

On the Limits of Syntactic Movement: Hyperraising in P'urhepecha

Erik Zyman · Linguistics Department, University of California, Santa Cruz
ezyman@ucsc.edu

Introduction

Two fundamental questions of syntax: (cf. Kayne 2016)

- (1) What **rules and principles** govern how words can (and *can't*) be put together to form larger structures (phrases, clauses, sentences)?
- (2) To what extent are these rules and principles universal (or: how much do they vary from language to language), and why?

One domain in which these questions arise in extremely interesting ways: **movement**—i.e., movement of phrases from particular positions in a sentence to others.

Example: In English, the verb *seem* can take as its complement an **infinitival clause**. There are well-formed sentences that end like this:

- (3) ...seems [to be happy].

Seem can alternatively take as its complement a *that*-clause with a **visible subject**:

- (4) It seems [that **Sophie** is happy].

But if we try to combine these two patterns—by giving *seem* as its complement an **infinitival clause** with a **visible subject**—something strange happens: the subject is forced to ascend (or “**raise**”) into the main clause.

- (5) ✗ It seems [Sophie to be happy].
(6) ✓ Sophie seems [to be happy].

And although the subject of the **infinitival clause** has to raise, the subject of a *that*-clause **can't** raise in this way. Compare (4) with (7-8):

- (7) ✗ Sophie seems [that ___ is happy]. ~ (8) ✗ Sophie seems [___ is happy].

Let's use the term **core movement** to refer to any movement that changes the fundamental grammatical role of a phrase (e.g., subject, object). The core movement in (6) transforms the subject of the subordinate clause into the subject of the main clause.

These English data raise a lot of questions. One big one:

- (8) Why can't the subject of a *that*-clause undergo core movement? ((7-8))

One possibility: the Case Hypothesis

Here's one possibility. In English, an **infinitival clause** can't assign its subject any **Case** (e.g., Subject Case [she] or Object Case [her]): ✗ It seems [she/her to be happy].

So the subject of an **infinitival clause** raises into the main clause so that it can get Case—specifically, Subject Case: She seems [to be happy].

But the subject of a *that*-clause can get Case right where it is—specifically, Subject Case: It seems [that she is happy].

So it doesn't need to **raise** to get Case—and because it doesn't need to raise, it can't. (adapted from Chomsky 2000, 2001)

Here, I present novel data illustrating a phenomenon I call **hyperraising to object** in P'urhepecha, a language of Mexico with no known relatives spoken by >120,000 people, mostly in the central-western state of Michoacán...

...specifically, in the variety spoken on the island of **Janitzio** on Lake Pátzcuaro.

We'll see that in Janitzio P'urhepecha, even when a Noun Phrase can get Case right where it is (being the subject of a *that*-clause), it can still undergo **core movement** into the next clause up.

This challenges the Case Hypothesis. The human capacity for language does **not** inherently restrict **core movement** to only those Noun Phrases that haven't gotten Case yet (cf. Carstens & Diercks 2013, Halpert & Zeller 2015, Petersen & Terzi to appear, and refs. therein).

The phenomenon: “-ni + eska” in Janitzio P'urhepecha

In Janitzio P'urhepecha, a *that*-clause (rather, an *eska*-clause) normally has a **subject** in Subject Case:

- (9) Uekasindisi **eska** Xumo uaka ma k'umanchikua.
they.want that Xumo make a house
'They want Xumo to build a house.'

But when the *eska*-clause is the complement of any of a few verbs (*ueka*- 'want', *uetarincha*- 'need', and [for some speakers] *mitie*- 'know'), its subject can show up in **Object Case** (marked by the suffix **-ni**), and to the **left** of the subordinating conjunction *eska*:

- (10) Uekasindisi Xumuni **eska** uaka ma k'umanchikua.
they.want Xumo-OBJ that make a house
'They want Xumo to build a house.'

If the Noun Phrase marked with **-ni** (“**NP-ni**”) raises from the subordinate clause, this can't be due to its need for Case: it could have gotten Subject Case in the subordinate clause (as in (9)).

This is especially clear given that **NP-ni** can be linked to a **quantifier** in the subordinate clause that's in **Subject Case** (11). Subject Case really is available and ready to be assigned in these *eska*-clauses.

- (11) Uekasingani Alonsuni, Pakuni ka Pukini **eskasi** iamindueecha ch'anaaka.
I.want Alonzo-OBJ, Paco-OBJ, and Puki-OBJ that all(SUBJ.CASE) play
'I want Alonzo, Paco, and Puki (three dogs) to all play.'

So if **NP-ni** raises from the subordinate clause, it does so even though it could have gotten (Subject) Case there—posing a major challenge to the Case Hypothesis.

Does NP-ni raise from the subordinate clause?

-ni + eska challenges the Case Hypothesis only if **NP-ni** raises from the subordinate clause. So, does it? Or is it “born” in the main clause—in which case (9) may have a structure along the lines of ‘They want in relation to Xumo that he build a house’?

