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## 15 Burmese

## 1 Introduction

This chapter examines how the five levels of clause linkage (M. Tsunoda 2004, 2012b; cf. also T. Tsunoda \& M. Tsunoda, this volume, Section 8) are expressed by means of subordination in Burmese, regarding causals, conditionals and concessives. (Burmese has no clause-linkage marker for coordination.)

Burmese has seven clause-linkage markers ("CLMs") for causals, three for conditionals, and three for concessives. In each of causals and concessives, one CLM has only a limited distribution in terms of the five levels, while the others have a wider distribution, although - roughly speaking - they cannot be used at all the five levels. In contrast, all the three CLMs for conditionals have a wide distribution, although - roughly speaking - they cannot be used at all the five levels.

The Burmese data yield evidence that boundaries can be drawn (i) between Levels I and II, (ii) between Levels II and III, and (iii) between Levels IV and V. (i) and (ii) support M. Tsunoda's (2004: 22, 2012b: 390; cf. also T. Tsunoda \& M. Tsunoda, this volume, 8.8) proposal to set up Level II and Level III, as distinct from Level I and as distinct from each other.

## 2 Profile of the language

[1] Location, genetic affiliation, and number of speakers
Burmese belongs to the Lolo-Burmese branch of the Tibeto-Burman family of the Sino-Tibetan linguistic stock. It is mainly spoken in Myanmar. I estimate the number of its native speakers to be somewhere between 45 to 50 million. The present paper examines the Yangon-Mandalay dialect, which is generally recognized as the standard language in Myanmar. In English, this language has sometimes come to be called Myanmar because this word is close to the indigenous name of the Myanmar people: /myămà/. However, the present paper uses "Burmese", the traditional English term, in order to avoid confusion.

## [2] Phonology

The syllable structure of Burmese is $\mathrm{C} 1(\mathrm{C} 2) \mathrm{V} 1(\mathrm{~V} 2)(\mathrm{C} 3) / \mathrm{T}$, where C and V stand for a consonant and a vowel, respectively, and T indicates a tone. The end part, i.e. V1(V2)(C3), is the rhyme. The consonant phonemes are: /p, t, $\mathrm{t}, \mathrm{c}[\mathrm{tc}], \mathrm{k}, \mathrm{P}, \mathrm{ph}\left[\mathrm{p}^{\mathrm{h}}\right]$, th $\left[\mathrm{t}^{\mathrm{h}}\right]$, ch $\left[\mathrm{t}^{\mathrm{h}}\right]$, kh $\left[\mathrm{k}^{\mathrm{h}}\right], \mathrm{b}, \mathrm{d}, \mathrm{d}, \mathrm{j}[\mathrm{dz}], \mathrm{g},(\mathrm{f}), \mathrm{s}, \mathrm{c}, \mathrm{h}, \mathrm{sh}\left[\mathrm{s}^{\mathrm{h}}\right], \mathrm{z}, \mathrm{m}, \mathrm{n}, \mathrm{n}, \mathrm{n}, \mathrm{n}, \mathrm{hm}$ [mm], hn [nn], hn [^̊n], hy [ท̊ท], w, y [j~j], hw [ww], l, hl [1ll], (r)/. There are twentytwo rhymes: /i, e, $\varepsilon$, a, $, ~ o, ~ u, ~ i n, ~ e i n, ~ a i n, ~ a n, ~ a u n, ~ o u n, ~ u n, ~ i P, ~ e i P, ~ a i P, ~ \varepsilon ?, ~ a ?, ~$
aup, oup, uP/. Burmese has three tones: /à/ (low level), /á/ (high level), and /â/ (falling). In addition, it has an atonic syllable, which is transcribed as /Că/. It never occurs in an utterance-final position.

The voiceless initial consonant phoneme present in many bound morphemes (i.e. particles and affixes placed after nouns or verbs) alternates with its voiced counterpart unless it is preceded by a glottal stop. The same alternation occurs in compounding. In what follows (except for Table 8), when a bound morpheme is cited, both voiceless and voiced forms are shown, respectively before and after a slash, e.g. $=k \hat{a} /=g \hat{a}$ 'agent (subject); source' and $=p a ̀ /=b a ̀ ~ ' p o l i t e n e s s ' . ~$
[3] Word classes
Four word classes can be posited for Burmese: nouns, verbs, particles, and interjections. There is no need to set up adjectives or adverbs because, in Burmese, words that denote states are a subcategory of verbs and many words that can modify verbs are a subcategory of nouns. Verbs can be defined as words that can be followed by a "verb sentence marker" (see [4] below).

## [4] Morphosyntax

Burmese can be considered either an isolating or an agglutinative language. If we regard particles, which I listed as one of the word classes in [3] above, as enclitics, Burmese can be said to be an isolating language. However, if we regard them as suffixes, this language can be regarded as highly agglutinative. I regard particles as enclitics in this study (see also Wheatley 1982: 89-91). Burmese has no inflection, but it has a small number of derivational prefixes and suffixes.

Burmese is a non-configurational and dependent-marking language. The basic order is AOV. Modifiers of a noun, such as demonstratives and adnominal clauses, precede the noun.

Grammatical relations and semantic roles are generally indicated by "case particles" (this terminology follows Yabu 1994), such as $=k \hat{a} /=g \hat{a}$ 'agent (subject); source', =kò/=gò 'patient; recipient; goal', =nर̂ 'instrument; accompanier; enumeration', =hmà 'location', =ŷ̂ 'possession', =câun/=jâun 'cause'. Examples include (1), an intransitive sentence, and (2), a transitive sentence.
(1) $t \underset{\sim}{u}(=g \hat{a})$ th $\hat{a}=d \grave{\varepsilon}$
$3 \mathrm{SG}=\mathrm{KA}$ stand=RLS
'He stood up.'

$3 \mathrm{SG}=\mathrm{KA}$ mother=with house=at mango=KO eat=RLS
'He ate mangos with [his] mother at home.'
The case particles $=k \hat{a} /=g \hat{a}$ 'agent (subject); source' (glossed as 'KA'), =kò/=gò 'patient; recipient; goal' (glossed as 'KO'), and $=y \hat{\varepsilon}$ 'possession' can be absent provided that the syntactic/semantic structure of the clause is parsable.

Tab. 1: Verb sentence markers.

| Verb sentence marker | Meaning | Example |
| :--- | :--- | :--- |
| $=t \grave{\varepsilon} /=d \grave{\varepsilon}$ | realis | $(3)$ |
| $=m \grave{\varepsilon}$ | irrealis | $(4)$ |
| $=p h u ́ /=b u ́$ | negative | $(5)$ |
| $=\emptyset$ (no marking) | imperative | $(6)$ |
| $=n \hat{\varepsilon}$ | prohibitive | $(7)$ |

The case system is of the nominative-accusative type: $=k \hat{a} /=g \hat{a}$ for the $\mathrm{A} / \mathrm{S}$, and $=$ $k o ̀ /=g o ̀ ~ f o r ~ t h e ~ O . ~$

The verb (either in a simple sentence or in the main clause of a complex sentence) is obligatorily followed by one of the particles that are called "verb sentence markers" by Okell (1969: 118-119). They mainly indicate modality. The verb sentence markers that are relevant for the discussion in the present study are shown in Table 1. (For further discussion of the functions of the verb sentence markers, see Gärtner, 2005, and Jenny, 2009.)

Sentences with $=t \varepsilon ̀ /=d \varepsilon ̀ ~ ' r e a l i s ' ~ b a s i c a l l y ~ c o n c e r n ~ a ~ p r e s e n t ~ e v e n t ~ o r ~ a ~ p a s t ~$ event, e.g. (3). Those with $=m \varepsilon ̀ ~ ' i r r e a l i s ' ~ b a s i c a l l y ~ c o n c e r n ~ a ~ f u t u r e ~ e v e n t, ~ e . g . ~(4) . ~$
(3) tù Rèin=hmà $k \hat{a}=\boldsymbol{d} \hat{\varepsilon}$

3sg house=at dance=RLS
'He dances at home. / He danced at home.'
(4) tì $u$ Pèin=hmà $k \hat{a}=\boldsymbol{m} \grave{\varepsilon}$

3sG house=at dance=IRR
'He will dance at home.'

The verb sentence marker =phú/=bú 'negative' is used in negative sentences. A negative sentence is formed by attaching the negative prefix mă- before the verb and placing the particle $=p h u ́ /=b u ́$ 'negative' after the verb, as in (5). In a negative sentence, the opposition between realis and irrealis is neutralized. Thus, (5) may mean 'He did not dance' (past), 'He does not dance' (present), or 'He will not dance' (future).
(5) tìu $m a ̆-k \hat{a}=b \hat{u}$

3SG not-dance=NEG
'He did not dance. / He does not dance. / He will not dance.'

An imperative sentence is formed by using $=\emptyset$, that is, no marking, e.g. (6).
(6) Pèin=hmà $k \hat{a}=\emptyset$
house=at dance=IMP
'Dance at home.'

A prohibitive sentence is formed by attaching the negative prefix $m a ̆$ - before the verb and placing the verb sentence marker $=n \hat{\varepsilon}$ 'prohibitive' after the verb, e.g. (7).
(7) Pèin=hmà mă-kâ=n仑
house $=$ at not-dance $=\mathrm{PROH}$
'Don't dance at home.'
[5] Literacy and styles
Burmese has a long history of the written language, dating back to the $12^{\text {th }}$ century, and the literacy of Burmese-speaking people has historically been relatively high.

Modern Burmese has two styles: the literary style and the colloquial style. They differ considerably from each other, especially in that they use different particles. The present paper deals with the colloquial style.

The "Questionnaire for levels in clause linkage" (T. Tsunoda, this volume-a) was employed to elicit data for the present work.

## 3 Subordination

### 3.1 Formation of subordinate clauses

Burmese has no morphosyntactic means to form coordination, as is the case with other Tibeto-Burman languages such as Amdo-Tibetan (Ebihara, this volume, Section 1) and nDrapa (Shirai, this volume, 3.1). Productive morphosyntactic means to form subordinate clauses include the following four types: (i) nominalizers, (ii) special heads, (iii) adnominalizing markers, and (iv) adverbial clause markers.

First, the nominalizers are a pair of particles that show a realis vs. irrealis contrast. They appear after the verb and nominalize the clause: =tà/=dà indicates realis and =hmà indicates irrealis. (Okell 1969: 65 assigns them to "special heads", discussed below.)

Tab. 2: Nominalizers.

| Nominalizer | Modality | Example |
| :--- | :--- | :--- |
| $=t a ̀ /=d a ̀$ | realis | $(8)$ |
| $=h m a ̀ ~$ | irrealis | $(9)$ |


3sG rice cook=NMLZ=KO 1SG know=RLS
'I know that he cooked rice.'

3SG rice cook=NMLZ=KO 1SG know=IRR
'I know that he will cook rice.'

Second, special heads are nominal morphemes that can be attached directly after a verb to yield a "verb + noun" compound noun, where the verb functions as the head of a clause. The term "special head" was introduced by Okell (1969: 65) (see also Wheatley 1982: 109-111; Yabu 1992: 581; Sawada 1998: 24-25; Myint Soe 1999: 34; Okell \& Allot 2001: 288; Okano 2007: 132-141). Some of the special heads can be used as full nouns, while others cannot; all of the special heads treated in this chapter belong to the latter group. Special heads that cannot be used as full nouns can also possibly be regarded as suffixes, and I attach a hyphen before them when they are presented. (Enclitics are preceded by an equal sign.)

Clauses formed with a special head function as arguments or adjuncts. (10) is an example of -phô/-bô 'to V; for V-ing'. (See [2] in 3.2 for other special heads.)
(10) $\eta$ à pha?-phô=gò yù là=dè

1SG read-to/for=Ko take come=RLS
'I brought what I had to read.'

Third, there are the particles that I call "adnominalizing markers" (Okell 1969: 59 refers to them as "attribute markers"). They appear after a verb and form an adnominal clause (i.e., a relative clause). They differ from the verb sentence markers $=t \grave{\varepsilon} /=d \grave{\varepsilon}$ 'realis' and $=m \varepsilon ̀ ~ ' i r r e a l i s ' ~ i n ~ t o n e ~ o n l y . ~ A n ~ a d n o m i n a l ~ c l a u s e ~ a l w a y s ~$ precedes the noun it modifies.

Tab. 3: Adnominalizing markers.

| Adnominalizing marker | Modality | Example |
| :--- | :--- | :--- |
| $=t \hat{\varepsilon} /=d \hat{\varepsilon}$ | realis | $(11)$ |
| $=m \hat{\varepsilon}$ | irrealis | $(12)$ |

(11) $\eta \grave{a}$ sá $=\boldsymbol{d} \hat{\boldsymbol{\varepsilon}}$ tăăyc?țí

1SG eat=AN mango
'the mango that I ate'
(12) $\eta a ̀ ~ s a ́=m e ̂ ~ t a ̆ y \varepsilon ? t i ́ ~ i ́ ~$

1sG eat=AN mango
'the mango that I will eat'

Finally, the particles that I call "adverbial clause markers" can form a subordinate clause that functions as an adjunct in a sentence (Okell \& Allott 2001: 300 call them "subordinate clause markers"). Below is an example of =lô 'because'.
(13) țù $k \hat{a}=l \hat{\boldsymbol{o}} \quad \eta \grave{a}=l \varepsilon ́ \quad k \hat{a}=d \bar{\varepsilon}$

3sG dance=because 1SG=also dance=RLS
'Because he danced, I also danced.'

### 3.2 Formation of adverbial clauses

We saw in 3.1 the methods of forming subordinate clauses in Burmese. Adverbial clauses, which are a type of subordinate clause, can be formed in various ways (see also Myint Soe 1999: 327-338). The types of adverbial clauses that are relevant to the present study are shown as [1] to [6] below. Adverbial clauses of Type (a), as shown in [1], are formed by using an adverbial clause marker only (mentioned in 3.1), and some of the adverbial clauses of Type (b)1, shown in [2], are formed by using a special head only. However, the other adverbial clauses are formed using a combination of various forms. In the list below, the adverbial clauses dealt with in the present chapter are indicated with the symbol "!".
[1] Type (a): V=<adverbial clause marker>
Adverbial clauses of this type are formed by placing an adverbial clause marker after the verb. The adverbial clause markers are listed below. "V" stands for "verb".

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![1-1] V=lô 'because'
! [1-2] \(\mathrm{V}=t \hat{\jmath} /=d \hat{\jmath} \quad\) 'because'; 'when'
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The adverbial clause marker $=t \hat{\jmath} /=d \hat{\jmath}$ can have a causal meaning 'because' and a temporal 'when'.

| $![1-3] \quad \mathrm{V}=\mathrm{yin}$ | 'if' |
| :---: | :---: |
| ! [1-4] V=pèm $\mathrm{c}^{\prime}=$ bèm $\hat{\varepsilon}$ | 'although' |
| [1-5] V=hmâ | 'not until' |
| [1-6] V=?àun | 'so that' |
| [1-7] V=pí/=bí | 'and then' |
| [1-8] V=yín | 'while' |
| [1-9] V=táin/=dâin | 'whenever' |
| [1-10] V V=chín /=jín | 'as soon as' | The verb is reduplicated when used with this marker.

