

A Contrastive Study of Tense-Rich and Tenseless Languages

The Case of the Future Tense

Masahiko Nose
Shiga University / Professor

I Introduction

This study explores the contrast between the use of the future tense in various languages (cf. Comrie 1985, Nose 2017). Typologically, there are diverse languages representing tense-rich, tenseless and other temporal realizations (Nose 2020a). This study examines four sample languages, two languages that are tense-rich and two languages that are tenseless. The former are Amele and Ma Manda, both are Trans-New Guinea languages spoken in Papua New Guinea (Foley 2000). The latter are Mandarin Chinese and Nguna, Chinese is Sino-Tibetan, and Nguna is an Austronesian language, spoken in Vanuatu (cf. Nose 2020b).

The behaviors of tense are diverse and most of languages have grammatical tense markers, but some languages lack them. In previous studies the author has already considered the past tense (Nose 2017, 2020a) and this study considers the future tense usages of tense-rich and tenseless languages. There are several rare tense phenomena different from standard European languages.

Firstly, Nguna has no past tense marker. In (1b), however, there is a future marker “ga” with intension meaning.

- (1) Nguna (Austronesian, Schütz 1969)
- a. Present and past: E munu.
“He drinks, he drank.”
 - b. Future: E ga (intension marker) munu.
“he will drink.”

Another language, Amondawa, a Tupian language, spoken in Brazil, does not have any grammatical tense markers (Sinha et al., 2011, Dahl 2001). Therefore, Sinha et al. (2011) called

it a “no concept of ‘time’ ” language. Of course, there are a variety of temporal adverbs such as “yesterday” and “tomorrow,” and they can indicate tense information in the sentences. Thus, we can consider the following two points in this study. One is to discuss the relationship between time and grammar (Comrie 1976, 1985) and another is to clarify particularly the “future tense” (Bybee et al., 1994, Nose 2017).

Section 2 offers an overview of previous studies that have investigated future tenses and language descriptions in Papua New Guinea and outlines the study objectives. Section 3 presents data on the future tenses in the sample languages. Section 4 discusses the form/meaning of the future tenses both in tense-rich and tenseless languages. Section 5 presents the conclusions.

II Previous studies and the purpose of this study

This section reviews previous studies on future tenses and related matters, included in this is a typological study of future tenses. First, this study tries to introduce the future tense. For example, in English, there are two kinds of future markers: “be going to” and “will.”

According to Tyler and Jan (2017), basic meanings are motivated in terms of cognitive terms; (2a) is a metaphorical extension [TIME IS MOTION] and (2b) has a modal meaning with intension.

- (2) English:
 - a. I am going to eat a cake.
 - b. I will eat a cake.

It is necessary to consider the sample languages in the combination of tense-aspect-mood (cf. Bybee et al., 1994). This study is a contrastive study of different language genera, Trans-New Guinea, Austronesian, and Chinese. This combination is not enough for a typological study, but it is helpful to find certain effect(s) of unusual tense features (cf. Nose 2017, 2020a, 2020b).

Before observing the data, this study shows several examples of rich tense and tenseless languages.

- (3) Amele, Papua New Guinea (Roberts 1987)
 - Present tense: Fri-diga (to surprise).
“I am surprised.”
 - Today’s past: Fri-iti-ga.
“I was surprised (today).”
 - Yesterday’s past: Fri-iti-gan.
“I was surprised (yesterday).”
 - Remote past: Fri-it-en.
“I was surprised (long ago).”

In (3), Amele is a Trans-New Guinea language, it has three kinds of past tenses: today’s past, yesterday’s past, and remote past. Their past tense forms are involved in the verbal morphology. Therefore, one can say that Amele is a tense-rich language. By contrast, the examples below are of tenseless languages, Nguna, and Mandarin Chinese.

