Chapter 5

Participant identification patterns

This chapter examines the patterns of how referring expressions are used to introduce participants and maintain their identification in Bru KS narrative discourse. While different genres of Bru KS narrative could potentially have different patterns, this paper assumes that the patterns discovered in the texts under study form a system of reference that governs how referents are introduced, how they are tracked, how they are ranked and how ambiguities are resolved. This chapter describes the default patterns and discusses possible motivations for exceptions to the default pattern.

5.1 Theoretical approach

Dooley and Levinsohn (2001:112) state that, "A viable system of reference in any language must accomplish three kinds of tasks." They list these three tasks as semantic, discourse-pragmatic and processing. The semantic task is to "identify the referents unambiguously," meaning that a referent must be coded in such a way as to distinguish it from all other "practically possible" referents. This means that the higher the degree of possible ambiguity, the more coding material will be necessary to narrow down the correct referent.

The discourse-pragmatic task concerns the level of salience and how "activated" a referent is. Activation occurs when a referent is introduced and it becomes active in the mind of the reader/listener. Activation status is usually described with the following categories: introduction, keeping on stage, dismissal, and reintroduction. Chafe (1987) uses the categories of being activated, maintaining activation status and being deactivated. The result of activation status is that the more a referent is activated, the less coding material is necessary for that referent.

Dooley and Levinsohn (2001:113) state that "activation is commonly accomplished with a full noun phrase. If the participant will be prominent in the text, an initial activation noun phrase is often prominent as well in discourse-

pragmatic structuring." Keeping a referent active requires minimal coding, such as pronouns, verb agreement or zero-anaphora. Deactivation is generally not marked as a referent tends to disappear from the stage.

Finally, the third task of processing requires more coding material when there is a disruption in the text. Disruptions occur when there is a change of place, participants or time. Sometimes the disruption can be a change in the type of clause information such as storyline information versus non-storyline.

To perform these three tasks, participant reference systems generally follow two strategies for participant reference. The first is a sequential strategy (or look-back) that identifies a referent "by noting who or what was mentioned most recently" (Dooley and Levinsohn 2001:117). This strategy is not concerned with the organizational structure of the text but is concerned with how to identify referents coded with something less than a full noun phrase. It is concerned with the immediate identifiability of a referent.

A VIP (Very Important Participant) strategy flags one referent with special overt linguistic coding in its introduction (Dooley and Levinsohn 2001:119). This special coding signals that the referent is a VIP in the text globally or locally. It can be used to identify the VIP anywhere in the text that the VIP is thematically salient. Participants are introduced and tracked using linguistic signals that reflect their prominence or thematic salience in the narrative.

In Bru KS, the VIP strategy is used with central participants, major participants and in the case of the daughter in the second episode of the Big Snake S-I-L, with a minor participant who was highly salient for a portion of the narrative. The linguistic signal used is the third person pronoun *an*.

5.2 Methodology

Using Dooley and Levinsohn's method (2001:44), the texts were charted clause by clause. They were then divided into thematic groupings which gave an outline of the structure of the text. The texts were also charted using Thurman charts adapted from Grimes (1975:182-191). The Thurman charts were used to show each occurrence of a referent within the text.

Then participant identification patterns were analyzed using Dooley and Levinsohn's (2001:127) eight-step methodology. The first step is to list the various ways a participant can be referred to (e.g. full NP, pronoun, agreement, zero anaphora). The second step is to prepare a chart of participant encoding with special note of how

subjects and non-subjects are coded. This was done utilizing the modified Thurman charts.

The third step is to assign a number to each participant referred to more than once. The fourth step is to identify and label the linguistic context of each referent. The following labels are assigned for both subjects and non-subjects:

S1 the subject is the same as in the previous sentence,

S2 the subject is the addressee of a speech reported in the previous sentence,

S3 the subject is involved in the previous sentence in a nonsubject relation other than addressee, and

S4 other changes of subject than those covered by S2 and S3.

N1 the referent occupies the same non-subject relation as in the previous sentence,

N2 the addressee of a reported speech is the subject (speaker) of a speech reported in the previous sentence,

N3 the referent is involved in the previous sentence in a different relation than that covered by N2, and

N4 other references to non-subjects than those covered by N1-N3.

After all the contexts have been identified and labeled, step five is to propose default encoding values for each context. Then step six is to search for and identify any exceptions to the default coding, determining if the exception contains more or less coding than the default. The seventh step is to modify the default hypothesis of Step 5 in light of the exceptions discovered in Step 6.

This leaves deviations from the default that are not explained by the context of the text. Step 8 takes these deviations as special encoding and makes a generalization of the causes for the deviation. Some examples of generalizations that can be made come from Dooley and Levinsohn (2001:133), who argue that when coding is less than the default, it is generally because "the referent is a VIP" or "that there is only one major participant on stage" or "a cycle of events is being repeated." When the coding material is more than the default, Dooley and Levinsohn (2001:134) argue that this indicates a discontinuity in the text. Thus if a discontinuity can be identified, then an alternate coding strategy is expected.

5.3 Rules for default encoding patterns

The motivation for particular participant reference codings depends on the method of tracking. Dooley and Levinsohn (2001) present two methods of tracking: the sequential strategy and the VIP (Very Important Participant) strategy. The sequential strategy looks back at the immediately preceding referent while the VIP has a broader scope of looking at the rank of the participant in the narrative as a whole.

Dooley and Levinsohn (2001:121) state that the VIP reference system initially codes the participant in the introduction and then uses the same coding throughout the text. Thus a VIP will have a relatively small amount of coding throughout the text. When this pattern occurs throughout the text, it is called a global VIP pattern. When this pattern occurs within a section of the narrative, it is called a local VIP pattern. The Bru texts analyzed in this study use both the sequential strategy and the VIP strategy.

In the following sections, the methodology of section 5.2 is used to examine sequential patterns of both subject and non-subject references. The rules for subject reference will be presented first, followed by the rules for non-subject reference patterns.

5.3.1 Subject reference patterns

This section will present rules based on an analysis of the sequential patterns found in the narratives. Exceptions to the rules are then examined to see if there is any predictable pattern to account for the exception. If there is a predictable pattern to the exception, the rules are revised to reflect those exceptions. Note that the first and second episodes of The Big Snake S-I-L narrative will be analyzed as separate narratives due to their distinct sets of participants.

5.3.1.1 Same subject (S1 context)

The S1 context identifies the coding used for the subject of an independent clause that is the same as the subject of the preceding independent clause. An analysis of the S1 context shows that the default coding is a zero reference for 3 of the narratives: The Seven Orphans, the second episode of The Big Snake S-I-L and The Buyeang Fish. The other three narratives do not have a distinct default pattern but have a more even distribution between zero reference and pronoun reference. The Grandfather Ghost narrative and the Wild Buffalo Ear have an almost even distribution between zero reference and pronoun reference, with pronouns in the

majority. The first episode of the Big Snake S-I-L is unique in that it uses a much higher percentage of NPs in the S1 context. Table 22 below shows the distribution of the referring expressions for the S1 environment of each narrative.

Table 22: Distribution of S1 category

	Big Snake S-I-L episode 1	Big Snake S-I-L episode 2	Seven Orphans	Buyeang Fish	Grandfather Ghost	Wild Buffalo Ear
Ø	49.00%	71.00%	72.50%	79.00%	38.50%	35.44%
PRO	15.50%	12.50%	8.50%	9.70%	40.00%	46.83%
Clf_P	0.00%	5.50%	3.50%	0.00%	0.00%	0.00%
NP	35.50%	11.00%	15.50%	11.30%	21.50%	17.73%

The first rule applies to references where the subject is the same in the previous clause or sentence (S1 context).

