Incremental Valuation and the Person Case Constraint: Five Attested Patterns

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Extensive research has been conducted on person feature interactions between the indirect object (IO) and the direct object (DO) in double object constructions—commonly referred to as Person Case Constraint (PCC) effects—in a number of languages (i.a. Bonet 1991; Béjar and Rezac 2003; Nevins 2007; Walkow 2012; Pancheva and Zubizarreta 2017). French, for example, shows restrictions on at least a 3rd person IO with a 1st or 2nd person DO (*3>1/2) as shown in (1).[1]

(1) *French* [1>3, 2>3, 3>3, *3>1, *3>2 ($^{\%}$1>2, $^{\%}$2>1)] (Rezac 2011)

a. Elle {**nous/vous**} **le** présentera.
she {**us/you.D**} **him.A** will.introduce
'She will introduce him to us/you.'

b. Lucille {**la/*nous/*te**} **leur** présentera.
L. {**her/us/you.A**} **them.D** will.introduce
'Lucille will introduce her/us/you to them.'

Five distinct patterns have been identified with respect to restrictions on person combinations of the internal arguments in a weak form (i.e., clitics or agreement morphemes). The five types of PCC are listed in (2) with their unavailable person combinations (IO>DO) marked as '*'.

(2)

Person combinations→	1>3	1>2	2>1	2>3	3>1	3>2	3>3
a. STRONG	✓	*	*	✓	*	*	✓
b. WEAK	✓	✓	✓	✓	*	*	✓
c. ULTRASTRONG	✓	✓	*	✓	*	*	✓
d. SUPER-STRONG	✓	*	*	✓	*	*	*
e. *me*-FIRST	✓	✓	*	✓	*	✓	✓

The strong PCC (2a) has been analyzed as a restriction on an unlicensed marked person feature (1st/2nd) on the DO (Béjar and Rezac 2003). Anagnostopoulou (2005) uses Multiple Agree to account for the additional availability of 1>2 and 2>1 in the weak PCC variety (2b). The ultrastrong PCC (among other variants) has been explained using relativized probes in conjunction with Multiple Agree (*Contiguous Agree*—Nevins 2007). Pancheva and Zubizarreta (2017) attempt to account for the five varieties of PCC similarly, using a feature relativization in addition to other conditions on Agreement. These relativized probes and type-specific conditions describe each PCC pattern; however, they do not provide us with an explanation as to why this sort of cross-linguistic variation exists.

Proposal: In this paper, I propose that by taking full advantage of φ-feature geometry (Harley and Ritter 2002), we can capture the variation in (2). I claim that the restriction on certain person combinations arise from one probe attempting to establish a valuation relation with two arguments and that the variation among the different types of PCC derives from the feature structure of probes and arguments. With the proposed system, we can account for the variation in terms of lexical specification without having to posit different syntactic operations or conditions on Agree for each PCC variant.

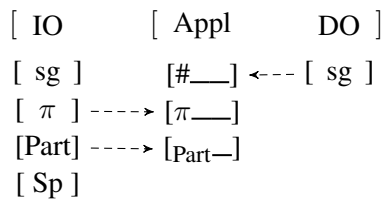
Assumptions: I assume that Merge is conditioned by valuation (*Merge Condition*—Wurmbrand 2014) and that arguments with valued φ-features come into the derivation in order to value unvalued φ-features on a probe. What follows from this assumption is that if an argument cannot transmit any value to the probe, the argument is unable to come into the derivation, resulting in ungrammaticality. I follow Béjar and Rezac (2009) and take morphological φ-features (i.e., articulated person features) to be visible for syntactic operations. As with their system, articulated person probes are taken to be active until all of their dependent features are exhausted. This means that one probe can be incrementally valued by more than one argument, giving rise to a possibility of the probe being a mediator of two arguments. I assume a feature inventory, partly adopted from Harley and Ritter (2002) and Béjar and Rezac (2009), which includes [#] (number: sg/pl), [π] (person), [Part(icipant)], [Ad(dressee)], and [Sp(eaker)]. [Sp] and [Ad] entail [Part], which in turn entails [π], and [#] has no entailment relation with these person features. Finally, I assume a structure where the DO merges with a functional element with a probe first and the IO is merged later (i.e, [$_{\text{ApplP}}$ IO [Appl DO]]) for all varieties.

