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

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## 1. Introduction

This paper will discuss the role of deixis on information structure in the Takivatan dialect of Bunun. For the sake of simplicity, the discussion will be restricted to topicality. We will distinguish 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 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). The upper limit for Takivatan speakers is certainly not higher than 1700 individuals.

The Takivatan dialect is largely agglutinating 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 make a case distinction.

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

As said before, the discussion here restricts itself to paradigms whose primary use is the expression of spatial (and often by extension 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 an anaphoric deictic function.

For the sake of simplicity, we will start the discussion from the point-of-view of what could be called ‘canonical’ deictic markers, demonstrative pronouns. 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).

What is quite striking about this classification is that only the first of these categories is directly involved in the expression of spatio-temporal deixis. The primary function of the other three categories appears to be related to organizing 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 throughout a text of the different entities mentioned in that text.

It is important to realize that when Himmelmann talks about these different demonstrative functions, he generally seems to assume that they are *primary* functions of demonstratives. Thus, when he discusses the tracking use of Tagalog *ito* in example, the primary function of this form is not spatial deictic reference, but establishing an anaphoric link to the referent *isang manlalakbay* in the previous clause.

- (1) may kasaysayan sa isang manlalakbay  
 may ka-saysay-an sa isa-ng maN-CV-lakbay  
 EXIST ?-statement-LOC LOC one-LK IRR.ACT-RED-travelling  
 ‘(One incident) is told about a traveler;’

ang manlalakbay na ito ay si Pepito  
 ang maN-CV-lakbay na **ito** ay si Pepito  
 SPEC IRR.ACT-RED-travelling LK **PROX** PM PN P.  
 ‘**This** traveller (his name) was Pepito.’ (from Himmelmann 1996:229)

Finally Himmelmann (1996:210) clearly distinguishes between definiteness markers and demonstratives (although he mentions on p. 243 that the extensional use of demonstratives for discourse reference and tracking is a step in the grammaticalization pathway leading to the creation of definiteness markers or third person pronouns). This is a distinction that I will not make 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 discussed in this paper make a basic three-fold distance distinction between the morphs *-i* ‘proximal’, *-un* ‘medial’ and *-a* ‘distal’ (see De Busser 2009, Chapter

9). This is the 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*)*au**pa* ‘thus’; 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 Kalinꞑuti, pisihalunti, na asa tunhan Nantuta  
 asa pi-sihal-un itu Kalinꞑu-**ti**  
 have.to CAUS.STAT-good-UF this.here K.-**DEF.REF.PROX**  
 ‘You have to put everything in order **here** in Kalinꞑu, ...’

pi-sihal-un-ti  
 CAUS.STAT-good-UF-DEF.REF.PROX  
 ‘... and when it is in order here, ...’

na asa tun-han Nantu-**ta**  
 CONS have.to PERL-go N.-**DEF.REF.DIST**  
 ‘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*; this is called empathy in De Busser (2009:422–425).

- (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), no reference is made to the role of deictic markers in establishing contrasts in information structure, except for the dedicated anaphoric function of the marker *sia*. Curiously, this seems to suggest that deictic paradigms have no significant function in the realization of information structure. The sections below will explore to what extent this is a valid assumption. I will then investigate how different deictic paradigms are involved in the realization of sentence-level and discursive topics.

The following deictic paradigms relevant to the present discussion:

- 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 contrast in distance (proximal, medial, distal) and a two-fold contrast in what could be called ontological status (referential vs. situational).

**Table 1. Takivatan Bunun definiteness markers**

	<b>Referential</b>	<b>Situational</b>
<b>Proximal</b>	<i>-ti</i>	<i>-ki</i>
<b>Medial</b>	<i>-tun</i>	<i>-kun</i>
<b>Distal</b>	<i>-ta</i>	<i>-ka</i>

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 (in other words, they are optional).

