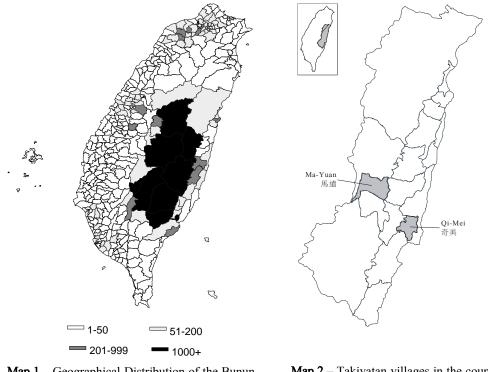
The Semantics of Clause Linking Chapter 30

Takivatan Bunun

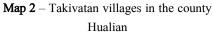
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I - Introduction

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)



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

Age category	Language proficiency
+ 85	Monolingual Bunun
60-81	Bilingual Bunun/Japanese
	or trilingual Bunun/Japanese/Mandarin
30-60	Bilingual Mandarin/Bunun
-30	Monolingual Mandarin

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 \pm 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 of 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, $-an / -\emptyset$), patient focus (PF, -un) and locative focus (LF, -an).

(01)	Muskun ata maun!				Masihal kaunun?		
	M-uskun ACT-together	ata 11.NOM	maun eat + AF		Ma-sihal ADJR-good	kaun-un eat + PF-PF	
	'Let us eat together!'			'Does it taste go eaten?')	od?' (lit.: 'Is it good to be		

(03) Maqei quðananina puk?ununin.

maqei	quðan-an-in	a	puk?un-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
	1 1 x		

'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) matinmutak munba?av.

ma-tiŋmut-ak	mun-ba?av
ACT-morning-1S.NOM	ALL-high.location
'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 munba?av.

(08) Tiŋmut ba?av. (han ba?av 'be in the mountains'; munba?av '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 atanhaan 打馬遠-tun haiða ituna qumaka.

[i-sak-a	dasun-i	ta	ma m	un-haan	sia	atan-haan
???-1S.ACC-LDIS	take.with+PF-D	DEF fa	ther Al	LL-be.at	ANAPH	arrive.at-be.at
Dă.Mă.Yuăn-tun] ^{C1}	[haiða	itun-a		quma-ka] ^C	22	
GeoName-DEF.INT	ER have	LOC.IN7	FER-FOC	land-DEF.	SIT.DIST	

'[...] 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 papiaqa madadain?að sadu?u, tupa tu: nei, savasu ei ma.

[Aupa	a (pa)piaq-	a	ma‹da›daiŋ?að	sadu?u,] ^{C1}	[tupa	tu:
But	⟨HUM⟩-h	low.many-???	<p>elder</p>	see	tell	COMPL
nei,	savasu-ai	ma] ^{C2}				
no	miss-???	INTER				

'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.

sinsi	a	mastaan	tu	ma-naskal-i
teacher	LDIS	exceedingly	COMPL	ADJR-happy-DEF
(771)				

'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 palamananu?un tu, [...]

А,	[miskaŋ	sam	amin	tu	[ni	ma-tiŋmut	ata,] ^{C1}
INTER	middle	1P.NOM	all	COMPL	NEG	ACT-morning	1I.NOM
[na-mu-sa IRR-DIR		DEF.SIT.DIS		ða,] ^{C2} ally	[ðaku- 1S.AC	-ka CC-DEF.SIT.DIST	Г
palamana follow.tra		tu,] ^{C3} COMPL	[.]			

'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, [...]'

(TVN-008-002:143)

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 qansaipun duq quðanan duq ni.

'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 dapana.

[Tanam mun-dip mahiva tu [duq 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 taismitas?atu, na, asaun sia < pause > ispinqansiapi na masðaŋi, nitu punhavuna sia sinkuðakuða.

