Feature gluttony in the syntax of hierarchy effects

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1 Introduction

Hierarchy effects

A recurring restriction across languages and constructions is that configurations that contain two DPs internal to a certain domain may impose restrictions on possible feature values for the two DPs: The lower DP must be on the right of the hierarchy or the lower DP cannot be left of the higher DP on the hierarchy.

(1) Example: Person hierarchy 1/2 > 3

• Example: Person Case Constraint (PCC)

An important example is the PCC (Perlmutter 1971, Bonet 1991), which constrains possible person features on the direct object (DO) and indirect object (IO) in ditransitive constructions:

- (2) (Strong) PCC in Basque: DO cannot be 1st or 2nd person when under an IO1
 - a. Zu-k *harakina-ri* **liburua** saldu d-i-o-zu. you-erg butcher-dat book.abs sold 3abs-aux-3dat-2erg 'You have sold the book to the butcher.' (√3dat > 3abs)
 - b. *Zu-k harakina-ri **ni** saldu n-(a)i-o-zu.
 you-erg butcher-dat me.abs sold labs-aux-3dat-2erg
 intended: 'You have sold me to the butcher.' (*3dat > 1abs)
 [Laka 1993: 27]

• Two DPs - one probe

Much previous work has argued that these restrictions arise in configurations in which two accessible DPs occurs in the domain of a single agreeing probe (e.g.,

Anagnostopoulou 2003, 2005, Béjar & Rezac 2003, Nevins 2007, Preminger 2014, 2019, Oxford 2019):

• Licensing failure?

The traditional approach to such effects (due to Anagnostopoulou 2003, 2005 and Béjar & Rezac 2003) ascribes the ungrammaticality to **failures of nominal licensing** or **violations of the Case Filter.**

- 1st/2nd person DPs need to be licensed through Agree with a ϕ -probe.
- In configurations like (4), the higher DP intervenes for such Agree.
- \triangleright a 1st/2nd person lower DP remains unlicensed \rightarrow ungrammaticality

(4)
$$[\operatorname{Probe}^{0}[\dots \operatorname{DP}_{[3]}\dots[\dots \operatorname{DP}_{[1/2]}\dots]]]$$

"Scarcity of resources" problem is too little Agree; problem is caused by an unlicensed DP

• Our proposal today: Feature gluttony (Coon & Keine 2019)

Hierarchy effects are the result of *too much Agree*: A probe agrees with two DPs, "biting off more than it can chew." We refer to such configurations as "feature gluttony."

(5)
$$[Probe^0 [\dots DP_{[3]} \dots [\dots DP_{[1/2]} \dots]]]$$

• Feature gluttony is not itself ungrammatical, but it can give rise to **irresolvably conflicting requirements for subsequent operations** and hence **ineffability**.

¹ Basque examples not otherwise attributed are due to Jon Ander Mendia (p.c.).

▶ Shift in perspective

- problem is caused by the probe, not an unlicensed DP
- problem is unrelated to (nominal) licensing
- problem is caused by too much Agree, rather than too little

• Motivation

We show that in many cases, hierarchy effects display sensitivity to overt φ-agreement (also see Preminger 2011b, 2019).

• Today: Three case studies

We investigate three kinds of hierarchy effects:

- 1. PCC effects (primarily in Basque)
- 2. Person restrictions in Icelandic dative–nominative constructions
- **3.** Person and number restrictions in certain types of copula constructions in Hindi-Urdu
- These case studies show that hierarchy effects are tied to $\it overt$ φ -agreement in at least four ways:
 - 1. They disappear in ϕ -less nonfinite clauses.
 - 2. They disappear under gapping of the verb.
 - **3.** They disappear if agreement with both DPs is syncretic.
 - **4.** They are sensitive to passivization if it affects which DP is targeted by verb agreement.
- An approach in terms of (nominal) licensing does not lend itself to these interactions; a feature-gluttony approach does.

→

2 Person Case Constraint

2.1 Background

• PCC effects

Canonically described as a ban on certain person combinations of direct and indirect objects, typically involving pronominal clitics (see Anagnostopoulou 2017 for a recent overview).

Attested in wide variety of languages, e.g., Basque, Greek, Spanish, Catalan, Passamaquoddy, Walpiri, Slovenian, Kiowa, French, Sambaa, Yimas, Georgian, and Albanian (e.g., Perlmutter 1971, Bonet 1991, 1994, Laka 1993, Anagnostopoulou 2003, 2005, Adger & Harbour 2007, Nevins 2007, Ormazabal & Romero 2007, Riedel 2009, Pancheva & Zubizarreta 2018, Stegovec 2019).

(6) Types of PCC discussed here

	IO	>	DO	Examples
Strong:	*1/2/3	>	1/2	Basque (Laka 1993), Greek (Anagnostopoulou 2003), Kiowa (Adger & Harbour 2007)
Weak:	*3	>	1/2	varieties of Catalan (Bonet 1991) and Italian (Bianchi 2006), Sambaa (Riedel 2009)
Ultra-Strong	; {*3 *2	> >	$\left. \begin{array}{c} 1/2 & \& \\ 1 & \end{array} \right\}$	Classical Arabic (Fassi Fehri 1988, Nevins 2007)

(7) Strong PCC in Basque: *1/2/3 > 1/2

- a. Zu-k *harakina-ri* **liburua** saldu d-i-o-zu. you-erg butcher-dat book.abs sold 3abs-aux-3dat-2erg 'You have sold the book to the butcher.' (✓3dat > 3abs)
- b. Zu-k *ni-ri* **liburua** saldu d-i-da-zu. you-erg me-dat book.abs sold 3abs-aux-ldat-2erg 'You have sold the book to me.' (\(^1\text{Dat} > 3abs)
- c. *Zu-k harakina-ri ni saldu n-(a)i-o-zu.
 you-erg butcher-dat me.abs sold labs-aux-3dat-2erg
 intended: 'You have sold me to the butcher.' (*3dat > labs)
- d. *Haiek ni-ri zu saldu z-ai-da-te.
 they.erg me-dat you.abs sold 2abs-aux-ldat-3erg
 intended: 'They have sold you to me.' (*ldat > 2abs)

(8) Weak PCC in Catalan: *3 > 1/2

a. En Josep, **te** 'l va recomenar la Mireia. the Josep, 2DAT.CL 3ACC.CL recommended the Mireia 'She (Mireia) recommended him (Josep) to you.' (\$\sqrt{2DAT} > 3ACC)

b. *A en Josep, **te li** va recomanar la Mireia. to the Josep, 2ACC.CL 3DAT.CL recommended the Mireia intended: 'She (Mireia) recommended you to him (Josep).'

(*3DAT > 2ACC)

c. **Te'm** van recomanar per a la feina.

2CL.1CL recommended for the job

'They recommended me to you for the job.' (✓2DAT > 1ACC)

'They recommended you to me for the job.' (✓1DAT > 2ACC)

[Bonet 1991: 178, 179]

2.2 PCC effects as failed nominal licensing

• The PCC is not a morphological constraint

The PCC is not due to a morphological surface filter on clitic/agreement morphology because in various cases the ungrammatical verb+agreement combination is possible in other configurations (e.g., Perlmutter 1971, Albizu 1997, Rezac 2008).