Secondly, these bound markers can occur on words in many word classes, including nouns, verbs (!), the anaphoric marker *sia*, and the manner word *maupa*.<sup>1</sup> Third, definiteness markers distinguish 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 vaŋlað.  
 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) ... laʔadusduki Qusunsubali sia Maiaata tama.  
 la-adus-du-**ki** Qusunsubali  
 COVER-carry-EMO-**DEF.SIT.PROX** Q.  
 sia Maia-**ta** tama  
 ANAPH M.-**DEF.REF.DIST** father  
 ‘[...] **from here** we went together to (**that**) Qusunsubali,  
 to the father of Maia.’ (TVN-008-002:69)

Definiteness markers are very common in narrative discourse; their frequency varies in informal spoken language, but is generally lower there.

### 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>2</sup>

<sup>1</sup> But not on third person pronouns or demonstrative pronouns.

<sup>2</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.

**Table 2. Third person personal pronouns**

	<b>Singular</b>	<b>Plural</b>
<b>Proximal</b>	<i>isti</i>	<i>inti</i>
<b>Medial</b>	<i>istun</i>	<i>intun</i>
<b>Distal</b>	<i>ista</i>	<i>inta</i>

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

- (6) Hanʔak daiða maluskun inta.  
 han-ʔak 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 numbers, the third person forms do not have distinguish between different grammatical roles (agent, undergoer, location) and – in Takivatan Bunun – have no bound equivalent forms. 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 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**

<b>Visibility</b>	<b>ROOT</b>	<b>Plurality</b>	<b>Distance</b>
$\emptyset$ - ‘VIS’	<i>ai-</i>	<i>-p-</i> ‘singular’	<i>-i</i> ‘PROX’
<i>n-</i> ‘NVIS’		<i>-ŋk-</i> ‘vague plural’	<i>-un</i> ‘MED’
		<i>-nt-</i> ‘paucal’	<i>-a</i> ‘DIST’
		<i>-t-</i> ‘inclusive generic’	$\emptyset$ ‘USPEC’

Not all combinations of morphs have been attested in naturalistic language and there is great variety in the frequency of use. For instance, in the paucal paradigm only the distal forms *ainta* ‘DEM.VIS.PAUC.DIST’ and *nainta* ‘DEM.NVIS.PAUC.DIST’ have been attested. Underspecific forms (forms without a distance marker) in general 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*.

- (7) Na, ukin aipa ʔita namudanin, musbai naipa maqmut  
 na uka-in **aipa** ʔita  
 INTER NEG.have-PRV **DEM.S.DIST.VIS** there.DIST  
 ‘**It [the deer, visible]** wasn’t there anymore, ...’  
 na-muda-in  
 IRR-walk-PRV  
 ‘... it had gone, ...’  
 musbai **naipa** maqmut  
 run.away **DEM.S.DIST.NVIS** night  
 ‘... **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 *?iti/?itun/?ita* typically express spatial and, somewhat less commonly, temporal distance. They make the typical three-fold distinction between proximal, medial and distal.

**Table 4. Manner words**

		<b>Spatial</b>	<b>Temporal</b>
<b>PROX</b>	<i>?iti</i>	‘here’	‘at this moment’
<b>MED</b>	<i>?itun</i>	‘there (medial)’	‘at that moment (medial)’
<b>DIST</b>	<i>?ita</i>	‘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 atikisuna? ?ita  
**mun-?ita**  
**ALL-there.DIST**  
 ‘[The shaman] has to **go there ...**’  
 madas pu-daku tikis-un-a? **?ita**  
 take place-ritual.object little-EMPH-PROG **there.DIST**  
 ‘... and put a little bit of the ritual token **over there**.’ (TVN-012-001:44)

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

- (11) Maupata madai?að tu m baðbaði Diqanin tu masihala? kakaunun  
**maupa-ta** ma-dai?að tu baðbað-i Diqanin tu  
**thus-DEF.REF.DIST** STAT-old COMPL have.conversation-PRT Heaven COMPL  
 ma-sihal-a? 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*

An extremely common marker that is exclusively used for anaphoric (or exophoric) reference is *sia*. It refers to referents or events that were previously mentioned in a discourse or are assumed to be commonly known to all discourse participants. *Sia* combines with bound definiteness markers and is 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) illustrates a common usage of *sia* in narrative prose as an end-of-story marker, in which case its antecedent is an entire text rather than 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 pronominal topic marker. Notionally, the topic is always interpreted as definite.”

