Morphological person restrictions and the pressure to realize local persons*

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1 Overview

- Ditransitive person restrictions, such as the Person-Case Constraint (PCC), generally arise in doubly weak environments and reference syntactic hierarchy.[1]
- Analyses of the PCC are either syntactic, morphological, or hybrid.
  - Syntactic analyses generally argue that restrictions arise in configurations with one probe and two potential goals (e.g., Anagnostopoulou 2003; Béjar & Rezac 2003, Stegovec 2019).
  - Morphological analyses tend to place global constraints on morpheme combinations, particularly for *3>3 restrictions (e.g., Perlmutter 1971, Bonet 1994, 1995, Nevins 2007).
  - Hybrid analyses argue that certain syntactic configurations lead to untenable morphological conflict (Coon & Keine 2018) or a repair using a default vocabulary item (Walkow 2013).

▷ We argue that novel data from Caquinte (Arawak; Peru) show independent morphological and syntactic restrictions in a single language.

- Unlike the canonical PCC, only *local>local configurations are ungrammatical in Caquinte (Table 1).

IO	DO	Strong PCC	Caquinte
1	3	✓	✓
2	3	✓	✓
1	2	*	*
2	1	*	*
3	2	*	✓
3	1	*	✓

Table 1: Caquinte person restrictions

- Caquinte person restrictions are sensitive to morphological anti-agreement under $\bar{A}$ extraction.
  - *Local>local is effectively "repaired" by DO anti-agreement.
  - IO anti-agreement removes all object agreement and creates ungrammaticality when the remaining DO is local.

- We propose a morphological constraint REALIZEPARTICIPANT which requires overt exponence of local person agreement, yielding *local>local under morphological slot competition.

(1) REALIZEPARTICIPANT:
A [PART] feature within the complex V must be realized by overt morphology.

- We also propose a Person Licensing Condition (PLC; Béjar & Rezac 2003) to capture the IO extraction facts.

(2) *Person Licensing Condition (PLC):* (Béjar & Rezac 2003:53)
An interpretable 1st/2nd person feature must be licensed by entering into an Agree relation with a functional category.

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[1] There are some notable exceptions to the "phonologically weak" generalization: see Sheehan (2019) for an overview, Reidel (2009) for Swahili, Shklovsky (2012) for Tseltal, and Aissen (1987) for Tzotzil.

2 Background on person restrictions

- The Person-Case Constraint (PCC) is a well documented restriction on grammatical person combinations, typically found in ditransitive clauses when both objects are phonologically weak (Bonet 1991, 1994).

(3) Strong PCC in French:

a. Elle **me l'** a présenté.
3SG.M 1SG 3SG.DAT have introduced
'She introduced him to me.' (1>3)

b. * Elle **me lui** a présenté.
3SG.M 1SG 3SG.DAT have introduced
Intended: 'She introduced me to him.' (*3>1)

- There are two canonical varieties of the PCC (Table 2), which are found particularly (but not exclusively) in Romance.[2]
  - Strong PCC: DO cannot be local person (French, Greek, Basque)
  - Weak PCC: if DO is local, IO must be local (Catalan, Italian)

IO	DO	Strong	Weak
1	3	✓	✓
2	3	✓	✓
1	2	*	✓
2	1	*	✓
3	2	*	*
3	1	*	*

Table 2: Canonical PCC patterns

- Syntactic approaches to the PCC argue that person restrictions arise when a single agreeing head has two accessible DPs in its agreement domain, preventing (full) agreement with both.
  - This will run afoul of a nominal licensing/valuation mechanism (Béjar & Rezac 2003; Anagnostopoulou 2003; Stegovec 2019), or...
  - ...there will simply be no derivation that creates weak realizations of both arguments (Deal 2019).

[2] See Anagnostopoulou (2017) for an overview of documented PCC patterns.

