The Semantics of Space in Takivatan Bunun

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1. Introduction

With around 50,000 ethnic members, the Bunun are the fifth-largest of the fourteen recognized Austronesian aboriginal groups inhabiting the island of Taiwan (DGBAS (2009)). The actual number of speakers is much lower since language transfer to younger generations has come almost completely to a halt and almost all Bunun under 30 are monolingual Mandarin speakers.

There are five extant Bunun dialects: Isbukun (Southern Bunun), Takbanuað and Takivatan (Central Bunun), and Takituduh and Takibakha (Northern Bunun). Takivatan is the third-largest dialect, after Isbukun and Takbanuað, and is spoken in Nantou county and Hualien county.

Like many other Austronesian languages of Taiwan, Takivatan Bunun is verb-initial and is highly agglutinative, particularly because of its very rich verbal morphology. The unmarked argument order is:
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Nouns, verbs and adjectives are open word classes; adjectives are a subclass of stative verbs. There is no distinguishable class of adverbs; most adverbial concepts and many aspectual and modal meanings are in Takivatan expressed by a class of words that behave as auxiliary verbs.

2. Spatial deixis

Takivatan has a number of different paradigms that syntactically behave differently but all centre around a distance dimension based on an alternation between the morphs -i ‘proximal, -un ‘medial’ and -a ‘distal’. This tripartition appears in:

2.1. The definiteness markers -ti/-tun/-ta // -ki/-kun/-ka

2.2. The place words ʔiti/ʔitun/ʔita

The three place words are the most commonly used words for relative spatial and temporal reference. They are typically speaker-oriented.

ʔiti ‘here’ ‘at this moment’
ʔitun ‘there (medial)’ ‘at that moment (medial)’
ʔita ‘there (distal)’ ‘at that moment (distal)’

They are very often used as verbs, as in (1), or combine with locative prefixes to form a verb, as in (2).

(1) ʔitiʔak

{ʔiti}[{-ʔak}]_{AG}
here-1S.F
‘I am here.’ (adaptation of BNN-N-002:52)

(2) Maisnaʔisaq amu munʔiti?

{maisna-ʔisaq} [amu]_{AG} {mun-ʔiti}
ABL-where 2P.F ALL-here
‘From which places did you all come here?’ (BNN-N-002:51)

However, they can also appear in certain (peripheral) nominal slots:
2.3. **Four demonstrative paradigms**

There are four demonstrative paradigms (a singular, a vague plural, a paucal and an inclusive generic), which can have a non-visual prefix and a proximal/medial/distal suffix.

<table>
<thead>
<tr>
<th>prefix-</th>
<th>ROOT</th>
<th>-suffix</th>
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<tbody>
<tr>
<td>Ø- ‘VIS’</td>
<td>aip- ‘singular’</td>
<td>-i ‘PROX’</td>
</tr>
<tr>
<td>n- ‘NVIS’</td>
<td>aŋki- ‘vague plural’</td>
<td>-un ‘MED’</td>
</tr>
<tr>
<td>aint- ‘paucal’</td>
<td>-a ‘DIST’</td>
<td></td>
</tr>
<tr>
<td>ait- ‘inclusive generic’</td>
<td>(-Ø ‘USPEC’)</td>
<td></td>
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</table>

Table 1 – Demonstrative paradigms

Only the *aip*-paradigm can be realized without suffix, in which case it is underspecified for distance. For paucal *aint-* only distal forms have been attested (*ainta* and *nainta*).

(4) Mintun aipun minsumaʔa, [...]

{mintun}_AUX  [aipun]_AG     {minsuma-a}
sometimes DEM.S.MED.VIS come.here-SUBORD

‘From time to time this person comes here, [...]’ (TVN-008-001:9)

(5) Aituða aŋki tu madadauk pakasihal

{aituða}_AUX  [aŋki]_CSR     tu
be.real DEM.PV.PROX.VIS COMPL

{ma-(da)auk}_AUX     {paka-sihal}
STAT-INTENS-slow CAUSE-good

‘And as such I could see that these men were really making things slowly better for us.’ (TVN-008-002:39)
(6) tama tina akita, painanainta, [...] 
   (a) [tama tina aki-ta] 
       father mother grandfather-DEF.REF.DIST 
   (b) {paina-nainta} 
       rightfully.belong-DEM.PA.DIST.VIS 

