When a language is consistently ergative (& how it gets that way)

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First things first

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- Eugenia Policarpo
- Jacinta Simón Galindo
- Eduardo Luna
- Rubén Castañeda
- Félix Castañeda Flores
- Raúl Castañeda

Section 1 • Introduction

Why Indigenous languages?

(Some) Reasons for investigating endangered and/or Indigenous languages

- Inherent *value*
- Need for *diversity*
- Human *knowledge*

Linguistics concerns itself with how human language(s) work/s

- Requires evidence from a large *variety of languages*

Why Indigenous languages?

Contributions to (theoretical) linguistics (some highlights):

- Ergative case and agreement
- Extraction asymmetries
- Word order possibilities
- Strategies for deriving verb-initiality
- etc.

Why Me'phaa?

Underrepresentation

- Little linguistic literature exists on the language
- Many grammatical properties underdocumented
- No syntactic analyses

Typologically exceptional properties

- Unique encoding of given/new distinction
- Rare ‘one’-based system of indefinite pronouns
- “Pegative case” (??), marked absolutive (??)
- Extreme morphological complexity

Morphological complexity

Otomanguean languages have a bit of a reputation:

"Perhaps the most conspicuous hallmark of the [Otomanguean] family is the overwhelming complexity it presents to descriptive analysis. What's more, the complexity which one finds is not a mere superficial phenomenon which results from the interaction of underlying generalizations of great descriptive power, but rather a seemingly intractable maze of irregularities which lead the analyst to question his [*sic*] own ability to analyze and which has led some of us to reevaluate the relative importance of rule-governed behavior versus arbitrary memorized facts in human knowledge."

— Smith Stark & Tapia García (1987)

Because verbs

Verbs are central to Me'phaa grammar...

- Me'phaa displays "omniverbity" (Wichmann, 2014)
- Pronouns, nouns, coordinators ('and'/'with'), etc. inflect like verbs

...yet they exhibit bewildering complexity (Suárez, 1983)

"the most complicated part of all the grammar"

— Weathers & Carrasco Zúñiga (1989)

Because verbs

Because verbs

(1) Ways of encoding 2SG

a. Na-*ta*-majng-úún.
IPFV-2SG-push-1SG
'You're pushing me.'

b. Na-kix-*iín*.
IPFV-jump-2SG
'You're jumping.'

c. Ne'-ng-*áa*.
PFV-die-2SG
'You died.'

d. Na-*ta*-ndu'wá.
IPFV-2SG-laugh
'You're laughing.'

e. Ni̲-xkhax-*iín*.
PFV-wake-(1SG)>2SG
'I woke you.'

f. Ni-*dx*anú'.
PFV-2SG.arrive
'You arrived.'

Because verbs

Me'phaa is ergative...

- A ≠ S = O in (2a-b)

(2) a. Na-*ta*-majng-úún.
IPFV-2SG-push-1SG
'You're pushing me.'

b. Na-kix-*iín*.
IPFV-jump-2SG
'You're jumping.'

Because verbs

...except when it's not

- A = S ≠ O in (3a-b)

(3) a. Na-*ta*-majng-úún.
IPFV-2SG-push-1SG
'You're pushing me.'

b. Na-*ta*-ndu'wá.
IPFV-2SG-laugh
'You're laughing.'

So, Me'phaa is ergative with a hint of accusative...

Because verbs

...except when it's not

- A ≠ S ≠ O in (4a-c)

(4) a. Na-*ta*-majng-úún.
IPFV-2SG-push-1SG
'You're pushing me.'

b. Ne'-ng-*áa*.
PFV-die-2SG
'You died.'

c. Ni̲-xkhax-*iín*.
PFV-wake-(1SG)>2SG
'I woke you.'

Because verbs

Numerous patterns of agreement are a primary source of Me'phaa's complexity

- How can we account for such complexity?
- What might Me'phaa patterns of agreement tell us about how human language(s) work/s?

Ideally,

- We don't have to rewrite the linguistic playbook
- Me'phaa broadens our understanding of what is possible (perhaps within the bounds of what is known)

