A THREE-DIMENSIONAL ANALYSIS OF CHAM SENTENCES

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0. INTRODUCTION

Cham¹ sentences are described here in relation to the following parameters: Manifested Form, Feature Type and Truth Value Type.² Manifested form relates to the overt form of a sentence. Feature type refers to its internal function. And truth value refers to its external function in relation to the speaker-hearer situation.

1. MANIFESTED FORMS

With respect to manifested form, sentences may be described in terms of the following basic forms: Simple, Complex, Juxtaposed, Initial-echo, Quotative, Conjunctive and Particle-marked. There may also be combinations of these basic forms, such as initial-echo-quotative. These combinations will be discussed in section 1.8.

1.1. A simple sentence consists of one independent clause or a less complete version of such a clause.

Nhu buch bimao ka amek nhu.³
he pluck mushroom for mother his
'He gathered mushrooms for his mother.'
Djauv.
correct
'That's right.'

1.2. A complex sentence has a clause(s) or sentence(s) embedded in the main clause, as illustrated in the sentence below:

Nhu tabliĕk nao iŏk thay urang dok pāk līngiu page.
he go-out go look who person be at outside fence
'He went out to see who was outside the fence.'

Embedded as the object of the sentence is the clause:
 thay urang dok pāk līngiu page

1.3. Juxtaposed sentences may be divided into those which have two clauses, Simple-juxtaposed, and those which have three or more clauses, Multiple-juxtaposed. The clauses in a juxtaposed sentence are closely linked in a sequence of some kind, such as a temporal or consecutive action sequence, rather than by conjunctions.

(Simple-juxtaposed)
Mek mūdōh tagôk, nao mŭk līthay ka anûk huāk.
mother woke got-up get rice for child eat-rice
'The mother got up (and) went to get rice for (her) child to eat.'

(Multiple-juxtaposed)
Nhu nao hmu, ŭamû ribong, līpōk mŭk hu klaw dray nhach.
he go field, enter irrigation-ditch, felt-for get able 3 cl. frog
'He went to the paddy, entered the irrigation ditch (and) got three frogs with his hands.'

As shown in the examples above, simple-juxtaposed and multiple-juxtaposed sentences frequently omit the subject from the second and succeeding clauses, since the subject of the first clause most often is the understood subject of the succeeding clauses in the sentence.

1.4. Unlike some of the neighbouring languages which manifest complete echo sentences,4 Cham manifests only a partial echo of the preceding sentence in the first clause of the reflector sentence. The echo clause contains a main verb or synonym of a main verb from the preceding sentence.

Sanwĕng yau năn, ŭapai klaw tha dray.
think like that rabbit laugh one self
'Thinking that way, the rabbit laughed to himself.'

The initial echo in this sentence repeats the sanwĕng 'thinking' of the
rabbit in the sentence before.

1.5. A *quotative sentence* differs from other complex sentences in that it contains either a *direct* or an *indirect quotation* (see section 2 on Feature Types), and is introduced by a quotative clause.

**Direct-Quotative Sentence:**

*A bôm thông tapal lâch: "Dahlâk jang nôo mu-in yau ai ray."

snail spoke with rabbit say I also go play like older-sibling too

'The snail spoke to the rabbit, saying: "I'm also having fun like you are."'

**Indirect-Quotative Sentence:**

*NhuASTE lâch brûk nân nhu ngâk bloh pajo.

he politely say work that he do finish already

'He politely stated that he had completed that work already.'

A direct quotation may contain any manifesting sentence form, including both direct and indirect quotations. This is because, in a direct-quotative sentence, the quotation introducing clause is not bound to the quotation, even though the quotation acts as the object of the introductory clause. In an indirect-quotative sentence the quotation is embedded in the quotation introducing clause. Thus it cannot function as a distinct discourse in itself, as the quotation in a direct-quotative sentence can.

The main distinction prosodically is that in a direct-quotative sentence there is an obligatory pause (or juncture) before the quotation, and in an indirect-quotative sentence there is not an obligatory pause before the indirect quotation.

1.6. A *conjunctive sentence*\(^5\) is: 1) one which is related to a preceding sentence by an *initial conjunction*, or a sentence consisting of clauses which are related to each other by a sentence-initial conjunction; 2) a sentence consisting of two or more clauses, two of which are connected by a *medial conjunction*; or 3) a sentence combining both *initial* and *medial* conjunctions.

