ABSTRACT

AN EXPLORATION OF HMONG LEXICAL ADVERBS, ASPECTS, AND MOODS

Cinque (1999) observes a relationship between the orderings of lexical adverbs and functional heads (tense, aspect, and mood) in his analysis of various languages. He proposes a universal hierarchy of clausal functional projections and locates tense, aspect, and mood in the head of each functional projection and places adverbs in the specifier position of the projection. The current study goes in search of lexical adverbs, aspects, and moods in Hmong, a Hmong-Mien language spoken in China, Southeast Asia, and the United States. Seven adverb-like Hmong morphemes are tested to see whether they are lexical or functional categories using a lexical/functional diagnostics test. Once identified, they are classified in accordance with Cinque’s classification. The ordering of these elements is then tested against Cinque’s universal hierarchy of clausal functional projections. The main findings are as follows: 1) there are no lexical adverbs in Hmong; rather, aspectual heads combine to convey adverbial meanings, 2) Hmong has a rich system of aspectual and modal markers, 3) Cinque’s universal hierarchy of clausal functional projections is partially correct, 4) Cinque’s hierarchy predicts the Hmong polar question particle puas as part of the aspects and moods system, and 5) the functional heads hierarchy of Hmong reveals that aspects and moods that have similar functions or meanings are close in proximity. This study contributes to the study of the Hmong language as well as the study of adverbs, aspects, and moods in general. This is the first study of its kind for Hmong.

Nalee Thao See
May 2015
AN EXPLORATION OF Hmong Lexical Adverbs, Aspects, and Moods

by

Nalee Thao See

A thesis
submitted in partial
fulfillment of the requirements for the degree of
Master of Arts in Linguistics
in the College of Arts and Humanities
California State University, Fresno
May 2015
APPROVED

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Dean, Division of Graduate Studies
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ACKNOWLEDGMENTS

I would like to thank the following people for being a part of my thesis-writing journey. Thank you to Dr. Nerida Jarkey for suggesting the topic of Hmong adverbs to me through our brief email correspondences in Fall of 2013. Thank you to my thesis advisor, Brian, for his guidance and introducing me to Cinque’s (1999) adverb theory, which led to some incredible findings in Hmong, including an answer to puas. I would also like to thank my committee members and language consultants for their help. A big ‘Thank you!’ goes out to my mom and my siblings for caring for my kids while I was hard at work on my thesis. This thesis is dedicated to my husband and my three beautiful children. Last but not least, I would like to thank God for this opportunity and for His continuous blessings!
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<tbody>
<tr>
<td>1PL</td>
<td>1st person plural</td>
</tr>
<tr>
<td>1SG</td>
<td>1st person singular</td>
</tr>
<tr>
<td>2PL</td>
<td>2nd person plural</td>
</tr>
<tr>
<td>2SG</td>
<td>2nd person singular</td>
</tr>
<tr>
<td>3DU</td>
<td>3rd person dual</td>
</tr>
<tr>
<td>3PL</td>
<td>3rd person plural</td>
</tr>
<tr>
<td>3SG</td>
<td>3rd person singular</td>
</tr>
<tr>
<td>ANT</td>
<td>Anterior tense/aspect</td>
</tr>
<tr>
<td>ATTAIN</td>
<td>Attainment aspect</td>
</tr>
<tr>
<td>BEN.FUT</td>
<td>Benefactive future</td>
</tr>
<tr>
<td>CL</td>
<td>Classifier</td>
</tr>
<tr>
<td>COMP</td>
<td>Comparative marker</td>
</tr>
<tr>
<td>COMPL</td>
<td>Completive aspect</td>
</tr>
<tr>
<td>CONT</td>
<td>(1) Continuous, (2) Continuative</td>
</tr>
<tr>
<td>DECL</td>
<td>Declarative mood</td>
</tr>
<tr>
<td>DP</td>
<td>Discourse particle</td>
</tr>
<tr>
<td>DPQ</td>
<td>Discourse question particle</td>
</tr>
<tr>
<td>EPIST</td>
<td>Epistemic mood</td>
</tr>
<tr>
<td>EVAL</td>
<td>Evaluative mood</td>
</tr>
<tr>
<td>FPART</td>
<td>Final particle</td>
</tr>
<tr>
<td>FUT</td>
<td>Future aspect</td>
</tr>
<tr>
<td>HAB</td>
<td>Habitual aspect</td>
</tr>
<tr>
<td>INT</td>
<td>Intensifier</td>
</tr>
<tr>
<td>IPFV</td>
<td>Imperfective</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>IRRLS</td>
<td>Irrealis mood</td>
</tr>
<tr>
<td>NEC</td>
<td>Necessitive mood</td>
</tr>
<tr>
<td>NEG</td>
<td>Negation marker</td>
</tr>
<tr>
<td>NOM</td>
<td>Nominative case</td>
</tr>
<tr>
<td>PART</td>
<td>Particle</td>
</tr>
<tr>
<td>PASS</td>
<td>Passive voice</td>
</tr>
<tr>
<td>PERF</td>
<td>Perfective aspect</td>
</tr>
<tr>
<td>PQ</td>
<td>Polar question</td>
</tr>
<tr>
<td>PROG</td>
<td>Progressive aspect</td>
</tr>
<tr>
<td>PROS</td>
<td>Prospective aspect</td>
</tr>
<tr>
<td>RECIPIR</td>
<td>Reciprocal action marker</td>
</tr>
<tr>
<td>REFL</td>
<td>Reflexive</td>
</tr>
<tr>
<td>REP</td>
<td>Repetitive aspect</td>
</tr>
<tr>
<td>STA.PFV</td>
<td>Stative perfective</td>
</tr>
</tbody>
</table>
CHAPTER 1: INTRODUCTION

1.1 Purpose of Research
Cinque (1999) observes a relationship between lexical adverbs and functional heads (tense, aspect, and mood) in his analysis of various languages. He proposes a universal hierarchy of clausal functional projections and locates tense, aspect, and mood in the head of each functional projection and places adverbs in the specifier position of the projection. The current study attempts to identify and classify lexical adverbs, aspects, and moods in Hmong, a Hmong-Mien language spoken in China, Southeast Asia, and the United States, in accordance with Cinque’s classification. In addition, this study will provide a description of the placements of Hmong lexical adverbs, aspects, and moods. A lexical/functional diagnostics test will be applied to seven adverb-like Hmong morphemes to see whether they are lexical or functional categories. Once identified, the ordering of these elements will be tested against Cinque’s universal hierarchy of clausal functional projections. The current study aims to provide a more in-depth study of lexical adverbs, aspects, and moods in Hmong, in hopes of contributing to the study of the Hmong language as well as the study of adverbs, aspects, and moods in general. This is the first study of its kind for Hmong.

