Word units in the Oceanic predicate complex

Kilu von Prince

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Structure

Early settlement of Papunesia

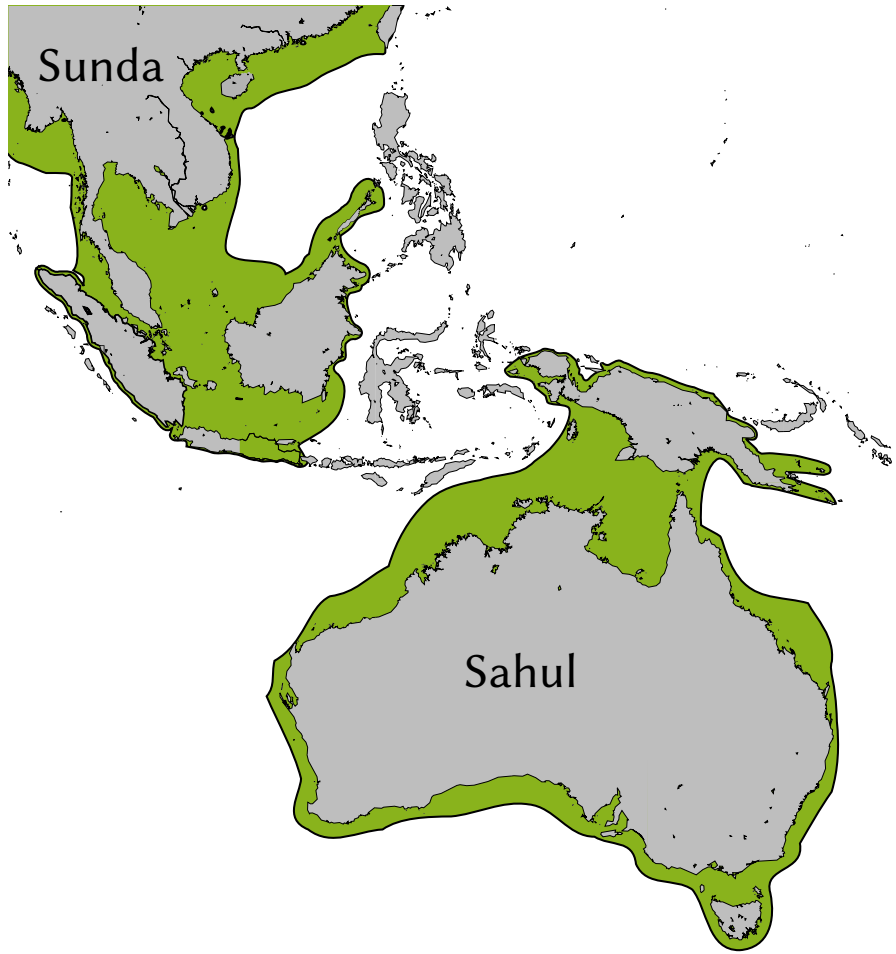


Figure: The Sahul and Sunda continents around the time of the first settlement 60k-40k years ago. Roughly reproduced from Harrison *et al.* (2006)

