

Person, case, and cliticization: the Panará PCC*

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Abstract: In Panará, a Jê language spoken in central Brazil, the verbal word presents polysynthetic properties, among which is the cross-reference of multiple participants, including ergative, absolutive, dative, and adpositional participants. Crucially, absolutive and dative clitics are restricted from co-occurring with speech-act participant features on both participants. In this paper, I explore a derivational analysis of this instance of Person-Case Constraint in Panará and the predictions that follow from it.

Keywords: Panará, Jê, clitics, case, person, PCC, dative

1 Introduction

Panará (ISO 639-3: kre) is a Northern Jê language spoken in central Brazil, in the eastern edge of the Amazon basin. There are currently 500-600 speakers of Panará, all of whom live in the Panará Indigenous Land, located between the states of Pará and Mato Grosso.

In Panará, sentences minimally consist of a verb. Verbs are preceded by a set of morphemes, rigidly ordered relative to one another, forming the Panará verb complex (1).¹

- (1) Jy= py= ra= kwy.
INTR DIR 1SG.ABS go
'I'm leaving [on foot].'

Verbal morphology in Panará presents aspects that are usually considered to be defining characteristics of polysynthetic languages: cross-reference to more than one participant, known as polypersonalism (2a); noun incorporation (2b); and verb serialization (2c).

- (2) a. Jy= py= ra= kô= mē= ra= tẽ.
INTR DIR 3PL.ABS COM DU 2SG.ABS leave
'The two of us are going away with them.'
- b. Ka= ra= jôkrepajô= kwâri sã!
2SG.ERG 1SG.ABS throat break NEG
'Don't break my throat!'

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¹ The following abbreviations are used in the glosses: 1=first person, 2=second person, 3=third person, ABL=ablative, ABS=absolutive, ACC=accusative, ART=article, COM=comitative, DAT=dative, DIR=dir, DU=dual, ERG=ergative, F=feminine, INS=instrumental, INTR=intransitive, IRR=irrealis, ITER=iter, MAL=mal, NEG=negative, PL=plural, SG=singular.

- c. Jy= ra= tẽ= ty.
 INTR 1SG.ABS fall die
 ‘I fainted.’

The verb complex also presents notions like directionality, iterativity, reflexives, and reciprocals. Multiple participants are cross-referenced with clitics that function as exponents of the number, person, and case features of their associate noun phrases. Both the ergative and absolutive arguments are cross-referenced with clitics on the verb complex (3).

- (3) a. Intransitive
 Jy= py= mẽ= ra= pôô.
 INTR ITER DU 1SG.ABS arrive
 ‘The two of us are back.’
- b. Transitive
 Ka hẽ ka= ra= sisyrî inkjẽ.
 2SG ERG 2SGERG 1SGABS hit 1SG
 ‘You hit me.’

Panará also presents adpositional clitics for certain postpositions (Bardagil 2018:ch. 4). This phenomenon, P-doubling, is only available to postpositions with relational semantics (like a malefactive), as opposed to stative semantics (like the ablative, homophonous with malefactive P) (4).

- (4) a. Jy= ra= pêê= a= ty inkjẽ pêê.
 INTR 1SG.ABS MAL 2SG.ABS die 1SG MAL
 ‘You died on me.’
- b. Sâkjo jy= ∅= (*pêê=) ∅= pôô aty pêê.
 Sâkjo INTR 3SG.ABS ABL 3SG.ABS arrive forest ABL
 ‘Sâkjo arrived from the forest.’

Ergative and absolutive clitics can both carry speech-act participant (first and second person) features. However, as I describe in more detail in section 3, there is a restriction on such features from co-occurring on the clitics of internal arguments, namely absolutive and dative participants. This restriction is described in the following section.