- Example: Basque (Albizu 1997, Rezac 2008)
 - **Psych-verbs:** DP.DAT > DP.ABS \Rightarrow *PCC effect* (9)
 - Motion verbs: DP.ABS > DP.DAT \Rightarrow no PCC effect (10)
 - identical surface agreement morphology
 - (9) Psych verbs → PCC (DP.ABS cannot be 1st or 2nd person)
 - a. [... DP.dat ... [... DP.abs ...]]
 - b. *Ni Itxaso-ri gustatzen n-atzai-o me.abs Itxaso-dat like.impf labs-aux-3dat intended: 'Itxaso likes me.' (*3dat > labs)
 - (10) *Motion verbs* \rightarrow *no PCC*
 - a. [... DP.abs ... [... DP.dat ...]]
 - b. Ni Itxaso-ri etortzen n-atzai-o me.ABS Itxaso-DAT come.IMPF lABS-AUX-3DAT
 'I am coming to Itxaso.' (\sqrt{lABS} > 3DAT)
 [Rezac 2008: 63]

▷ An account of PCC effects must make crucial reference to the syntactic relationship between the two DPs, which may be neutralized in the surface morphology.

• Standard approach: failed Agree

Since Anagnostopoulou's (2003, 2005) and Béjar & Rezac's (2003) seminal proposals, the standard approach to PCC effects attributes them to *failures of nominal licensing*. Ist and 2nd person DPs are subject to a special licensing condition, expressed here as Béjar & Rezac's (2003) *Person Licensing Condition*.

(11) Person Licensing Condition (PLC)

A 1st or 2nd person DP must be licensed by entering into a ϕ -Agree relation with a functional category.

[adapted from Béjar & Rezac 2003: 53]

- In a ditransitive configuration, the indirect object (IO) intervenes between the direct object (DO) and its licensing φ-probe.
 - ▷ If the DO is 1st or 2nd person, it remains unlicensed, and ungrammaticality results. This derives the Strong PCC.
 - ⊳ More assumptions are needed for the Weak PCC (see, e.g., Anagnostopoulou 2005, Nevins 2007).
- (12) Strong PCC as licensing failure

• Failed-licensing/Agree accounts (which do not necessarily subscribe to the exact syntactic configuration in (12)) have also been developed by, e.g., Adger & Harbour (2007), Nevins (2007), Baker (2008), Rezac (2008, 2011), Richards (2008), Kalin (2019), Preminger (2019), and Stegovec (2019).

2.3 Against a nominal-licensing account

• Based on evidence from Basque, we demonstrate that the PCC is crucially sensitive to *overt agreement morphology* (see also Preminger 2011b, 2019). An account in terms of nominal licensing or failed Agree does not readily extend to this sensitivity.

2.3.1 Clauses without φ-agreement

• In Basque, PCC effects systematically disappear in nonfinite clauses (Laka 1993, Albizu 1997, Arregi & Nevins 2012, Preminger 2011b, 2019).

- ➤ The same IO–DO combination that is ungrammatical in the finite clause in (13a) is grammatical in nonfinite clauses (13b,c).
- (13) Basque PCC effects disappear in nonfinite clauses: Ditransitives
 - a. Finite clause: PCC

*Zu-k harakina-ri **ni** saldu n-(a)i-o-zu. you-erg butcher-dat me.abs sold labs-aux-3dat-2erg 'You have sold me to the butcher.' (*3dat > labs)

b. Case-marked infinitival clause: No PCC

Gaizki iruditzen \varnothing -zai-t [zu-k harakina-ri **ni** wrong look.impf 3abs-aux-1dat you-erg butcher-dat me.abs sal-tze-a].

sell-impf-art.abs

'It seems wrong to me for you to sell me to the butcher.'

 $(\sqrt{3}\text{DAT} > 1\text{ABS})$

[based on Laka 1993: 27]

c. Adpositional infinitival clause: No PCC

Zu-k [harakina-ri ni sal-tze-n] probatu you-erg butcher-dat me.abs sell-impf-loc attempted d-u-zu.

3ABS-AUX-2ERG

'You have attempted to sell me to the butcher.' ($\sqrt{3}DAT > 1ABS$)

- This effect is not limited to ditransitive configurations. (14) shows that it also holds for *psych*-predicates (Arregi & Nevins 2012).
 - (14) Basque PCC effects disappear in nonfinite clauses: Psych-predicates
 - a. Finite clause: PCC

*Ni-ri **zu** ondo jaus-ten za-tzai-t me-dat you.abs well fall-impf 2.abs-aux-ldat 'I like you.' (*1dat > 2abs)

b. Nonfinite clause: No PCC

[Ni-ri zu ondo jaus-te-a] nahi d-u-t me-dat you.abs well fall-IMPF-ART.abs want 3ABS-AUX-1.ERG 'I want to like you.' (\checkmark 1DAT > 2ABS)

• Crucial observation: No agreement

What sets nonfinite clauses apart from finite clauses in Basque is that there is

no agreement/cliticization in nonfinite clauses. This indicates that no ϕ -Agree with DPs inside these nonfinite clauses takes place (also Anagnostopoulou 2003, Preminger 2011a, 2019).

 \triangleright Absence of ϕ -Agree obviates PCC effects.

• Independent support

Hierarchy-type effects also disappear in nonfinite (= non-agreeing) environments in Georgian (Bonet 1991; Béjar & Rezac 2003; Léa Nash, p.c.), German (Keine et al. 2019), and Icelandic (below).

• The challenge for licensing accounts

If hierarchy effects arise because there are not enough probes to license all of the DPs, then removing probes should exacerbate the problem, not resolve it.²

The first person absolutive DO ni in (13b,c) does not have a head to license it—yet the derivation converges.

(15)
$$[... DP [... DP_{[1/2]} ...]]$$

2.3.2 Gapping and stripping

- Basque PCC effects also disappear under gapping (16) and stripping (17).
 - (16) Basque PCC effects disappear with gapping
 - a. Ditransitive predicates

Jon-ek *alkatea-ri* **Mikel** saldu d-i-o, eta
Jon-erg mayor-dat Mikel.abs sold 3abs-aux-3dat and
zu-k *harakina-ri* **ni**you-erg butcher-dat me.abs

'Jon sold Mikel to the mayor, and you me to the butcher.'

b. Psych-predicates

ni-ri Mikel ondo jaus-ten za-i-t, eta ni-ri me-dat Mikel.abs well fall-IMPF 3.ABS-AUX-1.DAT and me-dat zu ___ ere you.abs too 'I like Mikel and I (like) you too.'

² Preminger (2011b, 2019) proposes a revised version of PLC, which by stipulation exempts DPs inside clauses that do not contain a φ-probe from the licensing requirement. While this yields the right empirical results (though perhaps not for the gapping cases in §2.3.2), it is non-explanatory.

