# The role of Bunun deixis in information structure: An initial assessment

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#### 1. Introduction

This paper will discuss the role of spatial deixis on information structure in the Takivatan dialect of Bunun. For the sake of simplicity, we will mainly restrict the discussion to topicality, and we will here look at two types of topicality:

- (1) **Clausal topicality**: the expression of the topic in a clause, i.e. the grammatical or functional identification of the pragmatically most salient participant of that clause.
- (2) **Discourse topicality**: the expression of the discursive text topic, i.e. the establishment of discursive themes through the creation of strings of cohesion (cf. Halliday & Hasan 1976). A single text or discourse can have more than one discourse topic.

We will also restrict the discussion to deictic paradigms or elements whose primary function is the expression of either spatial deixis (*this*, *that*) or anaphoric deixis (*the aforementioned*).

#### 1.1. Takivatan Bunun

Takivatan is one of the five dialects of the Bunun language (ISO 639-3: bnn), an Austronesian language spoken on Taiwan. The Bunun language is mainly spoken in the central regions of Taiwan, mainly in villages in relatively remote mountainous locations. There are no official figures on the actual number of speakers; currently 56,004 people are officially registered as Bunun, but the actual number of fluent speakers is certainly considerably lower (at most 60% of that number).

Takivatan Bunun is a largely agglutinating language with a very strongly developed verbal morphology. It has a Philippine-type argument alignment system (see De Busser 2011), with a basic contrast between actor, undergoer and locative alignment marked by suffixes on the verb, and has a very productive of valency-changing verbal affixes. Only non-third-person pronouns distinguish between different case forms.

#### 1.2. Cross-linguistic functions of spatial deixis

We restrict ourselves here to paradigms whose primary use is the expression of spatial (and temporal) deixis. The discussion will exclude person deixis, i.e. personal pronouns and other words used for indicating person contrasts, and phenomena like TAM systems, which are dedicated to the grammaticalized expression of temporal contrasts. (We will discuss anaphoric markers and expressions of manner, because they both have a phoric deictic function.)

For the sake of simplicity, let's start the discussion from the point-of-view of 'canonical' deictic markers, demonstrative pronouns. Dixon (2003:79ff) asserts that the following functions have been attested for demonstratives:<sup>1</sup>

- **Deictic function**: The expression of spatial distance contrasts
- **Phoric reference**: Anaphoric and cataphoric reference
- **Identification**: Expressing that a referent should be considered identified or should be recognizable to the discourse participants (e.g. *It's that kind of guy*.)
- **New Information**: The expression of new information (e.g. *There is this new mobile phone.*)
- **Discourse organization**: It is not exactly clear what is meant here, but it appears that this covers the use of demonstrative for contrastive reasons or to express a narrative climax (e.g. [Story of a fishing trip]. And finally, we caught this gigantic sword fish.)

The three latter ones are categorized as minor or secondary functions. Only the last one is of interest to us here. It pertains to the use of, for instance, English this for introducing new referents in discourse, as in in the following example.

(1) When we walked outside, we suddenly saw this strange light.

Again, it is mentioned by Dixon as a peripheral function of demonstratives only, and are not discussed in great detail.

Himmelmann (1996:218ff) divides the cross-linguistic functions of demonstratives in four major categories:

- **Situational use**: "reference to an entity present in the utterance situation" (Himmelmann 1996:219)
- **Discourse deixis**: a metaphorical extension of spatial deixis that refers to the distance of a referent in the current text or conversation.
- **Tracking use**: the use of demonstratives for keeping track of textual referents. In other words, the use of deictics for creating textual cohesion in the sense of Halliday & Hasan (1976)
- **Recognitional use**: "[...] the intended referent is to be identified via specific, shared knowledge rather than through situational clues or reference to preceding segments of the ongoing discourse." (Himmelmann 1996:230) This definition appears to correspond more or less to the fifth function in Dixon's classification.

Of these categories, only the first is directly involved in the expression of spatial and temporal deixis. The primary function of the other three categories appears to be related to the organization of information in texts and conversations. This is especially the case for the tracking use of demonstratives, in which demonstrative reference is used for creating cohesive chains of reference in a text, thus allowing the discourse participants to keep track of the different entities mentioned in the text. Interestingly, in his discussion of the tracking use of deixis, Himmelmann gives examples from Tagalog.

