

# Two case studies in morphological person restrictions

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# Person restrictions

- Many languages do not allow all person combinations to appear as the two objects of a ditransitive.
  - ▶ The most well-known of these restrictions is the Person-Case Constraint (PCC) (Bonnet 1991, 1994), originally described in Romance.

## (1) PCC in French

- a. Je **le** **lui** ai présenté.  
1SG 3SG.ACC 3SG.DAT have introduced  
'I introduced him to her.' (3>3)
- b. \*Je **te** **lui** ai présenté.  
1SG 2SG 3SG.DAT have introduced  
Intended: 'I introduced you to her.' (\*3>2)

# Person restrictions

- PCC-like patterns have now been described in many languages outside of Romance. (Anagnostopoulou 2017)
  - ▶ Restrictions are commonly found when two arguments are realized weakly (as clitics or agreement).
- The documented patterns of person restrictions are now quite diverse, but the literature has focused on two primary “flavors” of the PCC: **weak & strong**.

# Person restrictions: Weak PCC

- Weak PCC languages (e.g. Catalan, Italian) ban combinations of 3rd person IOs with 1st or 2nd person (local) DOs.
  - ▶ We abbreviate this restriction as  $*3 > \text{local}$ .

## (2) Weak PCC in Catalan (Bonet 1991:178, Bonet 1994)

- a. \* **...me**      **li**      va recomenar la Mireia.  
1SG.ACC 3SG.DAT recommended the Mireia  
'She (Mireia) recommended me to him.'      ( $*3 > 1$ )
- b. **Te**      **m'**      ha venut el mercader més important.  
2SG.ACC 1SG.DAT has sold the merchant most important  
'The most important merchant has sold you to me.'      ( $1 > 2$ )

# Person restrictions: Strong PCC

- Strong PCC languages (e.g. Greek, French) ban combinations of two local persons in addition to banning \*3>local.

## (3) Strong PCC in Greek (Anagnostopoulou 2005:202)

- a. \*Tha **tu**      **me**      sistisune.  
FUT 3M.GEN 1.ACC introduce.3PL  
Intended: 'They will introduce me to him.'      (\*3>1)
- b. \*Tha **su**      **me**      sistisune.  
FUT 2.GEN 1.ACC introduce.3PL  
Intended: 'They will introduce me to you.'      (\*2>1)

# Person restrictions

- Other PCC patterns aside from Strong & Weak are also attested.
  - ▶ Me-first: 1st person must be IO (Nevins 2007)
  - ▶ Ultrastrong: IO must outrank DO on  $1>2>3$  hierarchy (Walkow 2012)

Table 1: Summary of attested PCC patterns

IO>DO	Strong	Weak	Me-first	Ultrastrong
1>3	✓	✓	✓	✓
2>3	✓	✓	✓	✓
1>2	*	✓	✓	✓
2>1	*	✓	*	*
3>1	*	*	*	*
3>2	*	*	✓	*

# Person restrictions

- All of these patterns are **hierarchical** in nature.
  - ▶ They allow local > 3 & ban some form of 3 > local.
- To account for the hierarchical nature of the PCC, most current analyses claim that the restriction is fundamentally syntactic.
- They commonly rely on the Agree operation (Chomsky 2000) & assume that person restrictions arise when two goals are accessible within the domain of one probe.

# Person restrictions

- In this talk, we describe a novel ditransitive person restriction, which is **non-hierarchical**: only local>local is ungrammatical.
  - ▶ This pattern is found in two unrelated, underdescribed languages: Caquinte (Arawak; Peru) & Kipsigis (Kalenjin; Kenya).
- We show that \*local>local requires a morphological analysis: no existing syntactic analysis predicts this pattern.
- We then develop a cross-linguistic typology showing how syntactic & morphological restrictions interact to derive all attested PCC patterns.



# Outline

- 1 Existing analyses of the PCC
- 2 Case studies
  - Caquinte
  - Kipsigis
- 3 Two classes of person restrictions
- 4 A predictive typology
  - Accounting for variation
  - A third case study: French
  - Empirical predictions

## 1 Existing analyses of the PCC

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# Types of analyses

- Analyses of ditransitive person restrictions can be divided into three categories:
  - ▶ Morphological
  - ▶ Syntactic
  - ▶ Hybrid morphosyntactic

# Morphological analyses

- Morphological accounts generally ban particular surface combinations of morphemes.
- Bonet (1991, 1994) offers one of the earliest analyses of the Strong PCC in French, proposing the \**me-lui* constraint.
  - ▶ This constraint blocks the surface co-occurrence of local person DO clitics & 3rd person IO clitics.