S1 Context Rule

A zero identification is given for central and major participants while minor and peripheral participants are identified with a pronoun or NP in the S1 context.

The example of the orphan child who is the central participant of The Grandfather Ghost narrative illustrates this rule in example (98) below. Line 050 is classified as S4 (subject not in the preceding clause) with the referent being the orphan child who is coded with an NP and a pronoun in apposition to the NP. Then in lines 051-053, there are four zero references as the background information of what the orphan sees (namely nothing) is given. Then in line 055, an exception to the rule occurs and the orphan is coded with a full noun phrase as he becomes the agent who bends his bow back, ready to kill the oncoming deer.

(98) The_Grandfather_Ghost.050-055

jah	***aːj***	***ka.mu̱ːt***	***an***	*kaʔ*	*a.ka̱n*	*ɤːt*	*ki̱ː*
side	**older**	**orphan**	**3S**	so	wait	LOC	that

As for **the orphan**, **he** waited in that place.

Ø	*tʌː*	*huːm*	*ṉ.traw*	*loah*	*t͡ʃoʔ*	*an*	*lɤ̱ːj*
orphan	NEG	see	what	out	in	3S	Prt_emph

(**He**) did not see anything come out to him at all.

tran	*kaʔ*	***Ø***	*tʌː*	*huːm*	*ṉ.traw*	*kaʔ*	***Ø***	*tʌː*	*huːm*
animal	so	**orphan**	NEG	see	anything	so	**orphan**	NEG	see

Animals, (he) did not see; anything (else), he did not see.

Ø	*sʌŋ*	*tɛː*	*ka.nę̱a*	*wa̱w*	*paːj*	*an*	*pʌʔ*	*t͡ʃoʔ*	*maj*	*t͡ʃʌ̱ː*	*dəː*
orphan	hear	but	friend	speak	C	3S	go	in	2S	PST	Prt_Emph

(**He**) only heard the friends saying, "It has gone towards you!"

aːj	***kɔːn***	***ka.mu̱ːt***	*ŋę̱ːaŋ*	*ta.mi̱aŋ*	*dɒʔ*
older	**child**	**orphan**	bend	bow	COMP

The eldest orphan child bent his bow and held it ready.

Thus it is observed that while the default encoding is zero for central and major participants, text discontinuities can motivate extra coding in the S1 context. In the case of example (98) above, the discontinuity is a switch in information type, from background information to a mainline event. Other examples of text discontinuity are thematic boundaries and change in clause type such as the transition between a transitive clause and a speech event.

Osborne (2009:95) reports that "more than default encoding occurs at a text boundary in the final sentence of a thematic grouping." This was not found to be the case in Bru KS except for a few exceptional speech acts where the end of the speech is marked with a rare final speech clause, as shown in (99).

(99) The_Grandfather_Ghost.046

kʰan	*huːm*	*an*	*loah*	*ɔːn*	*maj*	*paŋ*	*lo̱ːt*	*dəː*	***ka.nę̱a***
if	see	3S	out	allow	2S	shoot	Prt_command	Prt_request	**friend**

atɤːŋ
say

"If you see it come out, you must shoot it, OK." **The friends said.**

Along with discontinuity in the text, another motivation for using more than zero reference in the S1 environment is to highlight a participant. An example of highlighting a participant is shown in example (100) below. The recovery of the woman who almost died inside of the snake is highlighted with five consecutive pronoun references in the S1 context.

(100) The_Big_Snake_S-I-L.139-143

an *ka?* *ra.t͡ʃaw* *buːn*
3S then wiggle able

Then **she** was able to move a little bit.

pʰɔː *poːn* si.ŋaj *sɤːŋ* *si.ŋaj* ***an*** *ka?* *wa̤w* *buːn*
when four day five day ***3S*** then speak able

After four or five days, **she** was able to speak.

tʌː *duːn* ***an*** *ka?* *wa?*
NEG time.long **3S** so heal

Not long after that, **she** was healed.

tɛː ***an*** *t͡ʃuː* *lṳaŋ* *ṭia?* *tʌː* *buːn*
but **3S** remember story before NEG able

But **she** could not remember what had happened to her.

pʰɔː ***an*** *wa?* *t͡ʃʌ̤ː* ***an*** *ka?* *wa̤w* *paːj* *a.mʌ̤?* *t͡ʃṳaj* ***an*** ***an*** *si*
when **3S** heal PST **3S** then speak C whoever help **3S** **3S** IRR

tɛːŋ *dɔːŋ* *kap* *na̤w* *a.-kɯ̤*
marry with 3P CAUS-there

After **she** had been healed **she** said that whoever had helped **her**, **she** would marry that person.

If the S1 rule for default encoding takes into account the exceptions of text discontinuities and of highlighting a participant, a revised rule can be formed. The revised rule is:

Revised Rule for S1 Context

A zero identification is given for central and major participants, **except when there is a discontinuity in the text or when the referent is being highlighted as being particularly salient.** Minor and peripheral participants are identified with a pronoun or NP in the S1 context.

An example of a minor participant who is coded with an NP in the S1 context is the crow in the first episode of The Big Snake S-I-L. The crow has two references in the S1 context and both are coded with an NP. An exception to this rule of minor and peripheral characters is seen in the minor character of the snake in the second episode of The Big Snake S-I-L. By the S1 rule, the snake should be coded with more than a zero. But in lines 088 to 090 in example (101) below, the snake is coded with zero reference. In this case, the snake is not the salient referent, but rather the daughter who is being swallowed. Thus the under-coding signifies that the snake has been downgraded to the background of the scene.

(101) The_Big_Snake.088-090

pʰɔ:	*si.daw*	*ma.hɔj?*	***ku.t͡ʃʰan***	***hɯk***	*ka?*	*hat*	*an*
when	night	moment	**snake**	**big**	so	wrap.around	3S

The moment night fell, **the big snake** wrapped itself around her.

t͡ʃa̤:	**Ø**	*ka?*	*t͡ʃa:*	*an*
then	**snake**	so	eat	3S

And then **(the snake)** started to eat her.

Ø	*lṳ:n*	*lɔ:ŋ*	*an*	*ɲṳaŋ*
snake	swallow	leg	3S	first

It swallowed her lower leg first.

To take into account the zero coding of minor and peripheral participants, the S1 context rule is again revised as follows:

Final Revision of Rule for S1 Context

A zero identification is given for central and major participants, **except when there is a discontinuity in the text or when the referent is being highlighted.** Minor and peripheral participants are identified with a pronoun or NP in the S1 context, **except when they are being backgrounded.**

This final rule then covers all of the occurrences of participant reference in the S1 context. In later sections, the rule addendum of "except when a referent is being highlighted," will be considered as a case of over-coding. The rule addendum of "except when they are being backgrounded" will be considered a case of under-coding. This rule than is broad enough to cover all cases, even those of over-coding and under-coding.

5.3.1.2 Subject is addressee of previous clause (S2 context)

The S2 context identifies the coding used for the subject of an independent clause that was the addressee in the preceding speech act. An analysis of the S2 context shows that the default coding is a NP as shown by Table 23 below. Note that sometimes the entire speech quote formula is omitted. In those cases, the implied subject is coded as a zero reference.

