

## Yi Future: Tense or Evidential?\*

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The Nuosu future clitic encodes future time reference but exhibits a “first-person” constraint that is reminiscent of evidential markers. We argue in support of the tense hypothesis but demonstrate with pan-Yi data that the evidential constraint is historically inherited from a quotation clitic which in turn can be traced back to a verb of speech (SAY). Several Yi languages display SAY-future tenses like Nuosu. Still other Yi languages derive future tense from the diachronic sources of WANT, FOLLOW and (probably) GET.

Key words: future tense, evidential, Yi, Nuosu

### 1. Introduction

Scholars disagree on the status of the English auxiliary *will* as a tense or modality auxiliary. The use of *will* is neither a necessary nor a sufficient condition for future time reference (Comrie 1985:47). *Will* has several modal uses with present time reference.

- |        |                  |  |
|--------|------------------|--|
| (1) a. | Intention:       | We’ll do the job now.  |
| b.     | Volition:        | He <b>will</b> go swimming in dangerous waters. <sup>1</sup> |
| c.     | Polite request:  | <b>Will</b> you help me look for my purse?                   |
| d.     | Belief in truth: | The match <b>will</b> be finished by now.                    |

On the other hand, future time reference can be indicated by other forms than *will*.

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<sup>1</sup> Example (1b) is quoted from Comrie (1985:47), (1c+d) from Salkie (2010:192), (2a) from Declerck et al. (2006:182), and (2b) from Salkie (2010:196).

- (2) a. Present tense: The train **leaves** (/will leave) in 2 hours.  
 b. Present progressive: Helen **is taking** (/will take) her exam tomorrow.  
 c. Epistemic modal: Mary **may** (/will) get married next year.

Those who argue for *will* as tense marker discount the importance of these examples and quote studies on large corpora which place pure future time uses of *will* above 90 per cent of all uses (Salkie 2010:196).

In Nuosu and other Yi (彝) languages (Tibeto-Burman: China), future tense is encoded in verb clitics suffixed to the predicate. The status of the Nuosu clitic as marker of future tense is controversial for a different reason. The Nuosu clitic does not manifest modal *extensions* in sentences with non-future time reference, as English *will* in example (1). The Nuosu future clitic rather exhibits an evidential *restriction* in sentences with future time reference.

The use of the clitic **mi**<sup>44</sup> is a sufficient but not necessary condition for future time reference. The use of **mi**<sup>44</sup> encodes future tense and is incompatible with explicit nonfuture time reference, as shown in (3a+b). However, future time reference can also be expressed without the clitic, as illustrated in (4).<sup>2</sup>

Nuosu (Sichuan, Liangshan Prefecture)

- (3) a.  $\eta a^{33}$   $\zeta a^{21} mo^{21}$   $\zeta a^{21}$  **mi**<sup>44</sup>.  
 1P SG wife, bride marry MIX  
 ‘I will get married (in the future not now).’  
 b. \* $\eta a^{33}$   $a^{21} m^{33}$   $si^{55}$   $ts^{h33}$   $dzi^{55}$   $\eta o^{21}$  **mi**<sup>44</sup>.  
 1P SG now affair DEM:PROX CL think MIX  
 ‘I will look into this problem now.’  
 (4)  $m^{21} s^{33} tu^{44}$   $m^{33} t^{h33}$   $ko^{44}$   $nw^{33}$  ( $\eta a^{33}$ )  $ze^{55} ho^{21}$   $ze^{55}$   $sa^{33}$   $o^{44}$ .  
 tomorrow morning SENT.TOP TOP 1P SG song sing well DP  
 ‘Tomorrow, I will sing well.’ (Folk story “The dove and the cuckoo”)

Similar to the English auxiliary *will*, future time reference does not necessarily trigger the presence of the Nuosu clitic, but unlike *will*, the clitic is subject to a first person constraint. The future clitic is incompatible with second and third person subjects.

<sup>2</sup> The Yi language data are elicited or quoted from unpublished narratives that I collected over the past 17 years. I also cite from folk stories published by Chen & Wu (1998). The Nuosu data represent the Shynra dialect of Xide County (喜德縣).

Nuosu (Sichuan, Liangshan Prefecture)

- (5) a.  $\text{n}\epsilon^{55}\text{he}^{33}\text{di}^{21}\text{k}^{\text{hv}}\text{u}^{55}$   $\eta\text{a}^{33}$   $\text{z}\epsilon^{21}\text{z}\text{o}^{55}$   $\text{tsi}^{33}$   **$\text{mi}^{44}$** .  
 next year 1P SG potato plant MIX  
 ‘I will plant potatoes next year.’
- b.  $\text{n}\epsilon^{55}\text{he}^{33}\text{di}^{21}\text{k}^{\text{hv}}\text{u}^{55}$   $\text{nui}^{33}$   $\text{z}\epsilon^{21}\text{z}\text{o}^{55}$   $\text{tsi}^{33}$  ( **$\text{mi}^{44}$** ).  
 next year 2P SG potato plant MIX  
 ‘You will plant potatoes next year.’
- c.  $\text{n}\epsilon^{55}\text{he}^{33}\text{di}^{21}\text{k}^{\text{hv}}\text{u}^{55}$   $\text{tsi}^{\text{h}}\text{i}^{33}$   $\text{z}\epsilon^{21}\text{z}\text{o}^{55}$   $\text{tsi}^{33}$  ( **$\text{mi}^{44}$** ).  
 next year 3P SG potato plant MIX  
 ‘He will plant potatoes next year.’

The exclusion of nonspeaker subjects is an evidential constraint. The speaker asserts something about the future only if s/he is in control of the uttered situation. This is only the case when the speaker is the controlling subject of the sentence. Thus, an alternative account of the Nuosu clitic  **$\text{mi}^{44}$**  would be to interpret its main function as *first-hand evidential*.

We argue against the evidential hypothesis and in favour of the tense hypothesis. We survey *pro* and *contra* arguments for both positions in §2. We present the future clitics of eleven Yi languages and identify their diachronic sources in §3.

## 2. The evidential vs. tense hypothesis in Nuosu

Evidentiality is the category of information sources which indicate how one learnt something (Aikhenvald 2004:1, Willett 1988:51). Information sources are encoded in the grammatical system of a quarter of the world’s languages. With bound morphemes, the sentence must indicate the type of source on which it is based. In a chapter of the *World Atlas of Language Structures*, De Haan (2005) identifies North and South America as the principal areas of languages with grammaticalized information sources. Individual languages exhibit between one and five grammaticalized information sources (Aikhenvald 2004:60). Willett (1988:57) organizes the attested information sources into the following system.

**Table 1:** Types of evidence

Types of evidence	Direct	Attested	Visual
			Auditory
			Other sensory
	Indirect	Reported	Second-hand (hear-say)
			Third-hand (hear-say)
			Folklore
		Inferring	Results
			Reasoning

The Nuosu language exhibits a quotative evidential (second-hand). The postverbal clitic **di**<sup>44</sup> marks a clause as direct or indirect speech. On the view that the morpheme **mi**<sup>44</sup> codes evidential instead of tense meaning, Nuosu would have an evidentiality system with two choices. It would be reminiscent of Aikhenvald’s type **A4** (2004:34), a rare type also found in several Australian languages.

**Table 2:** The evidential hypothesis in Nuosu

DIRECT:	<b>mi</b> <sup>44</sup>
QUOTATIVE:	<b>di</b> <sup>44</sup>

Tense is the grammatical expression of location in time (Comrie 1985:9). According to Dahl & Velupillai (2005:266-279), tense is encoded in about 80% of all languages. Languages of the world make between one and ten tense distinctions. They sometimes differentiate degrees of remoteness in the past and/or in the future. Temporal distance oppositions are more frequent in the past than in the future. Comrie (1985:97) distinguishes the following more common tense values. Noncanonical systems do also exist.