А,	sia-ti			nak-a		taismi-tas?a	tu,] ^{C1}	na,
INTER	ANAPH-DEF.PROX		1S.ACC-LI	DIS	ORD-first	COMPL	INTER	
[asa-un must-PF	sia AN	APH		ansiap-i understand-l	DEF	na INTER	masðaŋ-i, same-DE	-
[ni-tu		punhav-u	n-a	sia	sir	nkuðakuða] ^{C3}		
NEG-CO	MPL	lose-PF-?	??	ANAPH	lif	è		

'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).

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

[Pataqu	anak	tu,	[nipa-ti	mu-lumaq-‹e›i	a ,] ^{CC1}
discuss	self	COMPL	from.here-DEF.PRO	X to-home-DEF	SUBORD
[asa au	ın		aipi	pauktan-an] ^{CC2}] ^S	
must Pl	ROHIB	+ 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 *na*-, as the result link C1-C2 in (17) below.

(17) Ma, saduan asiki hutun na?asaun dusi manaqa.

Ma,[sadu-anasik-ihutuŋ]hutuŋ][na-<?>asa-unINTERsee-LFhelm.palm-DEFmonkeyIRR-want-PFdu-simanaq-a]c2EMOT-???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.

Ma, [samantuk-an du sia-tun]^{C1} [**na**-panaq-un]^{C2} INTER spy.on-AF EMOT ANAPH-DEF.INTER IRR-shoot-PF [ma-via dau muska]^{C3} 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 *na*- is developing into an independent discourse particle. Typically, the irrealis marker expresses temporality.

(19) Ŋausuŋ munhaan Kivit, kinuða namunhaan Kaliŋku.

[Ŋausuŋ mun-haan Kivit,]^{C1} [kinuða na-mun-haan Kaliŋku]^{C2} 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 *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 daiðaka.

 [Ni
 iti,]^{C1}
 [na,
 malan-saupa-ta
 haul

 NEG
 here
 INTER
 follow-in.direction.of-DEF.DIST
 little.river

 daiða-ka]^{C2}
 there-DEF.SIT.DIST
 ''

 '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 ${\mathbb H}$ nà.

(21) 那你相信什麼呢?

nà nǐ xiāng-xìn shén-me ne well.then you believe what Q 'Well then, what do you believe?'

(Sinica Corpus)

Occassionally, the discourse particle *a* expresses reason:

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

[Matumasqaiŋ,] ^{C1}	[a ,	samukani	nanu	itu	Tama Diqanin	tu] ^{C2}
be.grateful	INTER	arrange	really	there.DIV	father heaven	COMPL

'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 isbu?anin, pantu?a masmuav tudipi aupa, niapin tudip tu pasanpanakai, Taulu tu ni sia Sipuuna.

[Au]pa	[muqi	n[a]-in	tauna-han-in	t	u	isbu?an	-in,	
Thus	next-I	PRF	arrive.at-go-Pl	RF (COMPL	graduat	e-PRF	
pantu-?a student-L	DIS	masmuav more	tudip-i] ^{C1} past.times-		aupa because	niap-in know-PRF	tudip past.times	tu COMPL
pasanpan	aq- <a>i,	Taulu	tu	ni	sia		Sipuun-a] ^{C2}	
wage.war	-DEF	Chines	se COMPL	agai	nst Al	NAPH .	Japanese-FOC	

'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)

(24) A maupata naka inak tu sia < hesit > tu inuskunan tu qansaipuki aupa matqas naka sia qaliŋaki taqu, pa.

A	[maupa-ta	nak-a	inak	tu	sia	
INTER	thus-DEF.DIST	1S.ACC-LDI	S 1S.POSS	ATTR	ANAPH	
tu ATTR	in-uskun-an ???-together-AF	tu ATTR	qansaipu[n]-ki] ^C understand-DEF		[aupa X thus	
matqas	nak-a	sia	qaliŋa-ki	SIT.PROX	taqu,] ^{C2}	[au]pa
distinct	1S.ACC-FOC	ANAPH	language-DEF.S		tell	thus

'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

[nanu	qan tu	maisi-qal	bas-a	paun	tu	Tama	Diqanin
for.su	re COM	PL from-bef	ore-???	be.calle	ed COMPL	Father	Heaven
ni	tu	haiða,] ^{C1}	[ni 1	tu	tupa tu		uka] ^{C2}
NEG	COMPL	have	NEG	COMPL	call C	OMPL	NEG.have

"[...] 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."