Table 23: Distribution of S2 category

	Big Snake S-I-L episode 1	Big Snake S-I-L episode 2	Seven Orphans	Buyeang Fish	Grandfather Ghost	Wild Buffalo Ear
Ø	25.00%	10.00%	57.60%	33.33%	11.11%	0.00%
PRO	0.00%	0.00%	3.00%	0.00%	22.22%	0.00%
Cls_P	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ClP + N	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NP	75.00%	90.00%	39.40%	66.66%	66.66%	100.00%

The sample of references in the S2 context is relatively small with 84 occurrences. Forty percent of the S2 references are found in The Seven Orphans narrative which contains fifteen conversations with thirty-three S2 occurrences. The pattern

uniformly present in the S2 context in an extended conversation is that the first addressee is coded with a NP or in a few cases a pronoun. The second addressee is also coded with a NP (or pronoun). If the conversation continues back to the first addressee, the quote formula is often omitted and the reference is coded as zero. Because of the large number of extended conversations in The Seven Orphans narrative, the percentage of zero coding at 57% is significantly higher than any of the other narratives.

It is also observed that since minor and peripheral participants rarely have speaking parts in a narrative, there is limited data for these classes of participants. The grandmother of the Buyeang Fish narrative is the only peripheral participant referred to in the S2 environment. Based on this data, a tentative rule is proposed for the S2 context as follows:

> **Tentative Rule for S2 context**
>
> Where the referent is the addressee in a previous clause (S2), the default encoding is an NP for the first "turn" of a conversation and is optionally zero for the second "turn".

An example of this is seen in the Buyeang Fish narrative which has nine occurrences of participant reference in the S2 context. Six of the nine occurrences occur during an extended dialogue starting at line 051 and continuing to line 071 in which there are seven "turns" in which the *ɒ?* 'grandmother' and the younger brother speak to each other. The younger brother is referred to with a pronoun in the S4 context in a full quote formula when he initiates the conversation as seen in (102) below.

(102)The_Buyeang_fish.051

an	***lɤ̱ːj***	***mu̱ːt***	***a.bluh***	***paːj***	*ɒ?*	*ɒ?*	*vi̱l*	*maj*	*m̱.pɛ?*
3S	**so**	**enter**	**ask**	**C**	grandmother	grandmother	village	2S	why

tʌː *buːn* *kuaj*
NEG EXIST person

So he entered the house and asked, "Grandmother, grandmother, why aren't there any people in your village?"

When the grandmother responds, she is referred to with the kinship NP *ɒ?* 'grandmother'. As a minor character, the grandmother receives a full NP for four out of five times she appears in the subject slot. The only exception is in the S2 context where on her third consecutive speech, the speech formula and referring expression are omitted.

Thus the sequence of speech turns is: 1a) younger brother(NP)(S4), 1b) grandmother(NP)(S2), 2a) younger brother(zero)(S2) 2b) grandmother (NP)(S2), 3a) younger brother (NP)(S2) 3b) grandmother (zero)(S2), 4a) younger brother(zero) (S2). In turn (2a) the younger brother receives a zero coding. In turn (2b), the grandmother retains her full NP coding as a zero reference is optional. In turn (3a) the younger brother is coded with an NP while in (3b) the grandmother is coded with the optional zero. Finally, the younger brother receives a code of zero to end the dialogue.

While it may seem that turn (3a) is an exception to the S2 rule when the younger brother is coded with an NP, it must be remembered that the zero coding is optional. In the case of (3a), the speaker reminds the listener that the younger brother is doing the speaking, but omits the quote formula.

The only exceptions to the S2 rule proposed above is that in the Seven Orphans, the seven brothers who are the central participants are coded with a pronoun in one instance. Also, in the Grandfather Ghost narrative the grandson who is a central character is coded two times with a pronoun and two times with a kin term in the S2 context. Thus, the S2 rule is modified as follows:

> **Revised Rule for S2 context**
>
> Where the referent is the addressee in a previous clause (S2), the default encoding is an NP for the first "turn" of a conversation and is optionally zero for the second "turn". **Major participants may optionally take a pronoun instead of an NP.**

This revised rule accounts for all of the occurrences of participant reference in the S2 context.

5.3.1.3 Subject is non-subject in previous clause (S3 context)

The S3 context is defined as a referent which is the subject in the current clause and is in a non-subject relation other than addressee in the previous clause. An analysis of the S3 context shows that finding a default coding for this category is difficult due to the varied results shown in Table 24 below.

Table 24: Distribution of S3 category

	Big Snake S-I-L episode 1 12 occurrences	Big Snake S-I-L episode 2 10 occurrences	Seven Orphans 10 occurrences	Buyeang Fish 21 occurrences	Grandfather Ghost 12 occurrences	Wild Buffalo Ear 9 occurrences
Ø	8.33%	30.00%[7]	20.00%	4.80%	8.33%	0.00%
PRO	8.33%	50.00%[8]	20.00%	19.00%	58.33%	55.55%
Cls_P	8.33%	0.00%	0.00%	0.00%	0.00%	11.11%
NP	75.00%	20.00%	60.00%	76.20%	33.33%	33.33%

Osborne (2009:100) argues that the default coding is a pronoun. Bequette (2008:96) does not find a default coding for the S3 context. Since the S3 context by definition is a subject that is different from the preceding subject, one would expect more coding rather than less coding. One would not expect to find referents to receive a zero coding in this environment. Thus a closer examination of possible motivations for a zero coding are in order.

In the second episode of The Big Snake S-I-L narrative, three out of the ten S3 occurrences are coded zero. The first occurrence happens at the beginning of the episode at a major break where the referents are introduced in the non-subject slot of a presentational phrase as seen in example (103) below.

(103) The_Big_Snake.078[9]

wa̤w ta̤ʔ ***a.ja̤aʔ*** *tʰaw a.t͡ʃṳjh* *tʰaw ɛːn* *mṳaj* *doŋ* ***Ø***
speak about **grandmother** old grandfather old again one house **3P**

buːn kɔːn *ka.muːl* *mṳaj* *naʔ*
have child female.unmarried one Clf_person

Now we will talk about **an old man and old woman** of another family. **They** have one unmarried daughter.

One could argue that line 078 in example (103) above are not two separate independent clauses but a presentational clause with an unmarked relative clause. If that is the case, then the correct translation would be, "Now we will talk about an

[7] Due to the analysis that follows, this will be modified to 10%.

[8] Due to the following analysis, this will be modified to 70%.

[9] This is the same as example (96) except that it is given an alternate interpretation as two separate clauses with a zero subject reference in the second clause.

old man and old woman of another family **who had one unmarried daughter.**" If this hypothesis is correct, then the zero reference above does not fall in the S3 category as it is not an independent clause. The next line as seen in example (104) would fall into the S3 category and have the expected coding of a pronoun.

(104) The_Big_Snake.079

a.laj	*jʌʔ*	*buːn*	*pa.ṭiam*	*pɛn*	*ku.t͡ʃʰan*	*huk*	*kuṵː*	*kan*
3P	want	have	son-in-law	be	snake	big	same	RECIP

They wanted to have a son-in-law who was a big snake just the same (as the family we just talked about.)

The result of this examination is the hypothesis that zero coding in an S3 may signal that the clause is not independent but dependent. When looking at the second case of S3 zero coding in The Big Snake S-I-L narrative, the same phenomena occurs. The previous clause introduces the participants in the non-subject slot of a presentational clause. The next clause seems to be independent, but could be a dependent relative clause. Since the referring expression is zero, it can be hypothesized that the clause is a dependent relative clause. The free translation of example (105) assumes that the clause of line 121 is dependent. If the clause were independent, line 121 would be translated as "They farmed in the mountains."