On p. 243 he also extensional use of demonstratives for discourse reference and tracking (both could be subsumed under 'anaphoric' use) is a step in the grammaticalization pathway leading to the creation of definiteness markers or third person pronouns. However, he clearly distinguishes the two categories (see Himmelmann 1996:210), something that I will not make

<sup>&</sup>lt;sup>1</sup> Dixon (2003) additionally mentions a "syntactic function", but this is not really a function of deixis per se, but rather a paradigmatic opposition (for instance a case contrast) that intersects with deixis in the demonstrative paradigms of certain languages.

such a clear distinction for Takivatan Bunun. The only grammatical forms that conceivably could be analysed as markers of definiteness markers – the bound suffixes discussed in 2.1.1 – do also encode a distance contrast. These bound markers clearly establish a referent or an event (see below) as definite or identifiable, while their spatial deictic function is often more difficult to determine. They can be used for establishing what Himmelmann (1996:210) calls "associative-anaphoric" links.

#### 2. Bunun deixis and information structure

# 2.1. General overview

Most deictic paradigms in Takivatan Bunun have a three-fold distance distinction, which i is based on an alternation between the sub-morphemic -i 'proximal', -un 'medial' and -a 'distal' (see De Busser 2009, Chapter 9). This is a case for the bound definiteness markers, third person personal pronouns, demonstrative paradigms, and the place words ?iti/?itun/?ita (see 9.2, 9.3, and 9.4 respectively). Exceptions are the anaphoric marker sia and the manner word (m)aupa 'thus', which both express anaphoric deixis but express no distance contrast.

The prototypical function of deictic elements is marking distance contrasts, as in illustrated in the example below for definiteness markers.

(2) Asa pisihalun itu Kalinkuti, pisihalunti, na asa tunhan Nantuta pi-sihal-un Kalinku-**ti** have.to CAUS.STAT-good-UF this.here K.-DEF.REF.PROX pi-sihal-un-ti CAUS.STAT-good-UF-DEF.REF.PROX tun-han Nantu-ta asa CONS PERL-go N.-DEF.REF.DIST have.to 'You have to put everything in order **here** in Kalinku, and when it is in order here, you have to go over **there** to Nantou.' (TVN-012-002:49)

Apart from spatial deixis, Takivatan Bunun deictic markers have developed a number of meaning extensions: temporal deixis, empathy, animacy, and endorsement. In fact, certain deictic forms are primarily used for expressing non-spatial meanings. For instance, the bound medial definiteness marker -kun, when it appears on nominal forms, almost exclusively marks that the speaker has an emotional connection to the noun, usually a person, that is marked by -kun (empathy).

(3) Muska [ma]limadia minsumina Linikun.
muska mali-madia min-suma-in-a Lini-kun
but SUPERL-many INCH-return-PRV-LNK L.-DEF.SIT.MED
'But then, after a long time (my dear friend) Lini came back.' (TVN-008-002:179)

Interestingly, while all the above-mentioned functions of deixis are discussed in De Busser (2009), this work does not make any reference to the role of deictic markers in the realization of information structure contrasts, except for the dedicated anaphoric function of the marker *sia*. Curiously, this seems to suggest that deictic paradigms have no significant function related to information structure. In the sections below, we will explore to what extent this is a valid assumption. We will investigate how different deictic paradigms are involved in the realization of sentence-level and discursive topics.

First, I will give a short overview of the deictic paradigms relevant to the present discussion. I will discuss:

- bound definiteness markers (2.1.1)
- third person pronouns (2.1.2)
- free demonstratives (2.1.3)
- dedicated place and manner words (2.1.4)
- the anaphoric marker sia (2.1.5)

# 2.1.1. Definiteness markers

Takivatan Bunun has a set of six bound markers that express a three-fold distance contrast (proximal, medial, distal) and a two-fold contrast in what could be called ontological status (referential, situational).