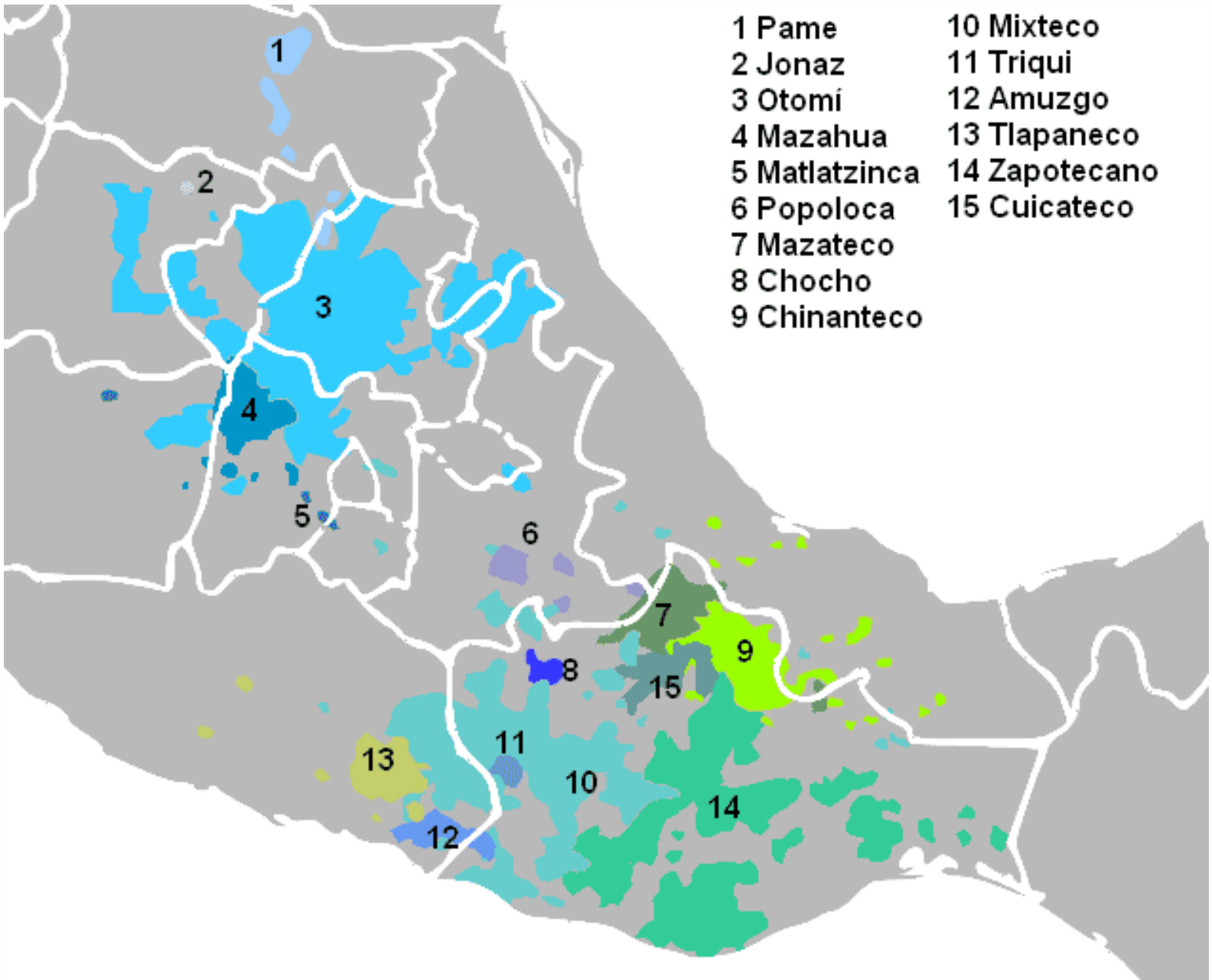
Today's talk

What might Me'phaa patterns of agreement tell us about how human language(s) work/s?

- Understanding of *ergativity* & how it manifests in language
- Understanding of syntactic structures underlying verbs & the *syntax of argument structure*
- Understanding of how *agreement classes* map onto core architectures

