Hyperraising to Object and the Mechanics of Agree*

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1 Introduction

In English and other familiar languages, A-movement can occur out of an infinitival clause, but not out of a finite clause:

(1) a. Sue$_1$ seems [$_{\text{INF}}$ ___$_1$ to be hoarding mouse photos].
b. *Sue$_2$ seems [$_{\text{FIN}}$ ___$_2$ is hoarding mouse photos].

On one prominent analysis, this is because movement depends on Agree, and an element can only be an eligible goal for Agree if it bears an unvalued feature (the *Activity Condition*, Chomsky 2000, 2001).[1] More explicitly:

(2) *Movement as Agree-Based*

A constituent Y internally merges with the highest available projection of a head X (or, in more traditional terms, moves to "[Spec,XP]") only when:

a. an Agree relation has been established between X and Y, and
b. X bears an unsatisfied EPP feature.

(3) *Agree* (adapted from Chung 2014:1, (1))

For two syntactic elements X (a *probe*) and Y (a *goal*), where:

a. X c-commands Y,
b. X lacks values for one or more features that can be supplied by the values of matching features on Y,
c. Y lacks values for one or more features that can be supplied by the values of matching features on X (the *Activity Condition*), and
d. no potential goal intervenes between X and Y,

Agree supplies values for each element's unvalued features by copying the values of the matching features on the other element.

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[1]For discussion of the hypothesis that movement depends on Agree, see van Urk 2015 (ch. 1, §1).

On this analysis, the contrast in (1) obtains because:

- In (1a), *Sue* cannot get Case in the embedded infinitival clause. Because it bears an unvalued Case feature, it is able to enter into an Agree relation with the matrix finite T, and subsequently move to its specifier to satisfy its EPP feature.
- In (1b), *Sue*'s Case feature is valued nominative in the embedded finite clause. At that point, it has no more unvalued features, and so cannot enter into an Agree relation with the matrix finite T, let alone move to its specifier.

Although this analysis is both reasonable and interesting, I'll be arguing today that it can't be correct insofar as it relies on the assumption that the Activity Condition is an inherent constraint on Agree. Instead, I argue that:

(4) The Activity Condition is not an intrinsic, universal constraint on Agree. (Cf. Nevins 2004.)

The evidence for this claim will come from a phenomenon I call "accusative + complementizer" (ACC-C) in Janitzio P'urhepecha:[2]

(5) *"Accusative + complementizer" (ACC-C)*

Ueka-sïn-∅-di=sï Xumu-ni **eska** u-a-∅-ka ma k'umanchikua.
want-HAB-PRS-IND3=pS Xumo-ACC that make-FUT-PRS-SJV a house
'They want Xumo to build a house.'

Today's investigation of ACC-C will have further theoretical consequences as well: it will lead me to argue that...

(6) a. **Hyperraising:** ACC-C in Janitzio P'urhepecha is **hyperraising to object**—of a type that at least some existing analyses of hyperraising cannot account for, prompting the development of a new analysis.

b. **Driving force for movement:** Hyperraising to object in Janitzio P'urhepecha is derived by **altruistic movement**, rather than greedy or Labeling-driven movement—providing a strong argument that altruistic movement exists.

1.1 Roadmap

- **§2:** The phenomenon: "accusative + complementizer" in Janitzio P'urhepecha
- **§3:** The position question: Is DP_{ACC} in the matrix or in the embedded clause?
- **§4:** The derivation question: Does DP_{ACC} end up in the matrix by movement or base-generation?
- **§5:** Analysis
- **§6:** Comparison with alternatives
- **§7:** Implications about the driving force for movement
- **§8:** Conclusion

[2] **Abbreviations:** ACC = accusative, ACT = active, AFFIRM = affirmative, ANTIP = antipassive, COND = conditional, COP = copula, DUR = durative, FUT = future, HAB = habitual, IND = indicative, INT = interrogative, int. = intended reading, LOC = locative, PFV = perfective, PL = plural, pO = plural object agreement, PRS = present, pS = plural subject, RESID = residential case, RESP = respectful, semilit. = semi literal translation, SG = singular, SJV = subjunctive, SUB = subordinator, 1/2/3 = first/second/third person, 1sS/2sS = first/second-person singular subject.

2 The phenomenon: "accusative + complementizer" in Janitzio P'urhepecha

Today's data come from P'urhepecha, an isolate of Mexico spoken mainly in the central-western state of Michoacán—and specifically from the variety spoken on the island of Janitzio on Lake Pátzcuaro (henceforth *Janitzio P'urhepecha*).

P'urhepecha is an exclusively suffixing, agglutinating, head- and dependent-marking language with relatively flexible constituent order (Foster 1969, Wares 1974, Capistrán 2002, Chamoreau 2007, Mendoza 2007, Vázquez-Rojas Maldonado 2011).

In Janitzio P'urhepecha, the verb *ueka-* 'want' can select a subjunctive clause[3] with a nominative subject ((7)). (Nominative case is morphologically unmarked.)

(7) Ueka-sïn-∅-di=sï **eska** Xumo u-a-∅-ka ma k'umanchikua.
want-HAB-PRS-IND3=pS that Xumo make-FUT-PRS-SJV a house
'They want Xumo to build a house.'

But for some speakers, the embedded subject can apparently surface to the left of the complementizer *eska*, with accusative rather than nominative case:

(8) *"Accusative + complementizer" (ACC-C)*
Ueka-sïn-∅-di=sï Xumu-ni **eska** u-a-∅-ka ma k'umanchikua.
want-HAB-PRS-IND3=pS Xumo-ACC that make-FUT-PRS-SJV a house
'They want Xumo to build a house.' (= (5))

ACC-C is possible only with certain matrix verbs. In addition to *ueka-* 'want', it is permitted with *uetarincha-* 'need':

(9) a. *'Need' without ACC-C*
Uetarincha-sïn-∅-ga=ni **eska** Elena k'uanatsinta-a-∅-ka Xanich-uo.
need-HAB-PRS-IND1=1sS that Elena return-FUT-PRS-SJV Janitzio-RESID
'I need Elena to return to Janitzio.'

b. *'Need' with ACC-C*
Uetarincha-sïn-∅-ga=ni Elena-ni **eska** k'uanatsinta-a-∅-ka Xanich-uo.
need-HAB-PRS-IND1=1sS Elena-ACC that return-FUT-PRS-SJV Janitzio-RESID
'I need Elena to return to Janitzio.'

...and, for some speakers, with *mite-* 'know':

[3]The subjunctive mood is used in many or most types of embedded clauses in Janitzio P'urhepecha. It may therefore be accurate to characterize it as essentially a marker of subordination.

(10) a. *'Know' without* ACC-*C*

Mite-sï-∅-ka=ni **eska** Ikinari Xanich-uo anapu-e-∅-∅-ka.
know-PFV-PRS-IND1=1sS that Ikinari Janitzio-RESID from-COP-PFV-PRS-SJV
'I know that Ikinari's from Janitzio.'

b. *'Know' with* ACC-*C*

%Mite-sï-∅-ka=ni Ikinari-ni **eska** Xanich-uo anapu-e-∅-∅-ka.
know-PFV-PRS-IND1=1sS Ikinari-ACC that Janitzio-RESID from-COP-PFV-PRS-SJV
semilit. 'I know Ikinari to be from Janitzio.'
[?$_A$, ?$_B$, *$_C$, *$_D$, ✓$_E$][4]

Crucially, the accusative DP (DP_{ACC}) can be linked to a *nominative* floated quantifier in the embedded CP:

(11) [Context: There are three dogs, named Alonzo, Paco, and Puki (= Lion). I want the three of them to play, so that they get enough exercise. I say...]

