

## Introducing internal arguments in symmetrical voice languages

Jonathan Cheng-Chuen Kuo

Academia Sinica / University of Hawai‘i at Mānoa

**Introduction:** This study discusses the empirical concerns of applying applicative approaches in symmetrical voice languages, and proposes an alternative analysis in the spirit of “severing the internal argument from its verb.”

**LV/CV as “applicative” morphemes:** The applicative structures have been proposed to be subsumed into the Philippine-type voice system, based on two grammatical functions of locative voice (LV) and circumstantial voice (CV) markers (1) and (2).

(1) Increasing valency in Truku Seediq:

a. keret-**an**=mu       $\emptyset$       sagas      ka keti’*inuh niyi*  
cut-LV=1SG.ERG OBL watermelon ABS board this  
‘I cut watermelon on this board.’

b. **se**-kerut=mu       $\emptyset$       sagas      ka bubu / ka yayu niyi  
CV-cut=1SG.ERG OBL watermelon ABS mother ABS knife this  
‘I cut watermelon for Mother/with this knife.’

(2) Rearranging valency in Truku Seediq

a. biq-**an**=mu       $\emptyset$       pila      ka iming  
give-LV=1SG.ERG OBL money ABS Iming  
‘I gave Iming money.’

b. **se**-begay=mu       $\emptyset$       iming ka pila gaga  
CV-give=1SG.ERG OBL Iming ABS money that  
‘I gave the money to Iming.’

Recent studies of Formosan LV/CV verbs (e.g. H. Chang 2009, 2013; M. Chang 2004; Shih and Manqoqo 2014, inter alia) adopt either Pytkäinen (2002) or Georgala (2012) to account for the functions of these voice markers. Pytkäinen proposes High/Low contrast regarding the position of applicative phrases (AppIPs) in relation to its VP (underlined in [3]). Georgala argues that all AppIPs are above VP, and proposes instead Thematic/Raising contrast regarding the introduction of the applied argument (underlined in [4]).

(3) Pytkäinen’s (2002) High/Low applicatives

- a. [VoiceP DP<sub>AGENT</sub> [Voice’ Voice [AppIP DP<sub>BNF/LOC/INST...</sub> [AppI’ Appl [VP V DP]]]]] (high)  
b. [VoiceP DP<sub>AGENT</sub> [Voice’ Voice [VP V [AppIP DP<sub>GOAL/SOURCE</sub> [AppI’ Appl DP<sub>THEME</sub>]]]]] (low)

(4) Georgala’s (2012) Thematic/Raising applicatives

- a. [VoiceP DP<sub>AGENT</sub> [Voice’ Voice [AppIP DP<sub>BNF/LOC/INST...</sub> [AppI’ Appl [VP V DP]]]]] (thematic)  
b. [VoiceP DP<sub>AGENT</sub> [Voice’ Voice [AppIP DP<sub>RECIPIENT</sub> [AppI’ Appl [VP t<sub>DP</sub> [V’ V DP]]]]]]] (raising)

**The Challenges:** Despite the differences, these two approaches appear to account for the valency-increasing/rearranging functions of LV/CV markers properly—(1) can be analyzed as involving High or Thematic AppIP, and (2) can be analyzed as involving Low or Raising AppIP. However, these applicative approaches have empirical concerns in Formosan languages upon scrutiny of the interaction between voice and verb classes. First, the presence of two-argument LV (contact/location) verbs and CV (emotion/transfer) verbs challenges Pytkäinen’s framework in (3), as the High/Low parameter fails to address the sole internal argument without a DP complement.

A possible solution lies in the parameter underlying Georgala’s approach. It is tempting

to connect two-argument LV/CV verbs with Raising ApplP (4b), under the assumption that the sole internal argument is base-generated inside VP (5).

(5) A tentative analysis for two-argument LV/CV verbs

[VoiceP DP<sub>AGENT</sub> [Voice' Voice [AppIP DP<sub>GOAL/STIMULUS</sub> [AppI' Appl [VP V t<sub>DP</sub> ]]]]] (raising)

This modified analysis is, however, problematic in many respects. An “applicative analysis” is dubious because the thematic roles involved in these verb classes are not covered in the related literature. Furthermore, the presence of a base-generated complement DP renders the alleged ApplP redundant with no syntactic motivation. A further challenge to this assumption arises from the argument alternation between CV/LV verbs, suggesting the indeterminacy of the lexical verb’s subcategorization before “applicativization”(6).

(6) Puyuma CV/LV alternations (in parallel with *spray/load* alternation; see Levin 1993:50)

a. ku=ba'ba-ay                    na sa'ub (dra rabutr)

1SG.ERG=spread-LV ABS roof OBL grass

‘I spread the roof (with some grass).’

b. ku=ba'ba-anay                na rabutr (dra sa'ub kan senden)

1SG.ERG=spread-CV ABS grass ID.OBL roof SG.OBL Senden

‘I spread the grass (on the roof of Senden’s house).’

**Proposed Analysis:** The criticisms about the applicative approaches to argument structure in Philippine-type languages are mainly based on the derivational properties of symmetrical voice markers. In this study, I propose an event-based analysis for Formosan non-actor (NAV) verbs in light of constructivist approaches under which neither external nor internal arguments are true arguments of the lexical verb/root (e.g. Borer 2005; Lohndal 2014).

(7) The syntax of event structure in Formosan NAV verbs

a. [Voice DP<sub>initiator</sub> [Voice' Voice [FP DP [F [√ ([PP) ]]]]]] (PV verbs)

b. [Voice DP<sub>initiator</sub> [Voice' Voice [FP [+Space] DP [F [√ ([PP) ]]]]] (LV contact/location verbs)

c. [Voice DP<sub>initiator</sub> [Voice' Voice [FP [+Cause] DP [F [√ ([PP) ]]]]] (CV transfer/emotion verbs)

The symmetry among NAV verbs is captured with a functional phrase (FP) which carries a feature that indicates the event type denoted by the derived verb. The (thematic) interpretation of the absolutive argument (i.e., DP in [Spec, F]) is subject to the interaction between the feature and the encyclopedic entry (e.g. location/goal/source for LV verbs; instrument/beneficiary/theme for CV verbs). Importantly, I propose the same structure for LV (or CV) verbs regardless of the number of participants. A third participant, when present, is merged with a null P, thus being categorized and assigned inherent case (Borer 2005; see also Baker 2012). The present analysis replaces the applicative analysis by showing no distinction between valency-increasing and valency-rearranging functions, which conforms with the view of roots being “precatatorial” in symmetrical voice languages (Foley 1998).

**Selected Short References:** Baker, M. 2012. “Obliqueness” as a component of argument structure in Amharic. In *The end of argument structure?* Emerald. Borer, H. 2005. *Structuring Sense: The normal course of events*. OUP. Chang, H. 2013. Extraction asymmetries in Tsou causative applicatives. Paper presented at the colloquium of Institute of Linguistics, Academia Sinica. Foley, W. 1998. Symmetrical voice system and precatatoriality in Philippine languages. Paper presented at the 3<sup>rd</sup> LFG Conference. Georgala, E. 2012. Applicatives in their structural and thematic function. Cornell University PhD dissertation. Lohndal, T. 2014. *Phrase structure and argument structure*. OUP. Pylkkänen, L. 2002. Introducing arguments. MIT PhD dissertation.