1) Initial conjunctions include:

a. those which relate a sentence to a preceding sentence:

\[ mîn 'but' \]

\[ bloh 'then' \]

The following conjunctive expressions may also act as paragraph introducers:
bloh di nān  'finally, after that'
dōm nān   'therefore, so'
birau mung  'just then, then'
jung mung  'so then, then'
nān ka mung  'so, therefore, consequently'
kayua yau nān  'because of that'

Dōm nān patao ginong, nāo mūk urang nān.
therefore king angry so get person that
'So the king was angry (and) went to seize that person.'

b. those which relate clauses within a sentence to each other:
muyah ～ yah  'if, since'
kai  'when'
tāl  'when, arriving (at that point)'
kayua ～ yua  'because'

Tāl urang mūk kan mai, urang bōh bōh ok rīlō.
when persons get fish come they see many mangoes
'When the fishermen returned they saw many mangoes.'
tāl relates the first clause to the second clause of the above sentence.

2) Medial conjunctions include:
   a. conjunctions that may fill either the sentence-medial or
      sentence-initial slots:
         min  'but'
bloh  'then'
bloh di nān  'after that'
muyah ～ yah  'if, since'
kayua ～ yua  'because'

Yaup hray tapal nāo mūnhum lo, min tūk hlay jang bōh bāo.
each day rabbit go drink water but hour which also saw snail
'Every day the rabbit went to drink water, but each time (he) also
saw the snail.'

b. conjunctions that may fill the sentence-medial slot only:
   ngān  'or'
hai ～ hai lach  'or'
mung  'then'
thōng  'and'
nān  'then'
sāng  'then'
Kau mai munhum ia thong rah mu-in.
*I came drink water and go-around play
'I came to drink water and have some fun.'

3) Initial and medial conjunctions may co-occur in the same sentence. Combinations that have been observed in text material are: muyah - bloh ~ muyah - nyn 'if - then' and min - yua 'but - because'.

Muyah dray dih tha panik, bloh doch tuil, jang klak nhu ray.
*if sleep one nap then run follow also leave him also
'If I take a nap, then run after (him), I'll still leave him behind.'

1.7. Particle-marked sentences include: 1) those that are clause-based (see sections 5.2 and 5.3, interrogative and imperative truth values); 2) those that are phrase or word-based (see section 5.4, exclamatory truth value, vocatives); and 3) those that are particle-based (see section 5.4, expletives). A clause-based sentence has a full clause as its main element, a phrase- or word-based sentence has only a phrase or word as its main element, and in a particle-based sentence the particle itself is the main element.

1) Clause-based:

Nhu ngak yau nyn/djaup lay? (Interrogative)
*he do like that correct ques.
'Is it correct that he did that?'

Dua urang dray nao'nao! (Imperative)
2 person self go imp.
'Let's the two of us go!

The main distinction between the form of the interrogative and imperative sentences is to be found in the prosodic features, especially on the final particles. Imperative nao receives a noticeably heavier stress than interrogative djaup lay. Also, the intonation contour for nao is falling. The intonation contour of djaup lay is rising and it is preceded by a pause.

2) Phrase or word-based:

Oi ai munus! (Pre-base vocative)
*hey older-sibling human-being
'Hey you!'

Adau lai! (Post-base vocative)
younger-sibling hey
'Hey brother!'
3) **Particle-based:**

1) 'exclamation of disgust'
2) 'exclamation of mild surprise'
3) 'exclamation of surprise'

1.8. **Combination of forms** that may be manifested include:

1) **Combinations of clause-based types, such as this Initial-echo-Quotative sentence:**

Tapai tõh yau năn, tangi bao Iach: "Ngăn gêt?"
\r\n*rabbit see like that ask snail say do what*
\r\nThe rabbit seeing that, asked the snail, "What are (you) doing?"

2) **Combinations of clause-based types with conjunction-based types, such as this Initial-conjunction-Complex sentence:**

Döm năn patao bray ka J'Bong Lah khing anuk patao.
\r\n*so king give for Bong Lah marry child king*
\r\n'So the king gave Bong Lah permission to marry his daughter.'

Other combinations of clause-based types with conjunction-based types that have been observed are: Initial-echo-Medial-conjunctive, Initial-conjunctive-Simple-juxtaposed, Initial-conjunctive-Quotative, Medial-conjunctive-Multiple-juxtaposed, Medial-conjunctive-Quotative.

2. **FEATURE TYPES**

The second parameter by which sentences are described refers to the internal lexico-semantic function of a sentence. Feature types in Cham sentences include: Conditional, Contrary to expectation, Causal, Action sequence, Coordinate, Topic-Comment, Quotative and Neutral.

2.1. **Conditional sentences** include: simple-conditional, concessive-conditional, motivation-proposition conditional, temporal-emphasis conditional and iterative-conditional.

1) A **simple-conditional** sentence consists of a clause that states a condition to be met and a second clause that states the expected action, based on the fulfillment of the condition. The conditional clause may be introduced by muyah 'if', ka' *when', or another general or specific temporal, providing completed action is not indicated. The second clause may be optionally linked to the first clause by a medial conjunction such as biôh, năn, or săng 'then'. In this type of conditional sentence, the clauses are reversible. However, the first sentence shown below is the usual order:
2) A concessive-conditional sentence consists of a clause (or two) that states the situation or condition, in spite of which the anticipated action of the next clause is expected to take place. The first clause is introduced by muyah 'if, though' and the last clause contains jang 'also' in pre-verb position. The clause order is fixed.