The Austronesian expansion

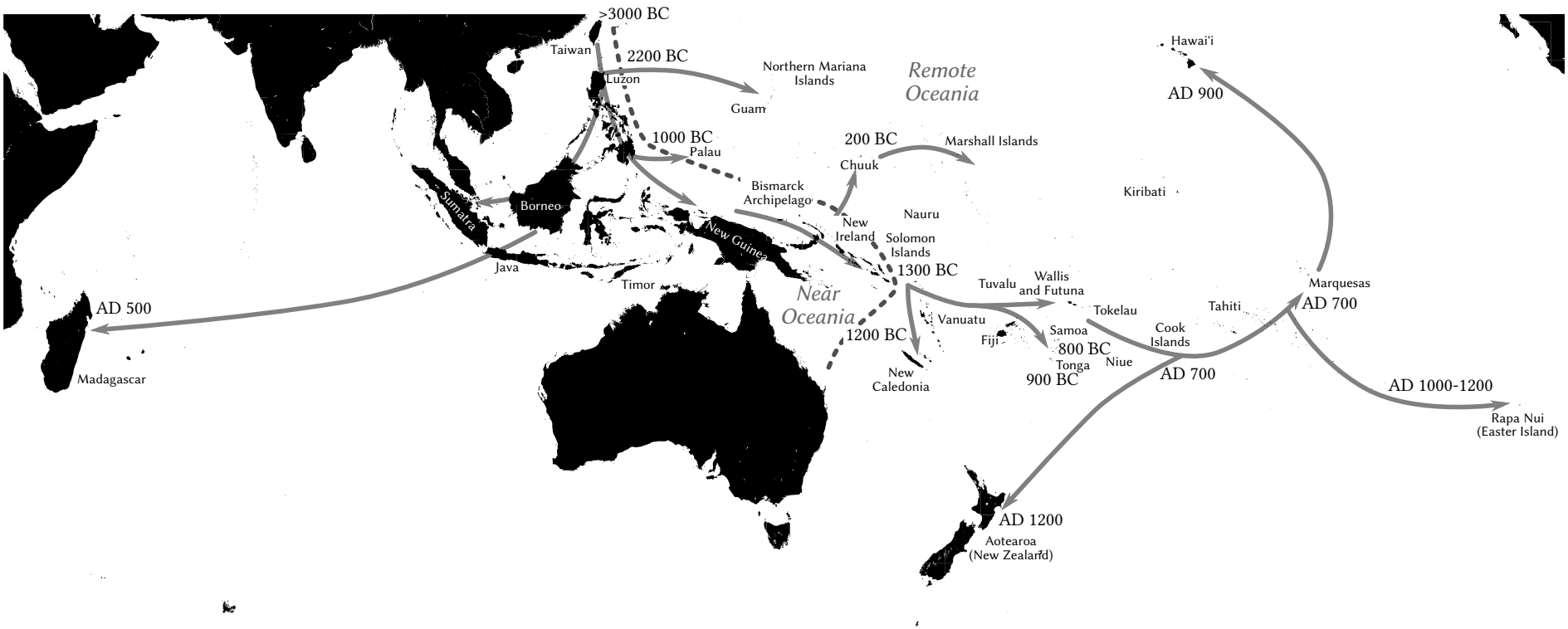


Figure: The Austronesian Expansion; based on Benton *et al.* (2012)

The Oceanic predicate complex

This is partly based on joined work with Cat Butz.

