# Five levels in Burmese

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### 1. Introduction

This chapter examines how the five levels of clause linkage (cf. Mie Tsunoda, 2012; this volume) are expressed by means of subordination in Burmese, regarding causals, conditionals and concessives. (Burmese has no clause-linkage marker for coordination.) The "Questionnaire for Five Levels" (Tasaku Tsunoda, this volume) was employed to elicit data for the present work.

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

the three CLMs for conditionals can be used at all five levels.

The Burmese data has yielded evidence that boundaries can be drawn (i) between Levels II and III, and (ii) between Levels IV and V. The boundary between Levels II and III indicates the importance of including Level III, as distinct from Level II, in the framework of Mie Tsunoda (2012, this volume).

### 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 voiceless initial consonant phoneme present in many bound morphemes, that is, 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—for example, as  $=k\hat{a}/=g\hat{a}$  'agent (subject); source' or  $=p\hat{a}/=b\hat{a}$  'politeness'.

### [3] Word classes

Four word classes can be posited for Burmese: nouns, verbs, particles, and interjections. There is no need to set up adjective or adverb categories 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 consider particles, which I listed as one of the word classes in [3]

above, to be enclitics, Burmese can be said to be an isolating language. However, if we consider them as suffixes, this language can be regarded as highly agglutinative. I tentatively consider particles to be enclitics in this study. There is no inflection in Burmese, but there are a small number of derivational prefixes and suffixes.

Burmese is a non-configurational and dependent-marking language. The basic order is SOV. 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',  $=k\hat{o}/=g\hat{o}$  'patient; recipient; goal',  $=n\hat{\epsilon}$  'instrument; accompanier; enumeration',  $=hm\hat{a}$  'location',  $=y\hat{\epsilon}$  'possession',  $=c\hat{a}un/=j\hat{a}un$  'cause'. Examples include (1), an intransitive sentence, and (2), a transitive sentence.

- (1) tù(=gâ) thâ=dè 3SG=KA stand=RLS 'He stood up.'
- (2) tù(=gâ) ?ămè=nê ?èin=hmà tăye?tí(=gò) sá=dè 3SG=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',  $=k\hat{o}/=g\hat{o}$  'patient; recipient; goal', and  $=y\hat{\varepsilon}$  'possession' can be absent provided that the syntactic/semantic structure of the clause is parsable.

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

The verb (either in a simple sentence or in the main clause of a complex sentence) has to be obligatorily followed by one of the particles called "verb sentence markers" by Okell (1969: 118-119). These 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 also Gärtner, 2005, and Jenny, 2009.)

Sentences with marker  $=t\hat{\epsilon}/=d\hat{\epsilon}$  'realis' basically concern a present event or a past event, as in (3). Those with  $=m\hat{\epsilon}$  'irrealis' basically concern a future event, as in (4).

Table 1. Verb sentence markers

Verb sentence marker	Meaning	Example	
$=t\hat{\epsilon}/=d\hat{\epsilon}$ $=m\hat{\epsilon}$ $=ph\acute{u}/=b\acute{u}$ $=\mathcal{O} \text{ (no marking)}$ $=n\hat{\epsilon}$	realis irrealis negative imperative prohibitive	(3) (4) (5) (6) (7)	

- (3)  $\dot{t}$ ù ?èin=hmà kâ= $d\dot{\epsilon}$ 
  - 3sg house=at dance=RLs

'He dances at home. / He danced at home.'

(4) tù ?èin=hmà kâ=**m**è 3sG house=at dance=IRR 'He will dance at home.'

The verb sentence marker  $=ph\acute{u}/=b\acute{u}$  'negative' is used in negative sentences. A negative sentence is formed by attaching the negative prefix  $m\breve{a}$ - before the verb and placing the particle  $=ph\acute{u}/=b\acute{u}$  '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) tù mă-kâ=**bú**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, as in (6).

(6) ?èin=hmà kâ=Ø house=at dance=IMP 'Dance at home.'

A prohibitive sentence is formed by attaching the negative prefix  $m\check{a}$ -before the verb and placing the verb sentence marker  $=n\hat{\varepsilon}$  'prohibitive' after the verb, as in (7).

(7) ?èin=hmà mă-kâ=**n**ê house=at not-dance=PROH 'Don't dance at home.'

# [5] Literacy and styles

Burmese has a long history of the written language, dating back to the 12th 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.

### 3. Subordinate clauses

### 3.1 Formation of subordinate clauses

Burmese has no morphosyntactic means to form coordination. 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:  $=t\dot{a}/=d\dot{a}$  indicates realis and  $=hm\dot{a}$  indicates irrealis. (Okell 1969: 65 assigns them to "special heads", as discussed below.)

Table 2. Nominalizers

Nominalizer	Modality	Example
=tà/=dà	realis	(8)
=hmà	irrealis	(9)

## Examples follow.

- (8) tù thămíν chε?=tà=gò nà tî=dè
  3sG rice cook=NMLZ=KO 1sG know=RLS
  'I know that he cooked rice.'
- (9) tù thămín chε?=hmà=gò ŋà tî=dè
  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 and 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 equals sign.)

Clauses formed with a special head function as arguments or adjuncts. (10) is an example of  $-ph\hat{o}/-b\hat{o}$  'to V; for V-ing'. (See [2] in 3.2 for other special heads.)

(10) ŋà pha?-**phô**=gò yù là=dè 1SG read-to/for=KO take come=RLS 'I brought what I had to read.'

Third are the particles that I call "adnominalizing markers" (Okell 1969: 59 refers to them as "attribute markers"). As shown in Table 3, these appear after a verb and form an adnominal clause (i.e., a relative clause). They differ from the verb sentence markers  $=t\hat{e}/=d\hat{e}$  'realis' and  $=m\hat{e}$  'irrealis' in tone only. An adnominal clause always precedes the noun it modifies.

Table 3. Adnominalizing markers

Adnominalizing marker	Modality	Example
$ \begin{array}{c}                                     $	realis irrealis	(11) (12)

### Examples are:

- (11) ŋà sá=**dê** tặyε?tí 1SG eat=AN mango 'the mango that I ate'
- (12) ŋà sá=**mε̂** t̪ἄyεʔt̪í 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 and Allott 2001: 300 call them "subordinate clause markers"). Subordinate clauses that function in this way are called "adverbial clauses" in this chapter. Below is the example of  $=l\hat{o}$  'because'.

(13) từ kâ=**lô** ŋà=lέ kâ=dè 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 (as mentioned in 3.1), and some of the adverbial clauses of Type (b) shown in [2] are formed by using a special head only. However, the other adverbial clauses are formed using combinations of various forms. In the list below, the adverbial clauses dealt with in this paper 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.

- ! [1-1] V=*lô* 'because'
- ! [1-2]  $V=t\hat{\beta}/=d\hat{\beta}$  'because'; 'when'

The adverbial clause marker  $=t\hat{\beta}/=d\hat{\beta}$  can have a causal meaning 'because' or a temporal 'when'.

- ! [1-3]  $V=yi_N$  'if
- ! [1-4]  $V=pene^{2}$  'although'
  - [1-5]  $V=hm\hat{a}$  'not until'
  - [1-6] V=2aun 'so that'
  - [1-7] V=pi/=bi 'and then'
  - [1-8] V=yiN 'while'
  - [1-9] V= $t \dot{a}iN/=d \dot{a}iN$  'whenever'
  - [1-10] V V = chi N = ji N 'as soon as'

The verb is reduplicated when used with this marker.

[1-11]  $m \check{a}$ -V= $kh \grave{i} N/=g \grave{i} N$  'before'

The verb has to be combined with the negative prefix mă.

[1-12]  $m\ddot{a}$ -V= $ph\dot{\epsilon}/=b\dot{\epsilon}$  '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]  $V-y\varepsilon 2t\dot{a}=n\hat{\varepsilon}$  'although'
  - V- $y\varepsilon$ ? $t\acute{a}$  means 'state of V-ing' or 'during V-ing', and  $=n\hat{\varepsilon}$  is a case particle indicating instrument, accompanier, or enumeration. (The form  $-y\varepsilon$ ? $t\acute{a}=n\hat{\varepsilon}$  has a more colloquial variant  $-y\hat{\varepsilon}t\acute{a}=n\hat{\varepsilon}$ , and may also be abbreviated as  $-y\varepsilon$ ? $=n\hat{\varepsilon}$ .)
  - [2-2] V- $ph\hat{o}/-b\hat{o}$  'in order to'

*V-phô* /-bô means 'to V' or 'for V-ing'.

[2-3] V- $t\acute{o}un/-d\acute{o}un(=hm\grave{a})$  'while'

V-tóun/-dóun means 'process of V-ing', and  $=hm\dot{a}$  is a case particle for location. (The case particle  $=hm\dot{a}$  has the same phonological form as the irrealis nominalizer  $=hm\dot{a}$  (Table 2), but there is no etymological connection. In colloquial Burmese, the

case particle  $=hm\dot{a}$  has a free variant  $=m\dot{a}$ , whereas the irrealis nominalizer  $=hm\dot{a}$  has no such variation. Thus, these two appear to have no synchronic connection either.)

