P;
   - specified with a PART sub-feature, which corresponds to 2P;
   - specified with both PART and AUTH sub-features, which corresponds to 1P.[10]

   c.   AUTH is dependent on PART (= PART←AUTH), that is: AUTH alone does not have a formal status, which in turn means that all PART-valuation must always precede all AUTH-valuation;

   d.   If [uπ] is specified for PART or PART←AUTH, it <u>must</u> copy the relevant sub-features to the [iπ] of any deficient pronouns as soon as the conditions for the valuation are met.

Consider then the STRONG PCC derivation in (20). Following Stegovec (2015, 2016), I assume [uπ] on v can value the unvalued [iπ] of deficient pronouns via Agree, but that [uπ] itself is not the Probe that initiates Agree.[11] As the [IO] is an accessible Goal for v, they can enter Agree. If [uπ] is specified either for PART or PART←AUTH, the sub-features can now be copied to the [IO] making it 2P or 1P respectively.

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[10] The 1/2/3P contrast is also expressible in a *participant + hearer* system, and both *author* and *hearer* sub-features may be needed for the inclusive/exclusive contrast. But as this is orthogonal to the main topic, I will put it aside.
[11] In Stegovec (2015, 2016) I argue that it is the unvalued number/gender φ-features on v that trigger Agree with their valued counterparts on the deficient pronouns (only [iπ] is unvalued). See the two papers for details.

(20)

$$\boxed{\text{IO}} \gg \boxed{\text{DO}} = 1/2/3\text{P} \gg 3\text{P}$$
$$\boxed{\text{IO}} \gg \mathbf{\boxed{\text{DO}}} = {}^*1/2/3\text{P} \gg \mathbf{1/2\text{P}}$$
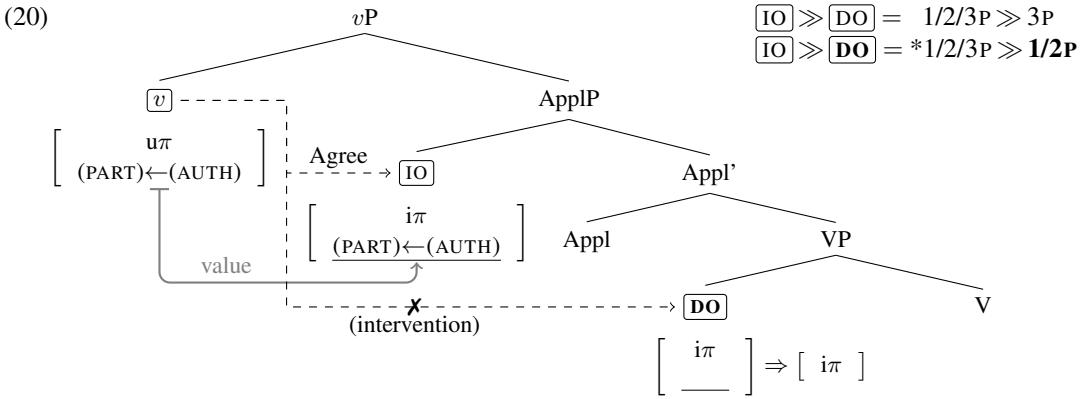
As the intervening $\boxed{\text{IO}}$ makes $\boxed{\text{DO}}$ inaccessible to v for Agree, it spells-out with a default bare [iπ], restricting it to 3P. This yields STRONG PCC, where $\boxed{\text{DO}}$ is restricted to 3P in the presence of $\boxed{\text{IO}}$ (10).

WEAK PCC arises under slightly different conditions with the same initial configuration. As argued in Stegovec (2015, 2016), in WEAK PCC languages, deficient object pronouns must move to Spec$v$P to be valued in a Spec-Head relation.[12] This is shown in (21,22). In (21), the $\boxed{\text{IO}}$ is closest to v, so it must move to Spec$v$P first, resulting in its [iπ] feature being valued for PART (but not yet AUTH; cf. (19c)).

