I - Introduction

The Bunun are an Austronesian tribe that originates from the mountainous interior of Taiwan. Originally, they were hunters and slash-and-burn agriculturists, who lived in semi-permanent small family units in the north of the Central Mountain Range, in the present County Nantou. In search of new hunting ground and due to population pressure, this original population gradually migrated eastward and southward. During the Japanese occupation, most aboriginal tribes were ‘pacified’. They were forced to give up their lives in the mountains and had to live in villages, subject to the control of the Japanese administration. In the course of the 20th century, all aboriginal tribes in Taiwan, including the Bunun, were converted to Christianity. Their present distribution is shown on Map 1.

Map 1 – Geographical Distribution of the Bunun
(Source: CIP 2003)

Map 2 – Takivatan villages in the county
Hualian
According to the latest population counts (CIP 2003), the Bunun tribe has over 38,000 ethnic members. I estimate that approx. 65% still speak their mother tongue fluently. It is hard to find monolingual Bunun speakers (See Table 1).

<table>
<thead>
<tr>
<th>Age category</th>
<th>Language proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>+85</td>
<td>Monolingual Bunun</td>
</tr>
<tr>
<td>60-81</td>
<td>Bilingual Bunun/Japanese or trilingual Bunun/Japanese/Mandarin</td>
</tr>
<tr>
<td>30-60</td>
<td>Bilingual Mandarin/Bunun</td>
</tr>
<tr>
<td>-30</td>
<td>Monolingual Mandarin</td>
</tr>
</tbody>
</table>

**Table 1 – Language proficiency of Bunun speaker**
(approx. breakdown in age categories)

The Bunun have at least five distinct dialects, each corresponding to a clan of the same name:

- Northern Bunun: Takibaka, Takituduh
- Central Bunun: Takbanuað, **Takivatan**
- Southern Bunun: Isbukun

There is considerable grammatical variation across the dialects. My research was limited to Takivatan.

The Takivatan are a side-branch of the Takbanuað. Due to population pressures, they left their homeland in Nantou ± 75 years ago and settled in the County Hualian (see Map 2). Many older Takivatan still cultivate small plots of land on the mountain slopes near the villages; the younger generations either work in forestry or have moved to the cities. The Takivatan dialect split off from Takbanuað at least 100 years ago. At present, there are approximately 1000 Takivatan speakers left.

**II - Typological profile**

- Takivatan Bunun is an agglutinative language with some fusion and an extremely productive derivational morphology. It has prefixes, suffixes, infixes and circumfixes. Derivation is typically prefixal; inflection has a tendency to use suffixes. There are four commonly used aspect markers (perfective -in, resultative ‹in›, irrealis na- and progressive -aŋ)

- Constituent order is VAO/VS, but there is a productive system of left-dislocation. Takivatan has a focus-system (a Philippine-style voice system). This means that constituent configuration and voice are purely determined by pragmatic factors (instead of following NOM/ACC or ABS/ERG alignment). In practice, this means that there are three semantico-pragmatic cases (Agent, Patient, and Location) and residues of a fourth (Beneficiary/Instrument). The order of obligatory constituents and voice marking on the verb reflect which semantic case is in focus (i.e., most salient). Only personal pronouns are explicitly marked for case. focused NPs are optionally followed by a marker a.
• **Open wordclasses:** nouns, verbs, adjectives (stative verbs); **closed classes:** personal pronouns, demonstratives, question words (verb-like), numerals, auxiliaries (‘converbs’), time words, prepositions, …

• Personal pronouns have three persons and an inclusive/exclusive distinction. The 1st and 2nd are suffixes. 3rd person pronouns occur only rarely. There are two sets of cardinal numerals (human and non-human) and a whole bunch of ordinals.

• Word class boundaries are fluid and it is often hard to say to which word class a word belongs: time words can get aspect marking; pronouns sometimes behave like verbs, as do numerals; etc., etc.

### III - Clause structure

Takivatan verbs have three focus voices, which can or cannot be explicitly marked on the verb by a suffix: agent focus (AF, -an/∅), patient focus (PF, -un) and locative focus (LF, -an).

(01) Muskun ata maun!

M-uskun ata maun
ACT-together 1I.NOM eat+AF
‘Let us eat together!’