1.1 The PCC

It has been observed in multiple languages that there are series of restrictions on the verbal morphology of different internal arguments of a single predicate. This restriction is known as the Person-Case Constraint (PCC). It usually involves the person features of two internal arguments of a ditransitive verb. The notation used in this paper, mirroring Béjar and Rezac (2009), indicates the person of the clitics for the direct object (DO) and the indirect object (IO): DO>IO, corresponding to ACC/ABS>DAT (e.g., 2>3). In absence of a given clitic, it is marked as ∅.

PCC effects restrict some but not all combinations of features on different arguments, although typically they involve locuphoric or speech-act participants (SAP). This is exemplified for Catalan (Romance) in (5).

(5) Catalan PCC

a. 1>∅

M' ha vengut al pirata, en Joan.
1SG.ACC has sold to.the pirate the John
'John has sold me to the pirate.'

b. *1>3

*Al pirata, **me** **li** ha vengut en Joan.
to.the pirate 1SG.ACC 3SG.DAT has sold the John
'To the pirate, John has sold me to him.'

c. 3>1

El pirata, **me** **l'** ha vengut en Joan.
the pirate 1SG.DAT 3SG.ACC has sold the John
'The pirate, John has sold him to me.'

In Catalan, a SAP direct object clitic prevents a dative clitic. Combinations of first and second person clitics are also banned, varying on whether a speaker has the strong version of the PCC (only third person DOs are allowed) or the weak version (if a third person clitic is present, it must be the DO). For speakers with a weak PCC, a sentence like (6) is acceptable, although speakers will almost always only accept one of the two possible readings. For speakers with a strong PCC, (6) is outright unacceptable.

(6) 2>1 / 1>2

(*)Te m' ha recomanat la Neus.
2SG 1SG has recommended the.F Neus
'Neus recommended me to you / you to me.'

PCC effects are well documented in Romance (Bonet 1991, 2008), Germanic (Anagnostopoulou 2008), Basque (Arregi and Nevins 2007) or Kiowa (Tanoan) (Adger and Harbour 2007), among other languages and families, including Amazonian languages such as Yanomama (Ferreira 2017:371).

2 Panará dative case

Besides the absolutive and ergative cases described in Section 1, Panará also has a dative case and a series of oblique cases. Dative participants present certain differences in their morphosyntactic behaviour with respect to the oblique cases that are introduced by postpositions. In this section, I present a description of dative case before moving on to the specific cases of PCC effects in Panará.

The dative participant holds a semantic role of recipient or beneficiary. Dative is marked with a morpheme *mã* that appears immediately following the dative constituent (7).

(7) Pôka hẽ ti= mã= ∅= sõri Akââ mã issê.
Pôka ERG 3SG.ERG 3SG.DAT 3SG.ABS have Akââ DAT bow
'Pôka gave a bow to Akââ.'

Next to the absolutive (or unmarked) and the ergative clitics, the dative is the third and last paradigm of participant cross-reference.

The complete paradigm of dative clitics is presented in Table 1.

Table 1: Panará dative clitics.

| | SINGULAR | DUAL | PLURAL |
|---|----------|--------|------------|
| 1 | kjê | kjê mẽ | pan |
| 2 | kan | kan mẽ | rê ... kan |
| 3 | mã | mẽ mẽ | ran |

The placement of iterative/directional clitics allows us to pinpoint the location of dative clitics inside the verb complex. As can be seen in (8), iterative *py* occurs between the ergative and the dative clitics.

- (8) Pôka hẽ ti= py= kjê= ∅= sôri issê.
 Pôka ERG 3SG.ERG ITER 1SG.DAT 3SG.ABS give bow
 ‘Pôka gave me a bow again.’

Sentences similar to (8) also show that the dative clitic is located to the left of the dual *mẽ* clitic. This allows us to provide a map of the verb complex with the inclusion of a dative slot:

- (9) | mood | ERG | 2NUM | ITER | DAT | DU | ABS | verb |

Panará has a tendency towards null anaphora of participant phrases. As is also the case with absolutive and ergative nominals, once a dative participant has been introduced, or when it is otherwise salient in the discourse, the dative phrase is elided and its person and number features are recovered exclusively through the pronominal clitic or clitics that agree with the dative. The sentence in (10), with an elided *ka mã* ‘to you’ noun phrase, illustrates this point.