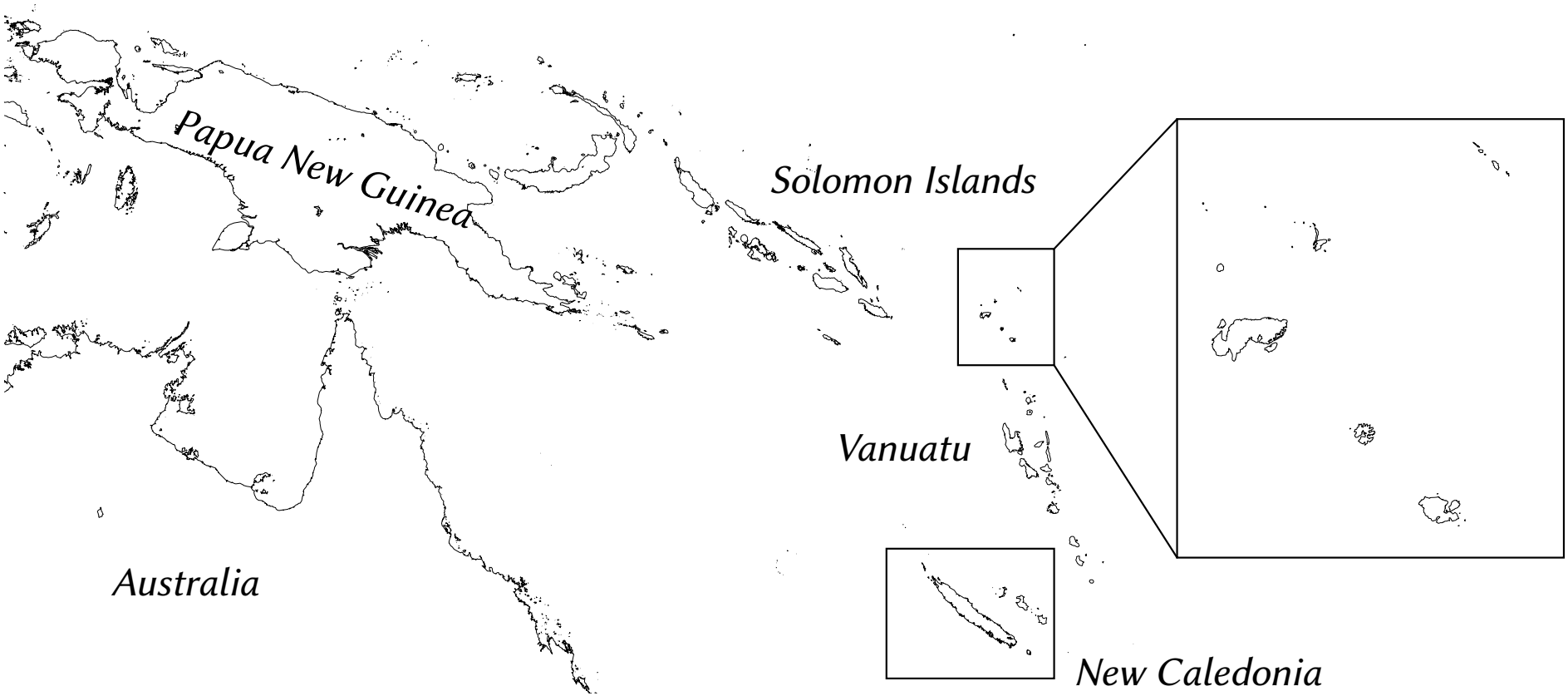
The Oceanic predicate: Overview

Pawley 2003: 149:
Subject features – TAM/polarity – (Reduplication) – verb root ...

- verb plus modifiers (e.g. subject agreement, TMA, negation)
- phonological phrase with single intonational contour
- modifiers free forms which can be said and glossed in isolation

⇒ According to Pawley, the verb complex is word-like phonologically and morphosyntactically, but unwordlike lexically.

Differences in fusion: New Caledonia vs. Santa-Cruz-Reefs languages



Isolating predicate complex: Tinrin

(1) Nalögo (Santa-Cruz-Reefs)

te=lë-mno=lü *ma*
NEG1=3AUG.PFV-stay=NEG2 DEM1.PROX
"No, they were not here." (Alfarano, 2021: 249)

(2) Tinrin (New Caledonia)

kevi *re* *see* *ta* *poka*
1PL.EXCL HAB NEG kill pig
"We did not hunt pigs in those days." (Osumi, 1990: 175)