[1-11] mă-V=khìs/=gìs 'before'
The verb has to be combined with the negative prefix mă.
[1-12] mă-V=ph́́/=b́́ 'without V-ing'
The verb has to be combined with the negative prefix mă.
[2] Type (b): V-<special head>(=<case particle>)
Adverbial clauses of this type are formed by attaching a special head to the verb. Some of them are followed by a case particle, either optionally ([2-3]) or obligatorily ([2-1] and [2-4]). The following are adverbial clauses of this type.
! [2-1] V-y $2 T t a ́=n \hat{\varepsilon}$
'although'
$V$-y $\varepsilon$ Ptá means 'state of V-ing' or 'during V-ing', and $=n \hat{\varepsilon}$ is a case particle indicating instrument, accompanier, or enumeration. (The form -y $3 t t \hat{a}=n \hat{\varepsilon}$ has a more colloquial variant $-y \hat{\varepsilon} t \underset{\sim}{a}=n \hat{\varepsilon}$, and may also be abbreviated as $-y \varepsilon$ ? $=n \hat{c}$.)
[2-2] V-phô /-bô 'in order to' V-phô /-bô means 'to V' or 'for V-ing'.
[2-3] V-tóun/-dóun(=hmà) 'while'
V-tóun/-dóun means 'process of V-ing', and =hmà is a case particle for location. (The case particle =hmà has the same phonological form as that of the irrealis nominalizer =hmà (Table 2), but there is no etymological connection between them. In colloquial Burmese, the case particle =hmà has a free variant $=m a ̀$, whereas the irrealis nominalizer =hmà has no such variation. Thus, these two appear to have no synchronic connection either.)

## [2-4] V-tóun/-dóun=gâ 'when (somebody did)'

V-tóun/-dóun means 'process of V-ing'. =kâ/=gâ is a case particle for agent or source.
[3] Type (c): V=<nominalizer>=<case particle>
Adverbial clauses of this type are formed by placing the nominalizer $=t a ̀ /=$ dà (realis) or =hmà (irrealis) after the verb, with a case particle following the nominalizer. The following are adverbial clauses of this type. Among them, only =môlô takes both $=t a ̀ /=d a ̀$ and $=h m a ̀$, while the others take $=t a ̀ /=d a ̀$ only.
! [3-1] $\mathrm{V}=t a ̀ /=d a ̀=n \hat{\varepsilon}$
'because’; ‘right after’
$=n \hat{\varepsilon}$ is a case particle for instrument, accompanier, or enumeration.
! [3-2] $\{\mathrm{V}=t a ̀ /=d a ̀$ or $\mathrm{V}=h m a ̀\}=m o ̂ l o ̂ \quad ' b e c a u s e ' ~$
$=m o ̂ l o ̂$ is a case particle for cause; that is, it means 'because of'. It has a variant that lacks the second syllable: $=m \hat{o}$. The initial consonant of $=m o ̂ l o ̂$ and $=m o ̂$ is occasionally replaced with a voiceless counterpart, that is, $=h m o ̂ l o ̂ ~ a n d ~=h m o ̂, ~ r e s p e c t i v e l y . ~$
! [3-3] $\mathrm{V}=t a ̀ /=d \grave{a}=j a ̂ u n \quad$ 'because'
$=c \hat{u} u n /=j \hat{a} u n$ is a case particle for cause, that is, 'because of'. V=tà/=dà $=j a ̂ u n$ is somewhat literary.
[4] Type (d): V=<adnominalizing marker> <subordinate noun>
Adverbial clauses of this type are formed with a subordinate noun preceded by an adnominal clause. The term "subordinate noun" was introduced by Okell (1969: 142-144). Subordinate nouns are postpositions and can function like case particles
(see also Wheatley 1982: 142; Sawada 1998: 7-9; Myint Soe 1999: 72-93). Below is an example of the subordinate noun Rătwદ? 'for' being used as a postpostion, following a noun.
(14) ךà myaPthún=?ătwe? loup=tè

1SG (personal name)=for do=RLS
'I did (it) for Myat Htun.'

As noted above, when used to form adverbial clauses, subordinate nouns follow an adnominal clause. As seen above (Table 3), adnominal clauses are formed using the adnominalizing marker $=t \hat{\varepsilon} /=d \hat{\varepsilon}$ 'realis' or $=m \hat{\varepsilon}$ 'irrealis'. In some instances of Type (d), the weakened form =ță 'realis' or =mă 'irrealis' is used. The following are adverbial clauses of this type.
! [4-1] $\{\mathrm{V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ Rătw $? \quad$ 'because'
This adverbial clause is used in somewhat formal speech. When the subordinate noun २ătw\&? is used as a postposition, it means 'for' or 'for the sake of'.
[4-2] $\{\mathrm{V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ جăthî 'until'
The subordinate noun Păthî used as a postposition means 'up to' or 'as much as'.
[4-3] $\{\mathrm{V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ Rătáin 'just as'
The subordinate noun Pătáis used as a postposition means 'in accordance with' or 'in the manner of'.
[4-4] $\{\mathrm{V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ Răpyìs 'in addition to V-ing' The subordinate noun Păpyìn used as a postposition means 'outside', 'besides', or 'as well as'.
[4-5] V=mê Păsá 'instead of V-ing'
The subordinate noun २ăsá used as a postposition means 'in place of' or 'instead of'.
[4-6] $\{\mathrm{V}=t \underset{\sim}{a} /=d a ̆$ ar $\mathrm{V}=m a ̆\} ~ l o ̀ ~ ' a s ' ~$
The subordinate noun lò used as a postposition means 'like N', 'as', or 'in the way of'.
[4-7] $\{\mathrm{V}=t \underset{c}{ }$ ă $=d$ dă or $\mathrm{V}=m a ̆$ \} lòlò 'as if' lòlò following a noun means 'rather like' or 'almost'.
[4-8] $\{\mathrm{V}=t \mathrm{~d} a /=d$ dă or $\mathrm{V}=m a ̆\}$ lau? 'as much as'
The subordinate noun laup used as a postposition means 'as much as'.
[5] Type (e): C <shò ‘say'>=<adverbial clause marker>
"C" stands for "clause". Clauses appearing in this slot can stand by themselves as verb predicate sentences or non-verb predicate sentences. (For these terms, see below. Those clauses that can stand by themselves as verb predicate sentences show the opposition between realis and irrealis (cf. Table 1).) The following are adverbial clauses of this type; shò is a verb that means 'say'.
! [5-1] C shò=d̂̂ 'because’
$=t \hat{\jmath} /=d \hat{\jmath}$ is an adverbial clause marker (see [1-2] above). Although the adverbial clause marker $=t \hat{\jmath} /=d \hat{\jmath}$ can mean 'because' or 'if, when', C shò=d̂̂ only means 'because'.
! [5-2] C shò=yìn 'if'
=yìs is an adverbial clause marker meaning 'if' (see [1-3] above).
! [5-3] C shò=bèm $\hat{\varepsilon}$
'although'
$=p e ̀ m \hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ is an adverbial clause marker meaning 'although' (see [1-4] above).

As alluded to above, Burmese sentences can be grouped into verb predicate sentences and non-verb predicate sentences. A verb predicate sentence contains a verb in the predicate and ends with a verb sentence marker; examples include (3), (4), (5), (6), and (7). In contrast, a non-verb predicate sentence has a predicate that consists of a noun phrase, a postpositional phrase, or a subordinate clause. For example, the following non-verb predicate sentence has a noun phrase as its predicate.
(15) țù=gâ myămà

3SG=KA Burman
'He is a Burman.'

Non-verb predicate sentences cannot be embedded in another sentence as an adverbial clause, using an adverbial clause marker, for they do not have a verb. Type (e) is one of the means employed for embedding a non-verb predicate sentence in another sentence. Sentence (16) is an example where the noun predicate sentence (15) is embedded.
(16) [ț̃u $=g \hat{a}$ myămà] shò=d̂̀ $\quad$ myămàză $g a ́ ~ p y o ́=d a P=t \varepsilon ̀ ~$

3SG=KA Burman say=because Burmese speak=can=RLS
'He can speak Burmese because he is a Burman.'

The important point to note here is that the verb shò 'say' in all of C shò=dô, C shò=yìn, and C shò=bèmê has lost the meaning of 'say’, e.g. (16). See sentence (17) for an additional example. As shown in the translations, the verb shò 'say' in (16) and (17) is semantically empty.
(17) țù $m$ ă-ț $w a ́=b u ́ \operatorname{sho}=\boldsymbol{d} \hat{\boldsymbol{\jmath}} \quad \eta a ̀ \quad t w a ́=y \hat{a}=m \grave{\varepsilon}$

3SG not-go=NEG say=because 1SG go=have.to=IRR
'Because he won't go, I will have to go.'

This fact can be made clear when we compare (17) with (18).
(18) tiù mă-țwá=bú shò=lô $\quad \eta \grave{a}$ ț $w a ́=y \hat{a}=m \bar{~}$

3SG not-go=NEG say=because 1SG go=have.to=IRR
'Because [someone] said that he wouldn't go, I will have to go.'
In (18), where the adverbial clause marker=lô is used, shò has not lost the meaning of 'say'. That is, (18) necessarily expresses that someone said that "he" would not go. Therefore, the adverbial clause C shò=lô in (18) should not be included in Type (e) but should instead be regarded as an adverbial clause of Type (a), which uses =lô (see [1-1]), but one which happens to be used with the verb shò 'say'. Such a difference between C shò=dô and C shò=lô has not been explicitly pointed out in previous studies.
[6] Type (f): V=<adverbial clause marker> <6î 'exist'>=<adverbial clause marker> This type contains only one member.
! [6-1] V=lô $6 \hat{\imath}=y i ̀ n ~ ' i f ’ ~$

Here, =lô has etymologically the same origin as that of the adverbial clause marker =lô 'because’ (see [1-1] above). However, in Type (f), =lô functions merely as an adapter, syntactically connecting the V and the verb $6 \hat{\imath}$ 'exist'. The verb $6 \hat{\imath}$ is then followed by the adverbial clause marker =yìs 'if' (see [1-3] above).

The forms shown in [1] to [6] above will be called "clause-linkage markers" (CLMs) in the present study. We shall examine the use of CLMs in terms of the five levels: causals (Section 4), conditionals (Section 5), and concessives (Section 6).

As seen above, there are seven CLMs that can have a causal meaning ('because'), three CLMs that can have a conditional meaning ('if'), and three CLMs that have a concessive meaning ('although'). That is, the numbers are as follows.
(19) Numbers of clause linkage markers
causals (7) > conditionals (3), concessives (3)

We shall now examine how the five levels in clause linkage are expressed in Burmese, regarding causals (Section 4), conditionals (Section 5), and concessives (Section 6). The acceptability judgements were obtained from three consultants (see Acknowledgements) and they are shown as follows.
no marking: fully acceptable.
?: acceptable, but not to all the consultants.
*: unacceptable.

## 4 Causals

The seven CLMs for causals are shown in Table 4. The column headed by "Type" shows the types discussed in Section 3, and the column with "Number in 3.2" shows where each of the adverbial clauses is given in Section 3.2.

Tab. 4: Clause-linkage markers for causals.

| CLM | Type | Number in 3.2 |
| :---: | :---: | :---: |
| $\mathrm{V}=t a ̀ /=d a ̀=n \hat{\varepsilon}$ | (c) | [3-1] |
| $\mathrm{V}=1 \hat{0}$ | (a) | [1-1] |
| $\mathrm{V}=t \hat{\jmath} /=d \hat{\jmath}$ | (a) | [1-2] |
| $\mathrm{V}=t a ̀ /=d a ̀=j a ̂ u n$ | (c) | [3-3] |
| $\{\mathrm{V}=t a / /=d a ̀$ or $\mathrm{V}=h m a ̀\}=m o ̂ l o ̂$ | (c) | [3-2] |
| $\{\mathrm{V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ アătwe? | (d) | [4-1] |
| C $\operatorname{sho} \grave{o}=d \hat{\jmath}$ | (e) | [5-1] |

Semantic differences among these CLMs are subtle and difficult to grasp. It can be said at least that, $=t \grave{a} /=d \grave{a}=j \hat{a} u n$ and $\{\mathrm{V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ Pătw $\mathcal{\varepsilon}$ ? are a little formal. Nonetheless, these CLMs behave differently in terms of the five levels, and can be classified into three groups according to this behavior, as shown in Table 4. As we go down in the table, these three groups have increasingly wider distributions in terms of the five levels, as will be shown in Table 8.

A note on $\{\mathrm{V}=t a ̀ /=d a ̀$ or $\mathrm{V}=h m a ̀\}=m o ̂ l o ̂$ and $\{\mathrm{V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ Pătwe? is in order. As seen in Section 3 (cf. Tables 2 and 3), $V=t \grave{a} /=d a ̀ ~ a n d ~ V=t \hat{\varepsilon} /=d \hat{\varepsilon}$ are used for "realis" (i.e. a present event or a past event), while $V=h m a ̀$ and $V=m \hat{\varepsilon}$ are used for "irrealis" (i.e. future event). All the questionnaire sentences used in Section 4 concern "realis", and consequently $V=t \grave{a} /=d a ̀$ and $\mathrm{V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$, not $\mathrm{V}=h m a ̀$ or $\mathrm{V}=m \hat{\varepsilon}$, are used. See ( $2-1-1-1-e$ ) and ( $2-1-1-1-\mathrm{f}$ ), for example.

### 4.1 Causals Level I

Subordinate clause: situation. Main clause: situation.