1.2 Overview of Thesis
Chapter 1 provides some background information on the Hmong people, their language, and the Hmong orthography used in this study. Chapter 2 reviews the literature and presents some of the major studies that have investigated Hmong adverbs, aspects, and moods. The foundation for Cinque’s (1999) universal hierarchy of clausal functional heads is also presented. In Chapter 3, the lexical/functional diagnostics test is applied to seven morphemes that are possibly
adverbs, aspects, or moods. Further analysis is conducted to identify the meanings and orderings of these morphemes. Chapter 4 displays the results of the diagnostics test, analyses, and the overall order of morphemes. The functional heads hierarchy of Hmong is then compared with Cinque’s predicted Hmong hierarchy followed by a discussion. Chapter 5 concludes the study and provides suggestions for further research. The main findings are as follows: 1) there are no lexical adverbs in Hmong; rather, aspectual heads combine to convey adverbial meanings, 2) Hmong has a rich system of aspectual and modal markers, 3) Cinque’s universal hierarchy of clausal functional projections is partially correct, 4) Cinque’s hierarchy predicts the Hmong polar question particle *puas* as part of the aspects and moods system, and 5) the functional heads hierarchy of Hmong reveals that aspects and moods that have similar functions or meanings are close in proximity.

### 1.3 The Hmong People

The Hmong are a hill tribe from China (Southwestern provinces) and Southeast Asia (primarily Laos, Thailand, Vietnam, and Burma) (Lyman, 1990). The largest Hmong population can be found in China, with a population of 8,950,000 according to the 2000 census (as cited in Lewis, Simons, & Fennig, 2014). In China, the Hmong are a subgroup of the larger *Miao* ethnicity (苗族) and are referred to by that name. They are called by a similar name, *Meo*, in Southeast Asia. However, they prefer to identify themselves using the endonym, ‘Hmong/Mong’ (Lyman, 1990; Thao, 1999). Various Hmong subgroups exist and differ slightly in language, culture, and attire. In Laos and Thailand, the two major Hmong dialects spoken are White Hmong (*Hmoob Dawb*) and Green Mong
The Hmong played a significant role during the Vietnam War, where they fought alongside Americans to combat the spread of communism. Following the end of the Vietnam War in 1975, many Hmong fled to Thailand and neighboring countries to find refuge and settled in refugee camps (Lyman, 1990; Thao, 1999). That was the beginning of a vast immigration to western countries, such as the United States and France. The 2010 Census recorded 260,073 persons of Hmong origin in the United States, including the District of Columbia and Puerto Rico, with the largest populations concentrated in California, Minnesota, Wisconsin, and North Carolina (Pfeifer, Sullivan, Yang, & Yang, 2013, p. 9).

1.4 The Hmong Language

The Hmong language is a branch of the Hmong-Mien (Miao-Yao) language family. However, it was once considered a branch of the Sino-Tibetan language family or thought to be related to Austronesian, Tai, or Mon-Khmer languages (Li, 1991; Lyman, 1990; Mortensen, 2006). Ethnologue records 32 Hmong dialects subdivided into three groups (Lewis et al., 2014). Of those dialects, this study will be focusing on the Hmong Daw (WHM) and Hmong Njua (GM) dialects, which are a part of the Western Hmongic division, also known as the Chuanqiandian and Sichuan-Guizhou-Yunnan groups (Lewis et al., 2014; Strecker, 1987). WHM and GM are the two major Hmong dialects spoken in the U.S. In this study, the term ‘Hmong’ will be used to refer to both WHM and GM.

The Hmong language consists of a rich sound inventory, especially a large number of consonants (prenasalization, lateral releases, contrast between aspirated and unaspirated consonants, etc.) and tone inventory (seven lexical tones plus one
variant) (see Golston & Yang, 2001, for a complete sound inventory of WHM
transcribed in IPA; Lyman, 1990; see also Mortensen, 2004, for a complete sound
inventory of GM). The syllable structure of Hmong consists of a consonant and
vowel (CV) and no final consonant, except for a weak velar nasal ‘ŋ’ that can
occur after nasalized vowels (Golston & Yang, 2001; Lyman, 1990). Majority of
the words are monosyllabic (one syllable long), but compounds and unanalyzable
polysyllabic words do exist (Golston & Yang, 2001; Lyman, 1990). There are no
inflections in Hmong (words do not undergo changes in form). Hmong is an
isolating language and generally follows Subject-Verb-Object (SVO) word
ordering (Lyman, 1990).

WHM and GM are mutually intelligible with some phonological and lexical
differences (Thao, 1999). Even within its own dialect other subdialects exist. The
Hmong examples below are transcribed using the Romanized Popular Alphabet
(RPA), which will be discussed in Section 1.5.

(1) Sample lexical differences between WHM and GM
(Adapted from Thao, 1999, p. 112)

<table>
<thead>
<tr>
<th>WHM</th>
<th>GM</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>txhuv</td>
<td>ntsab</td>
<td>rice</td>
</tr>
<tr>
<td>pam</td>
<td>choj</td>
<td>blanket</td>
</tr>
<tr>
<td>phauj</td>
<td>puj nyaaq</td>
<td>paternal aunt</td>
</tr>
<tr>
<td>yawg laus</td>
<td>txiv kwj</td>
<td>uncle (husband of paternal aunt)</td>
</tr>
</tbody>
</table>
Sample sound differences between WHM and GM

<table>
<thead>
<tr>
<th>WHM</th>
<th>GM</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hmoob</td>
<td>Moob</td>
<td>Hmong/Mong</td>
</tr>
<tr>
<td>hnub</td>
<td>nub</td>
<td>sun</td>
</tr>
<tr>
<td>dej</td>
<td>dlej</td>
<td>water</td>
</tr>
<tr>
<td>mus</td>
<td>moog</td>
<td>go</td>
</tr>
<tr>
<td>hais tias</td>
<td>has tas</td>
<td>say that</td>
</tr>
<tr>
<td>Paj Huab</td>
<td>Paaaj Fuab</td>
<td>Pahoua (a female given name)</td>
</tr>
<tr>
<td>nees</td>
<td>neeg</td>
<td>horse</td>
</tr>
</tbody>
</table>

1.5 Orthography: Romanized Popular Alphabet (RPA)

The Romanized Popular Alphabet, also known as RPA, is one of many Hmong writing systems and is the orthography used to transcribe the Hmong data in this study. RPA uses the Roman script and is considered the most prevalent Hmong writing system used worldwide. In the United States, RPA is used in scholarly works, official government documents, books, newspapers, Hmong language classrooms, and within the Hmong community. It is compatible with writing both WHM and GM (see Thao, 1999, for a comparison between WHM and GM consonants and vowels written in RPA). RPA was created in Laos in the 1950’s by the missionaries Yves Bertrais, William Smalley, and Linwood Barney with the assistance of several Hmong consultants. Over the years, changes have been made to the alphabet, specifically the consonants. This study will follow the original RPA according to the Hmong primers by Bertrais (1999) and Lewis and Vang (1999).

Each word is written in the order of Consonant-Vowel-Tone (C-V-T) in RPA. Tone markers are represented with a consonant at the end of a word.
(3) Sample WHM words written in RPA

<table>
<thead>
<tr>
<th>RPA</th>
<th>C-V-T</th>
<th>IPA</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>paj</td>
<td>p-a-j</td>
<td>[pâ]</td>
<td>flower</td>
</tr>
<tr>
<td>hlaws</td>
<td>hl-aw-s</td>
<td>[lài]</td>
<td>bead</td>
</tr>
<tr>
<td>nplhaib</td>
<td>nplh-ai-b</td>
<td>[mɔbjái]</td>
<td>ring</td>
</tr>
<tr>
<td>ib</td>
<td>-i-b</td>
<td>[ʔf]</td>
<td>one</td>
</tr>
<tr>
<td>cua</td>
<td>c-ua-</td>
<td>[cuɔ]</td>
<td>wind</td>
</tr>
</tbody>
</table>

Writing conventions vary among individual users of RPA. Traditionally, each syllable of a word is written out separately. The reasons may be because Hmong is largely monosyllabic and to facilitate reading by avoiding the clashing of letters (tone markers and initial consonants). Conversely, some writers prefer to combine syllables, especially compounds.

