The role of corpus data in comparative research Case studies from the MelaTAMP project

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December 20, 2017

Background	Empirical sources	New insights into grammatical features	Things I still don't know about Ambrym
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The upshot

 We do not know much about Oceanic languages (especially from Melanesia).

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 - · Expressions of possibility without auxiliaries;
 - Timitive or apprehensive structures without lexical expressions;
- At the same time, the greater variability of supra-lexical structures makes it harder to determine strict differences between closely related varieties.

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About the MelaTAMP project



Things I still don't know about Ambrym

Introduction

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We (Manfred Krifka, Ana Krajinović, Stephan Druskat, two SAs and me) investigate

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- Duration: March 2016 March 2019

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Main accounts previously available for each language

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- In addition, we have designed storyboard stimuli to elicit specific contexts.
- Our collaborators and us have run these stimuli with 4-9 speakers per language this summer, except for Saliba-Logea.

Corpus data

Background

Empirical sources: corpus data

Language	Texts	Tokens
Daakaka	119	68,291
Daakie	103	86,112
Dalkalaen	114	33,987
Mavea	95	63,123
North-Ambrym	75	142,609
Saliba	214	149,516
South-Efate	110	64,765

Empirical sources: corpus data

```
\ref .0978
\tx ma wese webung wi
                                 sii,
                                      wi
          vyer ma
                    gete,
                                  mu
  kukyu
\mb ma wese webung w- i
                                 sii, w-
        vyer ma
                                        ku-
                    ge
                         -te,
                                  mu
  kyu
\ge REAL enough day POT- COP three POT- COP
   four REAL like -MEDIAL REAL REDUP-SURROUND
\ps tam
                      tam- cop
         V
                n
                                 num
        num tam
                  v
                       _***
                                v.pre v.tr
   COD
\ft it might have been three or four days, it
  surrounded him
```

Empirical sources

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Categories	Name	Values
Clause type	clause	(main): assertion (default), question, directive, other; embedded: proposition, e.question, conditional, temporal, adverbial, attributive
Temporal domain	time	past, future, present
Modal domain	mood	factual, counterfactual, possible
Event structure	event	bounded, ongoing, repeated, stative, cos (change-of-state)
Polarity	polarity	positive, negative

Corpus data

Background

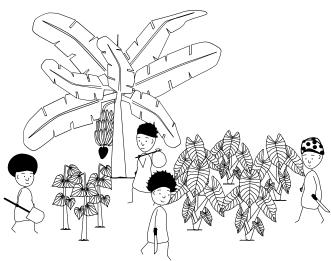
Applying the tags

```
\ref .0978
\tx ma
        wese webung wi
                                   sii,
                                                    vyer
                             kukvu
  ma
        gete,
                      mu
\mb ma
                             i
                                   sii,
                                               i
        wese
                webung w-
                                                    vver
                             ku-kvu
  ma
        αe
             -te,
                      mu
\qe REAL enough day POT- COP three POT- COP four REAL
  like -MEDIAL REAL REDUP-SURROUND
\ps tam
        V
                n
                       tam- cop num tam-
                                               COD
                                                    num
            _***
  tam
                      v.pre v.tr
\ft it might have been three or four days, it surrounded
  him
\unitref 1 2 13
\clause 1 proposition
\time 1 present
\mood 1 possible
\event 1 stative
\polarity 1 positive
\kevwords 1 EPISTEMIC
```

Elicitation materials

Background

Storyboards



Things I still don't know about Ambrym

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About storyboards

 Storyboards are stories represented by pictures such that each picture can be summarized by one or two sentences. **Flicitation materials**

Background

About storyboards

- Storyboards are stories represented by pictures such that each picture can be summarized by one or two sentences.
- They allow for the elicitation of relatively natural speech while at the same time narrowly targeting specific meanings.

Areal TAM features under the typological radar

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- Embedding structures for the expression of possibility (von Prince & Margetts, 2017).

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- A combination of reduplication with imperfective aspect markers for the expression of habitual aspect (von Prince et al., accepted).
- Embedding structures for the expression of possibility (von Prince & Margetts, 2017).
- It would not be good if...-structures for the expression of timitive or apprehensive modality.