3 The empirical puzzle

3.1 Background on Caquinte

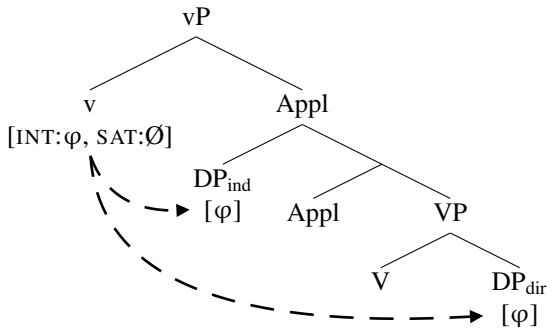
- Caquinte is spoken by several hundred people in southeastern Peru.
- Relevant features: VSO, polysynthetic, head-marking
- Subject and object affixes (Table 3) do not encode number or case, and only 3rd person affixes encode gender.

	SUBJ	OBJ
1	no-	-na
1INCL	a-	-aji
2	pi-	-mpi
3M	i-	-ri
3F	o-	-ro

Table 3: Caquinte argument affixes

- Object suffixes arise via agreement with a single probe on *v* (we motivate this move and revise the details in §4.2).
  - This can be implemented in Interaction-Satisfaction (Deal 2015), where a probe is specified for the features it copies back and the feature that halts the probe.
  - The probe specifications for Caquinte object agreement could be [INT:φ, SAT:Ø], which interacts with all φ and is insatiable.

(4)



- Caquinte has rigidly-ordered morphology, which reveals two "slots" for object agreement: local suffixes always precede non-local suffixes (5).

(5) [SUBJ] ... V ... [LOCAL OBJ] - [NON-LOCAL OBJ]

- Object suffixes can co-occur with overt arguments, both full DPs (6) and pronouns (7).[3]

(6) Yojokakenaro itsogena.
i-ojok-k-i-na-**ro** **i-tsogena**
3M-give-PFV-AR-1-3F 3M-beak.F
'He gave me his beak.' (ST p.81)

(7) Arikea ikoakokena naatimpa...
ari=kea i-koako-k-i-**na** **naatimpa**
PRO=EW 3M-ask-PFV-AR-1 1.TOP
'Then he asked me...' (ST&O p.13)

- All Caquinte data in this paper comes from Zachary O'Hagan's in-situ fieldwork in southeastern Peru (2011-present).

- Page numbers are from two text collections: Salazar Torres & O'Hagan (2019; ST&O) and Salazar Torres et al. (2019; ST), the latter available online. Examples not cited are from elicitation.[4]

3.2 The basic pattern

- The verbal template prohibits combinations of two local suffixes (**-mpi-na*, **-na-mpi*) as well as two non-local suffixes (**-ri-ro*, **-ro-ri*).

- Local>local configurations are ungrammatical: there is no way to produce the utterances in (8).

(8) a. * Yojokakenampi.
i-ojok-k-i-**na-mpi**
3M-give-PFV-AR-1-2
Intended: He gave you to me. (*1>2)

b. * Yojokakempina.
i-ojok-k-i-**mpi-na**
3M-give-PFV-AR-2-1
Intended: He gave me to you. (*2>1)

- 3>3 is grammatical and simply avoids the illicit suffix cluster. Only the indirect object is cross-referenced on the verb, and the first suffix slot is filled by the applicative morpheme *-nV* (see Appendix A for details).

(9) ...nojokakotajeneri aapani kishokiro...
no-ojok-ako-aj-e-nV-**ri** aapani kishokiro
1-give-A:INDR-REG-IRR-APPL-3M father.M cooked.manioc.F
...I'll give my father cooked manioc... (ST p.71) (3M>3F)

- Combinations of local and non-local suffixes are grammatical and may be hierarchy-obeying (10a) or hierarchy-violating (10b), even though the order of suffixes remains the same.

(10) a. Tsioji, pamenagetenari nogepigairikitite.
tsioji pi-amen-ge-e-**na-ri** no-kepigairikiti-te
sister 2-look.for-DSTR-IRR-1-3M 1-louse.M-POSS
'Sister, look for my lice for me.' (ST p.98) (1>3)

b. ...yojokabakokenari Joanka.
i-ojok-bako-k-i-**na-ri** Joanka
3M-give-hand-PFV-AR-1-3M Juan
...he gave me to Juan. (ST&O p.19) (3>1)

3.3 Anti-agreement

- Caquinte shows complete anti-agreement with focused, wh-moved, and relativized (but not topicalized) elements.
  - Anti-agreement targets both subjects and objects.
  - (11) demonstrates that topicalized objects show agreement on the verb, while focused objects do not.