   ‘There were his father and mother and grandfather, he would give them their 
   rightful share, [...]’ (TVN-012-001:119) 

(7) naitun qabas haqulka sia duʔun

   [naitun]AG {qabas}AUX {haqul-ka} 
   DEM.IG.MED.NVIS old.times trap-DEF.SIT.DIST 
   [sia duʔun]UN:INSTR 
   ANAPH thread 

   ‘In the old days, our people [i.e. the Bunun] used strings for setting hunting 
   traps.’ (TVN-012-002:93) 

2.4. The third person singular and plural personal pronouns

Only third person pronouns distinguish between proximal, medial and distal forms. 

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<thead>
<tr>
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<th>Plural</th>
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<tr>
<td>Proximal</td>
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<td>inti</td>
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<tr>
<td>Medial</td>
<td>istun</td>
<td>intun</td>
</tr>
<tr>
<td>Distal</td>
<td>ista</td>
<td>inta</td>
</tr>
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</table>

Table 2 – Third person personal pronouns

Unlike other personal pronouns, but like demonstratives, they have no distinct forms 
for different cases. Unlike demonstratives, they do not take the non-visible prefix n- 
and they can be used attributively in possessive constructions.

(8) Nastuqas istuna 

   [nas-tuqas [istun-a]PSR] 
   deceased-older.sibling 3S.MED-LNK 

   ‘his deceased older sibling’ (TVN-008-003:122) 

3. Definiteness markers

Takivatan Bunun has six definiteness markers that as far as I can see exhibit
paradigmatic behaviour.

<table>
<thead>
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<th>situational</th>
</tr>
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<td>proximal</td>
<td>-ti</td>
</tr>
<tr>
<td></td>
<td>-ki</td>
</tr>
<tr>
<td>medial</td>
<td>-tun</td>
</tr>
<tr>
<td></td>
<td>-kun</td>
</tr>
<tr>
<td>distal</td>
<td>-ta</td>
</tr>
<tr>
<td></td>
<td>-ka</td>
</tr>
</tbody>
</table>

Table 3 – Takivatan definiteness markers

These morphemes are optional in almost all contexts. Native speakers are not able to indicate what they mean (though they apply them fairly consistently) and there are contexts where referential and situational forms are mutually exchangeable. For example, speakers will generally indicate that both forms below are possible and that their propositional meaning is more or less identical:

(9)  
(a) Samuta!  
\[
\text{samu-} \text{ta} \quad \text{taboo-}\text{DEF.REF.DIST}
\]
\[
\text{samu-} \text{ka} \quad \text{taboo-}\text{DEF.SIT.DIST}
\]

‘It is a taboo!’

Most interestingly, all forms can occur both on nouns and on verbs. This is unusual, but, on the other hand, there are no \textit{prima facie} reasons why definiteness could not be relevant to the categorization of events. The correlation between certain verb classes (in particular motion verbs) and deixis has been pointed out in the literature (e.g. by Fillmore (1982) and Levinson (1996:362)) and Lyons (1977:690ff) discusses the involvement in a wider range of verb classes in the expression of deixis.

Some examples with distal forms:

(10)  
\{s\dd\} \text{maduqta}
\[
\text{take} \quad \text{millet-}\text{DEF.REF.DIST}
\]

‘[Go there when it is still small and] take some millet’ (TVN-012-001:69)

(11)  
\{hai\dd\} \text{tupata, […]}
\[
\text{have} \quad \text{tell-}\text{DEF.REF.DIST}
\]

‘Having said (\textit{those things}), […]’ (TVN-003-xxx:18)
(12) Maq a maitamaka, […]
maq  a  [mai-tama-ka]
DEF  LNK  deceased-father-DEF.SIT.DIST

‘As far as my deceased father is concerned, […]’ (TVN-012-003:11)

(13) Maqai tantuŋuka, […]
maqai  {tantuŋu-ka}
if  visit-DEF.SIT.DIST

‘If you visit (over there), [you have to sleep there, you can’t immediately return.’ (TVN-012-002:20)

3.1. The distance dimension

The distance dimension is fairly unproblematic:

- **Proximal ɒi**: ‘close’; near the deictic centre
- **Medial ɒun**: ‘delineated’; not near the deictic centre and not very far away, but in a clearly delineated space, typically either in the same space as the deictic centre or within visible range.
- **Distal ɒa**: ‘far’; away from the deictic centre; often – but not necessarily – outside visible range and/or in a vague, non-well-delineated distance.