Ueka-sïn-∅-ga=ni Alonsu-ni, Paku-ni ka Puki-ni **eska**=sï iamindu-eecha
want-HAB-PRS-IND1=1sS Alonzo-ACC, Paco-ACC and Lion-ACC that=pS all-PL
ch'ana-a-∅-ka.
play-FUT-PRS-SJV
'I want Alonzo, Paco, and Puki to all play.'

(12) ?Ueka-pirin-∅-ga=ni Maria-ni, Klara-ni ka Ana-ni **eska** iamindu-eecha
want-COND-PRS-IND1=1sS Maria-ACC, Clara-ACC and Anna-ACC that all-PL
pire-a-∅-ka=sï pauani.
sing-FUT-PRS-SJV=pS tomorrow
'I'd like for Maria, Clara, and Anna to all sing tomorrow.'

The floated quantifiers in (11-12) show that nominative Case is available in the embedded CP in ACC-C.

Therefore, <u>if</u> ACC-C is derived by raising the embedded subject DP into the matrix (and assigning it accusative Case in the process), then this occurs even though the DP could perfectly well have received, and in fact did receive, (nominative) Case in its clause of origin—powerfully challenging the Activity Condition.

These, I'll argue, are exactly the right conclusions to draw.

(13) <u>Two basic questions about ACC-C in Janitzio P'urhepecha</u>

a. *Position question*
Is DP_{ACC} in the <u>matrix</u> clause, or at the left edge of the <u>embedded</u> clause (e.g., in [Spec,CP])?

b. *Derivation question*
If DP_{ACC} is in the matrix, does it get there by <u>movement</u> (hyperraising) or <u>base-generation</u> (prolepsis)?

[4]Bracketed diacritics represent acceptability judgments provided by individual speakers; they accompany sentences for which I have judgments from multiple speakers that display some variation. All diacritics followed by a subscript B represent judgments provided by the same speaker, and likewise for the other letters.

3 The position question: Is DP_{ACC} in the matrix or in the embedded clause?

(14) *Predictions about the relative order of DP_{ACC} and matrix adverbials*

a. **Matrix hypothesis:** DP_{ACC} may be able to precede a matrix adverbial that in turn precedes the embedded CP.

b. **Embedded hypothesis:** DP_{ACC} should not be able to precede such a matrix adverbial.

The relevant sentences—involving $DP_{ACC} \gg$ MATRIX ADVERBIAL $\gg$ CP order—are relatively or even quite acceptable:

(15) (?)Emilia ueka-sïn-∅-di Xumo-ni **mintsita-ni jingoni** eska jaruata-a-∅-ka pauani.
Emily want-HAB-PRS-IND3 Xumo-ACC heart-ACC with that help-FUT-PRS-SJV tomorrow
'Emily wants Xumo with all her heart to help her tomorrow.'

(16) ?Axuni ueka-sïn-∅-di Ana-ni **alma-ni jingoni** eska pire-a-∅-ka pauani.
Axuni want-HAB-PRS-IND3 Anna-ACC soul-ACC with that sing-FUT-PRS-SJV tomorrow
'Axuni wants Anna with all his soul to sing tomorrow.'

This is very strong evidence that DP_{ACC} can occupy a position in the matrix.[5]

4 The derivation question: Does DP_{ACC} end up in the matrix by movement or base-generation?

Now that we have shown that DP_{ACC} is in the matrix, a crucial question that arises is how it comes to be there. Two possibilities: **1)** the DP raises from the embedded clause (the *hyperraising hypothesis*); **2)** the DP is base-generated in the matrix and anaphorically linked to a *pro* in embedded subject position (the *prolepsis hypothesis*).

We now turn to three strands of evidence that indicate that the DP raises from the embedded clause.[6]

4.1 Intervention effects

(17) *Predictions about intervention effects*

a. **Hyperraising hypothesis:** ACC-C should perhaps be expected to show intervention effects, with DP_{ACC} corresponding to the subject of the embedded clause and not to any lower argument.

b. **Prolepsis hypothesis:** ACC-C should not show intervention effects. DP_{ACC} should be able to correspond to DPs within the embedded clause other than the highest subject.

ACC-C in Janitzio P'urhepecha does show intervention effects:

[5] The opposite order (MATRIX ADVERBIAL $\gg$ $DP_{ACC} \gg$ *eska...*) is also possible: the judgments given for (15-16) remain unchanged if the boxed DP_{ACC} is placed to the immediate right of the boldfaced matrix adverbial. What is important for present purposes, though, is that (15-16) provide strong evidence that DP_{ACC} *can* be in the matrix.

[6] A third possible hypothesis is that ACC-C is finite object control. For arguments against this hypothesis, just ask!

(18) a. *No ACC-C*

Ueka-sïn-∅-ga=ni **eska** Elena jananari-a-∅-ka Berta-ni.
want-HAB-PRS-IND1=1sS that Elena respect-FUT-PRS-SJV Bertha-ACC
'I want Elena to respect Bertha.'

b. *ACC-C: DP_{ACC} can correspond to the highest DP in the embedded clause*

Ueka-sïn-∅-ga=ni Elena-ni **eska** jananari-a-∅-ka Berta-ni.
want-HAB-PRS-IND1=1sS Elena-ACC that respect-FUT-PRS-SJV Bertha-ACC
'I want Elena to respect Bertha.'
[✓A, ✓I, ✓J]

c. *ACC-C: DP_{ACC} cannot correspond to a lower DP in the embedded clause*

*Ueka-sïn-∅-ga=ni Berta-ni **eska** Elena jananari-a-∅-ka.
want-HAB-PRS-IND1=1sS Bertha-ACC that Elena respect-FUT-PRS-SJV
semilit. '*I want Bertha$_i$ for Elena to respect ∅$_i$.'
int. 'I want Elena to respect Bertha.'

4.2 Island effects

(19) *Predictions about islands*

a. **Hyperraising hypothesis:** ACC-C should obey island constraints. (Cf. Bruening 2001, §3.1.4.)

b. **Prolepsis hypothesis:** ACC-C should not obey island constraints.