- (4) Nguna, Vanuatu (Nose 2007)
 - Kinau a gami (I eat/I ate): No marker
- (5) Mandarin Chinese (Lin 2012: 673)
 - “Lisi broke a vase.”
 - a. Lisi dapo (break-(perf)) huaping.
(no past marker)

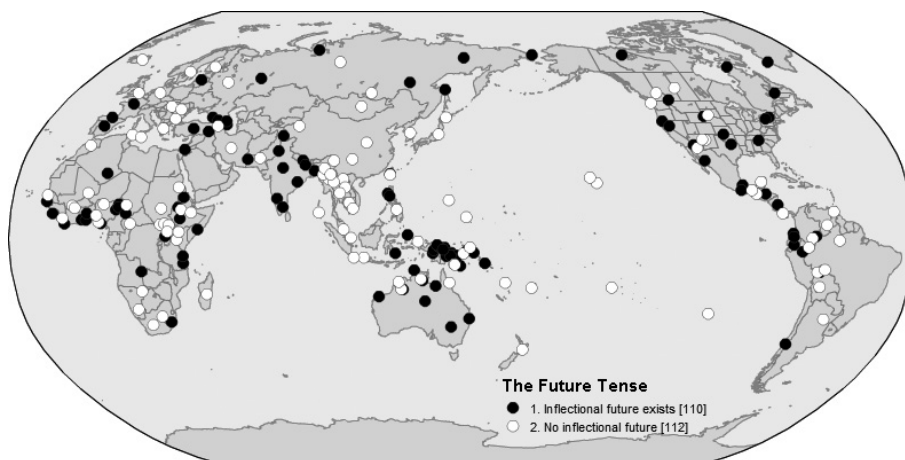


Figure 1: The future tense in world languages (Dahl and Velupillai 2005b)

b. Lisi zuotian (yesterday) dapo (break) huaping.

(Using temporal adverb, yesterday)

c. Lisi dapo-LE heaping.

(Using perfective marker LE)

In (4) and (5), Nguna (Austronesian, Vanuatu) and Chinese (Sino-Tibetan) are tenseless languages. Nguna in (4) has no past tense markers, and sentence (4) means both present and past meanings (Nose 2020a). Chinese has several options of translating “Lisi broke a vase” in (5a-c). (5a) is the same as Nguna in (4), and it has past meaning inside “dapo” nevertheless it has no marker. (5b) implies a past meaning by using the temporal adverb “yesterday” and (5c) uses the perfective marker “le” and the sentence means perfective, as it had happened already, as a past event (Lin 2012).

The distribution of the future tenses in world languages is shown in Figure 1.

Dahl & Velupillai (2005) investigated future tenses typologically. Dahl & Velupillai (2005) classified the languages into inflectional or no

inflectional futures. Geographically, the languages in Europe do not have an inflectional future, except Spanish, French, and Basque. In Asia, the languages without past tenses also have no morphological future. In the South Pacific and Australia, many languages have an inflectional future.

This study considers why some languages have rich tense systems and other languages are tenseless in when expressing the future. Moreover, this study tries to discuss the effects of rich tense (remoteness distinctions: Roberts 1987, Nose 2018, 2020a) and the effects of tenselessness in grammars (cf. Dahl 2001, Lin 2012). This is a contrastive study of four sample languages, tense-rich (Amele and Ma Manda) and tenseless (Chinese and Nguna). This study examines these languages future tense forms and particularly verbal morphology and their future meanings are investigated (cf. Foley 2000, Nose 2017).

In (6) below are the data sources of the languages. Only Ma Manda examples are referred from Pennington (2015) with no interview da-

ta. Pennington's work is reliable, and it offers enough information for this contrastive study.

- (6) Data sources of the sample languages
* Amele (New Guinea): Roberts (1987) and interview data
* Ma Manda (New Guinea): Pennington (2015)
* Nguna (Vanuatu, South Pacific): Schütz (1969), Nose (2007) and interview data
* Chinese (China, Asia): Setoguchi (2003), Yip and Rimmington (2004) and interview data¹⁾

III | Data of future reference

In this section, the future tense usages of the sample languages are given. This study particularly investigated their morphology (inflectional or not) and meanings (realis or irrealis, cf. Elliott 2000). Finally, this study summarizes the observed data and seeks the mechanisms of future tenses or alternative means such as temporal adverbs.