Section 2 • Me'phaa basics

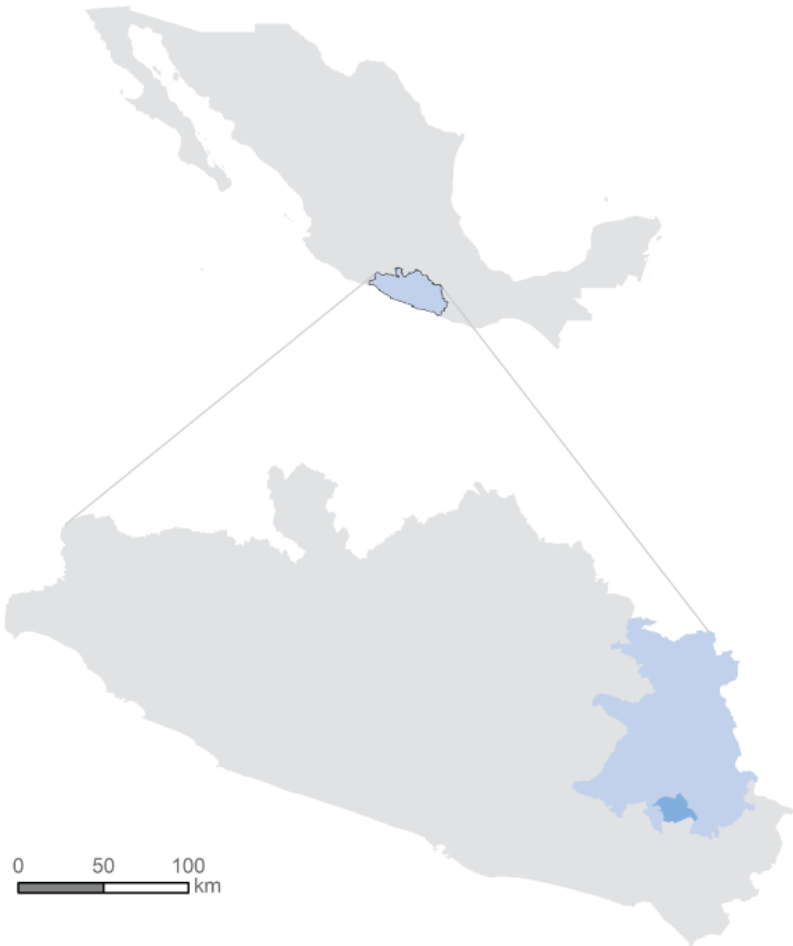
Situating Me'phaa



Situating Me'phaa

9 varieties, ∼100k speakers

- Mi'phaa Míŋuíí (Tlacoapa)
- Me'phaa Mañuwiín (Malinaltepec)
- Me'phaa Váthάá (Huehuetepec)
- Me'phaa Wí'iin (Acatepec)
- Me'phaa Xma'íín (Teocuitlapa)
- Me'phaa Xirágáá (Zapotitlán Tablas)
- Me'phaa Murúxíí (Nanzintla)
- Me'phaa Aguaa (Huitzapula)
- Me'pháa Tsindíi (Azoyú)



The data

Work with speakers from Iliatenco

- Subsumed under Me̲'pha̲a̲ Mañuwi̲ín (Malinaltepec), but different
- All bi- or trilingual

Elicitation techniques:

- Structured elicitation
- Prompted narratives
- Story-builder cards

Grammatical features

Tonal, verb-initial, *pro*-drop, head-marking, w/ pormanteau affixes

- Contrastive tone, tone sandhi
- VSO/VOS alternating
- Arguments indexed on verb via agreement morphemes & clitics
- No case-marking on dependents

Generic verbal template

(5) ASP-(NEG)-AGR-$\sqrt{Verb}$-AGR=CL

Section 3 • Patterns of agreement

Me'phaa agreement - the basics

Verbal agreement in Me'phaa is highly complex

- $\sim$ 7-12 verb classes (Suárez, 1983) based on suffixes
- Agreement occurs on the *left* side of the verb, on the *right* side of the verb, and *in/on* the verb itself
- Encode case? (Wichmann, 2009)

For verbs where agreement surfaces before the root/stem,

- 2SG & PL arguments are most salient
- 1SG indicated by tonal pattern
- 3SG by glottal stop; sometimes postverbal

The data

Transitive verbs (w/o object suppletion)

- Agreement on *left* & *right* side of verb root (prefixation + suffixation/cliticization)

(6) a. Ni-*ta*-xkhax-*iin* ikhiin.
PFV.AFF-2SG-wake-3PL 3PL
'You woke them.'

b. *Nu*-xkhax-*úún=lá*'.
IPFV.AFF.PL-wake-1SG=2PL
'Y'all are waking me.'

The data

Intransitive verbs (unergatives)

- Agreement on *left* side of verb root (prefixation) (& plural enclitics)
- Exception: Non-local subjects can be indexed suffixally, too

(7) a. Na-'-si-een (gi-sian).
IPFV.AFF-3SG-dance-3SG.ERG (NMLZ-dance)
'S/he's dancing (a dance).'

b. *Nun*-sian=xo' (gi-sian).
IPFV.AFF-PL-dance-3SG.INAN.ABS=1PL.EXCL (NMLZ-dance)
'We (but not you) are dancing (a dance).'

The data

Intransitive verbs (inchoatives, statives, & experiencer verbs)

- Agreement on *right* side of verb root (suffixation)

(8) a. Ni-th-*ún* (ikhúún).
PFV.AFF-cut-1SG (1SG)
'I got cut.'/'I cut myself (on accident).'

b. Mbá-*uun*.
be.alone-1SG
'I'm alone.'

c. Ne'ng-*ó'*.
PFV.AFF-get.sick-1SG
'I got sick/tired.'