ACC-C does obey island constraints. It can't cross a relative clause island:

(20) a. *No ACC-C*

Ueka-sïn-∅-ga=ni **eska** k'uanatsenta-a-∅-ka uariti enga minariku-∅-∅-ka
want-HAB-PRS-IND1=1sS that return-FUT-PRS-SJV woman$_{RESP}$ SUB meet-PFV-PRS-SJV
juramuti-ni.
president-ACC
'I want the woman who knows the president to return.'

b. *ACC-C: DP_{ACC} can correspond to the highest DP in the embedded clause*

Ueka-sïn-∅-ga=ni uariti-ni enga minariku-∅-∅-ka juramuti-ni **eska**
want-HAB-PRS-IND1=1sS woman$_{RESP}$-ACC SUB meet-PFV-PRS-SJV president-ACC that
k'uanatsenta-a-∅-ka.
return-FUT-PRS-SJV
'I want the woman who knows the president to return.'

c. *ACC-C: DP_{ACC} cannot correspond to a DP inside the relative clause*

*Ueka-sïn-∅-ga=ni juramuti-ni **eska** k'uanatsenta-a-∅-ka uariti enga
want-HAB-PRS-IND1=1sS president-ACC that return-FUT-PRS-SJV woman$_{RESP}$ SUB
minariku-∅-∅-ka.
meet-PFV-PRS-SJV
semilit. '*I want the president$_i$ for the woman who knows ∅$_i$ to return.'
int. 'I want the woman who knows the president to return.'

Nor can ACC-C cross an adjunct island:

(21) a. *No ACC-C*

Ueka-sïn-∅-ga=ni **eska** iamindu-eecha kurandi-a-∅-ka=sï enga jorhentperi
want-HAB-PRS-IND1=1sS that all-PL listen-FUT-PRS-SJV=pS SUB teacher
uanda-na-∅-ka.
talk-DUR-PRS-SJV
'I want everyone to listen when the teacher's talking.'

b. *ACC-C: DP_{ACC} can correspond to the highest DP in the embedded clause*

%Ueka-sïn-∅-ga=ni iamindu-eecha-ni **eska** kurandi-a-∅-ka=sï enga jorhentperi
want-HAB-PRS-IND1=1sS all-PL-ACC that listen-FUT-PRS-SJV=pS SUB teacher
uanda-na-∅-ka.
talk-DUR-PRS-SJV
'I want everyone to listen when the teacher's talking.'
[$?_A$, $*_B$, $?_F$, $*_G$]

c. *ACC-C: DP_{ACC} cannot correspond to a DP inside the temporal adjunct clause*

*Ueka-sïn-∅-ga=ni jorhentperi-ni **eska** iamindu-eecha kurandi-a-∅-ka=sï enga
want-HAB-PRS-IND1=1sS teacher-ACC that all-PL listen-FUT-PRS-SJV=pS SUB
uanda-na-∅-ka.
talk-DUR-PRS-SJV
semilit. '*I want the teacher$_i$ for everyone to listen when ∅$_i$ is talking.'
int. 'I want everyone to listen when the teacher's talking.'

4.3 Escape-hatch blocking

(22) *Predictions about escape-hatch blocking*

a. **Hyperraising hypothesis:** In raising into the matrix, the embedded subject DP should pass through the embedded [Spec,CP], after which we may well expect it to be impossible to extract *another* constituent from the embedded CP.

b. **Prolepsis hypothesis:** ACC-C should not interfere with extraction from the embedded CP.

ACC-C does display the escape-hatch blocking effect: it is incompatible with (further) extraction from the embedded CP ((23-24)).

(23) a. *No ACC-C; extraction from the embedded CP is licit*

¿Ambe uetarincha-sïn-∅-gi=sï **eska** Emilia pia-a-∅-ka?
what need-HAB-PRS-INT=pS that Emily buy-FUT-PRS-SJV
'What do they need Emily to buy?'

b. *ACC-C; no (additional) extraction from the embedded CP*

Uetarincha-sïn-∅-di=sï Emilia-ni **eska** pia-a-∅-ka itsukua.
need-HAB-PRS-IND3=pS Emily-ACC that buy-FUT-PRS-SJV milk
'They need Emily to buy milk.'

c. *ACC-C blocks extraction from the embedded CP*

?? ¿Ambe uetarincha-sïn-∅-gi=sï [Emilia-ni] **eska** pia-a-∅-ka?
what need-HAB-PRS-INT=pS Emily-ACC that buy-FUT-PRS-SJV
int. 'What do they need Emily to buy?'

One more paradigm:

(24) a. *No ACC-C; extraction from the embedded CP is licit*

¿Ambe=ri ueka-sïn-∅-gi **eska** [Alicia] kusta-a-∅-ka?
what=2sS want-HAB-PRS-INT that Alice play$_{music}$-FUT-PRS-SJV
'What do you want Alice to play?'

b. *ACC-C; no (additional) extraction from the embedded CP*

?Ueka-sïn-∅-ga=ri [Alicia-ni] **eska** kusta-a-∅-ka ma pirekua.
want-HAB-PRS-IND2=2sS Alice-ACC that play$_{music}$-FUT-PRS-SJV a song
'You want Alice to play a song.'

c. *ACC-C blocks extraction from the embedded CP*

?* ¿Ambe=ri ueka-sïn-∅-gi [Alicia-ni] **eska** kusta-a-∅-ka?
what=2sS want-HAB-PRS-INT Alice-ACC that play$_{music}$-FUT-PRS-SJV
int. 'What do you want Alice to play?'
[?$_A$, *$_B$, *$_F$, *$_G$, *$_H$]

4.4 Interim conclusion

Evidence from intervention effects, island effects, and extraction blocking favors a hyperraising analysis of ACC-C over a prolepsis analysis. The phenomenon will therefore be referred to throughout the rest of the talk as *hyperraising to object*.

5 Analysis

To get a clear idea of what hyperraising to object in Janitzio P'urhepecha tells us about the Activity Condition, Agree, and the driving force for movement, we will need an explicit, detailed analysis of it.

5.1 Where does the hyperraising DP raise to?

The clause structure of Janitzio P'urhepecha is the following:[7]

(25) … [$_{PolP}$ … [$_{MoodP}$ … [$_{TP}$ … [$_{AspP}$ … [$_{VoiceP}$ (AdvP$_{manner}$) [$_{VoiceP}$ … [$_{vP}$ DP$_{SUBJ}$ … [$_{VP}$ …]]]]]]]]

Consider the sentences in (26-27):

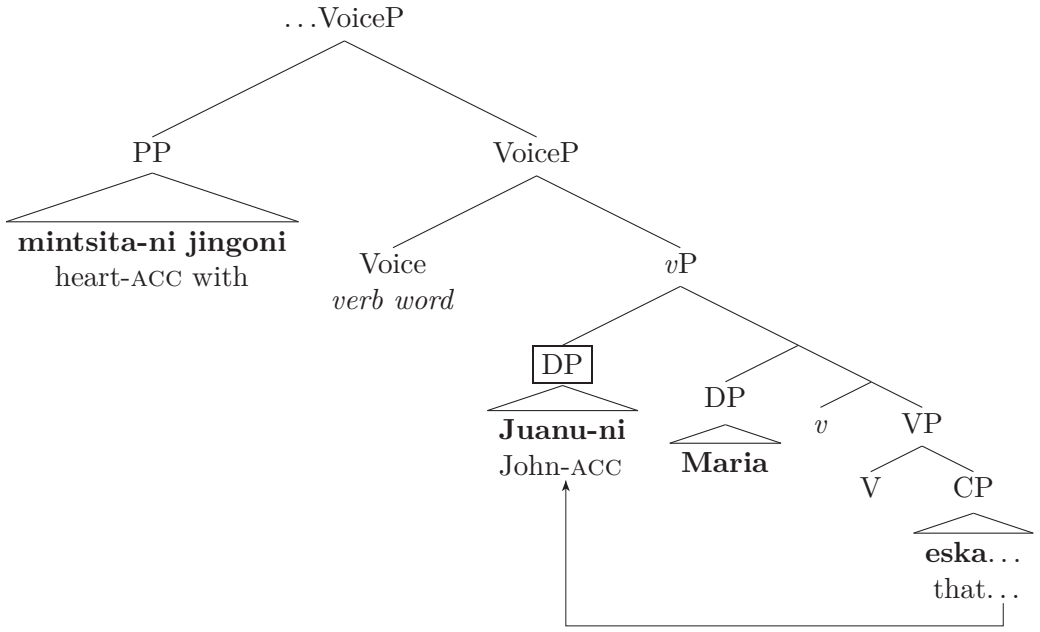
[7]This is a slightly revised version of the clause structure argued for in Zyman (2016, MS, §3). Set aside here is the left periphery. See Capistrán 2002 for a detailed investigation of the left periphery in Lake Pátzcuaro P'urhepecha, of which Janitzio P'urhepecha is a variety.