(21)

$$\boxed{\text{IO}} \gg \boxed{\text{DO}} = 1/2\text{P} \gg 1/2\text{P} \ (\textbf{Step \#1})$$
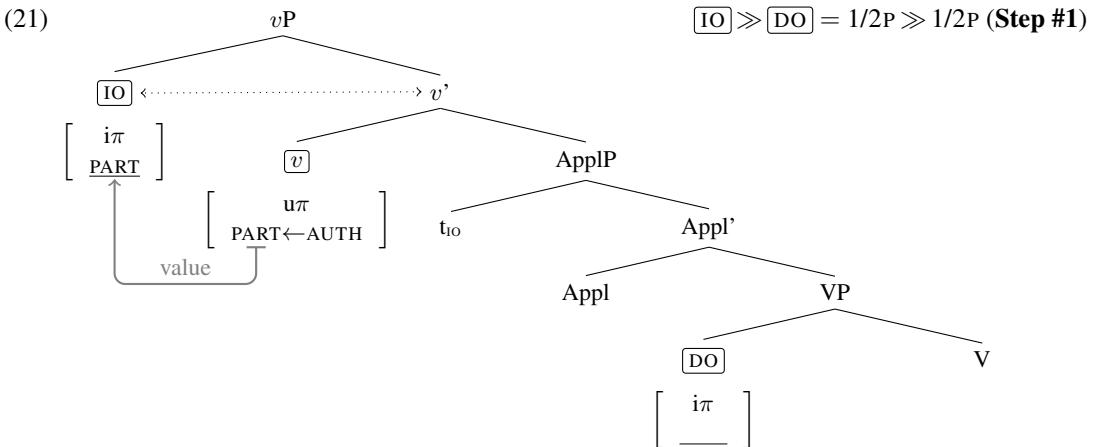
After $\boxed{\text{IO}}$ moves to Spec$v$P, $\boxed{\text{DO}}$ can also move to Spec$v$P by 'tucking-in' under $\boxed{\text{IO}}$ (Richards, 2001). Because in this configuration there is no intervener between $\boxed{\text{DO}}$ and v, $\boxed{\text{DO}}$ too can be valued by v. Valuation proceeds first for PART and only then for AUTH (19c), but since $\boxed{\text{IO}}$ and $\boxed{\text{DO}}$ now both stand in a Spec-Head relation with v, either one can be valued for AUTH (represented with { }), resulting in either a 2P $\gg$ 1P or 1P $\gg$ 2P configuration (1P $\gg$ 1P and 2P $\gg$ 2P are out due to Condition B).

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[12] The relation between pronoun movement and WEAK PCC has independent motivation. Anagnostopoulou (2008) observes that languages with weak (but not clitic) pronouns are restricted to WEAK PCC, and weak pronouns typically move to different positions than clitic pronouns (see Cardinaletti & Starke, 1999). In Stegovec (2015, 2016) I tie the movement of deficient pronouns to Spec$v$P to a lexical difference between clitic and weak pronouns: in clitic pronouns [π] and other φ-features form a bundle, while in weak pronouns [π] is a separate node. This means that [iπ] on weak pronouns functions as a Probe itself, as it cannot be valued in the Agree cycle established for other φ-features. Consequently, it must move to a position where it c-commands a valued [uπ], like Spec$v$P. The STRONG/WEAK PCC split can thus also be derived without treating Spec-Head/Probe-Goal Agree as separate operations, deriving the variation in strength entirely as lexical variation. See the two papers for details.

