

Prosodic phrasing in western Austronesian languages



Nikolaus P. Himmelmann

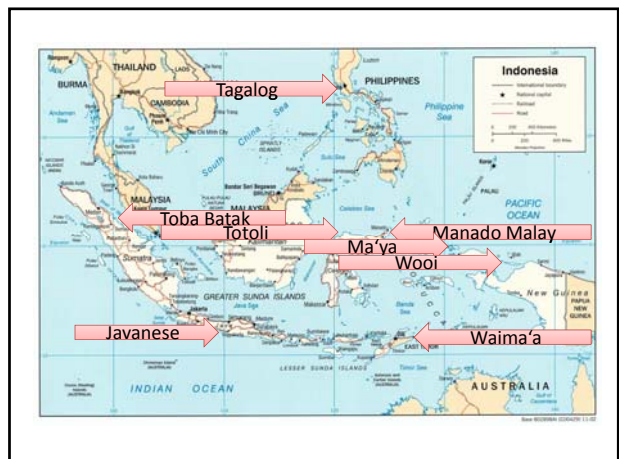
Westfälische Wilhelms-Universität, Münster

Claims

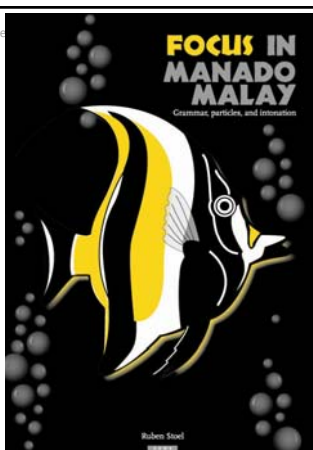
- 1) two levels of prosodic structure
 - intonation unit (IU)
 - intonational phrase (ip)
- 2) no (intonational) pitch accents for focus marking
- 3) right-headed vs. left-headed constructions/languages
- 4) metrical structure (lexical accent) only of secondary relevance for intonational structure

and an unresolved question

What are the principles and constraints for segmenting intonation units into intonational phrases?



Institut für Allgemeine



Definition of the intonation unit (IU)

- 1) interruption of rhythmic delivery/break: **pause** and/or **anacrusis** and/or **lengthening** of unit-final syllables
- 2) Intonation I: **reset of pitch level** (offset/onset phenomena, reset of declination)
- 3) Intonation II: change of pitch at boundaries, especially if on unaccented syllable (**boundary tones**)

A simple example from English

you see his hand sometimes at close up / (0.9)
uh snatching the pears from the tree / (0.7)
and you hear the sound really: strongly \ (0.4)

Size of intonation units

- one-clause-at-a-time-hypothesis (Pawley & Syder 2000)
- one new idea unit (Chafe 1994)

Size of intonation units

Syntactically, the typical size of an IU tends to be a major phrase (maximal projection):

NP/DP, PP, clause/IP

Exception: particle, conjunction, fixed phrase
= regulatory units

Regulatory intonation units

(Chafe 1994: 63f)

⇒ interactional/text structuring function

- | | | |
|-----|--------------------|---------------|
| (A) | ... Well, | (regulatory) |
| (A) | isn't she healthy? | (substantive) |
| (B) | ... Mhm, | (regulatory) |

other examples from English: *and then, you know, let me see, oh, maybe, I think*

Intonation Unit (IU)

universal: functions and factors determining the size of IUs

⇒ Levinson's (2006) *Human 'Interaction Machine'*

Not universal: **phonological structure** of IUs, in particular anything related to tone/the tonal marking of IUs and information structure ('focus')

Phonological structure of an intonation unit

[σσσσσσσσσσσσσσ] (final lengthening, pause, etc.)

Phonological structure of an intonation unit

(%T) T%

↓ ↓

[σσσσσσσσσσσσσσ]

T% = **boundary tone** (final, initial)

Phonological structure of an intonation unit

(%L) H%

↓ ↓

[σσσσσσσσσσσσσσ]

Tonal targets can be **H**igh or **L**ow

Phonological structure of an intonation unit

(%T) T- T%

↓ ↓ ↓

[σσσσσσσσσσσσσσ]

Edge tones

T% = boundary tone

T- = **phrase accent**

Phonological structure of an intonation unit

T% T* T*+T T-T%

↓ ↓ ↓ ↓

[σσσσσσσσσσσσσσ]