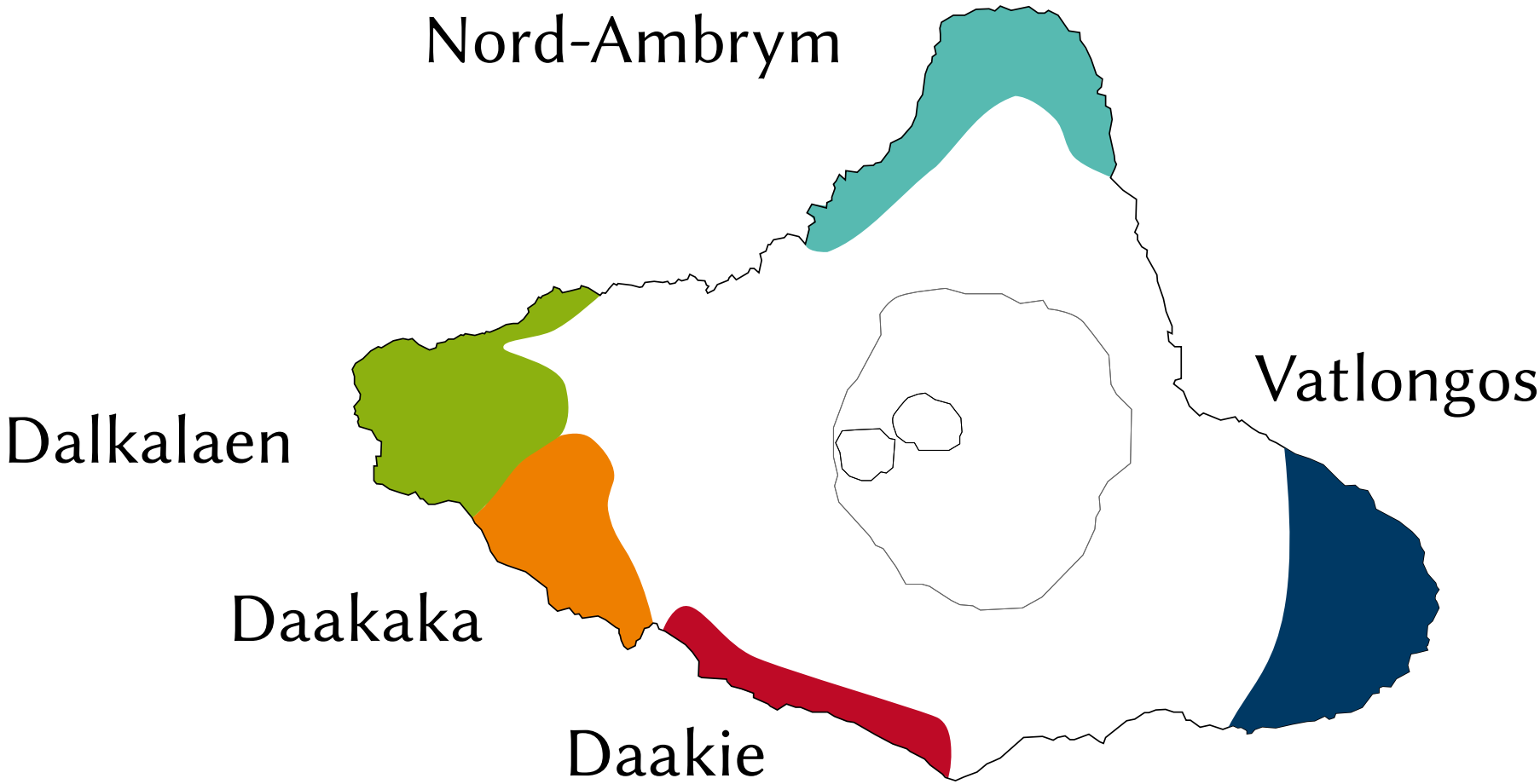
Difference in fusionality

- The orthographic conventions used for each language might exaggerate the linguistic differences between them.
- In both languages, the order of elements in the predicate complex is fixed.
- Nalögo does appear to have more cumulative morphemes and more allomorphy.

Vanuatu


Torres Islands
Banks Islands
Vanua Lava
Santa Maria
Espiritu Santo
Maewo
Aoba
Pentecost
Ambrym
Malakula
Shepherd Islands
Epi
Efate
Erromango
Aniwa
Futuna
Tanna
Aneityum

Ambrym languages



Variation: The Daakaka Potential marker I

(3) Enclitic /p/:
Da=p lyung vyan pyan!
1D.IN=POT bathe go under
“Let’s dive!”

(4) Monoconsonantal proclitic /w/:
ko w=en we!
2SG POT=eat first
“Please eat!”

Variation: The Daakaka Potential marker II

(5) Vowel harmonic proclictic /wV/:
sam oko=an ka wu=vu
2SG.POSS travel=NMLZ ASR POT=be.good
“your journey will be successful.”

(6) Syllabic with disharmonic vowel:
ka wa mini vyos
ASR POT drink coconut
“she will drink a coconut”

(7) Not realized before bilabial consonant:
Da=∅ vyan
1.INCL.DU=POT go
“Let’s go!”

Variation: Dalkalaen potential marker

(8) *ba muju yan fyan*
POT 2PC go down
“Go down!” (to several people)

(9) *ba yi mae p-ii be ne*
POT 1P.IN make POT-be.like which TRANS
“What shall we do about it?”

(10) ∅ *na* ∅ *kebu*
1SG return
“I shall return.”

Subject agreement markers in Daakaka

Person	Singular	Plural	Dual	Paucal
1ex	*na*	*kinye*	*kana*	*kisi*
1in		*ra*	*da*	*si*
2	*ko*	*ki*	*ka*	*kasi*
3	∅	*ya*	___ *ye* ___	

Table: The pronominal system. For each person row, the first line shows the non-subject pronoun, while the second line shows the subject pronoun. (t): topic; (o): object

TAM markers in Daakaka

	enclitic	proclitic	monosyllabic
Pos. Realis	*=m*	*mw=*	*mwe/mV*
Neg. Realis			*to*
Pos. Potential	*=p*	*w=*	*wV*
Distal	*=t*	*t=*	*tV*
Open Polarity			*doo*
Necessity /neg. Pot.	*=n*		*nV*
Change of State			*bwet*

Table: The system of TAM markers. V: vowel; Pos: positive; Neg: negative; Pot: Potential.