(22)

$$vP$$

$\boxed{\text{IO}} \gg \boxed{\text{DO}} = 1/2\text{P} \gg 1/2\text{P} \text{ (\textbf{Step \#2})}$

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                              vP
                   ┌──────────┴──────────┐
              ┌ IO ┐  ‹·················›  v'
              │           ┌───────────┴────────────┐
  ┌─────────────┐     ┌ DO ┐  ‹···············›  v'
  │     iπ      │     │          ┌──────────┴──────────┐
  │ PART←{AUTH} │  ┌────────┐  ┌ v ┐              ApplP
  └─────────────┘  │   iπ   │        ┌──────────────┐
                   │ PART←{AUTH} │  ┌──────────┐   t_IO ... t_DO ...
                   └────────┘  │    uπ    │
                        value  │PART←AUTH │
                               └──────────┘
                          value
```
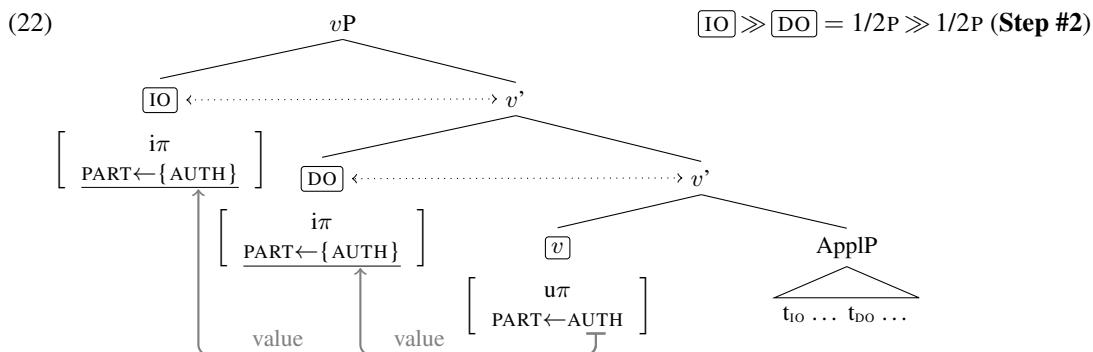
In any derivation where v's [uπ] is specified at least for PART, the $\boxed{\text{DO}}$ can only be 3P if it does not move to Spec$v$P and spells-out as 3P without being valued, analogously to what we saw in (20):

(23)

$\boxed{\text{IO}} \gg \boxed{\textbf{DO}} = 1/2\text{P} \gg 3\text{P}$