# Morphological analyses

- However, this type of analysis faces empirical & theoretical challenges.
  - ▶ First, \**me-lui* does not hold globally in French, since these clitic combinations are licit in ethical datives. (Perlmutter 1971)

(4) **French** (Rezac 2008:68)

Pierre **me**        **lui**        semble fidèle.

Pierre 1SG.DAT 3SG.DAT seems faithful

'Pierre seems to me to be faithful to her.'

- ▶ Second, \**me-lui* simply restates the empirical generalization without offering a real explanation.

# Morphological analyses

- However, morphological analyses do well in accounting for  $*3>3$ , which can appear in addition to canonical PCC patterns (Perlmutter 1971; Bonet 1995; Pescarini 2005; Nevins 2007) or on their own (Dumézil 1975, Deal 2020)
  - ▶ In Spanish & Catalan,  $3>3$  configurations are ungrammatical unless the IO clitic is replaced with the reflexive pronoun (i.e. spurious-se).

(5) **Spanish** (Bonet 1995:608)

... {se / \*le}      lo            dieron    ayer.  
SE    3SG.ACC 3SG.DAT gave.3PL yesterday  
'They gave it to him yesterday.'

( $*3>3$ )

# Morphological analyses

- The appearance of 3>3 restrictions is surprising from a syntactic perspective.
  - ▶ 3rd persons are often thought to lack person features or to not require licensing. (e.g. Harley & Ritter 2002; Béjar & Rezac 2003)
- Rather, this effect parallels more established morphological processes.
  - ▶ \*3>3 bans adjacent, featurally similar elements.
  - ▶ Dissimilation rescues the derivation, in a way that is reminiscent of the Obligatory Contour Principle (OCP).

# Syntactic analyses

- The vast majority of current PCC analyses are syntactic. (e.g. Albizu 1997; Béjar & Rezac 2003; Anagnostopoulou 2005; Nevins 2007; Rezac 2008; Pancheva & Zubizarreta 2018; Preminger 2019; Deal 2020b; Stegovec 2020)
- Syntactic accounts generally rely on the Agree operation (Chomsky 2000) & assume that ditransitive person restrictions arise when two goals are accessible within the domain of one probe.



# Syntactic analyses

- The exact source of ungrammaticality in one probe-two goal configurations varies from analysis to analysis.
  - ▶ Some argue that the relevant probe simply fails to Agree with both goals. (e.g. Béjar & Rezac 2003; Deal 2020b; Stegovec 2020)
  - ▶ Others claim that it Agrees with both goals, but finds conflicting specifications. (e.g. Anagnostopoulou 2005; Nevins 2007)

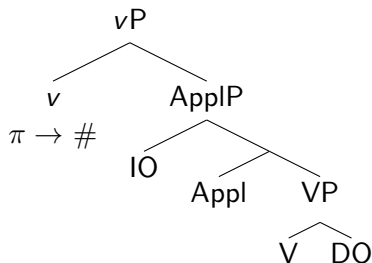
# Syntactic analyses

- Crucially, though, none of these syntactic analyses captures \*local>local as an independent restriction.
  - ▶ 3>local configurations are always ruled out alongside them.

## Syntactic analyses: Béjar & Rezac (2003)

- Béjar & Rezac (2003) derive the Strong PCC using a person probe ( $\pi$ ) & a number probe ( $\#$ ) above the objects in a ditransitive.
  - ▶  $\pi$  probes first, Agreeing with the IO.
  - ▶ The IO moves out of the way for subsequent probing (i.e. cliticization).
  - ▶ Then,  $\#$  probes & Agrees with the DO.

(6)



- This creates a configuration in which the  $\pi$  probe is always “eaten up” by the structurally higher IO.

