TWO TYPES OF ADVERBIALS IN MAYRINAX ATAYAL

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1. Introduction

Mainly focusing on the morphological representations and syntactic distributions, adverbials in Mayrinax Atayal (MA) would be classified, following Hsiao’s (2004) predicate-like and adjunct-like adverbs distinction in Squliq Atayal, which is one of the dialects of Atayal spoken in Taiwan. Following previous studies (Chang 2004, 2005, Li 2007), two more criteria are proposed in distinguishing the types of adverbs in MA: the existence of linker ‘i’ and syntactic distributions of adverbials. The linker ‘i’, also manipulated in Serial Verb Construction, would then be considered as one of historical remains, which further justifying Tsai’s (to appear) assumptions on the grammaticalization among Formosan languages.

2. Background

MA is a dialect of C’uli’, which is one of the two major subgroups of Atayal, and the other is Squliq Atayal. MA, as one of Formosan languages, is spoken in Chinsiu Village (錦水村), Taian Hsiang (泰安鄉), Miaoli prefecture (苗栗縣), Taiwan. Mayrinax is well known because of its distinctions on certain vocabulary manipulated by male and female native speakers. Besides, MA is also regarded as a language in which lots of ancient markers are preserved, used and still comprehensible nowadays.¹

The linker ‘i’ between adverbs and verbs, for instance, is one of these ancient remnants. Among the dialects of Atayal, MA is worth paying more attention on the event construction, i.e., the verb phrase modified by adverbs. By observing co-occurrence of the linker ‘i’ and the types of adverbs, we try to figure out the behaviors of adverbials as well as the role of the linker ‘i’ in MA.

This paper is organized as following: In section 3, previous studies would be mentioned as review on the discussion of adverbials in Formosan languages. In section 4, adverbs in MA would then be further classified into two types, predicate-like and adjunct-like adverbs, according to certain distinctive properties. Finally, the linker would be analyzed as a historical remnant from the V-V conjunction construction, following Tsai’s (to appear) idea.

¹ Lots of these ancient markers, such as the linker ‘i’, discussed in the following section, can be precisely judged, and though these markers tend to be gradually omitted in daily conversations among native speakers of MA.
3. Literature Review on Adverbials in Formosan Languages


With the similarity in syntactic behaviors, adverbs in MA are regarded as one kind of predication, similar to normal verbs. Identical to the behaviors in serial verb constructions, shown in (1), two constituents in (2) are also linked by ‘i’, which also takes the same function in serial verb constructions in (1) (Huang 1995: 191):

(1) M-a’usa’ i’ k-um-aluap ‘i’ casan ‘i’ Yumin.
   AV-go Link hunt-AV-hunt Particle tomorrow Nom Yumin
   ‘Yumin will go hunting tomorrow.’

(2) Lihka’ i’ ma-ktaiyun ku’ ulaqi’.
   fast Link AV-run Nom child
   ‘The child is running fast.’

Carrying the correspondent voice marker, two constituents composing serial verb constructions in (1) could be plausibly treated as verbs. Without the voice markers, however, adverb in (2) seems to be quite unlike, under the morphological affixation.


Chang (2004) takes another perspective on the behaviors of adverbs in Kavalan, one of Formosan languages spoken in Taiwan. He claims that the adverbials should be considered as the main verbs and the following lexical verb as the complements. He further divides adverbials into four types, according to their syntactic distributions and morphological properties:
Two Types of Adverbials in Mayrinax Atayal (R. X.-X. Yu)

(3)

<table>
<thead>
<tr>
<th></th>
<th>Type A—SVC-I</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A sequence of verbs without intervening conjunctions</td>
</tr>
<tr>
<td></td>
<td>AV-only restriction</td>
</tr>
<tr>
<td></td>
<td>No aspectual/ modal/ pronominal marking</td>
</tr>
<tr>
<td></td>
<td>Inflected with imperative suffixes</td>
</tr>
<tr>
<td></td>
<td>As matrix verbs, taking the following VP phrase as the complements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Type B—SVC-II</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>A sequence of verbs without intervening conjunctions</td>
</tr>
<tr>
<td></td>
<td>No AV-only restriction</td>
</tr>
<tr>
<td></td>
<td>With aspectual/ modal/ pronominal marking</td>
</tr>
<tr>
<td></td>
<td>Inflected with imperative suffixes</td>
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<table>
<thead>
<tr>
<th></th>
<th>Type C—becoming adverbs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Restricted to sentence-initial position → not typical adverb</td>
</tr>
<tr>
<td></td>
<td>Unable to host bound pronouns → not typical verb</td>
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<tr>
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<th>Type D—Adjunct</th>
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<tbody>
<tr>
<td></td>
<td>Free distribution</td>
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<td></td>
<td>Not sentence-initially existence</td>
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</tbody>
</table>