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

“Surface subjects of Malagasy simplex Ss [sic] are necessarily definite. Semantically this means there are always objects 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).

The Takivatan corpus does not corroborate this 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 elicited answer to the question *Did you plant many yams*.

- (14) Sauḍunin ḍaku.  
 suaḍ-un-in ḍaku  
 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 undergoer 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 in a more general sense. On a 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). It is just that this correlation is not absolute.

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 Takivatan deictic that have a tripartite distance distinction, I have so far found not a single example where spatial deictic contrast has developed an unambiguously 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* ‘the one mentioned longer ago’.

The absence of such metaphorical extensions of the spatial into the discursive domain in Takivatan should not surprise us, because 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 *maupa* ‘thus’, which has a clear discourse-anaphoric function.

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

To illustrate this, we will now 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 hunters’ temporary camp.

- (15) [A] Aupa tuða... niaŋ tu nanu sanavan minsumina ... Tiaŋ, minabaʔav tupa naip tu:  
 [A1] aupa tuða ni-aŋ tu nanu sanavan min-suma-in-a Tiaŋ  
 thus real NEG-PROG COMPL really evening INCH-return-PRV-LNK T.  
 [A2] mina-baʔav tupa naip tu  
 ABL-high.location say DEM.S.NVIS COMPL  
 ‘But, when it wasn’t really evening yet, Tiaŋ had returned, he had come back from the mountain and told us.’
- [B] Na, maqtu laqbiŋina, naʔasa dusa ta matiskun, maluʔumi han baʔav daiðaki, pinkaunun isian baʔavta, ŋabul.  
 [B1] na maqtu laqbiŋin-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 baʔav-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 ʔukai laqaiban.  
 [C1] a na-ma-qaisaq dau-ka  
 INTER IRR-DYN-in.that.direction EMO-DEF.SIT.DIST  
 [C2] saqnut-ai-du sia ʔuka-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] Ansaisaŋa Atul Daiŋ tu “nis, matiŋmutin tamudana madav.”  
 [D1] ansais-aŋ-a Atul daiŋ tu  
 forbid-PROG-ENUM A. large COMPL  
 [D2] ni-is ma-tiŋmut-in ta-mu-dan-a maðʔav  
 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... ʔukin aipa ʔita namudanin, musbai naipa maqmut.  
 [E1] na ʔuka-in aipa ʔita 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 anaphoric and exophoric links that establish discourse cohesion through the use of deictic words in this narrative segment. Discourse participants are marked by a square; anaphoric or exophoric links established by deictics are represented as arrows. Note that only explicit elements in the text are encoded; non-expressed arguments, even those that might be signalled by verbal morphology, are not taken into account.<sup>3</sup>

<sup>3</sup> Ellipsis (or better non-expression) is an important indicator of discursive prominence in many Austronesian languages, and in Takivatan Bunun argument ellipsis is extremely common.