[3] Epenthetic segments /t/ and /a/, which repair vowel and consonant hiatus, respectively, are not represented in the segmentation. Graphemes correspond to their IPA equivalents, with the exceptions of: <b> = [β]; <ch> = [tʃ]; <j> = [h]; <sh> = [ʃ]. Other abbreviations are: ABL = ablative; AL = alienable; ALL = allative; APPL = applicative; AR = active realis; CAUS = causative; DISTR = distributive; EW = elsewhere; F = feminine; FOC = focus; INCL = inclusive; IRR = irrealis; M = masculine; MID = middle; MOD = modal; MR = middle realis; PFV = perfective; POSS = possessive; REG = regressive; REL = relativizer; TOP = topic.

[4] Documentary materials are archived with the Survey of California and Other Indigenous Languages and are available online: http://dx.doi.org/doi:10.7297/X24M92P6.

(11) a. Imaika abiatimpa nantsipetakaakempi...
imaika **abiatimpa** no-N-atsipe-akag-k-e-**mpi**
now 2.TOP 1-IRR-suffer-CAUS-PFV-IRR-2
'Now I will make you suffer...' (ST p.59)

b. ...abiro noshekatakempa.
abiro no-sheka-ak-e-mpa
2.FOC 1-eat-PFV-IRR-MID
'...I will eat you.' (ST p.89) (Baier & O'Hagan 2019)

- When the focused object is a full DP, it is doubled by a focus pronoun in the pre-verbal focus position. Anti-agreement still occurs.

(12) Iro pitashitake chopeki.
iro pi-tashi-ak-i(*-ro) **chopeki**
3F.FOC 2-roast-PFV-AR-3F plantains.F
Plantains are what you roasted.

- Baier & O'Hagan (2019) formalize the Caquinte pattern a φ-feature impoverishment rule in the presence of OP features on *v*.[5]

(13) *Caquinte φ-feature Impoverishment:*[6]
[φ] → Ø / [__, OP, *v*]

3.3.1 DO extraction

- DO extraction behaves as expected: anti-agreement applies, removing DO agreement from the verb while leaving IO agreement intact.

- Anti-agreement of the direct object allows previously ungrammatical local>local configurations to surface.

(14) a. Abiro yojokakena piraapanite.
abiro i-ojok-k-i-**na** pir-aapani-te
2.FOC 3M-give-PFV-AR-1 2-father.M-POSS
It's you your father gave me. (1>2extr)

b. Naro yojokakempi noraapanite.
naro i-ojok-k-i-**mpi** nor-aapani-te
1.FOC 3M-give-PFV-AR-2 1-father.M-POSS
It's me my father gave you. (2>1extr)

[5]See Appendix B for argumentation that anti-agreement is morphological.

[6]Baier & O'Hagan (2019) assume that OP features are a subset of Ā features. By referring to this subset, the rule can trigger impoverishment in focus, relativization, and wh-movement contexts to the exclusion of other Ā contexts like topicalization.

- In local>3 contexts, extraction of the DO leaves only the local IO suffix.

(15) Iro namakempi paperi.
iro no-am-k-i-**mpi** paperi
3F.FOC 1-bring-PFV-AR-2 book.F
It's the book that I brought you. (2>3extr)

- In 3>local contexts, the local DO can be extracted; the 3rd person IO suffix remains on the verb and the *-nV* morpheme must appear to fill the local suffix slot.

(16) Abiro yojokakeneri iritinerijaniki.
abiro i-ojok-k-i-nV-**ri** iri-tinerijaniki
2.FOC 3M-give-PFV-AR-APPL-3M 3M-nephew.M
It's you that he gave to his nephew. (3>2extr)

- In 3>3 contexts, the DO may be extracted, but recall that in base 3>3 sentences, the DO never shows agreement anyway.

  – Under anti-agreement, then, no change is expected.