Word units

How do we decide for an analysis of words when faced with at least the following options?

(11) a. nambwemini vyos

b. nam bwe mini vyos

na=m bwe mini vyos
1SG=REAL CONT drink coconut
"I'm drinking a coconut."

Pro single-word analysis

The predicate complex is morpho-syntactically wordlike in the following ways (Haspelmath, 2011):

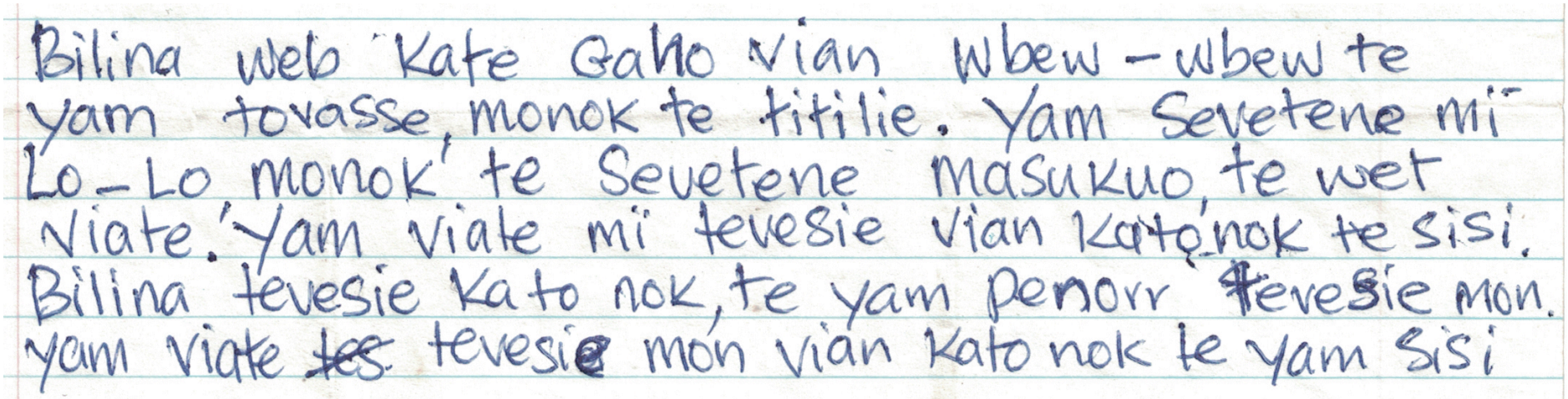
- Strict order of elements;
- Fairly strong paradigmatic restrictions;

Further advantage to a single-word analysis: No inconsistencies in assigning functions to word units;

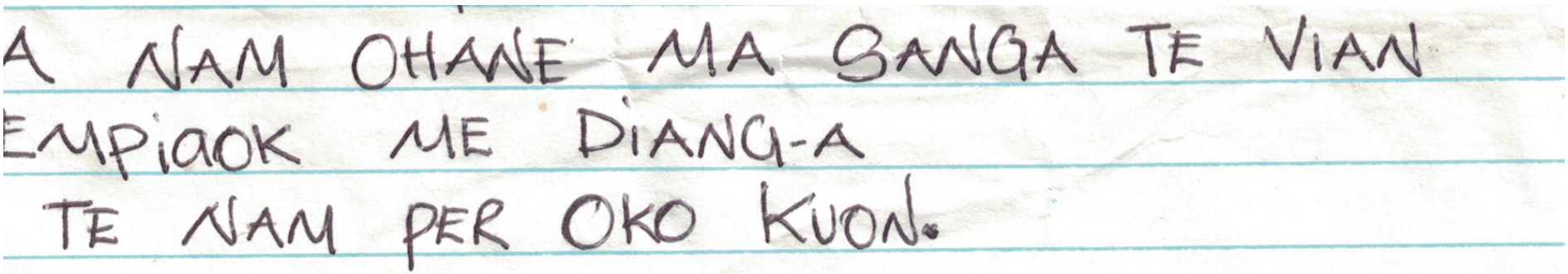
Pro multi-word analysis

- The predicate complex can still get quite complex (*nambweteeteepyakilye basee*)
- This would produce sound sequences that are not common inside simple lexical words (Dixon & Aikhenvald, 2003);
- Does not correspond to speaker intuitions.