The data

Ditransitive verbs

- Agreement on *left* & *right* side of verb root (prefixation + suffixation/cliticization)
- R & T compete for suffix

(9) a. Ikháa ma̲-xn-*áa* ikhaa.
3SG IRR-give-2SG 3SG
'S/he will give you to her/him.'

b. Ni-*ra*-xn-*u'* mbá re'e.
PFV.AFF-2SG-give-1SG a.INAN flower
'You gave me a flower.'

The data

Intransitive verbs (verbs of motion & appearance)

- Agreement *in/on* the verb root (root suppletion)

(10) a. Na-ganú'.
IPFV.AFF-arrive
'S/he is arriving.'

b. Na-*dx*anú'.
IPFV.AFF.2SG-arrive
'You are arriving.'

c. Na-*gu*a'nú'.
IPFV.AFF-pl.arrive
'They are arriving.'

The data

Transitive verbs (w/ object suppletion)

- Object agreement *in/on* verb root (suppletion)

(11) a. Ikhúún ni-ka ja-*y*o' (mbá) dxama.
1SG PFV.AFF.1SG-go ST.1SG-carry (a.INAN) banana
'I brought (a) banana.'

b. Ikhúún ni-ka ja-*g*o' (atsún') dxama.
1SG PFV.AFF.1SG-go ST.1SG-carry.PL (two.INAN) banana
'I brought (two) bananas.'

The data

Transitive verbs (w/ object suppletion), cont'd.

- Subjects *never* trigger root suppletion

(12) a. Ni-gwa'nú<u>u</u>=x<u>o</u>' ju-*y*á'=x<u>o</u>' dxam<u>a</u>.
PFV.AFF-PL.arrive-ITER=1PL.EXCL ST.PL-carry banana
'We (not including you) arrived carrying a banana.'

b. Ni-gwa'nú<u>u</u>=x<u>o</u>' ju-*d*á'=x<u>o</u>' dxam<u>a</u>.
PFV.AFF-PL.arrive-ITER=1PL.EXCL ST.PL-carry.PL banana
'We (not including you) arrived carrying bananas.'

Making sense of the data

Me'phaa verb classes (based on agreement patterns and clause type)

- *Ditransitive*: Preverbal A marking + postverbal R/T marking
- *(di)transitive*: Preverbal A marking + postverbal P marking
- *transitive(2)*: Preverbal A marking + object suppletion
- *unergative*: Preverbal S marking
- *unaccusative*: Postverbal S marking
- *unaccusative(2)*: Suppletive S marking
- *dative*: Postverbal S marking

Making sense of the data

Agreement classes form natural classes based on *where* they appear & *what form* they take

Minimally, this involves:

- Class 1 (prefix): transitive, unergative, & Ditransitive subjects
- Class 2 (suffix): transitive objects, inchoative & stative subjects
- Class 3 (suffix): Ditransitive objects, experiencer subjects
- Class 4 (root suppletion): Intransitive & transitive verbs of motion, position

Making sense of the data

Observations:

- Agreement morphemes pattern together based on clause type (transitive, unergative, unaccusative, etc.)
- E.g., morphemes indexing transitive subjects look like unergative ones, transitive objects look like (some) intransitive subjects...
- Suppletive verbs always encode motion, position

Hypothesis

The location and shape of an agreement morpheme reflects the position of the argument it indexes in the syntax