[2-4] V- $t\acute{o}uN$ - $d\acute{o}uN$ = $g\^{a}$  'when (somebody did)' V- $t\acute{o}uN$ - $d\acute{o}uN$  means 'process of V-ing'.  $=k\^{a}/=g\^{a}$  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  $=t\dot{a}/=d\dot{a}$  after the verb, with a case particle following the nominalizer. The following are adverbial clauses of this type.
  - ! [3-1]  $V=t\grave{a}/=d\grave{a}=n\hat{\varepsilon}$  'because'; 'right after' = $n\hat{\varepsilon}$  is a case particle for instrument, accompanier, or enumeration.
  - ! [3-2]  $V=t\hat{a}/=d\hat{a}=m\hat{o}l\hat{o}$  'because'  $=m\hat{o}l\hat{o}$  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  $=m\hat{o}l\hat{o}$  and  $=m\hat{o}$  is occasionally replaced with a voiceless counterpart, that is,  $=hm\hat{o}l\hat{o}$  and  $=hm\hat{o}$ , respectively.
  - ! [3-3]  $V=t\hat{a}/=d\hat{a}=j\hat{a}uN$  'because'  $=c\hat{a}uN/=j\hat{a}uN$  is a case particle for cause, that is, 'because of'.  $V=t\hat{a}/=d\hat{a}=j\hat{a}uN$  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 Pătwe? 'for' being used as a postpostion, following a noun.
  - (14) ŋà mya?thún=**?ătwe?** lou?=tè 1SG (personal name)=for do=RLS 'I did (it) for Myat Htun.'

As noted, 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  $=t\hat{\epsilon}/=d\hat{\epsilon}$  'realis' or  $=m\hat{\epsilon}$  'irrealis'. In some instances of Type (d), the weakened forms  $=t\tilde{\alpha}$  'realis' or  $=m\tilde{\alpha}$  'irrealis' are used. The following are adverbial clauses of this type.

! [4-1]  $\{V=t\hat{\epsilon}/=d\hat{\epsilon} \text{ or } V=m\hat{\epsilon}\}$  ? $\check{a}tw\epsilon$ ? 'because' This adverbial clause is used in somewhat formal speech. When the subordinate noun ? $\check{a}tw\epsilon$ ? is used as a postposition, it means 'for' or 'for the sake of'.

[4-2]  $\{V=t\hat{\varepsilon}/=d\hat{\varepsilon} \text{ or } V=m\hat{\varepsilon}\}$   $\{2\check{a}th\hat{i}\}$  'until'

The subordinate noun *?ăthî* used as a postposition means 'up to' or 'as much as'.

[4-3]  $\{V=t\hat{\epsilon}/=d\hat{\epsilon} \text{ or } V=m\hat{\epsilon}\}$  ?\text{\text{\$\delta}\$} is as'

The subordinate noun *Pătáin* used as a postposition means 'in accordance with' or 'in the manner of'.

- [4-4]  $\{V=t\hat{\varepsilon}/=d\hat{\varepsilon} \text{ or } V=m\hat{\varepsilon}\}$   $2\check{a}pyi_N$  'in addition to V-ing' The subordinate noun  $2\check{a}pyi_N$  used as a postposition means 'outside', 'besides', or 'as well as'.
- [4-5] V=mê ?ăsá 'instead of V-ing'
  The subordinate noun ?ăsá used as a postposition means 'in place of' or 'instead of'.
- [4-6]  $\{V = \underline{t}\underline{a}/=d\underline{a}$  or  $V = m\underline{a}\}$   $l\hat{o}$  'as' The subordinate noun  $l\hat{o}$  used as a postposition means 'like N', 'as', or 'in the way of'.
- [4-7] {V=tă/=dă or V=mă} lòlò 'as if' lòlò following a noun means 'rather like' or 'almost'.
- [4-8]  $\{V = t\breve{a}/= d\breve{a} \text{ or } V = m\breve{a}\}\ lau?$  'as much as' The subordinate noun lau? 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 or non-verb predicate sentences. (For these terms, see below.) The following are adverbial clauses of this type; shò is a verb that means 'say'.
  - ! [5-1]  $C \sinh \partial = d\hat{\partial}$  'because'  $= t\hat{\partial}/=d\hat{\partial}$  is an adverbial clause marker (see [1-2] above). Although the adverbial clause marker  $= t\hat{\partial}/=d\hat{\partial}$  can mean 'because' or 'if, when',  $C \sinh \partial = d\hat{\partial}$  only means 'because'.
  - ! [5-2]  $C sh\grave{o} = y\grave{i}N$  'if' = $y\grave{i}N$  is an adverbial clause marker meaning 'if' (see [1-3] above).
  - ! [5-3] C shò=bèmê 'although' =pèmê/=bèmê is an adverbial clause marker meaning 'although' (see [1-4] above).

As implied 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) tù=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 in (15) is embedded.

(16) [tù=gâ myămà] **shò=dô** myămàzăgá pyó=da?=tè 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  $sh\grave{o}$  'say' in all of C  $sh\grave{o}=d\hat{\sigma}$ , C  $sh\grave{o}=y\grave{i}n$ , and C  $sh\grave{o}=b\grave{e}m\hat{\varepsilon}$  has lost the meaning of 'say'. See sentence (17) for an additional example. As shown in the translation, the verb  $sh\grave{o}$  'say' in this sentence is semantically empty.

(17) tù mă-twá=bú shò=**d**3 nà twá=yâ=mè 3SG not-go=NEG say=because 1SG go=must=IRR 'Because he won't go, I will have to go.'

This fact can be made clear when we compare (17) with sentence (18).

(18) tù mă-twá=bú shò=**lô** nà twá=yâ=mè 3SG not-go=NEG say=because 1SG go=must=IRR 'Because [someone] said that he wouldn't go, I will have to go.'

In sentence (18), where the adverbial clause marker= $l\hat{o}$  is used,  $sh\hat{o}$  has not lost the meaning of 'say'. Thus, sentence (18) necessarily expresses that someone said that 'he' would not go. Therefore, the adverbial clause C  $sh\hat{o}=l\hat{o}$  in (18) should not be included in Type (e) but should instead be regarded as an adverbial clause of Type (a), which uses  $=l\hat{o}$  (see [1-1]), but one which happens to be used with the verb  $sh\hat{o}$  'say'. Such a difference between C  $sh\hat{o}=d\hat{o}$  and C  $sh\hat{o}=l\hat{o}$  has not been explicitly pointed out in previous studies.

[6] Type (f): V=<adverbial clause marker> <cî 'exist'>=<adverbial clause marker>

This type contains only one member.

! [6-1] 
$$V=l\hat{o}$$
  $\varepsilon \hat{i}=y \hat{i} N$  'if'

Here,  $=l\hat{o}$  has etymologically the same origin as the adverbial clause marker  $=l\hat{o}$  'because' (see [1-1] above). However, in Type (f),  $=l\hat{o}$  functions merely as an adapter, syntactically connecting the V and the verb  $\epsilon\hat{i}$  'exist'. The verb  $\epsilon\hat{i}$  is then followed by the adverbial clause marker  $=y\hat{i}y$  '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 will now examine the use of CLMs in terms of the five levels, in 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)

#### 4. Causals

The seven CLMs used for causals are shown in Table 4. The column headed with "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.

Table 4. Clause-linkage markers for causals

CLM	Туре	Number in 3.2
$V=t\dot{a}/=d\dot{a}=n\hat{\varepsilon}$	(c)	[3-1]
V=lô V=tô/=dô V=tà/=dà=jâun	(a) (a) (c)	[1-1] [1-2] [3-3]
$V=t\grave{a}/=d\grave{a}=m\^{o}l\^{o}$ { $V=t\^{e}/=d\^{e}$ or $V=m\^{e}$ } ? $\breve{a}twe$ ? $C\ sh\grave{o}=d\^{o}$	(c) (d) (e)	[3-2] [4-1] [5-1]

Semantic differences among these CLMs are subtle and difficult to grasp. It can be said at a minimum that,  $=t\grave{a}/=d\grave{a}=j\hat{a}uN$  and  $\{V=t\hat{\epsilon}/=d\hat{\epsilon} \text{ or } V=m\hat{\epsilon}\}$   $?\check{a}tw\epsilon?$  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. These three groups have increasingly wider distributions across the five levels, as will be shown in Table 8.

### 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.
  - (a) mó ywà=thá=dà=nê myèjí sò=nè=dè rain fall=RES=NMLZ=with ground wet=PROG=RLS
  - (b) mó ywà=thá=lô myèjí sò=nè=dè ground wet=PROG=RLS
  - (c) mó ywà=thá=dô myèjí sò=nè=dè ground wet=PROG=RLS
  - (d) mó ywà=thá=dà=jâun myèjí sò=nè=dè rain fall=RES=NMLZ=because.of ground wet=PROG=RLS
  - (e) mó ywà=thá=dà=môlô myèjí sò=nè=dè rain fall=RES=NMLZ=because.of ground wet=PROG=RLS
  - (f) mó ywà=thá=dε̂ ?ătwε? myèjí sò=nè=dὲ rain fall=RES=AN for ground wet=PROG=RLS
  - (g) mó ywà=thá=dè shò=dô myèjí sò=nè=dè rain fall=RES=RLS say=because ground wet=PROG=RLS
- (2-1-1-2) Because the child is hungry, he/she is crying.
  - (a) khălé bai? shà=nè=dà=nê ŋò=nè=dè child hungry=PROG=NMLZ=with cry=PROG=RLS
  - (b) khălé bai? shà=nè=lô ŋò=nè=dè child hungry=PROG=because cry=PROG=RLS
  - (c) khălé bai? shà=nè=dô ŋò=nè=dè child hungry=PROG=because cry=PROG=RLS
  - (d) khălé bai? shà=nè=dà=jâun ŋò=nè=dè child hungry=PROG=NMLZ=because.of cry=PROG=RLS
  - (e) khălé bai? shà=nè=dà=môlô ŋò=nè=dè child hungry=PROG=NMLZ=because cry=PROG=RLS
  - (f) khălé bai? shà=nè=dê ?ătwe? ŋò=nè=dè child hungry=PROG=AN for cry=PROG=RLS

(g) khălé bai? shà=nè=dè shò=dô ŋò=nè=dè child hungry=PROG=RLS say=because cry=PROG=RLS

An additional example of causals at Level I is (13) (= $l\hat{o}$  'because'), given in 3.1.