(02) Masihal kaunun?

Ma-sihal kaun-un
ADJR-good eat+PF-PF
‘Does it taste good?’ (lit.: ‘Is it good to be eaten?’)

(03) Maqeiquṑdananina pukʔununin.

maqeiquṑdan-anin a pukʔun-un-in
in.case rain-LF-PRF SUBORD pile.up-PF-PRF

If it starts raining, you have to put it all together in one pile. (about millet drying in the sun)

Negation, existential constructions, Aktionsarten, temporal and adverbials modifications of the VP, deontic and epistemic modality are expressed by an auxiliary verb construction, as in the examples below.

(04) Kitŋain aipi minpantu Sipuun

kitŋa-in aipi min-pantu Sipuun
started-PRF DEM.S.PROX.VIS reach.state-study Japanese

‘He had started to study Japanese.’

(05) Niaŋ ak pasiða nauað.

Ni-aŋ-ak pasiða nauað
NEG-PROG-1S.NOM marry girl

I didn’t marry a girl yet.
In complex verb phrases with an auxiliary or an adjective (see ex. (2)), and in constructions with a preverbal time word, agentive subjects and aspect markers tend to be moved to the first verb. An example of complex verb phrase with a time word:

(06) matiŋmutak munbaʔav.

\[\begin{aligned}
\text{ma-} & \text{tiŋmut-ak} & \text{mun-baʔav} \\
\text{ACT-} & \text{morning-1S.NOM} & \text{ALL-high.location} \\
\end{aligned}\] ‘In the morning, I will go up in the mountains.’

Most constituents in the Takivatan main clause, except for the verb and (most of the time) the first and second person subject can be ellipted as long as this does not create ambiguity. In the same way, many derivational and inflectional affixes can be omitted (e.g., nauað < binanauað in (05)). For instance, you could rephrase (06) as (07), but not as (08), because the latter would be ambiguous.

(07) Tiŋmut munbaʔav.

(08) Tiŋmut baʔav. (han baʔav ‘be in the mountains’; munbaʔav ‘go up in the mountains’; …)

IV - Takivatan clause linking: general concepts

Temporal iconicity of the clause order in text is a tendency in many languages, but in Takivatan it seems to be a grammatical rule: the order of sentences within a complex sentence is always temporally iconic. There are some constructions for which this rule is irrelevant, such as atemporal expressions or eternal events, meta-linguistic clause links, …

For a good illustration of how this works, compare the reason link in (09) and the result link (10).

(09) […] isaka dasuni tama munhaan sia atańhaan 打馬遠-tun haiða ituna qumaka.

\[\begin{aligned}
[i\text{-}sak-a & \text{dasun-i} & \text{tama} & \text{mun-haan} & \text{sia} & \text{atańhaan} \\
???-1S.ACC-LDIS & \text{take.with+PF-DEF} & \text{father} & \text{ALL-be.at} & \text{ANAPH} & \text{arrive.at-be.at} \\
\text{Dǎ. Mǎ. Yuǎn-tun}]^{C1} & \text{haiða} & \text{itun-a} & \text{quma-ka}]^{C2} \\
\text{GeoName-DEF.INTER} & \text{have} & \text{LOC.INTER-FOC} & \text{land-DEF.SIT.DIST} \\
\end{aligned}\] ‘[…] father took me with him and he went to (lit.: he went in order to arrive at) Da-Ma-Yuan where there was a plot of land.’

(10) Aupa papiaq-a madadaiŋʔað saduʔu, tupa tu: nei, savasu ei ma.

\[\begin{aligned}
[Aupa & \text{pa}piaq-a & \text{madadaiŋʔað} & \text{saduʔu},]^{C1} & \text{tupa tu:} \\
\text{But} & \text{\langle HUM\rangle-how.many-??} & \text{\langle P\rangle-elder} & \text{see} & \text{tell} & \text{COMPL} \\
\text{nei,} & \text{savasu-ai} & \text{ma}]^{C2} \\
\text{no} & \text{miss-??} & \text{INTER} \\
\end{aligned}\] ‘But a lot of elders had seen it, and they said: “No, you missed it.” ’
The two major clause linking strategies in Takivatan, **apposition and subordination**, realize more than half of all clause links. Both are structural markers: they do not explicitly express the semantics of the link they establish. (One consequence: the semantics of many clause links is subjective.) They can be augmented by semantic markers: aspect markers, definiteness markers, adverbs and discourse particles.