At Level I, all of the seven CLMs for causals are acceptable.
(2-1-1-1) Because the rain fell, the ground is wet.

$$
\begin{array}{ll}
(2-1-1-1-\mathrm{a}) & \text { mó } y w a ̀=t h a ́=d a ̀=n \hat{\varepsilon} \quad \text { myèjí } \quad s o ̀=n e ̀=d \grave{\varepsilon} \\
& \text { rain fall=RES=NMLZ=with ground wet=PROG=RLS }
\end{array}
$$

(2-1-1-1-b) mó $y w a ̀=t h a ́=l o ̂ \quad ~ m y e ̀ j i ́ ~ s o ̀=n e ̀=d ~ c ̀ ~$ rain fall=RES=because ground wet=PROG=RLS
(2-1-1-1-c) mó $y w a ̀=t h a ́=d \hat{\jmath} \quad$ myèjí $\quad$ sò=nè=d rain fall=RES=because ground wet=PROG=RLS
 rain fall=RES=NMLZ=because.of ground wet=PROG=RLS
(2-1-1-1-e) mó $y w a ̀=t h a ́=d a ̀=m o ̂ l o ̂ \quad ~ m y e ̀ j i ́ ~ s o ̀=n e ̀=d ~ c ̀ ~$ rain fall=RES=NMLZ=because.of ground wet=PROG=RLS
(2-1-1-1-f) mó $y w a ̀=t h a ́=d \hat{\varepsilon}$ २ătw 2 myèjí $s o ̀=n e ̀=d e ̀ ~$ rain fall=RES=AN for ground wet=PROG=RLS
(2-1-1-1-g) mó $y w a ̀=t h a ́=d \check{\varepsilon} \quad s h o ̀=d \hat{\jmath} \quad$ myèjí $s o ̀=n e ̀=d \grave{\varepsilon}$ rain fall=RES=RLS say=because ground wet=PROG=RLS
(2-1-1-2) Because the child is hungry, he/she is crying.
(2-1-1-2-a) khălé baîshà $=n \grave{e}=d \grave{a}=n \hat{\varepsilon} \quad \eta \grave{o}=n \grave{e}=d \grave{\varepsilon}$
child hungry=PROG=NMLZ=with cry=PROG=RLS
(2-1-1-2-b) khălé baiłshà $=n e ̀=l o ̂ \quad \eta o ̀=n \grave{e}=d \grave{\varepsilon}$
child hungry=PROG=because cry=PROG=RLS
(2-1-1-2-c) khălé bai३shà $=n \grave{e}=d \hat{\jmath} \quad \eta \grave{o}=n \grave{e}=d \grave{\varepsilon}$ child hungry=PROG=because cry=PROG=RLS
(2-1-1-2-d) khălé baỉshà=nè=dà=jâun $\eta \grave{=}=n \grave{e}=d \grave{\varepsilon}$ child hungry $=$ PROG $=$ NMLZ $=$ because.of cry $=P R O G=$ RLS
(2-1-1-2-e) khălé baîshà=nè=dà=môlô $\quad \eta o ̀=n e ̀=d \grave{\varepsilon}$ child hungry=PROG=NMLZ=because cry=PROG=RLS
 child hungry=PROG=AN for cry=PROG=RLS
(2-1-1-2-g) khălé baîshà=nè=d $\quad s h o ̀=d \hat{\jmath} \quad \eta o ̀=n e ̀=d \grave{\varepsilon}$ child hungry=PROG=RLS say=because cry=PROG=RLS

An additional example of causals at Level I is (13) (=lô ‘because’), given in 3.1.

### 4.2 Causals Level II

Subordinate clause: situation. Main clause: situation + judgment.
At Level II, too, all of the seven CLMs for causals are acceptable. In (2-1-2-1-a, -b, -c, $-d,-e,-f,-g$ ) the verb sentence marker $=m \varepsilon$ 'irrealis' (cf. Table 1) expresses the epistemic meaning of "must".
(2-1-2-1) Because the rain fell, the ground must be wet.
(2-1-2-1-a) mó $y w a ̀=t h a ́=d a ̀=n \hat{\varepsilon} \quad m y e ̀ j i ́ ~ s o ̀=n e ̀=m e ̀ ~$ rain fall=RES=NMLZ=with ground wet=PROG=IRR
(2-1-2-1-b) mó $y w a ̀=t h a ́=l o ̂ \quad m y e ̀ j i ́ ~ s o ̀=n e ̀=m e ̀ ~$ rain fall=RES=because ground wet=PROG=IRR
(2-1-2-1-c) mó $y w a ̀=t h a ́=d \hat{\jmath} \quad$ myèjí $\quad s o ̀=n e ̀=m \grave{\varepsilon}$ rain fall=RES=because ground wet=PROG=IRR
(2-1-2-1-d) mó $y w a ̀=t h a ́=d a ̀=j a ̂ u n \quad ~ m y e ̀ j i ́ ~ s o ̀=n e ̀=m e ̀ ~$ rain fall=RES=NMLZ=because.of ground wet=PROG=IRR
(2-1-2-1-e) mó $y w a ̀=t h a ́=d a ̀=m o ̂ l o ̂ \quad m y e ̀ j i ́ ~ s o ̀=n e ̀=m e ̀ ~$ rain fall=RES=NMLZ=because.of ground wet=PROG=IRR
(2-1-2-1-f) mó $y w a ̀=t h a ́=d \hat{\varepsilon}$ २ătw 2 myèjí sò=nè=mè rain fall=RES=AN for ground wet=PROG=IRR
(2-1-2-1-g) mó $y w a ̀=t h a ́=d \grave{\varepsilon} \quad$ shò=dô $\quad m y e ̀ j i ́ ~ s o ̀=n e ̀=m \grave{~}$ rain fall=RES=RLS say=because ground wet=PROG=IRR
(2-1-2-2) Because the rain is falling, he has to stay in the house.
(2-1-2-2-a) mó $y w a ̀=n e ̀=d a ̀=n \hat{\varepsilon} \quad$ tù $\quad$ Pèin=hmà nè=y $\hat{a}=m \grave{\varepsilon}$ rain fall=PROG=NMLZ=with 3 SG house=at stay=have.to=IRR
(2-1-2-2-b) mó $y w a ̀=n e ̀=l o ̂ \quad t u ̀ ~ R e ̀ i n=h m a ̀ ~ n e ̀=y a ̂=m e ̀ ~$ rain fall=PROG=because 3SG house=at stay=have.to=IRR
(2-1-2-2-c) mó $y w a ̀=n e ̀=d \hat{\jmath} \quad t t u ̀ ~$ アèiN=hmà nè=yâ=mè rain fall=PROG=because 3sG house=at stay=have.to=IRR
 rain fall=PROG=NMLZ=because.of 3sG house=at stay=have.to=IRR
(2-1-2-2-e) mó $y w a ̀=n e ̀=d a ̀=m o ̂ l o ̂ ~ t ̦ u ̀ ~ R e ̀ i n=h m a ̀ ~ n e ̀=y a ̂=m e ̀ ~$ rain fall=PROG=NMLZ=because.of 3 SG house=at stay=have.to=IRR
(2-1-2-2-f) mó $y w a ̀=n e ̀=d \hat{\varepsilon} \quad$ Pătwع? trù Rèin=hmà nè=yâ=mè rain fall=PROG=AN for 3SG house=at stay=have.to=IRR
 rain fall=PROG=RLS say=because 3SG house=at stay=have.to=IRR

Additional examples of causals at Level II are (17) (shò=d人̂ 'because') and (18) (=lô 'because'), given in 3.2.

## 4．3 Causals Level III

Subordinate clause：situation．Main clause：situation＋interpersonal effect．

At Level III，the sentences with $=t \grave{a} /=d \grave{a}=n \hat{\varepsilon}$ ，that is，$(2-1-3-1)-(\mathrm{a})$ and $(2-1-3-2)-(\mathrm{a})$ ，are unacceptable．The other sentences are acceptable．
（2－1－3－1）Don＇t go out because the rain is falling．
（2－1－3－1－a）＊mó $y w a ̀=n e ̀=d a ̀=n \hat{\varepsilon} \quad$ Păpyìs mă－thw $\}=n \hat{\varepsilon}$
rain fall＝PROG＝NMLZ＝with outside not－go．out $=\mathrm{PROH}$
（2－1－3－1－b）mó $y w a ̀=n e ̀=l o ̂ \quad$ アăpyìn mă－thw $\mathcal{1}=n \hat{\varepsilon}$ rain fall＝PROG＝because outside not－go．out＝PROH
（2－1－3－1－c）mó $y w a ̀=n e ̀=d \hat{\jmath} \quad$ Păpyìn mă－thwe？$=n \hat{\varepsilon}$ rain fall＝PROG＝because outside not－go．out＝PROH
（2－1－3－1－d）mó ywà＝nè＝dà＝jâun Păpyìn mă－thw $\mathcal{P}=n \hat{\varepsilon}$ rain fall＝PROG＝NMLZ＝because．of outside not－go．out＝PROH
（2－1－3－1－e）mó $y w a ̀=n e ̀=d a ̀=m o ̂ \quad$ アăpyìn mă－thwe？＝n $\hat{\varepsilon}$ rain fall＝PROG＝NMLZ＝because．of outside not－go．out＝PROH
（2－1－3－1－f）mó $y w a ̀=n e ̀=d \hat{\varepsilon}$ アătwع？२ăpyìn mă－thwe？＝n̂̂ rain fall＝PROG＝AN for outside not－go．out＝PROH
（2－1－3－1－g）mó $y w a ̀=n e ̀=d \grave{\varepsilon} \quad s h o ̀=d \hat{\jmath} \quad$ Păpyìn $m a ̆-t h w \varepsilon ?=n \hat{\varepsilon}$ rain fall＝PROG＝RLS say＝because outside not－go．out＝PROH
（2－1－3－2）Give the child food because he／she is hungry．
（2－1－3－2－a）＊khălé baîshà＝nè＝dà＝n̂ $\quad$ sázăyà cwé＝bà＝Ø child hungry＝PROG＝NMLZ＝with food feed＝POL＝IMP
（2－1－3－2－b）khălé bai३shà＝nè＝lô sázăyà $c w e ́=b a ̀=\emptyset$ child hungry＝PROG＝because food feed＝POL＝IMP
（2－1－3－2－c）khălé baiچshà＝nè＝dô sázăyà $c w e ́=b a ̀=\emptyset$ child hungry＝PROG＝because food feed＝POL＝IMP
（2－1－3－2－d）khălé bai？shà＝nè＝dà＝jâun sázăyà cwé＝bà＝Ø child hungry＝PROG＝NMLZ＝because．of food feed＝POL＝IMP
（2－1－3－2－e）khălé baiłshà＝nè＝dà＝môlô sázăyà cwé＝bà＝Ø child hungry $=$ PROG $=$ NMLZ $=$ because ．of food feed＝POL＝IMP
（2－1－3－2－f）khălé baiچshà＝nè＝dê Pătwe？sázăyà cwé＝bà＝Ø child hungry＝PROG＝AN for food feed＝POL＝IMP


As shown above, (2-1-3-1-a) ('Don’t go out ...') and (2-1-3-2-a) ('Give the child food ...'), both of which involve $=t \grave{a} /=d \grave{a}=n \hat{\varepsilon}$, are unacceptable. That is, at Level III this CLM does not occur with a main clause that expresses command or prohibition. To the best of my knowledge, this fact has not been pointed out in any previous study.

### 4.4 Causals Level IV

Subordinate clause: premise. Main clause: judgment.

At Level IV, literal translations of the questionnaire sentences are unacceptable; see ( $2-1-4-1-a,-b,-c,-d,-e,-f,-g$ ) and ( $2-1-4-2-a,-b,-c,-d,-e,-f,-g$ ). Some of these sentences become acceptable if an expression indicating the speaker's judgment, such as conjecture, is used in the main clause. Burmese has no adverb-like word that means 'probably' or 'perhaps'; one of the most general expressions that denote conjecture is the verb predicate form $\mathrm{V}=t \grave{a} /=d a ̀ ~ p h y i \hat{\imath}=m \grave{\varepsilon}$ 'it would be the case that', which will be employed in the Burmese sentences (2-1-4-1-a', -b', -c', -d', -e', $-f^{\prime},-g^{\prime}$ ) and (2-1-4-2-a', -b', -c', -d', -e', -f', -g').

A note on the form $\mathrm{V}=t \grave{a} /=d \grave{a} p h y i \hat{i}=m \grave{\varepsilon}$ is in order here. This form is a member of a group of constructions that can be represented as "V=<nominalizer> phyi?= <verb sentence marker>", which can be translated as 'it is the case that'. This construction is an instance of a construction that is called the "mermaid construction" ("MMC"). (T. Tsunoda (ed.) (2013b) contains descriptions of the MMC in about twenty languages of Asia and Africa, including Kato’s (2013) account of the MMC in Burmese.) The MMC has the structure shown in (20) (T. Tsunoda, 2013a). The Noun slot is generally occupied by a noun; see (20). (The noun in the "Noun" slot is typically a noun that is an independent word.) But in one variant of the MMC, the Noun slot is occupied by a nominalizer; see (21). (The nominalizer may be an independent word or a clitic.)

Mermaid construction
(20) Clause + Noun + Copula.
(21) Clause + Nominalizer + Copula.

The copula may be negated; see 6.4 for examples from Burmese. The MMC may express various meanings, such as modal, evidential, aspectual, or temporal. It may also have discourse-related functions, e.g. explanation or the like.

The MMC, i.e. (20) (or its variant in which the Noun slot of (20) is occupied by a nominalizer, i.e. (21)) is used at Level IV in languages such as Standard Japanese
(T. Tsunoda \& M. Tsunoda, this volume, 8.9.2), the Mitsukaido dialect of Japanese (Sasaki, this volume), Korean (Kim, this volume), Newar (Kiryu, this volume) and nDrapa (Shirai, this volume). The use of the MMC (or its variant) at Level IV is discussed in T. Tsunoda (this volume-b, 3.3).

In the construction "V=<nominalizer> phyip=<verb sentence marker>" of Burmese, the "Noun" slot of (20) is occupied by the nominalizer =tà/=dà 'realis' or =hmà 'irrealis' (shown in Table 2). That is, this construction is an instance of (21). The "Copula" slot is occupied by the verb phyi? 'to be'. Additionally, the construction "V=<nominalizer> phyi?=<verb sentence marker>" has a slot for a verb sentence marker, which is filled with $=t \grave{\varepsilon}$ 'realis' or $=m \grave{\varepsilon}$ 'irrealis' (shown in Table 1). This yields four possible combinations of nominalizer and verb sentence marker (see Table 5). Furthermore, as shown in Table 5, the nominalizer in this construction generally indicates time: =tà/=dà concerns the past or present, and =hmà has to do with the future. The verb sentence marker generally indicates whether or not the speaker is certain about the occurrence of the event denoted by the verb. In other words, phyi $1=t \varepsilon$ indicates that the speaker is certain that the event actually occurred or will occur, while phyi $=m \grave{\varepsilon}$ expresses that the speaker is uncertain whether the event actually occurred or will occur. (A possible translation is given for each combination in Table 5.)

Among the four combinations listed in Table 5, $\mathrm{V}=t a ̀ /=d a ̀ p h y i \mathcal{P}=m \grave{\varepsilon}$ 'it would be the case that' has to be used to translate (2-1-4-1) and (2-1-4-2) into acceptable Burmese sentences. This is because, in both sentences, first, the respective events 'rain fell' and 'the doctor saved him' are past events, and second, the speaker is not certain that the event actually occurred.