### 4.2 Causals Level II

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

At Level II, as at Level I, all of the seven CLMs for causals are acceptable.

- (2-1-2-1) Because the rain fell, the ground must be wet.
  - (a) mó ywà=thá=dà=nê myèjí sò=nè=mè rain fall=RES=NMLZ=with ground wet=PROG=IRR
  - (b) mó ywà=thá=lô myèjí sò=nè=mè rain fall=RES=because ground wet=PROG=IRR
  - (c) mó ywà=thá=dô myèjí sò=nè=mè rain fall=RES=because ground wet=PROG=IRR
  - (d) mó ywà=thá=dà=jâun myèjí sò=nè=mè rain fall=RES=NMLZ=because.of ground wet=PROG=IRR
  - (e) mó ywà=thá=dà=môlô myèjí sò=nè=mè rain fall=RES=NMLZ=because.of ground wet=PROG=IRR
  - (f) mó ywà=thá=dε̂ ?ătwε? myèjí sò=nè=mè rain fall=RES=AN for ground wet=PROG=IRR
  - (g) mó ywà=thá=dè shò=dô myèjí sò=nè=mè 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.
  - (a) mó ywà=nè=dà=nê từ ?èin=hmà nè=yâ=mè rain fall=PROG=NMLZ=with 3SG house=at stay=must=IRR
  - (b) mó ywà=nè=lô từ ?èin=hmà nè=yâ=mè rain fall=PROG=because 3SG house=at stay=must=IRR
  - (c) mó ywà=nè=dô từ ?èin=hmà nè=yâ=mè rain fall=PROG=because 3SG house=at stay=must=IRR
  - (d) mó ywà=nè=dà=jâun tù ?èin=hmà nè=yâ=mè rain fall=PROG=NMLZ=because.of 3SG house=at stay=must=IRR

- (e) mó ywà=nè=dà=môlô tù ?èin=hmà nè=yâ=mè rain fall=PROG=NMLZ=because.of 3SG house=at stay=must=IRR
- (f) mó ywà=nè=dê ?ătwe? từ ?èin=hmà nè=yâ=mè rain fall=PROG=AN for 3SG house=at stay=must=IRR
- (g) mó ywà=nè=dè shò=dô từ ?èin=hmà nè=yâ=mè rain fall=PROG=RLS say=because 3SG house=at stay=must=IRR

Additional examples of causals at Level II are (17)  $(sh\hat{o}=d\hat{\sigma})$  'because' and (18)  $(=l\hat{o})$  'because', as given in 3.2.

### 4.3 Causals Level III

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

At Level III, the sentences with  $=t\hat{a}/=d\hat{a}=n\hat{\varepsilon}$ , that is, (2-1-3-1)-(a) and (2-1-3-2)-(a) are unacceptable. The other sentences are acceptable.

### (2-1-3-1) Don't go out because the rain is falling.

- (a) \*mó ywà=nè=dà=nê ʔặpyìn mặ-thwe?=nê rain fall=PROG=NMLZ=with outside not-go.out=PROH
- (b) mó ywà=nè=lô ?ăpyìν mă-thwε?=nê rain fall=PROG=because outside not-go.out=PROH
- (c) mó ywà=nè=dô ?ăpyìν mă-thwε?=nê rain fall=PROG=because outside not-go.out=PROH
- (d) mó ywà=nè=dà=jâun ?ăpyìn mă-thwε?=nê rain fall=PROG=NMLZ=because.of outside not-go.out=PROH
- (e) mó ywà=nè=dà=mô ?ăpyìn mă-thwε?=nê rain fall=PROG=NMLZ=because.of outside not-go.out=PROH
- (f) mó ywà=nè=dε̂ ?ătwε? ?ăpyìn mă-thwε?=nε̂ rain fall=PROG=AN for outside not-go.out=PROH
- (g) mó ywà=nè=dè shò=dô ʔặpyìn mặ-thwε?=nê rain fall=PROG=RLS say=because outside not-go.out=PROH

# (2-1-3-2) Give the child food because he/she is hungry.

- (a) \*khălé bai? shà=nè=dà=nê sázăyà cwé=bà=Ø child hungry=PROG=NMLZ=with food feed=POL=IMP
- (b) khălé bai? shà=nè=lô sázăyà cwé=bà=Ø child hungry=PROG=because food feed=POL=IMP

- (c) khălé bai? shà=nè=dô sázăyà cwé=bà=Ø child hungry=PROG=because food feed=POL=IMP
- (d) khălé bai? shà=nè=dà=jâun sázăyà cwé=bà=Ø child hungry=PROG=NMLZ=because.of food feed=POL=IMP
- (e) khălé bai? shà=nè=dà=môlô sázăyà cwé=bà=Ø child hungry=PROG=NMLZ=because.of food feed=POL=IMP
- (f) khălé bai? shà=nè=dε̂ ?ătwε? sázăyà cwé=bà=Ø child hungry=PROG=AN for food feed=POL=IMP
- (g) khălé bai? shà=nè=dè shò=dô sázăyà cwé=bà=Ø child hungry=PROG=RLS say=because 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  $=t\dot{a}/=d\dot{a}=n\hat{\varepsilon}$ , 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 for Five Levels" sentences are not acceptable; 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 V=ta/=da phyi/2=me 'it would be the case that', which will be employed in the Burmese sentences (2-1-4-1)-(a', b', c', d', e', f', g') and (2-1-4-2)-(a', b', c', d', e', f', g').

A note on the form V=ta/=da  $phyi?=m\hat{e}$  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 one kind of Burmese "mermaid construction", a form which Kato (2013) discusses in detail. In the construction "V=<nominalizer> phyi?=<verb sentence marker>", the "nominalizer" slot is occupied by =ta/=da 'realis' or =hma 'irrealis' (as shown in Table 2). The word phyi? is a verb meaning 'to be'. The "verb sentence marker" slot is filled with  $=t\hat{e}$  'realis' or  $=m\hat{e}$  'irrealis' (as shown in Table 1). This yields four possible combinations of nominalizer and verb sentence marker (see Table 5). Further, as shown in Table 5, the nominalizer in this construction generally indicates time: =ta/=da concerns the past or present, and =hma 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,  $phyi2=t\hat{\epsilon}$  indicates that the speaker is certain that the event actually occurred or will occur, while  $phyi2=m\hat{\epsilon}$  expresses that the speaker is uncertain whether the event actually occurred or will occur. (A possible translation is given for each combination.)

Table 5. Combinations of nominalizers and verb sentence markers in the construction 'V=<nominalizer> phyi2=<verb sentence marker>'

Combination	Time	Certainty
$V=t\dot{a}/=d\dot{a}\ phyi\partial=t\dot{e}$ ('it is the case that someone/some	past or present thing V-s/V-ed')	certain
$V=t\hat{a}/=d\hat{a} \ phyi?=m\hat{e}$ ('it would be the case that someon	past or present le/something V-s/V-	
V= $hm\grave{a}$ $phyi?=t\grave{e}$ ('it is the case that someone/some	future thing will V')	certain
V=hmà phyi?=mè ('it would be the case that someon	future ne/something would	uncertain V')

Among the four combinations listed in Table 5, V=ta/=da phyi $l=m\dot{\epsilon}$  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 not acceptable, as in (2-1-4-1)-(a, b, c, d, e, f, g) and (2-1-4-2)-(a, b, c, d, e, f, g). On the other hand, see (2-1-4-1)-(a', b', c', d', e', f', g') and (2-1-4-2)-(a', b', c', d', e', f', g'), whose main clause contains V=ta/=da phyi $leq =m\dot{\epsilon}$  in place of the verb sentence marker  $=t\dot{\epsilon}$  'realis'. Sentences (2-1-4-1)-(e', f', g') and (2-1-4-2)-(e', f', g') are totally acceptable, and involve the CLMs  $=t\dot{a}/=d\dot{a}=m\hat{o}l\hat{o}$ ,  $=t\hat{e}/=d\hat{e}$  ?ătwe?, and  $sh\dot{o}=d\hat{o}$ , 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 = $l\hat{o}$ , = $t\hat{o}/=d\hat{o}$ , and  $=t\dot{a}/=d\dot{a}=j\hat{a}uN$ , respectively. Finally, (2-1-4-1)-(a') and (2-1-4-2)-(a'), which are unacceptable, involve the CLM  $=t\dot{a}/=d\dot{a}=n\hat{\epsilon}$ . That is, for causals at Level IV, the use of V=tà/=dà phyi?=mè does not make every sentence acceptable: there are sentences that are unacceptable or marginally acceptable despite the fact that they use  $V=t\dot{a}/=d\dot{a}$  phyi $\partial=m\dot{c}$ . In Burmese, sentences (2-1-4-1)-(a', b', c', d') and (2-1-4-2)-(a', b', c', d') also cannot be made acceptable by any other means.