**Subordination** uses a generic marker *a* in the supporting clause to link it to the focal clause. The term subordination is misleading, since constructions with the marker *a* do not correspond to subordination as it is traditionally defined:

- It does not take the adverbial slot (because there is no adverbial slot)
- There is no grammatical reduction (although constructions with *a* tend to be shorter)
- Constructional parallels with topicalization: both have a marker *a*, both are fronted

(11) Sinsi a mastaan tu manaskali.

\[
\begin{array}{llllll}
\text{sinsi} & \text{a} & \text{mastaan} & \text{tu} & \text{ma-naskal-i} \\
\text{teacher} & \text{LDIS} & \text{exceedingly} & \text{COMPL} & \text{ADJR-happy-DEF}
\end{array}
\]

‘The teacher was very happy.

Takivatan clause linking has a tendency to be **pragmatically right-skewed**: the supporting clause often precedes the focal clause.

An overview of all semantic linking types is given in Tables 2 and 3.

### V - Addition

Addition is quite common in Takivatan. It is mainly expressed by appositional constructions, as in link C2-C3 below.

(12) A, miskaŋ sam amin tu ni matiŋmut ata, namusaupata tuða, ðakuka palamananuʔun tu, […]

\[
\begin{array}{llllllll}
\text{A,} & \text{[miskaŋ sam amin tu [ni ma-tiŋmut ata],]} & \text{[n a-mu-saup-a-ta tuða],} & \text{[ðaku-ka palaman-\text{-}u-\text{-}u tu, […]]}
\end{array}
\]

‘We all agreed not to go in the morning, but to go there straight away (lit.: go there really), and I had to follow the trail, […]’

There are some examples of subordinating constructions expressing addition.
VI - Disjunction

The only means of expressing disjunction in Takivatan is with a double marker *duq… duq*… (*‘whether… or…’*). It expresses inclusive closed disjunction (i.e., either A or B, but not both). It typically occurs in complement clauses following verbs of speech of thought.

(13) Ni qašaipun duq quðanan duq ni.

\[
\text{[Ni qašaip-un } [\text{duq } \text{quðan-an}]^{CC_1} [\text{duq } \text{ni}]^{CC_2}]^S
\]

NEG know-PF whether rain-LF whether NEG

‘You cannot know yet whether it will rain or not.’

(BNN-N-002:213)

A single *duq* (*‘whether’*) can also be used non-repetitively as in (14).

(14) Tanam mundip mahiva tu duq haiða dapan-a.

\[
\text{[Tanam mun-dip mahiva tu } [\text{duq } \text{haiða dapan-a}]^{CC}]^S
\]

Try DIR-there check.for COMPL whether have footprint-FOC

‘We will try to go there to check whether there are footprints.’

(TVN-008-002:126)

Disjunctive constructions are rare in Takivatan.

VII - Consequence:

reason, result and purpose

Sentences (09) and (10) on p. 4 are examples of an appositional reason and result construction respectively. Apposition can also express purpose, as in (15).

(15) A, siati naka taismitasʔatu, na, asaun sia <pause> ispinqansiapi na masðaŋi, nitu punhavuna sia sinkuðakuða.

\[
\text{[A, } \text{sia-ti nak-a taismi-taʔa tu,}]^{C_1} \text{ na, INTER ANAPH-DEF.PROX IS.ACC-LDIS ORD-first COMPL INTER [asa-un sia ispinqansiap-i na masðaŋ-i]}^{C_2} \text{ must-PF ANAPH make.understand-DEF INTER same-DEF [ni-tu punhav-un-a sia sinkuðakuða]}^{C_3} \text{ NEG-COMPL lose-FOC ANAPH life}
\]

‘And this is of first and foremost importance to me, that it must be made understood in a similar way, so that this life will not be lost.’

(TVN-008-002:240)

Occasionally, result links can be expressed by subordination (I found no examples of reason or purpose).
Clause linking in Takivatan Bunun

(16) Pataqu anak tu, nipati mulumaqeia, asa aun aipi pauktanan.