- (17) Basque PCC effects disappear with stripping
 - a. Ditransitive predicates

```
Zu-k harakina-ri Mikel saldu d-i-o-zu, eta you-erg butcher-dat Mikel.abs sold 3abs-aux-3dat-2erg and ni __ ere bai me.abs too yes

'You sold Mikel to the butcher, and me too.'
```

b. Psych-verbs

```
Ni-ri Mikel ondo jaus-ten za-i-t, eta zu

I-DAT Mikel.ABS well fall-IMPF 3.ABS-AUX-1.DAT and you.ABS

ere bai
too yes

'I like Mikel, and you too.'
```

- What is elided in all of these cases is the lexical verb plus the auxiliary that bears the agreement.
- This should not obviously affect the licensing need of DPs. On a licensing account, it is hence not clear why gapping the verb would ameliorate the PLC.

\rightarrow The role of overt ϕ -agreement

The PCC in Basque is tied to *overtly realized* ϕ -agreement. An abstract licensing account does not lend itself to this restriction.

2.3.3 Interim summary

- PCC obviation if agreement is suppressed:
 - clauses without agreement
 - gapping of verb+agreement
- We conclude that the problem that underlies the PCC does *not* lie with nominal licensing or case, but rather *with verb agreement and the* ϕ -probe that underlies it.

3 Feature gluttony

• Analytical intuition

- PCC effects are due to *too much Agree*: a probe agrees with more DPs than it can handle.
- Such Agree leads to conflicting requirements for subsequent operations
 → ineffability
- This account offers an explanation for PCC obviation in the environments above.

3.1 Assumptions

1. Feature geometries

Features are organized into hierarchical geometries (Harley & Ritter 2002, Béjar 2003, among many others), as shown for person in (18) and for number in (19).

(19)
$$\left[\begin{array}{c} NUM(BER) \\ | \\ PL(URAL) \end{array} \right]$$

- (20) a. 3rd person: [PERS]
 - b. 2nd person: [PERS [PART [ADDR]]]
 - c. singular: [NUM]
 - d. plural: [NUM [PL]]

2. Probe structure

Probes are structured as well, consisting of hierarchically-organized *segments* (e.g., Béjar 2003, Béjar & Rezac 2009, Preminger 2014, Oxford 2019).

- In Deal's (2015) terms, all segments on a probe must be matched for this probe to be *satisfied* and stop probing.

(21) a.
$$[upers]_{\pi}$$
 — fully satisfied by any person-bearing DP

b.
$$\begin{bmatrix} u_{PERS} \\ | \\ u_{PART} \end{bmatrix}_{\pi}$$
 — fully satisfied by 1st and 2nd person DPs

c.
$$\begin{bmatrix} upers \\ | \\ upart \\ | \\ uspkr \end{bmatrix}_{\pi} - fully satisfied by 1st person DPs$$

3. Segment-based Agree

Different probe segments of a probe can agree with different DPs (Béjar & Rezac 2009):

- If a probe encounters a DP bearing a segment of the probe, the probe agrees with the DP, copying over the entire feature geometry of the DP.
- Probing iterates until all potential goals are exhausted or the probe is satisfied (also see Deal 2015).

(22) Agree

Given a probe P with a hierarchy of unchecked feature segments [uF],

- a. P searches the closest accessible DP in its domain such that this DP contains feature set [G], with $[G] \cap [F] \neq \emptyset$;
- b. the feature hierarchy containing [G] is copied to P;
- c. [G] is removed from [uF];
- d. iterate over steps a.-c. until $[uF] = \emptyset$ or search fails.

• Illustrations

1. Lower DP matches more segments of a probe than a higher DP

Here, the probe will agree with both DPs. We represent such a derivation as in (23). In line with (22b), the entire π -structure of both DPs is copied over to the probe, as represented in (24).

$$(23) \quad [P \begin{bmatrix} u \\ u \\ v \\ v \end{bmatrix} \dots [\dots DP \begin{bmatrix} v \\ [x] \end{bmatrix} \dots [\dots DP \begin{bmatrix} x \\ v \\ z \end{bmatrix}]]]$$

(24)
$$P = \left\{ \begin{bmatrix} x \end{bmatrix} \boxed{1}, \begin{bmatrix} x \\ y \\ z \end{bmatrix} \boxed{2} \right\}$$

▷ Gluttony

The probe in (23) has agreed with two DPs and acquired two feature values. We call such probes *gluttonous*.

2. Lower DP matches fewer of the probe's segments than the higher DP Here, the probe will only agree with the higher DP, as in (25). The probe hence acquires only a single valued, as in (26).

$$(25) \quad \left[P \begin{bmatrix} ux \\ l \\ uy \end{bmatrix} \rightarrow 1 \right] \dots \left[\dots DP \begin{bmatrix} x \\ l \\ y \\ z \end{bmatrix} \right] \dots \left[\dots DP_{[x]} \right] \right]$$

(26)
$$P = \left\{ \begin{bmatrix} x \\ y \\ z \end{bmatrix} \right\} \Rightarrow not gluttonous$$

3. Higher DP matches only a subset of the probe's segments, but the lower DP doesn't match more

Here, the probe again only agrees with the higher DP, as in (27).

(27)
$$[P \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix} \dots [\dots DP \underbrace{[x]}_{[x]} \dots [\dots DP_{[x]}]]]$$

$$(28) \quad P = \left\{ [x]^{\boxed{1}} \right\}$$

Consequence

6

Gluttony arises if and only if the lower DP has *more* feature segments sought by the probe than the higher DP.

• Importantly, despite its algorithmic definition, (22) counts as a single step of the derivation. It is hence not possible to intersperse subprocedures of (22) with other operations.

3.2 Weak PCC (in Catalan)

• We first analyze the Weak PCC illustrated on the basis of Catalan, which involves pronominal clitics.

· Assumptions about cliticization

The PCC in Catalan arises with clitics. We therefore need to make some background assumptions about how cliticization works. For concreteness, we adopt here assumptions in Béjar & Rezac (2003) and other relevant literature. Our account is to some extent independent of these specific assumptions.

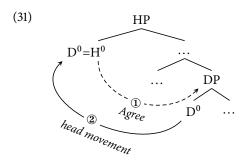
1. π vs.

Person (π) and number (#) are separate probes (see Laka 1993, Taraldsen 1995, Béjar 2003, Béjar & Rezac 2003, Rezac 2003, Sigurðsson 2004a, Sigurðsson & Holmberg 2008, Kalin 2019). These are universally ordered such that π probes before #, which we indicate as in (30):

(30)
$$[\pi > \#]$$

2. Cliticization as head movement

Cliticization involves long head movement triggered by ϕ -Agree (see Anagnostopoulou 2003, Béjar & Rezac 2003, and Preminger 2009, 2019).



3. Cliticized DPs are invisible to subsequent probes

Cliticized DPs behave like traces of A-movement and are invisible to subsequent operations (see Chomsky 2000, Anagnostopoulou 2003, Béjar & Rezac 2003, and Preminger 2009).

• Probe structure

The person probe is articulated as in (32). The number probe can be of arbitrary complexity.

(32)
$$v^0 \begin{bmatrix} u_{\text{PERS}} \\ u_{\text{PART}} \end{bmatrix}_{\pi} > [u_{\text{NUM}}]_{\#}$$

 \Rightarrow The π -probe is fully satisfied only by 1st or 2nd person DPs.