- (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.'
  - (a) \*myèjí sò=nè=dà=nê mó ywà=thá=dè ground wet=PROG=NMLZ=with rain fall=RES=RLS
  - (a)'\*myèjí sò=nè=dà=nê mó ywà=thá=dà phyi?=mè ground wet=PROG=NMLZ=with rain fall=RES=NMLZ be=IRR
  - (b) \*myèjí sò=nè=lô mó ywà=thá=dè ground wet=PROG=because rain fall=RES=RLS
  - (b)'?myèjí sò=nè=lô mó ywà=thá=dà phyi?=mè ground wet=PROG=because rain fall=RES=NMLZ be=IRR
  - (c) \*myèjí sò=nè=dô mó ywà=thá=dè ground wet=PROG=because rain fall=RES=RLS
  - (c)'?myèjí sò=nè=dô mó ywà=thá=dà phyi?=mè ground wet=PROG=because rain fall=RES=NMLZ be=IRR
  - (d) \*myèjí sò=nè=dà=jâun mó ywà=thá=dè ground wet=PROG=NMLZ=because.of rain fall=RES=RLS
  - (d)'?myèjí sò=nè=dà=jâun mó ywà=thá=dà ground wet=PROG=NMLZ=because.of rain fall=RES=NMLZ phyi?=mè be=IRR
  - (e) \*myèjí sò=nè=dà=môlô mó ywà=thá=dè ground wet=PROG=NMLZ=because.of rain fall=RES=RLS
  - (e)'myèjí sò=nè=dà=môlô mó ywà=thá=dà ground wet=PROG=NMLZ=because.of rain fall=RES=NMLZ phyi?=mè be=IRR
  - (f) \*myèjí sò=nè=dê ?ătwε? mó ywà=thá=dè ground wet=PROG=AN for rain fall=RES=RLS
  - (f)' myèjí sò=nè=dê ?ătwe? mó ywà=thá=dà phyi?=mè ground wet=PROG=AN for rain fall=RES=NMLZ be=IRR
  - (g) \*myèjí sò=nè=dè shò=dô mó ywà=thá=dè ground wet=PROG=RLS say=because rain fall=RES=RLS

- (g)' myèjí sò=nè=dè shò=dô mó ywà=thá=dà ground wet=PROG=RLS say=because rain fall=RES=NMLZ phyi?=mè 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.
  - (a) \*tù ?ăţɛ? cìn=nè=dà=nê shăyàwùn kè=lai?=tè 3SG life alive=PROG=NMLZ=with doctor save=LAI=RLS
  - (a)'\*tù ʔặtɛʔ cìn=nè=dà=nê shăyàwùn kè=lai?=tà
    3SG life alive=PROG=NMLZ=with doctor save=LAI=NMLZ
    phyi?=mè
    be=IRR
  - (b) \*tù ?ăte? cìn=nè=lô shăyàwùn kè=lai?=tè 3SG life alive=PROG=because doctor save=LAI=RLS
  - (b)'?tù ʔặtɛʔ cìn=nè=lô shǎyàwùn kè=lai?=tà
    3SG life alive=PROG=because doctor save=LAI=NMLZ
    phyi?=mè
    be=IRR
  - (c) \*tù ʔặtɛʔ cìn=nè=dô shăyàwùn kè=laiʔ=tè 3SG life alive=PROG=because doctor save=LAI=RLS
  - (c)'?tù ʔặtɛʔ cìn=nè=dô shǎyàwùn kè=lai?=tà
    3SG life alive=PROG=because doctor save=LAI=NMLZ
    phyi?=mè
    be=IRR
  - (d) \*tù ʔặtɛʔ cìn=nè=dà=jâun 3SG life alive=PROG=NMLZ=because.of shăyàwùn kè=lai?=tè doctor save=LAI=RLS
  - (d)"?tù ʔặtɛ? cìn=nè=dà=jâun

    3SG life alive=PROG=NMLZ=because.of
    shāyàwùn kè=lai?=tà phyi?=mè
    doctor save=LAI=NMLZ be=IRR
  - (e) \*tù ?ăţɛ? cìn=nè=dà=môlô
    3SG life alive=PROG=NMLZ=because.of
    shăyàwùn kè=lai?=tè
    doctor save=LAI=RLS

- (e)'tù ?ăţɛ? cìn=nè=dà=môlô
  3SG life alive=PROG=NMLZ=because.of
  shăyàwùn kè=lai?=tà phyi?=mè
  doctor save=LAI=NMLZ be=IRR
- (f) \*tù ʔặtɛʔ cìn=nè=dê ʔặtwɛʔ 3SG life alive=prog=an for shāyàwùn kè=laiʔ=tè doctor save=LAI=RLS
- (f)'tù ʔặtɛʔ cìn=nè=dê ʔặtwɛʔ 3SG life alive=PROG=AN for shăyàwùn kè=laiʔ=tà phyiʔ=mè doctor save=LAI=NMLZ be=IRR
- (g) \*tù ?ătɛ? cìn=nè=dè shò=dô
  3SG life alive=PROG=RLS say=because
  shăyàwùn kè=lai?=tè
  doctor save=LAI=RLS
- (g)'tù ʔặtɛʔ cìn=nè=dè shò=dô
  3SG life alive=PROG=RLS say=because
  shāyàwùn kè=laiʔ=tà phyiʔ=mè
  doctor save=LAI=NMLZ be=IRR

### 4.5 Causals Level V

Subordinate clause: premise. Main clause: speech act.

At Level V, all seven CLMs for causals are unacceptable. Neither of the questionnaire sentences can be expressed in a single sentence. What is expressed in (2-1-5-1) has to be expressed using multiple sentences, as for example in (20). The same applies to (2-1-5-2); see (21).

- (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'.
  - (a) \*mín cà=nè=dà=nê dì=hmà sázăyà cî=dè lè 2SG look.for=NMLZ=with here=at food exist=RLS SFP
  - (b) \*mín çà=nè=lô dì=hmà sázăyà cî=dè lè 2SG look.for=because here=at food exist=RLS SFP
  - (c) \*mín cà=nè=dô dì=hmà sázăyà cî=dè lè 2SG look.for=because here=at food exist=RLS SFP

- (d) \*mín çà=nè=dà=jâun dì=hmà sázăyà çî=dè lè 2SG look.for=NMLZ=because.of here=at food exist=RLS SFP
- (e) \*mín cà=nè=dà=mô dì=hmà sázăyà cî=dè lè 2SG look.for=NMLZ=because.of here=at food exist=RLS SFP
- (f) \*mín cà=nè=dê ?ătwe? 2SG look.for=PROG=AN for dì=hmà sázăyà cî=dè lè here=at food exist=RLS SFP
- (g) \*mín çà=nè=dè shò=dô
  2SG look.for=PROG=RLS say=because
  dì=hmà sázăyà cî=dè lè
  here=at food exist=RLS SFP
- (20) dì=hmà sázăyà cî=dè lè.
  here=at food exist=RLS SFP
  mín cà=nè=lô pyó=dà=bà
  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'.
  - (a) \*mín yè shà=nè-bòun yâ=dà=nê
    2SG thirsty=PROG-shape get=NMLZ=with
    dì=hmà yè cî=dè lè
    here=at water exist=RLS SFP
  - (b) \*mín yè shà=nè-bòun yâ=lô
    2SG thirsty=PROG-shape get=because
    dì=hmà yè cî=dè lè
    here=at water exist=RLS SFP
  - (c) \*mín yè shà=nè-bòun yâ=dô
    2SG thirsty=PROG-shape get=because
    dì=hmà yè cî=dè lè
    here=at water exist=RLS SFP
  - (d) \*mín yè shà=nè-bòun yâ=dà=jâun 2SG thirsty=PROG-shape get=NMLZ=because.of dì=hmà yè çî=dè lè here=at water exist=RLS SFP

- (e) \*mín yè shà=nè-bòun yâ=dà=mô
  2SG thirsty=PROG-shape get=NMLZ=because.of
  dì=hmà yè cî=dè lè
  here=at water exist=RLS SFP
- (f) \*mín yè shà=nè-bòun yâ=dê ʔǎtweʔ 2SG thirsty=PROG-shape get=AN for dì=hmà yè cî=dè lè here=at water exist=RLS SFP
- (g) \*mín yè shà=nè-bòun yâ=dè shò=dô
  2SG thirsty=PROG-shape get=RLS say=because
  dì=hmà yè cî=dè lè
  here=at water exist=RLS SFP
- (21) dì=hmà yè cî=dè lè.
  here=at water exist=RLS SFP
  mín yè shà=nè-bòun yâ=lô pyó=dà=bà
  2SG thirsty=PROG-shape get=because say=NMLZ=POL
  'There is water here. I am saying (this) because you look thirsty.'

To sum up the discussion of causals,  $=t\grave{a}/=d\grave{a}=n\hat{\epsilon}$  is acceptable at Levels I and II only. The CLMs  $=l\hat{o}$ ,  $=t\hat{o}/=d\hat{o}$  and  $=t\grave{a}/=d\grave{a}=j\hat{a}uN$  are perfectly acceptable at Levels I to III, and marginally acceptable at Level IV when used in sentences with a form which indicates a judgment on the part of the speaker, such as  $V=t\grave{a}/=d\grave{a}$  phyi $?=m\grave{\epsilon}$  'It would be the case that [...]'. The CLMs  $=t\grave{a}/=d\grave{a}=m\hat{o}l\hat{o}$ ,  $\{V=t\hat{\epsilon}/=d\hat{\epsilon} \text{ or } V=m\hat{\epsilon}\}$  ? $\check{a}tw\epsilon$ ?, and  $sh\grave{o}=d\hat{o}$  are perfectly acceptable at Levels I to III, and also acceptable at Level IV when used with  $V=t\grave{a}/=d\grave{a}$  phyi $?=m\grave{\epsilon}$ . At Level V, none of the causal CLMs are acceptable.

### 5. Conditionals

Conditionals can be expressed by the three CLMs shown in Table 6.

Table 6. Clause-linkage markers for conditionals

CLM	Type	Number in 3.2	
V=yìn	(a)	[1-3]	
V=lô cî=yìn	(f)	[6-1]	
C shò=yìn	(e)	[5-2]	

Semantic differences among these CLMs are difficult to grasp. All of them are acceptable at all levels except Level IV, where they are not acceptable unless they are used with an expression indicating the speaker's judgment.

## 5.1 Conditionals Level I

Subordinate clause: situation. Main clause: situation.

All three CLMs for conditionals are acceptable at Level I.