In general, three kinds of adverbs is inducted under Chang’s observations: predicate-type, adjunct-type and the other one between them. All of these types are divided by means of examining the syntactic distribution and morphological affixation, such as relative distribution of the adverbs and imperative suffixation, respectively.

In addition to these criteria of discriminate the type of adverb, Mayrinax Atayal also provides us another hint to distinguish. That is the linker ‘i’, which has been omitted in other dialects of Atayal. The linker ‘i’ occurring between two components of a serial verb construction, which is theoretically defined as a sequence ‘in which verbs sharing a common actor or object are merely juxtaposed with no intervening conjunctions’(Foley and Olson 1985).

However, in some occasions, this linker sometimes becomes optional and sometimes obligatory. This is another phenomenon relating to the historical evolution of MA.

3.3. **Li (2007) in Puyuma**

Based on three restrictions, Li subclassifies adverbial expressions in Puyuma, a Formosan language spoken in the southeast of Taiwan (Li 2007: Table 4):
Under Li’s observations, adverbs in type I obey these three restrictions: AV restriction—voice marker on the following lexical verb must be Agent Voice, Argument attraction restriction—the argument selected by the lexical verb must be attached to the preceding adverb, and Argument occurrence restriction—the arguments occur just once. Li’s assumptions provide us a standard way to evaluate the types of adverbs.


From the observations of Hsiao (2004), we can also discover two types of adverbs in Squilq Atayal, which is another dialect of Atayal:

A. Predicate-like type

(5) M-qnhway m-wah qu’ Tali.
   AV-slowly AV-come Nom Tali
   ‘Tali comes slowly.’ (Hsiao 2004: 49)

(6) Wal si pk’ia m-ihiy Tali qu’ Yumin.
   Perf SI violent AV-beat Tali Nom Yumin
   ‘Yumin beat Tali violently.’ (Hsiao 2004: 57)

B. Adjunct-like type

(7) Ulung (sa) qriq-un na Tali s<m>i t’tu qu’ rhyal
    fortunately Par steal-PV Obl Tali put-AV-AV trap Nom ground
    Obl yesterday
    ‘Fortunately, Tali put the trap on the ground stealthily.’ (Hsiao 2004: 72)

(8) Ki’a cyux m’abi slaq hozil qasa.
    probably Asp AV-sleep farm dog that
    ‘Maybe the dog is sleeping in the farm.’ (Hsiao 2004: 73)

Although some vocabulary shared between Squilq Atayal and Mayrinax Atayal, these two dialects can be crucially distinguished on the existence of the linker ‘i’ between adverbs
and verbs.

4. Types of Adverbials in MA

Based on Hsiao’s categorization, we can divide adverbs in MA into two types: predicate-like and adjunct-like adverbs. For each type, Li’s restrictions would be applied as criteria in order to further confirm their syntactic properties.

4.1. Predicate-like Adverbs

Adverbs in this type with Voice inflection affix and bound pronominal clitics behave similarly to the main predicate. Moreover, there is a linker occur between these adverbs and the following lexical verb. In addition, the emergence of this linker ‘i’ seems to be arbitrary.

4.1.1. Voice Markers and Bound Pronoun

Acting as a predicate, adverbs in MA are also observed to have Voice markers (9). In addition, the bound pronouns are found to be attached on the adverbs in this type, instead of on the lexical verb (10). Once negated, the adverbs carry only the Voice marker, while the bound pronoun then attach to the initial negation (11), just like a matrix predicate:

(9) a. **M-ubagaq** ‘i’ k<um>alu ‘i’ Watan.

   **AV-polite** Link talk-AV-talk Nom Watan

   ‘Watan talked politely.’

   b. **K<um>alu** ‘i’ Watan.

   talk-AV-talk Nom Watan

   ‘Watan talked.’