(105) The_Big_Snake.120 and 121

wạw	*tạʔ*	*baː*	*naʔ*	*sɛːm*	*aːj*	*ɤːt*	*nʌŋ*	*ɒʔ*	*ra.kɔŋ*
speak	come	two	Clf_person	younger	older	live	with	grandfather	man

mṵaj	*naʔ*	**Ø**	*taʔ*	*tʰraj*	*ɤːt*	*nʌŋ*	*koh*
one	Clf_person	**3P**	do	field	LOC	on	mountain

Now we will talk about two brothers, a younger and an older, who lived with their grandfather and **who** farmed in the mountains.

This third case of zero coding in the S3 environment is also atypical. The referent is a pumpkin plant which buds very quickly after the tip is picked off for food. Line 162 contains two clauses with both an old woman and a pumpkin plant coded as zero. In 162a ("When she had picked off the end of the pumpkin plant") the subject is the old woman (S4 class) and the object is the pumpkin plant. Then in 162b ("by the next morning it had bud again"), the subject is the pumpkin plant coded with zero. This is shown in example (106) below.

(106) The_Big_Snake.162

pʰɔ:	*Ø*	*ki̤t*	**Ø**	*a.bu:*	*a.rṳ:p*	*t͡ʃʌ:*	**Ø**	*bac*	*ɛ:n*
when	she	pick.off	**it**	evening	morning	PST	**it**	bud	again

When she picked **the tip of the vine** in the evening, by the next morning, **the vine** had bud again.

With this case, the hypothesis is made that a zero reference in an S3 environment is motivated by the previous referent in a non-subject slot being also zero reference.

With this is mind, the following rule for the S3 context is proposed:

Rule for S3 Context

When the referent is in a non-subject relation other than addressee in the previous clause (S3), the default encoding is a pronoun. When the referent in the previous non-subject relation is coded with a zero, then the referent in the S3 context will also be coded with a zero. Minor or peripheral participants will be coded with a NP.

This rule accounts for 80% of the 60 participant reference occurrences in the S3 context. The exceptions are due to over-coding the participants to promote salience or to differentiate the participants as will be discussed in section 5.4.1. Along with over-coding, exceptions also seem to be motivated by unique grammatical constructions in the previous sentence which necessitate more coding.

5.3.1.4 Not mentioned in previous clause (S4)

The S4 context is defined as a referent which is the subject in the current clause and which was not mentioned in the previous independent clause. The distribution of the S4 context is shown in Table 25 below.

Table 25: Distribution of S4 category

	Big Snake S-I-L episode 1 28 occurrences	Big Snake S-I-L episode 2 28 occurrences	Seven Orphans 72 occurrences	Buyeang Fish 25 occurrences	Grandfather Ghost 40 occurrences	Wild Buffalo Ear 47 occurrences
Ø	17.80%	25.00%	9.80%	4.00%	5.00%	0.00%
PRO	0.00%	7.10%	2.80%	20.00%	10.00%	21.00%
Clf_P	0.00%	10.70%	5.60%	0.00%	0.00%	2.00%
NP	82.20%	57.20%	81.80%	76.00%	85.00%	77.00%

This table shows that the default coding of the S4 environment is NP. Since the S4 environment is non-contiguous with the preceding clause, one would expect more coding so that the listener would have the necessary information to create a mental image of the new participant. One would not expect to find zero coding in the S4 environment.

Both episodes of the Big Snake S-I-L narrative show a higher percentage of zero coding than the other narratives. One reason for the higher percentage is that sometimes the referent is a combination of the previous subject and object referents. This is illustrated in example (107) in which the preceding clause contains *a.t͡ʃu̯jh tʰaw* 'grandfather old' in the subject slot of line 007 and *m̥.paj* 'wife' in a non-subject slot. In line 009 they come together as the subject of the verb *t͡ʃuaj?* 'search' and are encoded with a zero. Note that the speech quote in line 008 was not included in the example.

(107) The_Big_Snake_S-I-L.007

a.t͡ʃu̯jh *tʰaw* *wa̯w* *kap* *m̥.paj* *paːj*
grandfather **old** speak with **wife** C

The old grandfather said to his **wife**, "..."

The_Big_Snake_S-I-L.009

Ø *t͡ʃuaj?* *ɲɒ?* *t͡ʃi̥n* *t͡ʃon* *pʌ?* *tʌ?* *kal* *ɲɒ?* *mu̯aj* *kal*
they search mango ripe until go come tree mango one Clf_tree

They searched for the ripe mangoes until they came to one particular mango tree.

Bequette (2008:103) makes the observation that when a participant is encoded as zero in an S4 environment, the participant is already active in the scene. She states

that "relational givenness will often enable the listener to correctly identify who the referent is when the referring expression gives little information."

Based on the data and the observation about zero reference, a tentative rule is proposed for the S4 context as follows:

> **Tentative Rule for S4 context:**
>
> Where the referent is not mentioned at all in the preceding clause (S4), the default encoding is an NP. If the referent is a combination of the subject and non-subject referents of the previous clause, the default encoding is zero.

An example of this rule is shown in (108) where there is a shift in focus from the younger brother mentioned in line 005 to the *a:j* 'older brother' reintroduced in line 006 with a kinship NP.

(108) The_Buyeang_Fish.006

a:j	*pɛn*	*kuaj*	*tʌ:*	*ɔ:*
older	be	person	NEG	good

The older brother was not a good person.

Sometimes a pronoun is used in the S4 context when the referent is a central or major participant. The younger brother who is the central participant of The Buyeang Fish narrative is encoded four times exclusively with a pronoun in the S4 environment. An example of this is shown in (109). Note that the younger brother was not mentioned in lines 043 or 044.

(109) The_Buyeang_Fish.045

an	*lɤ:j*	*ta.jah*	*pʌ?*	*ɛ:n*	*t͡ʃon*	*tu̯?*	*kru̯aŋ*	*mu̯aj*	*kru̯aŋ*
3S	so	walk	go	again	until	come	city	one	Clf_city

So **the younger brother** went on again until he came to a city.

Osborne (2009:104) states that "where there is no ambiguity, a pronoun is used." The younger brother is so salient in the Buyeang narrative that he is encoded with a pronoun on 12 occasions in all of the S1-S4 environments. The only other participant encoded with a pronoun was the witch who receives one pronoun in the S4 environment and three in the S1 environment. Thus we observe that using a pronoun in the S4 context highlights the salience of that participant.

Thus the rule for the S4 context can be modified as such:

Tentative Rule for S4 context:

Where the referent is not mentioned at all in the preceding clause (S4), the default encoding is an NP. If the referent is a combination of the subject and non-subject referents of the previous clause, the default encoding is zero. **If the referent is a central character or a local VIP, it may be encoded with a pronoun. A classifier phase may be used instead of a pronoun.**

This rule accounts for 226 of the 240 participant reference occurrences in the S4 environment. The exceptions to the rule consist of eight occurrences where participants receive a zero coding. These are considered a case of under-coding and function to lessen the salience of the participant. The other exceptions to the rule were six occurrences where the participants were coded with a classifier phrase at a boundary in the text. This is a case of over-coding which serves to mark the text boundary.

5.3.2 Non-subject reference patterns

The following is an analysis of non-subject reference patterns with charts showing the frequency of the various kinds of encoding used. Using this data, rules are proposed for default encoding patterns of non-subject references.