Now, as noted above, at Level IV, literal translations of the questionnaire sentences are unacceptable; see ( $2-1-4-1-a,-b,-c,-d,-e,-f,-g$ ) and ( $2-1-4-2-a,-b,-c,-d$, $-e,-f,-g)$. But see (2-1-4-1-a’, -b’, -c', -d’, -e', -f', -g’) and (2-1-4-2-a’, -b’, -c', -d', -e’, $-\mathrm{f}^{\prime},-\mathrm{g}$ ), whose main clause contains $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i{ }^{2}=m \grave{\varepsilon}$ 'it would be the case that' in place of the verb sentence marker $=t \bar{\varepsilon}$ 'realis'. This expression indicates the

Tab. 5: Combinations of nominalizers and verb sentence markers in the construction ' $\mathrm{V}=<$ nominalizer> phyip=<verb sentence marker>'.

| Combination Time | Certainty |
| :---: | :---: |
| $\mathrm{V}=t a ̀ /=d a ̀ p h y i \supsetneq=t \grave{\varepsilon} \quad$ past or present | certain |
| ('it is the case that someone/something V-s/V-ed') |  |
| $\mathrm{V}=t a ̀ /=d a ̀ p h y i \supsetneq=m \grave{\varepsilon} \quad$ past or present | uncertain |
| ('it would be the case that someone/something V-s/V-ed') |  |
| $V=h m a ̀ ~ p h y i p=t \grave{~} \quad$ future | certain |
| ('it is the case that someone/something will V') |  |
| $\mathrm{V}=h m a ̀$ phyip=mè future | uncertain |
| ('it would be the case that someone/something would V') |  |

speaker's judgement. Sentences (2-1-4-1-e', -f', -g') and (2-1-4-2-e’, -f', -g') are totally acceptable. They involve the CLMs $=t a ̀ /=d a ̀=m o ̂ l o ̂,=t \hat{\varepsilon} /=d \hat{\varepsilon}$ २ătw ?, and $s h o ̀=d \hat{\jmath}$, respectively. However, (2-1-4-1-b', -c', -d') and (2-1-4-2-b', -c', -d') are only marginally acceptable. They involve the CLMs $=l \hat{o},=t \hat{\jmath} /=d \hat{\jmath}$, and $=t a ̀ /=d \grave{a}=j a ̂ u n$, respectively. Finally, (2-1-4-1-a') and (2-1-4-2-a'), which are unacceptable, involve the CLM =tà/ $=d \grave{a}=n \hat{\varepsilon}$. That is, for causals at Level IV, the use of $\mathrm{V}=t \grave{a} /=d \grave{a} p h y i ?=m \grave{\varepsilon}$ 'it would be the case that' does not make every sentence acceptable; there are sentences that are unacceptable or marginally acceptable despite the fact that they use $\mathrm{V}=t \grave{a} /=d \grave{a}$ $p h y i p=m \varepsilon ̀$. Thus far, no means have been found that make ( $2-1-4-1-a ',-b \prime,-c^{\prime},-d^{\prime}$ ) and (2-1-4-2-a', b', -c', -d') acceptable.

Examples follow. The intended meaning of (2-1-4-1-a'), for instance, is 'Because the grounds is wet, it would be the case that the rain fell'.
(2-1-4-1) Because the ground is wet, rain fell.
Intended meaning: BECAUSE the ground is wet, I GUESS/SUPPOSE/
INFER/CONCLUDE THAT rain fell.'
(2-1-4-1-a) *myèjí $\quad$ sò=nè=dà $=n \hat{\varepsilon} \quad$ mó $y w a ̀=t h a ́=d \grave{~}$
ground wet=PROG=NMLZ=with rain fall=RES=RLS
(2-1-4-1-a), *myèjí sò=nè=dà=n $\hat{\varepsilon} \quad$ mó $y w a ̀=t h a ́=d a ̀ \quad p h y i \supsetneq=m \varepsilon ̀$
ground wet=PROG=NMLZ=with rain fall=RES=NMLZ be=IRR
(2-1-4-1-b) *myèjí sò=nè=lô mó $y w a ̀=t h a ́=d \varepsilon ̀ ~$ ground wet=PROG=because rain fall=RES=RLS
(2-1-4-1-b)' ?myèjí sò=nè=lô mó ywà=thá=dà phyiz=mè ground wet=PROG=because rain fall=RES=NMLZ be=IRR
(2-1-4-1-c) *myèjí sò=nè=d̂̂ mó ywà=thá=dè ground wet=PROG=because rain fall=RES=RLS
(2-1-4-1-c)' ?myèjí sò=nè=d̂̂ mó $y w a ̀=t h a ́=d a ̀ ~ p h y i چ=m e ̀ ~$ ground wet=PROG=because rain fall=RES=NMLZ be=IRR
(2-1-4-1-d) *myèjí sò=nè=dà=jâun mó $y w a ̀=t h a ́=d e ̀$
ground wet=PROG=NMLZ=because.of rain fall=RES=RLS
(2-1-4-1-d)' ?myèjí sò=nè=dà=jâun mó ywà=thá=dà phyip=mè ground wet=PROG=NMLZ=because.of rain fall=RES=NMLZ be=IRR
(2-1-4-1-e) *myèjí sò=nè=dà=môlô mó $y w a ̀=t h a ́=d \grave{\varepsilon}$
ground wet=PROG=NMLZ=because.of rain fall=RES=RLS
(2-1-4-1-e)' myèjí sò=nè=dà=môlô mó $y w a ̀=t h a ́=d a ̀ ~ p h y i z=m e ̀ ~$ ground wet=PROG=NMLZ=because.of rain fall=RES=NMLZ be=IRR
(2-1-4-1-f) *myèjí sò=nè=d $\hat{\varepsilon} \quad$ Pătwع? mó $y w a ̀=t h a ́=d \grave{\varepsilon}$ ground wet=PROG=AN for rain fall=RES=RLS
 ground wet=PROG=AN for rain fall=RES=NMLZ be=IRR
$(2-1-4-1-\mathrm{g}){ }^{*}$ myèjí $\quad$ sò=nè=d $\quad$ shò= $d \hat{\jmath} \quad$ mó $y w a ̀=t h a ́=d \grave{\varepsilon}$ ground wet=PROG=RLS say=because rain fall=RES=RLS
(2-1-4-1-g)' myèjí sò=nè=de $\quad s h o ̀=d \hat{s} \quad m o ́ \quad y w a ̀=t h a ́=d a ̀ \quad p h y i p=m e ̀$ ground wet=PROG=RLS say=because rain fall=RES=NMLZ be=IRR
(2-1-4-2) Because he is alive, the doctor saved him.
Intended meaning: BECAUSE he is alive, I GUESS/SUPPOSE/INFER/ CONCLUDE THAT the doctor saved him.

3sG life alive=PROG=NMLZ=with doctor save=CMP=RLS
(2-1-4-2-a), *tù Pățe? $\operatorname{cìN=nè=dà=n\hat {\varepsilon }\quad \text {shăyàwùn}k\grave {\varepsilon }=laiP=tà~}$ 3sG life alive=PROG=NMLZ=with doctor $\quad$ save $=C M P=$ NMLZ phyi?=mè
be=IRR

3SG life alive= $\mathrm{PROG}=$ because doctor save $=$ CMP=RLS
 3SG life alive=PROG=because doctor save=CMP=NMLZ be=IRR
(2-1-4-2-c) *țù २ățe? $\operatorname{civ}=n e ̀=d \hat{\jmath} \quad$ shăyàwùn $k \varepsilon ̀=l a i P=t \varepsilon ̀$
3sG life alive=PROG=because doctor save=CMP=RLS

3sG life alive=PROG=because doctor save=CMP=NMLZ be=IRR

3SG life alive=PROG=NMLZ=because.of doctor save=CMP=RLS

3sG life alive=PROG=NMLZ=because.of doctor save=CMP=NMLZ
phyi? $=m \grave{\varepsilon}$
be=IRR

3sG life alive=PROG=NMLZ=because.of doctor $\quad$ save $=C M P=$ RLS

3sG life alive=PROG=NMLZ=because.of doctor save=CMP=NMLZ phyi?=mè
be=IRR


3sG life alive=PROG=AN for doctor save=CMP=NMLZ
phyi? $=m \grave{\varepsilon}$
be=IRR

3SG life alive=PROG=RLS say=because doctor save=CMP=RLS

3sG life alive=PROG=RLS say=because doctor save=CMP=NMLZ
phyi?=mè
be $=$ IRR

### 4.5 Causals Level V

Subordinate clause: premise. Main clause: speech act.
At Level V, all the seven CLMs for causals are unacceptable. Neither of the questionnaire sentences can be expressed with a single sentence. Each questionnaire sentence has to be expressed by the use of two separate sentences. See (22) and (23). Note that, in each of them, the second sentence contains an expression for "I am saying (this)".
(2-1-5-1) There is food here, because you are looking for food.
Intended meaning: BECAUSE you are looking for food, I SAY TO YOU
'There is food here'.

2SG look.for=NMLZ=with here=at food exist=RLS SFP
(2-1-5-1-b) ${ }^{*}$ mín $6 a ̀=n e ̀=l o ̂ \quad d i ̀=h m a ̀ ~ s a ́ z a ̆ y a ̀ ~ 6 i=d e ̀ ~ l e ̀ ~$
2sG look.for=because here=at food exist=RLS SFP
(2-1-5-1-c) *míN $\quad$ à =nè=dô dì=hmà sázăyà $6 \hat{\imath}=d \grave{\varepsilon} \quad$ lè
2SG look.for=because here=at food exist=RLS SFP
(2-1-5-1-d) *mín $\epsilon \grave{a}=n e ̀=d \grave{a}=j a ̂ u n \quad$ dì=hmà sázăyà $6 \hat{\imath}=d \grave{\varepsilon} \quad$ lè
2SG look.for=NMLZ=because.of here=at food exist=RLS SFP
(2-1-5-1-e) ${ }^{*}$ mín $6 \grave{a}=n e ̀=d a ̀=m o ̂ \quad d i ̀=h m a ̀ ~ s a ́ z a ̆ y a ̀ ~ 6 \hat{l}=d e ̀ ~ l e ̀ ~$
2SG look.for=NMLZ=because.of here=at food exist=RLS SFP
(2-1-5-1-f) ${ }^{*}$ mín $6 \grave{a}=n e ̀=d \hat{\varepsilon} \quad$ Pătwe? dì=hmà sázăyà $6 \hat{\imath}=d \grave{\varepsilon} \quad$ lè
2SG look.for=PROG=AN for here=at food exist=RLS SFP
(2-1-5-1-g) *mín 6 à=nè=dè shò=d̂̂ dì=hmà sázăyà $6 \hat{\imath}=d \grave{\varepsilon} \quad$ lè 2SG look.for=PROG=RLS say=because here=at food exist=RLS SFP
(22) dì=hmà sázăyà $6 \hat{\imath}=d \grave{\varepsilon}$ lè. míN $\epsilon \grave{a}=n e ̀=l o ̂ \quad p y \bar{o}=d a ̀=b a ̀$ here=at food exist=RLS SFP 2SG look.for=PROG=because say=NMLZ=POL 'There is food here. I am saying (this) because you are looking for food.'
(2-1-5-2) There is water here, because you are/look thirsty.
Intended meaning: BECAUSE you are/look thirsty, I SAY TO YOU ‘There is water here'.
(2-1-5-2-a) *mín yè shà=nè-bòun $\quad y \hat{a}=d \grave{a}=n \hat{\varepsilon} \quad d i ̀=h m a ̀ ~ y e ̀ ~ 6 \hat{\imath}=d \grave{\varepsilon}$ 2SG thirsty=PROG-shape get=NMLZ=with here=at water exist=RLS lè SFP
(2-1-5-2-b) *mín yè shà=nè-bòun $\quad y \hat{a}=l o ̂ \quad d i ̀=h m a ̀ ~ y e ̀ ~ 6 \hat{l}=d \grave{\varepsilon} \quad l e ̀ ~$ 2SG thirsty=PROG-shape get=because here=at water exist=RLS SFP
(2-1-5-2-c) *mín yè shà=nè-bòun $\quad y \hat{a}=d \hat{\jmath} \quad d i ̀=h m a ̀ ~ y e ̀ ~ 6 \hat{\imath}=d \check{\varepsilon} \quad$ lè 2SG thirsty=PROG-shape get=because here=at water exist=RLS SFP
(2-1-5-2-d) *mín yè shà=nè-bòun $\quad y \hat{a}=d a ̀=j a ̂ u n \quad d i ̀=h m a ̀ ~ y e ̀ ~$ 2SG thirsty=PROG-shape get=NMLZ=because.of here=at water 6î=dè lè exist=RLS SFP
(2-1-5-2-e) *mín yè shà=nè-bòun $\quad y \hat{a}=d a ̀=m o ̂ \quad d i ̀=h m a ̀ ~ y e ̀ ~$ 2SG thirsty=PROG-shape get=NMLZ=because.of here=at water $6 \hat{\imath}=d \bar{\varepsilon} \quad l e ̀$ exist=RLS SFP
(2-1-5-2-f) *mín yè shà=nè-bòun $\quad y \hat{a}=d \hat{\varepsilon} \quad$ Pătw $? ~ d i ̀=h m a ̀ ~ y e ̀ ~ 6 \hat{\imath}=d \grave{\varepsilon} \quad$ lè 2SG thirsty=PROG-shape get=AN for here=at water exist=RLS SFP
(2-1-5-2-g) *mín yè shà=nè-bòun $\quad y \hat{a}=d \grave{\varepsilon} \quad$ shò=d̂̀ $\quad d i ̂=h m a ̀ ~ y e ̀ ~$ 2SG thirsty=PROG-shape get=RLS say=because here=at water $6 \hat{\imath}=d \bar{\varepsilon} \quad l e ̀$ exist=RLS SFP
(23) dì=hmà yè $6 \hat{\imath}=d \grave{\varepsilon} \quad$ lè. mín yè shà=nè-bòun $y \hat{a}=l \hat{o}$ here=at water exist=RLS SFP 2SG thirsty=PROG-shape get=because $p y \grave{j}=d \grave{a}=b \grave{a}$
say $=$ NMLZ $=$ POL
'There is water here. I am saying (this) because you look thirsty.'
(22) and (23) contain the sentence-final particle lè. This is the only sentence-final particle that occurs in the present work. It may be translated as 'you see' or 'as you know'. Sentence-final particles and verb sentence markers (cf. Section 2) behave alike in that both occur sentence-finally. However, they differ in the following respects. Verb sentence markers occur in verb sentences only, and the verb (either in a simple sentence or in the main clause of a complex sentence) is obligatorily followed by a verb sentence marker. Sentence-final particles occur in verb sentences and also in other sentences, and their presence is not obligatory. (22) and (23) sound natural when the sentence-final particle lè is included. Nonetheless, they do not become unacceptable even when lè is absent.

Both (22) and (23) involve the CLM =lô 'because'. Other causal CLMs do not seem to sound natural in sentences like (22) or (23). The cause for this difference between =lô and the other causals CLMs is not known for certain. Nonetheless, it may possibly be that, to express an excuse or the like, =lô 'because' is used.