Speaker intuitions: Spontaneous orthographies


Bilina web 'kate Gaho vian wbew-wbew te
yam tovasse, monok te titilie. Yam Sevetene mi
Lo-Lo monok' te Sevetene masukuo, te wet
viate. Yam viate mi tevesie vian kato nok te sisi.
Bilina tevesie kato nok, te yam penorr tevesie mon.
yam viate tes tevesie mon vian kato nok te yam sisi

Spontaneous orthographies



Phonological word units

- Different languages have different prosodic properties that operate on word units;
- These primarily affect factors such as
  - stress
  - tone
  - vowel harmony

Word-specific prosodic processes

	Mora-based	Syllable-based	Stress-based
stress correlates	pitch	pitch	pitch, duration, intensity
stress effect	none	none	vowel reduction, vowel lengthening, consonant changes
stress placement	predictable, fixed		unpredictable, free
tone	possible		no
vowel harmony	possible		no
syllable structure	simple	simple	complex
syllable divisions	unambiguous		ambiguous
assimilations	few		frequent
cluster resolution	yes		no
length contrasts	yes	possible in all syllables	not in unstressed syllables

Table 1: Phonological parameters for a typological study of linguistic rhythm

Figure: From Schiering (2007: 341), based in part on Auer (1993)

Word prosody in Daakaka

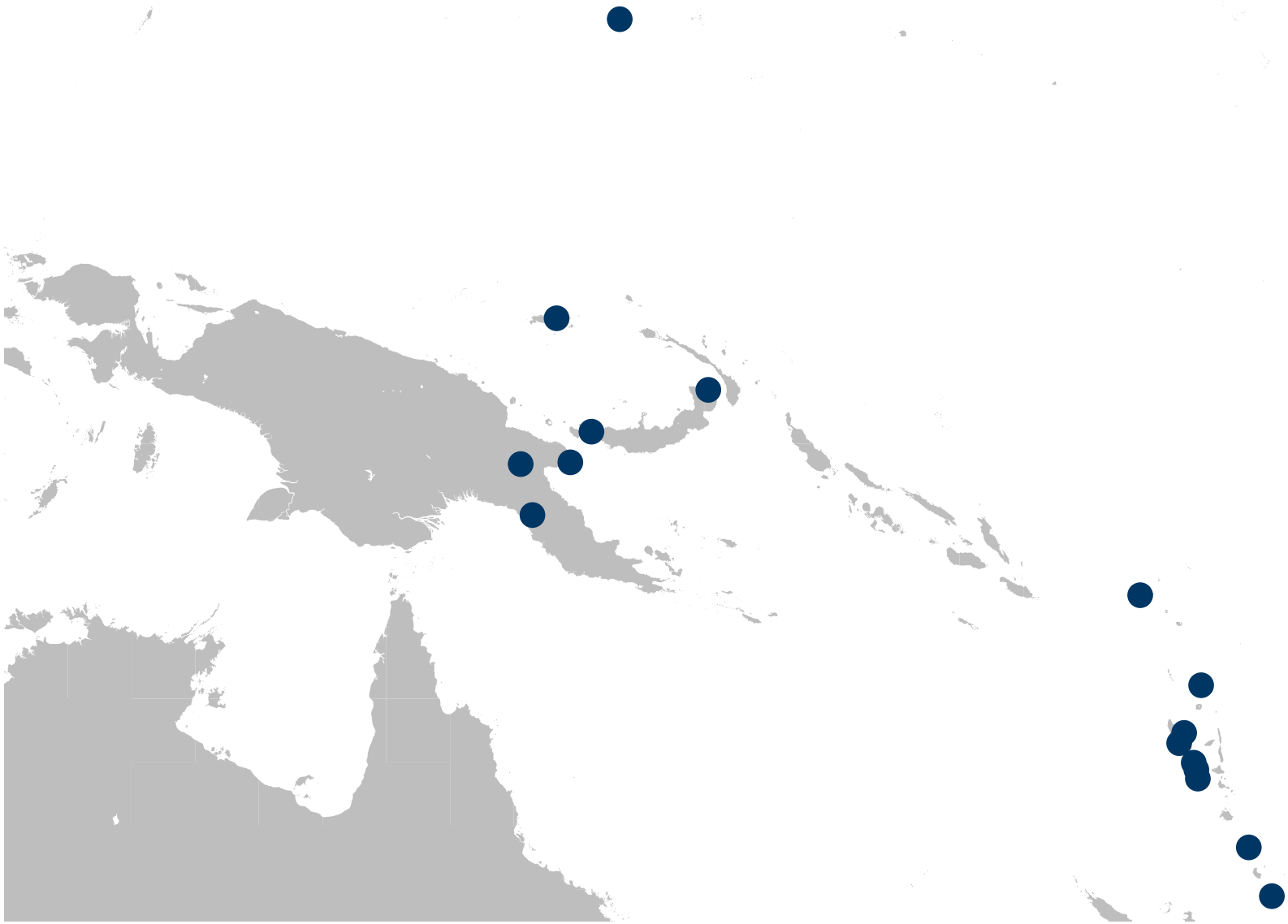
- Pitch does not appear to target specific positions within a word, but rather the edges of phrases.
- There is no reduction or lengthening of syllables.
- Tone: no;
- Vowel harmony: yes;
- Syllable structure: relatively simple (C[wy]VC);
- Syllable divisions: a bit ambiguous in vowel sequences;
- Assimilations: few;
- Cluster resolution: some;
- Length contrast: yes (*le* “marry”; *lee*: tree)

