Pragmatic function of low boundary tone in Puyuma:
question intonation and beyond

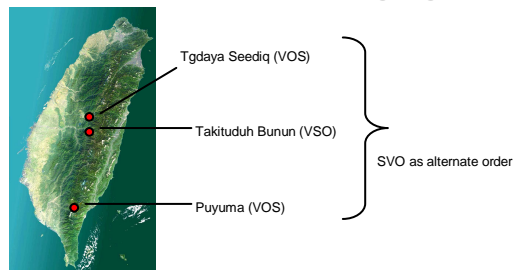*Anastasia Karlsson, Arthur Holmer*

Abstract

The aim of this study is to investigate what conditions word order variation in verb-initial languages. The languages studied are Seediq, Bunun and Puyuma, all spoken in Taiwan. For Puyuma, the main finding is that word order variation reflects information structure, and new is placed before given. Intonation has two main functions, to mark prosodic and syntactic groups and to mark semantic status (autonomy or non-autonomy) of speech units.

Research questions

- What conditions word order in Formosan languages at clause level, at NP level and within relative clauses?

- How is information structure expressed in Formosan languages?

- This study: function of L% in Puyuma.

Formosan: 3 sample languages

Tgdaya Seediq (VOS)

Takituduh Bunun (VSO)

Puyuma (VOS)

SVO as alternate order

Functions of word order in Puyuma

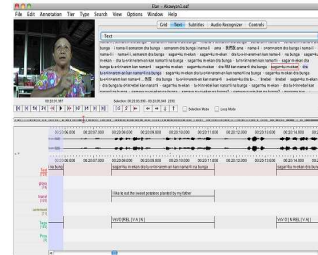Word order reflects information structure in Puyuma (Karlsson & Holmer 2011)

What happens? Answer: VOS (all new)

What is the woman eating? Answer: VOS (NEW - GIVEN)

Who is doing what? Answer: S*topic*VO (TOP [all new])

Who is eating the apple? Answer: SVO (NEW - GIVEN)

Data collection

Taiwan, June 2011. Nanwang village, Nanwang dialect.
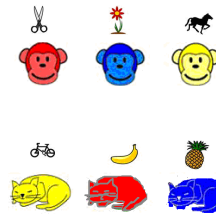
Stimuli: pictures, movies, interaction tasks

Semispontaneous connected and elicited speech

Speakers: 3 women (aged 57-77), 1 man (age 78)

Tools: Praat and Elan

Material

Word order

1) What happens? / What do you see?
2) Who is eating the apple and who is eating the banana?
3) What is the man eating and what is the woman eating?
4) What is the man doing, what is the woman doing?

What happens?
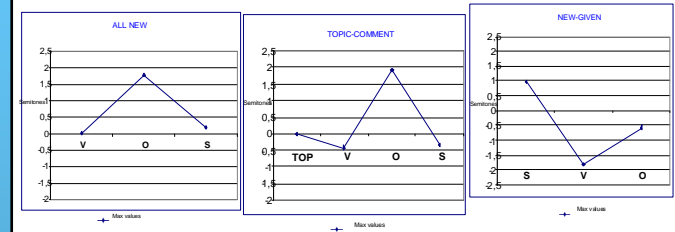
man = known referent
chair = new referent

Analysis

- Informational status (topic-comment, new-given) and word order
- Informational status and tonal courses: measurements of max and min F0 values in each lexical word
- Identification of relevant tonal gestures
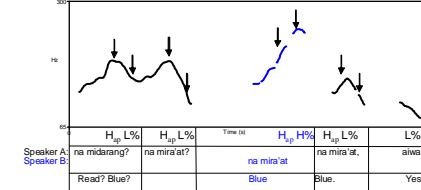- Functional analysis of identified tonal gestures

Results

1. Interaction between tonal course, word order and i-structure

Normalized F0 measurement points for F0 maxima in each word. Female speaker.

2. Tonal contrast between declaratives and interrogatives

Boundary tones in declaratives in interrogatives. Ex from a semispontaneous dialogue.

3. Distribution of H% vs L%

High boundary tone
[declarative] H%
[[S] H% [VO]]H%
[Head H% + Dependent] H%

Low boundary tone
[interrogative] L%
[[S*topic*] L% [VO]] H%
[Dependent L% + Head] H%

Conclusions

- Word order is the main device for expressing information structure in Puyuma

- Tonal courses reflect

1) Boundaries between SUBJECT and the rest (tonal turning points)

2) Semantic autonomy status: H% for autonomous and L% for non-autonomous units

References

Karlsson, A. and Holmer, A. (2011). "Interaction between word order, information structure and intonation in Puyuma". In Papers in Austroasiatic and Austronesian Linguistics, Mitsuaki Endo (ed.), pp. 28-38