To sum up the discussion of causals, $=t \grave{a} /=d \grave{a}=n \hat{\varepsilon}$ is acceptable at Levels I and II only. The CLMs $=l \hat{o},=t \hat{\jmath} /=d \hat{\jmath}$ and $=t a ̀ /=d \grave{a}=j \hat{a} u n$ are perfectly acceptable at Levels I to III. At Level IV, they are unacceptable by themselves, but they become marginally acceptable if they are used with $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i \hat{\imath}=m \grave{\varepsilon}$ 'It would be the case that [...]', which indicates the speaker's judgment. The CLMs $\{\mathrm{V}=t a ̀ /=d a ̀$ or $\mathrm{V}=h m a ̀\}$ $=m o ̂ l \hat{o},\{\mathrm{~V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ २ătw ?, and shò=d̂̂ are perfectly acceptable at Levels I to III. At Level IV, they are unacceptable by themselves, but they become acceptable if they are used with $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i \hat{i}=m \grave{\varepsilon}$. At Level V , all of the causal CLMs are unacceptable. Each questionnaire sentence can be expressed by the use of two separate sentences. See (22) and (23). In each of them, the second sentence contains an expression for "I am saying (this)".

## 5 Conditionals

Conditionals can be expressed by the three CLMs shown in Table 6.
Semantic differences among these CLMs are difficult to grasp. All of them are acceptable at all levels except Level IV, where they are unacceptable unless they are used with an expression indicating the speaker's judgment.

Tab. 6: Clause-linkage markers for conditionals.

| CLM | Type | Number in 3.2 |
| :--- | :--- | :--- |
| $\mathrm{V}=y \grave{n}$ | (a) | $[1-3]$ |
| $\mathrm{V}=l \hat{o ̂}$ î̀=yìn | (f) | $[6-1]$ |
| C shò=yìn | (e) | $[5-2]$ |

### 5.1 Conditionals Level I

Subordinate clause: situation. Main clause: situation.

At Level I, all the three CLMs for conditionals are acceptable.
(2-2-1-1) If spring comes, flowers bloom.
(2-2-1-1-a) nwè?ú yaup=yìs pán $\quad$ pwîn=dè
spring arrive=if flower open=RLS
(2-2-1-1-b) nwè̀ú yaup=lô $\quad$ 七̂̀=yìn pán $p w i ̂ N=d \grave{\varepsilon}$
spring arrive=ACM exist=if flower open=RLS
(2-2-1-1-c) nwè?ú yaup=tè shò=yìn pán $\quad p w i ̂ N=d \grave{\varepsilon}$ spring arrive=RLS say=if flower open=RLS
(2-2-1-2) If rain falls, I always stay in the house.
 rain fall=if 1 SG always house=at exist=PROG=RLS
(2-2-1-2-b) mó ywà=lô 6̂̂=yìn $\eta$ à Rămyź $d a ́ n ~ R e ̀ i n=h m a ̀ ~ 6 ̂=n e ̀=d e ̀ ~$ rain fall=ACM exist=if 1SG always house=at exist=PROG=RLS
(2-2-1-2-c) mó ywà=dè shò=yìn ךà PămyźdáN Rèiv=hmà $6 \hat{\imath}=n e ̀=d \grave{\varepsilon}$ rain fall=RLS say=if 1SG always house=at exist=PROG=RLS

### 5.2 Conditionals Level II

Subordinate clause: situation. Main clause: situation + judgment.

At Level II, all the three CLMs for conditionals are acceptable.
(2-2-2-1) If rain falls tomorrow, he has to stay in the house.
(2-2-2-1-a) mănع?phyàn mó ywà=yìn tù Pèin=hmà nè=y $\hat{a}=m \grave{\varepsilon}$ tomorrow rain fall=if 3sG house=at stay=have.to=IRR
(2-2-2-1-b) mănc?phyàn mó ywà=lô 6̂=yìn tù Pèin=hmà nè=yâ=mè tomorrow rain fall=ACM exist=if 3sG house=at stay=have.to=IRR
(2-2-2-1-c) măne?phyàn mó ywà=dè shò=yìn tù جèin=hmà nè=yâ=mè tomorrow rain fall=RLS say=if 3SG house=at stay=have.to=IRR
(2-2-2-2) If the child becomes hungry, he/she will surely cry.
(2-2-2-2-a) khălé baip shà=yìn $\eta o ̀=l e ̂ i n=m e ̀$
child hungry=if cry=surely=RLS
(2-2-2-2-b) khălé baî shà=lô $\quad$ î=yìn $\eta o ̀=l e ̂ i n=m \varepsilon ̀ ~$
child hungry=ACM exist=if cry=surely=RLS
(2-2-2-2-c) khălé baỉ shà=dè shò=yìn $\eta o ̀=l e ̂ i n=m e ̀$
child hungry=RLS say=if cry=surely=RLS

### 5.3 Conditionals Level III

Subordinate clause: situation. Main clause: situation + interpersonal effect.

At Level III, all the three CLMs for conditionals are acceptable.
(2-2-3-1) Don't go out if rain falls.
(2-2-3-1-a) mó ywà=yìn Răpyìn mă-thw $3=n \hat{\varepsilon}$
rain fall=if outside not-go.out=PROH
(2-2-3-1-b) mó ywà $=l o ̂$ $6 \hat{1}=y i ̀ n ~$ حăpyìn mă-thwe? $=n \hat{\varepsilon}$ rain fall=ACM exist=if outside not-go.out=PROH
(2-2-3-1-c) mó $y w a ̀=d \varepsilon ̀ ~ s h o ̀=y i ̀ n ~ R a ̆ p y i ̀ n ~ m a ̆-t h w \varepsilon ?=n \hat{\varepsilon}$ rain fall=RLS say=if outside not-go.out=PROH
(2-2-3-2) Give the child food if he/she becomes hungry.
(2-2-3-2-a) khălé baî shà=yìs sázăyà cwé=bà=Ø
child hungry=if food feed=POL=IMP
(2-2-3-2-b) khălé baip shà=lô 6î=yìn sázăyà cwé=bà=Ø child hungry=ACM exist=if food feed=POL=IMP
(2-2-3-2-c) khălé baî shà=dè shò=yìs sázăyà cwé=bà=Ø
child hungry=RLS say=if food feed=POL=IMP

### 5.4 Conditionals Level IV

Subordinate clause: premise. Main clause: judgment.

At Level IV, literal translations of the questionnaire sentences are unacceptable; see ( $2-2-4-1-\mathrm{a},-\mathrm{b},-\mathrm{c}$ ) and ( $2-2-4-2-\mathrm{a},-\mathrm{b},-\mathrm{c}$ ). However, the addition of $\mathrm{V}=t a ̀ /=$ dà $p h y i ?$ $=m \grave{\varepsilon}$ 'it would be the case that' (see Table 5) in the main clause makes all of these sentences acceptable, as is the case with causal CLMs at Level IV (cf. 4.4). See
(2-2-4-1-a', -b', -c') and (2-2-4-2-a', -b', -c'). The expression $V=t a ̀ /=d a ̀ p h y i ?=m e ̀ ~ i n d i-~$ cates the speaker's judgement.

Examples follow. (2-2-4-1-a'), for example, means 'If the ground is wet, it would be the case that the rain fell'.
(2-2-4-1) If the ground is wet, rain fell.
Intended meaning: IF the ground is wet, I GUESS/SUPPOSE/INFER/ CONCLUDE THAT rain fell.
(2-2-4-1-a) *myèjí sò=nè=yìn mó $y w a ̀=t h a ́=d \grave{\varepsilon}$ ground wet=PROG=if rain fall=RES=RLS
(2-2-4-1-a)' myèjí sò=nè=yìn mó ywà=thá=dà phyi?=mè ground wet=PROG=if rain fall=RES=NMLZ be=IRR
(2-2-4-1-b) *myèjí sò=nè=lô $\quad$ t̂=yìn mó $y w a ̀=t h a ́=d e ̀ ~$ ground wet=PROG=ACM exist=if rain fall=RES=RLS
 ground wet=PROG=ACM exist=if rain fall=RES=NMLZ be=IRR
 ground wet=PROG=RLS say=if rain fall=RES=RLS
(2-2-4-1-c)' myèjí sò=nè=dè shò=yìn mó ywà=thá=dà phyip=mè ground wet=PROG=RLS say=if rain fall=RES=NMLZ be=IRR
(2-2-4-2) If the child is crying, he/she is hungry. Intended meaning: IF the child is crying, I GUESS/SUPPOSE/INFER/ CONCLUDE THAT he/she is hungry.
 child cry=PROG=if hungry=RLS
(2-2-4-2-a)' khălé $\eta o ̀=n e ̀=y i ̀ n ~ b a i ̂ ~ s h a ̀=d a ̀ ~ p h y i ?=m e ̀ ~$ child cry=PROG=if hungry=NMLZ be $=$ IRR

child cry=PROG=ACM exist=if hungry=RLS
(2-2-4-2-b)' khălé $\eta o ̀=n e ̀=l o ̂ \quad ~ \quad \hat{\imath}=y i ̀ n ~ b a i ̉ ~ s h a ̀=d a ̀ ~ p h y i p=m e ̀ ~$
child $\mathrm{cry}=\mathrm{PROG}=\mathrm{ACM}$ exist=if hungry=$=\mathrm{NMLZ}$ be=IRR
(2-2-4-2-c) ${ }^{*}$ khălé $\eta o ̀=n e ̀=d \grave{\varepsilon} \quad$ shò=yìn baỉ shà $=d \grave{\varepsilon}$
child cry=PROG=RLS say=if hungry=RLS
(2-2-4-2-c)' khălé $\eta o ̀=n e ̀=d \grave{\varepsilon} \quad$ shò=yìn baip shà=dà phyỉ=mè child cry=PROG=RLS say=if hungry=NMLZ be=IRR

### 5.5 Conditionals Level V

Subordinate clause: premise. Main clause: speech act.

At Level V, all the three CLMs for conditionals are acceptable.
(2-2-5-1) There is an umbrella here, if rain is falling.
Intended meaning: IF rain is falling, I SAY TO YOU THAT there is an umbrella here.
(2-2-5-1-a) mó ywà=nè=yìn dì=hmà thí $\quad$ î=dè rain fall=PROG=if here=at umbrella exist=RLS
(2-2-5-1-b) mó $y w a ̀=n e ̀=l o ̂ \quad ~ 6 \hat{\mathbf{\imath}}=y i ̀ n ~ d i ̀=h m a ̀ ~ t h i ́ ~ \quad ~ 6 \hat{\imath}=d \grave{\varepsilon}$ rain fall=PROG=ACM exist=if here=at umbrella exist=RLS
(2-2-5-1-c) mó $y w a ̀=n e ̀=d \grave{\varepsilon} \quad s h o ̀=y i ̀ n ~ d i ̀=h m a ̀ ~ t h i ́ ~ \quad ~ 6 \hat{\imath}=d \grave{~}$
rain fall=PROG=RLS say=if here=at umbrella exist=RLS
(2-2-5-2) There is food here, if you are hungry.
Intended meaning: IF you are hungry, I SAY TO YOU THAT there is food here.
(2-2-5-2-a) baî shà=nè=yìn dì=hmà sázăyà $6 \hat{\imath}=d \varepsilon$ hungry=PROG=if here=at food exist=RLS
(2-2-5-2-b) baî shà=nè=lô $\quad$ cî=yìn dì=hmà sázăyà $6 \hat{\imath}=d \grave{\varepsilon}$ hungry=PROG=ACM exist=if here=at food exist=RLS
(2-2-5-2-c) baỉ shà=nè=dè shò=yìn dì=hmà sázăyà $6 \hat{\imath}=d \grave{\varepsilon}$ hungry=PROG=RLS say=if here=at food exist=RLS

To sum up the discussion of conditionals, all the three conditional CLMs are acceptable at Levels I, II, III, and V. At Level IV, they are unacceptable by themselves, but they become acceptable if the main clause contains $\mathrm{V}=t a ̀ /=d a ̀ p h y i p=m \grave{\varepsilon}$ 'it would be the case that', which indicates the speaker's judgement.

## 6 Concessives

Concessives can be expressed by the three CLMs shown in Table 7.
Semantic differences among these CLMs are difficult to grasp. Nonetheless, these CLMs can be divided into two groups regarding their acceptability in terms of the five levels. The CLM $-y \varepsilon P t{ }_{n} \alpha=n \hat{\varepsilon}$ is perfectly acceptable at Level I, acceptable under a limited circumstance at Level II, and unacceptable at Levels III to V. To be

Tab. 7: Clause-linkage markers for concessives.

| CLM | Type | Number in 3.2 |
| :---: | :---: | :---: |
| V-yहアtáa $=n \hat{\varepsilon}$ | (b) | [2-1] |
| $\mathrm{V}=\mathrm{pèm} \hat{\varepsilon} /=$ bèm $\hat{\varepsilon}$ | (a) | [1-4] |
| C shò=bèm $\hat{\varepsilon}$ | (e) | [5-3] |

specific, at Level II, $-y \varepsilon P t \underset{\sim}{a}=n \hat{\varepsilon}$ is acceptable when the verb in the main clause is volitional and unacceptable when the main-clause verb is non-voltional. In contrast, irrespective of whether the main-clause verb is volitional or not, $-y \varepsilon 2 t \underset{d}{ }=n \hat{\varepsilon}$ is acceptable at Level I and unacceptable at Levels III to V. At Level IV, it does not become acceptable even if the main clause contains $\mathrm{V}=t \grave{a} /=d \grave{a} p h y i ?=m \grave{\varepsilon}$ 'it would be the case that', an expression which indicates the speaker's judgment. The other two CLMs are acceptable at all the levels except Level IV, where they become acceptable if they are used with an expression indicating the speaker's judgment. Thus, $=p e ̀ m \hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and shò=bèm $\hat{\varepsilon}$ have a wider distribution than $-y \varepsilon ? t{ }_{n} \dot{a}=n \hat{\varepsilon}$.

### 6.1 Concessives Level I

Subordinate clause: situation. Main clause: situation.

At Level I, all the three concessive CLMs are acceptable.
(2-3-1-1) Although rain fell, the ground is dry.
(2-3-1-1-a) mó $y w a ̀=t h a ́-y \varepsilon P t+a ́=n \hat{\varepsilon} \quad m y e ̀ j i ́ ~ c h a u p=n e ̀=d \grave{\varepsilon}$
rain fall=RES-although=with ground dry=PROG=RLS
(2-3-1-1-b) mó $y w a ̀=t h a ́=b e ̀ m \hat{\varepsilon} \quad m y e ̀ j i ́ ~ c h a u p=n e ̀=d e ̀ ~$ rain fall=RES=although ground dry=PROG=RLS
(2-3-1-1-c) mó $y w a ̀=t h a ́=d \grave{\varepsilon}$ shò=bèm $\hat{\varepsilon} \quad m y e ̀ j i ́ ~ c h a u p=n e ̀=d ~ c ̀ ~$ rain fall=RES=RLS say=although ground dry=PROG=RLS
(2-3-1-2) Although rain was falling, he went out.