*Muyah* dray ngāk patao, *jang* ōh bui-be dl gēt.
*If* self do king *also* not happy at what
*Even though* I reign as king, (I) *still* won't be happy at all.

*Muyah* dray dīh the panīk, bloh dōch tui nhu, *jang* kīak nhu ray.
*though* self sleep one nap then run follow him *also* leave him too
*Even though* I take a nap (and) then run after him, (I'll) *still* leave him behind.'

In the second example, ray 'too' is an optional sentence-final particle that goes along with jang. The conjunction bloh 'then' relates the first two clauses into a temporal sequence.

3) A motivation-proposition conditional sentence consists of a clause that states the situation providing the motivation for the proposed action of the second clause. The motivation clause may be introduced by muyah 'if, since' or by a non-past specific temporal, such as urāk ni 'now', hray ni 'today', or hray paguh 'tomorrow'. The proposition clause may also be introduced by a non-past specific temporal expression. The clause order may be reversed, but the usual order is for the motivation clause to be followed by the proposition clause.

*Muyah* ai tapai lach yau nān, *urāk* ni dahlāk thōng
*since* older eib. rabbit say like that now I and
ai padāng gaup dōch lōk.
you challenge together run look

'Since you, rabbit, said that, now let's challenge each other to run and see.'

*Urāk* ni J'Bong Alah ginrōh lō, ung khing nhu mēk.
*now* Bong Alah powerful very agree marry him imp.

'Now Bong Alah is very powerful, agree to marry him!'
4) A **temporal-emphasis conditional** sentence consists of a clause stating a **prior condition**, followed by a clause stating **anticipated action** in response to the condition being met. The time order of 'first...then' is in focus. The first clause contains ka 'first' and the second is introduced by mung 'then'. A variant of this type has dahlau 'before' in the conditional clause and haday 'after, later' in the anticipated response clause. Clause order is fixed.

_Hu tong kau ka, mung kau tong hu wok._
_you beat me first, then I beat you again_
'_You hit me first, then I'll hit you back.'_

_Hu tong kau dahlau, kau tong hu haday._
_you beat me before I beat you after_
'_You hit me beforehand, I'll hit you afterward.'_

5) An **iterative-conditional** sentence consists of a statement, in the first clause, that each time a certain condition is met, a corresponding action, stated in the second clause, will be taken. The first clause is introduced by an iterative expression, such as, yaup bāng 'each instance'. The second clause may include initial jang 'also' and final wok 'again'. The clause order is fixed.

_Yaup bāng hu tong kau, jang kau tong hu wok._
_each time you beat me also I beat you again_
'_Everytime you hit me, I'll also hit you back.'_

2.2. A **contrary-to-expectation** sentence consists of a clause, stating a situation or action (thesis), followed by a clause that states unexpected or adverse factors (antithesis) in relation to the first clause. The second clause is introduced by min 'but', and the clause order is fixed.

_Yaup hray tapai nao munhum la, min wal hlai jang bōh bao ray._
_each day rabbit go drink water but part when also see snail too_
'_Every day the rabbit went to drink water, but no matter what part of the day he also saw a snail.'_

2.3. **Causal sentences** include: simple-causative, cause-effect and purposive.

1) A **simple-causative** sentence consists of a clause, which states a situation or action, followed by a clause which states the cause of the situation or action. The causative clause, usually the second one, is introduced by kayua ~ yua 'because'. Reversing the order of the clauses is acceptable, but infrequent.
Mrēk glong tapa wēk, kayu jru nān slam lō.
pepper tall pass again because medicine that good very
'The pepper plant was even taller, because that medicine was very
good.'

2) In a cause-effect sentence, the action or situation of the first
clause serves as the basis for the action of the succeeding clause.
Generally, a cause-effect sentence consists of two juxtaposed clauses,
but it may have more than one cause clause, followed by one or more
effect clauses.

Mek nhu sēt, tayah danung-mūnhim.
mother his jump wreck apparatus weaving
'His mother jumped, wrecking the weaving apparatus.'

A variation of this type is the anticipated cause-effect sentence,
in which the anticipated cause and effect clauses may be linked, in
that order, with the conjunction nān 'then'.

Ông padāl ngāk nān urang ngāk.
Mr tell do then person do
'You tell (someone) to do (something) (and) he'll do it.'

3) A purposive sentence generally consists of a clause predating
some kind of action, followed by another clause which gives the purpose
of the action. The purpose clause is introduced by ka 'for' or pīnh
'in order to'. The purpose clause subject and predicate are obligatory
with ka, but with pīnh only the predicate is obligatory.

