# The Syntactic Licensing of Adverbials: an Atayal Case Study

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Syntactically, adverbials are argued to be licensed as specifiers within a hierarchy of rigidly ordered functional projections (Cinque 1999) or as free adjunction constrained by restrictions on semantic composition (Ernst 2002). Recently, based on empirical evidence from the Austronesian languages of Taiwan (Formosan languages), Holmer (2012) proposes a mixed analysis that both specifiers and heads are possible positions for licensing adverbials, but the phrase structure hosting them is determined by scopal possibilities, which eliminates adjunction as a result. This paper examines these hypotheses by investigating adverbials in Atayal (Squliq dialect), another Formosan language. It's argued that Atayal adverbials entertain two types of syntactic categories, head vs. non-head; however, the head adverbials are strictly ordered, and the distribution of the non-head adverbials cannot be accounted for by specifiers of the functional (adverbial) heads but as adjuncts merged within scope of the semantic category (IP- or VP- level, McConnell-Ginet 1982). Scopal ambiguity arises when a head adverbial interacts with a non-head one.

Three groups of adverbials can be distinguished in terms of their morphosyntactic properties. Manner, frequency, subject-oriented and ability adverbials precede the lexical verb, and intervene in verbal morphology on the verb, resulting in fully inflected adverbials and defective verbs (1). Leaving aside if they are lexical verbs or restructuring verbs, this group is clearly of heads and immune to NP-movement. Aspectual, deontic, and epistemic adverbials are also heads as they only show up in one position (2) and can't be topicalized (3), although they don't inflect. In these respects, both groups contrast with the third one, including emphatic, temporal, epistemic, frequency, aspectual, additive and focusing adverbials, which allows multiple placements and topicalization (4). Clitic climbing, which always falls on the first c-commanding head of a clause, also marks the syntactic division: The first two groups are heads as they always attract clitics (1-2), whereas the third one never does (5).

The head adverbials exhibit rigid ordering, which can be shown by their position relative to the temporal marking and adverbial stacking. Manner, subject-oriented and ability adverbials follow the temporal marking, which is preceded by modal adverbials. Aspectual adverbials might follow or be in complementary distribution with the temporal marking. They constitute three syntactic zones (6), in which adverbials of two classes are rigidly ordered: subject-oriented adverbials precede manners (7), and epistemic adverbials precede deontic ones (8). Ideally, if the non-head adverbials are licensed as specifiers of the hierarchical adverbial heads, Cinque's proposal will be best supported. However, the non-head adverbials demonstrate two difficulties in one-to-one mapping of positions and interpretations (Ernst 2007). The first can be instantiated by the epistemic adverbial (4a), which has no meaning difference between several positional instances. The other is cases where the same adverbial appears in two positions and yields distinct meanings, e.g., the additive adverbial *lawzi* 'again' modifies either the manner adverbial or the verb depending on which one it follows (9).

Under the functional specifier analysis, the first fact would stipulate more than two unwanted projections in the clause, given that Atayal lacks empirical evidence for successive verb movement. The second fact can be derived from different scope taken by the same adverbial (Stechow 1996; Ernst 2002, 2007), without postulating two empty hosts (of *lawzi* 'again') or an unlabelled structure of a head adverbial and an empty host. Based on interactions of non-head adverbials (10), which orderings are constrained by the syntactic domain each takes (11), I propose that they are best analyzed as adjuncts merged at any position within their domain. Overall, Atayal adverbials present licensing conditions of both functional hierarchy and adjunction, which suggests that Cinque's and Ernst's theories could be parameterized for languages rather than being in a competition.

(1) a. qriq-*un*=<u>nya'</u>       s<m>i/*si-un       t'tu'. b. pknhyu'-*aw*=su'       m-aras/*ras-aw!
    steal-PV=3S.ERG put<AV>/put-PV trap       secretly-SUB.PV=2S.ERG AV-take/take-SUB.PV
    'He placed the trap stealthily.'                 'Don't secretly take (it)!'