```
                              vP
                   ┌──────────┴───────────────────────┐
              ┌ IO ┐  ‹························›       v'
              │           ┌──────────────────┴──────────────┐
  ┌─────────────┐     ┌ v ┐                            ApplP
  │     iπ      │   ┌──────────┐                ┌──────────┴──────────┐
  │PART←(AUTH) │   │    uπ    │              t_IO            Appl'
  └─────────────┘   │PART←(AUTH)│                     ┌──────────┴──────────┐
                    └──────────┘                   Appl                VP
                         value                              ┌──────────┴──────┐
                                                        ┌ DO ┐             V
                                                        ┌──────┐
                                                        │  iπ  │ ⇒ [ iπ ]
                                                        └──────┘
```
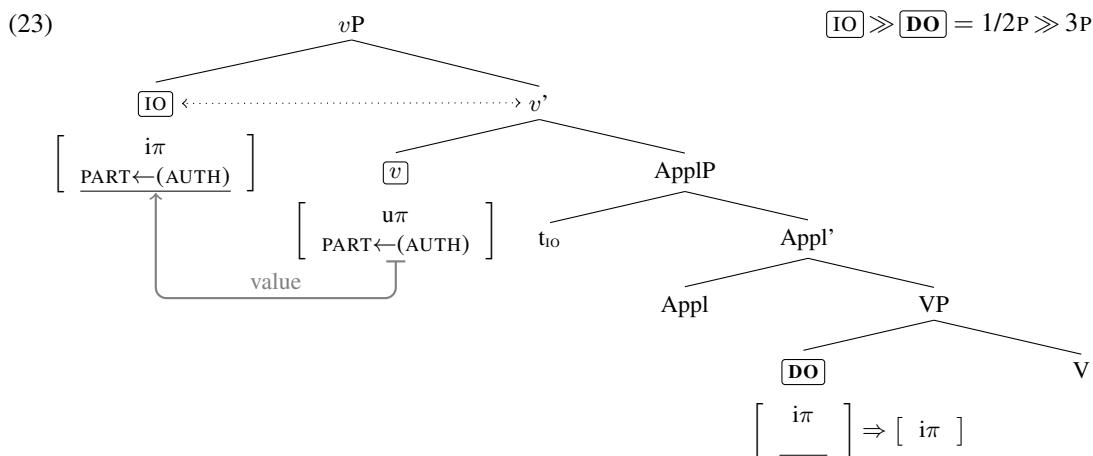
The person restriction arises in WEAK PCC languages due to condition (19d). A clause with at least one 1/2P deficient pronoun requires a derivation where v's [uπ] is specified for PART or PART←AUTH, so the pronoun can be valued. The reason why *3P $\gg$ **1/2P** combinations are banned lies once again in the structural configuration of $\boxed{\text{IO}}$ and $\boxed{\text{DO}}$. As illustrated in (24), in order to get a 3P $\gg$1/2P configuration in this approach, $\boxed{\text{IO}}$ must move to Spec$v$P first, so that $\boxed{\text{DO}}$ can later do the same and be valued 1/2P. However, if $\boxed{\text{IO}}$ is to be 3P, its [iπ] must not be valued by v's [uπ] when it moves to Spec$v$P, but this is impossible due to the condition in (19d); [uπ] is specified for PART←(AUTH) (so that $\boxed{\text{DO}}$ can be 1/2P), and since $\boxed{\text{IO}}$ is in a relation with v (Spec-Head) where valuation is possible, it also <u>must</u> be valued. Because of this *3P $\gg$ **1/2P** combinations are impossible with WEAK PCC. The only derivation where $\boxed{\text{IO}}$ can be 3P is the one in when the [uπ] on v is bare and therefore lacks PART and AUTH. But in that case the $\boxed{\text{DO}}$ must also be 3P, as there is no source of PART or AUTH in the vP phase.

(24)

$\boxed{\text{IO}} \gg \boxed{\textbf{DO}} = {}^*3\text{P} \gg \textbf{1/2P}$