# (2-2-1-1) If spring comes, flowers bloom.

- (a) nwè?ú yau?=yìn pán pwîn=dè spring arrive=if flower open=RLS
- (b) nwè?ú yau?=lô cî=yìn pán pwîn=dè spring arrive=ACM exist=if flower open=RLS
- (c) nwè?ú yau?=tè shò=yìn pán pwîn=dè spring arrive=RLS say=if flower open=RLS

## (2-2-1-2) If rain falls, I always stay in the house.

- (a) mó ywà=yìn nà ʔămyɛ́dán ʔèin=hmà cî=nè=dè rain fall=if 1SG always house=at exist=PROG=RLS
- (b) mó ywà=lô cî=yìn nà ʔămyɛ́dán ʔèin=hmà cî=nè=dè rain fall=ACM exist=if 1SG always house=at exist=PROG=RLS
- (c) mó ywà=dè shò=yìn nà ʔămyédán ʔèin=hmà cî=nè=dè rain fall=RLS say=if 1SG always house=at exist=PROG=RLS

## 5.2 Conditionals Level II

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

All three CLMs for conditionals are acceptable at Level II.

### (2-2-2-1) If rain falls tomorrow, he has to stay in the house.

- (a) mănɛʔphyàn mó ywà=yìn tù ʔèin=hmà nè=yâ=mè tomorrow rain fall=if 3sG house=at stay=must=IRR
- (b) măne?phyàn mó ywà=lô eî=yìn tù ?èin=hmà tomorrow rain fall=ACM exist=if 3SG house=at nè=yâ=mè stay=must=IRR
- (c) măne?phyàn mó ywà=dè shò=yìn tù ?èin=hmà tomorrow rain fall=RLS say=if 3SG house=at nè=yâ=mè stay=must=IRR

# (2-2-2-2) If the child becomes hungry, he/she will surely cry.

- (a) khălé bai? shà=yìn ŋò=lêin=mè child hungry=if cry=surely=RLS
- (b) khălé bai? shà=lô cî=yìn ŋò=lêin=mè child hungry=ACM exist=if cry=surely=RLS
- (c) khălé bai? shà=dè shò=yìn ŋò=lêin=mè child hungry=RLS say=if cry=surely=RLS

#### 5.3 Conditionals Level III

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

All three CLMs for conditionals are acceptable at Level III.

# (2-2-3-1) Don't go out if rain falls.

- (a) mó ywà=yìn ʔặpyìn mặ-thwɛʔ=nê rain fall=if outside not-go.out=PROH
- (b) mó ywà=lô cî=yìn ʔặpyìn mặ-thwεʔ=nε̂ rain fall=ACM exist=if outside not-go.out=PROH
- (c) mó ywà=dè shò=yìn ʔặpyìn mặ-thwεʔ=nê rain fall=RLS say=if outside not-go.out=PROH

### (2-2-3-2) Give the child food if he/she becomes hungry.

- (a) khălé bai? shà=yìn sázăyà cwé=bà=Ø child hungry=if food feed=POL=IMP
- (b) khălé bai? shà=lô cî=yìn sázăyà cwé=bà=Ø child hungry=ACM exist=if food feed=POL=IMP
- (c) khălé bai? shà=dè shò=yìn sázăyà cwé=bà=Ø child hungry=RLS say=if food feed=POL=IMP

### 5.4 Conditionals Level IV

Subordinate clause: premise. Main clause: judgment.

Literal translations of the questionnaire sentences (2-2-4-1) and (2-2-4-2) are not acceptable; see (2-2-4-1)-(a, b, c) and (2-2-4-2)-(a, b, c). However, using  $V=t\dot{a}/=d\dot{a}$  phyi $\dot{a}=m\dot{c}$  'it would be the case that' (see Table 5) makes all of these sentences acceptable, as with causal CLMs at Level IV (as discussed in 4.4). See (2-2-4-1)-(a', b', c') and (2-2-4-2)-(a', b', c').

## (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.

- (a) \*myèjí sò=nè=yìn mó ywà=thá=dè ground wet=PROG=if rain fall=RES=RLS
- (a)'myèjí sò=nè=yìn mó ywà=thá=dà phyi?=mè ground wet=PROG=if rain fall=RES=NMLZ be=IRR
- (b) \*myèjí sò=nè=lô gî=yìn mó ywà=thá=dè ground wet=PROG=ACM exist=if rain fall=RES=RLS
- (b)'myèjí sò=nè=lô cî=yìn mó ywà=thá=dà phyi?=mè ground wet=PROG=ACM exist=if rain fall=RES=NMLZ be=IRR
- (c) \*myèjí sò=nè=dè shò=yìn mó ywà=thá=dè ground wet=PROG=RLS say=if rain fall=RES=RLS
- (c)'myèjí sò=nè=dè shò=yìn mó ywà=thá=dà phyi?=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.
  - (a) \*khălé ŋò=nè=yìn bai? shà=dè child cry=PROG=if hungry=RLS
  - (a)' khălé ŋò=nè=yìn bai? shà=dà phyi?=mè child cry=PROG=if hungry=NMLZ be=IRR
  - (b) \*khălé ŋò=nè=lô cî=yìn bai? shà=dè child cry=PROG=ACM exist=if hungry=RLS
  - (b)' khălé ŋò=nè=lô cî=yìn bai? shà=dà phyi?=mè child cry=PROG=ACM exist=if hungry=NMLZ be=IRR
  - (c) \*khălé ŋò=nè=dè shò=yìn bai? shà=dè child cry=PROG=RLS say=if hungry=RLS
  - (c)' khălé ŋò=nè=dè shò=yìn bai? shà=dà phyi?=mè child cry=PROG=RLS say=if hungry=NMLZ be=IRR

# 5.5 Conditionals Level V

Subordinate clause: premise. Main clause: speech act.

All three CLMs for conditionals are acceptable at Level V.

(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.

- (a) mó ywà=nè=yìn dì=hmà thí cî=dè rain fall=PROG=if here=at umbrella exist=RLS (b) mó ywà=nè=lô çî=yìn dì=hmà thí cî=dè rain fall=PROG=ACM exist=if here=at umbrella exist=RLS (c) mó ywà=nè=dè shò=yìn dì=hmà thí cî=dè rain fall=PROG=RLS umbrella exist=RLS say=if here=at
- (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.
  - cî=dè (a) bai? shà=nè=yìn dì=hmà sázăyà hungry=PROG=if here=at food exist=RLS dì=hmà (b) bai? shà=nè=lô cî=yìn sázăyà cî=dè food hungry=PROG=ACM exist=if here=at exist=RLS shò=yìN (c) bai? shà=nè=dè dì=hmà sázăyà cî=dè

To sum up the discussion of conditionals, all three conditional CLMs are acceptable at Levels I, II, III, and V, and also at Level IV if they are used with  $V=t\hat{a}/=d\hat{a}$  phyi $\hat{i}=m\hat{\epsilon}$ .

here=at

food

exist=RLS

### 6. Concessives

hungry=PROG=RLS

Concessives can be expressed by the three CLMs shown in Table 7.

sav=if

Table 7. Clause-linkage markers for concessives

CLM	Туре	Number in 3.2	
$V$ -y $\varepsilon$ ? $t\acute{a}$ = $n\hat{\varepsilon}$	(b)	[2-1]	
V=pèmê/=bèmê C shò=bèmê	(a) (e)	[1-4] [5-3]	

Semantic differences among these CLMs are difficult to grasp. Nonetheless, these CLMs can be divided into two groups in terms of the five levels. The CLM  $-y\varepsilon 2t\acute{a}=n\acute{\varepsilon}$  is perfectly acceptable at Level I, acceptable under a limited circumstance at Level II, and unacceptable at Levels III to V. The other two CLMs are acceptable at all levels except Level IV, where they are acceptable if they are used with an expression indicating the speaker's judgment. Thus,  $=p\grave{e}m\acute{\varepsilon}/=b\grave{e}m\acute{\varepsilon}$  and  $sh\grave{o}=b\grave{e}m\acute{\varepsilon}$  have

a wider distribution than  $-y\varepsilon \frac{\partial t}{\partial t} \hat{a} = n\hat{\varepsilon}$ .

### 6.1 Concessives Level I

Subordinate clause: situation. Main clause: situation.

At Level I, all three concessive CLMs are acceptable.

# (2-3-1-1) Although rain fell, the ground is dry.

- (a) mó ywà=thá-yɛʔt̪á=nê myèjí chauʔ=nè=dè rain fall=RES-although=with ground dry=PROG=RLS
- (b) mó ywà=thá=bèmê myèjí chau?=nè=dè rain fall=RES=although ground dry=PROG=RLS
- (c) mó ywà=thá=dè shò=bèmê myèjí chau?=nè=dè rain fall=RES=RLS say=although ground dry=PROG=RLS

# (2-3-1-2) Although rain was falling, he went out.

- (a) mó ywà=nè-yɛʔtá=nê tù ʔặpyìn thwɛʔ=tè rain fall=PROG-although=with 3SG outside go.out=RLS
- (b) mó ywà=nè=bèmê tù ʔặpyìn thweʔ=tè rain fall=PROG=although 3SG outside go.out=RLS
- (c) mó ywà=nè=dè shò=bèmê tù ʔặpyìn thweʔ=tè 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, the CLMs  $=p\hat{e}m\hat{e}/=b\hat{e}m\hat{e}$  and  $sh\hat{o}=b\hat{e}m\hat{e}$  are acceptable, apparently with no restriction.

On the other hand,  $-y\varepsilon \partial_t \dot{a} = n\hat{\varepsilon}$  has a restriction. Of the two sentences using  $-y\varepsilon\partial_t \dot{a} = n\hat{\varepsilon}$ , the first, (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. In (2-3-2-1)-(a), since the verb *chau*? 'dry' is a non-volitional verb, this sentence is unacceptable. On the other hand, sentences (22) and (23) are acceptable because the verbs  $n\dot{e}$  'stay' and  $thw\varepsilon\partial$  'go out' are both volitional. In (2-3-2-2)-(a) also, the verb  $n\dot{e}$  'stay' is a volitional verb and the sentence is acceptable.