Note that in the N1, N3 and N4 contexts a new referential coding category, Verbal Particle (V_Prt), is introduced. It is observed that the verbal particle *kan* 'RECIP' is used only with plural participants and signals that the object is the same as the subject in the same clause. The use of *kan* after a verb is analogous to verbal inflection in that it signals a plurality which points back to a plural subject. When *kan* is used, the object slot only takes a Ø reference. One could argue that it is in fact a Ø coding, yet the mental construal of plurality caused by *kan* argues that this construction is a new class of coding. This coding is more prevalent in the N3 and N4 contexts. An example of *kan* is found in (110) below.

(110) The_Big_Snake_S-I-L.178

baː	*naʔ*	*m̥.pe̤ʔ*	*kɔːn*	*lɤ̤ːj*	*raˑmɔh*	***kan***
two	Clf_person	mother	child	so	meet	**RECIP**

So both the mother and child were reunited **with each other**.

5.3.2.1 Same non-subject relation as previous clause (**N1**)

The N1 context is defined as a referent in a non-subject role which occurred in a non-subject role in the preceding independent clause. An initial observation of Table 26 shows that the default coding of the N1 environment is somewhat ambiguous. It is observed that in both episodes of The Big Snake S-I-L and The Seven Orphans that Ø coding is 50% or less. The Buyeang Fish, Grandfather Ghost and Wild Buffalo Ear are coded as Ø in the N1 context between 60% and 80%.

The distribution of the N1 context is shown in Table 26 below.

Table 26: Distribution of N1 category

	Big Snake S-I-L Episode 1 8 occurrences	**Big Snake S-I-L Episode 2** 16 occurrences	**Seven Orphans** 16 occurrences	**Buyeang Fish** 36 occurrences	**Grandfather Ghost** 9 occurrences	**Wild Buffalo Ear** 10 occurrences
Ø	50.00%	37.50%	50.00%	61.10%	77.80%	60.00%
Verb Prt	0.00%	6.20%	0.00%	0.00%	0.00%	0.00%
PRO	0.00%	37.50%	0.00%	16.60%	22.20%	0.00%
Cls_P	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NP	50.00%	18.80%	50.00%	22.30%	0.00%	40.00%

While the percentages are not conclusive, one expects a default coding of Ø in the N1 environment as it is by definition contiguous with the preceding clause. The hypothesis of Ø as the default coding is further supported by the Bunong (Bequette 2008:105) and Kmhmu' data (Osborne 2009:106). While Osborne argues that minor and peripheral participants are coded with an NP in the N1 context, the texts analyzed for this paper do not indicate that this is so in Bru KS. Rather, the high percentage of PRO and NP references are due to text boundaries, highlighting a particular participant or prop, or possibly a VIP coding strategy. Four examples of Ø coding in the N1 context are shown in (111) below.

(111) The_Buyeang_Fish.036

an	*a.jo̤ʔ*	*Ø*	*lɤ̤ːj*	*t͡ʃṳaj*	*Ø*	*ɨ̤t*	*si.laː*	*bua*	*a.jom*	*Ø*	*pʌʔ*	*pa.tah*
3S	pity	**fish**	so	help	**fish**	take	leaf	lotus	wrap	**fish**	go	free

Ø	*ɤːt*	*m̤.pe̤ʔ*	*dʌʔ*	*huk*
fish	LOC	mother	water	big

He pitied **the fish** and so helped **the fish** by taking a lotus leaf and wrapping **the fish** up and then setting **the fish** free in a large river.

Based on the data, a tentative rule is proposed for the N1 context as follows:

Tentative Rule for N1 context:

Where the referent is mentioned in the same non-subject role in the preceding clause (N1), the default encoding is Ø. If the N1 reference is at a text boundary or if a VIP strategy is being used, PRO coding may be employed.

The rule will now be tested for validity using the Buyeang Fish narrative. In this narrative, 22 of the 35 N1 references are encoded with Ø (62.86%). This data supports the rule.

All 6 occurrences of PRO encoding (17.14%) in the N1 context referred to *sɛːm* 'younger brother' who was the central participant of this narrative. This data supports the tentative rule as a VIP strategy is being used to encode this participant.

There were 6 occurrences of kinship NP (NP[kin]) encoding (17.14%) in the N1 context. Two of those occurrences occurred at the beginning of a thematic paragraph just after a text boundary. Two of the occurrences occurred at the end of a thematic paragraph and were in a summary statement using the resultative conjunction *lɤ̤ːj* 'so/therefore.' Two occurrences do not follow the rule and are considered to be cases of over-coding which will be discussed in section 5.5.2 below. An example of this NP[kin] coding in a summary statement at a text boundary is found in (112) below.

(112) The_Buyeang_Fish.010

Ø	*lɤ̤ːj*	*kṳt*	*a.-t͡ʃɨ̤t*	*sɛːm*
he	so	think	CAUS-die	**younger**

So **he** (older brother) planned to kill **the younger brother**.

There was one occurrence of NP coding (2.85%) in the N1 context. The participants coded by the NP are *tʰa.haːn* 'soldiers', and the reference is not at a boundary marker

nor is there a VIP strategy for this group of minor participants. Neither is this a case of over-coding as they are not salient in any way. Thus the rule needs to be modified as such:

> **Modified Rule for N1 context:**
>
> Where the referent is mentioned in the same non-subject role in the preceding clause (N1), the default encoding is Ø. If the N1 reference is at a text boundary or if a VIP strategy is being used, PRO coding may be employed. **If the referent is a minor or peripheral participant, then an NP may be used.**

To further test this rule, the NP coding of the first episode of The Big Snake S-I-L is examined. There are four occurrences of NP coding in the N1 context which is 50% of all occurrences. Two of the NPs are NP[kin]. One is a summary statement before a boundary following the same structure of example (112). The other NP[kin] is a case of over-coding in the climax of the narrative. The other two NP occurrences are of a minor participant and a prop. Thus the modified rule has been applicable to three of the four occurrences.

Out of the 95 occurrences of participant reference in the N1 context, there were six exceptions to the rule where a major participant was coded with an NP to heighten the salience of that participant. Thus the rule was applicable to 94% of the occurrences in the N1 context.

5.3.2.2 Addressee was speaker in previous clause (**N2**)

The N2 context is defined as a referent who is an addressee in the current clause and who was the speaker in a previous clause. The data in Table 27 below shows that the default coding in the N2 context is Ø. This claim is supported by the statistic that 90.4% of the 73 occurrences in the N2 context are coded as Ø. The Seven Orphans narrative stands out with its 44 occurrences and its uniform 100% null coding. This high percentage of Ø reference is due to the fact that the participant who was the speaker in the previous clause is already active. Thus, that same participant as the addressee does not need to be made explicit and rarely is.

Table 27: Distribution of N2 category

	Big Snake S-I-L Episode 1 2 occurrences	Big Snake S-I-L Episode 2 5 occurrences	Seven Orphans 44 occurrences	Buyeang Fish 10 occurrences	Grandfather Ghost 6 occurrences	Wild Buffalo Ear 6 occurrences
Ø	50.00%	100.00%	100.00%	80.00%	66.67%	66.67%
Verb Prt	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PRO	0.00%	0.00%	0.00%	20.00%	33.33%	33.33%
Cls_P	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NP	50.00%	0.00%%	0.00%	0.00%	0.00%	0.00%
NP [kin]	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

A prototypical conversation is shown in example (113) below. In line 34, the *kɔ:n* 'children' are the addressees in an N4 context and a coded with an NP[kin]. The quote formula is made explicit in line 34 also. In line 35, *m̩.poa* 'father' is the addressee, and he along with the quote formula is elided. The speaker, *kɔ:n mu̩aj na?* 'child one person' is coded with an NP[kin] + ClfP. Then in lines 36, 37 and 38 both the speaker and addressee, along with the quote formula are elided.