- Agreement is transparent with respect to argument structure

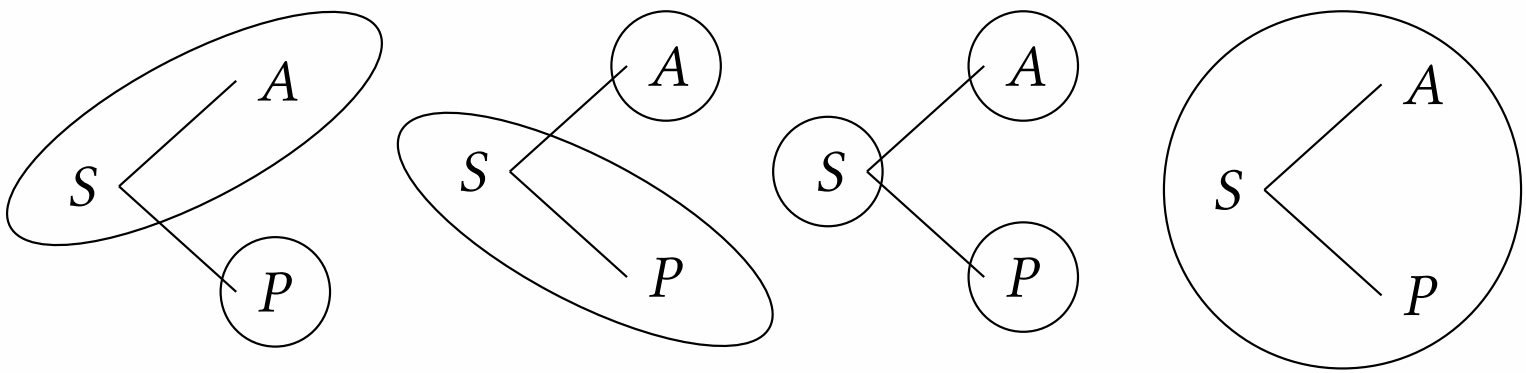
Section 4 • A typological account

Alignment types

Ergativity discussions are often framed in terms of *alignment*

Semantic maps for the 4 alignment types

(13) a. Accusative b. Ergative c. Tripartite d. Neutral



Ergativity as alignment

Seen in this light, Me'phaa exhibits *ergative*, *accusative*, & *tripartite* alignments

- Depends on which verbs are under comparison
- (14a) & (14b) & (14c) ⇒ Ergative (A ≠ S = O) (also suppletion)
- (14c) & (14d) & (14a) ⇒ Accusative (A = S ≠ O)
- (14a) & (14c) & (14e) ⇒ Tripartite (A ≠ S ≠ O)

(14) a. Nixkhax*iín* 'I woke *you*'

b. Nakix*iín* '*You*'re jumping

c. Na*ta*majngúún '*You*'re pushing me'

d. Na*ta*ndu'wá '*You*'re laughing'

e. Ni*dx*anú' '*You* arrived'

Ergativity as alignment

This is an expected outcome:

- Ergative languages are rarely (if ever) consistently ergative (Moravcsik, 1978)
- In some way, ergative alignment is lost, triggering *split ergativity*

Implication:

- There are no ergative languages, only *ergative systems* (Coon & Preminger, 2017)

Another perspective

Ergativity properties (Deal, 2015)

(15)
a. The *ergativity* property
   Subjects of transitive clauses behave differently from subjects of intransitive clauses for some grammatical generalization(s).
b. The *absolutive* property
   Objects of transitive clauses and subjects of intransitive clauses behave identically for some grammatical generalization(s).
c. The *argument-structural* property
   Subjects of unaccusative verbs behave differently from subjects of unergative and transitive verbs for some grammatical generalization(s).

Another perspective

Ergativity properties (Deal, 2015)

(16) a. The *ergativity* property
Na*ta*majngúún. 'You're pushing me'
Ne'ng*áa*. 'You died.'

b. The *absolutive* property
Nixkhax*iín*. 'I woke *you*.'
Nakix*iín*. 'You're jumping.'

c. The *argument-structural* property
Ni*dx*anú'. 'You arrived.'
Na*ta*ndu'wá. 'You're laughing.'
Na*ta*majngúún. 'You're pushing me.'

Another perspective

From the vantage point of *ergativity properties*,

- Me'phaa is *consistenly ergative*
- Me'phaa's unique complexity is informed by all 3 ergativity properties coalescing

Leads to a new question:

- Why does Me'phaa possess all 3 ergativity properties?

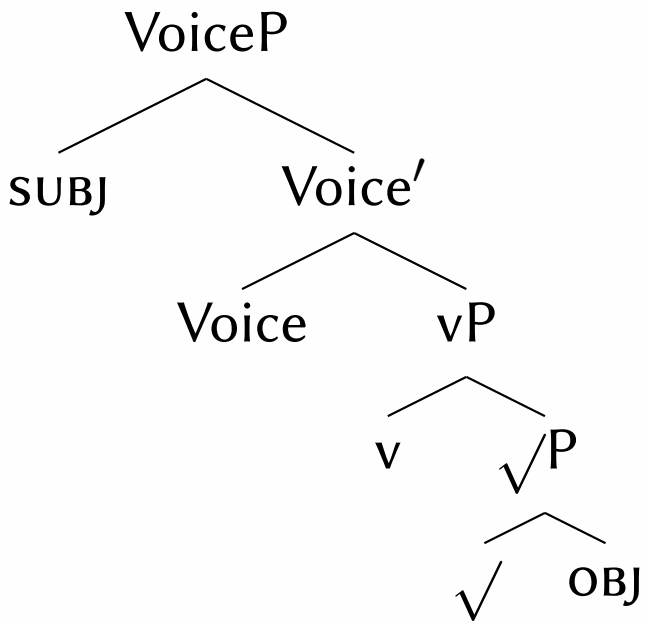
Section 5 • A theoretical account

A decompositional approach

Transitive structure (Kratzer 1996, Pylkkänen 2007, Halle & Marantz 1993, Harley 2014a)