Table 1.	<b>Takivatan</b>	Bunun	definiteness	markers

	Referential	Situational
Proximal	-ti	-ki
Medial	-tun	-kun
Distal	-ta	-ka

In a number of ways, these bound definiteness markers are unusual. First of all, calling them definiteness markers is somewhat controversial, given that (a) they encode a distance contrast and (b) while the attachment of a definiteness marker causes the host referent to be definite, referents can be definite without one of these markers being present.

Secondly, these bound markers can occur on words in many word classes, including nouns, verbs (!), the anaphoric marker *sia*, and the manner word *maupa*. Third, definiteness markers encode a difference between what has been called in De Busser (2009) referential and situational forms. The former pertain to the material properties of a referent of an event, while the latter put more emphasis on the spatial and/or temporal properties of a referent or event. This analysis has been elaborately supported by evidence in De Busser (2009:426–440).

Below is an example of a distal situational marker on a verbal host. The use of a situational marker indicates that emphasis is placed on the distal *location* of the event, rather than on what actually happened.

(4) Mukvaikuka vanlað.

mukvaiku-**ka** vaŋlað bend-**DEF.SIT.DIST** riverside

'The river makes a bend over there.' (TVN-xx2-001:3)

Example (5) contains a proximal situational marker and a distal referential marker. The distal referential *-ta* indicates that the referential properties, in this case the physical identity, of the person marked are important.

(5) ... la?adusduki Qusunsubali sia Maiata tama.

la-adus-du-**ki** Qusunsubali sia Maia-**ta** tama COVER-carry-EMO-**DEF.SIT.PROX** Q. ANAPH M.-**DEF.REF.DIST** father '[...] **from here** we went together to (**that**) Qusunsubali, to the father of Maia.' (TVN-008-002:69)

<sup>&</sup>lt;sup>2</sup> But not on third person pronouns or demonstrative pronouns.

# 2.1.2. Third person pronouns

Personal pronouns do generally not express a distance contrast, with the exception of the paradigms for the third person singular and plural.<sup>3</sup>

Table 2. Third person personal pronouns

	Singular	Plural
Proximal	isti	inti
Medial	istun	intun
Distal	ista	inta

Third person pronouns usually refer to human or other higher animate referents.

#### (6) Han?ak daiða maluskun inta.

han-?ak daiða ma-luskun **inta** be.at-1S.TOP over.there DYN-together **3P.DIST** 'I am there with them together.' (TVN-008-vxxx:1)

Unlike other pronominal forms, they do not have distinct forms for different grammatical roles (agent, undergoer, location) and – in Takivatan Bunun – do not have bound equivalents. Third person pronouns are relatively uncommon in comparison to first and second person forms and free demonstrative forms.

### 2.1.3. Free demonstrative paradigms

Takivatan Bunun has a rather complex demonstrative paradigm, which encodes: (a) a two-way visibility distinction; (b) a four-way plurality distinction; (c) and a three-way distance dimension:

**Table 3. Demonstrative forms** 

Visibility	ROOT	Plurality	Distance
Ø- 'VIS'	ai-	-p- 'singular'	-i 'PROX'
n- 'NVIS'		<i>-ŋk-</i> 'vague plural'	-un 'MED'
		-nt- 'paucal'	-a 'DIST'
		-t- 'inclusive generic'	-Ø 'USPEC'

Not all combinations of morphs have been attested and there is great variety in the commonality of demonstrative forms. For instance, in the paucal paradigm only the distal forms *ainta* 'DEM.VIS.PAUC.DIST' and *nainta* 'DEM.NVIS.PAUC.DIST' have been attested and most underspecific forms (without a distance marker) are relatively rare.

The most commonly occurring demonstratives by a large margin are singular and vague plural forms. Below is an example of the visibility contrast expressed by the singular distal demonstratives (n)aipa.

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<sup>&</sup>lt;sup>3</sup> The main reason for not analyzing the forms in Table 2 as demonstrative forms is that they appear to be historically related to the root *-is*, which in Isbukun Bunun has been analysed as a bound third person pronoun (e.g. in Zeitoun 2000) and occasionally occurs in Takivatan Bunun, mainly in fixed constructions.