Metrically-anchored tones

T* = **pitch accent (monotonal)**

T*+T = **pitch accent (bitonal)**

T- = phrase accent

T% = boundary tone

Two major types of phonological structure for IUs in database

T- T% T- T%

↓ ↓ ↓ ↓

[σσσσσσσσσσσσσσ] [σσσσσσσσσσσσσσ]

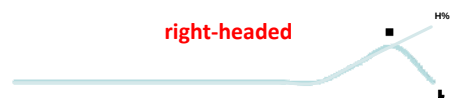
i.e. **only edge tones**

T% = boundary tone

T- = phrase accent

Weima's Totoli

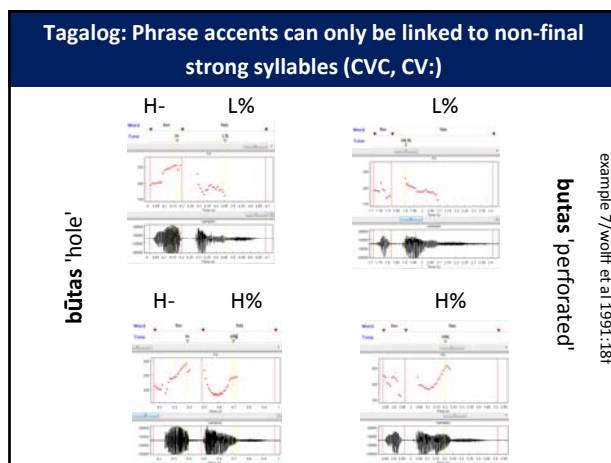
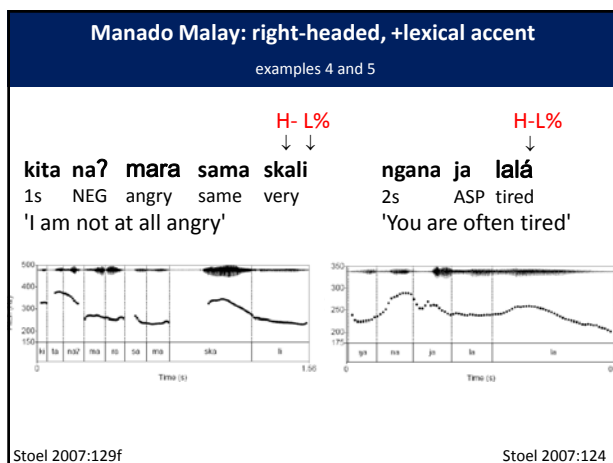
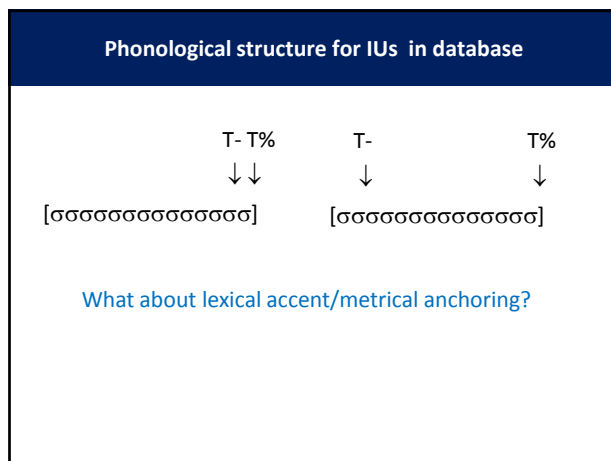
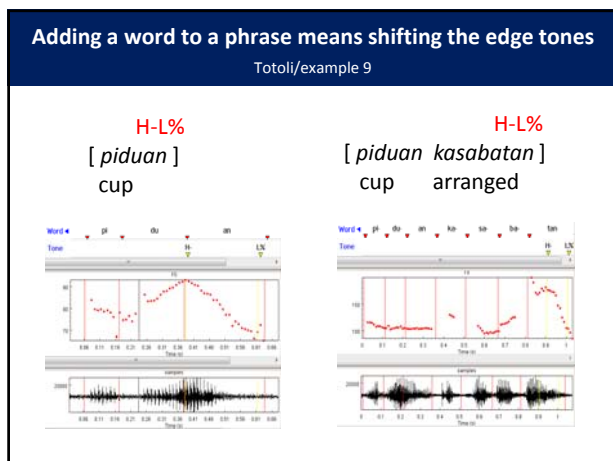
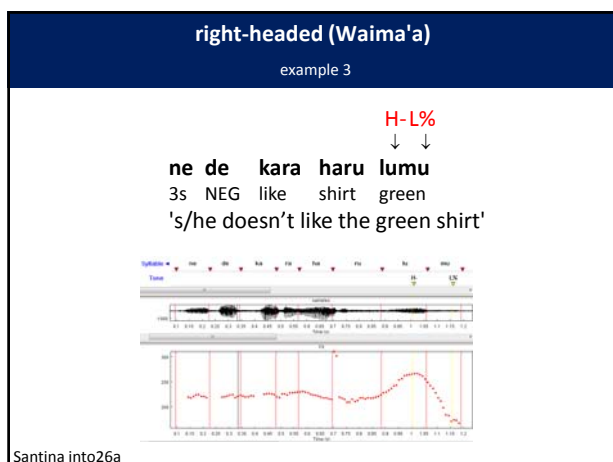
right-headed