```
                              vP
                   ┌──────────┴──────────┐
              ┌ IO ┐                     v'
              │         ┌──────────────┴──────────┐
  ✗[ iπ ] ⇐ [ iπ ]   ┌ v ┐                  ApplP
            ┌─────┐    ┌──────────┐       ┌──────────┴──────────┐
            │     │    │    uπ    │     t_IO ... ┌ DO ┐ ...
            └─────┘    │PART←(AUTH)│
                       └──────────┘
```
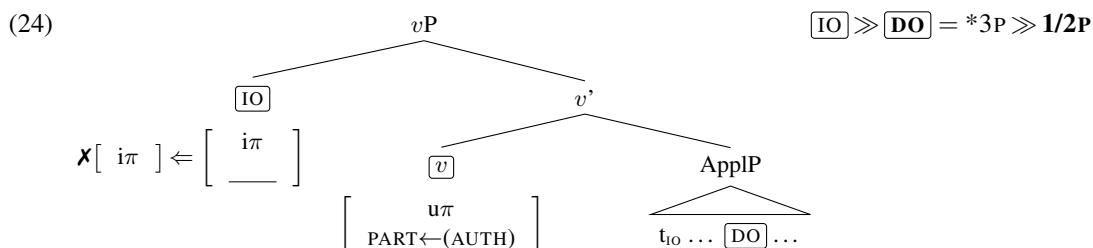
The "person hierarchy" effect of WEAK PCC is derived as a consequence of the timing of grammatical operations and the structure of DOCs — either one or both deficient pronouns can be valued as 1/2P, but when only one of them is valued, it must be the structurally higher one (cf. (9)).

3.2. Deriving Generalization I: *EA-IA → *IA-IA

The derivations so far involved only deficient object pronouns, which meant person restrictions were limited to IA-IA contexts. However, if a language also has $\boxed{\text{SU}}$ deficient pronouns, they are also predicted to have unvalued [iπ] features which must be valued externally. Since $\boxed{\text{SU}}$ is introduced by v, it already stands in a Spec-Head relation with v when merged. This means it is invariably in a configuration where its [iπ] can be valued. This contrasts with Agree, which is an operation and therefore does not necessarily have to take place. Operations, unlike structural configurations, can thus in principle be delayed.

I propose that WEAK EA-IA person restrictions in fact arise because a phase head can only probe <u>after</u> the numeration for its phase is exhausted. This assumption also has further consequences: it derives the Merge-over-Move preference (Chomsky, 2000). External Merge with a phase head precedes Agree, and since Agree is a prerequisite for Move/Internal Merge, External Merge has precedence over Move.

Consider now the derivation in (25). The [iπ] of $\boxed{\text{SU}}$ is valued by v's [uπ] at the point they merge (Spec-Head). As this exhausts the numeration for the phase, v can then probe and establish Agree with any accessible Goal. $\boxed{\text{SU}}$ is thus always valued by v before $\boxed{\text{IO}}$ in DOCs or $\boxed{\text{DO}}$ in regular transitives.

(25) $\boxed{\text{SU}} \gg \boxed{\text{IO}} \gg \boxed{\text{DO}} = 1/2\text{P} \gg 1/2\text{P} \gg 3\text{P}$
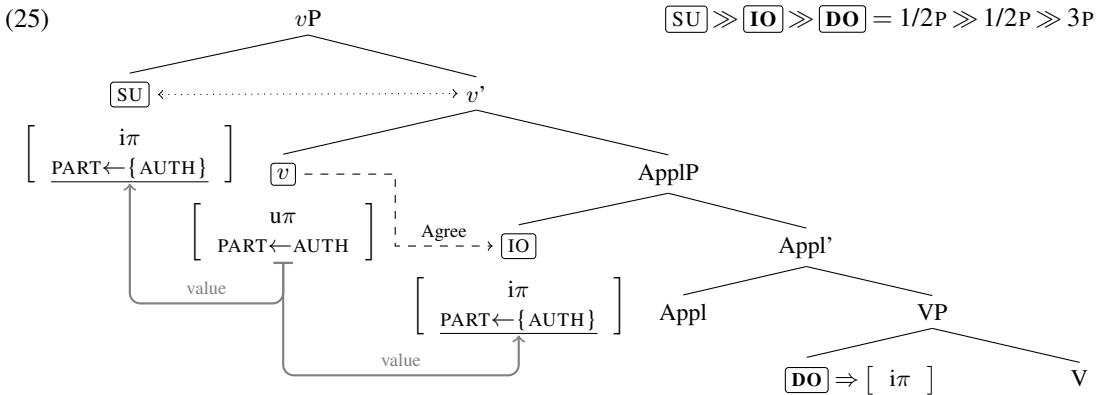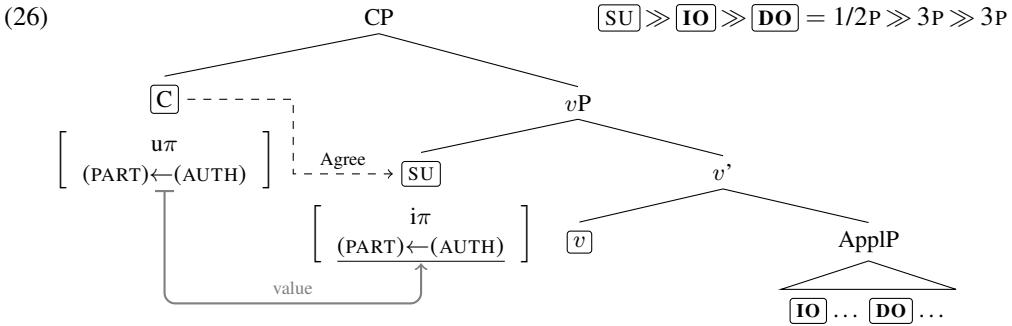

Note that $\boxed{\text{SU}}$ is in the same relation to v as $\boxed{\text{IO}}$ was in (21), so a WEAK restriction arises in this case too: once SU is valued, the [iπ] of the next accessible deficient pronoun can either be valued by v via Agree,[13] or spell-out as 3P. But $\boxed{\text{SU}}$ cannot spell-out as 3P if an $\boxed{\text{O}}$ is valued 1/2P (cf. (24)). Moreover, in (25), $\boxed{\text{IO}}$ still acts as an intervener for Agree between v and $\boxed{\text{DO}}$, which predicts a STRONG PCC with internal arguments. The whole predicted restriction pattern is therefore the one of Southern Tiwa (11–13) and other languages of **type D** (Table 2): a WEAK EA-IA and STRONG IA-IA restriction.