Nhu bray tha boh ok ka dāy nhu bāng.
he give one al. mango for sibling his eat
'He gave a mango to his younger brother to eat.'

Nhu joh ginrong rong pīnh parui aday kamay nhu.
he break-off pincher crab in order to tease younger sister his
'He broke off a pincher of the crab to tease his younger sister with.'

2.4. Action sequence sentences include: consecutive-action, temporal
sequence, subsequent-action, and resultant-action.

1) A consecutive-action sentence consists of two or more juxtaposed
clauses, with the action sequence proceeding from left to right.

Pateo dāng, dik yun, nāo thang.
king stand climb hammock go house
'The king stood up, climbed into the travelling hammock (and) went
home.'
2) In a temporal sequence sentence, the action also proceeds from left to right, but in this case the time sequence is in focus. The chronological progression may be indicated by a temporal conjunction, such as tài 'when', to introduce the first clause, or bloh 'then', to introduce the second clause.

Tài thang, nhu bôh mek dok munhim akhn.
arrive house he see mother be weaving cloth
'Upon arriving home, he saw (his) mother weaving cloth.'

Dua urang pathät-padök gaup, bloh pagön hray tük.
two person argue debate together then agree day hour
'The two of them argued together, finally agreeing on the day and hour.'

3) A subsequent action sentence consists of an initial clause, which echoes the action of the preceding sentence, followed by another clause, which predicates the subsequent action. The clauses are ordinarily juxtaposed.

Sanùng yau nän, tapal klao tha dray.
think like that rabbit laugh one self
'Thinking like that, the rabbit laughed to himself.'

4) A resultant action sentence presents a sequence of action resulting from previous action. It is introduced by a conjunctive expression, such as dóm nän 'so, therefore', and consists of at least two juxtaposed clauses.

Dóm nän patao ginong di tian, mūk mek nhu karök wök.
so king angry in stomach, get mother his shut-up again
'So the king was angry, seized his mother and shut her up.'

2.5. Coordinate sentences include: positive, negative and alternative-coordinate sentences.

1) A positive-coordinate sentence consists of two clauses connected by thóng 'and' or simply juxtaposed. The predications supplement each other in a coordinate relationship.

Khol dahlāk pajum urang kathot thóng dông urang ribah-riibup.
we help person poor and rescue person wretched
'We help those who are poor and rescue those who are wretched.'

2) A negative-coordinate sentence consists of two clauses connected by thóng 'and', ngān 'or', hai 'or', hai lach 'or', or simply juxtaposed. The predications supplement each other in an additive relationship, but
must also contain negatives ôh (preverb) and ô (clause final), if thông or zero connects the clauses.

Dahlâk ôh yeh dray thông pagâp bok muta urang ô.
I not boast self and compare cheek eye person neg.
'I don't boast about myself and don't compare my attributes with someone else."

If ngân, hai or hai lach 'or' connect the clauses, then the preverb negative ôh is used in the first clause only. Clause final ô 'not' is not ordinarily used, since the sense of ngân, in this case, is 'nor'.

Dahlâk ôh yeh dray ngân pagâp bok muta urang.
I not boast self or compare cheek eye person
'I neither boast of myself nor compare myself with another."

In place of negatives, the prohibitive jôi 'don't' may be used in a variation of the negative additive sentence type. In this case also, the two clauses may be connected by ngân, hai, hai lach or thông. In this construction ngân, hai, hai lach convey the additive sense of 'and' rather than alternative 'or'.

jôi yeh dray ngân pagâp bok muta urang jôi!
don't boast self or compare cheek eye person don't
'Don't boast about yourself and don't compare yourself with another!'

3) An alternative-coordinate sentence ordinarily consists of two clauses obligatorily connected by ngân, hai, hai lach 'or'. In this type of sentence the predication of one clause stands as an alternative to the predication of the other clause. This use of ngân, hai, hai lach contrasts with that of the negative coordinate sentence, where the sense of these conjunctions is 'and'.

Hray paguh dahlâk nao thang hai nao tom ông nân.
day tomorrow I go house or go gather-with man that
'Tomorrow I'll go home or go to meet with that man.'

2.6. In a topic-comment sentence, the first phrase or clause presents the topic under consideration and the second phrase or clause comments on or describes some aspect of it. The two phrases or clauses may be juxtaposed or may be linked by nân 'to be'. In the latter case, nân functions as the main verb of the simple or complex sentence.

Ông nân nân urang tôi.
mister that to be person guest
'That gentleman is a guest.'
Patao taluch ngāk nān òh djaup patao biāk ó.  
king Taluch do to-be not correct king real no  
'King Taluch's reigning was not really (that of) the true king.'

2.7. Quotative sentences include: direct quotation and indirect quotation.

1) A direct-quotation sentence consists of a quotation introducing clause followed by a verbatim quotation. The quotation acts as the object of the introductory clause, and it may vary in length from one word up to a long discourse.