- (10) Ja rê= kan= ∅= sũn, Kuupêri.
 this 1SG.ERG 2.DAT 3SG.ABS say Kuupêri
 ‘I have said this to you, Kuupêri.’

Besides the dedicated dative clitic paradigm, dative participants can also be cross-referenced with the absolutive paradigm. When that is the case, the result is that we see two absolutive clitics (11).

- (11) Saankôra jy= ∅= ho= ra= ∅= pôô tepi ho inkjê mã.
 Saankôra INTR 3SG.ABS INS 1SG.ABS(DAT) 3SG.ABS arrive fish INS 1SG DAT
 ‘Saankôra brought me some fish.’

Panará absolutive clitics are given in Table 2.

Table 2: Panará absolutive clitics.

| | SINGULAR | DUAL | PLURAL |
|---|----------|----------------|---------------------|
| 1 | ra (r) | mẽ ... ra (r) | ra (p) |
| 2 | a (k) | mẽ ... a (k) | rê ... a (rê ... k) |
| 3 | ∅ (s/j) | mẽ ... ∅ (s/j) | ra (r) |

Dourado put forward the first description of Panará morphosyntax, according to which dative and absolutive participants compete for one clitic slot that is systematically awarded to the clitic associated with the dative participant (Dourado 2001:105). Ever since, there has been the belief that dative participants outrank absolutives in some capacity (Dourado and Gildea 2008). However, the examples provided to support this interpretation do not include a speech-act participant absolutive noun phrase, meaning that the absolutive clitic that corresponds to it is the phonologically null [3SG.ABS] /∅/, as in (12).

- (12) Toopytũ hẽ ti= ra= [∅=] sõri kjãranpe inkjẽ mã.
 old.man ERG 3SG.ERG 1SG.ABS [3SG.ABS] give feather.crown 2SG DAT
 ‘The old man gave me a feather crown.’ (Dourado 2001:106)

There is no evidence that supports a strong interpretation of the absolutive-dative clash, as proposed by Dourado (2001:105). However, there is a complex interaction between the absolutive’s and the dative’s clitics that is sensitive to SAP features rather than case features. I discuss this restriction in the next section.

3 The Panará PCC

First described in Bardagil (2018), in Panará the co-occurrence of first and second person features in the sequence of dative-absolutive clitics is illicit (13). This is a version of the PCC that typically restricts the co-occurrence of first and second person features in cross-reference morphology (Nevins 2007).

- (13) a. *Kuupêri hẽ ti= kãn= ra= sõri inkjẽ ka mã.
 Kuupêri ERG 3SG.ERG 2SG.DAT 1SG.ABS give 1SG 2SG DAT
 ‘Kuupêri gave me to you.’
 b. *Saankôra hẽ ka= ti= kjẽ= a= sõri ka inkjẽ mã.
 Saankôra ERG IRR 3SG.ERG 1SG.DAT 2SG.ABS give 2SG 1SG DAT
 ‘Saankôra will give you to me.’

Ungrammaticality emerges exclusively as a result of a combination of first and second person dative and absolutive clitics. As long as either the dative or the absolutive participants are third person (and also if both are third person), the combination is grammatical (14).

- (14) a. 3_{DAT}-2_{ABS}
 Inkjê hê ka= mǎ= a= p̃ri ka inkjê sipjâ mǎ.
 1SG ERG IRR 3SG.DAT 2SG.ABS kill 2SG 1SG wife DAT
 ‘I will kill you for my wife.’
- b. 1_{DAT}-3_{ABS}
 Ka hê ka= kjê= ∅= s̃ri kôôtita inkjê mǎ
 2SG ERG 2SG.ERG 1SG.DAT 3SG.ABS give chicken 1SG DAT
 ‘You gave me a chicken.’