(26) (?)Mentku isï **mintsita-ni jingoni** ueka-sïn-∅-di **Maria** Juanu-ni eska jaruatpe-a-∅-ka
always thus heart-ACC with want-HAB-PRS-IND3 Mary John-ACC that help-FUT-PRS-SJV
k'umanchikua-rhu.
house-LOC
'Mary always wants John with all her heart to help out at home.'

(27) ?Mentku isï **mintsita-ni jingoni** ueka-sïn-∅-di Juanu-ni **Maria** eska jaruatpe-a-∅-ka
always thus heart-ACC with want-HAB-PRS-IND3 John-ACC Mary that help-FUT-PRS-SJV
k'umanchikua-rhu.
house-LOC
'Mary always wants John with all her heart to help out at home.'

The constituent order in (27) is highly informative. Given the clause structure in (25), the structure of (27) must be the following:

(28)



I.e., hyperraising to object targets a specifier position of *v*P.

In (28), the matrix subject (*Maria*) was externally merged with a projection of *v*, and then the hyperraising DP was internally merged. But if External and Internal Merge are really the same operation (Merge), those two derivational steps should, all else being equal, alternatively be able to occur in the opposite order, yielding the order MATRIX SUBJECT $\gg$ DP_{ACC}.

This prediction is correct ((26)), providing evidence against both Merge over Move (Chomsky 1995, 2000) and Move over Merge (Shima 2000, Larson 2015).

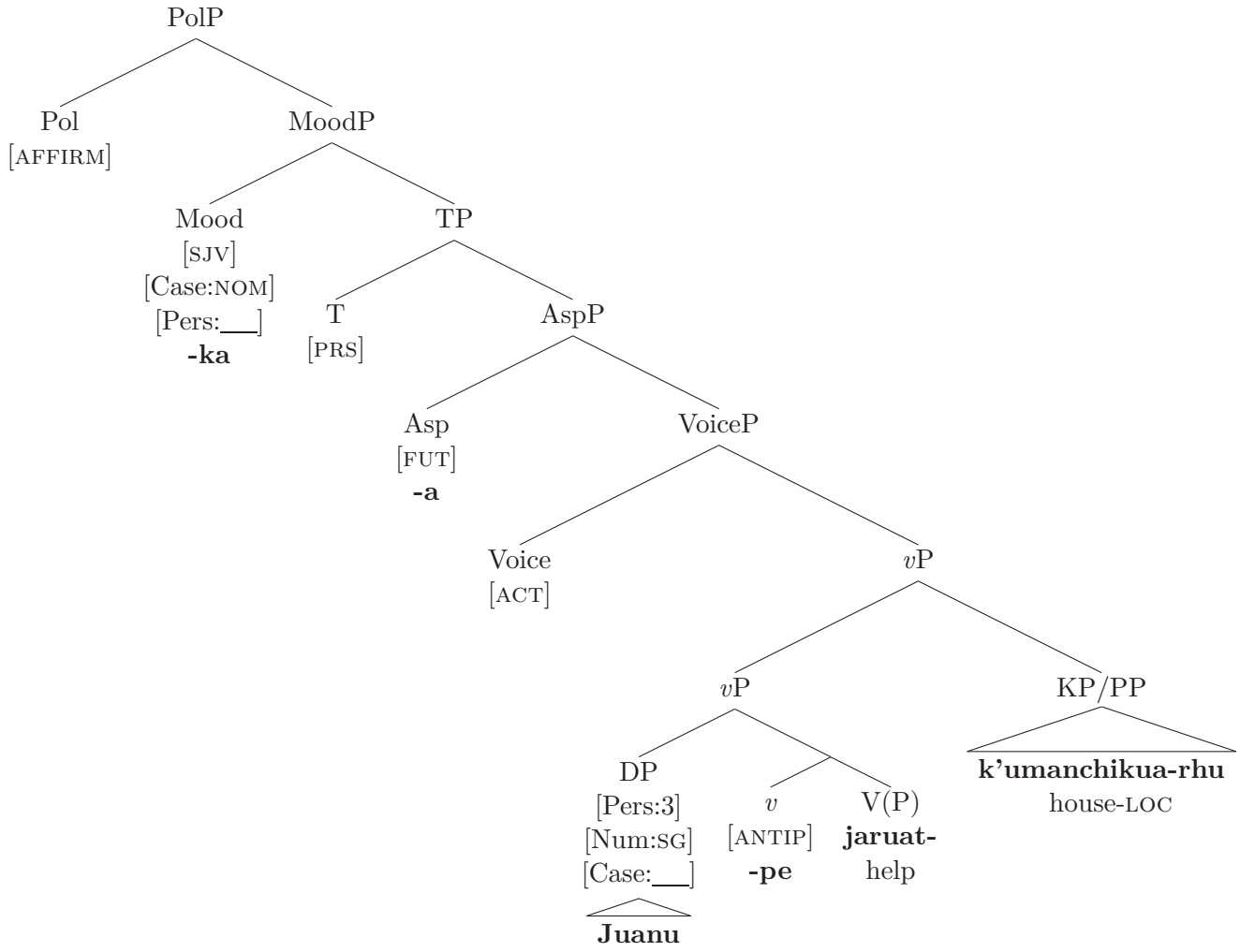
5.2 Putting it all together (with a derivation)

Now that we know that the hyperraising DP raises to a specifier of *v*P, let's give a derivation for a hyperraising-to-object sentence—in particular, (26), repeated below—in order to lay out the analysis explicitly.