(7) Na, ukin aipa ?ita namudanin, musbai naipa maqmut

na uka-in **aipa** ?ita

INTER NEG.have-PRV DEM.S.DIST.VIS there.DIST

na-muda-in

IRR-walk-PRV

musbai **naipa** maqmut run.away **DEM.S.DIST.NVIS** night

'It [the deer, visible] wasn't there anymore, it had gone, it [non-visible] had run away during the night.' (TVN-008-002:135)

Inclusive generic forms refer to an indeterminate number of referents which always includes the speaker.

(8) Haiða aitun ludun tikisuna, [...]

haiða **aitun** ludun tikis-un-a

have **DEM.IG.MED.VIS** mountain small-EMPH-SUBORD

'Our people had a small mountain, [where in the old days they would go hunting.]' (TVN-012-002:162)

# 2.1.4. Multi-categorial place and manner deictics

A dedicated set of words is used for expressing space, time and manner. These forms can occur in adverbial and in verbal slots. The forms <code>?iti/?itun/?ita</code> typically express spatial and, somewhat less commonly, temporal distance. They make the typical three-fold distinction between proximal, medial and distal.

?iti 'here' 'at this moment'

*?itun* 'there (medial)' 'at that moment (medial)' *?ita* 'there (distal)' 'at that moment (distal)'

An example of the proximal place word used as a verb:

(9) I?iti?ak.

i-**?iti**-?ak

STAT-here-1S.F

'I am here.' (BNN-N-002:52)

In the example below, the distal form occurs both in a verbal form and clause-finally in an adverbial slot.

(10) Mun?ita madas pudaku atikisunan ?ita

mun-?ita madas pu-daku tikis-un-aŋ ?ita
ALL-there.DIST take place-ritual.object little-EMPH-PROG there.DIST
'[The shaman] has to go there and put a little bit of the ritual token over there.' (TVN-012-001:44)

The manner word *(m)aupa* has a similar distribution as the place words above. It can be translated as 'thus' or 'in this/that manner' and often refers back to previous event in the text or discourse. As the example below illustrates, it is often modified by a bound definiteness marker, most commonly the referential distal form *-ta*.

(11) Maupata madaiŋ?að tu m baðbaði Diqanin tu masihalaŋ kakaunun maupa-ta ma-daiŋ?að tu baðbað-i Diqanin tu thus-DEF.REF.DIST STAT-old COMPL have.conversation-PRT Heaven COMPL ma-sihal-aŋ ka-kaun-un STAT-good-PROG things.to.eat 'And like that, the elders talked to Heaven in order to keep producing good crops.' (TVN-012-001:46)

# 2.1.5. The anaphoric marker

One commonly occurring marker that is exclusively used for anaphoric or exophoric reference is *sia*. It refers back to referents, events, or entire stories that were previously mentioned in a discourse or are commonly known to all discourse participants. *Sia* combines with all bound definiteness markers and can be used both in nominal (12) and verbal slots (13).

(12) Ma, samantukandu siatun [...].

ma samantuk-an-du sia-tun

INTER spy.on-LF-EMOT ANAPH-DEF.REF.MED

'[The deer...] I kept a close watch on it [in order to shoot it]' (TVN-008-002:184)

(13) Siata.

sia-ta

#### **ANAPH-DEF.REF.DIST**

'[I will now explain how we Bunun in former days were, how our elders said: if you want to grow up, you have to live attentively, if you see a one-eyed man, if there is a cripple, you cannot laugh, it is a taboo, you cannot make jokes about them.] It was **like that**.' (TVN-013-001:4)

Example (13) also illustrates that *sia* does sometimes refer back to an entire text, not just to a single referent or event.

#### 2.2. Austronesian definiteness and information structure

In the study of various Austronesian languages, a case has been made that topics (or topical subjects, or the like) must be definite. For instance, Schachter (1976:494) says of Tagalog:

"Formally, the topic is marked either by the use of a topic pronoun form or by a prenominal topic marker. Notionally, the topic is always interpreted as definite."

In the same volume, Keenan (1976:252) states:

"Surface subjects of Malagasy simplex Ss are necessarily definite. Semantically this means there are always object which the subject phrase refers to, and further this referentiality is not lost when the sentence is negated or questioned."

Keenan examples that this requires that Malagasy subjects "either be proper names, definite pronouns, or common nouns with demonstrative adjectives or definite articles." (Keenan 1976:253).