(TVN-008-002:04)

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

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

[num	?as	saŋ	ma	almananu	mi	Taluku	ma-‹ta›tamasað	a] ^{C1}
six	vil	lage	de	dicated	???	Taroko	ADJR-‹very›-strength	SUBORD
-				tudip-a past.time-		pinvai] ^{C2} win		

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

(TVN-008-002:23)

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) Tiana tu: na, muqa sana mu?uki maquaq, na, tanamuk laqbinin musaupata.

[Tiaŋ-atu:[na,muqasanaPersName.M-FOCCOMPLINTER???be.up.to

– 9 –

mu?u-kimaquaq,JCC1[na,tanam -uklaqbinin2P.ACC-DEF.SIT.PROXhowINTERtry.out -1S.NOMtomorrowmu-saupa-taJCC2JSJSJSJSJSDIR-direction-DEF.DIST''''''''''''''''''(TVN-008-002:138)

And an example with *aupa*:

(28) Ita?in a, asa minaunani puhut, pa ni mina?un,

[Ita- in	а		asa	m <in>aun-aŋ-i</in>	puhut,] ^{C1}
there-PRF	SUE	BORD	can	<prf>-eat + AF-PROG-DEF</prf>	squirrel
[[au]pa	ni	m <in></in>	aun,] ^{C2}		
but	NEG	«RES	>eat + A	ΛF	

'When she had come, we wanted to eat squirrel, but I did not eat.'

(TVN-008-002:195)

The relation between contrast and consequence might not be immediately clear, but example (29) below could give us a hint. (*Maupa* is a verbalized variant of *aupa*.)

(29) Maka astamaqansuað a maupa ni minaun maduq.

[Maka	astamaqansuað	a] ^{C1}	[m-aupa	ni	m∢in>aun	maduq] ^{C2}
How.be.that	sow.yearly	SUBORD	ACT-thus	NEG	<res>-eat</res>	millet

'How could it be that when we sowed yearly, we could nevertheless (lit.: because of that) not eat millet!'

(TVN-008-002:54)

Takivatan has a dedicated contrastive conjunction, muska ('but').

(30) Tuða, pauk tu: aduqei muska asa manaiŋali maki haiða pasbei?una, na, luqlas...naluqlas a sak.

^s [Tuða,	pauk	1	tu	[aduq- <e>i,]^{CC1}</e>	[muska	asa	ma-naiŋa	li] ^{CC2}
really	say + 1S	NOM	COMPL	of.course-DEF	but	must	ACT-list	en.carefully
[maki	haiða	pa-[i]sb	oai- un	a,] ^{CC3}	[na ,	na-luqlas	а	sak] ^{CC4}] ^S
if	have	ACT-ru	un.away-Pl	F 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 tan?auka hutuŋ buntu, mamatla tutuða.

Ma,	[madin	nadia	uka] ^{C1}		[muska	tan?auk-a	hutuŋ
INTER	long.tii	ne	NEG.have	e	except.for	hear-1S.NOM-???	monkey
buntu,] ^{C2}		[ma-m	natlaq	<tu< td=""><td>⊳tuða]^{C3}</td><td></td><td></td></tu<>	⊳tuða] ^{C3}		
continous	ly	ACT-	yell	٨I	NTENS>really		

'And for a long time, there was nothing except for that I heard the continuous (yelling of) the monkeys, they were really screaming.'