(2-3-1-2-b) mó $y w a ̀=n e ̀=b e ̀ m \hat{\varepsilon} \quad$ țù Păpyìn thw $1=t \grave{\varepsilon}$ rain fall=PROG=although 3sG outside go.out=RLS
 rain fall=PROG=RLS say=although 3SG outside go.out=RLS

### 6.2 Concessives Level II

Subordinate clause: situation. Main clause: situation + judgment.

At Level II, =pèm $\hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and shò=bèm $\hat{\varepsilon}$ are acceptable, apparently with no restriction. On the other hand, there is a restriction on the use of $-y \varepsilon ? t \underline{a}=n \hat{\varepsilon}$ at Level II. Of the two sentences using $-y \varepsilon ? t{ }_{n} a=n \hat{\varepsilon}$, (2-3-2-1-a) ('Although rain fell, the ground may be dry') is unacceptable, whereas (2-3-2-2-a) ('Although the rain stopped, he has to stay in the house') is acceptable. The difference is in the volitionality of the verb. (For volitionality in Burmese, see Kato 2010: 47-50.) When the verb in the main clause is volitional, the sentence is acceptable; however, when it is non-volitional, the sentence is unacceptable. (2-3-2-1-a) is unacceptable because chau? 'dry' is a non-volitional verb. On the other hand, (24) and (25) are acceptable because nè 'stay' and thwe? 'go out' are both volitional verbs. (2-3-2-2-a), too, is acceptable because nè 'stay' is a volitional verb.
(2-3-2-1) Although rain fell, the ground may be dry.

The idiomatic expression $\mathrm{V}=y i ̀ n \mathrm{~V}=m \grave{\varepsilon}$ has an epistemic meaning: 'may VERB, probably will VERB’.
(2-3-2-1-a) *mó $y w a ̀=t h a ́-y \varepsilon ? t \underset{a}{l}=n \hat{\varepsilon} \quad$ myèjí chau?=yìn chaup=nè=mè rain fall=RES-although=with ground dry $=$ if $\quad d r y=P R O G=I R R$
(2-3-2-1-b) mó ywà=thá=bèm $\hat{\varepsilon} \quad$ myèjí chaup=yìs chaup=nè=mè rain fall=RES=although ground dry=if dry=PROG=IRR
(2-3-2-1-c) mó ywà=thá=d ह̀ shò=bèm $\hat{\varepsilon} \quad$ myèjí chau?=yìn chaup=nè=mè rain fall=RES=RLS say=although ground dry=if dry=PROG=IRR
(24) mó teî ț twá-yc?tráan $n \hat{\varepsilon}$ țù Rèin=hmà nè=yìn nè=mè rain stop go-although=with 3 SG house=at stay=if stay=IRR 'Although the rain has stopped, he will probably stay at home.'
 rain fall=PROG-although=with 3SG outside go.out=if go.out=IRR 'Although rain is falling, he will probably go outside.'
(2-3-2-2) Although the rain stopped, he has to stay in the house.

```
(2-3-2-2-a) mó teiP=trwá-y\varepsilonPtáa}=n\hat{\varepsilon}\mathrm{ ttù PèiN=hmà nè=yâ=mè
    rain stop=go=although=with 3sG house=at stay=have.to=IRR
(2-3-2-2-b) mó teiP=trwá=bèm\hat{\varepsilon}}\mathrm{ ttù RèiN=hmà nè=yâ=mè
    rain stop=go=although 3sG house=at stay=have.to=IRR
```

```
(2-3-2-2-c) mó tei२=twá=d\varepsiloǹ shò=bèm\hat{\varepsilon}}\mathrm{ tù \èiN=hmà nè=y 人}=m\grave{\varepsilon
    rain stop=go=RLS say=although 3SG house=at stay=have.to=IRR
```


### 6.3 Concessives Level III

Subordinate clause: situation. Main clause: situation + interpersonal effect.

At Level III, sentences with -yع?țáa $n \hat{\varepsilon}$, e.g. (2-3-3-1-a) and (2-3-3-2-a), are unacceptable - even if the verb is volitional; this is in contrast with Level II. Sentences with $=p e ̀ m \hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and those with shò=bèm $\hat{\varepsilon}$ are acceptable.
(2-3-3-1) Let's go out although rain is falling.
(2-3-3-1-a) *mó ywà=nè-yع?táá=n $\quad$ Păpyìn thw ? $=c \hat{a}=y a ̂ P a ̀ u n ~$ rain fall=PROG=although=with outside go.out=PL=let's
(2-3-3-1-b) mó $y w a ̀=n e ̀=b e ̀ m \hat{\varepsilon} \quad$ Păpyìn thw $\mathcal{R}=c \hat{a}=y \hat{a}\{a ̀ u n$ rain fall=PROG=although outside go.out=PL=let's
(2-3-3-1-c) mó $y w a ̀=n e ̀=d e ̀ ~ s h o ̀=b e ̀ m \hat{\varepsilon} \quad$ Păpyìn thw $?=c \hat{a}=y a ̂ P a ̀ u s ~$ rain fall=PROG=RLS say=although outside go.out=PL=let's
(2-3-3-2) Stay in the house although the rain stopped.
(2-3-3-2-a) *mó teiß=țwá-yع?táa $=n \hat{\varepsilon} \quad$ Pèin=hmà nè=bà= $=$ rain stop=go=although=with house=at stay=POL=IMP
(2-3-3-2-b) mó teỉ=țwá=bèmê $\quad$ २èin=hmà nè=bà $=\emptyset$ rain stop=go=although house=at stay=POL=IMP
(2-3-3-2-c) mó teip=twá=dè shò=bèmê $\quad$ Rèin=hmà nè=bà=Ø rain stop=go=RLS say=although house=at stay=POL=IMP

### 6.4 Concessives Level IV

Subordinate clause: premise. Main clause: judgment.

At Level IV, literal translations of the questionnaire sentences are unacceptable; see ( $2-3-4-1-a,-b,-c$ ) and ( $2-3-4-2-a,-b,-c$ ). However, if an expression that denotes the speaker's judgment is used in the main clause, sentences with $=p e ̀ m \hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and shò=bèm $\hat{\varepsilon}$ become acceptable, as is the case with causal and conditional CLMs at Level IV (see 4.4 and 5.4). For an expression that denotes the speaker's judgment, I use $\mathrm{V}=t a ̀ /=d a ̀ ~ m a ̆-h o u ?=p h u ́$ 'it is not the case that', which is the corresponding negative form of $\mathrm{V}=t \grave{a} /=$ dà $p h y i\}=m \grave{\varepsilon}$ (see Table 5). The verb houp 'to be
so' has to be used in negation of the verb phyi? 'to be'. Additionally, we shall examine sentences that contain ' $\mathrm{V}=t \grave{a} /=d a ̀ p h y i \overrightarrow{ }=m \grave{\varepsilon}$ ' 'it would be the case that'; see ( $\left.2-3-4-2^{\prime}-a^{\prime},-b \prime,-c^{\prime}\right)$. Sentences with $=p e ̀ m \hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and those with shò=bèm $\hat{\varepsilon}$ become acceptable if they are used with either of these expressions; see (2-3-4-1-b, $\left.-c^{\prime}\right)$, (2-3-4-2-b’, -c') and (2-3-4-2'-b’, -c'). In contrast, sentences with -y\&?tráa $n \hat{\varepsilon}$ are unacceptable even when they are used with either of these expressions; see (2-3-4-1-a'), (2-3-4-2-a') and (2-3-4-2'-a').

Examples follow. The intended meaning of ( $2-3-4-1-a$ '), for example, is 'Although the doctor ${ }_{i}$ saved his/her ${ }_{j}$ life, it is not the case that $\left[t h e y_{k}\right]$ sent for that [doctor ${ }_{\mathrm{i}}$ ]'.
(2-3-4-1) Although the doctor saved/cured him, he had not been sent for. Intended meaning: ALTHOUGH the doctor saved/cured him, I GUESS/ SUPPOSE/INFER/CONCLUDE THAT the he had not been sent for.
 doctor=KA 3sG life=Ko save=CMP=although=with that for mă-hlup=phú
not-send=NEG

doctor=KA 3SG life=KO save=CMP=although=with that for hlup=tà mă-houp=phú
send=NMLZ not-be.so=NEG
(2-3-4-1-b) *shăyàwùn=gâ țû PătृॄP=kò kè=laiP=pèmê Pédì Pătwe?
doctor=KA 3sG life=Ko save=CMP=although that for
mă-hlu?=phú
not-send=NEG

doctor=KA 3sG life=KO save=CMP=although that for hlup=tà mă-houp=phú
send=NMLZ not-be.so=NEG
 doctor=KA 3SG life=KO save=CMP=RLS say=although that २ătwع? mă-hlup=phú
for not-send=NEG
 doctor=KA 3sG life=KO save=CMP=RLS say=although that Pătwe? hlup=tà mă-houp=phú
for send=NMLZ not-be.so=NEG
(2-3-4-2) Although the ground is wet, rain did not fall. Intended meaning: ALTHOUGH the ground is wet, I GUESS/SUPPOSE/ INFER/CONCLUDE THAT rain did not fall.
(2-3-4-2-a) *myèjí sò=nè-yદ?ttá=n $\hat{\varepsilon} \quad$ mó $m a ̆-y w a ̀=b u ́ ~$
ground wet=PROG=although=with rain not-fall=NEG
(2-3-4-2-a) ${ }^{*}$ *myèjí sò=nè-ycPt $t \dot{a}=n \hat{\varepsilon} \quad$ mó $y w a ̀=t h a ́=d \grave{a}$ ground wet=PROG=although=with rain fall=RES=NMLZ
mă-hour=phú
not-be.so=NEG
(2-3-4-2-b) *myèjí sò=nè=bèmê mó mă-ywà=bú ground wet=PROG=although rain not-fall=NEG
(2-3-4-2-b)' myèjí sò=nè=bèmê mó ywà=thá=dà mă-houp=phú ground wet=PROG=although rain fall=RES=NMLZ not-be.so=NEG
(2-3-4-2-c) *myèjí sò=nè=dè shò=bèm $\hat{\varepsilon} \quad m o ́ \quad m a ̆-y w a ̀=b u ́ ~$ ground wet=PROG=RLS say=although rain not-fall=NEG
(2-3-4-2-c)' myèjí sò=nè=dè shò=bèm $\hat{\varepsilon} \quad$ mó $y w a ̀=t h a ́=d a ̀ ~$
ground wet=PROG=RLS say=although rain fall=RES=NMLZ
mă-houp=phú
not-be.so=NEG

Questionnaire sentences (2-3-4-1) and (2-3-4-2) both have a negative clause as their main clause: "he had not been sent for" in (2-3-4-1) and "rain did not fall" in (2-3-4-2). It will be useful also to examine a sentence with an affirmative main clause, because the negative expression $\mathrm{V}=t a ̀ /=d a ̀ m a ̆-h o u ?=p h u ́$ 'it is not the case that' (cf. ( $2-3-4-1-a^{\prime},-b^{\prime},-c^{\prime}$ ) and ( $\left.2-3-4-2-a^{\prime}, b^{\prime}, c^{\prime}\right)$ ) uses a different verb from the affirmative $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i p=m \grave{\varepsilon}$ 'it would be the case that', which we employed in 4.4 and 5.4 , and also because $\mathrm{V}=t a ̀ /=d a ̀ ~ m a ̆-h o u p=p h u ́ ~ d o e s ~ n o t ~ s h o w ~ a ~ r e a l i s-~$ irrealis opposition. See Table 1 and 2-[4] for the neutralization of the realis-irrealis opposition in the use of the negative verb sentence marker $=p h u ́ /=b u ́$. As a sample with an affirmative main clause, I composed an additional English questionnaire sentence, shown in (2-3-4-2)' below, on the basis of (2-3-4-2). The results of the tests using this sentence are the same as those we have already seen for (2-3-4-1) and (2-3-4-2). That is, literal translations of (2-3-4-2)' are unacceptable; see ( $2-3-4-2^{\prime}-\mathrm{a},-\mathrm{b}$, -c). However, sentences involving =pèm $\hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and those with shò=bèm $\hat{\varepsilon}$ become acceptable if they are used with $\mathrm{V}=t \grave{a} /=d a ̀ ~ p h y i \overrightarrow{ }=m \grave{\varepsilon}$ 'it would be the case that', an expression indicating the speaker's judgment; see ( $2-3-4-2^{\prime}-b$ ', -c'). The sentence with $-y \varepsilon$ ? tá $a=n \hat{\varepsilon}$ does not become acceptable even if it is used with $\mathrm{V}=t a ̀ /=d a ̀ p h y i ?$ $=m \grave{\varepsilon}$; see ( $2-3-4-2^{\prime}-a^{\prime}$ ). This suggests that the polarity in the main clause does not affect the acceptability/unacceptability of these CLMs (as far as Level IV is concerned).

Examples follow. The intended meaning of ( $2-3-4-2$ '-a'), for example, is 'Although the ground is dry, it would be the case that the rain fell'.
(2-3-4-2)'Although the ground is dry, rain fell.
Intended meaning: ALTHOUGH the ground is dry, I GUESS/SUPPOSE/ INFER/CONCLUDE THAT rain fell.
(2-3-4-2'-a) *myèjí chauP=nè-ycPtráa $=n \hat{\varepsilon} \quad$ mó $y w a ̀=t h a ́=d \grave{\varepsilon}$ ground dry=PROG=although=with rain fall=RES=RLS
 ground dry=PROG=although=with rain fall=RES=NMLZ be=IRR
(2-3-4-2’-b) *myèjí chaup=nè=bèm $\hat{\varepsilon} \quad$ mó $y w a ̀=t h a ́=d \grave{\varepsilon}$
ground dry=PROG=although rain fall=RES=RLS
(2-3-4-2'-b)' myèjí chaup=nè=bèm $\hat{\varepsilon} \quad$ mó $y w a ̀=t h a ́=d a ̀ \quad p h y i P=m \varepsilon ̀ ~$ ground dry=PROG=although rain fall=RES=NMLZ be=IRR
(2-3-4-2’-c) *myèjí chaup=nè=dè shò=bèm $\hat{\varepsilon} \quad$ mó $y w a ̀=t h a ́=d \grave{\varepsilon}$ ground dry=PROG=RLS say=although rain fall=RES=RLS
(2-3-4-2'-c)' myèjí chaup=nè=d $\quad$ shò=bèm $\hat{\varepsilon} \quad$ mó $y w a ̀=t h a ́=d a ̀ ~ p h y i P=m \varepsilon ̀ ~$ ground dry=PROG=RLS say=although rain fall=RES=NMLZ be=IRR

### 6.5 Concessives Level V

Subordinate clause: premise. Main clause: speech act.

At Level V, the sentences with -yعPt $\hat{d}=n \hat{\varepsilon}$, namely ( $2-3-5-1-\mathrm{a}$ ) and (2-3-5-2-a), are unacceptable, while those with $=p e ̀ m \hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and those with shò=bèm $\hat{\varepsilon}$ are acceptable.
(2-3-5-1) There is food here, although you know this.
Intended meaning: ALTHOUGH you know this, I SAY TO YOU 'There is food here'.