From the data in the Takivatan corpus, it is not clear that there is a necessary link between definiteness and topicality. For instance, it is possible for the clausal topic of a sentence to be indefinite and non-specific. The example below is the answer to the question *Did you plant many yams*.

(14) Sauðunin ðaku.
suað-un-in ðaku
sow-UF-PRV 1S.N
'Many were planted by me.' (TVN-xx2-003:39)

Since this is an undergoer construction (as indicated by the suffix -un), the topic of this sentence must be the implied subject 'many' and this topic is indefinite in the given context. In addition, all deictic elements involved in establishing definite referents can occur in topic and non-topic positions and some, such as the definiteness markers and the anaphoric marker sia, can even mark predicates rather than arguments (see e.g. (13)). This means that there is no hard requirement for Takivatan subjects to be definite.

However, this does not mean that there is no correlation between definiteness and topicality. On a general conceptual level, it does make sense that pragmatically salient elements in a clause or discourse are more commonly realized as definite entities. In fact, the Animacy Hierarchy makes this connection explicit in that it "arranges entities in the order of their INTRINSIC TOPICALITY, i.e. the degree to which they are likely to be definite and referential" (Hopper & Thompson 1980:286).

All words in Takivatan that are associated with the explicit expression of definiteness have a deictic function. It is therefore safe to assume that there will be a strong correlation, whatever its nature, between Takivatan deixis and topicality, or more generally the degree of information salience.

# 3. The role of Takivatan deictics in information structure

This appears at odds with the following statement:

"Many studies on spatial deixis put great stress on the use of deictic markers for anaphoric reference and discourse deixis [...]. In Takivatan, the distance dimension in any of the deictic paradigms is rarely used unambiguously for anaphoric reference, most likely because of the existence of the anaphoric marker *sia* [...]." (De Busser 2009:425)

What does this mean? In 1.2, we saw that a number functions that have been commonly associated with deixis (or more narrowly, demonstration) is related to the organization of information structure. For instance, in many languages demonstratives have developed an anaphoric function and as such are important grammatical tools in establishing textual cohesion. Among the deictic words that have a tripartite distance distinction, I have so far found not a single example where spatial deixis has developed any sort of anaphoric meaning extension. For instance, there are no instances in the corpus where the proximal definiteness marker *-ti* means 'the one just mentioned' and *-ta* 'mentioned a bit longer ago'.

The absence of such metaphorical extensions of the spatial into the textual domain in Takivatan should not surprise us: we saw in 2.1.5 that the language has a dedicated anaphoric marker *sia* which is fulfils what Himmelmann calls a 'tracking function'. Another word that has an obvious textual function is the manner word *maupa* 'thus', which at the end of a narrative sequence often refers back

However, all this does not mean that other deictic words and morphemes have no function in Takivatan information structure. Although we established that there is no clear correlation between deixis and *clausal* topicality in Takivatan, deictic forms are, by the virtue of being definite, involved in the realization of topical progression, i.e. they have a function in maintaining discursive topics.

To illustrate this, we will have look at a narrative sequence from a hunting story. A group of hunters, which includes the speaker (VT) in his younger days, have gone into the mountains to hunt for deer. One of the men has gone on a reconnaissance trip and has just arrived back in the temporary camp.