A quotation, which introduces a new speaker with a new viewpoint, is considered to constitute a new paragraph in itself. Other direct-quotation sentences are considered to be on the sentence level, even though they may have a number of sentences acting as the object of the quotation-introducing clause.

Direct-quotation sentences include: a) those addressed to another person, b) those that are self-addressed, c) incantations of magic formulas, d) those with no specific address, e) included quotes.

a) Quotations addressed to another person or persons are by far the most frequent:

Ai kachua lach thōng day: "Lōi ka ai dok pāk ni."

sibling oldest say with sibling-younger leave for me stay at this

'The oldest brother said to a younger brother: "Let me stay here."'

The above type of quotation may contain references to first, second or third persons, without restrictions. Although no overt referent is obligatory, at least one referent is always implied and easily reinstated from the context.

In the quotation introducing clause the speaker is almost always specifically designated and the addressee is either designated or clearly implied from context. Predicates in this clause include: lach 'to say', döm 'to speak', tangi 'to ask', and the combinations döm lach 'to speak saying' and tangi lach 'to ask saying'.

b) Quotations that are self-addressed contain only first and third person referents. This distinguishes them from quotations addressed to others.

Dalām tian tapai sanung lach: "Dray klak nhu."

in stomach rabbit think say self abandon him

'The rabbit thought to himself: "I'll leave him behind."'

In the quotation introducing clause, the speaker and the addressee
are the same individual. The speaker is clearly designated or implied from context. The most common predicate for the introductory clause is sanlung lach 'to think saying'. The reflexive may be further indicated by an expression such as dalam tiao 'in stomach' or dalam hatai 'in liver'.

c) Incantations of magic words are fixed formulas that are not altered to fit the usual sex, age and kinship requirements, although they may appear in elliptical form when related by a story-teller. The speaker is usually specifically designated, but may also be implied. No specific addressee is required, but the context makes it clear who the message is intended for.

Nhu poch thunau lach: "Ong tam-set."
he read magic say grandfather enter-jump
'He incanted the magic words saying: "Mister begin jumping."

The context of the above sentence indicated that the speaker incanted these words to make his mother jump. Later in the same text, he made the king and his officers jump by using the same words.

Specialised predicates, such as poch thunau lach 'read magic saying', are used in the quotation introducing clause, but the general predicate lach may also be used.

d) In non-specific-address quotations, the referents are first and third persons only, although the words may be intended for a hearer who is present. The speaker may be specifically designated or may be an indefinite "voice".

Dalam patau nann hu sap eu prong lach: "Munus hlav ngak dhar hai."
in rock that have sound call big say human-being who do favour imp.
'In that rock there was a voice calling loudly saying: "Someone please do (me) a good turn."

e) A direct-quotatation sentence may include any other sentence type, including a direct quotation. When such a quotation is included, the speaker of the main quotation designates or implies the speaker of the second quote. Thus, for the subject of the included quotation-introducing clause, first, second or third person may be used.

Ong buht lach: "Dahlak likau dai tha thunau givroh lach:
Mr ghost say I beg bestow one magic powerful say
"Ong tam-set" nann urang set.
Mr enter-jump to-be person jump
'The ghost said: "Please let me give you a powerful magic, (you) say: "Mister jump!" and the person will jump."
2) An indirect quotation sentence consists of a quotation introducing clause and a summarised quotation.

Nhu lach ok nhu pëk min.
he say mango he pick only
'He said that he had picked the mangoes.'

In contrast to a direct quotation sentence, which frequently constitutes a paragraph in itself, an indirect quotation sentence generally does not. This is because the nature of an indirect quotation is to give only the gist of a quote rather than a word-for-word rehearsal.

Another distinguishing feature of an indirect quotation sentence is that both in the introductory clause and the indirect quote, the speaker is referred to in the same person.

2.8. A neutral sentence is distinguished from other types of sentences by the absence of any specific lexico-semantic feature. The neutral feature type includes cooccurrence with the following manifested forms:

1. Clause-based sentences: simple and complex

Tapš chlup aiah di abao. (simple-neutral)
rabbit suffer lose to snail
'The rabbit lost to the snail.'

Tapš hmit sāp abao ka uk anāk. (complex-neutral)
rabbit hear sound snail call out ahead
'The rabbit heard the sound of the snail calling out ahead.'

2. Particle-based sentences: initial, initial and final, and final-particle

(Initial-particle-Neutral)
Biāk mek ōh mūk lithay ka dahlāk?
really mother not get cooked-rice for me
'Mother, you're really not going to get rice for me?'

(Initial and Final-particle-Neutral)
Biāk day aī thi mūk dahlāk biāk min?
really siblings about to get me really just
'You're really about to get me sure enough?'