(113) Seven_Orphans.034

pʰɔ:	*tʌ̤ʔ*	*sʌk*	*m̥.poa*	*atɤ:ŋ*	***kɔ:n***	*pa:j*	*t͡ʃuaj?*	*si.mɯ:*	*hɯk*	*hɯk*
when	come	forest	father	say	**child**	C	search	vine	big	big

dɔ:
PRT_request

When they arrived at the forest the father told **the children**, “Search for a very big vine.”

Seven_Orphans.035

kɔ:n	*mṳaj*	*na?*	***Ø***	***Ø***	*m̥.poa*	*m̥.poa*	*naj*	*si.mɯ:*	*hɯk*	*a.lʌ:*
child	one	Clf_person	**said**	**father**	father	father	here	vine	big	very

One child (**said to the father**): "Father, father, here is a root that is very big."

Seven_Orphans.036

Ø	*Ø*	*Ø*	*mah*	*lɛ?*
father	**ask**	**child**	equal	how

(The father **asked the child,**) “How big?”

Seven_Orphans.037

Ø	*Ø*	*Ø*	*mah*	*ŋ.kɔŋ*
child	**tell**	**father**	equal	arm

(The child **said to the father,**) “As big as an arm.”

Seven_Orphans.038

Ø	*Ø*	*Ø*	*tʌ:*	*hɯk*	*ɤ:t*	*kɯ:j?*	*nʌŋ*
father	**said**	**child**	NEG	big	still	small	still

(The father **said to the child,**) “It's not big, still too small.”

Based on the data, a tentative rule is proposed for the N2 context as follows:

> **Tentative Rule for N2 context:**
>
> Where the referent is the addressee in the current clause and the speaker in the previous clause (N2), the default encoding is Ø. If a VIP strategy is being used, then PRO coding may be used with the VIP participant.

The rule will be tested for validity by looking at the N2 occurrences which are coded with more than Ø. There are two N2 occurrences of pronouns in The Buyeang Fish

narrative referencing *sɛːm* 'younger brother' who is a global VIP. There are two N2 occurrences of pronouns in The Grandfather Ghost narrative where the third person plural pronoun *a.laj* refers to a group of ghost friends. They are local VIPs and as such may take a pronoun in the N2 context. The N2 pronouns used in The Wild Buffalo Ear are also explained with VIP coding.

Finally, the lone occurrence of an NP in the N2 context in the first episode of The Big Snake S-I-L is examined. The NP *ku.t͡ʃʰan* 'snake' is a minor character with no VIP coding evident. Without further examples, it is difficult to determine what motivates this coding. The Kmhmu' data (Osborne 2008:105) shows that in the N1 context, minor and peripheral participants may take an NP coding in the N2 context. Since the N1 context is similar in activation status to the N2 context (Kmhmu' had no data for this category), the following modification is proposed as a hypothesis to account for the variant NP coding. The modified rule is as follows:

> **Modified Rule for N2 context:**
>
> Where the referent is the addressee in the current clause and the speaker in the previous clause (N2), the default encoding is Ø. If a VIP strategy is being used, then PRO coding may be used with the VIP participant. **A minor or peripheral participant may be coded with a NP.**

This rule accounts for all 73 occurrences in the N3 context.

5.3.2.3 Non-subject is in a different non-subject role from previous clause (N3)

The N3 context is defined as a non-subject referent who is involved in the previous independent clause but in a different role. All participants in the N3 context are similar in that they are active due to their mention in the previous clause. They differ in the various roles they may play in the previous clause. The possible roles in the previous clause are: subject role, object 1 role, object 2 role. Also, involvement in a relative clause was accepted as a non-subject role for the N3 context.

The data in Table 28 below shows Ø coding for a higher percentage of occurrences than any other category except for the Buyeang Fish narrative. As we have already seen, the Buyeang Fish narrative is using a VIP strategy for *sɛːm* 'younger brother' who is the central participant. All eight occurrences of pronoun coding refer to *sɛːm* 'younger brother'.

Table 28: Distribution of N3 category

	Big Snake S-I-L Episode 1 10 occurrences	Big Snake S-I-L Episode 2 17 occurrences	Seven Orphans 14 occurrences	Buyeang Fish 12 occurrences	Grandfather Ghost 15 occurrences	Wild Buffalo Ear 11 occurrences
Ø	40.00%	35.29%	71.40%	25.00%	53.33%	55.56%
Verb Prt	0.00%	29.41%	0.00%	8.33%	6.67%	22.22%
PRO	10.00%	5.88%	7.15%	66.67%	26.67%	33.33%
Cls_P	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NP	10.00%	17.65%	14.30%	0.00%	0.00%	11.11%
NP [kin]	40.00%	11.77%	0.00%	0.00%	13.33%	11.11%
NP + ClfP	0.00%	0.00%	7.15%	0.00%	0.00%	0.00%

Based on the data, a tentative rule is proposed for the N3 context as follows:

> **Tentative Rule for N3 context:**
>
> Where the non-subject referent is involved in a different non-subject role in the previous clause (N3), the default encoding is Ø. If a VIP strategy is being used, then PRO coding may be used with the VIP participant.

The rule will be tested for validity by looking at the N3 occurrences in The Big Snake S-I-L narrative which are coded with more than Ø. There is one N3 occurrence of a pronoun referencing to *sɛːm a.lʌh* 'youngest younger sister' who is a local VIP. There is one N3 occurrence of a NP which refers to the *t͡ʃom* 'bird' who is a minor participant. This is analogous to the snake examined in section 5.4.2.2 above, who is also a minor participant coded with an NP. Thus the rule should be modified to allow NP coding for minor and peripheral participants.

Finally, there were four N3 occurrences coded with a kinship term (NP[kin]). It seems that only motivation for this over-coding is that these participants are being promoted to a more salient state. Two of these NP[kin] occurrences refer to *kɔːm* 'children' as they are addressed in adjacent independent clauses with the warning of

what will happen if they eat the big snake's mangoes. The repetition and over-coding promote the salience of the warning. The third occurrence of NP[kin] occurs as the *sɛ:m a.lʌh* 'youngest younger sister', who is a major participant is coded as *m̰.paj* 'wife' for the first time. This transition is highlighted with over-coding in the N3 context.

The final NP[kin] occurrence happens when the *m̰.pe̤?* 'mother' discovers that her son-in-law is a man and not a snake. She is a minor character and this over-coding increases the salience of the revelation.

With this analysis, a modified rule for the N3 context is proposed as such:

> **Tentative Rule for N3 context:**
>
> Where the non-subject referent is involved in a different non-subject role in the previous clause (N3), the default encoding is Ø. If a VIP strategy is being used, then PRO coding may be used with the VIP participant. **A minor or peripheral participant may be coded with a NP. A kinship term may be used to heighten the salience of the participant or the situation.**

This rule accounts for all 79 occurrences of participant reference in the N3 context.

5.3.2.4 Other non-subject references (N4)

The N4 context is defined as the non-subject referent is not mentioned in the previous clause. The referring expression in this environment must activate a representation of the participant and so necessitates more coding. The default coding for the N4 context is some form of NP. In Table 29 all the different types of NPs are listed. No one particular type can be said to be the default at this stage of the analysis.