**Table 3:** Types of absolute tenses

		First option	Second option
Tense distinctions	Past	- <b>P</b> <sub>5</sub> : last year or before	distant past
		- <b>P</b> <sub>4</sub> : last week	last year
		- <b>P</b> <sub>3</sub> : yesterday	last month
		- <b>P</b> <sub>2</sub> : earlier today	yesterday
		- <b>P</b> <sub>1</sub> : immediate	immediate
	Present	Time interval including utterance time	
	Future	- <b>F</b> <sub>1</sub> : immediate	immediate
		- <b>F</b> <sub>2</sub> : later today	tomorrow
		- <b>F</b> <sub>3</sub> : tomorrow	next month
		- <b>F</b> <sub>4</sub> : next week	next year
		- <b>F</b> <sub>5</sub> : next year or later	distant future

On the view that **mi**<sup>44</sup> marks future tense and not evidential meaning, we would have a tense system with only one value, future tense. As zero marking is compatible with past, present and future time reference, Nuosu would not display a future versus nonfuture split as do half of the world's languages (Dahl & Velupillai 2005:270).

**Table 4:** The future tense hypothesis in Nuosu

FUTURE:	<b>mi</b> <sup>44</sup>
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On the following pages, we argue for and against both hypotheses and conclude that the tense hypothesis represents a stronger case.

## 2.1 The evidential hypothesis

The clitic **mi**<sup>44</sup> is a first-hand evidential whose use is always co-associated with the idea of speaker-control. The speaker controls the situation denoted by a sentence if and only if a first person pronoun functions as the subject and the predicate allows the idea of control. The speaker makes an assertion based on her/himself as guarantor of the outcome. This idea is present in the following examples.<sup>3</sup>

<sup>3</sup> The Nuosu future clitic **mi**<sup>44</sup> occurs in written texts, three times in Chen & Wu (1998)'s folk stories and dozens of times in the Nuosu New Testament (2009).

Nuosu (Sichuan, Liangshan Prefecture)

- (6) a.  $\eta a^{33}$   $ni^{55}$   $mi^{33}$   $ma^{44}su^{33}$   $b\ddot{y}^{33}$   $\eta a^{55}$   $lo^{55}$   
 1P SG 2P SG POSS name ART write 1P SG POSS hand  
 $ko^{33}$   $ti^{55}$   $ta^{33}$   **$mi^{44}$** .  
 LOC attach put MIX  
 ‘I will write your name on my hand.’
- b.  $\eta o^{21}yo^{44}$   $ze^{21}zo^{55}$   $ts^{h_i}i^{44}$   $gw^{33}$   $dzu^{33}$   $sa^{55}$   **$mi^{44}$** .  
 1P PL potatoes DEM:PROX CL eat EXH MIX  
 ‘We will eat up these potatoes.’
- c.  $\eta a^{33}$   $dze^{21}mo^{21}$   $ts^{h_i}i^{33}$   $va^{55}$   $de^{33}$   $nu^{33}$   $bz^{44}$   **$mi^{44}$** .  
 1P SG money NUM:10 RMB COV 2P SG give MIX  
 ‘I will give you 10 RMB.’
- d.  $\eta a^{33}$   $m^{21}s\ddot{a}^{33}tu^{44}$   $o^{21}dzo^{33}$   $bo^{33}$   **$mi^{44}$** .  
 1P SG tomorrow Xichang go MIX  
 ‘I will go to Xichang tomorrow.’

Examples in (7) exhibit second, third person subjects or impersonal subjects. They represent situations not controlled by the speaker.

- (7) a.  $*nu^{33}$   $mu^{33}ka^{33}$   $\eta gw^{44}$   $ta^{33}$   $ho^{44}zu^{44}$   $t\ddot{s}a^{33}$   $si^{21}\eta gw^{21}$   **$mi^{44}$** .  
 2P SG name COV:mix STP while CL chat MIX  
 ‘You will chat with Muka for a while.’
- b.  $*tsi^{33}$   $ma^{55}to^{21}$   $dza^{44}$   $dzu^{33}$   $gu^{21}dzu^{44}nu^{33}$ ,  $zi^{44}$   $ka^{33}$   $ndo^{33}$   
 3P SG noon food eat after tobacco CL smoke  
 **$mi^{44}$** .  
 MIX  
 ‘He will smoke a cigarette after the lunch.’
- c.  $*a^{33}no^{33}$   $ne^{55}di^{21}k^{hv}u^{55}$   $a^{44}zi^{33}$   $so^{33}$   $zo^{33}$   $ts^{h_i}i^{21}$   $dzi^{21}$   
 female name next year child NUM:3 CL NUM:1 CL  
 $m^{33}$   $zu^{33}$   $la^{33}$   **$mi^{44}$** .  
 ADVL bear come MIX  
 ‘Anyuo will bear a triplet next year.’
- d.  $*s\ddot{a}^{21}tu^{21}$   $th^{33}$   $ko^{33}$   $tu^{55}dze^{33}$   **$mi^{44}$** .  
 July time LOC Torch Festival MIX  
 ‘The Torch Festival will be in July.’

- e. \*ŋa<sup>55</sup>      zɯ<sup>33</sup>ni<sup>21</sup> li<sup>33</sup>    ni<sup>21</sup>tɯ<sup>21</sup> t<sup>h</sup>u<sup>33</sup> ko<sup>33</sup>    ŋu<sup>33</sup> **mi**<sup>44</sup>.  
 1P SG POSS birthday TOP February time LOC COP MIX  
 ‘My birthday will be in February.’
- f. \*ɬi<sup>44</sup>ko<sup>33</sup> p<sup>h</sup>u<sup>33</sup> la<sup>33</sup>      **mi**<sup>44</sup>.  
 storm blow COME MIX  
 ‘A hurricane will be coming.’
- g. \*m<sup>21</sup>ʂə<sup>33</sup>tɯ<sup>44</sup> mo<sup>33</sup>m<sup>33</sup> ga<sup>33</sup>ŋgo<sup>21</sup> la<sup>33</sup>      **mi**<sup>44</sup>.  
 tomorrow sky cold COME MIX  
 ‘Tomorrow the weather will get cold.’

In (8), the speaker assumes the function of non-controlling subject. As the predicates convey a low degree of control, the sentences are ungrammatical.

- (8) a. \*ŋa<sup>33</sup>    o      qu      **mi**<sup>44</sup>.  
 1P SG head white MIX  
 ‘I will have grey hair.’
- b. \*ŋa<sup>33</sup>    i<sup>33</sup>tɕ<sup>h</sup>i<sup>33</sup>    na<sup>33</sup>      **mi**<sup>44</sup>.  
 1P SG head ill MIX  
 ‘I will have a headache.’
- c. \*ŋa<sup>33</sup>    ɕə<sup>21</sup>ɬe<sup>33</sup>    ts<sup>h</sup>i<sup>44</sup>      ma<sup>33</sup>    ŋgu<sup>33</sup>      **mi**<sup>44</sup>.  
 1P SG girl DEM:PROX CL love MIX  
 ‘I will love this girl.’

In §2.1.1, we examine a typological argument and in §2.1.2 a diachronic argument in support of the evidential hypothesis.

### 2.1.1 The typological argument (“first person” effects)

Many languages with evidentials in the grammatical system exhibit “first-person” effects (Aikhenvald 2004:219-233). When the speaker talks about an event in which s/he participates, the evidence of this involvement will semantically react to the use of evidentials. Certain evidentials may acquire secondary meanings and overtones when a first person pronoun is employed. The range of secondary meanings attested in different languages is called “first-person” effects.

In Qiang, a remote genetic relative of Nuosu spoken in China, the marker of visual evidence implies for first person subjects that the action was unintentional, mistaken or

accidental (LaPolla 2003:66). This effect can be depicted as a loss of speaker control over the situation.