(29) (?)Mentku isï **mintsita-ni jingoni** ueka-sïn-∅-di **Maria** Juanu-ni eska jaruatpe-a-∅-ka
always thus heart-ACC with want-HAB-PRS-IND3 Mary John-ACC that help-FUT-PRS-SJV
k'umanchikua-rhu.
house-LOC
'Mary always wants John with all her heart to help out at home.' (= (26))

First, the core of the embedded clause is built:[8]

(30)

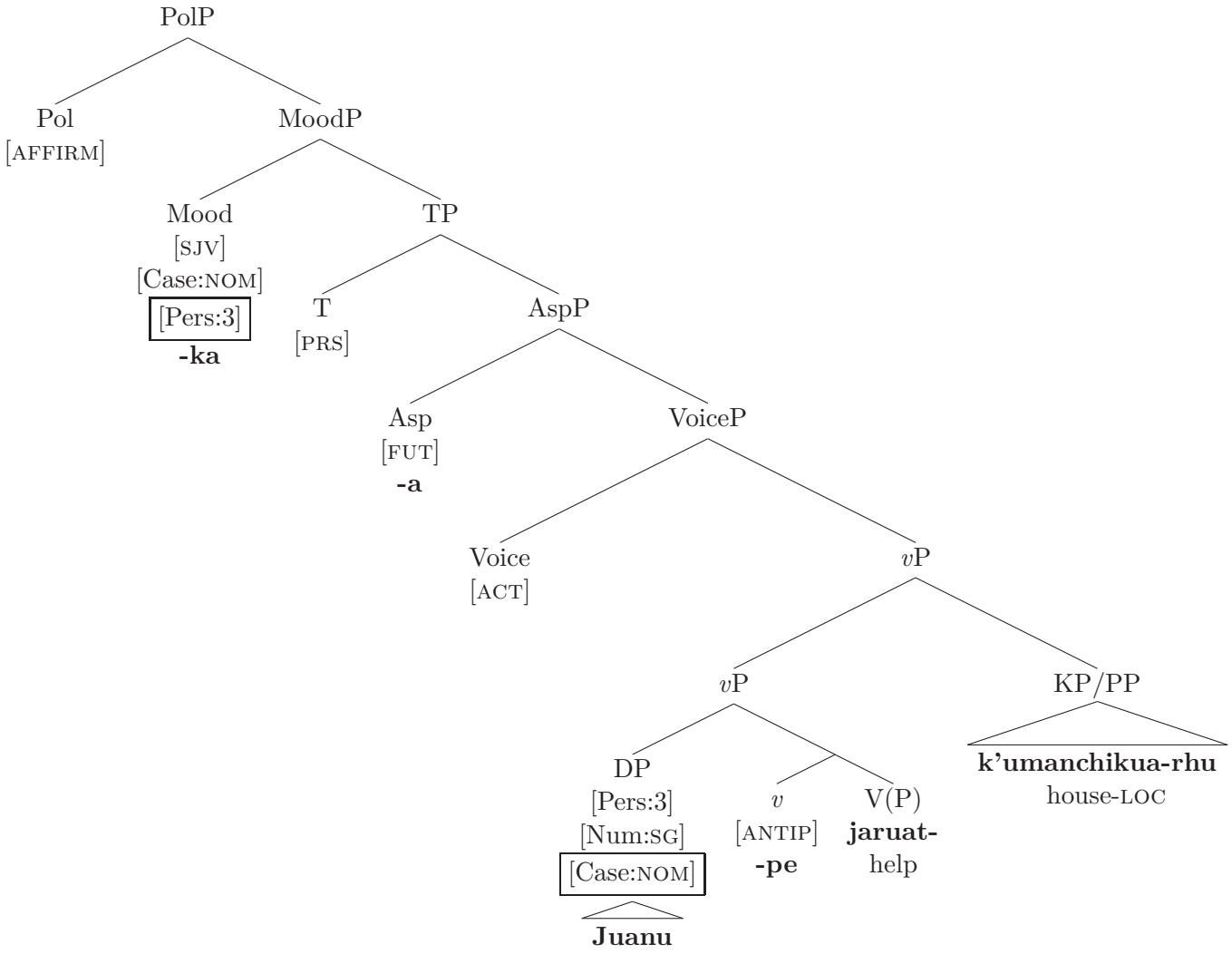


The subjunctive Mood head *-ka* has (let us suppose) an unvalued Person feature.[9] It probes its c-command domain for a constituent bearing a valued Person feature, finds [$_{DP}$ *Juanu*], copies its [Pers:3] feature onto itself, and values the unvalued Case feature of [$_{DP}$ *Juanu*] nominative:

[8]For ease of exposition, I abstract away here from the derivational effects of the clause-internal phase, if there is one (e.g., *v*P or VoiceP). This should not affect the analysis. Also, I have tentatively analyzed the antipassive suffix *-pe* in *jaruat-pe-* 'help-ANTIP' as a *v*. Nothing to follow will hinge on this.

[9]The basis for this supposition is the fact that the *indicative* Mood suffix is a portmanteau that also expones the person of the subject: *-ka* (1/2) ∼ *-ti* (3) (→ *-ga*, *-di* immediately after /n/). I assume for concreteness that the indicative Mood head not only agrees with the subject in person but also assigns it nominative Case, and that the subjunctive Mood head behaves identically—even though it does not agree with the subject overtly, but rather always surfaces as *-ka*(/*-ga*). The derivation uses simplified person features such as [Pers:3] for ease of exposition (see Bobaljik 2012:210-212 for relevant discussion).

(31)

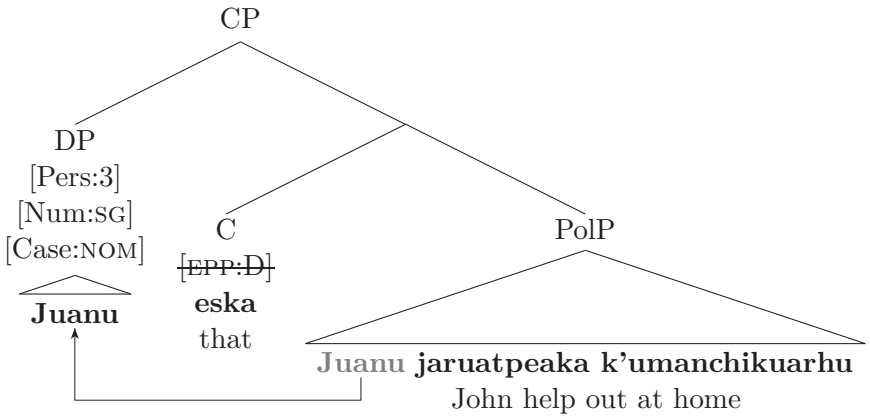


Merged in next is the complementizer *eska* 'that', which I claim can optionally bear a feature [EPP:D], just as Voice, Asp, T, (probably) Mood, and Pol can in Janitzio P'urhepecha (Zyman 2016, MS, §7.2; see also Cable 2012).

The claim that *eska* 'that' can optionally bear [EPP:D] is justified by the standard assumption that CP is a phase: if *eska* could not bear [EPP:D], the embedded subject could not move to [Spec,CP], and hence could not raise into the matrix (i.e., hyperraising to object would be impossible).