(10) a. **Si-punabak=mi** la cokang ‘i’ k<um>awah ku’ kurol.

   **IV-carefully=1st Asp very** Link open-AV-open Nom box

   ‘I’ve already carefully opened the box.’

   b. **K<um>awah=mi** ku’ kurol.

   open-AV-open=1st Nom box

   ‘I opened the box.’

(11) a. **Ini=mu’ ubuga-ani** ‘i’ baiq cu’ heing ‘i’ hiya’.

   **Neg=1st polite-BV** Link give Acc candy Nom he

   ‘I impolitely gave him the candies.’
b. \textit{Ini=mu’ baiq-i cu’ pila’ ku’ ‘ulaqi’}.  
\textit{Neg=1st give-LF Acc money Nom child}  
\textit{‘I didn’t give the child money.’} (Huang 1995: 66)

4.1.2. AV-only Restriction

Just like the situation in Serial Verb Construction mentioned in previous studies, adverbs act as the main predicate, assign the arguments with proper case markers, and bound the following lexical verb with AV form only:

(12) a. \textit{Ma-na-mat’mati ‘i’ t<um>uting cu’ ‘ulaqi’ ‘i’ Watan. AV-violently Link beat-AV-beat Acc child Nom Watan}

b. \textit{A’-mat’mati-un ‘i’ t<um>uting ni Watan ku’ ‘ulaqu’}.  
\textit{Red-violently-PV Link beat-AV-beat Gen Watan Nom child}

c. \textit{*Ma-na-matimati ‘i’ tuting-un ni’ Watan ku’ ‘ulaqi’}.  
\textit{AV-violently Link beat-PV Gen Watan Nom child}

d. \textit{*A’-mat’mati-un ‘i’ tuting-un ni’ Watan ku’ ‘ulaqi’}.  
\textit{Red-violently-PV Link beat-PV Gen Watan Nom child}

‘Watan beats the child violently.’

It is obvious that the adverbial can be formed as either Agent Voice or Patient Voice, with different case markers on the arguments. But it is not the case for the following lexical verb in (12c). Agreement between adverbials and lexical verb in terms of Voice System could not repair this failure (12d). AV-only restriction is absolutely required in this type of adverbs.

4.1.3. Arbitrariness of Linker ‘i’

One of the distinctive properties in MA is the existence of linker ‘i’. This linker occurs between the adverbials and the following lexical verbs (13), as well as between two adverbs (14):

(13) a. \textit{An-liliah-un ‘i’ t<um>uting ‘i’ Watan. often-PV Link beat <AV> Nom Watan}  
\textit{‘It is often for Watan to be beaten.’}

b. \textit{Ma-na-matimati ‘i’ t<um>uting cu’ ‘ulaqi ‘i’ Watan. AV-violently Link beat-AV-beat Acc child Nom Watan}  
\textit{‘Watan violently beats the child.’}
(14) An-liliah-un ‘i’ ma-na-mat’mati ‘i’ t<um>uting ‘i’ Watan.
often-PV Link AV-violently Link beat <AV> Nom Watan

‘It is often for Watan to be beaten violently.’

Its appearance, however, is arbitrary: sometimes it’s optional (15), sometimes it’s
obligatory (16).

(15) Ma-nahaiyau (‘i’) h<um>akay ‘i’ Watan. (‘i’ is optional)
AV-Slowly Link walk-AV-walk Nom Watan

‘Watan walked slowly.’

(16) Hailag cubalai *(‘i’) ma-ktaliyun ku’ bauwaq. (‘i’ is obligatory)
quickly very Link AV-run Nom pig

‘Pig runs very fast.’

Overall, the emergence of the linker ‘i’ under this type of adverbs is definitely
grammatical, since sentence failure may result from the omission in the some obligatory
situations. And the optionality of that linker seems to be the outcome of ease of articulation
among the native speakers.

4.1.4. Inability of Being Topicalized

All the arguments in MA could be topicalized at the initial position followed a topic
marker ga. Adverbs in this type, of course, are not allowed to be a topic:

(17) a. Ma-na-lialiah ‘i’ t<um>uting cu’  ulaqi ‘i’ Yumin.
AV-frequently Link beat-AV-beat Acc child Nom Yumin

b. *Ma-na-lialiah ga t<um>uting cu’  ulaqi ‘i’ Yumin.
AV-frequently TOP beat-AV-beat Acc child Nom Yumin

‘Yumin often beat the child.’