(Final-particle-Neutral)
Lōi day aī dahlāk bēk!
leave younger-older siblings I imp.
'Leave us alone!'
3. TRUTH VALUE TYPES

The truth value of a sentence is its external function, relating the sentence to the speaker-hearer situation. The two most effective indicators of truth value are sentence intonation and sentence particles. Cham sentences include the following truth value types: declarative, interrogative, imperative and exclamatory.

3.1. The function of declarative truth value is to predicate a statement. This truth value is manifested primarily by the intonation which the sentence bears. Particles do not indicate this truth value. It has the widest distribution of any truth value. It may cooccur with any feature type and with all manifested forms, except those which are particle-marked.

Intonation for declarative sentences depends upon its distribution. For example, a string of declarative sentences in a narrative may have slightly rising intonation on the last word of each non-final sentence, while the final sentence in such a series will have falling intonation on the last word. A declarative sentence in isolation has falling intonation on the sentence-final word.

Nhu bray boh ok ka urang.
he give al. mango to person
'He gave the mangoes to the people.'

3.2. An interrogative sentence poses a question. Interrogative truth value may be manifested by 1) question intonation alone or by question intonation with question words in the sentence nucleus, or 2) by question intonation with interrogative particles.

The context may further indicate whether an answer is really expected or whether the question form has been retained and the truth value has been changed (see section 3.5 on truth value switching).

1) A sentence nucleus may manifest interrogative truth value by intonation alone or by the use of content question words in the nucleus along with question intonation.

a) Below is an example of contrast between a sentence-nucleus interrogative and a declarative sentence, solely on the basis of intonation:

Hu השק pəʃə?  Hu השק pəʃə.
\textit{eat-rice already} \textit{eat-rice already}
'Have (you) eaten already?'  '(I've) eaten already.'

The rising intonation on pəʃə (at the left) signals a question. This
contrasts with the falling intonation on pąt in the declarative statement (on the right).

b) Sentence-nucleus interrogatives include the following content question words, which require appropriate content responses:

get 'what', thay 'who', thibăl 'why, how', yau hlay 'how', tao 'where', păk hlay 'where, what place', biēn 'when', tūk hlay 'when, what hour', urang hlay 'who, which person', dōm 'how many, how much'.

Hu dok ngăk get păk ni/bao?
you be do what at here snail
'What are you doing here, snail?'

2) Interrogative truth value may also be manifested by intonation along with interrogative particles, which include those listed below. These particles are usually accompanied by rising intonation on the final particle or on the final syllable, if the particle is not sentence-final.

General interrogative particles:
lay 'huh?', djaup lay 'correct?', hu lāy 'possible?', rāy (about a third person).

Specific interrogative particles:
hai 'or', hai ō 'or not' (alternative)
ka ō (incompleteness)
biāk 'really', biāk min 'really' (doubt)
biāk nāo 'how come' (reason)

Ōnɡ nāo puh lāy?
mister go field huh
'Are you going to (your) field?'

3.3. Imperative truth value functions in a sentence to express a command, request or exhortation of some kind, which may vary in force and purpose. This truth value may be manifested 1) by prosodic features alone, especially stress and intonation. Or, along with these prosodic features it may be manifested 2) by imperative words in a sentence nucleus, 3) by imperative particles, or 4) by a combination of imperative words in the sentence nucleus and imperative particles.

Ordinarily, the final syllable of an imperative sentence will be heavily stressed and the intonation will be falling. However, final words and particles ending in either glottal stop or h, have a slightly rising intonation. A final syllable may sometimes be lengthened for emphasis.
Imperative truth value is limited almost exclusively to direct address situations. So, in text material, imperatives are invariably found only in direct or indirect quotations.

1) Imperative truth value manifested by *prosodic features* alone:

\[ \text{N̂ uk/padók brah nān!} \]

*child catch milled-rice that*

'Child, catch that rice!'  

In this type of imperative, the subject (addressee) may have either rising or falling intonation, optionally followed by pause. The stress on the subject and final word will be about equally heavy. There will usually be falling intonation on the last word or syllable.

2) Imperative truth value manifested by *imperative words* in the sentence nucleus, along with prosodic features. In this type of imperative, the subject will often be omitted. The usual pattern of heavy stress and falling intonation on the final word is manifested.

\[ \text{Jō! Đōng dāy!} \]

*don't eat younger-sibling*

'Don't eat (it), brother!'  

Below is an imperative often heard in a Cham village. It takes the intonation contour for final words ending in glottal sounds.

\[ \text{gōk! Gōk!} \]

*go-up go-up*

'Soram! Soram!'  

This word has become a specialised imperative word, usually used by an adult with children. In this scolding type of imperative, the intonation contour is slightly rising, with a repetition of the order having both higher pitch and heavier stress than the first utterance.