3.1. Amele, Trans-New Guinea, as tense-rich (interview data and Roberts 1987)

Amele has an inflectional future²⁾ and a future suffix is involved in verbal morphology, as shown in (7).

- (7) Amele: Future: 3SG: -an (Present: man-igi-na/Past: man-igi-a)
Uqa sab man-igi-an.
“She will cook the food.”

¹⁾ There are already many previous studies of past usages or the aspect marker “le”. The perfect perfective usages in Chinese are so complicated and variety of previous studies to check and this study focuses on the future tense.

Amele has an inflectional future tense, and it has positive and negative future forms, as shown in (8).

- (8) Positive and negative future in Amele
a. Positive future tense:
I will come: hug-en
b. Negative future tense:
I will not come: (qee) hug-un

In sum, Amele has inflectional futures with both positive and negative forms. All forms are involved in verbal morphology, and they consist of a portmanteau form with persons, numbers, and tenses.

3.2. Ma Manda, Trans-New Guinea, as tense-rich: (Pennington 2015)

There are two kinds of inflectional futures in Ma Manda. Their forms are inserted in the verbal inflections, and moreover there is a distinction between normal future and remote future as in (9).

- (9) Future forms in Ma Manda
Normal future: ulak taab-taa-t.
(tell-future-1sg). “I will tell a story.”
Remote future: sisa ku-we-t.
“The day after tomorrow I will go.”

In (10), there is a clear distinction between near and remote past meanings.

- (10) Past tense forms in Ma Manda (Pennington 2015:366-369):
Near past: taamengsûla membû tem laal-a-k.
“(This) morning he shaved his head.”
Remote past: kep bûsenang aatûkugu

²⁾ Roberts (1987) described the relative future tense. But the Amele consultant claimed that the relative future forms are no longer used. Relative future can express an immediate future meaning (be about to do).

ba-go-t.

“Yesterday going around in the bush, I came (back).”

Thus, Ma Manda has near and remote distinction both in past and future tense usages.

(11) *fiyat dong ku-ya-t.*

Urine search go-present-1SG

“I’m going (for a) wee.”

(Pennington 2016:371)

Sentence (11) uses the present tense, yet it means an immediate future.³⁾

3.3. Nguna, Austronesian, as tenseless

Nguna has a simple verbal structure, and it does not have any tense markers. To clarify past events, it uses temporal adverbs, like “yesterday” or “last night,” as shown in (12).

(12) *Kinau a gani (eat) naika nanofa (yesterday).*

“I ate fish yesterday”

In (12), there is no morphological marker on the verb and the temporal adverb “nanofa” (yesterday) is the only cue of the past event.

Nguna has TAM (tense, aspect and mood) markers, and the markers appear between the subject and verb: Perfective *poo* (Schütz 1969: 27). One of the TAM markers is the perfective “*poo*,” as shown in (13).

(13) *A poo (perfective) munu (drink) sua (already).*

“He has drunk already.”

Other TAM makers “*ga*” and “*gawo*” have future implications, but not inflectional future, as in (14a) and (14b). These meanings are intension or necessity and their meaning is based on irrealis. Sentence (14c) has future tense meaning with the temporal adverb “*vano*” (tomorrow).

(14) Nguna: Future marker: “*ga*” and “*gawo*”

a. *Kinau a-ga.*

“I will” (intension)

b. *Kinau a-gawo.*

“I will, I must” (necessity, intension)

c. *Kinau a-gawo vano paki Vila matamai (tomorrow).*

“I will go to Port Vila tomorrow.”