(17) Irokampa ajokakeneri sheri obatsa.
iro=ka=mpa a-ojok-k-e-nV-**ri** sheri-obatsa
3F.FOC=MOD=INCGR 1IN-give-PFV-IRR-APPL-3M tobacco-dip.F
'We could give him tobacco dip.' (ST p.154) (3>3extr)

3.3.2 IO extraction

- IO extraction has unexpected behavior: extraction of the IO removes **both** IO and DO suffixes from the verb, leaving only the *-nV* suffix.

  – IO extraction is ungrammatical if the remaining DO is local.

- In local>3 configurations, extraction of the local IO is grammatical and triggers anti-agreement, but DO agreement cannot surface either (18).

(18) Naro yojokakene irorijanite.
naro i-ojok-k-i-nV(***-ro**) iri-orijani-te
1.FOC 3M-give-PFV-AR-APPL-3F 3M-daughter.F-POSS
It's to me that he gave his daughter. (1extr>3)

- In 3>3 configurations, IO extraction is grammatical and no object suffixes appear on the verb.

(19) Irio namakene paperi.
Irio no-am-k-i-nV(***-ro**) paperi
3M.FOC 1-bring-PFV-AR-APPL-3F book.F
It's to him that I brought the book. (3extr>3)

- If the remaining DO is a local person, IO extraction is ungrammatical.

- In local>local configurations, there is no grammatical string that allows extraction of an IO.
  - (20a) shows attempted IO extraction using the antipassive, and (20b) tries to use a local DO suffix alongside *-nV*.
  - If one local suffix remains, the utterance is unambiguously interpreted as extraction of the DO, as in example (14).

(20) Attempted IO extraction:

a. * Naro yojokantimpi.
naro i-ojok-**aN**-i-**mpi**
1.FOC 3M-give-ANTIP-AR-2
Intended: It's to me that he gave you. (*1extr>2)

b. * Naro yojokakenempi.
naro i-ojok-k-i-nV-**mpi**
1.FOC 3M-give-PFV-AR-APPL-2
Intended: It's to me that he gave you. (*1extr>2)

- Extracting the IO from 3>local is also ungrammatical.
  - This is perhaps more surprising given that these configurations are grammatical in their basic form.
  - (21) shows attempted IO extraction using the second person topic pronoun in lieu of an object suffix.

(21) * Irio nojokakene abiatimpa.
irio no-ojok-k-i-nV abiatimpa
3M.FOC 1-give-PFV-AR-APPL 2.TOP
Intended: It's to him that I gave you. (*3extr>2)

3.4 Interim summary

- In base position, local>local is the only ungrammatical configuration.
  - In 3>3 configurations, which could yield an illicit suffix combination, exponence of the IO is privileged over the DO.
- Person restrictions are sensitive to anti-agreement, which applies to $\bar{A}$ extracted arguments and is implemented by morphological impoverishment.
  - Direct object anti-agreement operates as expected, with the interesting result that local>local ungrammaticality is remedied by DO extraction.
  - Indirect object anti-agreement, on the other hand, requires the direct object suffix to also disappear, leaving only *-nV*.
    - Ungrammaticality results when the remaining DO is a local person (local>local and 3>local).

4 Analysis

- We argue for a hybrid analysis of Caquinte, where morphological and syntactic restrictions operate independently.
- The basic *local>local restriction can be captured by a REALIZEPARTICIPANT constraint, which mandates overt agreement with [PARTICIPANT] features.

(22) REALIZEPARTICIPANT:
A [PART] feature within the complex V must be realized by overt morphology.

- To capture the IO extraction facts, we also argue for a Person Licensing Condition, which requires agreement with local person arguments in the syntax.

(23) *Person Licensing Condition (PLC):* (Béjar & Rezac 2003:53)
An interpretable 1st/2nd person feature must be licensed by entering into an Agree relation with a functional category.

- Together, these two constraints effectively require local person agreement without interfering with the anti-agreement mechanism or pro-drop.

4.1 Morphological restrictions

- The ingredients of the basic *local>local restriction are:
  - REALIZEPARTICIPANT: local person agreement must be overt
  - Morphological competition: only one suffix per slot
- REALIZEPARTICIPANT applies after insertion of vocabulary items.
- In *local>local configurations, these two constraints will conflict to yield ungrammaticality.
  - ∗ The template rules out having both suffixes (24a).
  - ∗ REALIZEPARTICIPANT rules out exponence of just one φ-set (24b), even if a full pronoun is used (24c).