First-hand evidentials of other languages exhibit an opposite effect, an increase of speaker control. In the Tukano language spoken in Brazil, the visual evidential implies for speaker subjects that the action is done consciously and intentionally (Ramirez 1997, Vol. I: 133).

The Nuosu examples (6)-(8) demonstrate a “first-person” effect of still a different type. The clitic **mi**<sup>44</sup> takes a narrow view of first-hand evidence. It refers to the evidence that the speaker as controlling event participant possesses. Situations in which this “control-evidence” is unattainable are incompatible with **mi**<sup>44</sup>. The claim that **mi**<sup>44</sup> is evidential draws its support from this “first-person” effect, a version of which also exists in other languages of the world.

The typological argument looks weak if we distinguish between the sense of **mi**<sup>44</sup> and the meaning of other elements obligatorily co-associated with **mi**<sup>44</sup>. First-hand evidence is not a sense encoded in **mi**<sup>44</sup> but arises from the elements **mi**<sup>44</sup> co-occurs with. If it really encoded first-hand evidence, it would be grammatical in the following clauses.<sup>4</sup>

- |  |   |
|--|---|
| <p>(9) a.    <math>\eta a^{33}</math>    <math>z i^{33}</math>    <math>t s^{h i^{44}}</math>    <math>b o^{21}</math>    <math>k o^{33}</math>    <math>t a^{33}</math>    <math>b i^{55} b o^{33}</math><br/>                1P SG   house   DEM   CL   LOC   COV   leave<br/>                <b>o</b><sup>44</sup>    (<b>*mi</b><sup>44</sup>).<br/>                DP     MIX<br/>                ‘I have left the house.’</p>        | <p>(<b>mi</b><sup>44</sup> disallowed in perfective events)</p> |
| <p>         b.    <math>\eta a^{33}</math>    <math>z i^{33}</math>    <math>t s^{h i^{44}}</math>    <math>b o^{21}</math>    <math>k o^{33}</math>    <math>t a^{33}</math>    <math>b i^{55} b o^{33}</math><br/>                1P SG   house   DEM   CL   LOC   COV   leave<br/>                <b>ku</b><sup>33</sup>    (<b>*mi</b><sup>44</sup>).<br/>                PROG   MIX<br/>                ‘I am leaving the house.’</p> | <p>(<b>mi</b><sup>44</sup> disallowed in ongoing events)</p>    |

### 2.1.2 The diachronic argument

Although **mi**<sup>44</sup> does not function as an evidential in Modern Nuosu, it is still possible that **mi**<sup>44</sup> had this function in a proto-language. The “first-person” effect could be a residual property of its evidential meaning. Nothing can be known about the history

<sup>4</sup> The perfective and progressive clitics cannot be in the scope of the future clitic, but the future clitic can be in the scope of the perfective and progressive clitics. The compound clitics **mi**<sup>44</sup>**o**<sup>44</sup> and **mi**<sup>44</sup>**ku**<sup>33</sup>**o**<sup>44</sup> were reanalyzed with new meanings (§2.2.3).



of **mi**<sup>44</sup> through internal reconstruction, but other genetically related Yi languages offer insights.

The Nase [na<sup>33</sup>sə<sup>33</sup>] language, a close Yi relative not mutually intelligible with Nuosu (see §3), employs a future clitic that Gerner (2009, 2012) reconstructs from the verb ‘say’. There are three verb clitics that are distinguished by tone alone. The constant-mid tone [<sup>33</sup>] is associated with future tense, the rising-low tone [<sup>13</sup>] is a marker for possible epistemic modality and the constant-high tone [<sup>55</sup>] links to necessary epistemic modality.

<b>di</b> <sup>33</sup>	<b>di</b> <sup>13</sup>	<b>di</b> <sup>55</sup>
FUTURE TENSE (‘will’)	POSSIBILITY (‘may’)	NECESSITY (‘must’)

Examples in (10) contrast the three clitics for the same basic sentence.

- Nase (Yunnan, Luping County)
- (10) a. tɕu<sup>21</sup> ɕi<sup>55</sup> do<sup>33</sup> **di**<sup>33</sup>.  
           3P SG sweat exit FUT  
           ‘He will be sweating.’
- b. tɕu<sup>21</sup> ɕi<sup>55</sup> do<sup>33</sup> **di**<sup>13</sup>.  
           3P SG sweat exit POSS  
           ‘He might be sweating.’
- c. tɕu<sup>21</sup> ɕi<sup>55</sup> do<sup>33</sup> **di**<sup>55</sup>.  
           3P SG sweat exit NESS  
           ‘He must be sweating.’

These clitics are historically derived from the verb **die**<sup>55</sup> ‘say’ which is still in use in Modern Nase. It is a parallel compound of two words of speaking in a proto-language, \***di** ‘say’ and \***ɛ** ‘speak’.

- (11) tɕu<sup>21</sup> mi<sup>55</sup> yu<sup>21</sup> **die**<sup>55</sup>.  
       3P SG word say  
       ‘He is talking.’

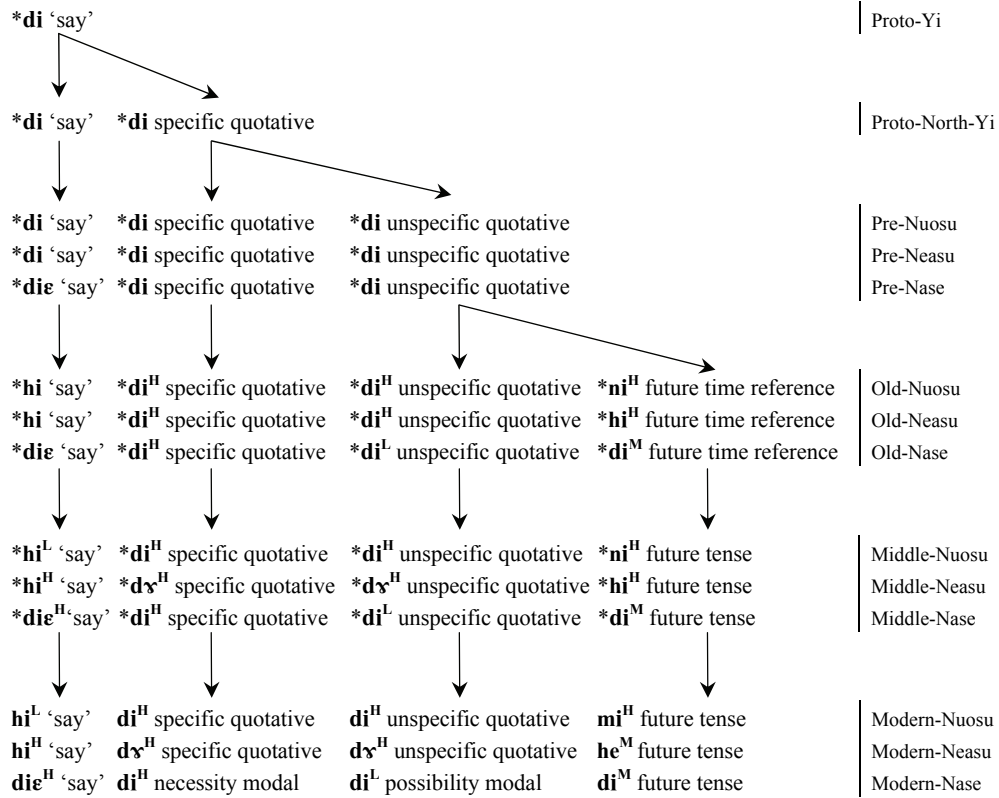
The split **di**<sup>55</sup>/**di**<sup>13</sup>/**di**<sup>33</sup> was triggered by intonational variation and speech act choice. Later, these three tonal variants were semantically reanalyzed as modal *must*, *can* and as future tense (Gerner 2012). The Neasu [nɣ<sup>55</sup>su<sup>13</sup>] language, another Northern Yi language (§3), exhibits a future tense clitic (**he**<sup>33</sup>) that is historically related to the verb ‘say’ (**hi**<sup>55</sup>). Both morphemes are exemplified in (12) and (13).