(4)  

a. ib zaug  ‘once – one+time’  ibzaug
b. tag kis  ‘tomorrow – ?+?’  tagkis
c. dab neeg  ‘story – spirit+human’  dabneeg
d. nus muag  ‘siblings – brother+sister’  nusmuag
e. khaub ncaws  ‘clothes – ?+?’  khaubncaws
For ease of reading and to keep the transcriptions consistent throughout this paper, my own data as well as all of the Hmong data that I adapt from other studies have been transcribed in RPA. Following the tradition, I will be spacing out two-syllable words to display each distinct morpheme. Adapted Hmong data have been changed to reflect my spelling convention.¹

¹ I tried to keep changes minimal in the adapted Hmong data. Additional changes that I made include the addition of missing glosses/translations and correction of spellings/translations. For the Hmong data that came with glosses, I have kept each author’s original abbreviations and symbols, unless his/her interpretation of a word is the same as mine, then I opted for my abbreviation. Notes or translations that I add appear in brackets < >.
CHAPTER 2: LITERATURE REVIEW

2.1 Previous Studies on Hmong Adverbs

The focus of the current research is lexical adverbs. The adverb lexical category or part of speech is one of the four major lexical categories, in addition to nouns, verbs, and adjectives (Loos, Anderson, Day, Jr., Jordan, & Wingate, 2003). These four major lexical categories are also referred to as content words. Nouns and verbs exist in every language; on the other hand, adjectives and adverbs are present in many but not all languages (Loos et al., 2003). Unlike the general adverb class that contains words with various distributions and functions, the adverb lexical category contains words that are similar in distribution and modify other major categories as well as sentences and clauses (Loos et al., 2003). These ‘true’ adverbs include some adverbs of time (already, still), manner (quickly, well), degree (almost, completely), frequency (always, often), evaluation (surprisingly, fortunately), viewpoint (personally), attitude (certainly, possibly), and focus (generally, just) (Carter, McCarthy, & Mark, 2011; Cinque, 1999; Loos et al., 2003).

The main question of this study is, ‘Are lexical adverbs present in Hmong?’ I will be using the terms ‘lexical adverb’ and ‘adverb’ interchangeably. Adverbial phrases, such as noun phrases (tej zaum ‘perhaps; CL+time,’ tam sim no ‘now; immediately here,’ ib zaug ‘once; one+time,’ etc.) are excluded from this study. Morphological processes, such as verb reduplication (indicated with ‘~,’ e.g. ceev~ceev ‘fast,’ zoo~zoo ‘good,’ nrawm~nrawm ‘quickly,’ etc.), and intensifiers (heev ‘very,’ ua luaj ‘so…,’ etc.) are also excluded.

Hmong adverbs or adverb-like constructions have been discussed to some extent by a handful of authors. This section will look at two general studies of GM
grammar, Lyman (1979) and Kunyot (1984), in search of Hmong lexical adverbs. In addition, Riddle’s (1995) English-Hmong glossary will also be investigated for the same purpose.

2.1.1 Lyman (1979)

In *Grammar of Mong Njua (Green Miao)*, Lyman (1979) provides a descriptive study of the grammar of GM. To describe the dialect more accurately, he created original labels for each word category based on the word’s function. The terms ‘adverb’ and ‘adverbial’ are not employed in his book. Words resembling manner and frequency adverbs are found in his study.

Lyman defines verbs as ‘Negatables,’ words which can be negated with *tsis/tsi* \(^1\) and occur in the structure ‘verb *tsi* verb’ as in *noj tsi noj*? ‘Is (he) eating?’ (pp. 24-25, 38). Verbals are ‘Verb Substitutes’ that can occur in the same positions as verbs except for the ‘verb *tsi* verb’ frame (p. 38). Lyman divides Verbals into five other subclasses, one being Preverbals-1, which contains words resembling manner adverbs. Lyman only provides one example for the Preverbals-1 subgroup, *maj mam/maam maam* ‘slowly, gradually, gently,’ and indicates that words in this subgroup are rare and should not be used as a basis for classifying verbs (p. 39). His examples are adapted below.

(5) a. *maam maam* moog  
slowly go  
to walk slowly  
(in the sense of slowing down one’s usual speed of walking)

---

\(^1\) In cases where there are lexical differences in WHM and GM, WHM is presented first followed by GM, as in *tsis/tsi* ‘no, not.’
b. tug hov maam maam ua num
   CL that slowly do work
   That person works slowly (in the sense of being able to work quickly
   but not being willing to do so)

The typical verb modifier in Hmong tends to occur post-verbally (further
discussed in Section 2.1.2). It might also be possible to place maj mam/maam
maam after the verb. However, the preverbal position is preferred.

(6) a. nws maj mam ua hauj lwm
   3SG slowly do work
   ‘S/he slowly works.’

b. ?nws ua hauj lwm maj mam
   3SG do work slowly

Heimbach (1979) notes in his White-Hmong dictionary that maj mam was
borrowed from Chinese. Ratliff (2009) also notes it as a loanword and links it to
the Chinese word, màn màn ‘slowly,’ which also occurs preverbally. This may be
the reason for its ‘rarity’ in Lyman’s study. Maj mam can also stand alone with a
final particle\(^2\) and function as the main verb of a sentence, as seen below.

(7) maj mam mas
   slowly FPART
   ‘Slowly/carefully!’

---

\(^2\) Every utterance in Hmong usually ends with a final particle (FPART), such as mas, nawb, os, los, ne, etc. that completes and sets the tone of the sentence. According to Kunyot (1984), they “…indicate politeness or command of the speaker” (p. 12).
The context would make clear the meaning of the above sentence. Although *maj mam* is functioning adverbially, the example above as well as it being a loanword shows that it is in fact a verb.

Lyman’s (1979) Duolocal Verbals class is another subgroup of Verbals and also contains words resembling manner adverbs. These words can take the positions of Preverbs and Postverbs, “…a Verb which amplifies another Verb in *preceding* position” and “…a Verb which amplifies another Verb in *following* position,” respectively (pp. 26, 40). Since Duolocal Verbals can take the place of Preverbs and Postverbs, which are verbs, they must be verbs themselves. They will be investigated here to identify whether they are verbs or adverbs. Lyman indicates that Duolocal Verbals are found in ‘limited distribution’ (p. 40). Only one example is provided for this group and is adapted below.

(8)  
   a.  *moog*  *kawg~kag*  
      go  quickly  
      to walk rapidly, to go in a hurry  
   
   b.  *kawg~kag*  *moog*  
      quickly  go  
      to walk rapidly, to go in a hurry  

In his dictionary, Lyman (1974) defines *kag* as ‘quickly, fast; in a hurry’ and provides the example below (p. 133).