(24) 'He gave you to me.'

a. * i-ojok-k-i-**na-mpi**
3M-give-PFV-AR-1-2 (template)

b. * i-ojok-k-i-**na**
3M-give-PFV-AR-1 (REALIZEPART)

c. * i-ojok-k-i-**na abiatimpa**
3M-give-PFV-AR-1 2.PRO (REALIZEPART)

- In 3>3 configurations, REALIZEPARTICIPANT will not apply.
  - ∗ The template still rules out having both suffixes (25a).
  - ∗ A sentence with only one suffix is grammatical (25b).[7]

(25) 'He gave it to her.'

a. * i-ojok-k-i-nV-**ri-ro**
3M-give-PFV-AR-APPL-3M-3F (template)

b. i-ojok-k-i-nV-**ro**
3M-give-PFV-AR-APPL-3F

- Crucially, REALIZEPARTICIPANT allows an anti-agreement repair.
  - Extraction of the DO deletes one set of φ-features on *v*, so the constraint will only apply to the remaining φ-features of the IO.

[7] It is worth noting that the single object suffix that appears in a 3>3 construction must track the indirect object. Based on the constraints we have proposed here, there is no principled reason why this should be the case. To capture mandatory indirect object agreement, we could propose that vocabulary insertion must begin with the argument that was agreed with first.

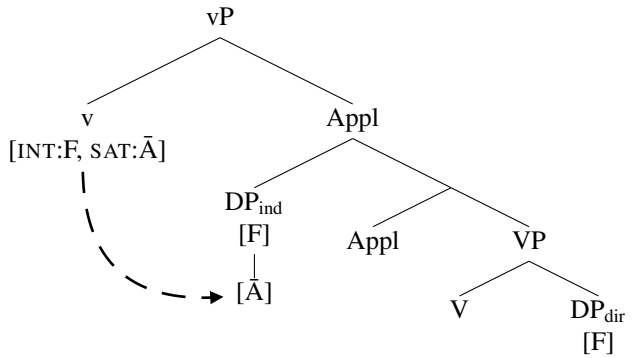
4.2 Syntactic restrictions

- The ingredients for the IO extraction asymmetry are:
  - A probe satisfied by [Ā] features
  - A PLC: local person features must be licensed by Agree
- Recall that IO extraction requires all object suffixes to disappear from the verb, leaving only the applicative *-nV*.
  - If the remaining DO in this configuration is local, ungrammaticality results.

▷ Rather than writing a complex impoverishment rule, we suggest that the probe on *v* is satisfied by Ā features, revising the articulation of the probe to [INT:F, SAT:Ā].

- In an IO extraction context, the probe on *v* will interact with all the features of the indirect object, which has some [Ā] feature to mark it for later extraction (26).
- The probe would be satisfied by this feature and stop probing, meaning the DO is never agreed with.

(26) Satisfaction of Ā probe:



- In DO extraction or non-extraction contexts, this probe will still agree with both arguments.
- Lack of agree with a local person escapes REALIZEPARTICIPANT, which only requires overt exponence of [PART] features within the complex V.

▷ We need a PLC to capture the ungrammaticality of *local>local and 3>local in IO extraction contexts.

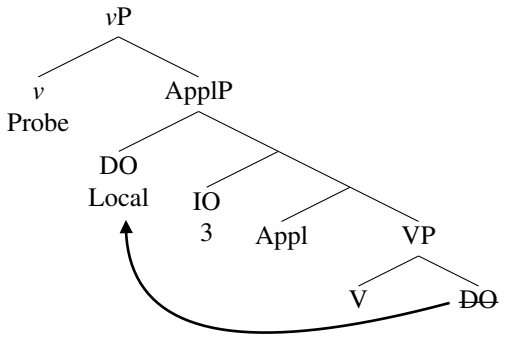
5 Against a purely syntactic analysis

- We argue that a purely syntactic analysis cannot account for both the basic *local>local pattern and the extraction facts in Caquinte.
- To relate Caquinte to the PCC, we could interpret the local-on-local restriction in Caquinte as a version of the Strong PCC that allows 3>local.