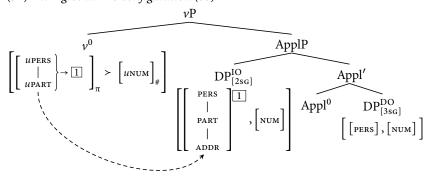
3.2.1 PCC-obeying 2>3 configuration

(33) En Josep, **te** '**l** va recomenar la Mireia. [=(8a)] the Josep, 2CL 3CL recommended the Mireia 'She (Mireia) recommended him (Josep) to you.' (\sqrt{2DAT} > 3ACC)

• π probes first

- π agrees with the 2nd person DP_{IO}, is fully satisfied, and stops probing.
- As a result of Agree with π , DP_{IO} is clitic-doubled.

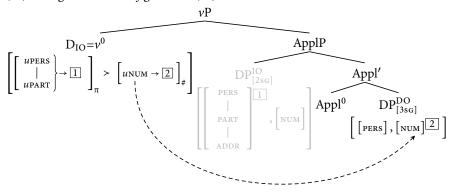
(34) π -Agree in 2>3 configuration (33)



• # probes second

- Because $\ensuremath{\mathsf{DP_{IO}}}$ has been clitic-doubled, it is invisible to probing by #.
- # agrees with $\ensuremath{\text{DP}_{\text{DO}}}$ and clitic-doubles it.

(35) #-Agree in 2>3 configurations (33)



(36) $D_{DO} = D_{IO} = v^0$

.....

3.2.2 PCC-violating 3>2 configuration

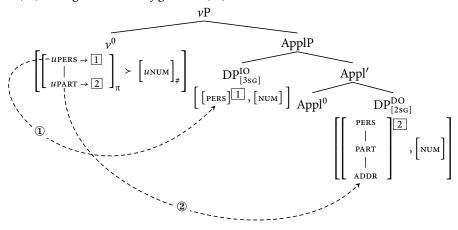
(37) *A en Josep, **te li** va recomanar la Mireia. [=(8b)] to the Josep, 2ACC.CL 3DAT.CL recommended the Mireia intended: 'She (Mireia) recommended you to him (Josep).'

(*3dat > 2acc)

• π -probing leads to gluttony

- ① π first reaches DP_{IO}, which matches only [*u*PERS].
- 2 [upart] remains and is matched by DP_{DO}. A second Agree dependency is established between π and DP_{DO}.

(38) π -Agree in 3>2 configuration (37)



· Ineffability in clitic-doubling

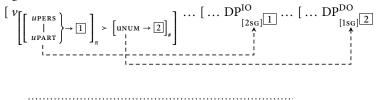
- Having agreed with two DPs, π is gluttonous.
 - (39) Due to the clitic-doubling requirement of π , every DP that π has agreed with must cliticize onto ν .

- But ...

- 1. Cliticizing only one of the two DPs violates (39).
- 2. Cliticizing neither DP also violates (39).
- 3. Cliticizing both DPs *sequentially* is impossible because doing so would require *not* cliticizing one of them in the first step would violate (39).
- 4. Cliticizing both DPs *simultaneously* is impossible because doing so would require Merge between v^0 and two D^0 's. This is excluded by Merge being binary.
- There is no way to satisfy (39) if the probe is gluttonous \rightarrow ineffability
- Because Agree as defined in (22) counts as a single derivational step, it is not possible to clitic-double $DP_{\rm IO}$ after π agrees with $DP_{\rm IO}$ but before it agrees with $DP_{\rm DO}$.

3.2.3 PCC-obeying PART>PART configuration

- van recomanar per a la feina. (40) **Te'm** [=(8c)]2CL.1CL recommended for the job 'They recommended me to you for the job.'/ $(\sqrt{2}DAT > 1ACC)$ 'They recommended you to me for the job.' $(\sqrt{1}DAT > 2ACC)$
- π is fully satisfied by Agree with DP_{IO}. No gluttony results, and DP_{IO} is cliticdoubled. # agrees with and clitic-doubles DP_{DO}.
 - (41) Agree in 2sG>1sG (40)



3.2.4 PCC-obeying 3>3 configuration

- π agrees with DP_{IO}. It is not fully satisfied, but DP_{DO} does not match any additional segments. No gluttony arises.
 - (42) Agree in 3sG>3sG

Agree in 3SG>3SG
$$\begin{bmatrix} v \begin{bmatrix} u_{\text{PERS}} \rightarrow 1 \\ u_{\text{PART}} \end{bmatrix}_{\pi} > \begin{bmatrix} u_{\text{NUM}} \end{bmatrix}_{\#} & \dots & \begin{bmatrix} DP & \downarrow \\ [3] & 1 \end{bmatrix} & \dots & \begin{bmatrix} DP_{[3]} \end{bmatrix} \end{bmatrix} \end{bmatrix}$$

Upshot

With a [upers[upart]] probe specification, gluttony arises iff

- 1. there are two DPs in the domain of the π -probe;
- 2. the IO is 3rd person \rightarrow matches a subset of the probe structure;
- 3. the DO is 1st or 2nd person \rightarrow matches the remaining probe structure.
- This derives the Weak PCC.

3.3 Strong PCC in Basque

3.3.1 Properties of the PCC in Basque

- 1. Strong PCC \rightarrow PART>PART is impossible too
 - (43) Strong PCC *1/2/3 > 1/2
 - (44) * Haiek saldu z-ai-da-te. ni-ri zu [=(7d)]they.erg me-dat you.abs sold 2abs-aux-1dat-3erg intended: 'They have sold you to me.' (*1DAT > 2ABS)
- 2. PCC disappears in nonfinite clauses and under gapping/stripping (see § 2.3)
- 3. Crossreferencing of absolutive DP is agreement; ERG and DAT are clitics (Preminger 2009; also Arregi & Nevins 2012 for a more nuanced view)
 - (45) No absolutive argument \rightarrow default agreement Ni-k dantzatu d -u-t I-ERG danced 3ABS-AUX-1SG.ERG 'I danced.'
 - (46) No ergative/dative argument \rightarrow agreement for them disappears completely joan **n**-aiz I.abs go labs-aux 'I went.'

3.3.2 Gluttony and ineffability in agreement

- We propose that the PCC in Basque is due to a **gluttonous absolutive-agreement** probe.
- 3>1/2 configurations give rise to gluttony in a way analogous to the Weak PCC; see (48).
- (47) *Zu-k harakina-ri ni saldu n-(a)i-o-zu. [=(7c)]you-erg butcher-dat me.abs sold labs-aux-3dat-2erg intended: 'You have sold me to the butcher.' (*3 > 1)

(48)
$$\pi$$
-Agree in (47)
$$\begin{bmatrix} v \\ u_{\text{PERS}} \rightarrow 1 \\ u_{\text{PART}} \rightarrow 2 \end{bmatrix}_{\pi} \succ \begin{bmatrix} u_{\text{NUM}} \end{bmatrix}_{\sharp} \cdots \begin{bmatrix} DP \\ 3 \end{bmatrix} \cdots \begin{bmatrix} DP \\ 1 \end{bmatrix}^{2} \end{bmatrix}$$

• The person values of both DPs are copied over to π , yielding (51).

• Morphological conflict

Assuming that absolutive agreement in Basque is genuine agreement, not clitic-doubling, there is not conflict w.r.t. movement. But we suggest that a conflict arises for the **morphological realization** of the gluttonous probe.