Vowel harmony in Oceanic

> *Oceanic languages do not have rich affix morphology, and very few have morphophonemic vowel harmony.* Alderete & Finley (2016: 770)

- Alderete & Finley (2016) is based on Polynesian languages (Fijian, Samoan, Tongan, Hawaiian).
- This statement does not apply to Oceanic languages of Melanesia.

Vowel harmony in Oceanic: some finds



Vowel harmony in West Ambrym languages: research history

> *The 3rd singular uses the mere tense particles, with adaptable vowel; this worker has not as yet been able to work out any clear principle of vowel harmony or adaptation. (Paton, 1971: 50)*

Harmonic TAM markers in Daakaka

(12) *na=m ongane ma sanga*
1SG=REAL feel REAL bad
“I’m sad.”

(13) *na=m en mo=nok*
1SG eat REAL=finish
“I have already eaten.”

(14) *pwe ku-kuo ti ki=tak*
REAL.CONT REDUP-run DIST like=PROX
“He was running around like this.”

Disharmonic TAM markers in Daakaka

(15) *mwe tii-tii*
REAL REDUP-sting
“it stings”

(16) *ma ongane daa nyoo*
REAL hear word 3PL
“she heard these words”

(17) *ya=m sewete=e ma sukuo*
3PL=REAL join=TRANS REAL together
“they joined them together”