(9)  *puab*  *tsi*  *kag*  *moog*  
    3PL  NEG  hurry  go  
    He didn’t hurry.  
    <They didn’t hurry.>
The example shows that *kag* is clearly a verb because it is negatable with *tsi*. It co-occurs with adjacent verbs in serial verb constructions. Lyman also lists *kag~kag* as a word entry in his dictionary and defines it the same way as he defines *kag*. *Kawg~kag* is also listed and given the meaning ‘quickly, fast; hurriedly.’ *Kag~kag* and *kawg~kag* are likely to be reduplicated forms of the verb *kag* with two variable pronunciations.

*Tsuag*, the WHM counterpart of *kag*, also often occurs in its reduplicated form, *tsuag~tsuag*. *Tsuag* is identified as a verb meaning ‘hurry, haste’ by Xiong (2005). Below is an adapted example from Xiong.

(10)  

<table>
<thead>
<tr>
<th>koj</th>
<th>tsuag</th>
<th>me ntsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2SG</td>
<td>hurry</td>
<td>a little</td>
</tr>
</tbody>
</table>

‘You, hurry a bit.’

This is another example that shows *tsuag* to be a verb, with its ability to function as the main verb and to be modified with the adverbial phrase *me ntsis*. WHM speakers tend to use *tsuag* in combination with other verbs, e.g. *noj tsuag~tsuag* ‘eat quickly’ and not on its own as a main verb, so it is not obviously a verb. However, it can be used on its own accompanied with the final particle *mas* as in *tsuag~tsuag mas* ‘Hurry!’, which apparently shows that it is a verb. From the analysis above, it is clear that *tsuag/kag* is a verb and not an adverb.

*Taug* is another adverb-like word found in Lyman’s (1979) study. It resembles a frequency adverb. Lyman places the word *taug* ‘frequently, often, continuously’ in a class of its own (pp. 25, 43). The verbs that *taug* can follow are called Frequentative Verbs by Lyman, which are verbs that can co-occur with *taug*

---

3 Jarkey (2004) defines serial verb constructions as “sequences of two verbs…juxtaposed within a single clause with no conjunction or complementizer…” (p. 178).
while in reduplicated form (p. 25). They include the verbs moog ‘to go,’ tuaj ‘to come,’ tso ‘to release,’ noj ‘to eat,’ and ntaus ‘to beat.’ Examples that Lyman provides are adapted below (pp. 25, 43).

(11) a.  moog moog taug le
      go    go    often   PART
      (He) often goes (there).

b.  cov moob khee v tsiv zej zog taug hwv
    CL  Hmong  like  move  village  often   very
    ‘The Miao tribe likes to continually change the location (of their) villages.’

c.  noj ncauj taug
    eat   mouth  often
    ‘said of a person who always has something in his mouth eating’

To the native speaker, taus/taug can have a negative connotation that is not captured in Lyman’s translations of the Hmong sentences. ‘Excessively’ and ‘too much’ are much closer translations (Xiong, 2005). This word seems to be less common nowadays. Quaj ‘to cry’ is another verb that can take taus/taug to form the common expression quaj quaj taug ‘to cry excessively’ when referring to children who cry too often.

It is possible that taus/taug may be linked to taus/taug ‘can,’ one of the potential mode markers. The potential mode marker follows verbs, as seen below.
(12)  \textit{nws pw taus lawm} \\
3SG sleep can PERF \\
‘S/he can sleep now.’ / ‘S/he’s able to sleep now.’ \\
(as in s/he was uncomfortable before and couldn’t sleep) \\

However, when the verb \textit{pw} ‘to sleep’ is reduplicated in combination with \textit{taus}, a different meaning results, as seen below. \\

(13)  \textit{nws pw-pw taus li} \\
3SG sleep can PART \\
‘S/he sleeps a lot/excessively.’ \\

The potential mode marker \textit{taus/taug} is found to be a verb (further discussed in Section 2.2.2). Therefore, the word \textit{taus/taug} ‘frequently, often, continuously’ identified by Lyman is likely to also be a verb and not an adverb. 

In summary, Lyman’s (1979) study of GM contained some words that resemble manner adverbs (\textit{maj mam/maam maam ‘slowly’} and \textit{tsuag/kag ‘hurry’}) and frequency adverbs (\textit{taus/taug ‘frequently, often, continuously’}). Both \textit{maj mam/maam maam} and \textit{tsuag/kag} were concluded to be verbs that can function adverbially within serial verb constructions. \textit{Taus/taug} was found to possibly be linked to one of the potential mode markers, \textit{taus/taug ‘can’}, which is also a verb. In conclusion, there are no adverbs found in Lyman’s study.

2.1.2 Kunyot (1984) 

In his study of GM grammar, Kunyot (1984) lays out the different grammatical structures, including the adverb phrase structure. Below is a simplified version of Kunyot’s adverb phrase structure of GM (p. 66).
The GM adverb phrase consists of an adverb (Adv), followed by an optional intensifier (Intens.) such as *kawg*, and an optional comparative unit that includes a comparative marker (CompMK) such as *dlua*, with a required nominal phrase (NP) (p. 66).

According to Kunyot, the adverb phrase usually occurs in the modifier position of a verb phrase and in the manner position of a clause (p. 65). Below is a simplified version of Kunyot’s general verb phrase structure (p. 52).

\[
(15) \quad VP = (Prv) + V + (Psv) + (Adv) + (Intens.)
\]

From the verb phrase structure above, the main verb (V) is the only obligatory element. All of the modifiers are optional (Prv – preverb, Psv – postverb, Adv – adverb phrase, and Intens. – intensifier). The adverb follows the postverb or the verb directly in the absence of a postverb.

Below is a simplified version of Kunyot’s general clause structure (p. 12).

\[
(16) \quad \text{Clause} = (\text{Time phrase}) + [(\text{Subject:NP}) + \text{Predicate:VP} + (\text{Object:NP}) + (\text{Indirect Object:NP})] + (\text{Location phrase}) + (Adv) + (\text{Final particle})
\]

The nucleus of the phrase is in [ ] and contains the subject, predicate, object, and indirect object. The adverb is part of the optional peripheral elements and describes the manner of the action. It is postverbal and follows the location phrase.

The following examples are adapted from Kunyot and illustrate the position of Hmong adverbs within a sentence (p. 66).
(17) a. *npuaj noj sai tshaaj plawg*
pig eat fast the most

‘Pigs eat the fastest.’

b. *kuv txiv has qeeb miv ntsis*
1SG father speak slow little

‘My father speaks quite slowly.’

c. *nwg moog kev ntsag qaus tu*
3SG go for a stroll quiet

‘He goes for a stroll quietly.’

d. *peb nam ua num zoo dluau cov*
1PL mother do work good than group

‘Our mother works better than the others.’

e. *nwg dhla nrawm*
3SG run quickly

‘He runs quickly.’