2SG know=although=with here=at food exist=RLS SFP
(2-3-5-1-b) mín tî=bèmê dì=hmà sázăyà $6 \hat{\imath}=d \varepsilon$ è lè
2SG know=although here=at food exist=RLS SFP
(2-3-5-1-c) mín țî=dè shò=bèmê dì=hmà sázăyà $6 \hat{\imath}=d \grave{\varepsilon} \quad$ lè
2sG know=RLS say=although here=at food exist=RLS SFP
(2-3-5-2) Work hard, although I am sorry for you.
Intended meaning: ALTHOUGH I am sorry for you, I SAY TO YOU ‘Work hard!’

```
(2-3-5-2-a) *míN=gò Pá nà-y\varepsilon\trá=n\hat{\varepsilon}}\quad\mathrm{ Pălou? cózá=bà=Ø
    2SG=GO sorry=although=with job endeavor=POL=IMP
```

(2-3-5-2-b) míN=gò Pá nà=bèmê २ălou? cózá=bà= $=$
2SG=GO sorry=although job endeavor=POL=IMP
(2-3-5-2-c) mín=gò Pá nà=dè shò=bèmê Pălou? cózá=bà=Ø
2SG=GO sorry=RLS say=although job endeavor=POL=IMP

To sum up the discussion of concessives, $-y \varepsilon ? t \hat{a}=n \hat{\varepsilon}$ is acceptable at Level I, accept able with a restriction at Level II, and unacceptable at Levels III to V. The other two CLMs (=pèm $\hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and shò=bèm $\hat{\varepsilon}$ ) are acceptable at all the levels except Level IV, where they become acceptable if an expression indicating the speaker's judgment (e.g., $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i ?=m e ̀ ~ ' i t ~ w o u l d ~ b e ~ t h e ~ c a s e ~ t h a t ' ; ~ V=t a ̀ /=d a ̀ ~ m a ̆-h o u ? ~$ $=p h u ́$ 'it is not the case that') is used in the main clause. ( $-y \varepsilon P t{ }_{n} \dot{a}=n \hat{\varepsilon}$ is unacceptable at Level IV even when it is used with either of these expressions.)

## 7 Discussion

### 7.1 Distribution of clause linkage markers

The uses of the CLMs examined in Sectons 4 to 6 are shown in Table 8.
In Table 8, only the voiceless form of each CLM is shown, due to space considerations.

As mentionded in 3.1, all the CLMs examined are subordinating CLMs. Burmese has no morphosyntactic means to form coordination.

Not all the sentences intended for a given level in a given semantic area may be acceptable. Recall that concessive $-y \varepsilon 2 t \underset{\sim}{a}=n \hat{\varepsilon}$ is acceptable at Level II if the main clause uses a volitional verb, but unacceptable otherwise (6.2).

The CLMs for causals can be classified into three groups. The use of =tà/=dà $=n \hat{\varepsilon}$ is severely restricted; it is acceptable at Levels I and II only. In contrast, the CLMs of the second group ( $=l \hat{o},=t \hat{\jmath} /=d \hat{\jmath}$, and $=t \grave{a} /=d \grave{a}=j \hat{a} u n$ ) are perfectly acceptable from Levels I to III. At Level IV, they are unacceptable by themselves, but they become marginally acceptable if a form indicating the speaker's judgment, e.g. $\mathrm{V}=t \grave{a} /=d \grave{a}$ phyip=mè 'it would be the case that', is used in the main clause. The CLMs of the third group ( $=t a ̀ /=d \grave{a}=m o ̂ l o ̂,=t \hat{\varepsilon} /=d \hat{\varepsilon} ~\} a ̆ t w \varepsilon ?$, and $s h o ̀=d \hat{\Delta}$ ) are perfectly acceptable at Levels I to III. At Level IV, they are unacceptable by themselves, but they become acceptable if they are used with an expression indicating the speaker's

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Tab. 8: Distribution of clause linkage markers.

|  | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Subordinate clause Main clause | Situation <br> Situation | Situation <br> Situation + <br> Judgment | Situation <br> Situation + <br> Interpersonal effect | Premise Judgment | Premise <br> Speech act |
| Causals |  |  |  |  |  |
| Subordination |  |  |  |  |  |
| $\begin{aligned} & \mathrm{V}=t a ̀=n \hat{\varepsilon} \\ & \quad \text { with ' } \mathrm{V}=t a ̀ /=d a ̀ ~ p h y i p=m \grave{\varepsilon} \text { ' 'it would be the case that' } \end{aligned}$ | + | + ... | - | - | - |
| $\mathrm{V}=1 \hat{o}$ <br> with ' $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i p=m e ̀ '$ | + | + | + | ? | $\begin{aligned} & \text {-.. } \end{aligned}$ |
| $\mathrm{V}=t \hat{\jmath}$ | + | + | + | - | - |
| with ' $\mathrm{V}=t \mathrm{a} /=$ dà $p h y i\rangle=m \grave{\varepsilon}$ ' | ... | ... | ... | ? | ... |
| $\mathrm{V}=$ tà $=j a ̂ u n$ | + | + | + | - | - |
| with ' $\mathrm{V}=\mathrm{ta} /=$ dà $p h y i P=m{ }^{\text {' }}$ | ... | ... | ... | ? | ... |
| $\mathrm{V}=t a ̀=m o ̂ l \hat{o}$ | + | + | + | - | - |
| with ' $\mathrm{V}=t \mathrm{a} /=$ dà $p h y i \overrightarrow{ }=m \mathrm{c}^{\prime}$ | ... | ... | ... | + | ... |
| $\mathrm{V}=t \hat{\varepsilon}$ アătwe? | + | + | + | - | - |
| with 'V=tà/=dà phyip=mè' | ... | ... | ... | + | ... |
| C shò=d $\hat{\jmath}$ | + | + | + | - | - |
| with ' $\mathrm{V}=\mathrm{ta} /=$ dà $p h y i \mathrm{P}=m{ }^{\prime}$ ' | ... | ... | ... | + | ... |
| Conditionals |  |  |  |  |  |
| Subordination |  |  |  |  |  |
| $\mathrm{V}=$ yin | + | + | + | - | + |
| with ' $\mathrm{V}=\mathrm{ta} /=$ dà $p h y i p=m \grave{\varepsilon}$ ' | ... | $\cdots$ | ... | + | ... |
| $\mathrm{V}=1 \hat{o} \mathrm{\epsilon} \hat{\imath}=y$ ìn | + | + | + | - | + |
| with ' $\mathrm{V}=\mathrm{ta} /=$ dà $p h y i \mathrm{l}=m \grave{\varepsilon}$ ' | ... | ... | ... | + | ... |
| C shò=yìn | + | + | + | - | + |
| with ' $\mathrm{V}=\mathrm{ta} /=$ dà $p h y i \overrightarrow{ }=m \grave{\varepsilon}$ ' | ... | ... | ... | + | ... |

Tab. 8 (continued)

|  | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Subordinate clause Main clause | Situation Situation | Situation <br> Situation + <br> Judgment | Situation <br> Situation + <br> Interpersonal effect | Premise <br> Judgment | Premise <br> Speech act |
| Concessives |  |  |  |  |  |
| Subordination |  |  |  |  |  |
| V-ycitáá $=n \hat{\varepsilon}$ | + | (+) | - | - | - |
| with $\mathrm{V}=t a ̀ /=$ dà mă-houp=phú 'it is not the case that' with ' $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i २=m$ ' | ... | ... | ... | - | ... |
| $\mathrm{V}=$ pèm $\hat{\varepsilon}$ | + | + | + | - | + |
| with $\mathrm{V}=t a ̀ /=$ dà mă-hou $\mathrm{P}=$ phú 'it is not the case that' with ' $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i \supsetneq=m \grave{\varepsilon}$ ' | ... | ... | ... | + | ... |
| C shò=bèm $\hat{\varepsilon}$ | + | + | + | - | + |
| with $\mathrm{V}=$ tà/=dà mă-hour=phú 'it is not the case that' | ... | ... | ... | + | ... |
| with ' $\mathrm{V}=\mathrm{ta} /=$ dà $p h y i \overrightarrow{ }=m$ ' | $\cdots$ | $\cdots$ | ... | + | $\cdots$ |

Legend: +: fully acceptable; (+): acceptable only under a certain circumstance; ?: acceptable, but not to all the consultants; -: unacceptable; ...: irrelevant".
judgment, e.g. $\mathrm{V}=t a ̀ /=$ dà phyip=mè 'it would be the case that'. At Level V, all of the causal CLMs are unacceptable. The intended meaning of a questionnaire sentence can be expressed by the use of two separate sentences, whose second sentence contains an expression for "I am saying (this)". These three groups of causal CLMs have increasingly wider distributions in terms of the five levels.

Regarding conditionals, all three CLMs ( $=y i ̀ n,=l \hat{o} 6 \hat{\imath}=y i ̀ n, ~ a n d ~ s h o ̀=y i ̀ n) ~ a r e ~ p e r-~$ fectly acceptable at all the levels except Level IV, where they become acceptable if they are used with a form indicating the speaker's judgment, e.g. $\mathrm{V}=t a ̀ /=d a ̀ p h y i ?$ $=m \varepsilon ̀$ 'it would be the case that'.

As for the concessive CLMs, $-y \varepsilon$ Rt $\hat{a}=n \hat{\varepsilon}$ is acceptable at Level I, acceptable with a restriction at Level II, and unacceptable at Levels III to V. At Level IV, it is unacceptable even if the main clause contains a form indicating the speaker's judgment, e.g. $\mathrm{V}=t \grave{a} /=$ dà $m a \check{a}-h o u ?=p h u ́$ 'it is not the case that'. The other two concessive CLMs (=pèm $\hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and shò=bèm $\hat{\varepsilon}$ ) are perfectly acceptable at all the levels except Level IV, where they become acceptable if they are used with a form indicating the speaker's judgment, e.g. V=tà/=dà mă-hou?=phú 'it is not the case that'.

In the main, these CLMs are more acceptable at the lower levels (i.e. Levels I, II, III) than at the higher levels (i.e. Levels IV, V). Also, in the main, they are most acceptable at Level I, and - when they are used by themselves - least acceptable at Level IV.

The semantic differences among CLMs within one semantic area - be it causal, conditional, or concessive - are difficult to ascertain. Despite this, the present study has shown that different groups of CLMs in one semantic area exhibit different distributions in terms of the five levels of clause linkage.

The distribution of CLMs across the five levels indicates that it is possible to draw boundary lines between levels, as follows.
(a) Between Level I and Level II: see the concessive $-y \varepsilon ? t a \dot{a}=n \hat{\varepsilon}$.
(b) Between Level II and Level III: see the causal $=t \grave{a} /=d \grave{a}=n \hat{\varepsilon}$ and the concessive $-y \varepsilon ? t a ́ a=n \hat{\varepsilon}$.
(c) Between Level IV and Level V: see the causal CLMs of the third group.

Admittedly, the evidence provided by the concessive $-y \varepsilon 2 t a \dot{a}=n \hat{\varepsilon}$ is not very robust; " $(+)$ " indicates not "unacceptable" but "can be used only under a certain circumstance" (6.2). Nonetheless, the evidence furnished by the causal $=t a ̀ /=d \grave{a}=n \hat{\varepsilon}$ is forceful; it is perfectly acceptable at Levels I and II but cannot be used at all at the other levels.

Where Sweetser (1990) has the content domain, M. Tsunoda (2004: 22, 2012: 390; cf. also T. Tsunoda \& M. Tsunoda, this volume, 8.8) proposes to set up three levels: Levels I, II and III, i.e. to set up Level II and Level III, as distinct from Level I and also as distinct from each other. (a) and (b) above support M. Tsunoda's proposal.

### 7.2 Degree of sentencehood of subordinate clauses

There is some evidence that the degree of sentencehood of a CLM (to be precise, a subordinate clause that contains a given CLM) may influence the acceptability of that CLM. This concerns the presence/absence of the opposition of reallis vs. irrealis in the causal CLMs.

The causal CLMs can be divided into three groups (cf. Table 4), and the CLMs of the third group exhibit a wider distribution than those of the other two groups (cf. Table 8 and the fifth paragraph of 7.1). In particular, at Level IV, when V=tà/=dà phyi $=m \check{\varepsilon}$ ' 'it would be the case that' is added, the CLM of the first group remains unacceptable, those of the second group become acceptable, but not to all the consultants, while those of the third group become acceptable to all the consultants.

The CLM of the first group and those of the second group do not have the realis-vs.-irrealis opposition. In contrast, those of the third group have this opposition. (Table 4 shows this for two of them: $\{\mathrm{V}=t a ̀ /=d a ̀ ~ o r ~ V=h m a ̀ ~\}=m o ̂ l o ̂ ~ a n d ~\{V=t \hat{\varepsilon} /$ $=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ २ătwe? . Table 4 does not show this for C shò=dô. But this CLM is of Type (e), and "C" (i.e. clause) in it has this opposition (cf. 3.2-[5]).)

Clauses with the realis-vs.-irrealis opposition have a higher degree of sentencehood than do those without. This suggests that clauses with a higher degree of sentencehood show a wider distribution in terms of the five levels than do those with a lower degree of sentencehood - as far as the causal CLMs are concerned.

What we have seen does not seem to apply to the conditional CLMs or the concessive CLMs. Regarding the conditional CLMs, one of them is of Type (e): C shò=yìn (cf. Table 6). It shows the realis-vs.-irrealis opposition, while the other two CLMs do not. Despite this, these three CLMs show the same distribution (cf. Table 8). Concerning the concessive CLMs, one of them is of Type (e): C shò=yìn (cf. Table 7). It shows the realis-vs.-irrealis opposition, while the other two CLMs do not. Despite this, C shò=yìn does not necessarily show a wider distribution than the other two CLMs.

The above suggests that the presence/absence of the realis-vs.-irrealis opposition influences the acceptability of the causal CLMs, but not that of the conditional CLMs or the concessive CLMs. The reason for this difference - if any - is not known.
M. Tsunoda (2004: 66-67) examines aspect, tense, polarity and modality (true-or-false judgment) of three causal CLMs, four conditional CLMs and four concessive CLMs of Japanese and she concludes that, as a general tendency, the higher the degree of sentencehood of a given CLM is, the more likely that CLM is to be acceptable at the "higher" levels, i.e. Levels IV and V. That is, in Japanese, in contrast with Burmese, the degree of sentencehood influences the CLMs of all of causals, conditionals and concessives.

### 7.3 Notes on Level IV

The intended meaning of the questionnaire sentences for Level IV contains "I GUESS/SUPPOSE/INFER/CONCLUDE"; see 4.4, 5.4 and 6.4. For example, the intended meaning of the questionnaire sentence ( $2-1-4-1$ ) "Because the ground is wet, rain fell" (4.4) is "BECAUSE the ground is wet, I GUESS/SUPPOSE/INFER/CONCLUDE THAT rain fell".