- Transitive = +EA, +IA

(17)



A decompositional approach

*v*P ≠ VoiceP (Harley 2013)

- Evidence for discreteness: Passivization of verbs like 'burn', which participate in causative/inchoative alternations

(18) a. Ni-kh-úún.
PFV.AFF-burn-1SG
'I got burned.'

b. Ni-ta-*tsi*-kh-úún.
PFV.AFF-2SG-CAUS-burn-1SG
'You burned me.'

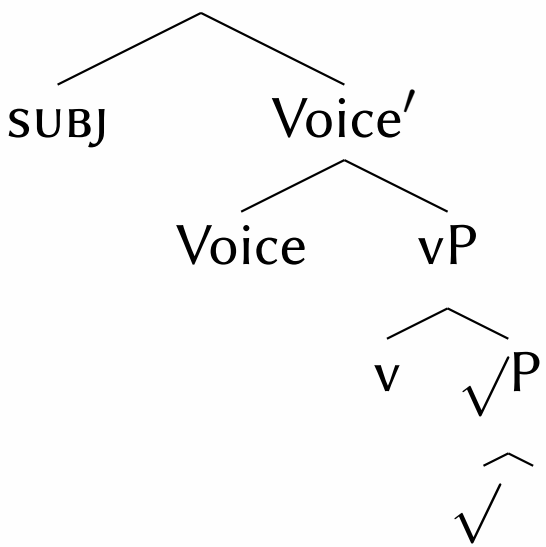
c. Ni-*wata-tsi*-kh-úún.
PFV.AFF-PASS-CAUSE-burn-1SG
'I was burned by you.'

A decompositional approach

Intransitive structures à la the Unaccusativity Hypothesis (Perlmutter, 1978) (to be revisited)

- Unergative = +EA, -IA
- Unaccusative = -EA, +IA

(19) a.



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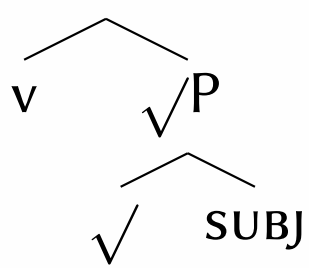
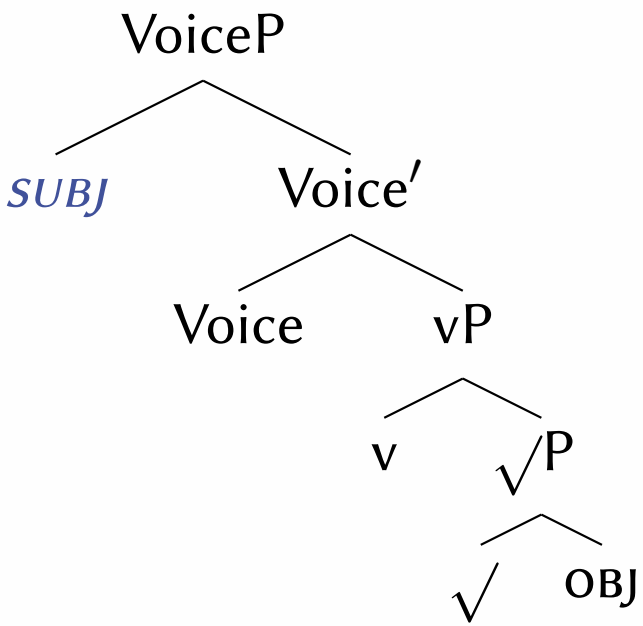


A decompositional approach

Tentative connections between agreement morphemes & structure:

- *Transitive subjects* look like *unergative subjects* because both are in Spec,VoiceP (= Class 1 prefix)

(20) a.