Tagalog

left-headed





What you cannot do without pitch accents

T% T* T*+T T-T%

↓ ↓ ↓ ↓

[σσσσσσσσσσσσσσ]

Metrically-anchored tones

T* = pitch accent (monotonal)

T*+T = pitch accent (bitonal)

What you cannot do without pitch accents

We planned to go to the wedding by car.

We needed **three** cars, but I only got **one** (car).

What you cannot do without pitch accents

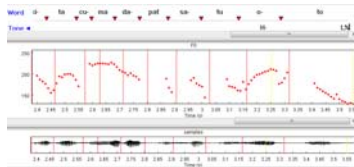
Manado Malay/example 8

They were looking for three ... three cars. But ... I only got one car.

dorang mo cari tiga ... tiga oto
3p ASP look.for three three car

H-L%

cuma ... kita cuma dapa satu oto.
only 1s only get one car



Stoel 2007:121

This is not the whole story

T- T% T-

↓ ↓ ↓

[σσσσσσσσσσσσσσ]

[σσσσσσσσσσσσσσ]

i.e. **only edge tones**

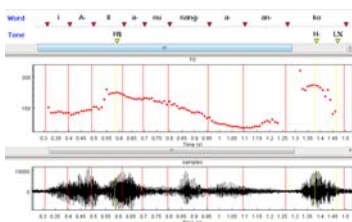
T% = boundary tone

T- = phrase accent

An early H in a Totoli IU

Example 10

H\$ H- L%
[[i Ali] anu nangaanko]
PN REL AV.RLS:eat:AND
(It was) Ali who ate it.



ip: An extreme example from Totoli

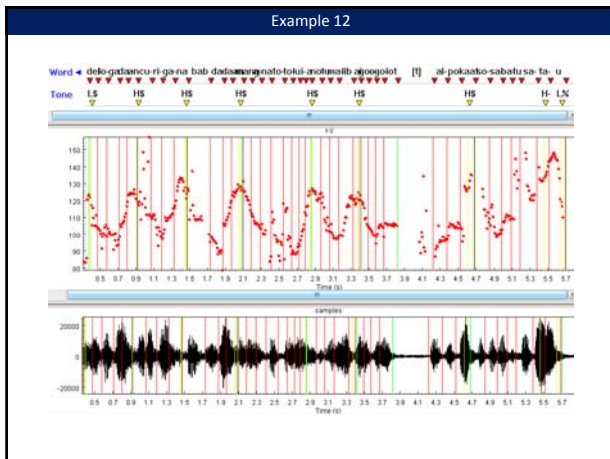
Example 12

H\$ H\$
[[delloga ddaan] [curiga-na]
like RDP:EXIST suspicion-3s.POSS

H\$ H\$
[?? da-daen] [mangana totolu ia]
RDP-EXIST little child three PRX

H\$ H\$
[notumalib ai] [goo-golot <::> alpukaat]
AV.RLS:pass_by VEN RDP-carry avocado

H-L%
saa-sabatu sa-tau] (but it was) like (as if) he had a
RDP2-one ONE-person suspicion (because) there were
these three children passing by,
carrying avocados, one each



ip
Example 11

L\$ H\$ L\$ H\$ T-T%

↓ ↓ ↓ ↓ ↓

[[σσσσσ]_{ip} [σσσσσσ]_{ip} σσσσ]_{IU}

T\$ = ip-boundary tone
T% = IU boundary tone
T- = IU phrase accent

Tagalog works very differently in this regard!