• Vocabulary insertion

We assume a late-insertion model of morphology (such as Distributed Morphology; Halle & Marantz 1993, 1994), where abstract syntactic heads are given overt exponence through postsyntactic vocabulary insertion.

- (49) Constraints on vocabulary insertion
 - a. For a feature value $\alpha,$ insert the maximally specific vocabulary item that realizes $\alpha.$
 - b. Only one vocabulary item may be inserted per head.
- (50) Vocabulary items

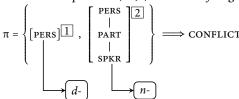
$$n$$
- \leftrightarrow [PERS [PART [SPKR]]] / _ [SG] (1SG)

$$g \rightarrow [PERS[PART[SPKR]]] / __[PL]$$
 (1PL)

$$z$$
- \leftrightarrow [PERS [PART [ADDR]]] (2)

$$d o [PERS]$$
 (3)

(51) Gluttonous π -probe in (48) (in context of singular agreement)



• Independent evidence: Case mismatch in ATB movement

We proposed that in the case of agreement, feature gluttony can give rise to irresolvable competition between vocabulary items.

- Morphological conflicts of this sort are independently attested. One example is case-match effects in ATB movement (Citko 2005). She shows that ATB movement is possible only if the two gaps are associated with the same case form. Assuming a multidominance structure for ATB movement, Citko's (2005) explanation is that the ATBed DP is assigned two case values. If they differ, they can give rise to morphological ineffability.
- (52) Case-mismatch effects in Polish ATB movement

a.	Kogo	Jan	lubi		a	Maria	podziwia	
	who.acc	Jan	likes	ACC	and	Maria	admires	ACC
	'Who doe	es Jar	ı like a	nd Mari	a adn	nire?'		

b. *Kogo/Komu	Jan	lubi		a	Maria	ufa	?
who.acc/who.dat	Jan	likes	ACC	and	Maria	trusts	DAT
intended: 'Who do	es Ja	n like	and Mari	a tru	st?'	[Citko	2005: 485]

Other examples

- Kratzer (2009) on morphological restrictions on the availability of fake indexicals in German,
- Schütze (2003) on free relatives in German,
- Asarina (2011) on Right Node Raising constructions in Russian

⇒	Our proposal	connects Base	que PCC eff	fects to these	restrictions.

3.3.3 Accounting for the Strong PCC

• Basque has the Strong PCC, meaning that 1>2 and 2>1 configurations are ungrammatical as well:

• Proposal: Representation of dative DPs in Basque

Dative DPs in Basque bear a dummy [PERS] specification and thus behave like 3rd-person DPs for external processes, regardless of their actual interpretation

(Boeckx 2000, Richards 2008, Sigurðsson & Holmberg 2008; also Taraldsen 1995, Anagnostopoulou 2003, and Atlamaz & Baker 2018 for other proposals that datives may be featurally deficient). To implement this, we assume that Basque datives are contained inside a KP shell, which bears a dummy [PERS] feature.

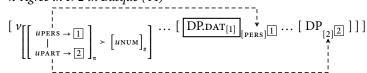
(54) Structure of dative DPs in Basque



▶ PCC-violating PART>PART configurations

Because of the dative's [PERS] specification, 1>2 and 2>1 configurations result in gluttony.

(55) π -Agree in 1>2 in Basque (44)



• A prediction: ABS>DAT configurations

The proposal that dative DP externally bear a [PERS] specification makes the prediction in (56). Based on motion verbs, (57) shows that this prediction is borne out.

- (56) Because DAT DPs are [PERS], a ABS>DAT configurations should never give rise to gluttony. Here, there should be no person restriction in ABS>DAT configurations.
- (57) No person restriction with ABS>DAT motion verbs
 - a. Ni Itxaso-ri etortzen n-atzai-o.
 me.ABS Itxaso-DAT come.IMPF 1ABS-AUX-3DAT
 'I am coming to Itxaso.' (✓1ABS > 3DAT)
 - b. **Itxaso** *ni-ri* etortzen Ø-zai-t.

 Itxaso.ABS 1SG-DAT come.IMPF 3ABS-AUX-1DAT

 'Itxaso is coming to me.' (3ABS > 1DAT)

(58) *Structure for (57b)*

$$[v_{[uPERS \rightarrow 1]} | v_{[uPART} | v_{[uNUM]_{\#}}] ... [DP_{[3]}] ... [DP.DAT_{[1]}]_{[PERS]}]]]$$

• Summary: Datives as [PERS]

- 1. *DAT>ABS configurations:* gluttony if ABS is 1st or 2nd person → Strong PCC
- 2. ABS>DAT configurations: no gluttony regardless of person specifications

.....

3.3.4 Sensitivity to overt ϕ -agreement

• PCC obviation in ϕ -less clauses

We saw the PCC effects disappear in Basque in clauses whose arguments do not control ϕ -agreement. This now follows straightforwardly: without a ϕ -probe, there is no risk of gluttony. All DP combinations are therefore permitted.

- (59) Gaizki iruditzen Ø-zai-t [zu-k harakina-ri ni wrong look.impf 3ABS-AUX-lDAT you-ERG butcher-DAT me.ABS sal-tze-a]. [=(13b)] sell-impf-ART.ABS
 'It seems wrong to me for you to sell me to the butcher.'
- (60) Licit hierarchy configuration with no probe \rightarrow no gluttony $[\dots DP_{[3sG]}\dots [\dots DP_{[1/2sG]}\dots]]$

• PCC obviation under gapping/stripping

Basque PCC effects also disappear under gapping and stripping – that is, when the verb agreement is not overtly realized.

(61) Jon-ek *alkatea-ri* **Mikel** saldu d-i-o, eta zu-k
Jon-erg mayor-dat Mikel.abs sold 3abs-aux-3dat and you-erg

harakina-ri ni ____ [=(16a)]
butcher-dat me.abs

'Jon sold Mikel to the mayor, and you me to the butcher.'

• Ineffability in vocabulary insertion

On our gluttony account, gluttonous probes themselves do not lead to ungrammaticality. Rather, they give rise to **conflicting requirements for subsequent operations**, leading to ineffability.

- For Basque PCC, the conflict arises for the morphological realization of a probe.
- ▷ Gapping/stripping obviates the PCC because it suppresses the morphological realization of the gluttonous probe. Specifically, we adopt (62).
 - (62) No vocabulary insertion applies to elided material.

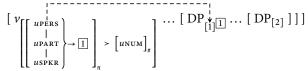
• Gluttony and its aftermath

Because it is not gluttony itself that leads to ungrammaticality, but rather its effect on subsequent operations, we gain a handle on why certain hierarchy effects should be suspended in the absence of overt ϕ -agreement.

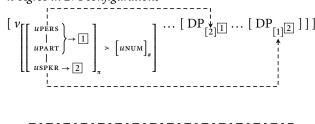
– Clauses without ϕ -probes and gapping/stripping are two configurations in which the detrimental effects of a gluttonous probe are circumvented.