[\text{Pataqu anak tu, nipa-ti mu-lumaq-\textit{ei} a.}]_{C1}^{CC1}
discuss self COMPL from.here-DEF.PROX to-home-DEF SUBORD

[\text{asa aun aipi paukt-an-an}]_{C2}^{CC2}
must PROHIB+PF DEM.S.PROX.VIS give.up-AF

‘We discussed by ourselves that from here they were going back home (i.e., from here the footprints were leading back to the deer’s resting spot), so that we could not give up on it now.’

(TVN-008-002:144)

A very typical strategy for expressing result and purpose in Takivatan is the irrealis marker \textit{na-}, as the result link C1-C2 in (17) below.

(17) Ma, saduan asiki hutuŋ naʔasaun dusi manaqa.

[\text{Ma, sadu-an asik-i hutuŋ}]_{C1}^{C1}
INTER see-LF helm.palm-DEF monkey IRR-want-PF

[\text{na-\textit{ʔ}asa-un dusi manaq-a}]_{C2}^{C2}
EMOT-??? shoot-???

‘I saw a monkey in the palm tree, and I wanted to shoot it.’

(TVN-008-002:184)

In this example, the speaker is hunting for monkey, and when he spots one in a palm tree, he wants to shoot it. The irrealis marker is also used for purposive clause links, such as C1-C2 in sentence (18), which in the story immediately follows (17).

(18) Ma, samantukan du siatun napanaqun mavia dau muska.

[\text{Ma, samantuk-an du sia-tun}]_{C1}^{C1}
INTER spy.on-AF E MOT ANAPH-DEF.INTER IRR-shoot-PF

[\text{napa-\textit{naq-un} mavia dau muska}]_{C2}^{C2}
ACT-why EMOT but

‘I was keeping close watch on it in order to shoot it, but what did it do then?’

(TVN-008-002:185)

The use of the irrealis marker for consequential clause linking seems to be part of an ongoing grammaticalization process, in which the prefix \textit{na-} is developing into an independent discourse particle. Typically, the irrealis marker expresses temporality.

(19) Ŋausuŋ munhaan Kivit, kinuḍa namunhaan Kaliŋku.

[\text{Ŋausuŋ mun-haan Kivit, na-mun-haan Kaliŋku}]_{C1}^{CC1}
first DIR-go.to GeoName afterwards IRR-DIR-go.to GeoName

‘First I’m going to Qi-Mei, and afterwards I will go to Hualian.

(BNN-N-002:236)

In a next stage, its usage was extended to consequential constructions, as in (17) and (18) above. The prefix \textit{na-} typically occurs near the beginning of the second sentence of a consequential link.
Gradually, speakers might have started to associate it with the interclausal link, rather than interpreting it as an aspect marker on the verb of the second constituent clause. In the end, it developed into an independent discourse particle (which in (20) expresses result).

(20) Ni iti, na <pause>, malansaupata haul daidaka.

\[
\begin{align*}
\text{Ni} & \quad \text{iti, C1} \\
\text{na} & \quad \text{INTER} \\
\text{malansaupata} & \quad \text{haul} \\
\text{daidaka} & \quad \text{C2}
\end{align*}
\]

‘We can’t go here, well, then we will go in the direction of that little river over there.’ (TVN-008-002:191)

It is possible that this evolution is influenced by the Chinese particle 那 nà.

(21) 那你相信什麼呢？

\[
\begin{align*}
\text{nà} & \quad \text{nǐ} \\
\text{xǐang-xin} & \quad \text{shén-me} \\
\text{Q}
\end{align*}
\]

‘Well then, what do you believe?’ (Sinica Corpus)

Occasionally, the discourse particle a expresses reason:

(22) Matumasqaiŋ, a, samukani nanu itu Tama Diqanin tu.

\[
\begin{align*}
\text{Matumasqaiŋ,} & \quad \text{a, C1} \\
\text{samukani} & \quad \text{really} \\
\text{nanu} & \quad \text{there.DIV} \\
\text{itu} & \quad \text{father} \\
\text{Tama Diqanin} & \quad \text{heaven} \\
\text{tu} & \quad \text{COMPL}
\end{align*}
\]

‘I am grateful, a, that that was really what the Father in Heaven has planned.’ (TVN-008-002:210)

Note that C1-C2 in (22) seems to violate the temporal iconicity rule, and that it is possible to interpret C2 as a complement clause of C1.