(TVN-008-002:180)

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[r	n]dasun		mun-ł	naan,] ^{C1}	dip,	[ana tupa tu
can-PRF	be.tak	en.whereve	er	to-go.	to	then	no.matter
ma-qaisaq,] ^C	2	[paun	tu		qanup	a,] ^{C3}	[]
ACT-directio	on	call + PF	CO	OMPL	hunt	SUBORE)

"[...] I was allowed to be taken with them to go, no matter in which direction they went, as we say, to hunt [...]"

(TVN-008-002:86)

Literally, the complex marker can be analyzed as 'although it was said that', but the construction has be 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 mapasaqei hulus, haiða kindu?una, hanu kunhanun sapuða.

[]	[sadu-ak	ma-pasaq-‹e›i	hulus,] ^{C1}	[haiða	kindu?un-a,] ^{C2}
	see-1S.NOM	ACT-wash-DEF	clothes	have	intertwine.threads-FOC
[hanu	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.'

(TVN-008-002:169)

And subordination:

(34) Maupa, sau?ita?ina, maina?ita?in tudip.

Maupa,	[sau- ita- in	a,] ^{C1}	[maina- ita- 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.'

(TVN-008-002:67)

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 puntas?a pantu, sauhaanin pundusa, puntau, maqansiapin punhanin pun... <recap > punpaat, punhima?in, pantua, matqasi maqansiap tu umaupata qana sia alasaŋan.

[Mainahan -in par	ntu] ^{C1} [m	usunu-han,] ^C	² [aupa]	pun-tas?a	pantu,] ^{C3}	[sau-han- in
go.through-PRF stu	ıdy ??	?-be.at	thus (ORD-one	study	ALL-go-PRF
pun-dusa,] ^{C4} [pun-t ORD-two ORD-	-	[ma-qansiap ACT-unders	-		in pun-pa PRF ORD-	-
[pun-hima- in ,] ^{C8}	pantu	a, m	atqas-i	ma-qa	nsiap	tu
ORD-five-PRF	student	LDIS di	stinct-DF	EF ACT-I	understand	COMPL
maupa-ta	ana	sia	8	alasaŋan] ^{C9}		
like.this-DEF.DIST	whate	ver ANA	PH 1	???		

'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, [...]

А	tupa-ka		Tiaŋ	tu:	[ma ,	dusasa	aus	du
INTER	say-DEF.SI	Г.DIST	PersName.M	COMPI	L INTEI	R sing		EMOT
naipi,] ^{C1} DEM.S.F	PROX.NVIS	[ma , INTER	vaðaqvaðaq-in-a squirm-PRF-???	-	malbaskav ie.dead	a,] ^{C3} 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).

(37) Maduanaan tudip taunhaan isbu?ana, maupa, namuŋain tuða qanaqtuŋ pasanpana.

[Ma-duanaan	tudip	taun-haan	isbu?an	a,] ^{C1}	maupa,
ACT-almost	past.time	arrive.at-be.at	graduate	SUBORD	thus
[na-muŋa-in IRR-soon-PRF	tuða really	1 1 5	pasanpanaq] ^{C2} wage.war		

'When we would almost graduate, just like that, the war would soon be over.'

(TVN-008-002:29)

Two aspect markers can express simultaneity: *-aŋ* and *-in*. The correlation between progressive aspect (*-aŋ*) and the expression of simultaneity is quite straightforward.

(38) Maitama qabas, tunahaan inama?aŋ, tunahaan ?asaŋ mitati, [...]

[Mai-tama		qabas,	,	tuna-han		inama- aŋ,] ^{C1}
deceased-fath	ner	forme	r.times	arrive-go.to		carry.on.back-PROG
[tuna-haan arrive-go.to		saŋ lage	mita-ti,] ^{C2} 11.POSS-1	DEF.PROX	[]

'My deceased father carried me in the old days here, and we arrived at our village, and it is really our Father in Heaven that blessed us to really set us apart as believers in the

(TVN-008-002:239)

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

(39) Bababaðbaðin, tupa saduki painaqan tu, [...].