Expressing possibility

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- While adverbs, affixes etc. are also taken into consideration, more complex embedding structures are ignored across the board.
- In many Oceanic languages, there are no modal auxiliaries to express possibility (von Prince & Krajinović, 2017).
- Instead, five out of seven of our project languages resort to embedding structures.

Expressing possibility without auxiliaries

Expressing possibility: auxiliaries

The project languages differ in whether they can express negative and positive possibility by auxiliaries or not.

Language	Positive possibility	Negative possibility
Nafsan	lakor "may"	kano "can't"
Mavea	adi "can"	leng "cannot"
Saliba-Logea	_	_
North Ambrym	_	_
Daakie	_	_
Daakaka	_	_
Dalkalaen	_	_

Expressing possibility without auxiliaries

Expressing possibilities: embedding structures

Saliba-Logea:

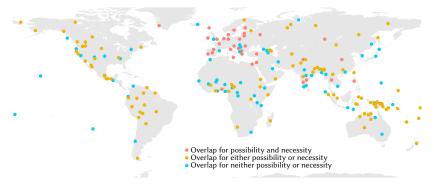
(1) gonowa-m meta kabo ku dobi ku
ability-2sc.poss part then 2sc.sbj go.down 2sc.sbj
unui-he-mate
catch-caus-die
"you are able to go down, to catch it and kill it (lit. 'Your ability exists to...')"

Daakaka:

(2) telelel [...] to kuowilye na long.tailed.triller NEG;REAL know NEG;POT tas-mar-mar yan lee sit-REDUP-quiet on tree "the long-tailed triller [...] can't sit still on a tree"

Expressing possibility without auxiliaries

Wider typological implications



According to van der Auwera & Ammann (2013), most languages outside of Europe do not conflate epistemic and deontic modality (see also Viebahn & Vetter 2016). However, that is probably a function of how well the languages are studied.

Background

Timitive/ apprehensive structures

Lichtenberk (2016) has identified *timitive* or *apprehensive* modality as a widespread category in Oceanic languages. Toqabaqita:

(3) Ada wane qeri ka riki nau.

TIM man that 3sg.seq see 1sg

"[I fear] the man might see me."

Timitive structures in the project languages

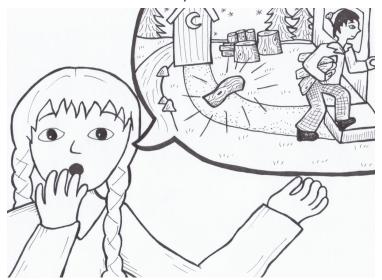
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Timitive structures in the project languages

- Among the project languages, only Saliba-Logea has a specific marker dedicated to timitive modality.
- However, when we ran the storyboards in the six remaining languages, we found that several timitive contexts were expressed consistently with a specific canonical structure, across languages and speakers.

Background

Timitive contexts in the storyboards



Background

Timitive contexts in the storyboards



Timitives: it would not be good

Mavea:

(4) sopo-du me ko-va ko-taraia-ira mo-evuia ko-laia-ira
NEG-good FUT 2SG-go 2SG-chop-3PL 3SG-finish 2SG-take-3PL
ko-mo-laia-ira ima mo-evuia ko-sopo-onea taite
2SG-COND-take-3PL house 3SG-finish 2SG-NEG-see one
i-sovi na sala
3SG.IR-fall Loc road
"no good you chop firewood then take it, if you take it home
you don't see a piece fall on the road" (VG20171059.006)

Background

Timitives: it would not be good

Daakaka:

(5) Te to vu ne ka na=p tewilya te ka
DISC NEG;REAL good TRANS COMP 1SG=POT kick DISC ASR
na=p mur vyan yen wye.
1SG=POT fall go in water
"And it would not be good if I stumbled on it, and fell into the water."

Interim summary

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Things I still don't know about Ambrym

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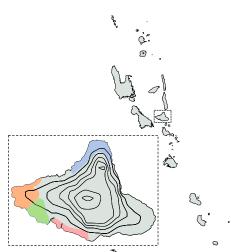
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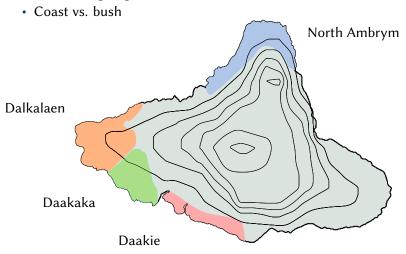
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- It helps to have corpus data both from targeted and non-targeted data collection...
- ...and to have data on comparable contexts for different languages from the same region to identify recurrent patterns.
- Embedding structures for the expression of possibility, complex timitives and complex habitual structures may very well turn out to be regional or family-specific features.