3.4 Extension to Ultra-Strong PCC

- We have so far offered an analysis of the Weak PCC and the Strong PCC. Our proposal extends to the Ultra-Strong PCC (e.g., in Classical Arabic), which bans 2>1, but not 1>2.
 - (63) Ultra-Strong PCC
 - a. *3 > 1/2
 - b. *2 > 1
 - (64) $\begin{bmatrix} upers \\ | \\ upart \\ | \\ uspkr \end{bmatrix}_{T}$
 - (65) π -Agree in 1>2 configurations



(66) π -Agree in 2>1 configurations



3.5 Section summary

- Feature gluttony may impose conflicting requirements on subsequent operations:
 - 1. Cliticization: conflicting demands on which DP to cliticize
 - 2. Agreement: conflicting demands on which vocabulary item to insert
- Gluttony can only arise if the lower DP is **more specific** than the higher DP and the higher DP doesn't exhaust the probe.
- In the absence of a ϕ -probe or vocabulary insertion, the detrimental effects of gluttony are obviated.
 - \triangleright derives link between hierarchy effects and overt ϕ -agreement
- No need to appeal to (nominal) licensing.
- In several respects, gluttony is the opposite of a licensing account:
 - The problem is with (the realization of) the probe, not an unlicensed DP.
 - The restriction is due to *too much Agree*, rather than too little.

4 Icelandic dative-nominative constructions

• We analyze a person restriction in Icelandic DAT-NOM constructions, discussed by Sigurðsson (1991, 1996), Taraldsen (1995), Holmberg & Hróarsdóttir (2003), Sigurðsson & Holmberg (2008).³

³ See Boeckx (2000), Anagnostopoulou (2003, 2005), Béjar & Rezac (2003), Richards (2008), and Walkow (2012) for other approaches that relate this restriction to PCC effects.

• In DAT-NOM constructions, the dative DP is the subject and the nominative DP is the object (Zaenen et al. 1985). The verb agrees with the object (67).

(67) Henni leidd**ust strákarnir**. (√3 > 3PL) her.DAT found.boring.3PL the.boys.NOM 'She found the boys boring.'

4.1 The person restriction

• But agreement with the nominative DP is subject to the person restriction in (68); Taraldsen (1995), Sigurðsson (1996), Schütze (1997, 2003), and Sigurðsson & Holmberg (2008).

(68) *Person restriction* (Sigurðsson & Holmberg 2008: 254)
In DAT-NOM constructions, only 3rd person NOM may control agreement.

• Consequently, agreement with a 1st or 2nd person nominative DP is impossible.

(69) a. * Henni leidd**umst við**. (*3 > 1PL) her.DAT found.boring.1PL we.NOM intended: 'She found us boring.' [Sigurðsson & Holmberg 2008: 270]

b. * Henni líkaðir þú. (*3 > 2sg) her.dat like.2sg you.sg

intended: 'She likes you.' [Sigurðsson 1996: (68b)]

• The role of overt agreement

Sigurðsson (2004b) and Sigurðsson & Holmberg (2008) observe that the restriction is ameliorated if the construction occurs inside a nonfinite clause, which do not contain ϕ -agreement. Thus, the problem is not the 1st or 2nd person object itself, but rather the agreement with it.⁴

(70) DAT-NOM in infinitival clause
? Hún vonaðist auðvitað [til að leiðast við/þið/þeir
she hoped of.course for to find.boring.INF we/you.PL/they.NOM
ekki mikið].
not much
'She of course hoped not to find us/you/them very boring.'

[Sigurðsson & Holmberg 2008: 271]

- Furthermore, in the presence of an embedded clause, the embedded verb can agree with the embedded clause instead of the NOM argument. In this case, the person restriction is also lifted (Sigurðsson 1996, Hrafnbjargarson 2002, Sigurðsson & Holmberg 2008).
 - (71) DAT-NOM in infinitival clauses
 - a. Mér þyk**ja þau** góð í fótbolta. me.dat think.3pl they.nom good in football 'I think they are good at football.'
 - b. Ykkur þyk**ir** / *þyk**i ég** góður í fótbolta. you.PL.DAT think.3sG / *think.1sG I.NOM good in football 'You think I am good at football.' [Hrafnbjargarson 2002: 2]

4.2 A gluttony analysis

• The Icelandic restriction bears a similarity to the Strong PCC: In the presence of agreement, a 1st/2nd person lower DP is ruled out. We therefore adapt our analysis for the Basque PCC to Icelandic.

1. π -probe

We propose the π -probe in (72).

(72)
$$\begin{bmatrix} u_{\text{PERS}} \\ | \\ u_{\text{PART}} \end{bmatrix}$$

2. Datives as [PERS]

We also assume, following Chomsky (2000), Boeckx (2000), Richards (2008), and Sigurðsson & Holmberg (2008), that Icelandic dative DPs externally carry only a [PERS] feature (just like datives in Basque).

• A 1st/2nd person nominative DP thus leads to gluttony, as in (73).

(73) * Henni leidd**umst við**. (*3 > 1PL)
her.DAT found.boring.lPL we.NOM
intended: 'She found us boring.'

⁴ Though see Pesetsky (2019) for a contrary view.

(74) Agree in (73)
$$\begin{bmatrix} T \\ \begin{bmatrix} u_{\text{PERS}} \rightarrow 1 \\ | \\ u_{\text{PART}} \rightarrow 2 \end{bmatrix}_{\pi} > \begin{bmatrix} u_{\text{NUM}} \rightarrow 2 \end{bmatrix}_{\#} \end{bmatrix} \dots \begin{bmatrix} DP.DAT_{[3]}^{\downarrow} & \dots & DP.NOM_{[1PL]}^{\downarrow} 2 \end{bmatrix} \end{bmatrix}$$

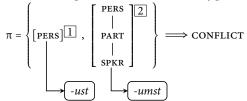
- In line with our account of Basque, gluttonous agreement in (74) results in a conflict in vocabulary insertion (see (77)). The relevant paradigm is given in (75) and the vocabulary items in (76).
 - (75) Past-tense mediopassive inflection for leiðast 'find boring'

	3G	PL
1	leidd- ist	leidd -umst
2	leidd- ist	leidd- ust
3	leidd- ist	leidd- ust

(76) Vocabulary items

$$\begin{array}{lll} -ist & \leftrightarrow & [&] \ / __ [SG] & (underspecified) \\ -ust & \leftrightarrow & [&] \ / __ [PL] & (underspecified) \\ -umst & \leftrightarrow & [PERS [PART [SPKR]]] \ / __ [PL] \end{array}$$

(77) Gluttonous π -probe in (74) (in context of plural number agreement)



• Rescue through non-agreement

In configurations that lack a ϕ -probe, no gluttony results, and all person combinations are allowed. This derives (70) and (71).

(78)
$$[... DP.dat_{[3]} ... [... DP.nom_{[1/2]} ...]]$$

4.3 Rescue by syncretism

Syncretism

The hierarchy effect is also ameliorated if agreement with the 1st or 2nd person NOM DP is syncretic with 3rd person agreement in the same number (Sigurðsson 1991, 1996, Taraldsen 1995, Schütze 2003, Thráinsson 2007, Sigurðsson & Holmberg 2008).