3) Imperative truth value manifested by *imperative particles*, along with prosodic features. These particles include:

\[ \text{mēk ∼ bēk ∼ ēk (positive forceful imperative)} \]
\[ \text{jōi (negative forceful imperative)} \]
\[ \text{nah, nāo (imperative of comradeship)} \]
\[ \text{ha! (imperative of petition)} \]
\[ \text{o (friendly imperative)} \]
\[ \text{dōch 'run' (to inferiors or close acquaintances)} \]
Nao thang mēk!
go house imp.
'Go home!'

Imperatives may be tempered or modified when combined with other particles:
mēk kai (coaxing imperative)
mēk yǒ (hurrying imperative)
mēk nhr (softened imperative)
mēk ah (coaxing imperative among close acquaintances)
mēk da (uncertain imperative)

Day nao mēk da!
younger-sib. go imp.
'Go (I suppose)!!'

All of the above particles are sentence-final with the usual falling intonation, except yǒ and nhr. yǒ and nhr have the rising intonation of a question and their effect is to temper the forceful imperative mēk.

Nao mēk yǒ!
go imp.
'Go on!'

4) Imperative truth value manifested by a combination of imperative words in a sentence nucleus and imperative particles, along with prosodic features:

'Joì ngaŋ yau nāŋ/Joì!
 don't do like that imp.
  'Don't do that!'

3.4. Exclamatory truth value functions in a sentence to express a sudden, forceful or colourful utterance, with an emotion of some kind generally being in focus. This truth value is found most often in direct address situations. It is manifested 1) by various intonation and stress combinations or 2) by exclamatory particles, along with prosodic features.

Exclamatory truth value is manifested in: calls of address; emphatic assertions or denials; and expressions indicating surprise, annoyance, anger, glee, sorrow, disgust, etc.

Some exclamations, such as vocatives and expletives, function on the paragraph level to add colour to the discourse. Other exclamations,
such as those expressing emphatic assertion or denial, often function on the sentence level.

1) Exclamatory truth value manifested by intonation and stress alone:

\[\text{Păk 'ni!} \quad \text{Ghoh 'lō!}
\]

at here skilful very

'Here!' 'Very skilful!'

2) Exclamatory truth value manifested by exclamatory particles, along with prosodic features:

\[\text{Ai'!o!}
\]

older-brother hey

'Hey, brother!' (Vocative)

\[\text{Us!}
\]

exclamation of surprise (Expletive)

\[\text{Kau pēk'min!}
\]

I picked only

'I indeed picked them!' (Emphatic assertion)

3.5. TRUTH VALUE SWITCHING (Rhetorical Questions)

The combination of prosodic features, manifested form and feature type that a sentence has will ordinarily indicate its corresponding truth value. However, a speaker may choose a set that would usually go with one truth value, while actually having a different truth value in mind.

This type of metaphorical switching of truth value is shown by the following rhetorical question, given in its context:

Nhu lach wōk: "Blāk day ai thi mūk dahlāk/blāk min? he say again really siblings will seize me really indeed

Muyah day ai thi mūk dahlāk, bloh mūk." Dōm nān ṭuah thunu: if siblings will seize me, then seize then incant magic

"Õng ōm-sēt."

Mr begin jump

'He said again: "Really, you're about to seize me, really indeed?
If you're about to seize me, then seize (me)." Then (he) incanted the magic (words): "Mister begin to jump."

The first sentence of the quotation question has initial and final
particles, along with interrogative intonation (rising intonation). Also, blihk initially is followed by a brief pause and final blihk min is preceded by a brief pause. Ordinarily, this would be sufficient evidence to say that this sentence has interrogative truth value.

However, the context indicates that although the question form was spoken, no answer was expected. The speaker did not give opportunity for the hearers to reply, but continued to speak and then incanted the magic words, which made his hearers powerless to capture him. So the truth value intended is declarative rather than interrogative.

Although a rhetorical question is the most common example of metaphorical switching of truth value, others may be possible.

4. CONCLUSION

In this type of sentence analysis, the distinctness of form and function is maintained, and then related. Thus, this approach avoids the confusion of mixing form and function before each parameter has been fully pursued. It also avoids the incompleteness of describing sentences on the basis of form only or function only.

A more exhaustive study of this type would include under sentence-form: Completeness Variants and Prosodic Features.

Completeness variants would include descriptions of sentences that are full, extra full, elliptical and incomplete.

Of special interest are extra-full or parenthetical sentences, which may function either on the paragraph level or the sentence level. Below is an example of the latter:

Taluch ngāk patao (patao taluch ngāk nān ōh
Taluch do king king Taluch do to be not
djaup patao blik ō), min graup krah-pakal binrōng
correct king real neg but plural wise-men officers
lu hńūk ōh thau thay patao blik, thay patao mū-in ō.
left right not know who king real who king play neg.
'Taluch reigned as king (King Taluch's reigning was not really that of the true king), but the wise men and officers on the left and right didn't know who the true king was and who the false king was.'