[<ba><ba>baðbað-in,]^{C1}</ba></ba>	[tupa	sadu-ki	pa <i>naq-an</i>	tu,] ^{C2}
<rep><rep>converse-PRF</rep></rep>	tell	see-DEF.SIT.PROX	<res>-shoot-A/PF</res>	COMPL

'people were talking back and forth, telling that they had seen the shooting, [...]'

(TVN-008-002:87)

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).

(40) Ma, niaŋ tu tupia dusaus via, matiŋna tinpusa matisbuŋ.

Ma,	[ni- aŋ	t	tu	tupia	dusaus] ^{C1}	[via
INTER	NEG-PRO	OG (COMPL	???	sing	why
ma-tiŋna ACT-anot	ther.time	1	pusa e-second	ma-tis ACT-6	buŋ] ^{C2} explode	

'But he had not sung that much, or again there was a second explosion.'

(TVN-008-002:156)

XI - Elaboration

Elaboration is mainly expressed by apposition.

(41) Panaq nadaqan, maq a nadaqei mapanahaan dalaq diqei peinaqan savisun ma.

[Panaq	ŋadaq-an,] ^{C1}	[maq a	ŋadaq-‹a›i	ma-panahaan	dalaq	diqei
shoot	below-PF	DFN COP	below-DEF	ACT-arrive.at	land	???
painaqan bullet	savisu-[u]n miss-PF	ma] ^{C2} INTER				

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

(TVN-008-002:89)

Occassionally, perfective constructions are used in elaborating clause links

(42) [...] haiðina duma tais?an, haiða Sani, masinauba?a.

[]	[haið <a>-in	a	duma	tais?an,] ^{C1}	[haiða	Sani,
	have-PRF	SUBORD	other	relative	have	PersName.F
	auba -‹? ger.sibling -F	⇒a] ^{C2} OC				
·[]	they had anoth	er relative, the	ey had San	i, the younger	sister.'	

(TVN-008-002:207)

XII - Meta-linguistic linking types

Meta-linguistic clause links say something about the relationship between one of the speech participants (in Takivatan usually the speaker) and the text.

Supporting clauses 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.

(43) Aupa, kaupa naki istaquki aupa, [...]

Aupa, [kaupanak-iis-taqu-ki $aupa,]^{C1}$ $[...]^{C2}$ thuscomplete1S.ACC-DEFtransfer-tell-DEF.SIT.PROXthus

'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.*]'

(TVN-008-002:20)

A perspective link indicates that the event in the focal clause is an interpretation of the facts from a particular perspective, which is expressed in the supporting clause. At the moment, I only found one clear example, which occurs in a subordinate clause construction.

(44) Aupa, masak amina, ni sak amin sainuduki inak tu tina.

Aupa,	[ma-sak	amin	a,] ^{C1}	[ni	sak	amin
Thus	ACT-1S.ACC	all	SUBORD	NEG	1S.NOM	all
sa‹in›udu- ‹RES›-see	-ki 2-DEF.SIT.PROX			tu ATTR	tina] ^{C2} mother	

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

(TVN-008-002:8)

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*.

(45) A, mavia haiða baqlusða, ?uat ainvalai?ani, ai, ni ailukmuan maqanvaŋ aipi maupati, laupa sak minanulu tu.

A, INTER	[ma-vi ACT-v		baqlu-sða, new-???] ^{C1}	[?uat apparently	<a>in-valai-?an-i,]^{C2} ???-trail-PF-DEF
[ai , INTER	ni NEG	ailukmua sleeping	ma-qanva ACT-saml	5	aipi DEM.S.PRO	X.VIS
maupa-ti thus-DEH	-	[laup now	NOM	m‹in›a ‹RES›	anulu be.attentive	tu] ^{C4} 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.'