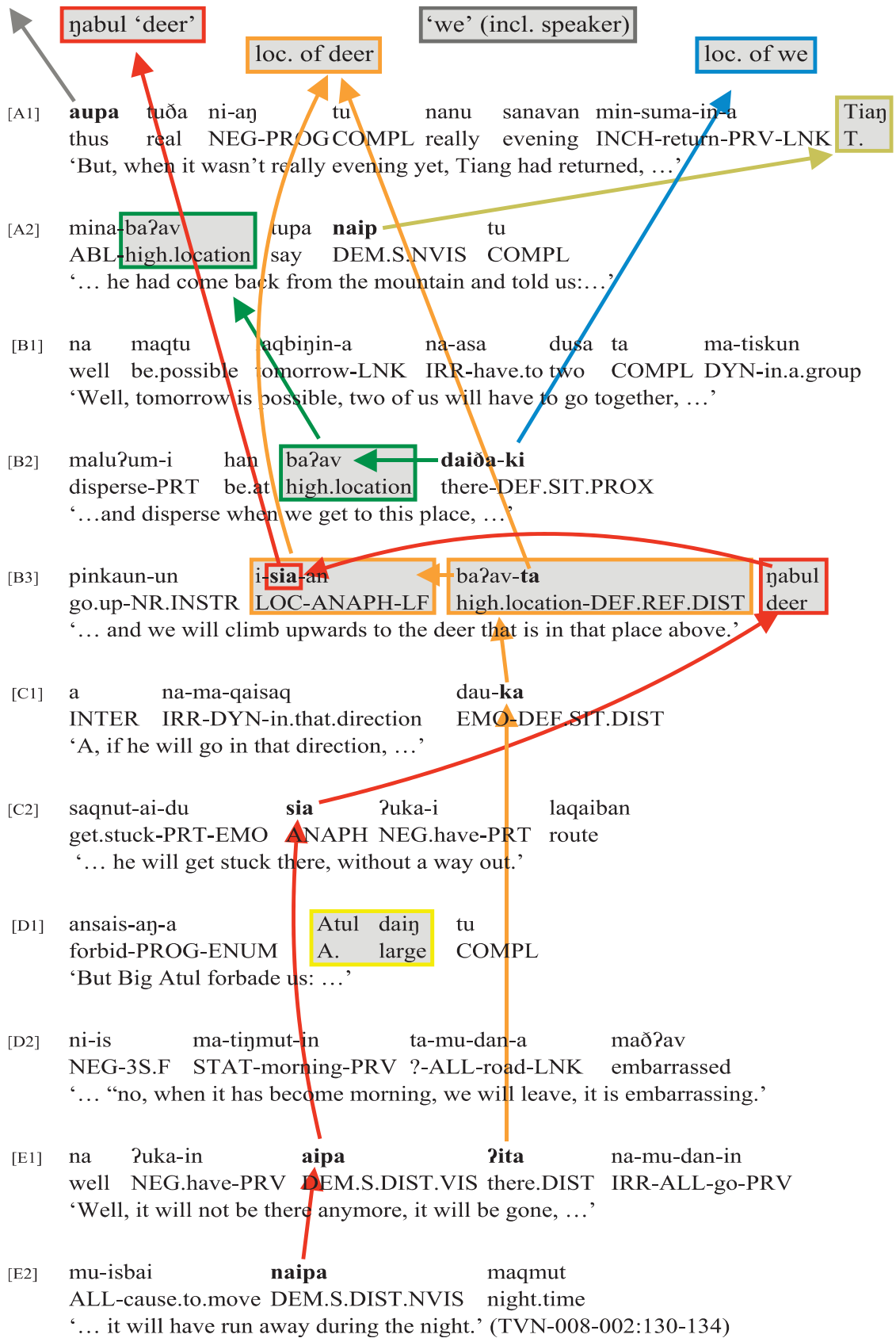


Figure 1. Active topic chains in example (15)

The result is a schema that gives a rough impression of the topical chains established in the textual sequence above, with different colours representing different chains. These topical chains weave this sequence together into a coherently interpretable whole. From Figure 1 we can deduce the following about textual coherence in Takivatan Bunun:

- 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, entities and locations are maintained by deictic elements, which often have deictic reference as their primary function in discourse, i.e. they are not primarily discourse-deictic markers. The relation between a referent and its anaphoric antecedent is often 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 target 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 (*ḡabul* in B3), but in (E1) it is a visible deer, and in (E2) a non-visible deer that has already run away. Similarly, in example (16) below, (B1) *ḡita* ‘there.DIST’ refers back to the root *quma* ‘field’ in (16) A1), but the semantic target of both words is not identical: *ḡita* refers to a location, whereas *quma* is part of a verb (*namuqumaka*) referring back to an event.
- Important discursive topics can be reinforced by an occasional repetition of nominal forms, e.g. *ḡabul* ‘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 the 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 madaiḡaḡi namuqumaka taḡusaḡ matibahi.  
 [A1] maqai ma-qabas-i tupa tu  
 if DYN-in.former.times-PRT say COMPL  
 ma-daiḡaḡ-i na-mu-quma-ka  
 STAT-old-PRT IRR-ALL-field-DEF.SIT.DIST  
 [A2] taḡus-aḡ 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 ḡita maqai masihala bahia, tudip, na, sintupadu tu maqai ḡitun asa namasihal kakaunun.  
 [B1] na-maqun ḡita  
 IRR-cut.off there.DIST  
 [B2] maqai ma-sihal-a bahi-a tudip  
 if STAT-good-SUBORD prophetic.dream-SUBORD that.time  
 [B3] na sin-tupa-du tu maqai ḡitun  
 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 mataisraq ... matataisraq a madadain?að tu, ... maqai mun?ita?a mavia mataisraq 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-taisraq  
INTER if DYN-dream