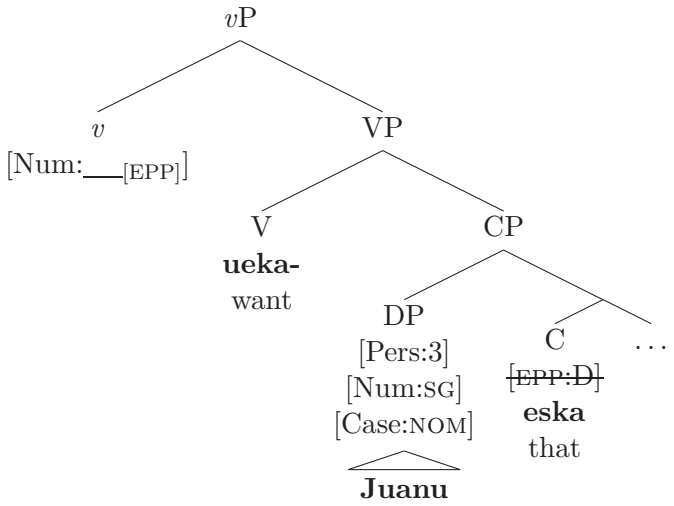
In a hyperraising-to-object sentence, the version of *eska* bearing [EPP:D] is chosen. It probes its c-command domain for a goal of category D, finds [$_{DP}$ *Juanu*], and forces it to internally merge with its own highest projection, thereby satisfying its [EPP:D] feature:

(32)



On the standard assumption that CP is a phase, *eska* is a phase head, so its complement (PolP) is spelled out. The highest copy of *Juanu* is on the phase edge, and therefore still accessible to the syntax. The derivation continues, yielding the following:

(33)



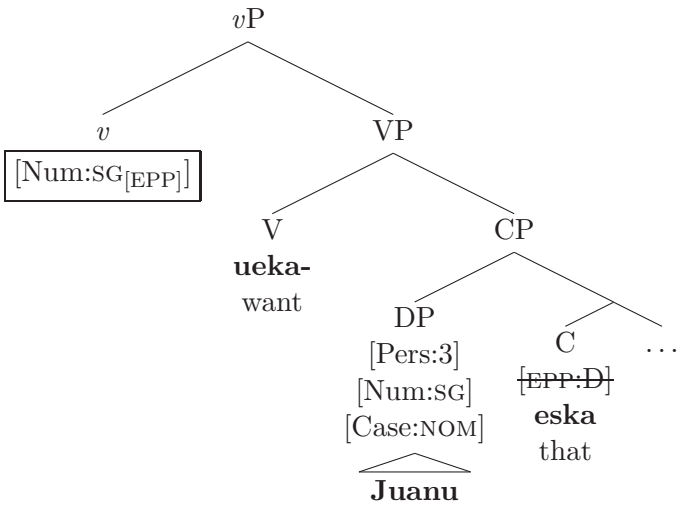
The hyperraising *v* selects the V *ueka-* 'want' (or *uetarincha-* 'need' or *mite-* 'know').

This *v* also bears an unvalued Number feature with an EPP subfeature. *v* probes its c-command domain for an element that can value this feature, finds [$_{DP}$ *Juanu*], and uses the latter's [Num:SG] feature to value its own Number feature singular.

I.e., *v* is an object agreement probe. The object agreement can be exponed overtly (by the suffix *-a*) when the agreed-with DP is plural (see the Appendix).

The structure is then as follows:

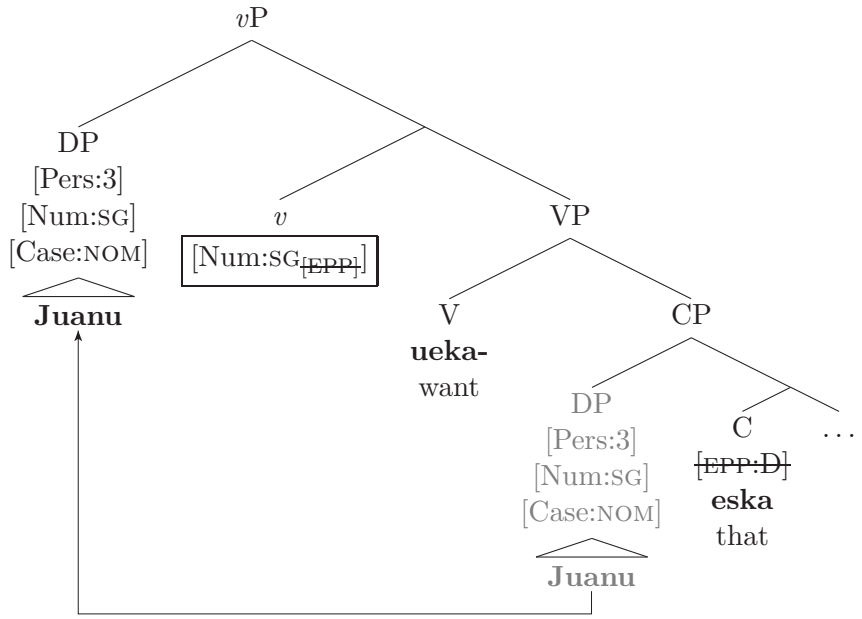
(34)



Crucially, this Agree relation is established even though the goal has no unvalued features, *pace* the Activity Condition.

The goal is then internally merged to the root of the tree to satisfy the Number feature's EPP subfeature:

(35)



How does the hyperraised DP end up being assigned accusative {C/c}ase? There are at least three possibilities, which I won't attempt to choose between today:

(36) a. **Case stacking:** The hyperraising *v* bears a feature [Case:ACC], which is somehow copied onto the DP as part of the Agree operation relating them.

b. **Case overwriting:** The hyperraising *v* bears a feature [Case:ACC], which somehow overwrites the DP's [Case:NOM] feature as part of the Agree operation.

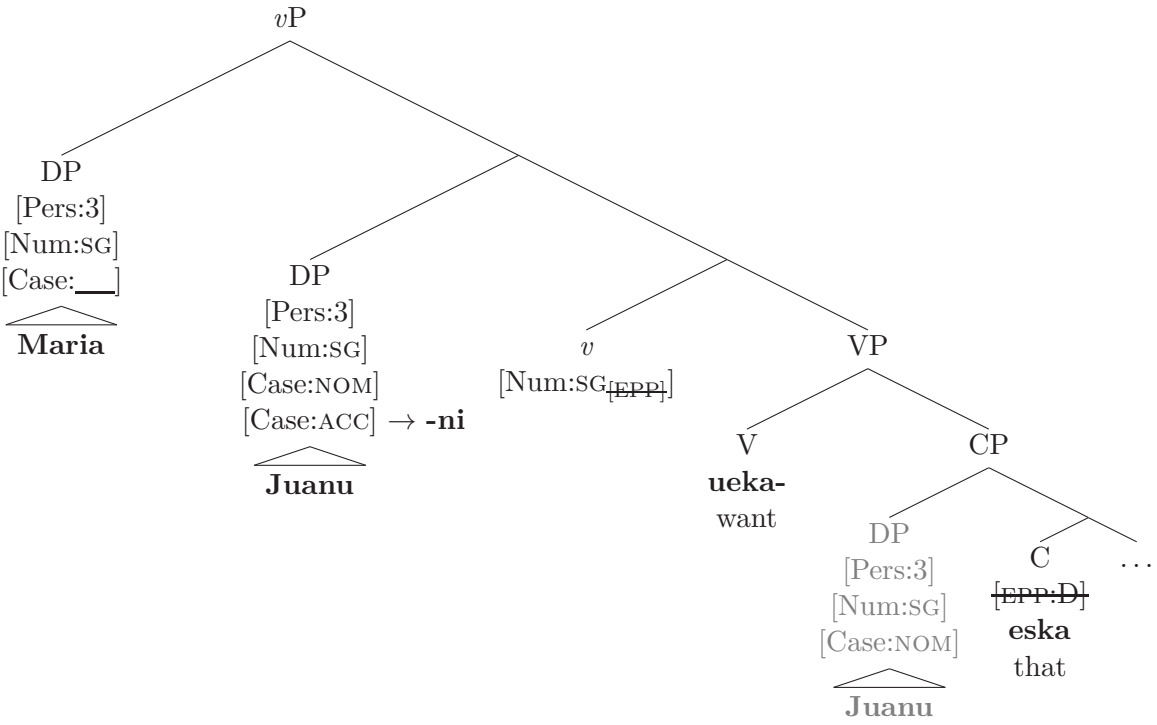
c. **Dependent case assignment:** The DP isn't Case-*licensed* again; rather, it is realized with dependent accusative case as a reflex of its being c-commanded by the matrix subject (cf. Marantz 1991, Baker 2015).[10]