## Syntactic analyses: Béjar & Rizac (2003)

- To derive ungrammaticality in PCC-violating configurations, Béjar & Rizac propose the Person Licensing Condition (PLC).
  - ▶ The PLC requires local person arguments to be Agreed with by a  $\pi$  probe in the syntax.
- Because the  $\pi$  probe always Agrees with the IO, local person DOs cannot be licensed—regardless of the features of the IO.
  - ▶ 3>local & local>local are ruled out together via the exact same mechanism.
- In this way, Béjar & Rizac are unable to derive \*local>local independently.

# Hybrid morphosyntactic analyses

- The final—and smallest—class of analyses treats ditransitive person restrictions as hybrid morphosyntactic phenomena. (Nevins 2007; Walkow 2012; Stegovec 2015; Coon & Keine to appear)
  - ▶ Some hybrid analyses account for certain restrictions like \*3>local in the syntax & others like \*3>3 in the morphology. (e.g. Nevins 2007)
  - ▶ Others rely on syntactic & morphological machinery to capture each restriction within a given PCC pattern. (e.g. Coon & Keine to appear)

# Hybrid morphosyntactic analyses

- However, like the syntactic analyses presented earlier in this section, existing hybrid accounts are unable to rule out local>local as an independent restriction.
  - ▶ In fact, Coon & Keine (to appear) incorrectly predict that any language that rules out local>local should also rule out 3>local due to the nature of feature geometries. (Coon & Keine to appear:23)

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## Two case studies

- Descriptions from two unrelated, understudied languages: Caquinte (Arawak; Peru) & Kipsigis (Kalenjin; Kenya)
- Novel pattern: only \*local>local is ungrammatical in ditransitives



# The Caquinte pattern

- Kampa Arawak language with several hundred speakers in southeastern Peru
- Relevant linguistic features:
  - ▶ VSO, polysynthetic, head-marking
  - ▶ Rigidly-ordered morphology
  - ▶ All arguments reflected by verbal affixes



- All data come from Zachary O'Hagan's fieldwork in Kitepámpani
  - ▶ Page numbers are from two text collections:
    - Salazar Torres & O'Hagan 2019 [ST&O]
    - Salazar Torres et al. 2019 [ST]

(available online)

# The Caquinte pattern

- Caquinte has strictly-ordered verbal morphology, presented pretheoretically below:

## Basic verbal template

[SUBJ]-...-V-...-[SLOT 1]-[SLOT 2]

- ▶ Slot 1: Local person object suffixes, applicative  $-nV$  ( $V$ =copy vowel)
- ▶ Slot 2: 3rd person object suffixes
- Only one suffix may appear in each slot.

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

Table 2: Caquinte argument affixes

# The Caquinte pattern

- When object suffixes belong to different morphological “slots”, the result is grammatical.
  - ▶ Unlike the PCC, this rules in both local>3 & 3>local.

## Local & 3 in Caquinte

- (7) a. ...*pamenagetenari*                      *nogepigairikitite*.  
pi-amen-ge-e-**na-ri**                      no-kepigairikiti-te  
2-look.for-DSTR-IRR-1-3M 1-louse-POSS  
'...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 [in marriage].' (ST&O p.13) (3>1)

## The Caquinte pattern

- When object suffixes belong to the same “slot” (local>local, 3>3), competition is resolved differently.
- **Local>local competition is not tolerated**; ditransitives that have two local person objects are simply ungrammatical.

### \*Local>local in Caquinte

- (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)

# The Caqunte pattern

- 3>3 competition is permitted: only the IO suffix appears.
- The first suffix “slot” is filled by the applicative morpheme *-nV*
  - ▶ Evidence that *-nV* is an applicative (not a repair strategy) can be found in the Appendix.

## 3>3 in Caqunte

- (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 father cooked manioc...' (ST p.71)                      (3M>3F)

# The Caquinte pattern: Summary

- Local > local is ungrammatical in any form.
- Combinations of local & 3 are grammatical regardless of hierarchy.
- 3 > 3 is grammatical & one suffix “wins” over the other.
- See Drummond & O’Hagan (to appear) for more details.

# The Kipsigis pattern

- Nilo-Saharan language of the Kalenjin subgroup with about 1.9 million speakers in western Kenya (Eberhard et al. 2019)
- Relevant linguistic features:
  - ▶ VSO-VOS alternating
  - ▶ Postverbal word order dictated by information structure (Bossi & Diercks 2019)
- All data come from Madeline Bossi's fieldwork.