Table 29: Distribution of N4 category

	Big Snake S-I-L Episode 1 36 occurrences	Big Snake S-I-L Episode 2 67 occurrences	Seven Orphans 114 occurrences	Buyeang Fish 48 occurrences	Grandfather Ghost 58 occurrences	Wild Buffalo Ear 63 occurrences
Ø	0.00%	14.93%	9.60%	8.33%	5.17%	4.69%
Verb Prt	0.00%	7.46%	10.50%	0.00%	3.45%	1.56%
ClfP	2.77%	1.49%	0.00%	0.00%	0.00%	0.00%
PRO	0.00%	7.46%	2.60%	6.25%	18.97%	3.12%
NP	50.00%	37.31%	51.80%	56.25%	44.83%	62.49%
NP + ClfP	0.00%	4.47%	5.30%	2.08%	3.45%	6.25%
NP + RelC	8.34%	2.98%	4.40%	0.00%	5.17%	1.56%
NP + POSS	2.77%	0.00%	0.00%	2.08%	0.00%	0.00%
NP + DEM	0.00%	0.00%	0.00%	0.00%	1.72%	3.13%
NP [kin]	27.78%	23.88%	15.80%	25.00%	13.79%	17.18%
NP [kin] + ClfP	8.34%	0.00%	0.00%	0.00%	0.00%	0.00%
NP [kin] + POSS	0.00%	0.00%	0.00%	0.00%	1.72%	0.00%
NP [kin] + RelC	0.00%	0.00%	0.00%	0.00%	1.72%	0.00%

The tentative rule for the N4 context is:

> **Tentative Rule for N4 Context:**
>
> For a participant in a non-subject role that was not mentioned in the previous clause the default coding is NP.

An example of the default rule is shown in example (114). In line 005 of the Wild Buffalo Ear, the NP *tran sʌk* 'animal forest' is in the N4 context as it is mentioned for the first time as the object of the verbs *pʌ? paŋ* 'go shoot'. In line 006 of the Wild Buffalo Ear, the NP *si.ŋuːr mu̱aj toː* 'wild buffalo one clf_animal' is mentioned for the first time as the object of the verb *paŋ* 'shoot'. In this case, the NP includes a classifier phrase which embodies the buffalo as an actual animal as opposed to the hypothetical/possible animal mentioned in line 005.

(114) The_Wild_Buffalo_Ear.005

a.laj	*pʌ? paŋ*	***tran***	***sʌk***	*ɤːt*	*nʌŋ*	*koh*
3P	go shoot	animal	forest	LOC	on	mountain

They went to hunt **wild animals of the forest** located in the mountains.

The_Wild_Buffalo_Ear.006

a.laj	*paŋ*	*buːn*	***si.ŋuːr***	***mu̱aj***	***toː***
3P	shoot	able	**buffalo.wild**	**one**	**Clf_animal**

They were able to shoot **a wild buffalo**.

While NP is the default encoding in the N4 context by a large majority, occurrences of zero coding also occur in a minority of instances and need to be examined. In the second episode of the Big Snake S-I-L there are ten occurrences of zero reference in the N4 context. Two of the six occurrences happen during the account of the big snake swallowing the daughter. This event is described in three cycles in which the snake progressively swallows more of the daughter. Thus in episodes two and three, the daughter is the object of the verb *lu̱ːn* 'swallow' and is coded with a zero as shown in example (115).

(115) The_Big_Snake_S-I-L.100

pʰɔː	*ma.hɔj?*	*ku.t͡ʃʰan*	*huk*	*ka?*	*lu̱ːn*	**Ø**	*tɹ̥?*	*ŋ.kiːŋ*
when	moment	snake	big	so	swallow	**daughter**	come	waist

In a moment, the big snake swallowed **(her)** up to the waist.

Another instance of zero coding in the N4 context is when two brothers rescue the daughter by cutting her out of *ku.t͡ʃʰan* 'snake'. The snake is the object of the verb *trɛ̰ːh* 'cut open' in three instances. In the first instance, the snake is in the N3 context and coded with a zero. In the second and third instances, the snake is in the N4 context and is coded each time with a zero. The verb *trɛ̰ːh* 'cut open' can take an explicit object. This seems to be a case of under-coding which will be discussed in section 5.4.4 below. An example of this under-coding is shown in example (116) below.

(116) The_Big_Snake_S-I-L.130

pʰɔː	*trɛ̰ːh*	*Ø*	*pʌʔ*	*biʔ*	*biʔ*	*kaʔ*	*hɯ̰m*	*kʰan*	*kɯ̰jʔ*
when	cut.open	**snake**	go	little	little	then	see	bowl	small

When they had cut **the snake** open a little bit, they saw a small bowl.

Zero coding seems to be motivated by textual patterns where there is no ambiguity. Cyclical accounts remove ambiguity after the first cycle. Some verbs are so associated with their object that the object does not need to be explicitly stated as in *trɛ̰ːh* 'cut.open' which is only used when butchering animals. Once the animal in question has been activated, it does not need to be maintained with PRO of NP coding.

Pronoun coding is also in the minority of the N4 context and needs to be analyzed. The Grandfather Ghost narrative has a particularly high rate of PRO encoding in the N4 context at 19%. This is most likely caused by the VIP encoding strategy used in this narrative. The grandchild is the central participant and is marked as such through pronouns. An example of this VIP coding is shown in example (117) below.

(117) The_Grandfather_Ghost.027

pʰɔː	*ma.hɔjʔ*	*ɒʔ*	*kaʔ*	*pɛ̰a*	***an***	*mɯ̰t*	*t͡ʃoʔ*	*vɨ̰l*
when	moment	grandfathe	so	bring	**3S**	enter	in	village

Just then, the grandfather brought **him** into the village.

This same PRO coding phenomena in the N4 context also occurs in the second episode of the Big Snake S-I-L with the swallowed daughter coded as a local VIP and in the Buyeang Fish narrative where the younger brother is a global VIP coded heavily with PRO.

With these observations of zero coding and pronoun coding in mind, the revised rule for the N4 context is:

Revised Rule for N4 Context

For a participant in a non-subject role that was not mentioned in the previous clause the default coding is NP. **When there is no ambiguity in the context, zero coding may be used. Where a VIP strategy is employed, a pronoun is used.**

In conclusion, NP and PRO encoding are considered the default encoding in the N4 context. Zero coding is the exception to the rule, though some motivation for these exceptions have been given. Out of the 386 occurrences of participant reference in the N4 context, 30 occurrences are considered to be exceptions, encoded with zero. Thus 92% of the N4 participant reference concurrences follow the pattern expressed in the Revised Rule for the N4 Context.

5.4 Non-default encoding patterns

The charts above show that participant identification coding generally follows the proposed rules. When participant coding does not follow the rules, the deviation points to some external motivation. The following sections will analyze these deviations and posit motivations for them.

5.4.1 More than default encoding for subject contexts

The distribution of coding in the S1 context in Table 22 shows that the Wild Buffalo Ear narrative has a high percentage of more than default coding, with 47% coded as PRO and 18% coded as NP. The extensive use of pronouns might be motivated by the need to disambiguate three major participants that are often on stage together and who have close to equal ranking. There are also many changes of time and location in this narrative which create disruptions in the text which may motivate pronoun encoding.

The theory that more than default encoding promotes salience in the narrative is difficult to support in this instance as non default coding is so extensive that it loses the salience promoting power of more economical use. Even in cases where kinship nouns are used, they serve to differentiate the participants at boundaries rather than to promote their salience.