(TVN-008-002:199)

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}	senter	sentence and clause boundaries				
Superscript:	S	Sentence				
	Cn	<i>n</i> -th clause of a complex sentence				
	CCn	<i>n</i> -th clause of a complex complement clause				

[] omitted phoneme or morpheme

 $\langle \rangle$ infix, reduplication or epenthesis

11	first person inclusive	DIV	divine	PercName	person name
	1				1
ACC	accusative	EMOT	emotive particle	PF	patient focus
ACT	action verb prefix	FOC	focus marker	Р	plural
ADJR	adjectivizer	GeoName	geographical name	PRF	perfective aspect
AF	actor focus	HUM	human	PROHIB	prohibition
ALL	allative	INTER	distal (intermediate)	PROX	proximal
ANAPH	anaphoric pronoun	INTER	interjection	Q	question particle
ATTR	attribution marker	IRR	irrealis aspect	REP	repetitive
COMPL	complementizer	LDIS	left-dislocation	RES	resultative aspect
COP	copula	LF	locative focus	S	singular
DEF	definiteness marker	LOC	locative	SIT	situational
DEM	demonstrative	М	male	SUBORD	subordinator
DFN	definitional marker	NEG	negation	VIS	visual
DIR	directional	NOM	nominative (actor case)		
DIST	distal (far)	ORD	ordinalizer		

XV - Bibliography

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	Linking type		Constructions	
Addition	Addition	А	(1) apposition; (2) subordination	
	Disjunction	Ao	① <i>duq duq</i> (mainly/only in complement clauses)	
Contrast	Contrast	В	① apposition; ② subordinator <i>a</i> in SuCl; ③ discourse particle <i>na</i> ; ④ manner	
			word <i>aupa</i> in FoCl; ③ conjunction <i>muska</i> in FoCl	
Consequence	Result	С	① apposition; ② subordinator <i>a</i> ; ③ irrealis marker <i>na</i> - in FoCl; ④ discourse	
			particle <i>na</i> ; (5) discourse particle <i>a</i> ; (6) manner word <i>aupa</i> in FoCl	
	Reason	С	① apposition; ② manner word <i>aupa</i> in SuCl	
	Purpose	С	① irrealis marker <i>na</i> - in FoCl; ② <i>muska</i> in SuCl	
	Possible	С	/	
	consequence			
Temporal	Sequence	D	① apposition; ② subordination; ③ perfective marker - <i>in</i> in SuCl; ④ discourse	
			particle ma in SuCl and FoCl; (5) irrealis marker na- in FoCl	
	Simultaneity	D	① subordination; ② progressive marker - <i>aŋ</i> in SuCl; ③ perfective marker - <i>in</i> in	
			SuCl	
	Interruption	D	① progressive marker -aŋ in SuCl and question word via in FoCl	
Condition	Condition	Dc	① conjunction <i>maki/maqi</i> in SuCl; ② <i>ana tupa tu</i> in SuCl	
Textual	Elaboration		1) apposition; 2) perfective marker - <i>in</i>	
Meta-linguistic	Assurance		① definiteness marker -ki in SuCl	
	Counterexpectation		① question word via in SuCl; ② discourse particle ai	
	Perspective		① subordinator <i>a</i> in SuCl	

Table 2 – Semantic linking types and their realizations

(FoCl = Focal Clause; SuCl = Supporting Clause)

Semantic linking type Linking strategy	Addition	Disjunction	Contrast	Result	Reason	Purpose	Sequence	Simultaneity	Interruption	Condition	Elaboration	Assurance	Counterexpect.	Perspective
Apposition			1	1	1	1	1				1	1		
Subordination			1	1			1	1				1		1
Aspect: -in (perfective)							1	1			1			
Aspect: na- (irrealis)				1		1	>							
Aspect: -aŋ (progressive)								1	1					
Definiteness: -ki												1		
Manner word aupa			1	1	1									
Question word via									1				1	
Discourse particle a				1										
Discourse particle ai													1	
Discourse particle ma							1							
Discourse particle na			1	1										
Conjunction ana tupa tu										1				
Conjunction <i>duq</i>		1												
Conjunction muska			1							<				
Conjunction maki/maqi										1				

Table 3 - Syntactic linking strategies and their semantics