While absolutive clitics are obligatory in Panará, the omission of dative clitics does not result in ungrammaticality. In first/second contexts like (13), the omission of the dative clitic repairs the clause, which is then grammatical (15).

- (15) a. Kuupêri hê ti= ra= s̃ri inkjê ka mǎ.
 Kuupêri ERG 3SG.ERG 1SG.ABS give 1SG 2SG DAT
 ‘Kuupêri gave me to you.’
- b. Saankôra hê ka= ti= a= s̃ri ka inkjê mǎ.
 Saankôra ERG IRR 3SG.ERG 2SG.ABS give 2SG 1SG DAT
 ‘Saankôra will give me to you.’

The PCC effects in Panará as presented above can be stated as the following condition:

- (16) In Panará, either the absolutive clitic or the dative clitic must be 3rd person.

As opposed to some well documented instances of PCC effects, such as Basque (Nevins 2011; Preminger 2019), the PPC in Panará is symmetric. In Basque, the PCC restricts the person features on the direct object but not on the indirect object, and as such the PCC only applies to the direct object clitic (17a, 18a). In Panará the PCC applies symmetrically, there is a restriction on the person features of both the absolutive argument or the dative argument (17b, 18b).

- (17) a. *Basque*
 Zuk niri liburu-a saldu d- i -∅ -da -zu.
 you.ERG me.DAT book-ART_{SG}(ABS) sell 3.ABS- √ -SG.ABS -1SG.DAT -2SG.ERG
 ‘You have sold the book to me.’ (Preminger 2019:3)
- b. *Panará*
 Ka hê ka kjê ∅= s̃ri kôôtita inkjê mǎ
 2SG ERG 2SG.ERG 1SG.DAT 3SG.ABS give chicken 1SG DAT
 ‘You gave me a chicken.’

(18) a. *Basque*

*Zuk harakin-ari ni saldu n- (a)i -∅ -o -zu.
 you.ERG butcher-ART_{SG}.DAT me(ABS) sell 1.ABS-√ -SG.ABS -3SG.DAT -2SG.ERG
 ‘You have sold me to the butcher.’ (Preminger 2019:3)

b. *Panará*

Inkjẽ hẽ ka= mã= a= sõri ka mãra mã.
 1SG ERG IRR 3SG.DAT 2SG.ABS give 2SG 3SG DAT
 ‘I will give you to him.’

The incompatibility of SAP features in the absolutive and dative clitics suggests that the dative participant interacts with the verbal agreement morphology in a different way than participants introduced by postpositions do, since this effect is absent in absolutive-PP interactions. The view that dative is not an adposition but a case is supported by its interaction with nominal number morphology, resolved with a case-marked number suffix like in ergative case.² In the next section, I discuss various angles from which the Panará PCC can be explained in a derivational approach.

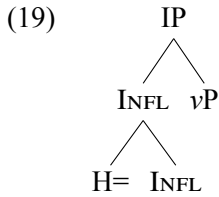
4 No features, no PCC

One straightforward analysis of PCC effects as seen in Panará is to stipulate a templatic restriction on the verb complex that filters out a combination of more than one SAP feature for the cross-reference of internal arguments. However, besides the little explanatory power of such approaches, the data presented in the previous section contradict the notion that the Panará verb complex can be “saturated” for SAP features in the internal argument domain, given the symmetrical PCC effects that are observed. In standard approaches to clitic-doubling, it is a result of a probing mechanism that applies consecutively for the different participants that are probed. If the Panará verb complex only allowed one SAP feature because of a templatic restriction, the first internal argument to be probed would always cliticize successfully, and the second one would never do so, giving rise instead to an asymmetrical PCC.