3.4. Chinese, Sino-Tibetan, as tenseless

Chinese is famous for its tenselessness (Lin 2012), because it utilizes temporal adverbs and often the aspect marker “*LE*” is the preferred way to express past meaning. In future meaning in Chinese, two kinds of modal markers (Yip and Rimmington (2006: 280, 286) call modal verbs) are used; “*hui*” and “*yao*,” as in (15a) and (15b). The basic meaning of “*yao*” is speaker-oriented and means “wish, want, should,” so therefore is not allowed (15d) because rain forecasts are not “speaker-oriented.” The marker “*hui*” means “be likely, may” and in (15c) is not allowed because landing is a “speaker-oriented” future. Both forms are based on irrealis.

(15) Future: using markers “*yao*,” “*hui*”

a. Feiji *yao* jiangluo le.

“The plane will land soon.”

b. Jintian *hui* xia yu. “It will rain today.”

3) Future tense markers in Ma Manda are inserted between verbal root and person/number inflections. The forms are not a portmanteau form which is observed in Amele.

- c. *Feiji hui jiangluo le.
- d. *Jintian yao xia yu.

Lin (2012) claimed that Chinese is a tenseless language, but he also recognized that there are two means of future tense reference.

3.5. Results and observations

This study was conducted on the future tenses of two types of languages: tense-rich and tenseless. The data in Table 1. has been summarized during which there have been two significant observations.

First, tense-rich type languages were represented by Amele and Ma Manda, they are based on remoteness distinctions in realis meaning. Moreover, they tended to use verbal suffix (inflectional) and are tense-rich, a distinction made in earlier research on both languages highlighting that they have several kinds of past tenses. Future and past tenses are divided into categories for remoteness; near and remote. Amele particularly has a distinction between positive (or affirmative) and negative tense usage. Both languages (both belong to Trans-New Guinea family) put their tense meanings in verb morphology and thus,

they have a morphological burden (Nose 2020a).⁴⁾

Next, was the tenseless type represented by Ngunu and Chinese. They are semantically based on irrealis. These types of language have the characteristics of having no past tense, hence the label tenseless. They do not have an inflectional future, but they distinguish the future tense by using irrealis markers. These irrealis markers imply intension, necessity or possibility.

IV | Discussion

This section discusses the functional effects of the tenseless languages in contrast to the tense-rich languages, and then, seeks inflectional, and semantic balance of the different grammars.

According to the previous studies such as Bybee et al. (1994), Elliott (2000), Sinha et al. (2011) and Nose (2020a), speakers with tenseless languages think of past and future events differently. Their semantic concepts of time are based on a distinction between realis and irrealis. In realis situations, present and past events can be events that happened or happen in real situations. But future events are not considered

Table 1: Future tense usage of the sample languages

	Amele	Ma Manda	Ngunu	Chinese
Forms	Positive and negative future	Near and remote future	Markers: <i>Ga, gawo</i>	Markers: <i>yao, hui</i>
Verbs	Involved	Involved	Preceding verb	Preceding verb
Inflectional	Yes	Yes	No	No
Meanings	Realis	Realis, partly irrealis	Irrealis (intension, necessity)	Irrealis (necessity, possibility)

4) At this point, this paper does not discuss why Amele has affirmative and negative future tenses.

real, and that is why irrealis markers are necessary. Therefore, tenseless languages have a sort of future tense though they do not have a realis past marker. Thus, the tenseless effect is to observe future events as unreal situations. Moreover, these languages tend to use temporal adverbs (such as “tomorrow,” “tonight”) to specify the temporal reference. The effect of this is to minimize the morphological burden of verb morphology (which can be observed in tense-rich languages).