# The Kipsigis pattern

- In 3>3 ditransitives, the verb surfaces with the Appl suffix *-i* & both objects can be realized independently.

## Applicatives

- (10) Koo-∅-maas-i Madeline (ineendet) Kibeet.  
PST-3-hit-APPL Madeline 3SG Kibeet  
'Madeline hit Kibeet for him/her (yesterday).' (3>3)

- 3rd person pronouns can co-occur with *-i*, though they are often *pro*-dropped.



# The Kipsigis pattern

- When the ditransitive contains one local person object, it surfaces as a suffix on the verb & replaces *-i*, regardless of its grammatical function.
  - ▶ Local>3: Verbal suffix tracks the IO (11)
  - ▶ 3>local: Verbal suffix tracks the DO (12)

## Promiscuous agreement in ditransitives

- (11) Koo-i-mut-**waan** Nancy ineendet.  
PST-3-bring-1SG.IO Nancy 3SG  
'Nancy brought him/her to me (yesterday).' (1>3)
- (12) Koo-i-mut-**yaan** Nancy ineendet.  
PST-3-bring-1SG.DO Nancy 3SG  
'Nancy brought me to him/her (yesterday).' (3>1)

# The Kipsigis pattern

- This type of pattern is known as promiscuous or context-sensitive agreement. (Béjar 2003)
  - ▶ The verb agrees sometimes with one argument (e.g. the IO) & other times with a different argument (e.g. the DO) depending on the  $\phi$ -features of the other arguments within the agreement domain.

	IO	DO
1SG	-waan	-yaan
2SG	-uun	-yiin
3SG	∅	∅
1PL	-weech	-yeech
2PL	-woog	-yoog
3PL	∅	∅

Table 3: Kipsigis object suffixes

# The Kipsigis pattern

- These local person object suffixes are obligatory.
  - ▶ Local person objects cannot be realized as full pronouns post-verbally.

## Obligatory local suffixes

- (13) \* Koo-i-mut<sup>j</sup>-i      Chepkoech **ane** ineendet.  
PST-3-bring-APPL Chepkoech 1SG 3SG  
Intended: 'Chepkoech brought me to him/him to me  
(yesterday).'

## The Kipsigis pattern

- (11) - (12) show that there is no canonical PCC pattern in Kipsigis.
  - ▶ Local>3 & 3>local combinations are both possible.
- However, **local>local configurations are ungrammatical**, regardless of which object is realized as a verbal suffix—be it the IO (14a) or the DO (14b).

### \*Local>local in Kipsigis

(14) \*1>2

- a. \* Koo-i-mut-**waan**      Kibeet **inye**.  
PST-3-bring-1SG.IO Kibeet 2SG  
Intended: 'Kibeet brought you to me (yesterday).'
- b. \* Koo-i-mut-**yiin**      Kibeet **ane**.  
PST-3-bring-2SG.DO Kibeet 1SG  
Intended: 'Kibeet brought you to me (yesterday).'

# The Kipsigis pattern

- Stacking of these local person suffixes is likewise impossible.

## No suffix stacking

- (15) a. \* Koo-i-mut-**yaan-uun** Kibeet.  
PST-3-bring-1SG.DO-2SG.IO Kibeet  
Intended: 'Kibeet brought me to you (yesterday).'
- b. \* Koo-i-mut-**uun-yaan** Kibeet.  
PST-3-bring-2SG.IO-1SG.DO Kibeet  
Intended: 'Kibeet brought me to you (yesterday).'

# The Kipsigis pattern: Summary

- Combinations of local & 3 are grammatical regardless of hierarchy.
  - ▶ The local person object is a verbal suffix whether it is the IO or DO (promiscuous agreement; Béjar 2003).
- Local > local is ungrammatical in any form.
- 3 > 3 is grammatical & neither object surfaces as a verbal suffix.
- See Bossi (2020) for more details.

## Case studies: Summary

- Both Caquinte & Kipsigis exhibit a novel \*local>local restriction.
  - ▶ \*Local>local is unique because it does not co-occur with any type of 3>local restriction in the languages.