My proposal to provide a derivational account of Panará cliticization, adopted from Bardagil (2018), relies on a view of clitic-doubling as head movement. This requires an Agree relation with the head’s phrase for the phrasal head to be attracted to the cliticizing head INFL. This relation is subject to standard probing and locality constraints (Chomsky 2001), but since the head can skip landing positions and is attracted to a specific node, it is not subject to the Head Movement Constraint (Travis 1984). Thus, I do not adopt a “big DP” approach to clitic-doubling (as proposed by, among others, Nevins (2011)).

The mechanism of head movement that I adopt, other than its long-distance property, is a simple instance of movement of a syntactic head H via adjunction to INFL, as represented in (19), resulting in cliticization (Nash and Rouveret 2002). In Panará, both copies of the head can be pronounced, resulting in clitic-doubling.

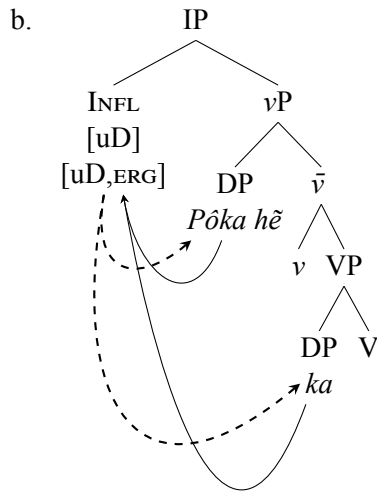
² *Inkjẽ hẽ* (1SG ERG) but not **inkjẽ-mẽra hẽ* (1SG-PL ERG), instead *inkjẽ-mẽrân* (1SG-PL.ERG). Similarly, not **inkjẽ-mẽra mã* (1SG-PL DAT) but *inkjẽ-mẽrân* (1SG-PL.DAT).



Formalized with a standard Agree approach, the head attraction mechanism proceeds as follows. A syntactic probe searches within its c-command domain (i.e., its sister) and finds a phrase. The anchoring category INFL is equipped with a probe that searches a valued counterpart, which could be a categorial feature corresponding to a DP, [D], or to an adposition, [P]. Once Agree obtains and the [uD] or [uP] probe on INFL is valued, an Agree chain is established between the positions of the INFL head and the DP/PP phrase. The head of the phrase then is adjoined to INFL via post-syntactic head movement.

For both the ergative and absolutive DPs, a different probe is given. It is specified for ergative case for the ergative DP, [uD,ERG] and unspecified for case for the absolutive DP, for which lack of a marked case is actually a lack of case. This is illustrated in (20) for a transitive clause. A dashed line indicates probing, and a continuous line indicates head movement.

- (20) a. Ti= k= anpun Pôka hẽ ka.
 3SG.ERG 2SG.ABS see Pôka ERG 2SG
 ‘Pôka saw you.’



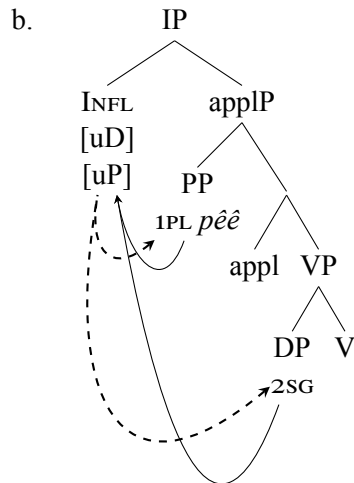
To obtain similar results for P-doubling, the distinction between Panará P-doubling PPs and static PPs becomes crucial. In Panará, there are two broad categories of PPs: the ones that involve a relation-type semantics (malefactive, comitative) can P-double, while the ones that involve stative semantics (temporal, ablative, allative) are static.

However, under a standard Agree approach that is typically used to derive similar phenomena, the mechanism would hinge on INFL carrying the relevant probe only when the P-doubling output is desired, effectively limiting the formalization to a restatement of the phenomenon: in a clause with a malefactive PP, INFL would carry a [uP,MAL] probe, but there would be no [uP,ABL] probe in a clause with an ablative PP.