- (15) [A] Aupa tuða... nian tu nanu sanavan minsumina ... Tian, minaba?av tupa naip tu:
  - [A1] aupa tuða ni-aŋ tu nanu sanavan min-suma-in-a Tiaŋ thus real NEG-PROGCOMPL really evening INCH-return-PRV-LNK T.
  - [A2] mina-ba?av tupa naip tu
    ABL-high.location say DEM.S.NVIS COMPL
    'But, when it wasn't really evening yet, Tiang had returned, he had come back from the mountain and told us:'
  - [B] Na, maqtu laqbinina, na?asa dusa ta matiskun, malu?umi han ba?av daiðaki, pinkaunun isian ba?avta, ŋabul.
  - [B1] na maqtu laqbinin-a na-asa dusa ta ma-tiskun well be.possible tomorrow-LNK IRR-have.to two COMPL DYN-in.a.group
  - [B2] maluʔum-i han baʔav daiða-ki disperse-PRT be.at high.location there-DEF.SIT.PROX
  - [B3] pinkaun-un i-sia-an ba?av-ta ŋabul go.up-NR.INSTR LOC-ANAPH-LF high.location-DEF.REF.DIST deer 'Well, tomorrow is possible, two of us will have to go together, and disperse when we get to this place, and we will climb upwards to the deer that is in that place above.'
  - [C] A, namaqaisaq dauka, saqnutai du sia ?ukai laqaiban.
  - [C1] a na-ma-qaisaq dau-ka
    INTER IRR-DYN-in.that.direction EMO-DEF.SIT.DIST
  - [C2] saqnut-ai-du sia ?uka-i laqaiban get.stuck-PRT-EMO ANAPH NEG.have-PRT route 'A, if he will go in that direction, he will get stuck there, without a way out.'
  - [D] Ansaisana Atul Dain tu "nis, matinmutin tamudana madav."
  - [D1] ansais-aŋ-a Atul daiŋ tu forbid-PROG-ENUM A. large COMPL
  - [D2] ni-is ma-tinmut-in ta-mu-dan-a mað?av NEG-3S.F STAT-morning-PRV ?-ALL-road-LNK embarrassed 'But Big Atul forbade us: "no, when it has become morning, we will leave, it is embarrassing."
  - [E] Na... s... ?ukin aipa ?ita namudanin, musbai naipa maqmut.
  - [E1] na ?uka-in aipa ?ita na-mu-dan-in well NEG.have-PRV DEM.S.DIST.VIS there.DIST IRR-ALL-go-PRV
  - [E2] mu-isbai naipa maqmut

    ALL-cause.to.move DEM.S.DIST.NVIS night.time

    'Well, it will not be there anymore, it will be gone, it will have run away during the night.' (TVN-008-002:130-134)

Figure 1 provides a visual representation of the cohesive anaphoric and exophoric links that are established by the use of deictic words in this short narrative segment. Discourse participants are marked by a square; anaphoric or exophoric links established by deictics are represented as arrows. Note that I only encoded explicit elements in the text. This means that non-expressed arguments, even those that might be signalled by verbal morphology, are not taken into account.

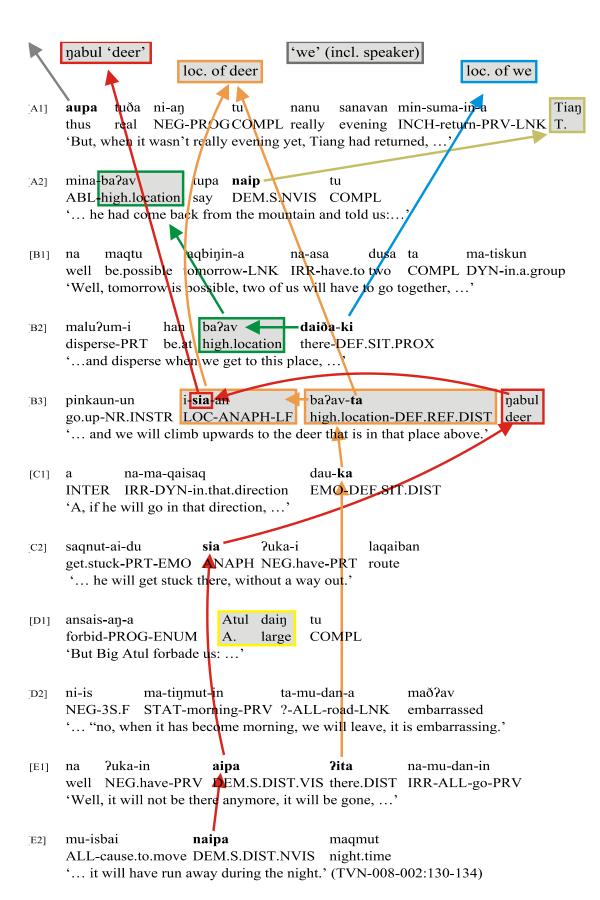


Figure 1. Active topic chains in example (15)