IO	DO	Strong	Caquinte
1	3	✓	✓
2	3	✓	✓
1	2	*	*
2	1	*	*
3	2	*	✓
3	1	*	✓

- This can be achieved syntactically by allowing scrambling of the DO to an outer specifier of Appl, as Stegovec (2019) posits for Slovenian.[8]
  - By scrambling the DO over the IO, ungrammatical 3>local configurations would look like local>3 to a higher probe on *v* (27).

(27)



- This scrambling does not actually seem to be possible in Caquinte: in all examples with two overt DP objects, the IO precedes the DO (28).

(28) ...nojokakotajeneri aapani kishokiro...
no-ojok-ako-aj-e-nV-ri aapani kishokiro
1-give-A:INDR-REG-IRR-APPL-3M father.M cooked.manioc.F
...I'll give my father cooked manioc... (ST p.71) (3M>3F)

[8]Thank you to Emily Clem for suggesting the application of this analysis to Caquinte.

- Additionally, agreement in 3>3 must always track the IO, which can be attributed to a locality effect. If scrambling is possible, we would expect to see optional DO agreement instead.

▷ If we allow scrambling to capture the basic pattern, however, we crucially lose the distinction between DO and IO extraction.

  - We should lose all hierarchy effects because any configuration is allowed to essentially become the reverse.
  - Scrambling should be available to remedy *3>local under IO extraction, which is not the case.

6 Conclusion

- Caquinte provides evidence for a hybrid analysis of person restrictions: morphological and syntactic restrictions can be distinct and active within the same language.
  - We argue that a REALIZEPARTICIPANT constraint requires overt exponence of local person features within the verbal complex, which interacts with morphological competition to yield *local>local.
  - We also argue for a syntactic Person Licensing Condition in Caquinte, which only becomes apparent in extraction contexts due to probe satisfaction by [Ā] features.
- The presence of both restrictions can be understood as a conspiracy to maximize agreement with local arguments.
  - REALIZEPARTICIPANT requires overt agreement with local persons if their features have been copied back to the probe.
  - A PLC requires agreement with local persons, feeding the overt agreement requirement.
- We predict that morphological person restrictions will result from competition, yielding restrictions on sameness.
- With morphological and syntactic restrictions operating independently, we also predict a four-way typology of person restrictions (Table 4).

	Syntactic	No syntactic
Morphological	Caquinte, Strong PCC?	Only *local>local
No morphological	Weak PCC?	No PCC

Table 4: A predictive typology of person restrictions

- It is possible that this typology can account for Strong and Weak PCC patterns, given that the only difference between the two is a *local>local restriction.
  - For this to be the case, we predict that Strong PCC languages will show morphological competition effects, whereas Weak PCC languages will not.
- This typology also predicts that some languages will show only *local>local restrictions, which appears to be attested in Kipsigis (Nilo-Saharan; Bossi, p.c.)
- Future work will investigate the application of a hybrid analysis to a wider variety of patterns.

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Appendix A: The status of *-nV*

- The *-nV* suffix appears in 3>3 configurations in the slot that would host a local person suffix, if there were one.

(29) ...nojokakotajeneri aapani kishokiro...
no-ojok-ako-aj-e-**nV**-ri aapani kishokiro
1-give-A:INDR-REG-IRR-APPL-3M father.M cooked.manioc.F
...I'll give my father cooked manioc...' (ST p.71) (3M>3F)

- Swift (1988) analyzes *-nV* as an impoverished realization of the theme (DO), which functions as a repair for ungrammatical 3>3 contexts.
- We argue instead that the *-nV* suffix is an exponent of the applicative head itself, and that 3>3 is not actually ungrammatical to begin with.
- Three things we will show:
  1. *-nV* does not realize the direct object
  2. *-nV* is not a repair for *3>3
  3. *-nV* is best analyzed as an Appl head

1. *-nV* does not realize the direct object

- When an object of a ditransitive is extracted, the corresponding object suffix disappears from the verb by anti-agreement (and IO agreement remains).
  - Full φ-feature impoverishment of the DO is shown in (30b).

