## A Cartographic Approach to Adverbials in Kavalan: Adverbial Verbs and Restructuring

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**Introduction:** Chang (2006) and Holmer (2010) have argued convincingly that some adverbial expressions in the Austronesian languages in Taiwan, or Formosan languages, are syntactically realized as verbs. The present study explores this syntactic phenomenon in Kavalan, an East Formosan language, and offers a syntactic analysis within the cartography framework of adverbials proposed by Cinque (1999, 2006).

**Empirical Patterns:** Kavalan adverbials can be classified into three broad types based on their morphosyntactic behaviors. First of all, manner (*paqanas* 'do.slowly'), frequency (*pataz* 'do.often'), aspect (*tuRin* 'do.immediately'; *uman* 'do.again'), and modal-volition (*sapazeng* 'do.on.purpose') expressions are verbs in that they occur in the clause-initial position, take voice markers, are affixed with ergative agreement suffixes, and attract tense/aspect clitics, as illustrated in (1).

(1) <u>tuRin-an-na=ti</u>	ni	Buya	m-nubi	ya	kelisiw
do.immediately-PV-3ERG=PFV	ERG	Buya	AV-hide	ABS	money
'Buya hides the money immedia	tely.'				

Secondly, evaluative (*peliya* 'luckily.not') and deontic (*qawman* 'must') adverbials must occur clause-initially, can host clitics, but are not allowed to take voice markers. The third type of adverbials (*pasi* 'probably'; *zuma* 'sometimes') must occur clause-initially, but can neither take voice markers nor host clitics.

**Cartography:** The present study argues that Kavalan adverbials occupy the heads of adverbial phrases in the split-IP/CP domain. Kavalan adverbial verbs are merged between VP and vP, i.e.,  $[AdvP_1]$  in (2) below, with v heading the so-called voice markers in Formosan languages. The second type of adverbials is merged right above vP within the IP domain, i.e.,  $[AdvP_2]$  in (2), whereas the third type of adverbials, which cannot host clitics, is merged in Rizzi's (2004) ModifierP in the CP domain, i.e., [ModP] in (2).

(2)  $\underline{ModP} - FinP - TP - \underline{AdvP_2} - vP - \underline{AdvP_1} - VP$ 

Only the adverbial heads situated between vP and VP can move to v to take voice affixes and thus show typical properties of verbs, whereas the adverbial heads in  $AdvP_2$  cannot take voice markers, which would be affixed to the verb that moves upward to v. Just like other functional elements in CP that cannot host clitics in Kavalan, e.g., the complementizer *tu* and the subordinator *anu* 'if', adverbials in ModP in the CP domain cannot attract clitics either.

**Restructuring:** The analysis of Kavalan adverbial verbs as heads of adverbial phrases between vP and VP predicts that they are restructuring verbs in a monoclausal configuration (Cinque 2006). This prediction is borne out. Firstly, the adverbial verb and the lexical verb in an adverbial verb construction (AVC) cannot host separate tense or aspect markers. Secondly, the case-marking pattern of the nominal arguments is determined by the voice marker on the adverbial verb, not the lexical verb. In (1), the agent is ergative and the theme absolutive; this is the case pattern of a patient voice sentence with *-an*. Thirdly, the lexical verb cannot be preceded by tu, which introduces a finite complement clause. Finally, as the adverbial verb intervenes between v and V, it is expected that the lexical verb cannot move to v due to the Head Movement Constraint. As shown in (3), the lexical verb *pukun* cannot take

the patient voice marker, but must occur in the agent voice form (cf. (1)), which is the default non-finite form of a verb in Kavalan. In contrast, adverbials merged in  $AdvP_2$  and ModP do not impose this voice restriction on the lexical verb.

(3) *sapazeng-an-na	ni	buya	<u>pukun-an</u>	aiku
do.on.purpose-PV-3ERG	ERG	Buya	hit.with.a.stick-PV	1SG.ABS

The cartographic approach to Kavalan adverbials thus successfully accounts for not only the different morphosyntactic properties of the three types of adverbials but also the monoclausal structure of the AVC.

## References

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