[10]If this is the right analysis, and the hyperraising DP is assigned dependent accusative when it is in the embedded [Spec,CP] and the matrix subject is in [Spec,*v*P], then this will constitute counterevidence to Poole's (2016) proposal that dependent case assignment is regulated by the Williams Cycle.

N.B. The first two possibilities will be difficult to distinguish empirically, since nominative case is morphologically unrealized in P'urhepecha.

Merged in next is the matrix subject (*Maria*). In this derivation, the Internal Merge step precedes the External Merge step, but as we have seen, the two operations can occur in either order, as we would expect by default.

(37)



The matrix *v*P merges with matrix Voice as its complement, forming a VoiceP, to which the manner PP *mintsitani jingoni* 'with all her heart' is left-adjoined. The matrix subject *Maria* values the Person feature of the matrix indicative Mood head, and is assigned nominative Case in return. These and other operations complete the derivation of the sentence, which is repeated here for convenience:

(38) (?)Mentku isï **mintsita-ni jingoni** ueka-sïn-∅-di **Maria** Juanu-ni eska jaruatpe-a-∅-ka
always thus heart-ACC with want-HAB-PRS-IND3 Mary John-ACC that help-FUT-PRS-SJV
k'umanchikua-rhu.
house-LOC
'Mary always wants John with all her heart to help out at home.' (= (26))

5.3 Crosslinguistic variation

On this analysis, what's special about Janitzio P'urhepecha that causes it to permit hyperraising to object is that it allows the C *eska*, and (at least the hyperraising) *v*, to bear an EPP (sub)feature.[11]

This seems to be part of a broader pattern. In Janitzio P'urhepecha, subjects can surface in [Spec,*v*P], [Spec,VoiceP], [Spec,AspP], [Spec,TP], (probably) [Spec,MoodP], and [Spec,PolP]...

...suggesting that Voice, Asp, T, Mood, and Pol can optionally be endowed with [EPP:D] as well (cf. Zyman 2016, MS, §§4.1, 7.2; cf. Cable 2012 on Dholuo.)

In English, a C cannot be endowed with [EPP:D], so hyperraising cannot get off the ground.

[11] I.e., the difference between hyperraising and nonhyperraising languages resides in the properties of individual lexical items. The analysis is therefore compatible with the Borer-Chomsky Conjecture (see, e.g., Baker 2008:353).

6 Comparison with alternatives

How does the analysis laid out above compare with other analyses of hyperraising?

Carstens and Diercks (2013) on Lubukusu and Lusaamia: N moves to D (as suggested by DP-internal constituent order). As a result, DP inherits N's Gender (Noun Class) feature, which is lexically valued but uninterpretable, and therefore infinitely reusable in A-relations, permitting hyperraising.

- Possibly right for those languages (though there's a question as to how exactly DP inherits N's Gender feature, and why this doesn't happen in, say, Romance). But can't extend to P'urhepecha, which lacks grammatical gender completely.

Martins and Nunes (2010), Petersen and Terzi (to appear) on Brazilian Portuguese and (P&T) Greek: Apparent hyperraising occurs when the embedded finite T is ϕ-incomplete and cannot assign its subject Case.

- On both analyses, finite T in Brazilian Portuguese can optionally be ϕ-incomplete; this is claimed to be a consequence of the "weakening" over time of the language's subject agreement paradigms. For Greek, P&T propose that the finite T in a clause that does not support independent temporal reference (as diagnosed by time adverbials) is ϕ-incomplete and hence not a Case assigner.
- May be on the right track for those languages, but not promising for Janitzio P'urhepecha, because a DP hyperraised to object in this language can be linked to a nominative floated quantifier in the embedded CP, suggesting strongly that nominative Case is available in that CP.

Halpert (2016) on Zulu (hyperraising to subject): T agrees with the embedded finite CP in ϕ-features. A finite CP can't satisfy T's EPP feature in Zulu, so T probes into the CP, agrees with its DP subject, and raises it to [Spec,TP] to satisfy its EPP feature. (T is able to probe into the featural intervener [CP] because it has agreed with it.)

- Possibly right for Zulu. In P'urhepecha, there is (to the best of my knowledge) no evidence that CPs bear ϕ-features. If CP isn't an intervener in P'urhepecha, then the hyperraising v should be able to probe into it and agree with the subject DP directly, <u>if</u> Halpert's long-term program of reducing phases to featural Relativized Minimality (cf. Rizzi 1990) proves successful.

Interim conclusion: In general, these analyses do not extend to hyperraising to object in Janitzio P'urhepecha. Halpert's (2016) analysis may be an exception, though, and therefore deserves further investigation in the P'urhepecha context.

An important open question: what about other existing analyses of hyperraising (e.g., Bruening 2001)?

7 Implications about the driving force for movement

The analysis given above for hyperraising to object in Janitzio P'urhepecha has another theoretical consequence: it sheds new light on the question of what the driving force for movement is.

Consider, once again, how a hyperraising-to-object sentence in Janitzio P'urhepecha is derived:

(39) $[_{vP}\ \boxed{\text{DP}_i}\ v\ [_{VP}\ \text{V}\ [_{CP}\ \boxed{\text{DP}_i}\ \text{C}\ \ldots\ [_{vP}\ \boxed{\text{DP}_i}\ \ldots\ ]]]]$

Above, the movements involved were analyzed as **altruistic** (Lasnik 1995, Chomsky 2000, 2001, 2004, McCloskey 2001)—i.e., driven by a featural requirement of the <u>target position</u>.

On the analysis given, the DP subject of the embedded clause moves to the embedded [Spec,CP] to satisfy an [EPP:D] feature on C (*eska* 'that'), and then moves to a matrix [Spec,*v*P] position to satisfy an EPP subfeature of the Number feature of *v*.

But there are at least two prominent alternative analyses available (at least a priori). Rather than being altruistic, the movement steps in question could be **greedy** (Grohmann, Drury, & Castillo 2000, Bošković 1995, 2002, 2007) or **labeling-driven** (Chomsky 2013, 2015).

Can we adjudicate between these possibilities?

7.1 Alternative analysis A: Greed

One possibility is that the hyperraising DP undergoes the movement steps in (39) to satisfy featural requirements not of its targets (C and *v*) but of its own.

The natural hypothesis in a Greed-based framework is that the DP moves to get Case.