Table 4: Caquinte & Kipsigis vs. attested PCCs

IO>DO	Caq/Kip	Strong	Weak	Me-first	Ultrastrong
1>3	✓	✓	✓	✓	✓
2>3	✓	✓	✓	✓	✓
1>2	*	*	✓	✓	✓
2>1	*	*	✓	*	*
3>1	✓	*	*	*	*
3>2	✓	*	*	✓	*

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## Two classes of person restrictions

- As seen in the previous section, \*local > local in Caquinte & Kipsigis has different hallmarks than the PCC.
- We introduce one additional hallmark in this section: repair strategies.

### **Class 1: Syntactic**

References syntactic hierarchy  
No restriction on exponence  
Syntactic repairs

### **Class 2: Morphological**

Ignores syntactic hierarchy  
Restrictions on exponence  
(Post-)syntactic repairs

# Hierarchy

- All existing PCC analyses reference syntactic hierarchy.
  - ▶ The structurally higher argument (IO) must outrank the structurally lower argument (DO) in the person dimension.
- Probe-based analyses—syntactic & hybrid morphosyntactic—rely on “finding” certain features (e.g. IO) before other features (e.g. DO).
- A striking example of syntactic hierarchy sensitivity is found in Slovenian, which has a Strong PCC. (Stegovec 2020)
  - ▶ When the DO scrambles above the IO, the PCC pattern is *reversed*.

# Hierarchy

- By contrast,  $*\text{local} > \text{local}$  &  $*3 > 3$  are **symmetrical**; either hierarchical configuration will yield the same result.
- When these restrictions appear on their own, as in Caquinte & Kipsigis, probe-based analyses overgenerate & predict hierarchy sensitivity.
  - ▶ All syntactic analyses in their current forms cannot capture  $*\text{local} > \text{local}$  without also predicting  $*3 > \text{local}$ .

# Restrictions on exponence

- PCC patterns are famously insensitive to morphological form.
  - ▶ Identical morpheme combinations can be ungrammatical in a certain syntactic configuration, but grammatical in another.
- French *me lui* is ungrammatical in double object constructions but grammatical in ethical datives, where both objects are dative.

## (16) French (Rezac 2008:68)

- a. \* Pierre me        lui        a    présenté.  
Pierre 1SG.ACC 3SG.DAT has introduced  
Intended: 'Pierre introduced me to her.'
- b. Pierre me        lui        semble fidèle.  
Pierre 1SG.DAT 3SG.DAT seems faithful  
'Pierre seems to me to be faithful to her.'

# Restrictions on exponence

- However, morphological person restrictions are **sensitive to surface-level constraints on exponence**.
- They appear in contexts in which two morphemes demand exponence, but only one can surface for a variety of reasons.
  - ▶ Templatic competition (Caquinte)
  - ▶ Realizing the same head (Kipsigis)
  - ▶ Ban on adjacent identical features (Spanish spurious-se)

# Restrictions on exponence: Caquinte

- In Caquinte, position-class morphology (Simpson & Withgott 1986; Inkelas 1993) creates competition: only one morpheme may surface in each “slot”.
- Evidence for this template comes from:
  - ▶ Arbitrary ordering of valence-changing morphology
  - ▶ The fixed order of local & non-local suffixes
  - ▶ The behavior of the applicative suffix  $-nV$  (Appendix)
- This template prevents two local person suffixes from appearing on the same verb.

## Restrictions on exponence: Kipsigis

- In Kipsigis, only one local person object suffix can appear on the verb.
- Bossi (2020) analyzes them as portmanteaux (Appl+local object) because they replace the default Appl suffix *-i*.
- Given that all local person suffixes realize Appl, only one can be inserted in local>local ditransitives.
  - ▶ Morphological competition is formalized as realization of the same syntactic head.

# Restrictions on exponence: Spanish

- In Spanish, two clitics with the same person features cannot be adjacent (*\*me-me*, *\*nos-me*, *\*le-lo*). (Nevins 2007)
- This effectively creates competition: two clitics are syntactically present, but both cannot surface.



# Repairs

- Repair strategies for person restrictions also give key insight into how the restriction is derived.
- The canonical PCC repair is to place one of the arguments into a PP.
  - ▶ This alleviates the restriction by moving one of the arguments outside the domain of the probe.

(17) **French repair strategy** (Kayne 1975:174)

Paul me            présentera **à lui**.

Paul 1SG.ACC will.present to him

'Paul will introduce me to him.'