## (2-3-2-1) Although rain fell, the ground may be dry.

The idiomatic expression V=yiN  $V=m\dot{\varepsilon}$  has an epistemic meaning: 'may

# VERB, probably will VERB'.

- (a) \*mó ywà=thá-yεʔt̞á=nε̂ myèjí chauʔ=yìn chauʔ=nè=mὲ rain fall=RES-although=with ground dry=if dry=PROG=IRR
- (b) mó ywà=thá=bèmê myèjí chau?=yìn chau?=nè=mè rain fall=RES=although ground dry=if dry=PROG=IRR
- (c) mó ywà=thá=dè shò=bèmê rain fall=RES=RLS say=although myèjí chau?=yìn chau?=nè=mè ground dry=if dry=PROG=IRR
- (22) mó tei? twá-yɛ?tá=nê tù ?èin=hmà nè=yìn nè=mè rain stop go-although=with 3SG house=at stay=if stay=IRR 'Although the rain has stopped, he probably will stay at home.'
- (23) mó ywà=nè-ye?tá=nê tù ?ăpyìn rain fall=PROG-although=with 3sG outside thwe?=yìn thwe?=mè go.out=if go.out=IRR 'Although rain is falling, he probably will go outside.'
- (2-3-2-2) Although the rain stopped, he has to stay in the house.
  - (a) mó tei?=twá-yɛ?tá=nê tù ?èin=hmà nè=yâ=mè rain stop=go=although=with 3sG house=at stay=must=IRR
  - (b) mó tei?=twá=bèmê tù ?èin=hmà nè=yâ=mè rain stop=go=although 3sG house=at stay=must=IRR
  - (c) mó tei?=twá=dè shò=bèmê tù ?èin=hmà nè=yâ=mè rain stop=go=RLS say=although 3sG house=at stay=must=IRR

### 6.3 Concessives Level III

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

At Level III, sentences with  $-y\varepsilon 2t\acute{a}=n\acute{\varepsilon}$ , such as (2-3-3-1)-(a) and (2-3-3-2)-(a), are unacceptable, whereas the other sentences, those with  $=p\grave{e}m\acute{\varepsilon}/=b\grave{e}m\acute{\varepsilon}$  and  $sh\grave{o}=b\grave{e}m\acute{\varepsilon}$ , are acceptable.

- (2-3-3-1) Let's go out although rain is falling.
  - (a) \*mó ywà=nè-yε?tá=nε̂ γặpyìν thwε?=câ=yâ?àuν rain fall=PROG=although=with outside go.out=PL=let's
  - (b) mó ywà=nè=bèmê ?ăpyìn thwe?=câ=yâ?àun rain fall=PROG=although outside go.out=PL=let's

- (c) mó ywà=nè=dè shò=bèmê ʔặpyìn thwe?=câ=yâ?àun rain fall=PROG=RLS say=although outside go.out=PL=let's
- (2-3-3-2) Stay in the house although the rain stopped.
  - (a) \*mó tei?=twá-yɛ?tá=nê ?èin=hmà nè=bà=Ø rain stop=go=although=with house=at stay=POL=IMP
  - (b) mó tei?=twá=bèmê ?èin=hmà nè=bà=Ø rain stop=go=although house=at stay=POL=IMP
  - (c) mó tei?=twá=dè shò=bèmê ?èin=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 (2-3-4-1) and (2-3-4-2) are unacceptable as they stand; 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  $=p\dot{e}m\hat{e}/=b\dot{e}m\hat{e}$  and  $sh\dot{o}=b\dot{e}m\hat{e}$  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  $V=t\dot{a}/=d\dot{a}$   $m\ddot{a}-hou\dot{a}=ph\dot{u}$  'it is not the case that', which is the corresponding negative form of  $V=t\dot{a}/=d\dot{a}$   $phyi\dot{a}=m\dot{e}$  (see Table 5). The verb  $hou\dot{a}$  'to be so' has to be used in negation of the verb  $phyi\dot{a}$  'to be'. Sentences with  $=p\dot{e}m\dot{e}/=b\dot{e}m\dot{e}$  and  $sh\dot{o}=b\dot{e}m\dot{e}$  (i.e. (2-3-4-1)-(b', c') and (2-3-4-2)-(b', c')) become acceptable if they are used with  $V=t\dot{a}/=d\dot{a}$   $m\ddot{a}-hou\dot{a}=ph\dot{u}$ . In contrast, even when  $V=t\dot{a}/=d\dot{a}$   $m\ddot{a}-hou\dot{a}=ph\dot{u}$  is used, the sentences with  $=v\dot{a}/t\dot{a}=n\dot{e}$  are unacceptable; see (2-3-4-1)-(a') and (2-3-4-2)-(a').

- (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.
  - (a) \*shǎyàwùn=gâ tû ?ǎtɛ?=kò kè=lai?-yɛ?tá=nê doctor=KA 3SG life=KO save=LAI=although=with ?édì ?ǎtwe? mā-hlu?=phú that for not-send=NEG
  - (a) \*\*shayawun=ga tû ?ate?=ko ke=lai?-ye?ta=nê doctor=ka 3sG life=ko save=lai=although=with ?édi ?atwe? hlu?=tà ma-hou?=phú that for send=NMLZ not-be.so=NEG

- (b) \*shăyàwùn=gâ tû ?ătɛ?=kò kè=lai?=pèmê doctor=KA 3SG life=KO save=LAI=although ?édì ?ătwɛ? mă-hlu?=phú that for not-send=NEG
- (b)' shăyàwùn=gâ tû ?ătɛ?=kò kè=lai?=pèmê doctor=KA 3SG life=KO save=LAI=although ?édì ?ătwɛ? hlu?=tà mă-hou?=phú that for send=NMLZ not-be.so=NEG
- (c) \*shǎyàwùn=gâ tû ?ǎtɛ?=kò kè=lai?=tè shò=bèmê doctor=KA 3SG life=KO save=LAI=RLS say=although ?édì ?ǎtwɛ? mǎ-hlu?=phú that for not-send=NEG
- (c)' shăyàwùn=gâ tû ?ăţe?=kò kè=lai?=tè shò=bèmê doctor=KA 3SG life=KO save=LAI=RLS say=although ?édì ?ătwe? hlu?=tà mă-hou?=phú that 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.
  - (a) \*myèjí sò=nè-yɛʔtá=nê ground wet=PROG=although=with mó mă-ywà=bú rain not-fall=NEG
  - (a)' \*myèjí sò=nè-yɛʔt̪á=nê ground wet=PROG=although=with mó ywà=thá=dà mă-houʔ=phú rain fall=RES=NMLZ not-be.so=NEG
  - (b) \*myèjí sò=nè=bèmê ground wet=PROG=although mó mă-ywà=bú rain not-fall=NEG
  - (b)' myèjí sò=nè=bèmê ground wet=PROG=although mó ywà=thá=dà mă-hou?=phú rain fall=RES=NMLZ not-be.so=NEG

- (c) \*myèjí sò=nè=dè shò=bèmê ground wet=PROG=RLS say=although mó mă-ywà=bú rain not-fall=NEG
- (c)' myèjí sò=nè=dè shò=bèmê ground wet=PROG=RLS say=although mó ywà=thá=dà mă-hou?=phú rain fall=RES=NMLZ not-be.so=NEG

Questionnaire sentences (2-3-4-1) and (2-3-4-2) both have a negative clause as their main clause. It would be better also to examine a sentence with an affirmative main clause, because the negative expression  $V=t\dot{a}/=d\dot{a}$ mă-hou?=phú 'it is not the case that' uses a different verb from the affirmative  $V=t\dot{a}/=d\dot{a}$  phyi $\partial=m\dot{\epsilon}$  'it would be the case that', which we employed in 4.4 and 5.4, and also because V=ta/=da  $m\ddot{a}$ -hou $\partial =ph\dot{u}$  does not show a realis-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  $=ph\dot{u}/=b\dot{u}$ . 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 (i.e., (2-3-4-2)'-(a, b, c)). However, sentences  $=p\hat{e}m\hat{e}/=b\hat{e}m\hat{e}$  and  $sh\hat{o}=b\hat{e}m\hat{e}$  become acceptable if they are used with an expression indicating the speaker's judgment, as, in this case,  $V=t\dot{a}/=d\dot{a}$  phyi $l=m\dot{c}$  (i.e., (2-3-4-2)'-(b', c')); and the sentence with  $-y\varepsilon 2t\dot{a}=n\hat{\varepsilon}$  does not become acceptable even if it is used with  $V=t\dot{a}/=d\dot{a}$  $phyi?=m\grave{\epsilon}$  (i.e., (2-3-4-2)'-(a')).

- (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.
  - (a) \*myèjí chau?=nè-yɛʔṭá=nê ground dry=PROG=although=with mó ywà=thá=dè rain fall=RES=RLS
  - (a)' \*myèjí chau?=nè-yɛ?tá=nê ground dry=PROG=although=with mó ywà=thá=dà phyi?=mè rain fall=RES=NMLZ be=IRR
  - (b) \*myèjí chau?=nè=bèmê ground dry=PROG=although mó ywà=thá=dè rain fall=RES=RLS

- (b)' myèjí chau?=nè=bèmê ground dry=PROG=although mó ywà=thá=dà phyi?=mè rain fall=RES=NMLZ be=IRR
- (c) \*myèjí chau?=nè=dè shò=bèmê ground dry=PROG=RLS say=although mó ywà=thá=dè rain fall=RES=RLS
- (c)' myèjí chau?=nè=dè shò=bèmê ground dry=PROG=RLS say=although mó ywà=thá=dà phyi?=mè rain fall=RES=NMLZ be=IRR

6.5 Concessives Level V

Subordinate clause: premise. Main clause: speech act.