As we've seen, though, the DP's need for Case can't be why it moves into the matrix, because nominative Case is available in the embedded finite clause.

So the Greed-based analysis could be revised as follows.

In Bošković's (2007) system, not only does every probe bear an unvalued feature, but also every element bearing an unvalued feature acts as a probe. If an element bearing an unvalued feature can't value it under Agree from where it is, it'll move to a c-commanding position and try to value it under Agree from there.

Since a hyperraising DP in Janitzio P'urhepecha ends up in a specifier position of *v*, we could posit that a D in this language can optionally be endowed with a feature [*uv*] (which will automatically percolate up to DP). (This is conceptually less appealing than the Case-based analysis, but still implementable.)

A virtue of this analysis is that it doesn't need any counterpart of the optional [EPP:D] feature on C that was posited in the altruistic analysis. An embedded subject DP that's been endowed with [*uv*] moves to [Spec,CP] (the phase edge position—if it doesn't, it'll be spelled out with its [*uv*] feature unvalued, causing a crash), and then moves to the matrix [Spec,*v*P], from which position it c-commands *v* and can thus value its [*uv*] feature under Agree.

But a major problem for this analysis is that the embedded subject DP already c-commands a *v* in its base position, and therefore would not have to move at all to satisfy a hypothetical [*uv*] feature.

I conclude, therefore, that hyperraising to object in Janitzio P'urhepecha poses a considerable challenge to analyses of movement on which all movement is greedy.

7.2 Alternative analysis B: Labeling

Could it be that the driving force for hyperraising to object isn't featural requirements of the target positions but rather the Labeling Algorithm of Chomsky (2013, 2015)?

Because hyperraising to object is (descriptively speaking) optional, it would presumably be necessary to say that the hyperraising $v_{[\text{Num}]}$ is optionally (!) too weak to label its maximal projection...

...and that, when it is, successful labeling of the traditional *v*P will only be possible if a DP (also bearing [Num]) raises to "[Spec,*v*P]."

When the embedded subject DP raises to "[Spec,vP]," it and its sister ("$\bar{v}$") share a feature, namely [Num], so the "vP" can be labeled ⟨Num,Num⟩.

One problem with this analysis: the assumption that the hyperraising v is optionally too weak to label its maximal projection is strange...

...especially given that there's good evidence that V (or the verbal root, "R") raises to v, and, by hypothesis, the R-v complex is able to label, unlike R alone (Chomsky 2015:12).

But these problems for the Labeling approach to movement are minor compared to those raised by the syntax of subjects in Janitzio P'urhepecha independently of hyperraising:

(40) a. The subject can apparently stay in situ, in [Spec,vP] (see, e.g., (26-27)). This produces an XP-YP configuration; hence, "vP" should be unlabelable, unless v and the subject DP share a feature, which there's no evidence for.

b. If indeed the subject DP can move to [Spec,MoodP], the resulting XP-YP configuration is unproblematic: Mood agrees with the subject in person, so "MoodP" can be labeled ⟨Pers,Pers⟩. But an XP-YP configuration is also created when the subject moves to [Spec,VoiceP], [Spec,AspP], [Spec,TP], or [Spec,PolP], and in these cases there's no overt agreement. The relevant maximal projections (VoiceP, AspP, TP, and PolP) could be rendered labelable by positing covert agreement, but this would arguably make the Labeling analysis unfalsifiable.

8 Conclusions

In hyperraising to object in Janitzio P'urhepecha, a DP is assigned nominative Case in an embedded finite clause. After that point, it has no more unvalued features, but it nonetheless enters into further A-relations: A-movement, object agreement, and (if this is another A-relation) accusative Case assignment.

This has several consequences of broader theoretical interest:

- **Hyperraising:** At least some existing analyses of hyperraising cannot extend to the Janitzio P'urhepecha case, which prompted the development of today's analysis. (Further comparison with alternatives will be crucial.)
- **Agree:** The Activity Condition is not an intrinsic, universal constraint on Agree (contra Chomsky 2000, 2001, but as argued by Nevins 2004).
- **Driving force for movement:** Hyperraising to object in Janitzio P'urhepecha can be given a simple, successful analysis on which both movement steps are **altruistic**. It is somewhat problematic for a Labeling analysis and extremely problematic for a Greed-based analysis. (But the Labeling approach also faces severe problems—from other facts about the syntax of subjects in Janitzio P'urhepecha.)

9 Appendix: Object agreement and its interaction with hyperraising to object

P'urhepecha has object agreement: when an object is plural, it can trigger the appearance of the suffix *-a* in the verbal complex. In Janitzio P'urhepecha, *-a* seems to immediately follow the root[12] ((41a)). It's optional, though: at least for the consultant who supplied these judgments, not realizing the *-a* overtly produces an output ((41b)) which is acceptable, though marked in comparison to (41a).

(41) a. Uitsindekua exe-[a]-sï-∅-ka=ni **Xumu-ni ka Axuni-ni**.
yesterday see-pO-PFV-PRS-IND1=1sS Xumo-ACC and Axuni-ACC
'Yesterday I saw Xumo and Axuni.'

b. [M]Uitsindekua exe-sï-∅-ka=ni **Xumu-ni ka Axuni-ni**.
yesterday see-pO-PFV-PRS-IND1=1sS Xumo-ACC and Axuni-ACC
'Yesterday I saw Xumo and Axuni.'

Exactly the same pattern is observed in hyperraising to object, with the appearance of *-a* triggered by the raised embedded subject (DP_{ACC}):

(42) Ueka-[a]-sïn-∅-ga=ni [Maria-ni ka Klara-ni] **mintsita-ni jingoni** eska
want-pO-HAB-PRS-IND1=1sS Maria-ACC and Clara-ACC heart-ACC with that
pire-a-∅-ka=sï.
sing-FUT-PRS-SJV=pS
'I want Maria and Clara with all my heart to sing.'

(43) [M]Ueka-sïn-∅-ga=ni [Maria-ni ka Klara-ni] **mintsita-ni jingoni** eska
want-pO-HAB-PRS-IND1=1sS Maria-ACC and Clara-ACC heart-ACC with that
pire-a-∅-ka=sï.
sing-FUT-PRS-SJV=pS
'I want Maria and Clara with all my heart to sing.'

In (42-43), DP_{ACC} precedes the matrix adverbial *mintsitani jingoni* 'with all my heart'. I note for completeness, though, that the judgments remain unchanged when DP_{ACC} follows this matrix adverbial instead:

(44) Ueka-[a]-sïn-∅-ga=ni **mintsita-ni jingoni** [Maria-ni ka Klara-ni] eska
want-pO-HAB-PRS-IND1=1sS heart-ACC with Maria-ACC and Clara-ACC that
pire-a-∅-ka=sï.
sing-FUT-PRS-SJV=pS
'I want Maria and Clara with all my heart to sing.'

(45) [M]Ueka-sïn-∅-ga=ni **mintsita-ni jingoni** [Maria-ni ka Klara-ni] eska
want-pO-HAB-PRS-IND1=1sS heart-ACC with Maria-ACC and Clara-ACC that
pire-a-∅-ka=sï.
sing-FUT-PRS-SJV=pS
'I want Maria and Clara with all my heart to sing.'

[12]Preceding even derivational suffixes, though this is not shown here.

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