In many languages investigated in the present volume, there are sentences at Level IV that are unacceptable by themselves, but that become acceptable if an epistemic expression such as the following is added to the main clause (T. Tsunoda, this volume-b, 3.3).
(a) Epistemic adverbs, e.g. "maybe", "probably", "surely", "certainly".
(b) Epistemic auxiliary verbs, e.g. "may", "must", "should".
(c) Clauses that contain a verb of cognition or the like, e.g. "I suppose/guess/infer/ conclude", "I know", "It appears", "It is certain".
(d) The mermaid construction.

The situation in Burmese is as follows.
[1] Causals (4.4)
$\mathrm{V}=t \grave{a} /=d \grave{a}=n \hat{\varepsilon}$ is unacceptable by itself; see (2-1-4-1-a) and (2-1-4-2-a). It remains unacceptable even when $\mathrm{V}=t \grave{a} /=d \grave{a} p h y i \hat{\beta}=m \grave{\varepsilon}$ 'it would be the case that' is added (to the main clause); see (2-1-4-1-a') and (2-1-4-2-a'). $(\mathrm{V}=t \grave{a} /=$ dà phyip=mè is a type of the mermaid construction. See 4.4.)
$\mathrm{V}=l \hat{o}, \mathrm{~V}=t \hat{\jmath} /=d \hat{\jmath}$ and $\mathrm{V}=t \grave{a} /=d \grave{a}=j \hat{a} u n$ are unacceptable by themselves; see (2-1-4-1-b, -c, -d) and (2-1-4-2-b, -c, -d). They become marginally acceptable if $\mathrm{V}=t \grave{a} /=d \grave{a} p h y i P=m \grave{\varepsilon}$ 'it would be the case that' is added; see (2-1-4-1-b', -c', -d') and (2-1-4-2-b', -c', -d').
$\{\mathrm{V}=t a ̀ /=d a ̀$ or $\mathrm{V}=h m a ̀\}=m o ̂ l o ̂, ~\{\mathrm{~V}=t \hat{\varepsilon} /=d \hat{\varepsilon}$ or $\mathrm{V}=m \hat{\varepsilon}\}$ ?ătw $\}$, and C shò=d̂ are unacceptable by themselves; see ( $2-1-4-1-\mathrm{e},-\mathrm{f},-\mathrm{g}$ ) and ( $2-1-4-2-\mathrm{e},-\mathrm{f},-\mathrm{g}$ ). They become acceptable if $\mathrm{V}=t \grave{a} /=$ dà $p h y i \supsetneq=m \varepsilon ̀ ~ ' i t ~ w o u l d ~ b e ~ t h e ~ c a s e ~ t h a t ' ~ i s ~ a d d e d ; ~ s e e ~(2-1-4-1-e ', ~$ $\left.-f^{\prime},-g^{\prime}\right)$ and (2-1-4-2-e', -f', -g').
[2] Conditionals (5.4)
$\mathrm{V}=y i ̀ n, \mathrm{~V}=l \hat{o} \mathrm{~h} \hat{\mathbf{\imath}}=y \grave{\mathrm{c}} \mathrm{n}$ and C shò=yìn are unacceptable by themselves; see (2-2-4-1-a, $-\mathrm{b},-\mathrm{c}$ ) and (2-2-4-2-a, -b, -c). They become acceptable if $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i p=m \varepsilon ̀ ~ ' i t ~$ would be the case that' is added; see (2-2-4-1-a', -b', -c') and (2-2-4-2-a', -b', -c').
[3] Concessives (6.4)
The CLM -yع?t $\begin{gathered}a \\ =n \hat{\varepsilon}\end{gathered}$ is unacceptable by itself; see (2-3-4-1-a) and (2-3-4-2-a). It remains unacceptable even when $\mathrm{V}=t a ̀ /=d a ̀ ~ m a ̆-h o u p=p h u ́ ~ ' i t ~ i s ~ n o t ~ t h e ~ c a s e ~ t h a t ' ~ i s ~$ added; see (2-3-4-1-a') and (2-3-4-2-a').

The CLMs =pèm $\hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ and shò=bèm $\hat{\varepsilon}$ are unacceptable by themselves; see (2-3-4-1-b, -c) and (2-3-4-2-b, -c). They become acceptable if $\mathrm{V}=t a ̀ /=d a ̀ ~ m a ̆-h o u p=p h u ́ ~$ 'it is not the case that' is added; see ( $2-3-4-1-b$ ', $-c$ ') and ( $2-3-4-2-b$ ', $-c$ ').

For each of the three CLMs for concessives, the siutaion is the same when $\mathrm{V}=t a ̀ /=d a ̀ ~ m a ̆-h o u p=p h u ́$ 'it is not the case that' is replaced with its affirmative version $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i p=m \grave{\varepsilon}$ 'it would be the case that'.

That is, at Level IV, generally these CMs are unacceptable by themselves, but they become marginally acceptable or acceptable if a relevant expression for the speaker's judgement (namely, the mermaid construction) is added in the main clause. However, there are two exceptions. The causal $\mathrm{V}=t \grave{a} /=d \grave{a}=n \hat{\varepsilon}$ and the concessive $-y \varepsilon$ ?țá $=n \hat{\varepsilon}$ remain unacceptable even when such an expression is added.

### 7.4 Notes on Level V

The intended meaning of the questionnaire sentences for Level V contains "I SAY TO YOU"; see 4.5, 5.5 and 6.5 . For example, the intended meaning of the questionnaire sentence (2-1-5-1) "There is food here, because you are looking for food" (4.5) is "BECAUSE you are looking for food, I SAY TO YOU "There is food here"".

Now, in some of the languages investigated in the present volume, literal translations of the questionnaire sentences for Level V are unacceptable or not highly acceptable, but they may become acceptable (though not always) if they contain a clause that contains a speech verb (such as 'I say', 'I tell', 'I ask', 'I request' or the like) or else the inclusion of such a clause may improve the acceptability of the sentences in question.

In Burmese, no such examples have been found that sound natural as far as subordination is concerned. (Burmese has no morphosyntactic means to form coordination.) Nonetheless, it is interesting to note that at Level V for causals there are instances that involve the use of two separate sentences, whose second sentence contains an expression for "I am saying (this)": (21) and (22), given in 4.5.

### 7.5 CLMs that contain the verb 'say'

The present work examined three CLMs that contain the verb shò 'say' (listed in 3.2-[5]). ("C" stands for "clause".)
[5-1] C shò=dô 'because’
$=t \hat{\jmath} /=d \hat{\jmath}$ is an adverbial clause marker. Although $=t \hat{\jmath} /=d \hat{\jmath}$ can mean 'because' or 'if, when', C shò=dô only means 'because'.
[5-2] C shò=yìn 'if'
=yìs is an adverbial clause marker meaning 'if'.
[5-3] C shò=bèmê 'although'
$=p e ̀ m \hat{\varepsilon} /=b e ̀ m \hat{\varepsilon}$ is an adverbial clause marker meaning 'although'.

These CLMs are all acceptable from Level I to Level III. At Level IV, they are unacceptable by themselves, but they become acceptable when they are accompanied by the expression $\mathrm{V}=t a ̀ /=d a ̀ ~ p h y i ?=m \grave{\varepsilon}$ 'it would be the case that' (or - in the case of the concessive C shò=bèm $\hat{\varepsilon}$ 'although' - by the expression $\mathrm{V}=t a ̀ /=d \grave{a} m a ̆-h o u$ ? $i=p h u ́ ~ ' i t ~ i s ~ n o t ~ t h e ~ c a s e ~ t h a t ') . ~ A t ~ L e v e l ~ V, ~ C ~ s h o ̀=d \hat{\jmath} ~ ‘ b e c a u s e ' ~ i s ~ u n a c c e p t a b l e, ~ b u t ~$ C shò=yìn 'if' and C shò=bèmê 'although' are acceptable. That is, on the whole these three CLMs are most highly acceptable at Levels I to III.

Now, Mie Tsunoda (p.c.) points out the following. Japanese has CLMs that contain the verb $i$-/iw-/it- 'say'. They include the following. They are used at the levels shown below.

Conditionals: Level V.
(26) =to it-tara
=QUOT say-if
LT: 'If [someone] says that ...'
FT: 'When it comes to ...', 'Talking about ...'.
(27) =to i-eba
=QUOT say-if
LT: ‘If [someone] says that ...'
FT: ‘Talking about ...'

Concessives: Levels IV, V.
(28) =to $\quad i-u=n o n i$
=QUOT say-NPST=although
LT: 'Although [someone] says that ...'
FT: ‘although'
(29) $=t o=w a \quad i-e$
$=$ QUOT=TOP say-IMP
LT: 'Say that ...'
FT: 'although'
(30) $=$ to $\quad i t-t e=m o$
=QUOT say-NFN=also/although
LT: ‘Although [someone] says that ...'
FT: 'although'
(31) =to=wa i-u=monono
$=$ QUOT=TOP say-NPST=although
LT: 'Although [someone] says that ...'

The conditional CLMs contaning the verb i-/iw-/it- ‘say’ are used at Level V only. The concessive CLMs containing this verb are used at Levels IV and V only. That is, the CLMs containing the verb $i$-/iw-/it- 'say' are used at the "higher" levels only. (The CLMs =to=wa i-e, =to it-te=mo, and =to=wa i-u=monono are discussed in M. Tsunoda (2012c).)

To sum up, the Burmese CLMs listed above contain the verb shò 'say', and the Japanese CLMs listed above contain the verb $i$-/iw-/it- 'say'. Despite this similarity, these Burmese CLMs are on the whole most highly acceptable at the "lower" levels, while on the other hand these Japanese CLMs are used at the "higher" levels only.

## 8 Conclusion

### 8.1 Summary

Main findings of the present chapter include the following.
In causals and concessives, one CLM has only a limited distribution, while the others have a wider distribution, although they cannot be used at all the five levels. All the three CLMs for conditionals have a wide distribution, although they cannot be used at all the five levels.

At Level IV, these CLMs are unacceptable by themselves, but they generally become marginally acceptable or acceptable if an expression for the speaker's judgement is added in the main clause. However, there are two exceptions: the causal $\mathrm{V}=t \grave{a}=n \hat{\varepsilon}$ and the concessive V - $y \varepsilon ? t \underset{a}{ } a=n \hat{\varepsilon}$. They are unacceptable even when such an expression is added.

There is no CLM which is acceptable by itself at all the five levels.

### 8.2 Main points of the investigation

T. Tsunoda (this volume-a, 1.7) lists "Main points of the investigation" for the research reported in the present volume. The present chapter furnishes evidence regarding the following points. See Table 8.

## [1] General

(b) Is there any evidence for distinguishing the five levels?

Yes. For example, the following CLMs provide evidence for this. (i) The concessive $\mathrm{V}-\mathrm{y} \varepsilon \mathrm{P} t \hat{a}=n \hat{\varepsilon}$ for Level I vs. Level II. (ii) The causal $\mathrm{V}=t a ̀=n \hat{\varepsilon}$ and the concessive V$y \varepsilon P t a ́ a=n \hat{\varepsilon}$ for Level II vs. Level III. (iii) Particularly the causal $\mathrm{V}=l \hat{o}, \mathrm{~V}=t \hat{\jmath}$ and $\mathrm{V}=t \grave{a}=$ jâus for Level III vs. Level IV. (iv) The three conditional CLMs among others for Level IV vs. Level V. ((i) and (ii) support M. Tsunoda's proposal to set up Level II and Level III, as distinct from Level I and as distinct from each other.)
[2] Types of clause linkage: Subordination, coordination and parataxis
(c) At which levels can subordination be used?

Subordination has acceptable examples at all the five levels.
(d) At which levels can coordination be used?

Burmese has no CLM for coordination.
(f) Is subordination more likely to be used at the lower levels?

Yes, generally this is the case. In particular, this clearly applies to the following CLMs. (i) Causals: $\mathrm{V}=t \grave{a}=n \hat{\varepsilon}, \mathrm{~V}=l \hat{o}, \mathrm{~V}=t \hat{\jmath}$ and $\mathrm{V}=t \grave{a}=j \hat{a} u n$. (ii) Concessives: $\mathrm{V}-y \varepsilon ? t \stackrel{a}{a}=n \hat{\varepsilon}$.
(g) Are/Is coordination and/or parataxis the only means available at the higher levels?
Burmese has no CLM for coordination. Parataxis is not examined in the present chater.
[3] Semantic areas: causal, conditional and concessive
(h) Within one and the same semantic area, e.g. "causal", do different CLMs show different distributions in terms of the five levels?
Yes, to some extent. The concessive CLMs can be divided into two groups, and these two groups show different distributions. However, the two CLMs of the second group have the same distributin. The causal CLMs can be classified into three groups. However, the second group and the third group have very similar distributions. Only the first group has a different distribution. The three conditional CLMs have exactly the same distribution.
(i) Are the distributional patterns in the three semantic areas similar to one another?
Yes, to some extent. The causal $\mathrm{V}=t \grave{a}=n \hat{\varepsilon}$ and the concessive $\mathrm{V}-y \varepsilon P t{ }_{n} \dot{a}=n \hat{\varepsilon}$ have very similar distributions. The three conditional CLMs and the two concessive CLMs of the second group have exacly the same distribution.
[4] Width, continuity and direction of distributions
(j) Is the distribution of a given CLM continuous or discontinuous?

Yes, all the causal CLMs and the concessive V-yع?táa $=n \hat{\varepsilon}$ have continuous distributions. The other CLMs (i.e. the three conditional CLMs and the two concessive CLMs of the second group) have a gap at Level IV in that they are unacceptable by themselves (although they become acceptable if an expression for the speaker's judgement is added in the main clause).
(k) If it is continuous:
( $\mathrm{k}-1$ ) does it extend from Level I?
Yes, this clearly applies to all the causal CLMs and the concessive V-y\&?táa $=n \hat{\varepsilon}$. However, the other CLMs cannot be justifiably regarded as extending from Level I (or from Level V).
(k-2) does it extend from Level V?
There is no CLM which clearly extends from Level V.
(l) Is there any CLM that is dedicated to one level only?

No, there is no such CLM. Nonetheless, it is interstinng to note that there are two CLMs that are confined to two levels: the causal $\mathrm{V}=t \grave{a}=n \hat{\varepsilon}$ and the concessive V $y \varepsilon$ Ptáa $=n \hat{\varepsilon}$ are confined to Levels I and II.
[5] Structure of CLMs
(m) Is there any correlation between the morphology of a given CLM and the levels at which it is used? For example, are CLMs heavier at the lower levels? Or are they heavier at the higher levels?
No, there does not seem to be such a correlation.
(n) Are there any complex CLMs (e.g. =ni=mo kakawarazu 'concessive' of Japanese)? If you have time at all, please comment on their formation/etymology. The CLMs at the higher levels may possibly be less grammaticalized and fairly transparent.
No, there is no such complex CLM.

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