Jun, Sun-Ah (ed.), 2005, *Prosodic Typology: The phonology of intonation and phrasing*, Oxford: Oxford University Press

ip

What are the principles and constraints for ip-chunking?
syntax? rhythm?

ip-chunking: general trends

Lexical items (excluding clitics and particles)
per ip (impressionistic trends):

Totoli: 2-3, 2 or more ip common
Manado Malay: 2-3, 2 or more ip common
Waima'a: 4-6 (-> serial verb constructions)
more than 1 ip per IU not common
Tagalog: ??, multiple ip common

ip-chunking: conjunctions
Totoli/example 13

L\$H\$ L\$ H\$ L- H%

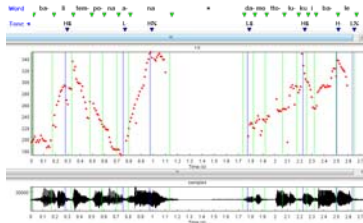
bali kodoong suanginapo ttolu ne llenget
so want fill:UV2.3s.POSS.INCLPL three LK basket
so he still wants to fill the third basket

ip-chunking: conjunctions

Totoli/example 14

L\$H\$ L- H% L\$ H\$ H- L%

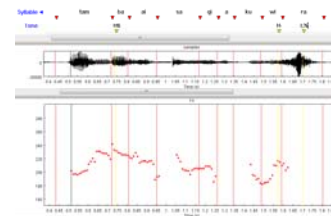
bali temponaana damo ttolu-ku i bale
 so time:MED live by oneself -1s.POSS LOC house
 so right now, I live all by myself in the house



ip-chunking: Waima'a also for subordinating conjunctions

L\$ H\$ H- L%

tamba ai-sa'i aku bira
 because yesterday 1s sick
 because I was sick yesterday

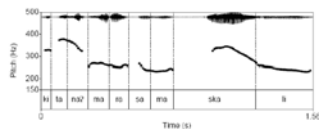


ip-chunking: independent phrasing of subject NP

Manado Malay/example 4

L\$H\$ H- L%

kita na? mara sama skali
 1s NEG angry same very
 'I am not at all angry'



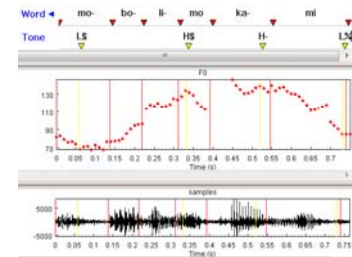
Stoel 2007:129f

ip-chunking: independent phrasing of subject NP

Totoli/example 15

L% H\$ H-L%

mo-boli-mo kami
 AV-buy-CPL 1pe
 We buy (them) (AV)

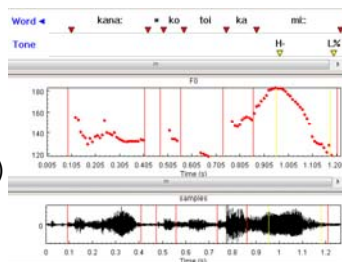


ip-chunking: independent phrasing of subject NP

Totoli/example 16

H- L%

kana koto-i kami
 because know-UV2 1pe
 because we know (UV)



Morphosyntactically both examples are ambiguous

- a) $[[_{VP} [_{V} kotoi] [_{NP} kami]]]$ 'we know (it)'
 (*kami* = nonsubject-ACTOR)
- b) $[[_{VP} kotoi] [_{NP} kami]]$ 'we are known'
 (*kami* = subject)

welcome.309

ip-chunking: independent phrasing of subject NP

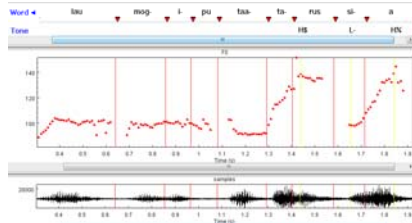
Totoli/example 17

L\$ H\$ L- H%

lau mogipu taatarus sia

presently AV:pick RDP2:continue 3s

(while) he keeps on picking (fruits)



Summary

- 1) two levels of prosodic structure: intonation unit (IU) and (optional) intonational phrases (ip)
- 2) no pitch accents for focus marking
- 3) right-headed vs. left-headed constructions/languages
- 4) metrical structure (lexical accent) only of secondary relevance for intonational structure
- 5) the languages differ significantly in how IUs are segmented into ip, with implications for syntactic analysis and historical developments