(30) a. Namakempiro paperi.
no-am-k-i-**mpi-ro** paperi
1-bring-PFV-AR-2-3F book.F
I brought you the book. (2>3)

b. Iro namakempi paperi.
iro no-am-k-i-**mpi** paperi
3F.FOC 1-bring-PFV-AR-2 book.F
It's the book that I brought you. (2>3extr)

- When the DO is extracted from a 3>3, both IO agreement and *-nV* remain on the verb (31).
  - If *-nV* realizes the theme, it should be fully impoverished by anti-agreement just like in (30b).

(31) Irokampa ajokakeneri sheri obatsa.
iro=ka=mpa a-ojok-k-e-**nV-ri** sheri-obatsa
3F.FOC=MOD=INCNGR 1INCL-give-PFV-IRR-NV-3M tobacco-dip.F
'We might give him tobacco dip.' (ST p.154) (3>3extr)

2. *-nV* is not a repair for *3>3

- *-nV* is not restricted to 3>3 contexts—it appears under extraction of local persons as well.
- In 3>local configurations, DO extraction impoverishes the local person features and *-nV* appears in the local suffix slot.

(32) Abiro yojokakeneri iritinerijaniki.
abiro i-ojok-k-i-**nV-ri** iri-tinerijaniki
2.FOC 3M-give-PFV-AR-APPL-3M 3M-nephew.M
It's you that he gave to his nephew. (3>2extr)

- *-nV* also appears when the IO is extracted from a local>3 configuration.

(33) a. Naro yojokakene irorijanite.
naro i-ojok-k-i-**nV** iri-orijani-te
1.FOC 3M-give-PFV-AR-APPL 3M-daughter.F-POSS
It's to me that he gave his daughter. (1extr>3)

b. Abiro namakene paperi.
abiro no-am-k-i-**nV** paperi
2.FOC 1-bring-PFV-AR-APPL book.F
It's to you that I brought the book. (2extr>3)

3. *-nV* is best analyzed as an Appl head

- The appearance of *-nV* under anti-agreement suggests that the features realized by *-nV* are always present in a double object construction.
- *-nV* never appears outside of applied object constructions.
- The distribution of *-nV* in ditransitives is summarized in Table 5—it only appears when there are no local person features to expone.
- We conclude, as does O'Hagan (2018), that *-nV* is a realization of the applicative head itself, which arbitrarily competes in the same morphological slot as local person agreement.

IO↓ DO→	PART	3rd	Extracted
PART	—	PART-3	PART
3rd	PART-3	-nV-3	-nV-3
Extracted	*	-nV	—

Table 5: Distribution of object agreement

Appendix B: Morphological anti-agreement

- It is often assumed that anti-agreement arises by a syntactic issue with $\bar{A}$ movement itself.
  - Some pin anti-agreement on issues with the binding of $\bar{A}$ traces (e.g., Ouhalla 1993; Wiltschko 2006 for Halkomelem Salish).
  - Others propose that $\bar{A}$ movement is somehow blocked (by anti-locality, for instance) and is only possible if the argument is base-generated outside the φ domain (e.g., Schneider-Zioga 2007 for Kinande; Cheng 2006 for Bemba).
  - Syntactic accounts often assume that anti-agreement is only possible with grammatical subjects.
- Baier (2018) argues that anti-agreement is best implemented by morphological impoverishment of phi-features in the context of $\bar{A}$ features.
- His typological survey revealed the following four arguments against a general movement-based analysis of anti-agreement:
  - Languages can show anti-agreement in contexts where a wh-word remains in-situ (e.g., Tundra Nenets).
  - Anti-agreement can occur with objects as well as subjects (e.g., Caquinte).
  - Some languages show only partial anti-agreement, which is difficult to capture under theories which rely on non-agreement in the syntax.
  - Different $\bar{A}$ features (e.g., [TOP], [WH], [FOC]) can show different patterns with respect to anti-agreement (e.g., Caquinte).
    - A broader issue with $\bar{A}$-movement would predict that all $\bar{A}$-features would behave the same way.