Recall that valued [uπ] can occur on either v or C. Consequently, if the location of valued [uπ] can be parameterized, a different restriction pattern is predicted in languages where only C can host them,[14] namely a **type G** language (Table 2) like Picurís or Tewa, with a STRONG restriction with both EA-IA and IA-IA. As (26) shows, only $\boxed{\text{SU}}$ can be valued for [π] in a Probe-Goal relation with C. This also means $\boxed{\text{SU}}$ intervenes for Agree between C and $\boxed{\text{IO}}$ or $\boxed{\text{DO}}$, which correctly predicts both to be restricted to 3P.

---

[13] Object pronouns can in principle also 'tuck in' under $\boxed{\text{SU}}$ and be valued there. This is actually required when v probes for other φ-features but fails to value the objects for person (see Stegovec, 2015, 2016: and footnote 12). In fact, to derive a **type E** pattern (Table 2), a WEAK restriction for both EA-IA and IA-IA pairs, both object pronouns must 'tuck in' under $\boxed{\text{SU}}$. A configuration of two 1/2P objects is then possible in such a language when *3P $\gg$ **1/2P** EA-IA combinations are allowed to surface due to INV-insertion or comparable repairs. This is borne out in Alutor (Mel'čuk, 1988), where the *3P $\gg$ **1P** $\gg$ 2P combination is only possible due to the *spurious anti-passive* repair.
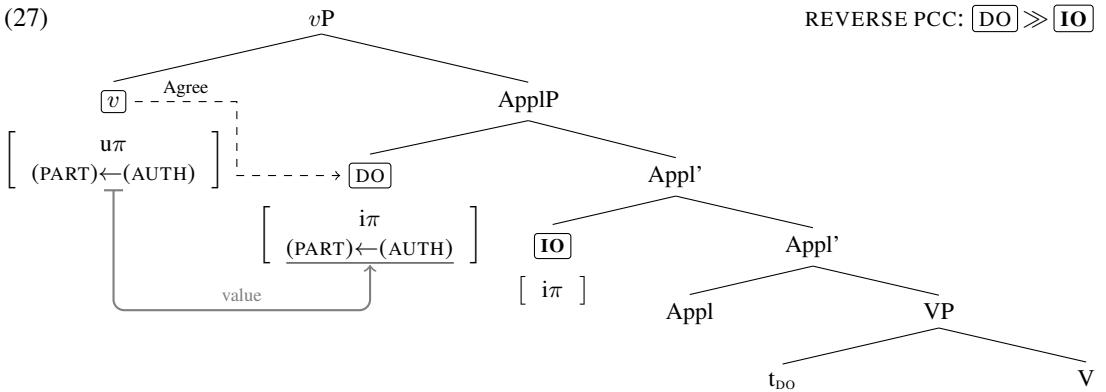
[14] By similarly parameterizing only the location of the PART or AUTH sub-features, in addition to the established Spec-Head/Probe-Goal split, it is possible to derive all the different types of WEAK restrictions shown in Table 1.

(26) CP $\quad\boxed{\text{SU}} \gg \boxed{\textbf{IO}} \gg \boxed{\textbf{DO}} = 1/2\text{P} \gg 3\text{P} \gg 3\text{P}$

Tree (26):
- CP
  - $\boxed{\text{C}}$
    $\begin{bmatrix} \text{u}\pi \\ (\text{PART}) \leftarrow (\text{AUTH}) \end{bmatrix}$
    — Agree →
  - vP
    - $\boxed{\text{SU}}$
      $\begin{bmatrix} \text{i}\pi \\ (\text{PART}) \leftarrow (\text{AUTH}) \end{bmatrix}$
    - v'
      - $\boxed{v}$
      - ApplP
        - $\boxed{\textbf{IO}} \ldots \boxed{\textbf{DO}} \ldots$

(value)

Combining the current approach to person valuation of deficient pronouns with standard assumptions regarding argument structure thus straightforwardly derives *Generalization I*. The $\boxed{\text{SU}}$ is never first merged bellow v, while $\boxed{\text{IO}}$ and $\boxed{\text{DO}}$ are, which means that whether the EA-IA person restriction is STRONG or WEAK, an IA-IA restriction active in the same language cannot be of a weaker kind.

3.3. Deriving Generalization II: REVERSE → STANDARD

Turning to *Generalization II* (16). Since $\boxed{\text{IO}}$ is base generated above $\boxed{\text{DO}}$, the default PCC pattern is the STANDARD one (cf. (20-24)): a person restriction on $\boxed{\textbf{DO}}$. The only way to derive REVERSE PCC is via movement of $\boxed{\text{DO}}$ over $\boxed{\text{IO}}$ in a manner which feeds person valuation; i.e. REVERSE PCC can only be derived if $\boxed{\text{DO}}$ moves before v enters the derivation. (27) illustrates this for a STRONG restriction.