Examples:

(14) Asa pisihalun itu Kaliŋkuti, pisihalunti, na asa tunhan Nantuta

(a) {asa}aux  {pi-sihal-un}  [itu  Kaliŋku-ti]lo
have.to  CAUS.STAT-good-UF  this.here  GeoName-DEF.REF.PROX

(b) {pi-sihal-un-tí}
CAUS.STAT-good-UF-DEF.REF.PROX

(c) na  {asa}  {tun-han}  [Nantu-tá]place
CONS  have.to  PERL-go  GeoName-DEF.REF.DIST

‘You have to put everything in order here in Kaliŋku, and when it is in order here, you have to go over there to Nantou.’ (TVN-012-002:49)

(15) Tudip tu ihan Damaiantun […]
{tudip}aux  tu  {i-han}  [Damaian-tun]place
in.those.days  COMPL  STAT-go  GeoName-DEF.REF.MED

‘In those days I was in Da-Ma-Yuan […]’ (TVN-008-002:66)
3.2. **Referential vs. situational definiteness**

Corpus data and interactions with informants do not make immediately clear what the exact distinction is between the \( t \)-forms and the \( k \)-forms. The two sets are more or less equally common in real-world texts and can occur both on nouns and on verbs.

Even from Figure 1, which plots the distribution of definiteness markers per word class in a typical Takivatan Bunun narrative, it is difficult to discern any clear tendencies that separate the two sets.

This is partly so because some forms have developed non-spatial meaning extensions and partly because some words (like the manner word *maupa*) combine idiosyncratically with a certain definiteness marker (*maupata*).

If we only take into account the distribution of the different markers on nouns and verbs (see Figure 2), it is clear that the \( t \)-set has a strong tendency to occur on nominal stems and the \( k \)-set on verbal stems.

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1 V = verbs; Aux = auxiliaries; Adj = adjectives; Q = question words; Loc = place words; Time = time words; Man = manner words; Emo = the emotive particle; Ppro = personal pronoun; Hnum = human numeral; DPro = demonstrative; N = noun
This is only so if we disregard medial situational -kun for a moment, a not unreasonable thing to do since there are only 6 examples in the entire corpus, all of which are on nouns and appear in idiosyncratic contexts: they typically occur on nouns referring to people and almost invariably express empathy.

(16) Tamakun niaŋ mataða

[tama-kun-a] {ni-aŋ}aux {matað-a}

father-DEF.SIT.MED-LDIS NEG-PROG die-SUBORD

‘[And almost immediately afterwards, my younger sister died, at a time when] my dear father had not died yet.’ (TVN-008-002:63)

The distribution in Figure 2 is best explained by making a fairly abstract differentiation between what I call situational and referential (or non-situational) definiteness markers.

Referential markers (the τ-forms) focus on the material and consistent properties of their hosts, for instance by conceptualising them as tangible objects or in terms of the material results they produce. Again, this explains why these forms have a preference for nouns, but also why this preference is not black-and-white: nouns are more often used for describing material objects, but it is sometimes necessary to reify events and consider them in their materiality.

**Examples with nouns:**

(17) Pian munhan inak lumaqti

[Pian]ag {mun-han} {inak lumaq-ti}place
PersName.M ALL-go 1S.POSS home-def.ref.prox

‘Pian came to my house (**here**)’ (TVN-008-001:2)
(18) Haiða laupaku paun tu sia padantun maʔuvul […]

{haiða} [laupaku] TIME [paun] tu
have now call.UF COMPL
sia padan-tun maʔuvul] AG
ANAPH reed-DEF.REF.MED STAT-flexible

‘And now there is this flexible kind of reed [which is called taqnas]’
(TVN-012-001:44)

(19) Paukin aipun tu: “Na, samuta.”