Vowel harmony of TAM markers with monosyllabic vs. multisyllabic verbs

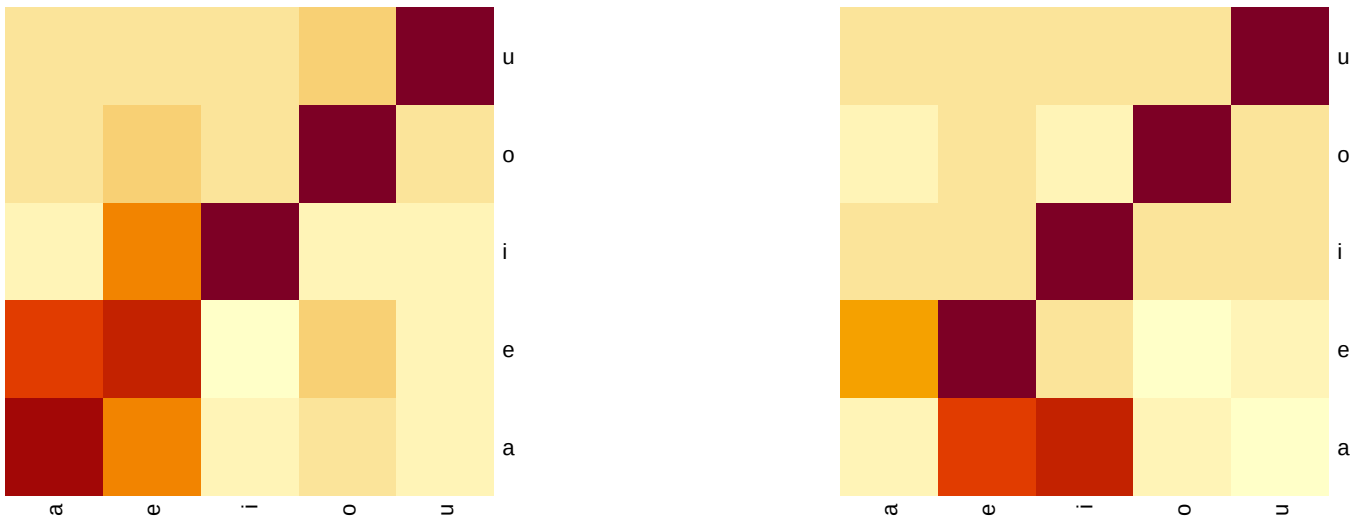


Figure: Darker colors indicate stronger correlations. Left: monosyllabic words; right: multisyllabic words. y: vowel of TAM marker; x: (first) vowel of verb

Vowel harmony in other areas of the language

lV: woody plant:

(18) *lo-o*
tree.of-coconut
“coconut palm”

(19) *lu-tuwu*
tree.of-bushnut
“bushnut tree”

(20) *li-vis*
tree.of-banana
“banana plant”

(21) But:
le-daa
tree.of-coraltree
“coraltree”

Vowel harmony in other areas of the language

-eli/*-uli*: diminutive:

(22) *meby-un-eli*
grandchild-3SG-DIM
“her little grandchild”

(23) *mun-uk-uli*
brother-1SG-DIM
“my(F) brother”

Interim conclusions

- Realizations of the predicate complex in Daakaka and Dalkalaen are highly variable.
- Across Oceanic languages, there is a lot of variation in how functions are distributed over word units in the predicate complex.
- Daakaka fits the hypothesis about syllable- and mora-timed languages.
- Vowel harmony is quite prominent in the language.
- Oceanic $\neq$ Polynesian!

Typological implications

(24) *nambwemini vyos* or *nam bwe mini vyos*?

The analysis of word units and word boundaries has several practical and theoretical implications:

- Orthographies should relfect speaker intuitions, be easily learnable and readable;
- Traditional typological categories are dependent on word units, e. g.:
  - (poly-)synthetic vs. isolating
  - head-marking vs. dependent-marking

Fundamental questions

- Different languages have different word-specific prosodic processes, primarily:
  - stress
  - vowel harmony
  - word-specific tonal processes
- Do these patterns emerge as a by-product of usage?
- Or are these patterns in themselves useful for learning, producing or processing speech?

Thank you!

Vowel harmony in Oceanic: preliminary review I

- Puluwatese (Elbert, 1974: 52f);
- Jabem (Dempwolff *et al.*, 2005: 7f);
- Tolai (58 Mosel, 1984: marginally);
- Una (Louwerse, 1988: 11f);
- Markahm languages of PNG (Holzknecht, 1989);
- Mekeo (Jones, 1998: 257);
- Maleu (Haywood, 1996: 147);
- Proto Oceanic (Ross, 1988);
- Loniu (Hamel, 1994: e. g. 32ff);
- Awad Bing (Bennett & Bennett, 1998: 162-172);
- Sougb (Reesink, 2002: 222);
- Neve'ei (Musgrave, 2007: 23ff);
- Sakao (Crowley, 2002: 17ff);

Vowel harmony in Oceanic: preliminary review II

- Atchin (Capell & Layard, 1980);
- Ura (Crowley, 1999);
- Mwotlap (François, 2005: 117);
- Anejom (Lynch, 2000: 31);
- Navahaq (Dimock, 2009: 38ff)
- Nalögo (Alfarano, 2021)
- Bislama (Crowley, 2004)
- Crowley (2006) argues that diachronic traces of vowel harmony in Avava;
- On Ambrym, Fanbyak and Vatlongos have previously been described to show some vowel harmony (Ridge, 2019; Franjieh, 2016);

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