(79) Syncretism generalization

If agreement with a 1st or 2nd person NOM object is syncretic with 3rd person agreement in the same number, no person restriction arises. [Sigurðsson & Holmberg 2008: 272]

(80) Syncretism fix

Henni leiddist ég/þú

her.dat found.boring.1/2/3sg I.nom/you.sg.nom

'She found me/you boring.' [Sigurðsson & Holmberg 2008: 270]

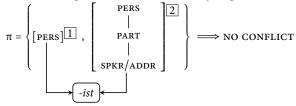
- In this case, the π -probe is gluttonous (as before), but *both feature values demand* the same vocabulary item.
 - (81) Agree in (80) $\begin{bmatrix} T \\ \begin{bmatrix} u_{\text{PERS}} \rightarrow 1 \\ u_{\text{PART}} \rightarrow 2 \end{bmatrix}_{\pi} > \begin{bmatrix} u_{\text{NUM}} \rightarrow 2 \end{bmatrix}_{\#} \end{bmatrix} \dots \begin{bmatrix} DP.DAT & DP.NOM \\ [3]1 & \dots & DP.NOM \\ [1/2sG]2 \end{bmatrix} \end{bmatrix}$

(82) Vocabulary items [=(76)]-ist \leftrightarrow [] / [[[] (underspecified)

-ust \leftrightarrow [] / [[[] (underspecified)

-umst \leftrightarrow [[[[] [] / [[] [] [] / [] []

(83) Gluttonous π -probe in (81) (in context of singular number agreement)



- The same amelioration is achieved by the 2PL/3PL syncretism (84a). By contrast, 1PL demands a designated vocabulary item, and the person restriction re-emerges (84b).
 - (84) Syncretism fix in the plural
 - a. Henni virtust þið eitthvað einkennilegir. her.DAT seemed.2PL/3PL you.PL.NOM somewhat strange 'You seemed somewhat strange to her.'
 - b. * Henni virt**umst við** eitthvað einkennilegir.
 her.dat seemed.**1PL** we.nom somewhat strange
 [Sigurðsson & Holmberg 2008: 270]
- Rescue by syncretism also holds in cases of ATB extraction (Citko 2005), fake indexicals in German (Kratzer 2009), and Russian Right Node Raising (Asarina 2011).

• Gluttony and its aftermath

The rescuing effect of syncretism is derived because gluttony itself does not lead to ungrammaticality, but rather can give rise to conflicting requirements for subsequent operations. Syncretism is one way of circumventing such conflicts.

.....

4.4 Grammatical-function changing

- Icelandic has no person restriction in regular ditransitives (85a), but if the DAT DP becomes the subject as the result of passivization, the person restriction pops up (85b); see Sigurðsson (1996) and Schütze (1997).
- (85) a. DAT>ACC

Ég gaf honum **þig** í jólagjöf I.NOM gave him.DAT you.ACC as Xmas gift 'I gave him you as a Christmas present.'

b. DAT>NOM

* Honum var/varst gefinn **þú**him.dat was.3sg/was.2sg given you.nom
[Schütze 1997: 117, citing Thráinsson p.c.]

 This follows straightforwardly from our account. While the ACC pronoun in (85a) is inaccessible to the probe, the NOM pronoun in (85b) has its full set of φ-features visible, leading to gluttony.

(86) a. π -Agree in (85a)

$$[T_{\begin{bmatrix} u_{\text{PERS}} \\ u_{\text{PART}} \end{bmatrix}} \dots [DP.\text{Nom}_{\begin{bmatrix} 1_{\text{SG}} \end{bmatrix} \boxed{1}} \dots [DP.\text{DAT} \dots [DP.\text{ACC}]]]]$$

b. π -Agree in (85b)



- \rightarrow Additional evidence for the role of overt ϕ -agreement.
 - \triangleright The same base configuration does or does not give rise to person restrictions depending on whether it is associated with overt ϕ -agreement.

.....

4.5 Section summary

- \bullet The Icelandic person restriction shows sensitivity to overt $\varphi\mbox{-agreement}$ in a number of ways:
 - 1. It disappears in nonfinite clauses.
 - 2. It disappears under syncretism.
 - **3.** It is sensitive to passivization (which affects which DP is targeted by verb agreement).
- Gluttony enables an account of these interactions because it locates the restriction in the morphological realization of a gluttonous probe.

5 Hindi-Urdu copula constructions

• We investigate hierarchy effects in a specific type of copula construction, originally observed for German by Coon et al. (2017) and Keine et al. (2019). Bhatia & Bhatt (2019a,b) observe a similar effect in Hindi-Urdu (henceforth Hindi) and propose a gluttony analysis. We provide evidence that the person restriction in these constructions is accompanied by a number restriction. This indicates that gluttony is not limited to person probes. unclear).

5.1 The person restriction

- Coon et al. (2017) and Keine et al. (2019) observe hierarchy effects in so-called "assumed-identity sentences." Such sentences convey that one person is assigned the role of another person in a play or game of charades. Bhatia & Bhatt (2019a,b) observe an analogous person restriction in Hindi.
 - (87) Person hierarchy *3 > 1/2
 - (88) Person-hierarchy effect in Hindi assumed-identity sentences
 - a. [Context: A Bollywood movie where two people are swapping identities]

aaj-se $m\tilde{a}i$ Ramesh hūū (\checkmark 1 > 3) today-from I Ramesh be.PRs.1sG 'From today onwards, I am Ramesh.' (i.e. 'I am taking on the role of a 3rd person.')

b. [*Context*: A Bollywood movie where someone is swapping identities with me]

*aaj-se Ramesh mãi hai/hũũ (*3 > 1) today-from Ramesh I be.PRS.3sG/be.PRS.1sG intended: 'From today onwards, Ramesh is me.'

[Bhatia & Bhatt 2019a: 3-4]

• See Coon et al. (2017), Keine et al. (2019), and Bhatia & Bhatt (2019a,b) for evidence that this is not merely a semantic constraint.

· Repair through gapping

Bhatia & Bhatt (2019a,b) observe that gapping obviates this restriction (89).

(89) Gapping obviates person restriction aaj-se mãi Ravi hũũ aur Ravi mãi ___ (√3 > 1) today-from I Ravi be.PRs.1sG and Ravi I 'From today, I am Ravi and Ravi me'. [Bhatia & Bhatt 2019a: 8]

· Repair through syncretism

Additionally, Bhatia & Bhatt (2019a,b) observe that the restriction disappears under syncretism (also see Keine et al. 2019). In Hindi, the past tense copula does not distinguish person values. In this case, the person restriction is lifted:⁶

(90) Obviation under syncretism

us din *mãi* Ramesh thaa aur *Ramesh* **mãi** thaa that day I Ramesh be.Pst.m.sg and Ramesh I be.Pst.m.sg 'That day I was Ramesh and Ramesh was me.' [Bhatia & Bhatt 2019a: 7]

5.2 The number restriction

- In addition, there is evidence for an analogous number-hierarchy effect (also see Coon et al. 2017 and Keine et al. 2019 for German):
- (91) *Number hierarchy* *SG > PL
- (92) a. is naaṭak-mē do log Ram hãĩ (√PL > sG) this play-in two people Ram be.PRS.3PL 'In this play, two people are Ram.'
 - b. ??is naaṭak-mẽ *Ram* **do paatr** hai (*sg > PL) this play-in Ram two characters be.PRS.3sg 'In this play, Ram is two characters.' [Rajesh Bhatt, p.c.]