[D2] ma-ta-taisraq a madadain?að tu  
DYN-CV-dream INTER elder COMPL

[D3] maqai mun-?ita a ma-via ma-taisraq 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-dain-?að 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)

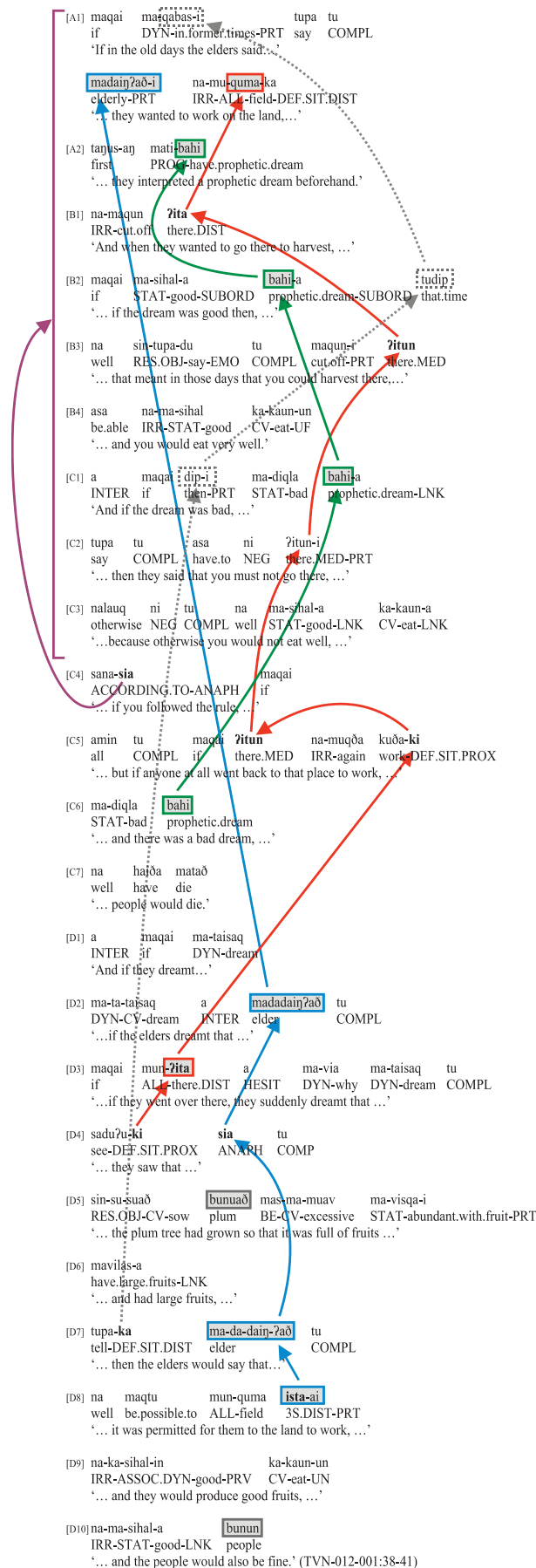


Figure 2. Active topic chains in example (16)

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: on the one hand, they have a clear spatial deictic function; on the other 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 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 tools in the creation of textual cohesion. Typically, discursive topics (as opposed to clausal topics) are established by full nominal 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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