At Level V, the sentences with  $-y\varepsilon 2t\acute{a}=n\acute{\varepsilon}$ , namely (2-3-5-1)-(a) and (2-3-5-2)-(a), are unacceptable, while the other sentences 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'.
  - (a) \*mín tî-ye?tá=nê dì=hmà sázăyà cî=dè lè 2SG know=although=with here=at food exist=RLS SFP
  - (b) mín tî=bèmê dì=hmà sázăyà cî=dè lè 2SG know=although here=at food exist=RLS SFP
  - (c) mín tî=dè shò=bèmê dì=hmà sázăyà cî=dè 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!'

- (a) \*mín=gò ?á nà-yɛ?tá=nê ?ălou? cózá=bà=Ø 2SG=GO sorry=although=with job endeavor=POL=IMP
- (b) mín=gò ?á nà=bèmê ?ălou? cózá=bà=Ø 2SG=GO sorry=although job endeavor=POL=IMP
- (c) mín=gò ?á nà=dè shò=bèmê ?ălou? cózá=bà=Ø 2SG=GO sorry=RLS say=although job endeavor=POL=IMP

To sum up the discussion of concessives,  $-y\varepsilon 2t\acute{a}=n\hat{\varepsilon}$  is acceptable at Level I, acceptable with restriction at Level II, and unacceptable at Levels

III to V. The other two CLMs ( $=p\grave{e}m\hat{\epsilon}/=b\grave{e}m\hat{\epsilon}$  and  $sh\grave{o}=b\grave{e}m\hat{\epsilon}$ ) are acceptable at all levels except Level IV, where they become acceptable if an expression indicating the speaker's judgment (e.g.,  $V=t\grave{a}/=d\grave{a}$   $phyi2=m\grave{\epsilon}$  'it would be the case that';  $V=t\grave{a}/=d\grave{a}$   $m\check{a}-hou2=ph\acute{u}$  'it is not the case that') is used.

### 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. Only the voiceless form of each CLM is shown so as to save space. In the table, "+", "(+)", "?", and "-" indicate respectively that the CLM in question:

- (a) "+": can be used with no restriction;
- (b) "(+)": can be used only under a certain circumstance;
- (c) "?": is not high in acceptability, and;
- (d) "-": cannot be used at all.

"irr." indicates "irrelevant".

The CLMs for causals can be classified into three groups. The use of  $=t\grave{a}/=d\grave{a}=n\hat{\varepsilon}$  is severely restricted; it is acceptable at Levels I and II only. In contrast, the CLMs of the second group  $(=l\hat{o}, =t\hat{o}/=d\hat{o}, \text{ and } =t\grave{a}/=d\grave{a}=j\hat{a}uN)$  are perfectly acceptable from Levels I to III and marginally acceptable at Level IV if used with a form indicating the speaker's judgment, such as  $V=t\grave{a}/=d\grave{a}$  phyi $P=m\grave{\varepsilon}$  'it would be the case that'. The CLMs of the third group  $(=t\grave{a}/=d\grave{a}=m\hat{o}l\hat{o}, =t\hat{\varepsilon}/=d\hat{\varepsilon}$   $P\check{a}tw\varepsilon P$ , and  $sh\grave{o}=d\hat{o}$ ) are perfectly acceptable at Levels I to III, and also acceptable at Level IV if they are used with an expression indicating the speaker's judgment. At Level V, all of the causal CLMs are unacceptable.

Regarding conditionals, all three CLMs (=yin,  $=l\hat{o}$   $\varepsilon\hat{i}=yin$ , and  $sh\hat{o}=yin$ ) are perfectly acceptable at all levels except Level IV, where they become acceptable if they are used with a form indicating the speaker's judgment.

As for the concessive CLMs,  $-y\varepsilon 2t\acute{a}=n\hat{\varepsilon}$  is acceptable at Level I, acceptable with a restriction at Level II, and unacceptable at Levels III to V. The other two concessive CLMs ( $=p\grave{e}m\hat{\varepsilon}/=b\grave{e}m\hat{\varepsilon}$  and  $sh\grave{o}=b\grave{e}m\hat{\varepsilon}$ ) are perfectly acceptable at all levels except Level IV, where they become acceptable if they are used with a form indicating the speaker's judgment.

Table 8. Distribution of clause linkage markers

CLM	I	II	III	IV	V
Main clause	Situation	Situation+ Judgment	Situation+ Interpersonal effect	Judgment	Speech act
Subordinate clause	Situation	Situation	Situation	Premise	Premise
Causals: subordination					
$V=t\grave{a}=n\hat{arepsilon}$	+	+	_	_	_
with 'V= $t\dot{a}/=d\dot{a}\ phyi?=m\dot{\epsilon}$ '	irr.	irr.	irr.	-	irr.
$V=l\hat{o}$	+	+	+	_	_
with 'V= $t\dot{a}/=d\dot{a}\ phyi?=m\dot{e}$ '	irr.	irr.	irr.	?	irr.
$V=t\hat{\sigma}$	+	+	+	_	_
with 'V= $t\dot{a}/=d\dot{a}$ phyi $\partial=m\dot{\epsilon}$ '	irr.	irr.	irr.	?	irr.
$V=t\hat{a}=j\hat{a}u_N$	+	+	+	_	_
with 'V= $t\dot{a}/=d\dot{a}\ phyi?=m\dot{\epsilon}$ '	irr.	irr.	irr.	?	irr.
V=tà=môlô	+	+	+	_	_
with 'V= $t\dot{a}/=d\dot{a}\ phyi?=m\dot{e}$ '	irr.	irr.	irr.	+	irr.
V=tê ?ătwe?	+	+	+	_	_
with 'V= $t\dot{a}/=d\dot{a}\ phyi?=m\dot{e}$ '	irr.	irr.	irr.	+	irr.
$C sh\grave{o} = d\hat{s}$	+	+	+	_	_
with 'V= $t\dot{a}/=d\dot{a}\ phyi?=m\dot{\epsilon}$ '	irr.	irr.	irr.	+	irr.
Conditionals: subordination	l				
V=yìN	+	+	+	_	+
with 'V=tà/=dà phyi?=mè'	irr.	irr.	irr.	+	irr.
V=lô cî=yìn	+	+	+	_	+
with 'V= $t\dot{a}/=d\dot{a}\ phyi ?=m\dot{\epsilon}$ '	irr.	irr.	irr.	+	irr.
$C sh\grave{o} = y\grave{\imath}_N$	+	+	+	_	+
with 'V=tà/=dà phyi?=mὲ'	irr.	irr.	irr.	+	irr.
Concessives: subordination					
 V-yε? <u>t</u> á=nε̂	+	(+)		_	_
with 'V= $t\dot{a}/=d\dot{a}$ phyi?= $m\dot{\epsilon}$ '	irr.	irr.	irr.	_	irr.
V=pèmê	+	+	+	_	+
with 'V=tà/=dà phyi?=mè'	irr.	irr.	irr.	+	irr.
$C sh\hat{o} = p\hat{e}m\hat{e}$	+	+	+	_	+

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. The following two lines can be drawn.

- (a) Between Level II and Level III: see the causal  $=t\dot{a}/=d\dot{a}=n\hat{\varepsilon}$  and the concessive  $-y\varepsilon 2t\dot{a}=n\hat{\varepsilon}$ .
- (b) Between Level IV and Level V: see the causal CLMs of the third group.

The boundary shown in (a) is very clear, because  $=t\grave{a}/=d\grave{a}=n\hat{\varepsilon}$  is perfectly acceptable at Levels I and II but cannot be used at all at the higher levels. This fact shows the importance of setting up a Level III as distinct from Level II (cf. Mie Tsunoda, 2012; this volume).

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

### 7.2 Notes on Level IV

For some of the languages investigated in the present volume, it is sometimes difficult at Level IV to obtain acceptable sentences unless a form that indicates the speaker's judgment is added. This applies to Burmese as well. As seen in 7.1, unless accompanied by an expression such as  $V=t\dot{a}/=d\dot{a}$  phyi $\dot{a}=m\dot{c}$  'it would be the case that', all of the CLMs are unacceptable.

### 8. Summary and concluding remarks

Burmese has at least seven causal CLMs, three conditional CLMs, and three concessive CLMs. They exhibit different distributions in terms of the five levels of clause linkage, even in the same semantic area.

The Burmese data show evidence that a boundary, (i), should be drawn between Levels II and III, and another, (ii), between Levels IV and V. The boundary between Levels II and III, which is very clear in Burmese, stresses the importance of setting up a Level III as distinct from Level II.

It is evident from these findings that the five-level classification of clause linkages is conceptually highly helpful in describing clause linkage in Burmese.

### **Abbreviations**

A - transitive subject; ACM - adverbial clause marker; AN - adnominalizing marker; CLM - clause-linkage marker; IMP - imperative verb sentence marker = $\theta$ ; IRR - irrealis verb sentence marker = $m\hat{e}$ ; KA - case particle = $k\hat{a}/=g\hat{a}$  'agent (subject); source'; KO - case particle = $k\hat{o}/=g\hat{o}$  'patient; recipient; goal'; LAI - auxiliary = $lai\hat{o}$  indicating thoroughness; NEG - negative verb sentence marker = $ph\acute{u}/=b\acute{u}$ ; NMLZ - nominalizer; O - object; PL - plural; POL - particle = $p\grave{a}$  indicating politeness; PROG - auxiliary = $n\grave{e}$  indicating progressive; PROH - prohibitive verb sentence marker = $n\hat{e}$ ; RES auxiliary = $th\acute{a}$  indicating resultative; RLS - realis verb sentence marker = $t\grave{e}/=d\grave{e}$ ; S - intransitive subject; SFP - sentence final particle; SG - singular; V - verb; 1 - first person; 2 - second person; 3 - third person

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# **Appendix**

I will show below how the sentences in Sections 3 and 4 of the "Questionnaire for Five Levels" (Tasaku Tsunoda, this volume) are expressed in Burmese. Some sentences in the questionnaire are revised so as to suit Burmese culture. Burmese sentences are presented directly after the English sentences.