The adverbs from the sentences above are *sai, qeeb, ntsag qaus tu, zoo,* and *nrawm* and they occur directly after the main verb or the direct object if one is present. These adverbs are in fact verbs, descriptive verbs as called by Kunyot, that have the ability to function like adverbs and adjectives based on its position within a sentence (pp. 61-62, 91). Kunyot also identifies them as ‘manner

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4 Many verbs in Hmong are complex predicates and require an object to complete its meaning (V+N), in contrast to English, e.g. *mus kev* (go+path) ‘to walk,’ *noj mov* (eat+rice) ‘to eat,’ *hu nkauj* (call+song) ‘to sing,’ and *sau ntawv* (write+writing) ‘to write.’ Once the verb complex has been mentioned and the noun is known, utterances that follow can drop the noun, e.g. Question: *Koj puas tau noj mov os?* ‘Have you eaten?’, Reply: *Kuv tsis tau noj os* ‘I haven’t eaten.’
elements’ that are placed after the predicate to describe the action (p. 36). They do not change in form whether functioning as a verb, adverb or adjective, which is characteristic of Hmong, and is illustrated in the following example with the verb *zoo* ‘to be good.’

(18) a.  
\[ \text{lub tseb no zoo heev} \]  
\[ \text{CL car this good very} \]  
‘This car is (very) good.’

b.  
\[ \text{nws yog tseb zoo} \]  
\[ \text{3SG is car good} \]  
‘It is a good car.’

c.  
\[ \text{lub tseb no khiav zoo} \]  
\[ \text{CL car this run good} \]  
‘This car runs good.’

Kunyot identifies the positions of descriptive verbs to be in the main verb, the postmodifier of an active verb phrase, or the modifier of a noun phrase (p. 88). In alignment with Kunyot’s findings, the sentences in example (18) above show that *zoo* ‘to be good’ functions verbally when it occurs after the subject of a sentence, functions adverbially when it follows the main verb, and functions adjectivally when it follows the object of the predicate. Another way of demonstrating *zoo* as a verb is through its ability to co-occur with the perfective aspect marker *lawm* and form a complete sentence, as seen below.
(19) lub tsheb no zoo heev lawm

CL car this good very PERF

‘This car is (very) good now.’ / ‘This car has become (very) good.’

Above, zoo is the verb and lawm indicates the completion of an action or the coming into a state, in this case, the attainment of the state of ‘being good.’ It alters the meaning of the sentence a bit by indicating that the car is good now in contrast to (18a). Kunyot’s findings show that GM uses a type of serial verb construction to perform adverbial functions.

In summary, Kunyot (1984) identified the GM adverb phrase structure and its occurrences in the modifier position of a verb phrase and in the manner position of a clause. These adverbs are in fact verbs, which Kunyot labels as descriptive verbs, which can function like adverbs and adjectives based on their position within a sentence. This is another study that shows that instead of a lexical class of adverbs, other elements function adverbially.

2.1.3 Riddle (1995)

This section goes in search of Hmong lexical adverbs by exploring an English-Hmong glossary. The glossary was compiled by Riddle (1995) and is part of the textbook, Hmong for Beginners, by Jaisser, Ratliff, Riddle, Strecker, Vang, and Vang (1995). English words are listed in alphabetical order along with their WHM counterparts. The Hmong words and phrases were gathered from texts used in the textbook and also include common phrases. Each Hmong word or phrase is categorized according to its part of speech, and ‘adverb’ is included as one of the word classes. Of the words identified as adverbs, single lexical items and unanalyzable or partially-analyzable compounds resembling lexical adverbs are listed below.
(20) a. lawm: already, marker of perfective aspect, completed, finished
b. pheej: constantly, always, continually, repeatedly
c. tseem: however, still, yet
d. tab tom: just starting to do, be in the process of doing
e. twb: already, to express unexpected fact, even, indeed, really,
   pre-verbal intensifier
f. nim: just then
g. haj yam: still more, more so, comparative degree
h. yuav luag: almost, nearly

From the list, (20a-d) resemble adverbs but have been proposed as aspect markers in the literature (further discussed in Section 2.2.1). Twb (20e) looks like an adverb and can be translated into English as ‘already.’ Nim (20f) has been described by Heimbach (1979) as a “particle used before the verb to indicate immediacy of action” and defines it as “just then, immediately, just as” (p. 139). It might possibly be an adverb. This word is less commonly used nowadays.

The compounds from this list are tab tom, yuav luag, and haj yam. The individual morphemes from tab tom cannot be analyzed (further discussed and analyzed in Section 3.3.4). Similar to its definition provided in Riddle’s glossary, tab tom has been identified in the literature as a progressive aspect marker.
Because Hmong is generally monosyllabic, I will consider this compound as an aspectual construction.

Yuav luag ‘almost,’ on the other hand, can partially be broken down into its individual morphemes: yuav ‘future aspect’ + luag ‘?luaj (verb).’ Similar to my initial speculations, Heimbach (1979) also links luag to the verb luaj and define them both as ‘like, the same as’ (p. 120). My definition of luaj is ‘to reach a
certain size,’ which I observe to be used when comparing two items. This compound looks like an aspect and verb construction, where the verb has undergone grammaticization. Evidence for grammaticization is the apparent tone change from tone J (high-falling) to tone G (breathy) and the ability for yuav luag and luaj to co-occur, as seen below.

(21) \textit{kuv lub tsev yuav luag luaj nws lub}
\begin{tabular}{llllll}
1SG & CL & house & almost & reach & 3SG & CL \\
\end{tabular}
\begin{tabular}{c}
‘My house is almost the same size as his/hers.’
\end{tabular}

If the verb \textit{luaj} were to be omitted above, the sentence would be incomplete because \textit{luag} cannot function as a verb here. \textit{Yuav luag} ‘almost’ is therefore not an adverb, but instead an aspectual construction that corresponds to an adverb.

\textit{Haj yam} ‘still more, more so, comparative degree’ can also be partially broken down: \textit{haj} ‘yet, still’ + \textit{yam} ‘more’ (Heimbach, 1979, p. 47). \textit{Haj} can also co-occur with \textit{tseem} ‘still’ to mean ‘still’ or ‘still in process of doing’ (Heimbach, 1979, p. 47) or possibly ‘even still.’ Therefore, it is likely that \textit{haj yam} does have the meaning ‘still, even’ + ‘more’ based on the analysis and its function as a comparative, as seen below.

(22) \textit{Pov haj yam siab}
\begin{tabular}{llll}
Pao & still/even & more & tall \\
\end{tabular}
\begin{tabular}{c}
‘Pao is even taller.’
\end{tabular}

From the list in (20), the words \textit{twb} ‘already,’ \textit{nim} ‘just then,’ and the individual morphemes of \textit{haj yam} ‘even more’ may possibly be lexical adverbs. \textit{Twb} will be tested in Section 3.3 to identify whether it is a lexical adverb or a functional particle.
2.1.4 Summary

In Section 2.1, three sources were explored in search of Hmong lexical adverbs. Lyman’s (1979) study on the grammar of GM contains words resembling manner adverbs (maam maam ‘slowly’ and kag ‘hurry’) and frequency adverbs (taug ‘frequently, often, continuously’). However, further analysis revealed that they are in fact verbs. Kunyot’s (1984) study on GM also revealed that descriptive verbs can function adverbially when following verbs, e.g. nrawm ‘quickly,’ qeeb ‘slowly,’ and zoo ‘good.’ An investigation of Riddle’s (1995) English-Hmong glossary showed that most of the words marked as adverbs are not ‘true’ adverbs, but instead belong to other categories. The words twb ‘already,’ nim ‘just then,’ and haj yam ‘even more’ are the only lexical adverb candidates.