(27) vP $\qquad$ REVERSE PCC: $\boxed{\text{DO}} \gg \boxed{\textbf{IO}}$

Tree (27):
- vP
  - $\boxed{v}$
    $\begin{bmatrix} \text{u}\pi \\ (\text{PART}) \leftarrow (\text{AUTH}) \end{bmatrix}$
    — Agree →
  - ApplP
    - $\boxed{\text{DO}}$
      $\begin{bmatrix} \text{i}\pi \\ (\text{PART}) \leftarrow (\text{AUTH}) \end{bmatrix}$
    - Appl'
      - $\boxed{\textbf{IO}}$
        $\begin{bmatrix} \text{i}\pi \end{bmatrix}$
      - Appl'
        - Appl
        - VP
          - t_{DO}
          - V

(value)

With both STRONG and WEAK PCC, an optional $\boxed{\text{DO}}$-over-$\boxed{\text{IO}}$ movement below v gives rise to a STANDARD/REVERSE alternation, while the unavailability of the additional movement predicts a STANDARD PCC-only language. Consequently, the reason no language has only REVERSE PCC is that crosslinguistically the base position of $\boxed{\text{DO}}$ never asymmetrically c-commands $\boxed{\text{IO}}$ in DOCs.[15]

To sum up, I identified two novel generalizations regarding syntactic person restrictions, which become apparent once we take both EA-IA and IA-IA person restrictions, as well as both DIR-INV systems and PCC-like restrictions to be manifestations of the same underlying phenomenon. To account for the two generalizations, I adopted an analysis where deficient pronouns must get their person values via agreement with C/v, deriving the generalizations from standard assumptions about argument structure.

References

Adger, David & Daniel Harbour (2007). Syntax and syncretism of the Person Case Constraint. *Syntax* 10, 2–37.
Aissen, Judith L. (1987). *Tzotzil Clause Structure*. D. Riedel, Dordrecht.

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[15] If $\boxed{\text{O}}$ moves over $\boxed{\text{SU}}$, when C is the locus of valued [uπ], we should get an equivalent of REVERSE PCC for EA-IA. This is attested in Tangut (Kepping, 1979), which appears to have this type of STANDARD/REVERSE alternation.

Albizu, Pablo (1997). *The Syntax of Person Agreement*. PhD thesis draft, USC, Los Angeles.

Anagnostopoulou, Elena (2003). *The Syntax of Ditransitives*. De Gruyter, Berlin.

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

Andrews, J. Richard (1975). *Introduction to Classical Nahuatl*. University of Oklahoma Press, Norman.

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

Bonet, Eulalia (1994). The Person-Case Constraint. *MIT Working papers in Linguistics* 22, 33–52.

Cardinaletti, Anna & Michal Starke (1999). The typology of structural deficiency. v. Riemsdijk, H. (ed.), *Clitics in the languages of Europe*, De Gruyter, New York, 145–233.

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

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