The manner word aupa (‘thus’) can express both reason, as in (23), and result, as in (24).

(23) Pa muqnin taunahanin tu isbuʔanin, pantuʔa masmuav tudipi aupa, niapin tudip tu pasanpanakai, Taulu tu ni sia Sipuuna.

\[
\begin{align*}
\text{Pa} & \quad \text{muqnin} \\
\text{taunahanin} & \quad \text{arrive.at-go-PRF} \\
\text{tu} & \quad \text{graduate-PRF} \\
\text{isbuʔanin} & \quad \text{COMPL}
\end{align*}
\]

Thus

\[
\begin{align*}
\text{next-PRF} \\
\text{arrive.at-go-PRF} \\
\text{COMPL} \\
\text{graduate-PRF}
\end{align*}
\]

\[
\begin{align*}
\text{pantuʔa} & \quad \text{more} \\
\text{masmuav} & \quad \text{because} \\
\text{tudipi-ij} & \quad \text{past.times-DEF}
\end{align*}
\]

\[
\begin{align*}
\text{aupa} & \quad \text{know-PRF} \\
\text{niap-in} & \quad \text{past.times} \\
\text{tudip} & \quad \text{COMPL}
\end{align*}
\]

\[
\begin{align*}
\text{tu} & \quad \text{COMPL} \\
\text{pasanpanaq-a} & \quad \text{Chinese} \\
\text{ni} & \quad \text{ANAPH} \\
\text{sia} & \quad \text{Japanese-FOC}
\end{align*}
\]

‘And afterwards, we came at the period of our graduation, more students graduated then, because it was known that in those days that the Chinese were wining the war, and not the Japanese.’ (TVN-008-002:27)
A maupata naka inak tu sia <hesit> tu inuskunan tu qansaipuki aupa matqas naka sia qaliŋaki taqu, pa.

And thus is my understanding of what happened to us together, and thus I tell you in clear language, like that. (Lit: while I am very clear and distinct about the language that I tell you here.)

VIII - Contrast

Both apposition and subordination can express contrast in Takivatan. Appositional contrastive links are quite common:

(25) [...] nanuqantu maisiqabasa paun tu tama diqanin nitu haiða, nitu tupa tu uka

‘[…] it is certain that from former times on it was not said that there was a God in Heaven, but is was also not said that there wasn’t one.’

Subordination in contrastive links is uncommon. This is one of the only examples I have found:

(26) Num ?asaŋ malmananu Taluku matatamasəða sia Bunun tudipa pinvai.

‘Although the six villages were very dedicated and the Taroko very strong, the Bunun won (the competition) that time.’

Both the discourse particle na en the manner word aupa, both primarily used for consequence, can express contrast. In (27), only na in CC1-CC2 has a contrastive function.

(27) Tiaŋa tu: na, muqa sana muʔuki maquaq, na, tanamuk laqbiŋin musaupata.

‘And thus is my understanding of what happened to us together, and thus I tell you in clear language, like that. (Lit: while I am very clear and distinct about the language that I tell you here.)’
Takivatan has a dedicated contrastive conjunction, *muska* (‘but’).

(30) Tuoda, pauk tu: aduqeimuسا asamanaijanakaihađa pasbeiʔuna, na, luqlas…naluqlasasak.

[Tuoda, pauk tu [adux-evoi] [muska asama-naînjal] [maki haiđa pa-[i]sbai-ʔun a] [na, na-luqlas a sak]]

if have ACT-run.away-PF SUBORD INTER IRR-yell ?? 1S.NOM

‘And I really said, “OK, but you have to listen carefully, if it (i.e., the deer) happens to run away, well, then I will yell.” ’

(TVN-008-002:145)

**IX - Condition**

Conditional clause links are fairly uncommon in Takivatan. They are typically expressed by the dedicated conjunction *maki* or *maqi* (‘if’) in the lead-up clause, as in (30) above.
Sometimes, the conjunction muska seems to express negative condition (‘except for’) rather than contrast, as in (31).