- 3. Sentences for elicitation (second stage): other semantic areas
- 3.1. Time, temporal (1): simultaneous: 'when, while'
- (3-1-1) He came when I came. (See [2-4] in 3.2.)

ηὰ là**-dóun=gâ** từ là=dὲ 1SG come-process=KA 3SG come=RLS

- (3-1-2) He worked while I was resting. (See [2-3] in 3.2.) nà ná=nè-**dóun** tù ʔălouʔ louʔ=tè 1SG rest-PROG=process 3SG job do=RLS
- (3-1-3) I saw him walking. (See Table 2 in 3.2.) tù lán sau?=nè=dà nà myìn=dè 3SG walk=PROG=NMLZ 1SG see=RLS
- 3.2. Time, temporal (2): 'before'
- (3-2-1) He came before I went out. (See [1-11] in 3.2.)

nà mă-thwε?=**khìn** tù là=dὲ 1SG not-go.out=before 3SG come=RLS

- (3-2-2) He went out before the rain started. (See [1-11] in 3.2.) mó mă-ywà=gìν tù thwε?=tὲ
  - rain not-fall=before 3sG go.out=RLS
- 3.3. Time, temporal (3): 'after'
- (3-3-1) He came after I went out.

tù là=**dε̂ nau?** ŋà thwε?=tὲ 3sg come=AN behind 1sg go.out=RLs

(3-3-2) He went out after the rain stopped.

mó tei?=**tê nau?** tù thwε?=tè rain stop=AN behind 3SG go.out=RLS

- 3.4. Negative conditional: 'unless'
- (3-4-1) Unless rain falls, I will go. (See [1-3] in 3.2.) mó mă-ywà=yìn nà twá=mè rain not-fall=if 1SG go=IRR
- (3-4-2) I will not go unless he goes. (See [1-3] in 3.2.) tù mă-twá=yìn nà mă-twá=bú 3SG not-go=if 1SG not-go=NEG
- 3.5. Concessive conditional
- (3-5-1) Even if he goes, I will not go. (See [1-11] in 3.2.) tù twá=yìn=lɛ ŋà mă-twá=bú 3SG go=if=also 1SG not-go=NEG
- (3-5-2) Even if rain falls, I will go. (See [1-11] in 3.2.) mó ywà=yìn=lé ŋà twá=mè rain fall=if=also 1sG go=IRR
- 3.6. Location, locative
- (3-6-1) I fell over where he fell over before.

tù lé=dê nèyà=hmà nà lé=dè 3sG fall=AN place=at 1sG fall=RLs

(3-6-2) Where he lives, winter is cold.

tù nè=dê nèyà=hmà sháunyàdì=shò chán=dè 3sG live=AN place=at winter=say cold=RLS

- 3.7. Manner
- (3-7-1) Ma Hla spoke as he had taught her to. (See [4-3] in 3.2.)  $\underline{t}\hat{u}$  py5 pyâ= $d\hat{\epsilon}$  **?ătái**N mâhlâ py5= $d\hat{\epsilon}$

gu pyo pya=de **Patain** mahla pyo=de 3SG tell show=AN as (personal name) tell=RLS

```
3sg coldness catch=go=AN
                                     as.if
                                            tell=RLS
3.8. Purpose
(3-8-1) I went to the river so that I could catch fish. (See [2-2] in 3.2.)
            phán-bô
                        myi?kán <u>t</u>wá=dè
      ηá
                        riverside go=RLS
       fish catch-to
(3-8-2) She cooked a side dish so that they could eat. (See [1-6] in 3.2.)
      tù-dô
                sá=hnàin=?àun
                                   tù
                                         hín
                                                   che?=tè
      3sg=pl eat=can=so.that
                                   3sg side.dish cook=RLS
3.9. Negative purpose
(3-9-1) In case he sees me, I will hide in the house. (See [1-6] in 3.2.)
      <u>t</u>ù
            mă-myin=?àun
                               ηà
                                     ?èin-dέ=hmà
                                                      póun=mè
       3sg not-see=so.that
                               1sg house-inside=at hide=irr
(3-9-2) Lest he speared me, I ran away. (See [1-6] in 3.2.)
                        mă-thó=hnàin=?àun
            hlàn=nê
       3sg spear=with not-stab=can=so.that
      ηà
            pyé=dè
       1SG run=RLS
3.10. Consequence/result
(3-10-1) He ran fast with the result that he fell over. (See [1-1] in 3.2.)
            myànmyàn pyé=lô
                                       lé=dè
      3sg quickly
                         run=because fall=RLS
(3-10-2) He throw a net into the river with the result that he caught fish.
 (See [1-1] in 3.2)
            myi?-thέ=hmà kùn pyi?=lô
      <u>t</u>ù
                                                 ηά yâ=dè
       3sg river-inside=at net throw=because fish get=RLs
3.11 Circumstantial and additive
3.11.1. Circumstantial
(3-11-1-1) He caught fish by throwing a net into the river. (See [1-7] in
3.2.)
            myi?-thé=hmà kùn pyi?=pí
                                            ná phán=dè
      3sg river-inside=at net throw=and fish catch=RLs
(3-11-1-2) He caught a pig without spearing it. (See [1-12] in 3.2.)
                   mă-<u>t</u>óun=b€́
            hlàn
                                     63 Y
                                            phán=dè
      3sg spear not-use=without pig
                                            catch=RLS
```

(3-7-2) She talks like she has a cold. (See [4-7] in 3.2.)

mî=<u>t</u>wá=**dă** 

lòlò

pyź=dè

?ă?é

```
(3-11-2-1) In addition to catching a tiger, he found an elephant. (See [4-4]
in 3.2.)
                    phán=yâ=dê
                                    ?ăpyìn
       <u>t</u>ù
             cá
       3sg tiger
                    catch=can=AN outside
       shìn=lέ
                      phán=yâ=dè
       elephant=also catch=can=RLS
(3-11-2-2) Besides not catching any tiger, he lost his sword. (See [4-4] in
3.2.)
                    mă-phán=yâ=dε̂
                                         ?ăpyìn
       <u>t</u>ù
             cá
       3sg tiger
                    not-catch=can=AN
                                        outside
       dá=bà
                      pyau?=<u>t</u>wá=dè
       sword=also
                      disappear=go=RLS
4. Sentences for elicitation (third stage): 'but' and 'and'
4.1. 'But'
4.1.1. 'But': Concessive
(4-1-1-1) Rain fell, but the ground is dry. (See [1-4] in 3.2.)
            vwà=bèmε̂
                           mvèjí
                                     chau?=nè=dè
       rain fall=though
                           ground
                                     dry=PROG=RLS
(4-1-1-2) Rain was falling, but he went out. (See [1-4] in 3.2.)
            ywà=nè=bèmε̂
       mó
                                 <u>t</u>ù
                                       thwe? twá=dè
       rain fall=PROG=though 3SG go.out go=RLS
4.1.2. 'But': Semantic opposition
(4-1-2-1) This man is tall, but that man is short. (See [1-4] in 3.2.)
       dì
            yau?cá=qâ ?ăya? cè=bèmê
       this man=GA
                          hight long=though
                          ?ăya? pû=dè
       hò
             yau?cá=qâ
                          hight short=RLS
       that man=GA
(4-1-2-2) This tiger is big, but that tiger is small. (See [1-4] in 3.2.)
       dì
            cá
                   cí=bèmê
                                 hò
                                       cá
                                             <u>t</u>é=dὲ
       this tiger big=though
                                 that tiger small=RLS
4.1.3. 'But': Contradicting evaluations
(4-1-2-1) This shirt is beautiful, but it is small. (See [1-4] in 3.2.)
             ?ínjì
                    hlâ=bèmê
                                       <u>t</u>é=dὲ
       dì
                    beautiful=though small=RLS
       this
            shirt
(4-1-2-2) This house is beautiful, but it is small. (See [1-4] in 3.2.)
             ?èin
                    hlâ=bèmê
                                       <u>t</u>é=dὲ
       dì
       this house beautiful=though small=RLS
```

3.11.2. Additive

## 4.2. 'And'

4.2.1. 'And': Linking two situations

(4-2-1-1) He went to a hill and her wife went to a river. (See [1-7] in 3.2.)

tù=gâ tàun-bò twá=bí 3SG=GA mountain-upside go=and tû méinmâ=gâ myi?kán twá=dè his wife=GA riverside go=RLS

(4-2-1-2) This man caught a tiger and that man caught an elephant. (See [1-7] in 3.2.)

dì yau?cá=gâ cá phán=**bí** this man=GA tiger catch=and hò yau?cá=gâ shìn phán=dè that man=GA elephant catch=RLS

4.2.2. 'And': Order of two situations

(4-2-2-1) He caught a pig and his wife cooked it. (See [1-7] in 3.2.)

tù=gâ we? phán=bí 3SG=GA pig catch=and tû méinmâ=gâ che?=tè his wife=GA cook=RLS

(4-2-2-2) I went and I found an elephant.

The meaning of this sentence is expressed with a serial verb construction in Burmese, as shown below.

nà shìν **twá twê=**dὲ 1sG elephant go find=RLS