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

Fassi-Fehri, Abdelkader (1993). *Issues in the structure of Arabic clauses and words*. Kluwer Academic, Dordrecht.

Haspelmath, Martin (2004). Explaining the ditransitive person-role constraint. *Constructions* 2, 1–49.

Hewitt, B. George (1989). *Abkhaz*. Routledge, London.

Jelinek, Eloise & Richard Demers (1983). The Agent Hierarchy and voice in some Coast Salish languages. *International Journal of American Linguistics* 49, 167–185.

Kepping, Ksenia B. (1979). Elements of ergativity and nominativity in Tangut. Plank, F. (ed.), *Towards a Theory of Grammatical Relations*, Academic Press, London, 263–277.

Kratzer, Angelika (2009). Making a pronoun. *Linguistic Inquiry* 40:2, 187–237.

Kroskrity, Paul V. (1985). A holistic understanding of Arizona Tewa passives. *Language* 61, 306–328.

Lamoureaux, Siri van Dorn (2004). Applicative constructions in Maasai. MA Thesis.

Leavitt, Robert M. (1996). *Passamaquoddy-Maliseet*. Lincom Europa, Munich.

Lichtenberg, Frantisek (1983). *A grammar of Manam*. University of Hawaii Press, Honolulu.

Lovestrand, Joseph (2012). The linguistic structure of Baraïn. MA thesis, GIAL.

Mel'čuk, Igor (1988). *Dependency Syntax: Theory and Practice*. SUNY Press, Albany, NY.

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. *Natural Language & Linguistic Theory* 29, 939–971.

Nichols, Lynn (2001). The syntactic basis of referential hierarchy phenomena. *Lingua* 111, 515–537.

Perlmutter, David (1971). *Deep and surface structure constraints in syntax*. Holt, Rinehart and Winston, New York.

Peterson, David (1998). The morphosyntax of transitivization in Lai. *Linguistics of the Tibeto-Burman* 22, 87–153.

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

Richards, Norvin (2001). *Movement in language*. Oxford University Press, Oxford.

Riedel, Kristina (2009). *The Syntax of Object Marking in Sambaa*. Ph.D. thesis, Universiteit Leiden.

Rosen, Carol (1990). Rethinking Southern Tiwa. *Language* 66, 669–713.

Rude, Noel (1994). Direct, inverse and passive in Northwest Sahaptin. Givón, T. (ed.), Voice and Inversion, John Benjamins, Amsterdam, 101–120.

Scancarelli, Janine (1987). *Grammatical relations and verb agreement in Cherokee*. Ph.D. thesis, UCLA.

Stegovec, Adrian (2015). Now you PCC me, now you don't. *Proceedings of NELS* 45, 107–117.

Stegovec, Adrian (2016). A Person-Case Constraint without Case. Ms. UConn. `lingbuzz/002632`.

Sturgeon, Anne, Boris Harizanov, Maria Polinsky, Ekaterina Kravtchenko, Carlos Gómez Gallo, Lucie Medová & Václav Koula (2012). Revisiting the Person Case Constraint in Czech. *Proceedings of FASL* 19, 116–130.

Tasaku, Tsunoda (1981). Interaction of phonological, grammatical & semantic factors. *Oceanic Linguistics* 20, 45–92.

Valentine, Randolph J. (2001). *Nishnaabemwin Reference Grammar*. University of Toronto Press, Toronto.

Wali, Kashi & Omkar N. Koul (1997). *Kashmiri*. Routledge, London.

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