(18) a. T-um-uting cu’  ulaqi ‘i’ Yumin.
beat-AV-beat Acc child Nom Yumin

beat-AV-beat TOP Acc child Nom Yumin

‘Yumin beats the child.’

Normally, it is not possible to topicalize an adverbial; however, adverbs in the other type,
Adjunct-like adverbs, are observed to be topicalized. We will discuss this part in section
4.2.4.
4.1.5. **Rigid Distribution**

Similar to the main predicates in verb-initial languages, adverbials in MA are restricted in the positioning. With Voice marker and bound pronoun, adverbials always initially occur. Other alternative orderings are not allowed:

(19) a. Ma-nahaiyau h<um>akay ‘i’ Watan.
    AV-Slowly walk-AV-walk Nom Watan

b. *H<um>akay ma-nahaiyau ‘i’ Watan.
    walk-AV-walk AV-Slowly Nom Watan

c. *H<um>akay ‘i’ Watan ma-nahaiyau.
    walk-AV-walk Nom Watan AV-Slowly

‘Watan walked slowly.’

4.2. **Adjunct-like Adverbs**

Lacking of Voice markers, adverbs in this type are not required to initially occur in sentence. Instead, their distributions would be relatively free. Distinctively, the linker ‘i’ is not allowed for these adverbs. Moreover, Adverbs in this type can be topicalized with topic marker ga. In addition, there is no AV-only restriction for this type of adverbials.

4.2.1. **No Voice Marker and Relevant Argument**

Adverbs in this type are not allowed to have any Voice marker. Instead, the following lexical verb acts as the matrix predicate (20). Moreover, this type of adverbs would attach either no argument or the bound pronoun irrelevant to the verb (21):

(20) Ki’i’ c<in>bu na’ ku’ bakarowap.
    probably shoot-PV-shoot Ins Nom hunting/hunter

‘It is probably that it was killed by the hunter.’

(21) a. Asi=mu-ga bak-un=mu hiya.
    seemingly=1s. know-PV=1s. he

    ‘It seems to me that I know him.’

b. Asi=nia’-ga bak-un=nia hiya.
    seemingly=3s. know-PV=3s. he

    ‘It seems to him, that he, knows him.’
4.2.2. No AV-only Restriction

The Voice system of the following lexical verb would no longer be restricted in Agent Voice. In other words, the preceding adverb would not get involved in the event:

(22) Asi-ga tuting-un kalialia’h ‘i’ Watan.
    probably beat-PV often Link Watan
    ‘It is probably that Watan is often beaten.’

4.2.3. No Linker Is Allowed

Different from predicate-like adverbs, the linker ‘i’ is absolutely forbidden under this type of adverbs:

(23) Tuting-un (‘*i’) kalialia’h ‘i’ Watan cu’ ‘ulaqi’.
    beat-PV Link often Nom Watan Acc child
    ‘Watan often beats the child.’

(24) Asi-ga (‘*i’) tuting-un kalialia’h ‘i’ Watan.
    probably Link beat-PV often Nom Watan
    ‘It is probably that Watan is often beaten.’

    often TOP beat-AV-beat Acc child Nom Yumin
    b. *Kalialia’h ‘i’ t<um>uting cu’ ‘ulaqi’ ‘i’ Yumin.
    often Link beat-AV-beat Acc child Nom Yumin
    ‘Yumin beats the child everyday.’

4.2.4. Capability of Being Topicalized

As mentioned above, predicate-like adverbs are unable to be topicalized. Adjunct-like adverb, however, can occur as the topic, followed by the topic marker ga:

(26) a. T<um>ting kalialia’h cu’ ‘ulaqi’ ‘i’ Yumin.
    beat-AV-beat often Acc child Nom Yumin
    b. Kalialia’h ga t<um>ting cu’ ‘ulaqi’ ‘i’ Yumin.
    often TOP beat-AV-beat Acc child Nom Yumin
    ‘Yumin beats the child everyday.’

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2 The expression kalialia’h in MA can be interpreted as either ‘often’ or ‘everyday’.
4.2.5. Relatively Free Distributions

Adverbs in this type can rather freely occur in different positions: following the first predicate (29a), following the second predicate (29b) or between the arguments (29c).