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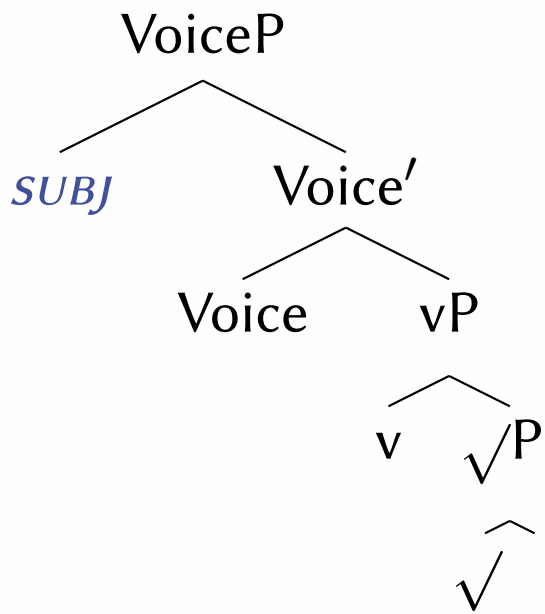
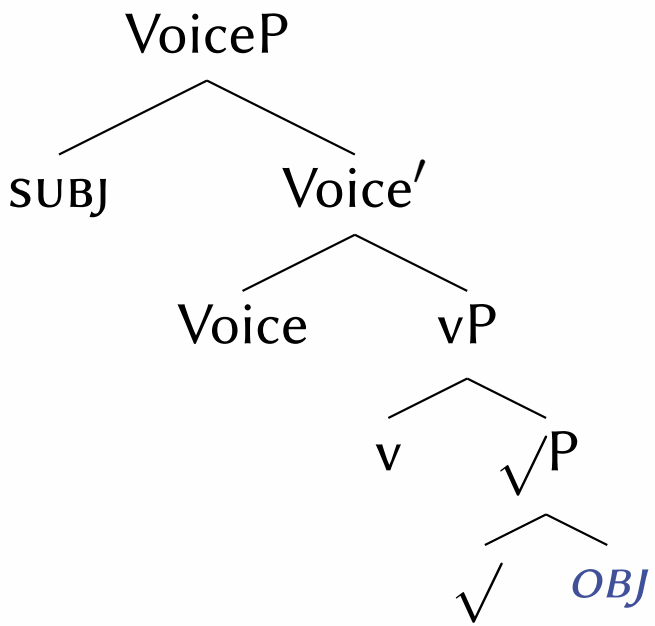


A decompositional approach

Tentative connections between agreement morphemes & structure:

- *Transitive objects* look like *unaccusative subjects* because both are sister to the verb root (= Class 2 suffix)

(21) a.



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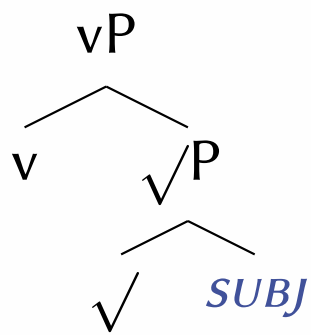


A decompositional approach

Putting the pieces together:

- *Transitive subjects* look like *unergative subjects* because both are in Spec,VoiceP (= Class 1 prefix)
- *Transitive objects* look like *unaccusative subjects* because both are sister to the verb root (= Class 2 suffix)

A problem

Not all unaccusatives in Me'phaa look like transitive objects (recall the argument-structural property).

- How to account for things like root suppletion? (Class 4)
- (Note: I'll save Class 3 for another time)

Diagnosing unaccusativity

Classic tests for unaccusativity don't work for Me'phaa

- Me'phaa doesn't have *have/be* auxiliaries
- There is no *there*-insertion in Me'phaa
- Are there identifiable language-internal diagnostics for unaccusativity?

Diagnosing unaccusativity

Cross-linguistically applicable tests for unaccusativity are hard to come by

- Causative/inchoative alternations exist in Me'phaa
- Peel away layer housing EA, left w/ IA sister to verb

(22) a. Ni-t-*ro*-th-úún.
PFV-2SG-CAUS-cut-1SG
'You cut me.'

b. Ni-th-úún.
PFV-cut-1SG
'I got cut.'/'I cut myself (on accident).'

Diagnosing unaccusativity

Are all internal arguments equal?

- Unaccusatives are not uniform (Borer 1991, Kural 1996, Alexiadou et al. 2006, Alexiadou & Schäfer 2009, 2011, Iwrin 2012, a.o.)
- "Internal argument" is a cover term for things that are not external arguments
- In reality, internal arguments may be heterogeneous

Diagnosing unaccusativity

Evidence for discriminating between types of intransitives and unaccusatives in Me'phaa

- *ne*-cliticization (like Italian, but coincidental!)
- The "iterative" suffix

Ne-cliticization

=ne can stand in place of an inanimate object in a transitive event:

(23) a. Ni-t-ro-thón maga.
PFV.AFF-2SG-CAUS-cut onion
'You cut the onion.'

b. Ni-t-ro-thón*=ne*.
PFV.AFF-2SG-CAUS-cut=*ne*
'You cut it.'

c. *Ni-t-ro-thón(*=ne*) maga(*=ne*).
PFV.AFF-2SG-CAUS-cut(=*ne*) onion(=*ne*)
(Intended: 'You cut the onion.')