(3>1)

- This is a syntactic manipulation to fix a syntactic problem.

# Repairs

- Yet for \*local > local & \*3 > 3, we see **post-syntactic repairs** in addition to syntactic ones.
- A post-syntactic repair is incompatible with a syntactic restriction, as the repair occurs *too late* to fix a syntactic problem.

## Repairs: Anti-agreement

- In Caquinte & Kipsigis, when either object is fronted for focus, the morphology canonically triggered by that object must disappear.

### Focus fronting & anti-agreement

- (18) Iro        namakempi                paperi.  
**iro**        no-am-k-i-mpi(\*-ro) paperi  
3F.FOC 1-bring-PFV-AR-2-3F book.F  
'It's the book that I brought you.' (2>3extr)
- (19) **Ane** ne        koo-i-mut<sup>j</sup>-i                Kibeet ineendet.  
1SG REL.SG PST-3-bring-APPL Kibeet 3SG  
'It's me who Kibeet brought to her/her to (yesterday).'

- This anti-agreement is obligatory; fronted objects cannot be doubled by verbal morphology.

## Repairs: Anti-agreement

- Crucially, fronting of either local person object in a local>local ditransitive obviates the person restriction.

### Anti-agreement rescues \*local>local

- (20) Abiro yojokakena piraapanite.  
**abiro** i-ojok-k-i-na pir-aapani-te  
2.FOC 3M-give-PFV-AR-1 2-father-POSS  
'It's you that your father gave me.' (1>2extr)
- (21) **Ane** ne koo-i-mut-**yiin** Kibeet.  
1SG REL.SG PST-3-bring-2SG.DO Kibeet  
'It's me who Kibeet brought you to (yesterday).' (1extr>2)

- In these cases, only the non-extracted object is realized using the standard verbal morphology.

# Repairs: Anti-agreement

- The formal implementation of anti-agreement differs in Caquinte vs. Kipsigis.
  - ▶ **In Caquinte:**  $\phi$ -features undergo morphological impoverishment in the context of  $\bar{A}$ -features. (Baier & O'Hagan 2019)
  - ▶ **In Kipsigis:** The object that would otherwise be morphologically incorporated with the verb is moved. (Bossi 2020)

# Repairs: Anti-agreement

- However, on both analyses the anti-agreement mechanism must be post-syntactic.
  - ▶ For **Caquinte**: Not all  $\bar{A}$ -extracted elements trigger anti-agreement
    - ★ See Baier (2018), Baier & O'Hagan (2019) & Drummond & O'Hagan (to appear) for more detailed discussions of anti-agreement as impoverishment.
  - ▶ For **Kipsigis**: Focus fronting involves constituent movement, giving extraction & non-extraction contexts a shared underlying syntax
    - ★ See Bossi (2020) for more detailed discussion about why focus fronting resolves a morphological—rather than syntactic—issue.

## Repairs: Anti-agreement

- Abstracting away from the analytical details, (20) - (21) show that when the offending morphological competition is removed, \*local > local disappears.
  - ▶ When either object is fronted for focus, it is no longer realized as a verbal suffix.
  - ▶ This allows the non-extracted object to surface without competition.
    - ★ In Caquinte the relevant slot becomes open.
    - ★ In Kipsigis there is now only one suffix realizing Appl.

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# A predictive typology

- PCC analyses tend to propose a unified mechanism which can be parameterized to account for the full range of PCC patterns.
- The exception has been in analyzing  $3>3$  restrictions, which are typically analyzed morphologically. (cf. Pancheva & Zubizarreta 2018)

# A predictive typology

- Based on Caquinte & Kipsigis data, we believe it's helpful to extend the insight from  $3 > 3$  restrictions to  $\text{local} > \text{local}$  ones as well.
- We argue that certain restrictions—like those banning  $3 > \text{local}$ —are purely syntactic, while others are morphological (i.e.  $*3 > 3$  &  $*\text{local} > \text{local}$ ).

