F0 timing in two verb-initial Formosan languages.

This research compares correlation between word order patterns, information structure and intonation in two Austronesian languages in Taiwan, Puyuma and Seediq. The two languages are verb-initial.

The word order data presented here is derived from three separate contexts, one where the whole content of the proposition is new, one where the object is new, and one where the subject is new, while the rest of the proposition is given. The data is based on three speakers of Puyuma and four speakers of Seediq of ages varying from 35 to 75.

In our analysis we distinguish New-Given (Information structure) and Topic-Comment (Discourse structure). Our material suggests that both languages display following orders: New before Given, Comment before Topic and Verb before Subject, and that word order variations convey information structure in the two languages. Intonation is used differently. In Seediq, intonation marks New information by a higher f0. In Puyuma, intonation primarily marks the division in Topic and Comment regardless of their status as New or Given, and f0 peak between Comment and Topic is higher.

When subject is new or when it becomes a stage-setting Topic it is moved to the initial position and is marked by a special cleft marker or by a Topic marker, giving SVO word order. However, these formal markers are not obligatory, especially for Seediq. This gives structurally ambiguous constructions SVO with different status of S. Seediq and Puyuma solve this be using timing of the tonal peak. Thus in Seediq, New is marked by a higher and often a later timing of f0 peak within the accented syllable, $S_{NEW}VO$ as contrast to $S_{OLD}VO$. In Puyuma, an earlier f0 peak marks Topic, regardless of its New/Given status, $S_{TOP}VO$ as contrast to $S_{COM}VO$ as illustrated in (a) (see Figure on the next page).

(a) The earlier f0 peak (black line) in Puyuma marks *ma'inayan* "boy" as Topic in the context *What is the boy playing with? – The boy is playing with the ball.* The later f0 peak (grey line) marks *ma'inayan* "boy" as Comment in the context *Who is playing with the ball? – It is the boy who is playing with the ball.* In both cases the utterance is structurally ambiguous:

na ma'inayan malralrinay dra malri

NOM-BOY   PLAY   OBJ-BALL

To summarise, we find correlation between functions in timing of f0 peak and intonation in the two languages. In Puyuma, both intonation and timing of f0 peak reflect Topic-Comment structure, while intonation and timing of f0 peak in Seediq reflect New-Given status.

ma - i - na - yan