Neasu (Guizhou, Weining County)

- (12)  $\eta o^{21}$  **hi**<sup>55</sup>  $na^{21}\chi^{55}$   $tu^{55}$ .  
 1P SG say 2P PL tell  
 ‘I tell you.’
- (13) a.  $\eta o^{21}$   $bo^{21}nde^{33}$   $ly^{55}$  **he**<sup>33</sup>.  
 1P SG Bondi township go FUT  
 ‘I will go to Bondi township.’
- b.  $\zeta i^{21}$   $\$u^{33}du^{33}$   $ko^{33}$   $p^hu^{55}$  **he**<sup>33</sup>.  
 3P SG hard-SUFF GOAL meet FUT  
 ‘He will suffer hardship.’

Neither Nase nor Neasu displays a “first-person” effect as reported for the Nuosu clitic **mi**<sup>44</sup>. The feature of speaker-control is either idiosyncratic to Nuosu or a property of all Northern Yi languages that was subsequently lost in Nase and Neasu. Either way, future tense developed from the sense of quotative marker in clauses with explicit future time reference. The quotative marker was reanalyzed as prediction marker (gloss: *predict that*) even when future time reference was not explicit in the sentence. Speaker-control might have triggered the function of predictive marker. The predictive marker further evolved into future tense. The following figure surveys the main steps of the reconstruction and is extended and adapted from Gerner (2012).<sup>5</sup>

<sup>5</sup> The verb *follow* has the sound shape /*me*/ in several Yi languages though not in Nuosu. There is a small chance that the Nuosu future tense clitic **mi**<sup>44</sup> is grammaticalized not from the verb *say* but from the verb *follow*. Under this scenario, the clitic **mi**<sup>44</sup> would not have changed its sound structure much. Two arguments contradict this kind of evolution. First, it would not be possible to account for the first person constraint, if **mi**<sup>44</sup> was related to the sense *follow*. Second, the Ni language of Shilin County (石林縣), considered by some scholars to be the cradle of the Yi tribes, uses the verb **me**<sup>33</sup> ‘follow’ and the forms **ni**<sup>33</sup>**du**<sup>33</sup>/**li**<sup>33</sup> for future tense. In Ni, the verb *follow* is not likely cognate to the future clitic as this would require an unlikely process of phonological dissimilation **me**<sup>33</sup> → **ni**<sup>33</sup>/**li**<sup>33</sup> (bilabial nasal + front vowel → alveolar nasal + front vowel). The Ni forms **ni**<sup>33</sup>/**li**<sup>33</sup> should be viewed as intermediate forms of the Nuosu clitic **mi**<sup>44</sup>.



In Nuosu and Neasu, the different products of the grammaticalization process can co-occur in the same clause, whereas in Nase they cannot. In the Modern Nuosu example (14), the clitics **mi**<sup>44</sup> and **di**<sup>44</sup> are compatible; Example (15) shows the same point for Modern Neasu. However, the Nase future tense clitic **di**<sup>33</sup> is ungrammatical with the modals **di**<sup>13</sup> ‘may’ and **di**<sup>55</sup> ‘must’, as illustrated in (16).

Nuosu (Sichuan, Liangshan Prefecture)

- (14) mu<sup>33</sup>ka<sup>33</sup><sub>k</sub> hi<sup>21</sup> ko<sup>33</sup> i<sup>33</sup><sub>k</sub> t<sup>h</sup>u<sup>21</sup>ɿ<sup>33</sup> ts<sup>h</sup>i<sup>33</sup> dʒi<sup>55</sup>  
 male name say SENT.TOP LOG-SG book DEM:PROX CL  
 bu<sup>33</sup> **mi**<sup>44</sup> **di**<sup>44</sup>.  
 write MIX QUOT  
 ‘Muka<sub>k</sub> said that he<sub>k</sub> will write this book.’

Neasu (Guizhou, Weining County)

- (15) ɕi<sup>21</sup> hi<sup>55</sup>, ɕi<sup>21</sup>χɣ<sup>55</sup> ni<sup>33</sup>dʒi<sup>33</sup> k<sup>j</sup>e ɬu<sup>33</sup> χo<sup>21</sup> **he**<sup>33</sup> dɣ<sup>55</sup>.  
 3P SG say 3P PL law GOAL change SEND FUT QUOT  
 ‘He said that they will change the law.’

Nase (Yunnan, Luoping County)

- (16) a. \*tɕsu<sup>21</sup> ʔu<sup>21</sup> mo<sup>55</sup> ntɕi<sup>fi:21</sup> ta<sup>21</sup> pə<sup>33</sup> ɕi<sup>33</sup>  
 3P SG 1P SG COV:toward wine NUM:1 CL do in honor of  
**di<sup>33</sup> di<sup>13</sup>**.  
 FUT POSS  
 ‘He will might be drinking a toast to me.’
- b. \*tɕsu<sup>21</sup> ʔu<sup>21</sup> t<sup>h</sup>a<sup>55</sup> nɔ<sup>55</sup> niɛ<sup>21</sup> tsə<sup>55</sup> də<sup>33</sup> sə<sup>33</sup> po<sup>55</sup> tɕhə<sup>21</sup>  
 3P SG 1P SG for container NUM:3 CL carry  
 diɛ<sup>21</sup> liɛ<sup>55</sup> **di<sup>33</sup> di<sup>55</sup>**.  
 come FUT NESS  
 ‘He will must have carried three container boxes for me.’

In Nuosu and Neasu, future tense and quotation clitics are compatible as they apply to different levels of a subordinate clause. In Nase, all three markers **di<sup>33</sup>**, **di<sup>13</sup>** and **di<sup>55</sup>** contribute to the same syntactic level of simple clause which explains their incompatibility.

Cross-linguistically, verbs of speech are attested as diachronic sources for future tense though infrequently. Aaron (1996) traces future tense in Obolo (Niger-Congo, Cross River) back to a verb of speech. Botne (1998) reconstructs future tense in Proto-Central-Eastern-Bantu (another branch of the Niger-Congo family) from the verb ‘say’.

## 2.2 The tense hypothesis

In Modern Nuosu, **mi<sup>44</sup>** is future tense marker. To substantiate this claim we discuss three arguments: the property that the use of **mi<sup>44</sup>** is a sufficient condition for future time reference (§2.2.1), the possibility of encoding relative future in subordinate clauses (§2.2.2), and the suspension of the constraint of speaker-control in certain contexts (§2.2.3).

### 2.2.1 The argument of “sufficient condition”

If **mi<sup>44</sup>** is appended to a simple clause, the clause always refers to the future of the time of speaking (sufficient condition). The converse is not true. Future time reference does not necessarily trigger the use of **mi<sup>44</sup>** (necessary condition). Most scholars would view linguistic forms whose use is either sufficient or necessary for particular time reference as encoding tense. Sometimes, authors even accept forms which fail on both sufficient and necessary conditions as tense forms (see Salkie 2010, on English *will*).

For minimal simple clauses, the sufficient condition and failure of necessary condition was already illustrated in examples (3)-(4). In this section, we catalogue

further contexts in which the sentence encodes or implicates nonfuture time reference and in which **mi**<sup>44</sup> is prohibited.

The clitic **mi**<sup>44</sup> is ungrammatical in clauses with past tense reference, in timeless clauses and in habitual clauses, as demonstrated in the following group of examples.