{pauk-in} [aipun] AG tu: c1 COMPL
say-PRV DEM.S.MED.PROX COMPL
na {samu-ta}
INTER taboo-DEF.REF.DIST.VIS

‘He said: “well, that is forbidden.” ’ (TVN-008-002:189)

Examples with verbs:

(20) […] tunadanti ?ata

{tunadan-ti} [?ata] AG
cross.road-DEF.REF.PROX 11.F

‘[And since it was over there,] we crossed this road.’ (TVN-008-002:178)

(21) Namusaupata tuða

{na-mu-saupa-ta} {tuða}
IRR-ALL-go.in.direction-DEF.REF.DIST really

‘We will really go in that direction’ (TVN-008-002:142)

(22) Haiða tupata, […]

{haiða} AUX {tupa-ta}
have tell-DEF.REF.DIST

‘Having said those things, [we will rely on God …]’ (TVN-003-xxx:18)

Situational markers (the $k$-forms) stress how their hosts unfold in a spatio-temporal
setting and therefore focus on their changeable qualities. This explains why these forms have a preference for verbs, but also why this preference is not absolute: it is sometimes necessary to interpret nouns as events in a spatio-temporal setting (think about English *interpretation, thought, the fathering of children*).

**Examples with verbs:**

(23) Na, muqnaŋ sak laupaku taquki [...]

na {muqna-ŋ}$_{\text{AUX}}$ [sak]$_{\text{AG}}$ {laupaku}$_{\text{AUX}}$ {taqu-ki}$_{\text{INTER next-PROG 1S.F now tell-DEF.SIT.PROX}}$

‘And next I will tell *now/here* [about how my life was in the old days when I was still a child.]’ (TVN-006-001:2)

(24) A tupaka maitama tu: [...]

a {tupa-ka}$_{\text{INTER say-DEF.SIT.DIST}}$ [mai-tama]$_{\text{AG}}$ tu$_{\text{deceased-father COMPL}}$

‘And then *my now-deceased father said: [...]’ (TVN-012-003:20)

(25) Maqtudu maqansiap tu maquaqa sinkuðakuðaka

{maqtu-du}$_{\text{AUX}}$ {maqansiap}$_{\text{tu}}$$_{c1|\text{COMPL2}}$

can-EMOT understand COMPL

{maqua-a}$_{\text{AUX}}$ {sinkuðakuða-ka}$_{\text{how-LNK work-DEF.SIT.DIST}}$

‘May [he] understand how difficult *those* lives [of us] were [lit: how we laboured]’ (TVN-003-xxx:25)

**Examples with nouns:**

(26) Lumaqki akia.

[lumaq-ki]$_{\text{lo}}$ [aki-a]$_{\text{AG}}$

home-DEF.SIT.PROX grandfather-LNK

‘Grandfather is at home (*here*).’ (BNN-N-002:239)
(27) Na maq a siðikuna, [...] 

\[
\begin{array}{llll}
\text{na} & \text{maq} & \text{a} & [\text{siði-kun}]_{AG}\text{-a} \\
\text{INTER} & \text{DEFIN} & \text{LNK} & \text{mountain\_goat'-DEF.SIT.MED\_SUBORD}
\end{array}
\]

‘As far as that mountain goat is concerned, [it moved to the drinking spot.]’

(TVN-xx2-003:24)

(28) Maqai haiða qumaka, [...] 

\[
\begin{array}{llll}
\text{maqai} & \{\text{haiða}\} & [\text{quma-ka}]_{AG}
\end{array}
\]

\[
\begin{array}{llll}
\text{if} & \text{have} & \text{land'-DEF.SIT.DIST}
\end{array}
\]

‘If there is a plot of land (over there), [you cannot randomly transgress its boundaries]’

(TVN-013-001:24)

4. Conclusion

- Takivatan Bunun has a number of deictic paradigms, all centred around the tripartition -\text{i} ‘proximal’ / -\text{un} ‘medial’ / -\text{a} ‘distal’
- There are two sets of definiteness markers, one with initial $\text{t}$ and one with initial $\text{k}$; both can occur on nouns and verbs and both are used approximately equally often.
- From straightforward observation, it is not clear how they are functionally or grammatically distinct; on the basis (rather informal) quantitative analysis, one can argue that the difference between the two sets is most elegantly explained in terms of how they conceptualize reality.

Interlinear glosses

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<thead>
<tr>
<th>1I</th>
<th>1\text{st} person inclusive</th>
<th>CAUS</th>
<th>causative prefix</th>
<th>LDIS</th>
<th>left-dislocating particle</th>
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### Bibliography