2.2 Previous Studies on Hmong Aspects and Moods

Unlike lexical categories, which are open classes and have ‘descriptive content,’ functional categories, generally known as function words, are closed classes that lack ‘descriptive content’ and only assist in the interpretation of lexical elements (Abney, 1987). Tense, aspect, and mood are considered functional categories and are relevant in a study of adverbs. According to Cinque (1999), there is a correspondence between adverbs and functional heads (tense, aspect, and mood), and he locates adverbs in the specifier position of the projections of various tense, aspect, and mood heads (further discussed in Section 2.3). This section reviews what has been identified in the literature on Hmong grammatical aspects and moods.

2.2.1 Aspects

Hmong has been found to lack tense but contain aspects (Li, 1991). Tense refers to the location in time of a situation, linking the time of the topic being
discussed to the time of speech and identifies it as either present, past, or future (Comrie, 1976). On the other hand, aspect “…expresses a temporal view of the event or state expressed by the verb” (Loos et al., 2003). In other words, it describes how a situation unfolds in relation to time. Aspect is divided up into perfectives and imperfectives. Perfective aspect views a situation as a whole inseparable unit, usually as a completed event (Comrie, 1976). Imperfective aspect views the ‘internal structure’ of the situation as ongoing, being reiterated, having already occurred, about to occur, occurring briefly, etc. (Cinque, 1999; Comrie, 1976). Hmong has both perfective and imperfective aspects.

Li (1991), Jaisser et al. (1995), and Ginsburg (2011) are the major studies that have investigated the aspectual system of Hmong (Li on GM, Jaisser et al. and Ginsburg on WHM). The main Hmong aspect markers that have been identified in the literature are tau, lawm, yuav, and tab tom/taab tom and they occur in preverbal position except for lawm, which occurs clause-finally (Ginsburg, 2011; Jaisser et al., 1995; Kunyot, 1984; Li, 1991; Lyman, 1979). Other aspects have also been found and will be presented as well. The following summary focuses on Li, Jaisser et al., and Ginsburg’s studies.

Li (1991) and Jaisser et al. (1995) identify tau as an attainment aspect marker of Hmong. Li states that “tau functions as an aspect marker indicating the attainment of the event signaled by the sentence” (p. 29). Two of his examples are adapted below.

(23) a. nwg tau nov qaab nqaa nwg phau ntawv
    3SG ATTAIN forget bring 3SG CL book
    ‘S/he forgot to bring her/his book.’
b.  
\[
kuv \ \textit{yawm} \quad \textit{tau} \quad tuag \ \textit{xyoo taag lug}
\]
\(1SG \ \text{grandpa} \ \text{ATTAIN} \ \text{die} \ \text{last year}
\]
‘My grandpa died last year.’

Similarly, Jaisser et al. define \textit{tau} as “…a word referring to a state of affairs that has been successfully reached or that is going to be reached” (p. 161).

Both Li and Jaisser et al. point out that \textit{tau} is not limited to past events but can also refer to events in the present and future.

(24) a.  
\[
yog \ \textit{koj} \quad \textit{tau} \quad poob \ \textit{koj} \quad tug \quad yuam \ sij \quad lawm
\]
\(\text{if} \ \ 2SG \ \text{ATTAIN} \ \text{lose} \ \ 2SG \ \text{CL} \ \text{key} \ \text{PERF}
\]
\[
kuv \ \textit{yuav} \ \textit{coj} \ \textit{lub} \ \textit{tsheb} \ \textit{rov qaab}
\]
\(1SG \ \text{will} \ \text{take} \ \text{CL} \ \text{car} \ \text{return}
\]
‘If you lose your key, I will take back the car.’ (Li, 1991, p. 29)

b.  
\[
thau \ \textit{txog} \ \textit{peb caug} \ \textit{lawm} \ \textit{sawv daws} \ \textit{thiaj}
\]
\(\text{when} \ \text{arrive} \ \text{New Year} \ \text{PERF} \ \text{everybody} \ \text{then}
\]
\[
\textit{tau} \quad hnav \ \textit{khaub ncaws} \ \textit{tshiab}
\]
\(\text{ATTAIN} \ \text{wear} \ \text{clothes} \ \text{new}
\]
‘So when the New Year arrives, everybody gets to wear new clothes.’ (Jaisser et al., 1995, p. 161)

c.  
\[
kuv \ \textit{niam hluas} \ \textit{nyob} \ \textit{hauv} \ \textit{Oregon;}
\]
\(\text{my} \ \text{younger sister} \ \text{live} \ \text{in} \ \text{Oregon}
\]
\[
nws \ \textit{tsis} \ \textit{tau} \ \textit{yuav txiv}
\]
\(\text{she} \ \text{NEG} \ \text{ATTAIN} \ \text{get married}
\]
‘My younger sister lives in Oregon; she’s not married (yet).’
(Jaisser et al., 1995, p. 161)
Negation precedes *tau*, making it a bit different from other aspects (as we will see shortly).

(25) \textit{kuv tsis tau noj mov os}  
1SG NEG ATTAIN eat rice FPART  
‘I haven’t eaten.’

Jaisser et al. note that *tau* is optional when a time adverb referring to the past is included in the sentence (p. 160).

(26) \textit{nag hmo niam tais (tau) hais ib zag dab neeg}  
last night grandmother (ATTAIN) tell one CL story  
‘Grandmother told us a story last night.’

Li and Jaisser et al. also point out two other functions of *tau*: as a transitive verb ‘to obtain, to get, to reach’ and as the potential mode marker ‘can’ (further discussed in Section 2.2.2), which has also been noted by Jarkey (2006). Many languages in Southeast Asia (Cantonese, Thai, Vietnamese, Mien, etc.) have a morpheme that is phonetically, functionally, and semantically similar to *tau*, indicating it as an ‘areal feature’ (Li, 1991, pp. 42-46). Below are adapted examples of *tau* functioning as a main verb.

(27) a. \textit{nwg tau ob qho hauj lwm nub nuav}  
3SG get two CL job today  
‘He got two jobs today.’ (Li, 1991, p. 30)
The reason the aspect marker tau can be negated may be because it was derived from the verb tau ‘to get.’ As a main verb, tau occurs on its own and has similar characteristics as other verbs in Hmong but cannot be modified by the attainment aspect tau (Li, 1991, p. 30) (‘*’ indicates that a sentence is ungrammatical).

(28) *kuv tau tau ib pob khoom
    1SG ATTAIN get one CL package/gift

    ‘I got a package/gift.’

The similarity in meaning and placement of tau as an aspect marker and main verb can cause ambiguity in a sentence when the context is not clear, as seen below.

(29) nwg tau noj nqaj
    3SG eat meat

    (a) ‘S/he ate meat.’  (b) ‘S/he got to eat meat.’