- Nuosu (Sichuan, Liangshan Prefecture)
- (17) a. \*a<sup>21</sup>ndi<sup>33</sup>hi<sup>44</sup>    ŋa<sup>33</sup>    tɕ<sup>h</sup>u<sup>33</sup>tɕ<sup>h</sup>u<sup>33</sup>    vɕ<sup>33</sup>    **mi**<sup>44</sup>.    | Past time  
          yesterday    1P SG    rice                    buy    MIX  
          ‘I bought rice yesterday.’
- b. \*vo<sup>55</sup> li<sup>33</sup>    ɕi<sup>44</sup>                    ni<sup>33</sup>    dzu<sup>33</sup>    **mi**<sup>44</sup>.    | Timeless  
          pig    TOP    QUANT:all    also    eat    MIX  
          ‘Pigs will eat everything.’
- c. \*ŋa<sup>33</sup>    k<sup>h</sup>u<sup>55</sup>mo<sup>21</sup>    ts<sup>h</sup>i<sup>21</sup>    ɕɔ<sup>33</sup>    dzi<sup>44</sup>a<sup>21</sup>dzi<sup>33</sup>    ndz<sup>33</sup>    | Habitual  
          1P SG    evening    NUM:1 CL    every                    wine  
          ndo<sup>33</sup>    ko<sup>33</sup>ɕu<sup>44</sup>    **mi**<sup>44</sup>.  
          drink    HAB            MIX  
          ‘I will drink wine every evening.’

The future clitic **mi**<sup>44</sup> can only occur in declarative sentences, but not in imperative or optative clauses. Imperative clauses refer to orders that are relevant at the time of speaking, not in the indefinite future to which **mi**<sup>44</sup> points. Optative clauses prohibit **mi**<sup>44</sup> because they refer to events that are not controlled by the speaker. (This is also true for imperative clauses.)

- Nuosu (Sichuan, Liangshan Prefecture)
- (18) a. \*dzo<sup>55</sup>bi<sup>21</sup>    ts<sup>h</sup>i<sup>44</sup>                    ma<sup>33</sup>    si<sup>21</sup>    bo<sup>33</sup>    **mi**<sup>44</sup>.    | Imperative  
          bag            DEM:PROX    CL    take    go    MIX  
          ‘Take this bag away!’
- b. \*nu<sup>33</sup>    ɕi<sup>21</sup>m<sup>33</sup>    t<sup>h</sup>a<sup>55</sup>                    ku<sup>33</sup>    **mi**<sup>44</sup>.    | Imperative  
          2P SG    DEM:DD    NEG.IMP    stupid    MIX  
          ‘Don’t be stupid!’
- c. \*ŋa<sup>33</sup>    ɕə<sup>21</sup>mo<sup>21</sup>    ɕə<sup>21</sup>    du<sup>21</sup>lo<sup>44</sup>    **mi**<sup>44</sup>.    | Optative  
          1P SG    wife, bride    marry    WISH    MIX  
          ‘Hopefully, I will get married.’

For interrogative sentences, there is a homophonous particle **mi**<sup>44</sup> whose function is to solicit the addressee’s opinion. It can occur in sentences with past time as well as

future time reference. It is not related to tense.

- (19) a.  $ts^h o^{33}$   $ts^h i^{44}$   $ʒe^{33}$   $i^{44} ko^{33}$   $a^{21}$   $dzo^{33}$ , | Interrogative  
 person DEM:PROX CL house NEG have  
 $k^h a^{55}$   $bo^{33}$   $mi^{44}?$   
 where go SOL  
 ‘As for this family, there is nobody at home. Where have they gone?’
- b.  $a^{21} ndi^{33} hi^{44}$   $ma^{55} mo^{21}$   $thi^{55}$   $ko^{33}$   $la^{44} la^{33}$  | Interrogative  
 yesterday teacher here LOC come-come  
 $mi^{44}?$   
 SOL  
 ‘Did the teacher come yesterday?’

Examples in this section show that **mi<sup>44</sup>** must be associated with sentences that have future time reference.

### 2.2.2 The argument of “relative future tense”

In the literature on tense, scholars traditionally distinguish between three time concepts: the *situation time*, the *reference time* and the *utterance time* (Reichenbach 1948, Comrie 1985, Klein 1992, 1994). The concepts of absolute and relative tense are defined in terms of these time frames. *Absolute tense* is the case where reference time and utterance time are identical; for *relative tense* they differ. Comrie (1985:74-75) defines *relative past tense* and *relative future tense* as follows.

Relative past tense      *situation time < reference time*  
 Relative future tense    *reference time < situation time*

*Pluperfect* and *future perfect* are two relative past categories attested across languages (Comrie 1985:65-71).

**Table 5:** Relative past tense and types

Types	Definition	Examples
Pluperfect	<i>situation time &lt; reference time &lt; utterance time</i>	‘John had already left at 10pm.’
Future perfect	<i>reference time &lt; situation time &lt; utterance time</i>	‘John will have left by tomorrow.’
	Cases: (a) <i>situation time &lt; utterance time &lt; reference time</i>	→ He has already left.
	(b) <i>situation time = utterance time &lt; reference time</i>	→ He is leaving now.
	(c) <i>utterance time &lt; situation time &lt; reference time</i>	→ He will leave before midnight.

By symmetry, relative future tense has also two exponents, *future in the future* and *future in the past*, but these two concepts are not widely expressed in the world's languages. For future in the past, English employs the temporal *would* which must be distinguished from its modal use (Comrie 1985:75).

**Table 6:** Relative future tense and types

Types	Definition	Examples
Future in the future	<i>utterance time</i> < <i>reference time</i> < <i>situation time</i>	'John will be about to leave.'
Future in the past		'John said that he would return.'
	Cases: (a) <i>reference time</i> < <i>situation time</i> < <i>utterance time</i>	→ John has already returned.
	(b) <i>reference time</i> < <i>situation time</i> = <i>utterance time</i>	→ John returns now.
	(c) <i>reference time</i> < <i>utterance time</i> < <i>situation time</i>	→ John has not returned yet.

The clitic **mi**<sup>44</sup> conveys *absolute future tense* with one exception. In reported speech constructions, **mi**<sup>44</sup> takes the deictic center of the embedded clause and expresses *future in the past*, as in (20a+b). In all other complex clauses, **mi**<sup>44</sup> either encodes absolute future tense, as in (20c), or is illicit, as in (20d).

Nuosu (Sichuan, Liangshan Prefecture)

- (20) a. a<sup>21</sup>he<sup>55</sup>di<sup>21</sup>k<sup>h</sup>u<sup>55</sup> ts<sup>h</sup>i<sup>33</sup> hi<sup>21</sup> ko<sup>33</sup> i<sup>33</sup> pa<sup>33</sup>ndʒe<sup>33</sup>  
 last year 3P SG say SENT.TOP LOG-SG move  
 o<sup>21</sup>dʒo<sup>33</sup> i<sup>55</sup> bo<sup>33</sup> **mi**<sup>44</sup> di<sup>44</sup>.  
 Xichang stay go MIX QUOT  
 'Last year he said that he would move to Xichang to live there.'
- b. o<sup>21</sup> k<sup>h</sup>u<sup>21</sup>ṁ<sup>33</sup> ta<sup>33</sup> ʒi<sup>44</sup>ni<sup>21</sup> ʕə<sup>21</sup>mo<sup>21</sup> ts<sup>h</sup>i<sup>44</sup> gw<sup>33</sup> a<sup>21</sup>  
 LOG PL INT:how STP then wife DEM CL NEG  
 tʕe<sup>33</sup> la<sup>33</sup> **mi**<sup>44</sup> di<sup>44</sup>.  
 fear COME FUT QUOT  
 '(Wondered about) how they will become less fearful of their wives.'  
 (Chen & Wu 1998:228)
- c. ŋa<sup>33</sup> ʕə<sup>21</sup> **mi**<sup>44</sup> su<sup>33</sup> ʕə<sup>21</sup>mo<sup>21</sup> ŋa<sup>55</sup> a<sup>44</sup>ta<sup>33</sup> mo<sup>33</sup> o<sup>44</sup>.  
 1P SG marry MIX NOM bride 1P SG POSS father see DP  
 'My father saw the bride that I will marry.'
- d. dʒi<sup>21</sup>hu<sup>44</sup> t<sup>h</sup>u<sup>33</sup> ko<sup>33</sup> ŋa<sup>33</sup> yu<sup>33</sup> to<sup>44</sup> (\***mi**<sup>44</sup>) su<sup>33</sup> ŋa<sup>33</sup>  
 compete time LOC 1P SG get able MIX COMP 1P SG  
 ko<sup>33</sup> ndʒə<sup>44</sup> o<sup>44</sup>.  
 GOAL believe DP  
 'I believed that I will win the competition.'