(29) a. Ma-na-matimati kalialia’h ‘i’ t<um>uting cu’ ‘ulaqi ‘i’ Yumin. AV-violently often Link beat-AV-beat Acc child Nom Yumin

b. Ma-na-matimati ‘i’ t<um>uting kalialia’h cu’ ‘ulaqi ‘i’ Yumin. AV-violently Link beat-AV-beat often Acc child Nom Yumin

c. Ma-na-mat’mati ‘i’ t<um>uting cu’ ‘ulaqi kalialia’h ‘i’ Yumin. AV-violently Link beat-AV-beat Acc child often Nom Yumin

‘Yumin violently beats the child everyday.’

4.3. Summary

From the previous observations, predicate-like adverbs and adjunct-like adverbs can be distinguished based on the following criteria:
Two Types of Adverbials in Mayrinax Atayal (R. X.-X. Yu)

The previous three criteria are identical to those in Puyuma (Li 2007) and Kavalan (Chang 2004, 2005). And the restriction on the distribution of adverbs could be considered as the effect caused by the attachment of Voice markers and relevant argument. AV-only restriction further confines the distribution of these predicate-like adverbs.

Apparently, the existence of the linker ‘i’ seems to have nothing to do with the distinctions between these two types of adverbs in MA. In fact, however, the discrimination may unable to be departed from the linker ‘i’.

5. **Reduction from Coordinate Structure**

By manipulating the identical form in Amis, Liu (2003) claims that VP modifications should be originally generated from coordinate structure. According to Hsiao’s (2004), Melody Chang’s (2004) and Tsai’s (to appear) assumptions, a coordinator in Formosan languages may either turn into a modifier marker in modification relation, or into a complementizer. This two-way grammaticalization is termed as “conjunctive reduction” (Tsai to appear: 17):

\[(31) \text{Adv} + V \leftarrow \text{Adv-Modifier Marker} + V \leftarrow V \text{Conj} V \rightarrow V[\text{Comp} V] \rightarrow V + V\]

Considering the modifying situations in MA, we can find that there are two types of adverbs, one with the linker ‘i’, the other without. Once this linker ‘i’ may be regarded as a modifier marker, two types of adverbs in MA illustrate two stages of the grammaticalization of conjunctive reduction.

As mentioned earlier, the linker ‘i’ also occur between two verbs in the same event, i.e., the Serial Verb Construction:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Adverb type</th>
<th>Predicate-like adverbs</th>
<th>Adjunct-like adverbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice marker</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Relevant argument attachment</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(bound pronoun)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV-only restriction</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Linker ‘i’</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Free distribution</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Topicalization</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Both the connection between two verbs in SVC and the modification of adverbs on verbs can be paralleled, in terms of their semantic representations, based on Parson’s (1990) assumptions on event structures:

   AF-go Link AF-carry Acc child Nom mother  
   ‘Mother is going to carry the child on her back.’ (Huang 1995: 191)

b. M-a’usa’ ‘i’ ma-sacka’ cu’ tawqi’ ku’ nabakis.  
   AF-go Link AF-welcome Acc chief Nom old-man  
   ‘The old man will go welcome a chief.’ (Huang 1995: 191)

The representation of conjunction could be illustrated by the linker ‘i’ in both situations. These collateral phenomena account for the plausibility of conjunction reduction in (31).

Another piece of evidence comes from the language usage in MA nowadays. As mentioned in section 4.1.3, the linker ‘i’ between predicate-like adverb and the lexical verb would be sometimes optional. This occasionally omission of the linker ‘i’ indicates the dynamic process of conjunction reduction.

6. Conclusion

In this article, two presumptions on adverbs in MA are concluded: (a) two types of adverbs are sub classified due to some syntactic and morphological criteria, and (b) the existence of the linker ‘i’ reveals the relation between V-V conjunction and Adv-V modification, under Tsai’s postulation. That is, adverbs establish their own constructions mainly in two distinctive ways. Predicate-like adverbs, originating from V-V conjunction, modify the lexical verbs with a historical remain, the linker ‘i’, occurring in-between. Adjunct-like adverbs, on the other hand, behave as real “adjuncts” juxtaposing in a sentence
with rather freely distributions.

References