    (Li, 1991, p. 31)

* Tau functions as an attainment aspect marker in (29a) and as a verb in a serial verb construction in (29b).
Ginsburg (2011) labels *tau* as a stative perfective aspect and defines it as “to (have) come into the state of being ‘x’.” Her examples are adapted below.

\[
\begin{align*}
\text{(30) } & \quad \text{a. } kuv \quad tsis \quad \textit{tau} \quad rov \ qab \quad los \quad tsev \quad li \\
& \quad \text{1SG \ NEG \ STA.PFV \ reverse \ come \ house \ IPFV?} \\
& \quad \text{‘I have not yet returned home.’} \\
& \quad \text{b. } koj \quad puas \quad \textit{tau} \quad txhuam \quad koj \quad cov \quad kaus \ hniav \\
& \quad \text{2SG \ PQ \ STA.PFV \ brush \ 2SG \ CL \ teeth} \\
& \quad \text{‘Have you brushed your teeth?’}
\end{align*}
\]

Li, Jaisser et al., and Ginsburg’s findings of *tau* are analogous.

*Lawm* is termed a completion aspect marker by Li (1991) and it occurs in clause-final position. It signals the completion of an event in the past or future or the coming into a state when used with a stative verb. Two of Li’s examples are adapted below (pp. 39-40).

\[
\begin{align*}
\text{(31) } & \quad \text{a. } thaum \quad koj \quad noj \quad taag \quad \textit{lawm}, \quad moog \\
& \quad \text{when \ 2SG \ eat \ finish \ COMPL \ go} \\
& \quad \text{‘When you finish eating, go!’} \\
& \quad \text{b. } nwg \quad txawj \quad \textit{has} \quad lug \quad \textit{Moob} \quad \textit{lawm} \\
& \quad 3SG \ know \ speak \ CL \ Hmong \ COMPL \\
& \quad \text{‘S/he knows how to speak Hmong already.’} \\
& \quad \text{<‘S/he knows how to speak Hmong now.’>}
\end{align*}
\]

Jaisser et al. (1995) and Ginsburg (2011) identify *lawm* as a perfective aspect. Jaisser et al. state that “…*lawm* signals the completion of a given situation (event, activity, or state)…” or that “…the action is merely underway—i.e. has left
the starting point, but has not been completed yet…” and can refer to events in the past, present, or future (pp. 156-158).

(32) a. *thaum txog peb caug lawm sawv daws thiaj*  
when arrive New Year PERF everybody then  
tau hnav khaub ncaws tshiab  
ATTAIN wear clothes new  
‘So when the New Year arrives, everybody gets to wear new clothes.’ (Jaisser et al., 1995, p. 161)

b. *tus tub tau rab hneev;*  
CL boy get CL crossbow  
nws thiaj mus ua si lawm  
he then go play PERF  
‘The boy got his crossbow and went off to play.’  
(Jaisser et al., 1995, p. 159)

Jaisser et al. also note two other less common uses of *lawm*: as a main verb ‘to leave, depart, go’ and as “…a location word referring to a place a certain distance away from the speaker when it is followed by a locative phrase…” (p. 156).

Ginsburg (2011) relates *lawm* to the Mandarin Chinese perfective, *le*, which has also been noted by Jarkey (2006). Ginsburg uses Frawley’s (1992) definition of perfectives in which an event is seen as a ‘whole non-segmentable unit’ with less emphasis on its completion (as cited in Ginsburg, 2011). Below is an example adapted from Ginsburg.
(33)  phau  ntaqw  ntawm ko  nws  twb
       CL  paper  that one  3SG  already
       tau  nyeem  lawm
       STA.PFV  read  PERF

   ‘He has already (completely) read that one.’

Ginsburg points out that *lawm* occurs in ‘clause penultimate’ position. This is true when final particles are present.

In addition to *lawm*, Kunyot (1984) points out another completive aspect in GM. He classifies *nyav* as an immediate completive aspect (*nyuam qhuav* in WHM) and glosses it as ‘just.’ Below are examples by Kunyot contrasting *lawm* and *nyav* (p. 40).

(34)  a.  koj  txiv  qaug  cawv  lawm
       2SG  father  drunk  whisky  already
       ‘Your father has been drunk.’       -completive
       <‘Your father is now drunk.’>

b.  puam  tab  kuv  nyav  noj  mov
    a minute ago  1SG  just  eat  rice
    ‘I have just eaten rice.’         -immediate completive
    <‘I have just eaten a little while ago.’>

Although *nyav* in GM looks like a lexical element, *nyuam qhuav* in WHM is actually a phrase that can function adverbially. Even though *quav* is not analyzable, *nyuam* ‘small (one)’ can and appears elsewhere in other phrases: *me*
nyuam ‘child,’ nyuam qhuav no ‘just now,’ ib nyuag5 pliag ‘just a little while,’ ib nyuag tug ‘just one,’ etc. I am not sure whether the GM counterpart functions in exactly the same way as the one in WHM.

Li (1991) identifies yuav as the GM future tense marker and the only marker of tense in the language (p. 52). He points out that its use is optional, especially when a temporal expression is present (p. 53), which has also been observed by Jaisser et al. (1995). Below is an example adapted from Li (p. 53).

(35) pig kig kuv (yuav) dlha
tomorrow 1SG FUT run
‘Tomorrow I’ll run.’

Li also points out that yuav precedes the negation marker tsis/tsi and operates like other modals (p. 54). Below is an example to illustrate this.

(36) kuv yuav tsis nrog nej mus
1SG FUT NEG with 2PL go
‘I won’t be going with you guys.’

An interesting point that Li discusses is the grammaticization of yuav from the verb yuav ‘to want; to buy’ and the fact that they occur in complementary distribution (p. 52). However, to a native speaker of WHM, both occurrence of yuav within the same sentence is acceptable, as illustrated below.

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5 Tone sandhi effect: ib ‘one’ + nyuam ‘small’ → ib nyuag. In this case, words that are inherently tone M (creaky) change to tone G (breathy) when following a word with tones B (high-level) or J (high-falling). Tone sandhi generally occurs in compounds and certain phrases (see Ratliff, 1992).
(37) a. kuv yuav yuav khoom los npaj tseg
   1SG FUT buy stuff come prepare save
   ‘I’m going to buy stuff to get ready.’

b. Maiv yuav yuav txiv tag kis os
   Mai FUT marry husband tomorrow FPART
   ‘Mai is going to get married tomorrow.’

Jaisser et al. (1995) labels the yuav + verb construction as indicating an irrealis situation: an event that can occur in the future and includes hypothetical or non-occurring events (pp. 164-165). Following are two examples adapted from Jaisser et al.

(38) a. Tus Tsov hais tias, “Kuv tshaib tshaib plab
   CL Tiger say ISG hungry hungry stomach
   li kuv yuav noj koj.”
   INT 1SG IRRLS eat you
   ‘The Tiger said, “I’m very hungry and I’m going to eat you.”’

b. Tus Qav tsis paub yuav ua li cas li.
   CL Frog NEG know IRRLS do what INT
   ‘The Frog didn’t know what to do.’

Ginsburg (2011) labels yuav as a future aspect and points out that it is the “most common and versatile future marker” in WHM. Below is one of her examples.
(39)  kuv  yuav  rov qab  mus  tsev  
1SG  FUT  return  go  house  
‘I’m going back home.’ (I don’t want to do this anymore.)