The possibility of conveying *future in the past* further substantiate the claim that **mi<sup>44</sup>** is a future tense clitic and not an evidential.

### 2.2.3 The argument of “suspended first-person effect”

The Yi languages have layered verb morphology (Stump 1997) where up to three clitics may be stacked after each other if they are semantically compatible. The clitic **mi<sup>44</sup>** has grammaticalized with several other aspect clitics into compound clitics that convey the meaning of definite and immediate future tense. Definite future tense combines the focus meaning of the perfect clitic **ta<sup>33</sup>** with the future tense meaning of **mi<sup>44</sup>**. Immediate future tense is a tense category pointing to a time point close to the utterance time.

**Table 7:** Five compound clitics for definite and immediate future

Compound Clitics	Type of future	Gloss	FUT	PROG	STP	DP
mi <sup>44</sup> ta <sup>33</sup>	Definite Future	‘it is the case that... will’	mi <sup>44</sup>		ta <sup>33</sup>	
mi <sup>44</sup> o <sup>44</sup>	Immediate Future	‘about to’	mi <sup>44</sup>			o <sup>44</sup>
mi <sup>44</sup> ta <sup>33</sup> o <sup>44</sup>	Immediate Future	‘definitely about to’	mi <sup>44</sup>		ta <sup>33</sup>	o <sup>44</sup>
mi <sup>44</sup> ku <sup>33</sup> o <sup>44</sup>	Immediate Future	‘about to, very soon’	mi <sup>44</sup>	ku <sup>33</sup>		o <sup>44</sup>

The use of any of these compound clitics suspends the constraint of speaker-control exhibited by the bare clitic **mi<sup>44</sup>** (§2.1.1). In the following examples, the compound clitics co-occur with non-speaker subjects or with predicates that lack the idea of control.

- (21) a. m̥<sup>21</sup>ʂə<sup>33</sup>tu<sup>44</sup> ma<sup>33</sup>ha<sup>33</sup> dʒi<sup>21</sup> la<sup>33</sup> **mi<sup>44</sup>ta<sup>33</sup>**.  
tomorrow rain become come DEFFUT  
‘It is the case that it will rain tomorrow.’
- b. m̥<sup>21</sup>ʂə<sup>33</sup>tu<sup>44</sup> bu<sup>33</sup>ma<sup>33</sup> a<sup>21</sup> zo<sup>33</sup> **mi<sup>44</sup>ta<sup>33</sup>**.  
tomorrow written language NEG study DEFFUT  
‘It is the case that there are no classes tomorrow.’
- c. mu<sup>33</sup>ka<sup>33</sup> ts<sup>h</sup>i<sup>33</sup> a<sup>44</sup>ti<sup>33</sup> o<sup>21</sup>dzo<sup>33</sup> bo<sup>33</sup> **mi<sup>44</sup>ta<sup>33</sup>**,  
male name 3P SG only Xichang go DEFFUT  
hi<sup>21</sup> k<sup>h</sup>a<sup>44</sup>di<sup>33</sup> ɲi<sup>33</sup> a<sup>21</sup> ku<sup>33</sup>.  
say INT:who also NEG tell  
‘Muka will go to Xichang on his own, so he didn’t tell anyone.’
- (22) a. ts<sup>h</sup>o<sup>21</sup>yo<sup>44</sup> i<sup>44</sup>ko<sup>33</sup> bo<sup>33</sup> **mi<sup>44</sup>o<sup>44</sup>**.  
3P SG home go IMFUT  
‘They go home immediately.’



- b. no<sup>21</sup>yo<sup>44</sup> m<sup>33</sup>k<sup>h</sup>u<sup>55</sup> a<sup>33</sup>ʂə<sup>55</sup> z<sup>44</sup>tce<sup>33</sup> la<sup>33</sup> **mi<sup>44</sup>o<sup>44</sup>**.  
 2P PL year new celebrate come IMFUT  
 ‘You are about to celebrate the New Year.’

The complex clitic **mi<sup>44</sup>ta<sup>33</sup>o<sup>44</sup>** can be employed in imperative clauses in contrast to example (18) of §2.2.1. See example (23b).

- (23) a. va<sup>33</sup>p<sup>v</sup>u<sup>33</sup> k<sup>v</sup>u<sup>33</sup> la<sup>33</sup> **mi<sup>44</sup>ta<sup>33</sup>o<sup>44</sup>**.  
 rooster cry come IMFUT  
 ‘The rooster is about to cry.’
- b. dzu<sup>21</sup>mo<sup>21</sup> ts<sup>h</sup>i<sup>33</sup> va<sup>55</sup> de<sup>33</sup> ŋa<sup>33</sup> bʒ<sup>44</sup> **mi<sup>44</sup>ta<sup>33</sup>o<sup>44</sup>**.  
 money NUM:10 dollar COV 1P SG give IMFUT  
 ‘Give me ten dollars now!’
- c. vo<sup>33</sup> dzə<sup>33</sup> bo<sup>33</sup> sa<sup>55</sup> **mi<sup>44</sup>ta<sup>33</sup>o<sup>44</sup>**.  
 snow melt go EXH IMFUT  
 ‘The snow is about to melt completely.’
- (24) a. ts<sup>h</sup>i<sup>33</sup> si<sup>55</sup> ts<sup>h</sup>i<sup>33</sup> dʒi<sup>55</sup> ŋo<sup>21</sup> **mi<sup>44</sup>ku<sup>33</sup>o<sup>44</sup>**.  
 3P SG matter DEM:PROX CL think IMFUT  
 ‘He is thinking at this problem immediately.’
- b. ho<sup>33</sup>pu<sup>33</sup> ko<sup>33</sup> dza<sup>33</sup>bo<sup>33</sup> zə<sup>55</sup>dʒ<sup>33</sup> hi<sup>55</sup> **mi<sup>44</sup>ku<sup>33</sup>o<sup>44</sup>**.  
 mountain LOC crops harvest can IMFUT  
 ‘The crops on the mountain can be harvested shortly.’

The future tense clitic **mi<sup>44</sup>** imports the sense of future tense into the above compounds but its evidential “first person” constraint is offset. The primary function of **mi<sup>44</sup>** is therefore not evidential but temporal.

### 3. Overview of future clitics in the Yi languages

In this section we survey the future clitics of eleven Yi (彝) languages that are representative of the Loloish group within the Tibeto-Burman family.<sup>6</sup> In Table 8, we present the future clitics, the possibility of negating the future clitic, two potential

<sup>6</sup> The Yi nationality is one of the 55 national minorities in China with more than 7 Million members. The Yi languages belong to the Tibeto-Burman language family and represent a cluster of about 120 isolating languages spoken in four provinces of Southwest China. The Nuosu language is the principal language of the Yi Nationality spoken by about 2.5 Million people.