Mechanism: The valuation system proposed here is such that if a probe is valued by an argument that is more highly specified (e.g., 1st person) first, then it cannot be valued further by another argument

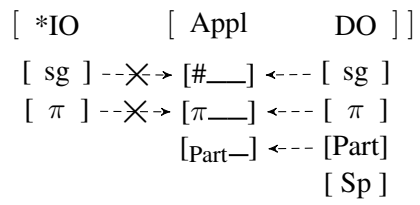
[1] A=accusative, D=dative. Many French speakers have the strong PCC pattern, but there have been reports that some speakers have the weak PCC pattern.

that is less or as highly specified (e.g., 3rd person) because there is no additional value for the less specified argument to transmit to the probe (3b).

(3) a. **✓1>3**



b. ***3>1**



In strong PCC varieties (2a), 1st person (1P) arguments are specified for [π], [Part], and [Sp] (all arguments and probes bear [#]), and 2nd person (2P) arguments are specified for [π], [Part], and [Ad]. 3rd person (3P) arguments are specified only for [#] if inanimate, and for [π] and [#] if animate. The φ-probe for these varieties comes with unvalued [π_] and [Part_] as shown in (3). If a 1P or 2P argument values the probe first (3b), the probe is fully valued, which makes it impossible for an additional argument to merge, ruling out 1>2, 2>1, 3>1, and 3>2. If, on the other hand, a 3P inanimate argument values the probe first (3a), two features [π_] and [Part_] will still be unvalued, allowing another argument of any person to merge later (✓1/2/3>3). The same person feature specificaitons apply to weak PCC varieties (2b) except for the probe. The probe for the weak PCC languages bears [π_] and [Part_] as well as [Ad_] and [Sp_]. Either 1P or 2P argument can be the DO without exhausting the probe, allowing 1>2 and 2>1. For the ultrastrong PCC (2c), 2P arguments are specified only for [π] and [Part] while the probe bears [π_], [Part_], and [Sp_]. Since a 2P argument as the DO leaves [Sp_] unvalued, a 1P argument can come in as the IO (✓ 1>2). However, a 1P argument as the DO will exhaust all the features of the probe, ruling out 2>1. Super-strong PCC languages (2d) have no animacy distinction in 3P arguments, and all 3P arguments are uniformly specified for [π]; therefore, two concurrent 3P arguments are not possible (*3>3).

Consequences: The proposed system would always rule out 3>2, which is accepted in *me*-first PCC languages (2e). This may appear to be evidence against the system; however, as the name of the PCC type suggests, the source of ungrammaticality in these languages is the 1P argument being in the second position of the clitic cluster rather than their person combinations. I suggest that in these languages (e.g., Romanian and Bulgarian), there are no person feature interactions between the two internal arguments because there are two separate probes for the arguments. The present analysis also makes an interesting prediction. Since [Ad] is part of the feature inventory for the strong PCC, the weak PCC, and the super-strong PCC but not for the ultrastrong PCC, assuming that these person features have semantic import as well, we predict that ultrastrong PCC languages cannot express inclusivity (1P+2P) with their pronominal elements, as inclusivity is represented with both [Sp] and [Ad].

Conclusion: By employing the idea of articulated person features and incremental valuation, we can attribute the variation among different PCC types to the lexical specification of arguments and probes in different languages. This analysis, therefore, spares us of the need to posit different syntactic operations or conditions in different PCC varieties and may provide a new way to investigate person feature interaction phenomena in general.

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