# A predictive typology

- These morphological & syntactic person restrictions are fully modular, each functioning independently of the other.
- A modular system predicts a typology of person restrictions where certain ungrammatical combinations appear to “toggle” on & off.
  - ▶ The difference between the Strong & Weak PCCs is the acceptability of local > local in the Weak PCC.
  - ▶ 3 > 3 restrictions are attested independently of all PCC varieties.
    - ★ Varieties of Spanish show \*3 > 3 alongside Strong, Weak & Ultrastrong patterns. (Pancheva & Zubizarreta 2018)
    - ★ Ubykh bans 3 > 3 with no other person restriction. (Dumézil 1975; Deal 2020a)

# A predictive typology

- Table 5 outlines a typology, showing how these modular syntactic & morphological restrictions interact to derive some attested PCC patterns.
  - ▶ If restrictions on similarity (i.e. \*local>local, \*3>3) can be attributed to the morphology, a division of labor between syntax & morphology could simplify the analyses in both modules.<sup>1</sup>

Table 5: A typology of ditransitive person restrictions

	SYNTACTIC	NO SYNTACTIC
MORPHOLOGICAL	Strong PCC	Caq/Kip
NO MORPHOLOGICAL	Weak PCC	No PCC

<sup>1</sup>In Table 5 “morphological” refers to \*local>local, though the same typology exists for \*3>3.

# A predictive typology

Table 5: A typology of ditransitive person restrictions

	SYNTACTIC	NO SYNTACTIC
MORPHOLOGICAL	Strong PCC	Caq/Kip
NO MORPHOLOGICAL	Weak PCC	No PCC

- The Weak PCC, which rules out only 3>local, is purely syntactic.<sup>2</sup>
- The Caquinte & Kipsigis pattern forbidding local>local combinations is morphological.
- No PCC effects arise when neither type of restriction is active in a language.

<sup>2</sup>The Me-first & Ultrastrong PCCs also fall into the syntactic category, since they rule out 3>local configurations while permitting certain local>local ones. See Nevins (2007); Deal (2020b); Coon & Keine (to appear) for possible implementations.

# A predictive typology

Table 5: A typology of ditransitive person restrictions

	SYNTACTIC	NO SYNTACTIC
MORPHOLOGICAL	Strong PCC	Caq/Kip
NO MORPHOLOGICAL	Weak PCC	No PCC

- The Strong PCC results from the co-occurrence of syntactic & morphological restrictions, as it encompasses both  $*3 > \text{local}$  &  $*\text{local} > \text{local}$ .
  - ▶ Different restrictions within the Strong PCC warrant different analyses.
  - ▶  $*3 > \text{local}$  is due to a syntactic restriction, while  $*\text{local} > \text{local}$  is morphological.

## A third case study: French

- Preliminary evidence for this hybrid approach to the Strong PCC comes from French.
- French clitics surface in a fixed order, schematized below:

### French clitic template (Perlmutter 1971:57)

[local persons]-[3.ACC]-[3.DAT]-[locative]-[partitive]

- ▶ In French, local person clitics including *me*, *te*, *nous* & *vous* are syncretic for case.
- ▶ Regardless of their grammatical function, these local person clitics surface in the same morphological slot.
- ▶ They are followed by separate slots for 3rd person DO & IO clitics.

## A third case study: French

- French displays the Strong PCC, ruling out clitic combinations with a local person DO (i.e. \**me-lui*).
- We've seen that *me lui* is acceptable in ethical dative constructions, even though this cluster is ungrammatical in PCC configurations.
  - ▶ This has been used to argue that the PCC cannot be morphological.

(22) *Me lui* in French ethical datives (Rezac 2008:68)

Pierre **me**        **lui**        semble fidèle.  
Pierre 1SG.DAT 3SG.DAT seems faithful  
'Pierre seems to me to be faithful to her.'



## A third case study: French

- However, *me te* remains ungrammatical in ethical datives.
  - ▶ This asymmetry suggests that *me te* configurations are ruled out for a different reason than *me lui*.

(23) \**Me te* in French ethical datives (Rezac 2008:98)

\*Elle **me**        **te**        semble infidèle.

she 1SG.DAT 2SG.DAT seems unfaithful

Intended: 'She seems to me to be unfaithful to you.'

## A third case study: French

- If \**me-te* has a unique explanation in ethical datives, then it likely also has a unique explanation in PCC configurations.
  - ▶ Specifically, \**me-te* has a uniform morphological source across both types of constructions.
  - ▶ In ethical datives & PCC configurations, local person clitics “compete” for a single morphological slot, which prevents exponence of both clitics.