<i>Language</i>	<i>Geographical location</i>	FUT	NEGATE	'say'	'want'	OTHER INFORMATION
Nuosu	Sichuan, Liangshan Prefecture	mi <sup>44</sup>	No	hi <sup>21</sup>	tʰɕi <sup>33</sup>	mi <sup>44</sup> (i) 'even'; (ii) '呷尼'
Neasu	Guizhou, Weining County	he <sup>33</sup>	Yes	hi <sup>55</sup>	kʰa <sup>55</sup>	he <sup>33</sup> 'kindness', 'mercy'
Ngopho	Guangxi, Longlin County	yw <sup>33</sup>	No	mbie <sup>33</sup>	ŋu <sup>33</sup>	yü <sup>33</sup> 'get'
Nase	Yunnan, Luoping County	di <sup>33</sup>	No	die <sup>55</sup>	ŋo <sup>33</sup>	di <sup>55</sup> 'must'; di <sup>13</sup> 'may'
Kopho	Yunnan, Shizong County	tie <sup>21</sup>	No	di <sup>21</sup>	ŋo <sup>55</sup>	---
Axi	Yunnan, Mile County	dia <sup>22</sup>	No	bie <sup>33</sup>	χw <sup>33</sup>	---
Azhee	Yunnan, Mile County	za <sup>21</sup>	No	bi <sup>33</sup>	ŋ <sup>55</sup>	yo <sup>33</sup> 'get'
Nesu	Yunnan, Gejiu City	ŋə <sup>33</sup>	Yes	dzə <sup>33</sup>	ŋe <sup>33</sup>	---
Lalo	Yunnan, Weishan County	xu <sup>55</sup>	?	bi <sup>33</sup>	zi <sup>55</sup>	---
Lolo	Yunnan, Yongren County	ŋ <sup>21</sup> me <sup>33</sup>	Yes	be <sup>33</sup>	nə <sup>33</sup>	ŋ <sup>21</sup> 'not'; me <sup>33</sup> 'follow'
Aluphu	Yunnan, Wuding County	ve <sup>33</sup>	No	dze <sup>33</sup>	di <sup>33</sup> ŋo <sup>33</sup>	---

In §2, we documented the *say*-future clitics of Nuosu, Neasu and Nase that are historically derived from the verb *say* and from quotation clitics. The Kopho and Axi languages can be added to this group.

The Nesu language derives future tense from a buletic verb. Verbs of *wanting* are widely attested in the world's languages as sources for future tense (Bybee et al. 1994: 252). Nesu is thus reminiscent of Chinese 将要<sup>8</sup> and English *will*. In the process of grammaticalization, the vowel in **ŋe**<sup>33</sup> 'want' weakened to become the middle vowel in **ŋə**<sup>33</sup> (future tense).

<sup>7</sup> To the best of my knowledge, there is no relevant research on future tense in the Yi languages undertaken in Mainland China. For research of future tense in Tibetan languages, see Zhou (1999).

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- b. ɲo<sup>33</sup> mi<sup>55</sup> ʔe<sup>55</sup> tɕ<sup>h</sup>e<sup>21</sup> ts<sup>h</sup>o<sup>55</sup> du<sup>33</sup> kə<sup>55</sup> ɲə<sup>33</sup>.  
 1P SG field DEM:PROX NUM:1 CL dig EXH FUT  
 ‘I will finish digging this piece of land.’
- c. k<sup>h</sup>ə<sup>55</sup> go<sup>33</sup>sə<sup>33</sup> tɕ<sup>h</sup>e<sup>21</sup> pa<sup>33</sup> ɲə<sup>33</sup>.  
 3P SG wheat NUM:1 CL want  
 ‘He wants a pack of wheat.’

The Nesu clitic is fairly unrestrained except for the prohibition of marking individual-level predicates (Kratzer 1995). This constraint is probably universal. A sentence like *The Yellow river will be in China* is always pragmatically marked as it seems to implicate that the situation does not hold at the time of speaking (Comrie 1985:43).

- d. #go<sup>33</sup>go<sup>21</sup>mi<sup>55</sup> lu<sup>21</sup>se<sup>55</sup> dza<sup>21</sup> ɲə<sup>33</sup>.  
 Gejiu city Luse mountain have FUT  
 ‘Luse mountain will be in Gejiu City.’

### 3.3 Follow-future

Another lexical source for future tense is the verb *follow*. In the Lolo language, the future tense particle ɲ<sup>21</sup>me<sup>33</sup> is historically derived from the negation particle ɲ<sup>21</sup> and the verb \*me ‘follow’. In several Yi languages, \*me ‘follow’ still functions as main predicate. The Nase language, for example, has preserved the old form mu<sup>55</sup> ‘follow’ which was replaced in Modern Lolo by tɕ<sup>h</sup>ə<sup>33</sup> ‘follow’.

Nase (Yunnan, Luoping County)

- (26) a. mo<sup>33</sup>zu<sup>33</sup> (ʔi<sup>55</sup>) mo<sup>33</sup>mu<sup>21</sup> mu<sup>55</sup> zə<sup>33</sup>.  
 colt run mare follow PROG  
 ‘The colt follows the mare.’

Lolo (Yunnan, Yongren County)

- b. dze<sup>21</sup>mu<sup>21</sup>zo<sup>33</sup> dze<sup>21</sup>mu<sup>21</sup>mo<sup>33</sup> t<sup>h</sup>ie<sup>21</sup> tɕ<sup>h</sup>ə<sup>33</sup> do<sup>55</sup> (go<sup>33</sup>).  
 colt mare GOAL follow PROG run  
 ‘The colt follows the mare.’

In Lolo, the morpheme me<sup>33</sup> cannot be used as independent predicate any longer but is grammaticalized as resultative suffix after other verbs (Gerner 2002). The suffix is not productive and can only occur after a few verbs. Examples are provided in (27a-c).

The clitic **ŋ<sup>21</sup>** is used for negating the predicate of declarative sentences, as illustrated in (28a+b).

Lolo (Yunnan, Yongren County)

- (27) a.  $lu^{33}tsi^{33} ge^{55} zɔ^{21} tv^{21} me^{33} ɔ^{44}$ .  
 mule all 3P SG gamble FOLLOW DP  
 ‘He has won all the mules in a gamble.’
- b.  $tʂa^{55}p^ha^{33}mo^{33} ne^{33}di^{33}zo^{33} ga^{21} me^{33} ɔ^{44}$ .  
 female monkey young girl chase FOLLOW DP  
 ‘The monkey caught the girls.’
- c.  $zɔ^{21} ge^{33}tɔ^{33} me^{33} ɔ^{44}$ .  
 3P SG hunt FOLLOW DP  
 ‘He hunted successfully.’
- (28) a.  $zɔ^{21} ɕe^{55} su^{33} ŋ^{21} sa^{55}$ .  
 3P SG Chinese (Han) written language NEG know  
 ‘He doesn’t know written Chinese.’
- b.  $ni^{33} ŋ^{21} zɿ^{33} lu^{33} ge^{33} go^{33}$   
 2P SG NEG go COMP more good  
 ‘It would be better not to go.’

The negation clitic **ŋ<sup>21</sup>** combined with **me<sup>33</sup>** into **ŋ<sup>21</sup>me<sup>33</sup>** to negate the result of an action. This sense is still available in Modern Lolo, as illustrated in (29). The meaning of negated result was reanalyzed as delayed result, then as delayed action and finally as future tense. The sense of future tense is illustrated in (30a+b).

- (29)  $tʂa^{55}p^ha^{33}mo^{33} ne^{33}di^{33}zo^{33} ga^{21} ŋ^{21} me^{33} ɔ^{44}$ .  
 female monkey young girl chase NEG FOLLOW DP  
 ‘The monkey (chased but) did not catch the girls.’
- (30) a.  $bɔ^{33}lu^{21} su^{55} dzɔ^{33} ŋ^{21}me^{33}$ .  
 male name book study FUT  
 ‘Bolo will attend school.’
- b.  $ɛ^{55}me^{33} ɔ^{55}mu^{21}tɕi^{21} ɕe^{33} ŋ^{21}me^{33}$ .  
 this evening very black early, quick FUT  
 ‘This evening it will get dark early.’