The result is a schema that gives a – rough – impression of the topical chains established in the textual sequence sequence. (Different colours represent different chains.) These topical chains weave this sequence together into a coherently interpretable whole. From Figure 1 we can deduce the following:

- New discursive topics in a text are often established by common or proper nouns in the case of entities, or by locative nouns or verbs in the case of locations.
- Once established, entitities and locations are then maintained by a deictic elements, which often have deictic reference as their primary function, i.e. they are not primarily discourse-deictic markers. The relation between a referent and its anaphoric antecedent is one that Halliday & Hasan (1976:314) call CO-INTERPRETATION: deictic elements link back to a previous reference in the text, but the anaphor and the anaphoric do not necessarily refer to identical semiotic denotata. For instance, *aipa* in (15) E1 and naipa in (15) E2 both refer to the same deer (*ŋabul* in B3), but in E1 it is a visible deer, and in E2 a non-visible deer that has already run away. Another example: in example (16) below, B1 ?ita 'there.DIST' refers back to the root *quma* 'field' in (16) A1, but the semantic target of both words is not identical: ?ita refers to a location, whereas *quma* is part of a verb () referring back to an event.
- Important discursive topics can be reinforced by an occasional repetition of nominal forms, e.g. *ŋabul* 'deer' in B3. This is what Halliday & Hasan (1976:279) refer to as REITERATION.
- Highly salient topics do not need to be expressed; the topical arguments are simply ellipted in subsequent sentences and not marked by any deictic element.

Below is a longer narrative segment by another narrator, followed by its analysis. In it, the narrator (TM) explains how in traditional Bunun society most important work on the field, in this case the harvest, could only be undertaken after consulting prophetic dreams.

(16) [A] Maqai maqabasi tupa tu madain?aði namuqumaka taŋusan matibahi.

[A1] maqai ma-qabas-i tupa tu
if DYN-in.former.times-PRT say COMPL
ma-daiŋ?að-i na-mu-quma-ka
STAT-old-PRT IRR-ALL-field-DEF.SIT.DIST

[A2] tanus-an mati-bahi

first PROG-have.prophetic.dream

'If in the old days the elders said they wanted to work on the land, they interpreted a prophetic dream beforehand.'

- [B] Namaqun ?ita maqai masihala bahia, tudip, na, sintupadu tu maqai ?itun asa namasihal kakaunun.
- [B1] na-maqun ?ita IRR-cut.off there.DIST
- [B2]maqaima-sihal-abahi-atudipifSTAT-good-SUBORDprophetic.dream-SUBORDthat.time
- [B3] na sin-tupa-du tu maqai ?itun well RES.OBJ-say-EMO COMPL if there.MED
- [B4] asa na-ma-sihal ka-kaun-un be.able IRR-STAT-good CV-eat-UF

'And when they wanted to go there to harvest (lit: when they wanted to cut off things in that place), if the dream was good, that meant in those days that if you were there, you could eat very well.'

- [C] A maqai dipi madiqla bahia tupa tu asa ni ?ituni nalauq, nitu na ... masihala kakauna sanasia maqai, amin tu maqai ?itun namuqða kuðaki madiqla bahi, na haiða matað.
- [C1] a maqai dip-i ma-diqla bahi-a INTER if then-PRT STAT-bad prophetic.dream-LNK
- [C2] tupa tu asa ni ?itun-i say COMPL have.to NEG there.MED-PRT
- [C3] nalauq ni tu na ma-sihal-a ka-kaun-a otherwise NEG COMPL well STAT-good-LNK CV-eat-LNK
- [C4] sana-sia maqai ACCORDING.TO-ANAPH if
- [C5] amin tu maqai ?itun na-muqða kuða-ki all COMPL if there.MED IRR-again work-DEF.SIT.PROX
- [C6] ma-diqla bahi
  STAT-bad prophetic.dream
- [C7] na haiða matað well have die

'And if the dream was bad, then they said that you must not go there, because otherwise you would not eat well, if you followed the rule, but if anyone at all went back to that place to work, and there was a bad dream, people would die.'