(2) a. *ki'a*=<u>nya'</u>       cyux  *<\*ki'a>* si-an  *<\*ki'a>* t'tu *<\*ki'a>*.
    EPI.POS=3S.ERG  PROG       put-LV       clamp
    'He might be placing the clamp.'
   b. *obih*=<u>saku'</u>   p-'agal     *<\*obih>* la  *<\*obih>*.
    close=1S.ABS  FUT-take.AV       PRT
    'I would almost pass.'

(3) a.*ki'a*       ga,  cyux=nya'       si-an  t'tu.
    EPI.POS  TOP  PROG=3S.ERG  put-LV  clamp
   b. *obih*  ga,  p-'agal=saku'       la.
    close  TOP FUT-take.AV=1S.ABS   PRT

(4) a. *hazi*       ga,  *<hazi>* cyux  *<hazi>* m-'abi  *<hazi>* slaq  *<hazi>* qu   huzil *<\*hazi>*.
    probably TOP       PROG       AV-sleep       farm       ABS dog
    'The dog is probably sleeping in the farm.'
   b. *krayryax* ga,  m-'abi  *<krayryax>* kya'  slaq  *<krayryax>*  qu   tali *<*$^{??}$krayryax>*
    every.day TOP AV-sleep       LOC  farm       ABS PN
    'Tali always/often/frequently sleeps in the farm.'

(5) a.*hazi*=<u>nya'</u>       si-an  t'tu. b. *krayryax*=nya'       bhi-an qu   tali.
    probably=3S.ERG  put-LV  clamp       every.day=3S.ERG  hit-LV ABS PN
    Intended for 'He probably put the clamp.'   Intended for 'He always/often/frequently hits Tali.'

(6) [ Epistemic > Deontic [ **T/A**       Aspectual [ Subject-oriented  >  Manner >  **V ...**
    *ki'a*       *siki*       *mutuw*       *rima'*       *mspzyang*       *mquriq*
    might       have to   habitually already       deliberately       stealthily

(7) *m-spzyang*       m-knhway (*m-spzyang*)   m-aniq.
    AV-intentional  AV-slow       AV-eat
    '(He) intentionally/deliberately eats slowly.'

(8) *ki'a*       siki       (*ki'a*) m-wah.
    might   have.to   might   AV-come
    'You might have to come.'

(9) cyux   si   phngzyang       *<lawzi>* k<m>ayal  *<lawzi>*.
    PROG AFF make.sound.DEP.AV again   speak<AV> again
    (i)  (I've told you to lower down your volume) 'You are speaking loudly again.' (1st instance)
    (ii) (I didn't hear him) '(He) is loudly speaking again.' (2nd instance)

(10) a.   wal   *lawzi'* (*hazi'*)   m-agal   (*hazi'*) qnabuw (*hazi'*) qu   tali.
       PAST   again   probably   AV-take       prize       ABS PN
    b.   wal   *hazi'*   (*lawzi'*) m-agal   (*lawzi'*) qnabuw (*lawzi'*) qu   tali.
       PAST   probably   again AV-take   prize       ABS PN
    c.   wal   m-agal   qnabuw *lawzi'*   *hazi'*       qu   tali.
       PAST   AV-take prize       again   probably   ABS PN
    'Tali probably won a prize again.'

(11) ___ **T/A** ___ **V** ___ **O** ___ **S**___

    temporal ('tomorrow')/emphatic ('really')
    *epistemic ('probably')*
    *additive ('again')*
    frequency ('often')/focusing ('also') /aspectual ('still')

**References**: Guglielmo, 1999. *Adverbs and Functional Heads: A Cross-Linguistic Perspective.* Oxford University Press, New York. \\ Ernst, T. 2002. *The Syntax of Adjuncts.* Cambridge University Press, Cambridge.\\ Ernst, T. 2007. On the role of semantics in a theory of adverb syntax. *Lingua* 117:1008–1033.\\ Holmer, A. 2012. Evidence from Formosan for a unified theory of adverb ordering. *Lingua* 122: 902-921.\\ McConnell-Ginet, S. 1982. Adverbs and Logical Form: A Linguistically Realistic Theory. *Language* 58: 144-84. \\ Stechow, A.v, 1996. The different readings of Wieder 'Again': A structural account. *Journal of Semantics* 13: 87-138.