Cross-linguistically, the verb *follow* was never reported as diachronic source for

future tense (Bybee et al. 1994:252-253).

### 3.4 Get-future

For the remaining future clitics, it is more difficult to predict their diachronic source. The verb **yɯ<sup>33</sup>** ‘get’ has probably given rise to future tense in the Ngopho language. If this conjecture is true, it must have undergone sound changes when morphing into the future tense clitic. In (31a-c), **yɯ<sup>33</sup>** is illustrated as independent verb, auxiliary and resultative suffix. The future tense clitic **yɯ<sup>33</sup>** is shown in (32a+b). Cross-linguistically, the diachronic source *get* for future tense is not reported (Bybee et al. 1994:253).<sup>9</sup>

- Ngopho (Guangxi, Longlin County)
- |         |  |                           |
|---------|--|---------------------------|
| (31) a. | zɿ <sup>33</sup> ni <sup>33</sup> sei <sup>33</sup> <b>yɯ<sup>33</sup></b> lie <sup>33</sup> .<br>today firewood get come<br>‘Today I have got some firewood.’         | Main predicate            |
| b.      | ŋo <sup>33</sup> <b>yɯ<sup>33</sup></b> dzu <sup>33</sup> lie <sup>33</sup> .<br>1P SG GET eat come<br>‘I got the chance to come eating.’                              | Auxiliary ‘get chance of’ |
| c.      | ŋo <sup>33</sup> sou <sup>33</sup> <b>yɯ<sup>33</sup></b> ma <sup>21</sup> ko <sup>21</sup> ...<br>1P SG search GET NEG MOD:can<br>‘When you cannot find me....’       | Resultative suffix        |
| (32) a. | muw <sup>55</sup> hũ <sup>21</sup> <b>yɯ<sup>33</sup></b> .<br>rain FUT<br>‘It will rain.’   | Future tense              |
| b.      | t <sup>h</sup> u <sup>21</sup> lou <sup>53</sup> ŋɤ <sup>33</sup> li <sup>21</sup> <b>yɯ<sup>33</sup></b> .<br>3P SG Longlin go FUT<br>‘He will go to Longlin County.’ | Future tense              |

### 3.5 Other future clitics

For Azhee, Lalo<sup>10</sup> and Aluphu the historical origin of the future tense clitic is uncertain and my informants did not provide information. In none of these languages,

<sup>9</sup> Bybee et al. (1994:253) mention that in Danish/Norwegian future tense is derived from the verb *get*. This does not seem to be correct as the two Danish tense auxiliaries *vil* ‘will’ and *skal* ‘must’ do not originate from the verb *get*.

<sup>10</sup> I did not personally collect data in Lalo but rely on Björverud (1998)’s Grammar of Lalo.

however, do we find “first-person” effects like those observed in Nuosu.

Azhee (Yunnan, Mile County)

- (33) a. ts<sup>hə</sup>21 ga<sup>33</sup> ʒi<sup>33</sup> tɕ<sup>hie</sup>33 lə<sup>21</sup> ts<sup>hə</sup>21 kua<sup>33</sup> du<sup>33</sup> to<sup>21</sup> **ʒa**21.  
 person evil DEM:PROX CL enter prison go FUT  
 ‘This evil man will go to prison.’
- b. a<sup>33</sup> nə<sup>33</sup> ʒə<sup>33</sup> mo<sup>33</sup> go<sup>33</sup> ɲa<sup>55</sup> **ʒa**21.  
 name money lose FUT  
 ‘Anna will lose money.’
- c. a<sup>21</sup> ni<sup>33</sup> k<sup>hu</sup>33 ku<sup>55</sup> mu<sup>21</sup> lu<sup>33</sup> dzu<sup>33</sup> to<sup>21</sup> **ʒa**21.  
 last year 3P SG Mile County go FUT  
 ‘He said last year that he would go to Mile.’

Lalo (Yunnan, Weishan County) (Björverud 1998:116)

- (34) ʔnə<sup>55</sup> dɿ<sup>21</sup> k<sup>hw</sup>21 la<sup>55</sup> **xu**55 a<sup>21</sup> mu<sup>55</sup>  
 2P SG GOAL steal come FUT DP EVID  
 ‘He will come and steal from you.’

Aluphu (Yunnan, Wuding County)

- (35) ɲo<sup>33</sup> k<sup>ho</sup>33 dɔ<sup>33</sup> **ve**33.  
 1P SG GOAL drink FUT  
 ‘I will drink it.’

## 4. Conclusion

We have argued in this paper for the existence of future tense in the Yi languages against the backdrop of a first-person constraint reminiscent of evidential markers in one Yi language, Nuosu. This constraint is explained as a residual property that survived when the future tense clitic in Nuosu shifted from evidential meaning to tense meaning. We have shown that the diachronic source for future tense in Nuosu and several other Yi languages is the verb *say*. Other Yi languages derive their future tense from the verbs *want*, *follow* and probably *get*. The Yi languages channel speedy grammaticalization processes through serial verb constructions which account for why future tense has so many different origins in a group of genetically closely related languages.

## Abbreviations

1P PL	First person plural	GET	Resultative derived from ‘get’
1P SG	First person singular	HAB	Habitual clitic
1P SG POSS	First person singular possessive	IMFUT	Immediate future
2P PL	Second person plural	INT:how	Interrogative pronoun ‘how’
2P SG	Second person singular	LOG-PL	Plural-logophor
2P SG POSS	Second person singular possessive	LOG-SG	Singular-logophor
3P PL	Third person plural	LOC	Locative
3P SG	Third person singular	MIX	The Nuosu future clitic (romanized)
3P SG POSS	Third person singular possessive	MOD:can	Modal auxiliary with meaning
ADV.L	Adverbializer	NEG	Negation
ALT	Alternative question	NEG.IMP	Negative Imperative
ART	Definite article	NESS	Necessity modal
CL	Classifier	NOM	Nominalization
COME	Inchoative phase derived from ‘come’	NUM:1	Number with value
COMP	Complementizer	POSS	Possibility modal
COP	Copular	PROG	Progressive marker
COV:mix	Coverb with verbal meaning	QUANT:all	Quantifier all
DEFFUT	Definite future	QUOT	Quotative
DEM:DD	Discourse deictic demonstrative	RMB	Renminbi Currency
DEM:PROX	Demonstrative: Proximal	SEND	Resultative derived from ‘send’
DP	Dynamic perfect	SENT.TOP	Sentence topic
EXH	Exhaustion clitic	SOL	Solicitation discourse particle
EVID	Evidential marker	SUFF	Suffix
FOLLOW	Resultative derived from ‘follow’	STP	Stative perfect
FUT	Future clitic	TOP	Topic
GOAL	Goal case marker	WISH	Optative clitic

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## 彝語的將來表達：時態或言據性？

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諾蘇語的將來助詞有指向將來的功能，但條件是句子的主語一定是第一人稱代詞，這種條件與言據性語言的助詞很相似。本文通過對諾蘇語的數據進行分析，得出諾蘇語的將來助詞是時態助詞，而不是言據性助詞。關於句子的主語一定是第一人稱代詞的現象是由古彝語引用助詞的演變而產生的，古彝語引用助詞是從動詞“說”演變來的。除諾蘇語以外其他幾種彝語的將來助詞也是從動詞“說”演變來的。但也有另外一些彝語的將來助詞是從動詞“要”和“跟”演變來的。可能還有一種彝語的將來助詞是從動詞“得”演變來的。

關鍵詞：將來時，言據性，彝語，諾蘇語