- [D] A, maqai mataisaq ... matataisaq a madadain?að tu, ... maqai mun?ita?a mavia mataisaq tu sadu?uki siatu, sinsusuað bunuað masmamua mavisqai, mavilasa tupaka madadain?að tu na maqtu munquma ista?ai nakasihalain kakaunun namasihala bunun.
- [D1] a maqai ma-taisaq INTER if DYN-dream
- [D2] ma-ta-taisaq a madadain?að tu DYN-CV-dream INTER elder COMPL
- [D3] maqai mun-?ita a ma-via ma-taisaq tu if ALL-there.DIST HESIT DYN-why DYN-dream COMPL
- [D4] sadu?u-ki sia tu see-DEF.SIT.PROX ANAPH COMP
- [D5] sin-su-suað bunuað mas-ma-muav ma-visqa-i RES.OBJ-CV-sow plum BE-CV-excessive STAT-abundant.with.fruit-PRT
- [D6] mavilas-a have.large.fruits-LNK
- [D7] tupa-ka ma-da-daiŋ-ʔað tu tell-DEF.SIT.DIST elder COMPL
- [D8] na maqtu mun-quma ista-ai well be.possible.to ALL-field 3S.DIST-PRT
- [D9] na-ka-sihal-in ka-kaun-un IRR-ASSOC.DYN-good-PRV CV-eat-UN
- [D10] na-ma-sihal-a bunun IRR-STAT-good-LNK people

'And if they dreamt... if the elders dreamt that, if they went over there, they suddenly dreamt that they saw that the plum tree had grown so that it was full of fruits and had large fruits, then the elders would say that it was permitted for them to the land to work, and they would produce good fruits, and the people would also be fine.' (TVN-012-001:38-41)

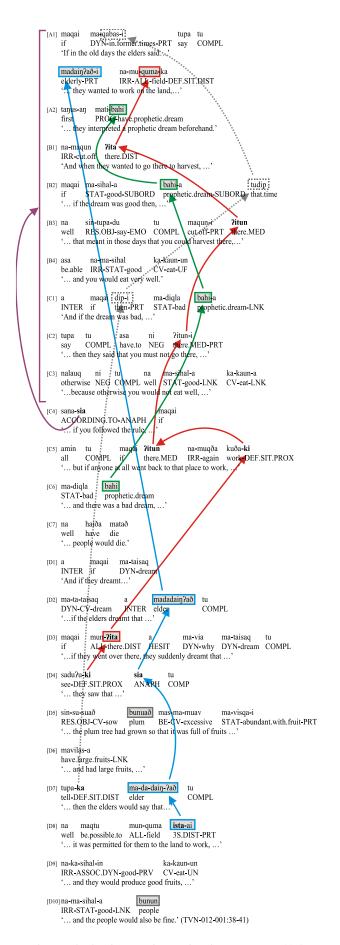


Figure 2. Active topic chains in example (16)

Despite the fact that there is a relatively large difference in the deictic forms used in (15) and (16), it is clear that deictic expressions function very much in the same way: despite the fact that they have a clear spatial deictic function, they are used to maintain discursive topics throughout the narrative segment.

What is interesting in (16) is that a repetition of nominal forms (e.g. *bahi* in A2, B2, C1, etc.) appears to be used for indicating contrast, while deictic forms are employed to establish a consistent, stable theme (e.g. the string maintaining the salience of *quma* 'land' throughout the segment). Further research will indicate whether this is a peculiarity of this particular narrator, or whether this is a general strategy in Takivatan Bunun.

#### 4. Conclusion

The two examples above indicate that it is correct, as De Busser (2009:425) asserted, that in actual text deictic forms that make a distance distinction are primarily involved in the expression of spatial (or temporal) deixis. There is also no clear correlation between spatial deictic forms and intra-sentential topicality: (1) deictics occur on both topical and non-topical arguments, and on predicates and adverbials; and (2) topical arguments do not need to be marked by deictics.

However, in narrative discourse deictic elements are important in the creation of textual cohesion. Typically, discursive topics are established by full nominal (or presumably pronominal) reference and are then subsequently maintained by a combination of deictic markers and the ellipsis of topical arguments. The primary function of these deictic markers is in all instances above still spatial deictic reference.

It is also clear from the examples that there are complex interactions between different deictic paradigms. How these interactions exactly work will be the subject of future research.

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