Inflectional future tenses are frequent in tense-rich languages (particularly in New Guinea), but there are two or more kinds of future meanings, such as near/remote, positive/negative. However, tenseless languages do not have inflectional future, but they have future tense with irrealis meaning. Therefore, typologically, future tenses are more marked than past tenses. In many cases, future tense usages are utilized by irrealis, meaning unreal situations. Primitive languages did not have any grammatical markers and later some lexical items have been grammaticalized that are incorporated into verbal morphology. Amele and Ma Manda have a long tradition of having rich tense forms. The viewpoint difference between near and far past might be considered key to Trans-New Guinea languages. However, their grammaticalization path of the future tense (or basic meaning of future) is uncertain.

V | Conclusion

This study has clarified the characteristics of future tenses in certain languages by investigating tense-rich and tenseless languages. This study contrasted the two language types which are semantically quite different viewpoints of

time. One is tense-rich: several events on a timeline (remote past, near past, present, near future and remote future), and another that is tenseless: realis and irrealis events are viewed separately, as are completed or not tenseless completed actions. Tenseless languages have future tense, but they are not inflectional.

Amele and Ma Manda place tense information (such as pastness or futurity) in realis verbal morphology. Contrastingly, Nguna and Chinese do not have morphological markers implying past or future in realis as they are tenseless languages. Yet they have a stronger motivation for marking futurity than pastness. Irrealis future is grammatically related to the mood category, further study needs to be done to investigate mood categories of languages. Moreover, temporal adverbs are a key to identifier of time. For languages like Amele and Ma Manda, tense information is included in the person or number of verbal inflections. Instead, tenseless languages focus on verbal actions only.

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The Case of the Future Tense

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This study examines languages with rich tense systems and those without tense. It particularly focuses on the future tense forms of its four sample languages: Amele, Ma Manda, and Nguna from the South Pacific, and Mandarin Chinese. Amele and Ma Manda are spoken in New Guinea and possess rich tense systems with several distinct past tenses, and Nguna (spoken in Vanuatu) and Chinese are well known for their tenselessness (Smith 2005). This study enumerates these four languages, especially the features of their past and future tenses. Moreover, it discusses the functional effects of being tense-rich/tenselessness.

First, Amele has a rich tense system, with three past tenses: today's past, yesterday's past, and the remote past. Moreover, it has two future tenses: the normal future tense and the negative future. Next, Ma Manda has two past and two future tense forms, near and remote past/future. The inflectional past/future of Amele and Ma Manda is deeply incorporated in verbal morphology. Thus, tense information is grammatically embedded in verbal inflections.

Amele:

Today's past: Ija hu-g-a (come-1sg-today's past). "I came (today)"

Yesterday's past: Ija hu-g-an. "I came (yesterday)"

Remote past: Ija ho-om. "I came (before yesterday)"

Future tense: Uqa sab manigi-an (cook-1sg. future). "She will cook the food."

Negative future: Ija sab qee jigi-n. "I will not eat the food."

Ma Manda (Pennington 2015):

Normal future: ulak taab-**taa**-t. (tell-future-1sg). "I will tell a story."

Remote future: sisa ku-**we**-t. "The day after tomorrow I will go."

Contrastingly, Chinese and Nguna lack a past tense form. For example, Chinese utilizes the perfective aspect marker "le" to indicate past meaning. Nguna lacks past tense entirely and requires the utilization of temporal adverbs such as "yesterday" or "last week" to indicate pastness. Neither language has inflectional future. Instead, they use future markers implying necessity or possibility. These future markers are semantically related to irrealis meaning.

Chinese (Lin 2012: 673):

Perfective: Lisi dapo-**le** (break-aspect marker). "Lisi broke a vase."

Future: using markers **yao**, **hui**

Feiji **yao** jiangluo le. "The plane will land soon."

Jintian **hui** xia yu. "It will rain today."

Nguna: Future marker: **gawo**

Kinau a-**gawo**. "I will, I must" (necessity)

This study claims that Amele and Ma Manda place tense information (such as pastness or futurity) in realis verbal morphology. Contrastingly, Ngunu and Chinese do not have a morphological marker implying past or future in the realis mood as they are tenseless languages. Thus, they have a stronger motivation for marking futurity than pastness.