## A third case study: French

- Such an analysis places French in the upper left quadrant of the proposed typology.
  - ▶ \*3>local is due to a syntactic restriction, while \*local>local is morphological—evidenced by the more widespread ungrammaticality of this clitic cluster.

Table 5: A typology of ditransitive person restrictions

	SYNTACTIC	NO SYNTACTIC
MORPHOLOGICAL	Strong PCC	Caq/Kip
NO MORPHOLOGICAL	Weak PCC	No PCC

## Empirical predictions

- This hybrid analysis of the Strong PCC predicts that 3>local & local>local configurations should show different behaviors in different parts of the grammar.
  - ▶ If \*local>local is morphological, it should be ruled out in a wider range of contexts than \*3>local.
- More work that considers local>local behaviors separately from 3>local ones is needed to fully test the proposed typology.
- Our proposal leaves open the possibility that the Strong PCC pattern could be derived in multiple ways.

# Conclusion

- Motivated a morphological analysis of a novel \*local>local restriction found in two unrelated languages—Caquinte & Kipsigis
- Described two classes of person restrictions, each with their own hallmarks
  - ▶ Syntactic restrictions reference hierarchy, are not sensitive to constraints on exponence & only have syntactic repairs.
  - ▶ Morphological restrictions do not reference hierarchy, are sensitive to constraints on exponence & have syntactic or post-syntactic repairs.
- Detailed a cross-linguistic typology of person restrictions, which derives all attested PCC patterns
  - ▶ Weak/Ultrastrong/Me-first PCCs are syntactic.
  - ▶ \*Local>local & \*3>3 are morphological.
  - ▶ Strong PCC (or a PCC + \*3>3) can arise from co-occurring syntactic & morphological restrictions.

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## Appendix: Caquinte $-nV$

- In basic ditransitives, the morpheme  $-nV$  only appears in  $3>3$  configurations.
  - ▶ For this reason, Swift (1988) analyzes it as a more general realization of the DO (similar to Spanish spurious-*se*).
- We analyze  $-nV$  as an applicative (following O'Hagan 2018) because:
  - 1  $-nV$  does not realize the DO
  - 2  $-nV$  is not a  $*3>3$  repair
  - 3  $-nV$  is best analyzed as an Appl head



## Appendix: Caquinte $-nV$

### ① $-nV$ does not realize the DO

- All focused objects in Caquinte undergo full anti-agreement.
- When the DO is extracted from a  $3>3$ , both IO agreement and  $-nV$  remain on the verb (24).
  - ▶ If  $-nV$  realizes the DO, it should be fully impoverished by anti-agreement.

### No anti-agreement of $-nV$

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

## Appendix: Caquinte -nV

### ② -nV is not a \*3>3 repair

- -nV appears outside of 3>3 contexts when local suffixes undergo anti-agreement.
- When extraction impoverishes a local person object, -nV always appears in the local suffix slot.

### -nV outside of 3>3

- (25) *Abiro yojokakeneri*                      *iritinerijaniki.*  
**abiro** i-ojok-k-i-**nV**-ri                      iri-tinerijaniki  
2.FOC 3M-give-PFV-AR-APPL-3M 3M-nephew  
'It's you that he gave to his nephew.'                      (3>2extr)
- (26) *Naro yojokakene*                      *irorijanite.*  
**naro** i-ojok-k-i-**nV**                      iri-orijani-te  
1.FOC 3M-give-PFV-AR-APPL 3M-daughter-POSS  
'It's to me that he gave his daughter.'                      (1extr>3)

## Appendix: Caquinte $-nV$

- ③  $-nV$  is best analyzed as an Appl head
  - $-nV$  only appears in ditransitive contexts.
  - The appearance of  $-nV$  after impoverishment (anti-agreement) suggests that it is always present in ditransitives.
  - $-nV$  appears whenever there is no local person suffix.
    - ▶ This is explained if  $-nV$  realizes Appl, which arbitrarily competes in the same morphological slot as local person agreement.

IO↓ DO→	Local	3rd	Extracted
Local	—	-local-3	-local
3rd	-local-3	$-nV$ -3	$-nV$ -3
Extracted	*	$-nV$	—

Table 6: Distribution of  $-nV$  in ditransitives