This restriction is independent of more general agreement restrictions in predicational and specificational copula clauses (see, e.g., Heycock 2012, Béjar & Kahnemuyipour 2017, and Keine et al. 2019 for discussion.)

⁶ As Filipe Hisao Kobayashi (p.c.) has pointed out to us, assumed-identity sentences also give rise to hierarchy effects in Brazilian Portuguese, and these effects are rescued under syncretism.

• Repair through gapping

Like the person restriction, the number effect is obviated under gapping:

(93) Gapping obviates number restriction

is naaṭak-mẽ *Anu* sirf ek paatr hai aur *Ram* do this play-in Anu only one character be.PRS.3SG and Ram two paatr (\checkmark SG > PL)

characters

'In this play, Anu is only one character and Ram two characters.'

[Rajesh Bhatt, p.c.]

• The effect of syncretism cannot be tested for number because singular and plural are never syncretic.

5.3 A gluttony analysis

- In Hindi, copula clauses involve two φ-accessible DPs in the domain of a single φ-probe.
 - ⇒ potential for gluttony

• The probes

We propose the π -probe and #-probe in (94).

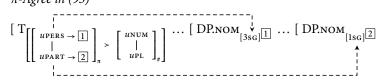
(94)
$$T^0 \begin{bmatrix} u_{PERS} \\ | \\ u_{PART} \end{bmatrix}_{\pi} > \begin{bmatrix} u_{NUM} \\ | \\ u_{PL} \end{bmatrix}_{\#}$$

• Person restriction

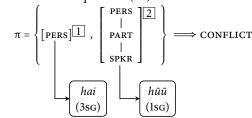
Hierarchy-violating 3>PART configurations lead to a gluttonous probe (96). This results in an irresolvable conflict in vocabulary insertion if the two values demand items (97).

(95) *aaj-se Ramesh mãi hai/hũũ (*3 > 1) today-from Ramesh I be.prs.3sg/be.prs.1sg intended: 'From today onwards, Ramesh is me.'

(96) π -Agree in (95)



(97) Gluttonous π -probe in (96)



Number restriction

The number effect is derived analogously. Due to the specification of #, a SG>PL configuration results in gluttony and a morphological conflict.

(98) ?? is naaṭak-mẽ *Ram* **do paatr** hai (*sG > PL) this play-in Ram two characters be.PRS.3sG 'In this play, Ram is two characters.'

(99) #-Agree in (98)
$$\begin{bmatrix} T \\ \begin{bmatrix} u_{\text{PERS}} \to 1 \\ \downarrow u_{\text{PART}} \end{bmatrix} \\ \end{bmatrix}_{\pi} \succ \begin{bmatrix} u_{\text{NUM}} \to 1 \\ \downarrow u_{\text{PL}} \to 2 \end{bmatrix}_{\sharp} \end{bmatrix} \dots \begin{bmatrix} DP.\text{NOM}_{[3\text{SG}]} \end{bmatrix} \dots \begin{bmatrix} DP.\text{NOM}_{[3\text{PL}]} \end{bmatrix}^{2}$$

(100) Gluttonous #-probe in (99)
$$\# = \left\{ \begin{bmatrix} \text{NUM} \end{bmatrix}^{\boxed{1}}, \begin{bmatrix} \text{NUM} \\ | \\ \text{PL} \end{bmatrix}^{\boxed{2}} \right\} \Longrightarrow \text{CONFLICT}$$

$$\begin{pmatrix} hai \\ (3\text{SG}) \end{pmatrix} \stackrel{h\tilde{a}\tilde{i}}{(3\text{PL})}$$

Gapping

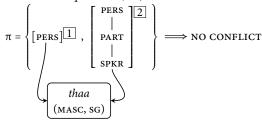
The rescuing effect of gapping is accounted for in the same way as for Basque above: vocabulary insertion does not apply to elided heads, hence no conflict arises.

• Syncretism

In gluttony configurations in which the feature values copied over from the two goals demand the same VI, no morphological conflict arises.

- (101) us din *mãi* **Ramesh** thaa aur *Ramesh* **mãi** thaa that day I Ramesh be.Pst.m.sg and Ramesh I be.Pst.m.sg 'That day I was Ramesh and Ramesh was me.'
- Because the past-tense copula does not morphologically distinguish person values, both values demand the same underspecified VI *thaa*.

(102) Gluttonous π -probe in (101)



5.4 Section summary

- While hierarchy effects are typically observed for person features, analogous effects arise for number as well.
- ⇒ Because gluttony is not specific to person features (unlike, e.g., the PLC), it extends to number effects.
- In addition, the Hindi pattern displays the by-now familiar sensitivity to surface φ-morphology:

→ **

6 Summary and outlook

- Across three case studies (Basque PCC, Icelandic DAT-NOM constructions, Hindi copula constructions), we saw that hierarchy effects are crucially modulated by the presence/absence of overt agreement/clitic morphology.
 - 1. They disappear in ϕ -less nonfinite clauses.
 - 2. They disappear under gapping of the verb.

- 3. They disappear if agreement with both DPs is syncretic.
- **4.** They are sensitive to grammatical-function changing operations if they affect agreement.
- This is unexpected under an abstract nominal-licensing/failed-Agree account:
 - ▷ If hierarchy effects are due to not enough Agree, then it is unclear why removing probes should salvage these configurations.
 - \triangleright Properties of the morphological realization of ϕ -agreement do not affect abstract nominal licensing.
- We instead suggested that the problem is located in the probe. We proposed that
 these effects arise as a result of feature gluttony: a single probe agreeing with
 more than one DP.
 - Cliticization: conflicting demands on which DP to cliticize
 - Agreement: conflicting demands on which vocabulary item to insert

▶ For gluttony to occur:

- 1. the probe must have access to at least two DPs
- **2.** the probe must be articulated (i.e. *picky*) enough to not be completely satisfied by the first DP it encounters
- **3.** the lower DP must have a more articulated feature structure than the higher DP
- ightharpoonup systematic predictions about the configurations that give rise to such effects

• Sensitivity to overt cliticization/φ-agreement

- Because the problem is caused by an oversaturated probe, it follows that the restrictions disappear in configurations that lack the probe.

 - sensitivity to grammatical-function changing operations
- Because it is not double Agree itself, but rather the possible *aftermath* that causes hierarchy effects, we gain handle on the role of overt agreement:
 - obviation by gapping → no morphological realization of gluttonous head
 - ⇒ obviation by syncretism → no conflict between vocabulary items

• Role of nominal licensing

Our account does not invoke a nominal-licensing condition. The problems that arose for it in the account of the PCC are therefore dispersed.

 Our approach is in line with other recent work that has questioned the role of nominal licensing/case in other syntactic domains (e.g., McFadden 2004, Preminger 2014, Keine 2018).

Extensions

We might imagine that some languages have more systematic ways of dealing with gluttonous probes, e.g.:

- fission of a gluttonous probe
- portmanteau realization of a gluttonous probe
- See Coon & Keine (2019) for some comments on possible extensions of the account along these lines and Coon et al. (2019) for a gluttony account for Mayan Agent Focus.

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