Three strands of evidence that **NP-ni** does **raise** into the main clause:

Closeness: **NP-ni** must “correspond” to the **subject** of the subordinate clause; it can't correspond to the **object** of the subordinate clause. This is a hallmark of **core movement**.

- (12) ✗ Uekasingani Bertani **eska** Elena jananiariaka __.
I.want Bertha-OBJ that Elena respect
literally: 'I want Bertha that Elena respect.'
intended meaning: 'I want Elena to respect Bertha.'

Island-sensitivity: **NP-ni** can't “correspond” to a Noun Phrase inside an **island**—i.e., a phrase that other phrases can't move out of. Islands restrict **movement**, suggesting that **-ni + eska** is a movement phenomenon.

- (13) ✗ Uekasingani juramutini **eska** k'uanatsentaaka uariti [relative clause = island] enga
I.want president-OBJ that return woman
minarikuka __. literally: 'I want the president, that the woman who knows __, return.'
has.met intended meaning: 'I want the woman who knows the president to return.'

Escape-hatch blocking: A **-ni + eska** structure doesn't allow anything (else) to move out of the *eska*-clause. That suggests that **NP-ni** itself has moved out of the *eska*-clause, “blocking its escape hatch” (a well-known property of structures involving movement).

- (14) ? ✗ ¿Amberi uekasingi Aliciani **eska** kustaaka __?
what-you want Alice-OBJ that play
intended meaning: 'What (music) do you want Alice to play?'

These three pieces of evidence show that **NP-ni** truly **raises** out of the subordinate clause.

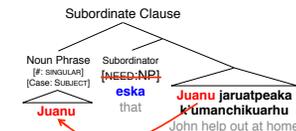
Analysis

I'll illustrate my proposal about how (most of) a **-ni + eska** sentence is built using the following one as an example:

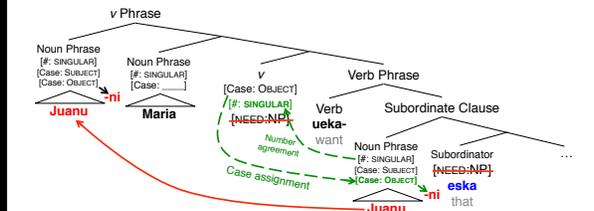
- (15) ?Mentku isi mintsitani jingoni uekasindi Juanuni Maria **eska** jaruatpeaka k'umanchikuarhu.
always thus heart with wants John-OBJ Mary that help in-the-house
'Mary always wants John with all her heart to help out at home.'

First, the subordinate *eska*- (*that*-) clause is built. Its subject, **Juanu**, gets Subject Case, as usual.

In Janitzio P'urhepecha, the subordinating conjunction *eska* ‘that’ can optionally bear a feature [**NEED:Noun Phrase**], which forces the closest Noun Phrase to move to its immediate left (cf. Cable 2012). In a **-ni + eska** sentence, the version of *eska* bearing [**NEED:Noun Phrase**] is used, and raises the subject of the subordinate clause to its left:



Once at the left edge of the subordinate clause, the subordinate subject **Juanu** is close enough to the main clause to enter into new **core relations**. An element in the main clause called **v** agrees with **Juanu** in Number (this is visible in the plural) and assigns it Object Case in return (on top of the Subject Case it already has). This **v** also bears the feature [**NEED:Noun Phrase**], so **Juanu** (now **Juanu-ni**) moves to its left to satisfy this feature.



Conclusion

In **hyperraising to object** in Janitzio P'urhepecha, the subject of a subordinate clause gets (Subject) Case right where it is, but nonetheless undergoes **core movement** into the main clause, becoming its object (with Object Case and everything).

This strongly suggests, contra the Case Hypothesis (cf. Nevins 2004), that even when a Noun Phrase already has Case, it can still enter into new core relations, such as agreement, (further) Case assignment, and **core movement**.

Uphshot: It is possible, in principle, for a Noun Phrase that has already gotten Case to undergo (more) **core movement** (contra Chomsky 2000, 2001).

More broadly: this result underscores the contributions that less-studied languages have to make to our understanding of what is and is not possible in the grammars of human languages.

Selected references: Cable, S., 2012. 'The optionality of movement and EPP in Dholuo.' NLLT 30: 651-97. Carstens, V. and M. Diercks, 2013. 'Parameterizing Case and Activity: Hyperraising in Bantu.' Proceedings of NELS 42: 99-118. Chomsky, N., 2000. 'Minimalist inquiries: the framework.' In Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik, 89-155. Chomsky, N., 2001. 'Derivation by Phase.' In Ken Hale: A Life in Language, 1-52. Halpert, C. and J. Zeller, 2015. 'Right dislocation and raising-to-object in Zulu.' The Linguistic Review 32.3: 475-513. Kayne, B.S., 2016. 'More Languages Than We Might Have Thought: Fewer Languages Than They Might Have Been.' Ms., NYU. Nevins, A., 2004. 'Derivations without the Activity Condition.' MITWPL 49, 287-310. Petersen, C. and A. Terzi, To appear. 'Hyperraising and locality: a view from Brazilian Portuguese and Greek.' Proceedings of CLS 50.