When examining a more prototypically encoded narrative such as the Buyeang Fish, one finds that more than default encoding does promote salience. In the peak of the narrative in lines 106 through 110, the witch is the subject of each S1 clause. In 106

she is over-coded with the NP *m̥.pɛ̥? si.muːt* 'witch'. In line 107 she is over-coded with a pronoun. In line 107 there are four zero encodings which deemphasize the witch which in turn emphasizes the act of looking. Then in line 108, the witch and her anger are again emphasized by using a pronoun when a zero could have been used. Finally, in line 110, the witch's final act of throwing her magic mirror and magic wand away is emphasized with a pronoun. This is shown in example (118) below.

(118) The_Buyeang_Fish.106

m̥.pɛ̥? si.muːt *rɛ̥aj* *pa.lɛ̥aj?*
witch angry very

The witch became very angry.

The_Buyeang_Fish.107

an *ɲɛːŋ* *t͡ʃʌː* **Ø** *ɲɛːŋ* *ɛːn* **Ø** *ɲɛːŋ* *t͡ʃʌː* **Ø** *ɲɛːŋ* *ɛːn*
3S watch PST **witch** watch again **witch** watch PST **witch** watch again

Ø *kaʔ* *tʌː* *hɯːm* *sɛːm* *lɤ̥ːj*
witch so NEG see younger at.all

She looked and then **(she)** looked again, **(she)** looked and then **(she)** looked again, but **(she)** did not see the younger brother at all.

The_Buyeang_Fish.108

an *rɛ̥aj* *pa.lɛ̥ːaj?*
3S angry very much

She was very angry.

The_Buyeang_Fish.109

Ø *kɯ̥t* *paːj* *t͡ʃi.lɑ̥ŋ* *wi.seːt* *kap* *a.loaŋ* *wi.seːt* *tʌː* *wi.seːt* *nʌŋ*
witch think C mirror magic and stem magic NEG magic still

(She) thought that the magic mirror and the magic wand were not magic any more.

The_Buyeang_Fish.110

an *lɤ̥ːj* *ta.kɛːl* *t͡ʃi.lɑ̥ŋ* *kap* *a.loaŋ*
3S so throw mirror and stem

So **she** threw the mirror and the wand.

These examples show that more than default encoding has two main motivations. The first is to differentiate central participants when there may be ambiguity. The

second motivation is to make the participant or the actions/emotions of the participant stand out as more salient.

5.4.2 More than default encoding for non-subject contexts

More than default encoding for non-subject contexts follows the same pattern as subject contexts which is that over-coding is motivated by the need to make participants unambiguous and to highlight their salience. An example of over-coding to promote salience is shown in example (119) below. In line 009 of the Buyeang Fish, the *sɛːm* 'younger brother' receives the default coding of NP in the N4 context. Lines 010 and 011 also code *sɛːm* with a NP even though they are in the N1 context which should take a zero. It is hypothesized that this over-coding highlights the younger brother's importance in the narrative as it is the instigating event in the plot line of the narrative.

(119) The_Buyeang_Fish.009

ŋ.kɔh	*m̤.poa*	*a.jʌʔ*	*krṳaŋ*	*ɔːn*	***sɛːm***
afraid	father	offer_up	city	for	**younger**

(He) was afraid the his father would give the city to **the younger brother**.

The_Buyeang_Fish.010

lɤ̤ːj	*kṳt*	*a.-t͡ʃiːt*	***sɛːm***
so	think	CAUS-die	**younger**

So he thought about killing **the younger brother**.

The_Buyeang_Fish.011

mṳaj	*si.ŋaj*	*lɤ̤ːj*	*pe̤a*	***sɛːm***	*pʌʔ*	*paɲ*	*tran*	*sʌk*
one	day	so	invite	**younger**	go	shoot	animal	forest

So one day he invited **the younger brother** to go shoot wild animals.

5.4.3 Less than default encoding for subject contexts

Less than default encoding for subject contexts occurs in the S3 and S4 contexts where the default is pronoun or NP encoding. It was found that under-coding with zero only occurs where there is no ambiguity. In the rare case where there is ambiguity, the under-coded participant was being demoted in salience. In example (120) below, the *a.je̤aʔ tʰaw* 'grandmother old' is the subject and is coded in line 007 with a NP (default) in the S4 context. In line 008, the subject of the verb invite is

'they' which is coded as a zero (under-coded) in the S4 context. We know that the subject is 'they' because the reciprocal verbal particle *kan* must have a plural subject. Then in line 009, the old grandmother is again the subject coded with a zero (under-coded) in the S4 context. This under-coding in line 009 is very ambiguous to the non-native speaker. One wonders if the subject is the old man and old woman, or just the wife. The proof that it is just the wife comes in the speech quote of 011 where the speaker says, "Please let me (*not us*) have children like these crabs." It would seem that the under-coding of the subject in lines 008 and 009 indicate that the storyteller is not as concerned with differentiating the subject, but with explaining the situation and describing the actions which make up the back ground of the narrative.

(120) Seven_Orphans.007

mu̯aj si.daw ***a.je̯a?*** ***tʰaw*** *wa̯w kap a.ja:k pa:j jʌ? bu:n*
one night **grandmother** **old** speak with husband C want have

kɔ:n bu:n t͡ʃaw ku̯: ka.ne̯a a.laj
child have grandchild same friend 3P

One night, **the old grandmother** said to her husband, "I want to have children, I want to have grandchildren just like my friends have."

Seven_Orphans.008

pʰɔ: tʌ? a.ru̯:p **Ø** *pe̯a kan pʌ? pi̯c a.ri̯aŋ*
when come morning **they** invite RECIP go dig crab

When morning came, **they** [old man and old woman] decided to go dig up crabs.

Seven_Orphans.009

Ø *hu:m kɔ:n a.ri̯aŋ pa.le̯aj?* **Ø** *ka? lɤ:j ku̯t jʌ? bu:n kɔ:n*
she see child crab many **she** then so think want have child

m̥.plɛ? a.ri̯aŋ
like crab

The grandmother saw many little crabs and so **she** decided that she wanted to have children just like the crabs.

Seven_Orphans.010

Ø *lɤ:j ka.kuh t͡ʃo? ma.lɔŋ sɛ:k kɔ:n kap tʰɛ:w.da:*
she so kneel to sky request child with angel

So **she** knelt to the sky and requested children from the angels.

5.4.4 Less than default encoding for non-subject contexts

Less than default encoding for non-subject contexts occurred much less frequently than under-coding in subject contexts. It was generally motivated by no need to disambiguate the participants. In all the cases of under-coding in non-subject contexts, the participants were not ambiguous due to a cultural schema which dictated a particular participant or due to the cyclical nature of the text which caused the participant to be anticipated. Osborne (2009:143) finds in Kmhmu' that less than default encoding signals a peak in the narrative, this was not found to be the case in Bru KS narratives.

5.5 Summary

Participant identification patterns of Bru KS follow both a sequential and VIP strategy. When a sequential strategy is used, participants are identified according to their context and their rank. Lower ranking participants such a minor and peripheral participants receive more coding material then central and major participants. The default coding for central and major participants is shown in Table 30 below.

Table 30: Default coding for central and major participants

	S1/N1	S2/N2	S3/N3	S4/N4
Central and Major participant Coding	Ø /Ø	Ø /Ø	PRO/Ø	NP/NP
Minor and Peripheral participant Coding	PRO, NP/ Ø	Ø/ Ø	NP/Ø	NP/NP

While default encoding is the norm, factors such as highlighting a participant's salience, text boundaries, cultural schema and peak markings will motivate over-coding or under-coding.