Ne-cliticization

But, it's not just about "objects"

(24) Ni-ˈ-sia̲n=*ne*.
PFV.AFF-3SG-dance=ne
'S/he danced it.' (*'It danced.')

(25) Ni-ganú=*ne*.
PFV-arrive=*ne*
'It arrived.'

Generalization

Ne-cliticization only works for internal arguments. (Can be a subject, but not the subject of an unergative.)

The “iterative” suffix

(26)

a. Na-ka.
   IPFV.AFF-go
   ‘I’m going.’

b. Na'-kha.
   IPFV.AFF-come
   ‘I’m coming.’

c. Na-gánu.
   IPFV.AFF-arrive(1SG)
   ‘I’m arriving.’

d. Na-kojmú.
   IPFV.AFF-appear
   ‘I’m appearing.’

e. Na-ka-*a*.
   IPFV.AFF-go-ITER
   ‘I’m going back.’

f. Na'-kha-*a*.
   IPFV.AFF-come-ITER
   ‘I’m coming back.’

g. Na-gánu-*u*.
   IPFV.AFF-arrive(1SG)-ITER
   ‘I’m arriving where I was.’

h. Na-kojmu-*ú*.
   IPFV.AFF-appear-ITER
   ‘I’m appearing where I was.’

The “iterative” suffix

A interesting plot development:

- The “iterative” is incompatible with inchoatives

Generalization

“Iterative” suffixation only works for *certain* internal arguments.
(Illicit when argument is sister to verb root.)

Suggests that this targets verbal constructions with an IA that is not sister to the verb root

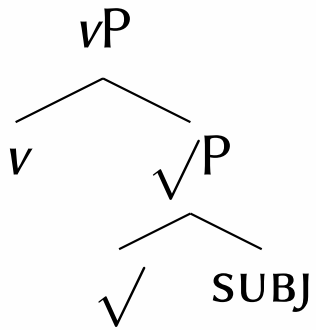
- Gets us 2 classes of unaccusatives
- May be unexpected, given what Harley (& colleagues) proposes about verbal suppletion (Harley 2014b, Bobaljik & Harley 2017, a.o.)

The other unaccusative

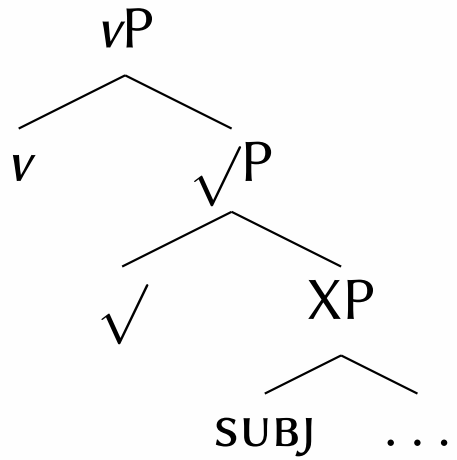
Unaccusative structures are not uniform (Borer 1991, Kural 1996, Alexiadou et al. 2006, Alexiadou & Schäfer 2009, 2011, Iwrin 2012, a.o.)

- Change of state verbs (27a) *vs.* verbs of motion & existence (27b) (Irwin 2012)

(27) a.



b.



Interim summary

Me'phaa verbs offer a snapshot of the clause, with verbal agreement playing a key role:

- Transitive subjects = unergative subjects
- Transitive objects = CoS unaccusative subjects
- Subjects of verbs of motion is different entirely (may be related to object suppletion)

Language-internal diagnostics corroborate unaccusative classes suggested by agreeement patterns

Implications

Agreement in Me'phaa provides insight into *structure*

Agreement classes map onto structural locations:

- Class 1 (prefix) = arg in Spec,VoiceP
- Class 2 (suffix) = arg sister to verb root
- Class 3 (suffix) = arg in ApplP (not discussed today)
- Class 4 (suppletion) = arg NOT sister to verb root

Section 6 • Conclusions

Summary

Me'phaa exhibits rich complexity in patterns of agreement

- Informed by multiple ergativity properties coalescing
- Agreement offers a straightforward view of the syntax of argument structure
- Agreement classes map onto structure

Me'phaa is unique in how agreement relates to structure

- *Many-to-many*, rather than many-to-few, relationship between underlying structures & agreement classes

Insights gained

A two-way street

- Other languages feed our understanding of Me'phaa
- Me'phaa feeds into our understanding of human language

Extreme morphological complexity in Me'phaa contributes to our understanding of how human language(s) work/s:

- Maybe a language can be consistently ergative
- Agreement can be a window into the syntax of argument structure
- Implications for how we understand agreement to work?

Thank you!

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