About Ambrym



Microvariation on Ambrym

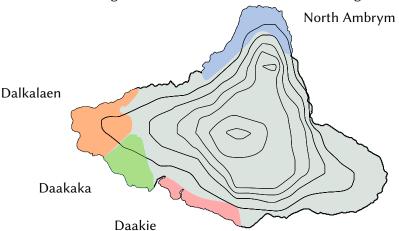
Factors affecting linguistic differences and similarities:



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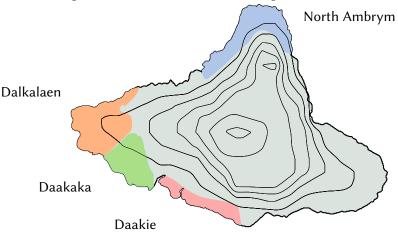
Factors affecting linguistic differences and similarities:

· French vs. English schools, Catholic vs. Protestant religion



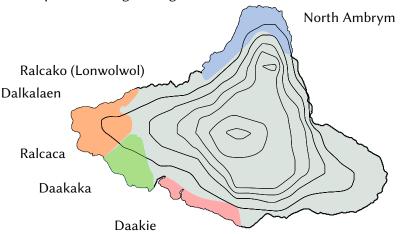
Factors affecting linguistic differences and similarities:

· Marriage relations to other islands/ villages



Factors affecting linguistic differences and similarities:

• Exposure to neighboring varieties



Social differentiation and impact on languages

 Contact to outside communities: More Bislama loans in Dalkalaen as opposed to Daakaka;

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- Marriage relations: varying levels of multi-linguialism; varying degrees of inter-language mixing;
- Exclusive varieties: Ralcaca (Polipetakever, Tou)

Within-language variation in Dalkalaen

 Compared to Daakaka, I have found more within-language and within-speaker variation in Dalkalaen. For example, Microvariation on Ambrym

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- The same speakers will sometimes use Daakaka words instead
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 bone).
- The same speakers will sometimes conflate 1 person exclusive and second person paucal and plural forms of pronouns, sometimes not.

Subject agreement markers in Dalkalaen

Table: The system of subject agreement markers

Person	Singular	Dual	Paucal	Plural
1ex	na	amro	miju/muju	qi/mi
1in		taro	ju	yi
2	qo	maro	muju	mi
3	Ø	ro	ri	ra

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- We do not know much about most Oceanic languages from Melanesia.
- In Vanuatu especially, there is still no consensus about boundaries between and numbers of languages.
- Some varieties exhibit more intra-variety variation than others...
- · ...for reasons I do not fully understand.

Counterfactual conditionals

- The most frequent environment for counterfactual reference are counterfactual clauses.
- In many languages, counterfactual clauses are themselves characterized by supra-lexical, canonical structures.
- In everyday language, counterfactual clauses are not very frequent.
- (6) If Laura had missed the train, she would have been late to the conference.

Eliciting counterfactual contexts



Figure: From TFS Working Group (2010)

Rare contexts: counterfactuals

Background

Counterfactuals in Dalkalaen and Daakaka

- (7) a wuto sene ka na do kirine yaafu mwermwer ta
 DISC ask catch COMP 1SG stay follow man short DEM
 lo bala nga t=ii be?
 DISC CNTF FOC DIST=be.like how
 "And she asked: If I had gone with that short man, how would
 it have been?" (Dalkalaen)
- (8) ma ka ka we pwe lene na ma kiyu te yene te

 REAL SAY COMP POT STAY MARRY COMP REAL fat DISC NOW DISC

 bili ka ti ki=vi.

 time ASR DIST be.like=how

 "she asked how it would have been if she had married the fat
 one" (Daakaka)

Summing up

- We still do not know much about the Oceanic languages of Melanesia.
- Our knowledge about supra-lexical structures is particularly fragmentary.
- We need to collect more targeted and untargeted data to ...
 - ...discover area- or family-specific patterns.
 - ...better understand the parameters of micro-variation.

Rare contexts: counterfactuals

Thank you!

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