This would be summarised as a Conjunctive - Extra-Full - Contrary-to-Expectation - Declarative Sentence. The parenthetical sentence immediately follows and explains the object patao 'king' of the first clause of the main sentence. The parenthetical sentence would be described as a Complex - Full - Topic-Comment - Declarative sentence.
Included under *prosodic features* of sentences would be: intonation, stress and juncture.

From this type of analysis, sentence batteries may be determined and sentence battery trees constructed, by means of plotting the co-occurrences of feature types with manifested forms and feature types with truth value types.
NOTES


The dialect on which this study is based is spoken by about 40,000 Cham people, mainly in Ninh-Thuận and Bình-Thuận provinces of central South Vietnam. More specifically, it is based on the speech of Mr. Thiên Sanh Cánh, who lives in the hamlet of Hữu-Dực in Ninh-Thuận province. He is about 55 years of age and has been a public elementary school teacher for over thirty years. He is also a respected teacher of teachers, since he has a thorough knowledge of the Cham script (of Sanskrit origin) and writings, as well as the customs and folklore of his people. I am very grateful for his valuable and patient assistance in my study of the Cham language.

2. The idea of describing a sentence in relation to its several form and function parameters is the brainchild of David D. Thomas. See his *Chrau Grammar*, Oceanic Linguistics Special Publication No. 7 (University of Hawaii Press 1971), especially chapter 11, Sentences and 12, Paragraphs and Discourses.

In personal conversation with Dr. Thomas, he suggested the following parameters for describing the sentences of a language:

1. Manifested Forms
2. Completeness Variants
3. Prosodic Features

in relation to form
4. Feature Types
5. Truth Value Types in relation to function

For the present study, Cham sentences will be described in relation to the first, fourth and fifth parameters only. However, prosodic features will be referred to, especially in section 3, Truth Value Types. Also, completeness variants will be mentioned in section 4, Conclusion.

For one definition of "sentences", which is appropriate for this type of description, see Thomas' definition of a sentence in Chrau (Chrau Grammar, p. 167).

I would like to thank Dr Thomas and Richard Geiser for their helpful suggestions in preparing this paper.

3. For a description of Cham phonemes see David L. Blood, 'Phonological Units in Cham', Anthropological Linguistics 9:8/15-32 (Nov. 1967). The orthography used in this paper represents the current romanisation used in Cham instructional materials prepared for use in elementary schools in Ninh-Thuan and Binh-Thuan provinces. It is as follows:

Consonants (Main Position)

Tense p t ch k (medial glottal stop)

Vcl. lax b d j g [p', t', č', k']

Vcl.

Voiced b d dj [b, d, dy]

s h

m n nh ng [m, n, ŋ, ŋ]

w l, r y

u i (preglottalised w and y)

All tense and lax voiceless oral stops may be aspirated. Lax voiceless stops are generally associated with low syllable or word pitch. Tense voiceless stops are generally associated with non-low pitch.

Consonants (Final Position)

-p -t -ch -c -k

-up -s -h

-m -n -ng

-u -l, -r -y

-o -i

Phonetic equivalents, for final consonants ch, c, k, up and s, are: [ŋʔ], [k], [ʔ], [wʔ] and [ŋh]. Phonetic equivalents, for short and
long a, respectively, before final semivowels, are: au[āw], ao[aw], ay[āy], ai[ay], and for vowels other than a before final semivowels: Vu[Vw] and Vi[Vy].

Vowels (long and short)

<table>
<thead>
<tr>
<th>i</th>
<th>i̯</th>
<th>u</th>
<th>u̯</th>
</tr>
</thead>
<tbody>
<tr>
<td>ē</td>
<td>ō</td>
<td>ā</td>
<td>ō</td>
</tr>
</tbody>
</table>

One contrasting set of long and short ō has been found: bǒn 'book' (a borrowing from Chinese) and bôn [bǒn]. But since the functional load of distinguishing between /o/ and /ō/ is very low, in the current practical orthography, every occurrence of these two phonemes is written ō.

Vowel Sequences

i̯[ye̯vi] u̯[we̯vo] in open syllables, before h.
i̯[e̯] u̯[o̯] elsewhere.


5. Evidence from a concordance of written Cham texts corroborates the sentence analysis presented in this paper. The concordance was produced by IBM computer at the University of Oklahoma. This computer project was sponsored by Grant GS-270 of the National Science Foundation.

6. Where sentence intonation and stress are used in describing sentences, sentence stress is indicated phonetically, ⬤, before the stressed syllable. If this contrasts with a heavier stress, the heavier stress is indicated in this way, ⬤. The phonetic intonation contour of a sentence is indicated with a line above the sentence. Phonetic sentence-medial pause (of juncture) is indicated with a slanted line, /. Extensive use of these symbols for prosodic features is made in section 3, Truth Value Types.