(31) Ma, madimadia uka muska tanʔauka hutuŋ buntu, mamatla tutuða.

Ma, [madimadia uka]C1 muska tanʔauk-a hutuŋ
INTER long.time NEG.have except.for hear-1S.NOM-?? monkey
buntu.,]C2 [ma-matlaq tu-tuða]C3
continuously ACT-yell <INTENS>really
‘And for a long time, there was nothing except for that I heard the continuous (yelling of) the monkeys, they were really screaming.’

The conjunction ana tupa tu (‘no matter what, notwithstanding’) expresses generic condition, as in example (32).

(32) […] maqtuin dasudasun munhaan, dip <hesit>, ana tupa tu maqaisaq, paun tu qanupa, […]

[maqtu-in dasu[n]dasun mun-haan,]C1 dip, [ana tupa tu
can-PRF be.taken.wherever to-go.to then no.matter
ma-qaisaq,]C2 [paun tu qanup a,]C3 […]
ACT-direction call+PF COMPL hunt SUBORD
‘[…] I was allowed to be taken with them to go, no matter in which direction they went, as we say, to hunt […]’

Literally, the complex marker can be analyzed as ‘although it was said that’, but the construction has been reinterpreted as one lexical unit, and the original conjunction ana (‘although’) has largely fallen into disuse.

**X - Temporal linking:**

**sequence, simultaneity and interruption**

Both apposition and subordination are commonly used to express temporal sequence. An example of apposition:

(33) […] saduak mapasaqe hulus, haiða kinduʔuña, hanu kunhanun sapuða.

[…] [sadu-ak ma-pasaq-‹e›i hulus,]C1 [haiða kinduʔuña-a,]C2
see-1S.NOM ACT-wash-DEF clothes have intertwine.threads-FOC
[haru kunhan-un sapuð-a]C3
put.in burn-PF fire-FOC
‘[…] I saw them [the elders] wash their clothes, there was a twined rope, and they put it in the fire to burn it.’
And subordination:

(34)  Maupa, sauʔitaʔina, mainaʔitaʔin tudip.
      [sau-‹ʔ›ita-‹ʔ›in   a,] C1  [maina-‹ʔ›ita-‹ʔ›in   tudip] C2
    thus  go.till-LOC.DIST-PRF SUBORD from-LOC.DIST-PRF former.times

   ‘And thus, those days had come, and they passed away again.’

A third major strategy for sequence is the perfective marker in the supporting clause. These three
strategies can be alternated, as is the case in the complex sentence (35), which creates a long event
sequence by alternating apposition and constructions with -in.

(35)  Mainahanin pantu musunuhan, aupa puntasʔa pantu, sauhaanin pundusa, puntau, maqansiapin punhanin
   pun… <recap> punpaat, punhimaʔin, pantua, matqasi maqansiap tu umaupata qana sia alasaŋan.

   [Mainahan-in pantu] C1  [musunu-han,] C2  [aupa pun-tasʔa pantu,] C3  [sau-han-in
   go.through-PRF study   ???-be.at   thus ORD-one study ALL-go-PRF
   ORD-two  ORD-three  ACT-understand-PRF  DIR-go-PRF  ORD-four
   [pun-hima-in,] C8  [pantu a, matqas-i ma-qansiap tu
   ORD-five-PRF student LDIS distinct-DEF ACT-understand COMPL
   maupa-ta ana sia alasaŋan] C9
   like.this-DEF.DIST whatever ANAPH ???

   ‘We went through our studies ???, en we studied the first grade; and when we had gone to the second
   grade, the third; and when we understood everything, we would go to the fourth grade, and when we
   had finished the fifth grade, the students clearly understood whatever he (the teacher) wanted.’

(TVN-008-002:16)

Occasionally, the particle ma occurs in temporal sequences, either in each clause of the clause
complex, or in each non-initial clause.

(36)  A tupaka Tiaŋ tu: ma, dusasaus du naipi, ma, vaðaqvaðaqinau, [...]