The account of D-doubling described above places the trigger of cliticization into the derivation itself, rather than on unvalued features on a probe. The same mechanism can also account for the different types of Panará PPs. P-doubling PPs are introduced by an applicative projection at a point in the derivation of the clausal spine. Static PPs, on the other hand, are inserted at a late stage in the derivation, like other adverbial phrases (like negation *pjoo* ‘sentential negator’, or temporal NPs like *pykkôômã* ‘tomorrow’).

Late-inserted phrases are not probed by INFL and therefore not clitic-doubled, just like \bar{A} -moved argument DPs in the left periphery are equally probed in their postverbal position before these late operations take place. Clitic-doubling of an applicative malefactive PP oblique participant is represented in (21).

- (21) a. Jy= ra= pêê= a= tēē.
 INTR 1PL.ABS MAL 2SG.ABS= leave
 ‘You left against us.’

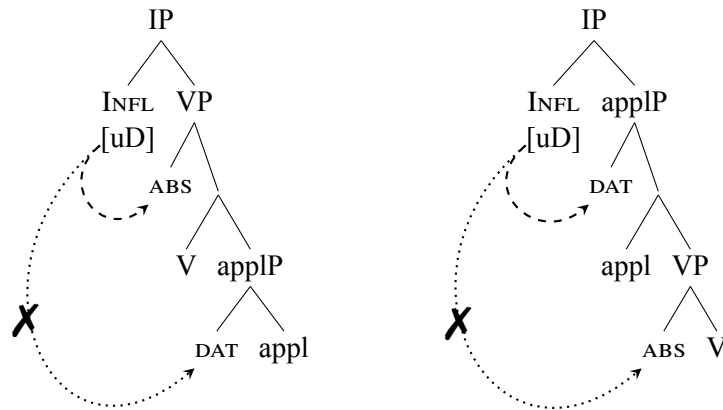


Since the adpositional objects of P-doubling PPs also D-double, in that case an additional [uD] probe becomes necessary to correctly derive both the P-doubling and the D-doubling of an oblique participant like a malefactive in the example above.

Now we are ready to apply this clitic-doubling mechanism to the Panará PCC, involving dative and absolutive clitics. We can imagine that two applicative positions are available: high applicatives, merged above VP, and low applicatives, merged below VP (Pylkkänen 2008).

In the approach explored here, cliticization of the dative constituent diagnoses the position of the applicative dative phrase: clitic-doubling dative DPs are introduced by a high applicative, whereas datives introduced by a low applicative are prevented from cliticizing, as probing from INFL is blocked by the absolutive DP (22).

(22)



Independent evidence from ergative and absolutive clitics supports the notion that Panará INFL probes are only specified for SAP features (Bardagil 2018:ch. 6), with third person dative clitics actually being not specified for person features: they are default morphemes inserted at Vocabulary Insertion given the lack of a feature bundle with a correspondingly specified morpheme.

The form of third person dative clitics, /mã/, identical to the dative adposition, supports this hypothesis. Thus, only SAP datives do in fact intervene probing of the absolutive DP, giving rise to the symmetrical PCC effects described above. Dative SAP clitics like *kjẽ* (first person) and *kân* (second person) are the spell-out of the dative D head. Dative third person clitic *mã* is the default morpheme inserted in absence of SAP features.

Since there is no PCC for ergative and PP participants, under the present approach, this tells us that INFL comes equipped with a single probe for internal arguments, and separate probes that target ergative case and adpositions, respectively.

5 Conclusion

Based on an analysis of recent data, there is solid evidence for Panará presenting an instance of the PCC. Specifically, Panará presents a symmetric PCC that restricts the co-occurrence of SAP clitics for absolutive and dative participants.

In this paper, I argue that the PCC as observed in Panará is better approached as a consequence of the derivation of agreement between the verb and its participants. The Panará PCC is manifested morphologically, but the morphology is fed by syntactic configurations. Rather than a templatic restriction, the inability of first and second persons to both occur in the cross-reference morphology arises as a side effect of the feature probing that derives cliticization.

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