   A       tupa-ka      Tiaŋ    tu:    [ma,    dusasaus    du
   INTER   say-DEF.SIT.DIST PersName.M COMPL INTER sing  EMOT
   naipi,] C1  [ma, vaðaqvaðaq-in-au,] C2  [malbaskav a,] C3  […]
   DEM.S.PROX.NVIS INTER squirm-PRF-??? lie.dead SUBORD

   ‘And Tiang said: “While I was singing, that deer, well, was squirming, and it appeared dead […]’

(TVN-008-002:157)

In rare cases, the irrealis marker na- can be used to express temporal sequence.

Simultaneity is one of the few semantic linking types in Takivatan that cannot be expressed by bare
apposition (i.e. apposition without any other marking). It is occasionally expressed by subordination,
as in (37).
Two aspect markers can express simultaneity: -aŋ and -in. The correlation between progressive aspect (-aŋ) and the expression of simultaneity is quite straightforward.

Strangely, it is also quite common to use a perfective marker -in for simultaneity.

Interruption is expressed by a progressive marker in the supporting clause in combination with the question word via (‘why’) in the focal clause (this construction can also be interpreted as counterexpectation; see (45) below).

Elaboration is mainly expressed by apposition.
Panaq ŋadaq-an, maq a ŋadaqei mapanahaan dalaq diqei peinaqan savisu ma.

‘You shot on the underside, it was under (the boar) and the bullet went in the ground and missed the target.’

Occasionally, perfective constructions are used in elaborating clause links

Prototypical constructions of assurance are relatively formulaic expressions that express an assurance from the part of the speaker that he has told the story to the best of his abilities. These expressions typically appear towards the end of a story, contain a speech verb and are marked by a proximal situational definiteness marker -ki on the main verb of the supporting clause.

And thus, and I tell you the complete truth, [I and also Ma Lin-Tang, we were both very small, but we were still selected to participate in the wrestling competition in the Xi-Lin district.]
Aupa, masak amina, ni sak amin sainuduki inak tu tina.

Aupa, [ma-sak amin a,] [ni sak amin]
Thus ACT-1S.ACC all SUBORD NEG 1S.NOM all

sav-in-udu-ki inak tu tina] [RES]-see-DEF.SIT.PROX 1S.POSS ATTR mother

‘And as such, in my entire life, I have never caught any glimpse of my mother.’

A final semantic linking type is counterexpectation (or surprise). Sentence (45) contains the two linking strategies for counterexpectation: the question word via and the discourse particle ai.

A, mavia haiða baqlusða, ʔuat aîinvalaiʔani, ai, ni aîilukmuan maqanvaŋ aîpi maupati, laupa sak minanulu tu.

A, [ma-via haiða baqlu-sða,] [ʔuat aîin-valai-ʔan-i,] [ai, ni aîilukmuan ma-qanvaŋ aîpi]
INTER ACT-why have new-??? apparently ???-trail-PF-DEF

[ai, ni aîilukmuan ma-qanvaŋ aîpi]
INTER NEG sleepin.g.spot ACT-sambar DEM.S.PROX.VIS

maupa-ti,] [laupa sak mîn-anulu tu] [thus-DEF.PROX now 1S.NOM RES-be.attentive COMPL

‘Look, how come there is something new, apparently it is a trail, ai, wasn’t there something here that was sleeping like a sambar, now I became very attentive.’

XIII - Conclusion

- Quantitatively, semantically implicit linking strategies make up more than half of all clause links; conjunctions are relatively rare. Semantically explicit linking strategies are more likely to appear with apposition than with subordination.

- Despite absence of marking and semantic specificity, apposition and subordination are clearly distinct syntactic linking strategy. There are clear tendencies as to what each can and cannot express. A majority of appositional links are additional and elaboration. If apposition expresses temporal links, it will be sequence and never simultaneity. The subordinator a is never used for expressing addition, but can occasionally be used for elaboration. It mainly expresses temporal relationships.

- As a linking strategy, aspect markers tend to appear toward the boundaries of clause links: the perfective -in and the progressive -aŋ appear in C1; the irrealis marker na- appears in C2; aspectual infixes do not seem to play any role in clause linking.
XIV - Conventions

[ [ ]^{S/C/CC} ] sentence and clause boundaries

Superscript:

S Sentence

Cn n-th clause of a complex sentence

CCn n-th clause of a complex complement clause

[ ] omitted phoneme or morpheme

〈 〉 infix, reduplication or epenthesis

1I first person inclusive

ACC accusative

ACT action verb prefix

ADJR adjectivizer

AF actor focus

ALL allative

ANAPH anaphoric pronoun

ATTR attribution marker

COMPL complementizer

COP copula

DEF definiteness marker

DEM demonstrative

DFN definitional marker

DIR directional

DIST distal (far)

DIV divine

EMOT emotive particle

FOC focus marker

GeoName geographical name

HUM human

INTER distal (intermediate)

IRR irrealis aspect

LDIS left-dislocation

LF locative focus

LOC locative

M male

NEG negation

NOM nominative (actor case)

ORD ordinalizer

PersName person name

PF patient focus

P plural

PRF perfective aspect

PROHIB prohibition

PROX proximal

Q question particle

REP repetitive

RES resultative aspect

S singular

SIT situational

SUBORD subordinator

VIS visual

XV - Bibliography


[Sinica Corpus]. Academia Sinica Balanced Corpus of Modern Chinese, v.4.0. [中央研究院現代漢語標記語料庫 4.0版] URL: <http://www.sinica.edu.tw/SinicaCorpus/>
<table>
<thead>
<tr>
<th>Linking type</th>
<th>Constructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition</td>
<td>○ apposition; ○ subordination</td>
</tr>
<tr>
<td>Disjunction</td>
<td>Ao ○ duq… duq… (mainly/only in complement clauses)</td>
</tr>
<tr>
<td>Contrast</td>
<td>B ○ apposition; ○ subordinator a in SuCl; ○ discourse particle na; ○ manner word aupa in FoCl; ○ conjunction muska in FoCl</td>
</tr>
<tr>
<td>Consequence</td>
<td>C ○ apposition; ○ subordinator a; ○ discourse particle na; ○ discourse particle a; ○ manner word aupa in FoCl</td>
</tr>
<tr>
<td>Reason</td>
<td>C ○ apposition; ○ manner word aupa in SuCl</td>
</tr>
<tr>
<td>Purpose</td>
<td>C ○ irrealis marker na- in FoCl; ○ muska in SuCl</td>
</tr>
<tr>
<td>Possible consequence</td>
<td>C /</td>
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<tr>
<td>Temporal</td>
<td>Sequence D ○ apposition; ○ subordination; ○ perfective marker -in in SuCl; ○ discourse particle ma in SuCl and FoCl; ○ irrealis marker na- in FoCl</td>
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<tr>
<td>Simultaneity</td>
<td>D ○ subordination; ○ progressive marker -ag in SuCl; ○ perfective marker -in in SuCl</td>
</tr>
<tr>
<td>Interruption</td>
<td>D ○ progressive marker -ag in SuCl and question word via in FoCl</td>
</tr>
<tr>
<td>Condition</td>
<td>Condition Dc ○ conjunction maki/maqi in SuCl; ○ ana tupa tu in SuCl</td>
</tr>
<tr>
<td>Textual</td>
<td>Elaboration ○ apposition; ○ perfective marker -in</td>
</tr>
<tr>
<td>Meta-linguistic</td>
<td>Assurance ○ definiteness marker -ki in SuCl</td>
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<tr>
<td>Textual</td>
<td>Counterexpectation ○ question word via in SuCl; ○ discourse particle ai</td>
</tr>
<tr>
<td>Perspective</td>
<td>○ subordinator a in SuCl</td>
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**Table 2 – Semantic linking types and their realizations**

(FoCl = Focal Clause; SuCl = Supporting Clause)
<table>
<thead>
<tr>
<th>Semantic linking type</th>
<th>Addition</th>
<th>Disjunction</th>
<th>Contrast</th>
<th>Result</th>
<th>Reason</th>
<th>Purpose</th>
<th>Sequence</th>
<th>Simultaneity</th>
<th>Interruption</th>
<th>Condition</th>
<th>Elaboration</th>
<th>Assurance</th>
<th>Counterexpect.</th>
<th>Perspective</th>
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Table 3 – Syntactic linking strategies and their semantics