Tab tom/taab tom has been identified as a productive aspect marker by Li (1991) and Jaisser et al. (1995). Li observes that it can only occur with activity verbs (p. 46).

(40)  a.  kuv  taab tom  moog  tsev  
1SG  PROG  go  house  
‘I am going home.’ (Li, 1991, p. 46)

b.  thaum  kuv  tus  phooj ywg  tuaj  
when  my  CL  friend  come  
(kuv)  tab tom  noj  mov  
(1SG)  PROG  eat  rice  
‘When my friend arrived I was eating.’ (Jaisser et al., 1995, p. 155)

Jaisser et al. note that tab tom is not used as frequently as its English progressive counterpart and is often omitted and used only when the context is unclear (p. 156).

A negative progressive is formed by placing tsi/tsi before the verb with the progressive aspect omitted (Li, 1991, p. 51).

(41)  a.  *kuv  tsi  tab tom  pw  os  
1SG  NEG  PROG  sleep  FPART
b. *kuv tsis pw os*
   1SG  NEG  sleep  FPART
   ‘I’m not sleeping.’

However, Ginsburg (2011) identifies *tseem* as the progressive marker in WHM and glosses *tab tom* as ‘currently.’ Her examples are adapted below.

(42) a. *kuv tseem tab tom noj mov*
   1SG  PROG  currently  eat  rice
   ‘I am currently eating.’

b. *ua ntej thaum kuv mus tawm rooj,*
   before  time  1SG  go  out door
   *kuv tseem ua dab tsi ne*
   1SG  PROG  do  what  DPQ
   ‘What was I doing before I went to the bathroom?’

In contrast, multiple authors have defined *tseem* as ‘still.’ Li (1991) notes that “*tseem* is not a Progressive aspect marker, but it can bring on an inferred meaning of progression” (p. 47).

*Sam sim/saam sim* is grouped with *tab tom/taab tom* as a continuative aspect by Kunyot (1984). Lyman (1979) defines it the same way as he defines the word *tseem* as ‘still, as yet, -ing.’ Heimbach (1979) defines *sam sim* as “a preverbal indicating action that is still going on, ‘in the process of…’ ” (p. 287).

After consulting several native WHM speakers, they agree that both *sam sim* and *tab tom* are somewhat similar. From my observations, *sam sim* is uncommon nowadays but is still used by some older Hmong speakers. Below are adapted examples.
(43) a. tug npua nuav **saam sim** noj  
    CL pig this be…ing eat  
    ‘This pig is eating.’ (Kunyot, 1984, p. 40)

b. **puab** **saam sim** noj mov  
    3PL still, as yet, -ing eat rice  
    ‘He is still eating.’ (Lyman, 1979, p. 39)  
    <’They are still eating.’>

In addition to the aspect markers discussed above, Ginsburg (2011) has proposed two more aspect markers in WHM: **mam li**/**maam le** ‘benefactive future aspect’ and **pheej** ‘continuous aspect.’ She defines the benefactive future, **mam li**, as “speaker will do something in the future for the listener.” Two of her examples are adapted below.

(44) a. **kuv** **mam li** khiav mus los mas  
    1SG BEN.FUT  run  go  DP  DP  
    ‘OK, I will leave.’ (you don’t want me here.)

b. **kuv** **mam li** ua li koj hais los mas  
    1SG BEN.FUT  do  like  2SG  say  DP  DP  
    ‘I will do whatever you say!’ (please forgive me)

To the native speaker, **li** in **mam li** can be optional. Ginsburg also points out that the future and benefactive future aspects are ‘mutually exclusive,’ meaning they cannot co-occur within the same sentence. Her examples are adapted below.
(45) a.  
\*kuv mam li yuav ua li koj hais los mas

1SG BEN.FUT FUT do like 2SG say DP DP

*intended: ‘I will do what you say.’

b.  
\*kuv yuav mam li ua li koj hais los mas

1SG FUT BEN.FUT do like 2SG say DP DP

*intended: ‘I will do what you say.’

For the continuous aspect pheej, Ginsburg points out that an action “must be in progress at utterance time and prior to utterance” and that it has the notion of “still/keep” and a “slightly unexpected and negative connotation.” Her examples are adapted below.

(46) a.  
kuv pheej xav rau kuv tus kheej

1SG CONT think to 1SG CL REFL

‘I keep thinking to myself.’

b.  
yog vim li cas koj pheej tseem yuav noj thiab no

why 2SG CONT PROG FUT eat and DP

‘Why are you still wanting to eat?’

(polite) (shouldn’t you be full already?)

It is interesting to note that in 1991, Jarkey (as cited in Jarkey, 2004, p. 189) has identified most of the aspects discussed in this section as adverbs functioning as imperfective aspects, e.g. tab tom ‘have just begun to,’ tseem ‘still,’ pheej ‘continually,’ and sij ‘repeatedly.’ Some of the morphemes above will be tested later on to see whether they are adverbs or aspects.
In summary, the four main Hmong aspect markers that have been identified in the literature are \( \textit{tau, lawm, yuav, and tab tom/taab tom} \). The literature has shown that the labeling of the aspect markers above have not been consistent among researchers. \( \textit{Tau} \) has been called an attainment aspect marker as well as a stative perfective. \( \textit{Lawm} \) has been termed a completive marker and a perfective marker, and \( \textit{yuav} \) has been labeled as a future tense, an irrealis aspect, and a future aspect. \( \textit{Tab tom/taab tom} \) has been termed a progressive marker, a continuative marker, as well as glossed as ‘currently.’ \( \textit{Tseem} \) has been proposed by one author as a progressive marker instead of \( \textit{tab tom/taab tom} \). Some authors have linked the less common \( \textit{sam sim/saam sim} \) with \( \textit{tab tom/taab tom} \) as an alternate progressive aspect. One author has identified \( \textit{nyuam qhuav/nyav} \) as an immediate completive, the opposite of the completive aspect \( \textit{lawm} \). Additional aspect markers that have been recently proposed are \( \textit{mam li/maam le} \) and \( \textit{pheej} \), a benefactive future and a continuous aspect, respectively.

2.2.2 Moods

Modality expresses “…the speaker’s opinion or attitude toward the proposition” (Lyons, 1977, p. 452) and is represented either in verbal morphology (mood) (Palmer, 1986, p. 21) or as independent words (modals) (as cited in Cinque, 1999, p. 78). Therefore, an isolating language like Hmong should express modality through independent words (particles).

Like aspects, modals in Hmong usually occur in preverbal position except for \( \textit{tau} \) and \( \textit{taus/taug} \) (Jaisser et al., 1995; Li, 1991). The following modals have been identified in the literature: \( \textit{tau} \) ‘can,’ \( \textit{taus/taug} \) ‘can,’ and \( \textit{yuav tsum} \) ‘must,’ and \( \textit{yuav tau} \) ‘must; have to.’ Verbs and phrases that express modality are not included here. This section will take a closer look at each of the modals above.
In addition to functioning as a main verb and an attainment marker, tau can also function as a potential mode marker to express “possibility, permissibility, and ability” (Jaisser et al., 1995, p. 161). Tau ‘can, be able to’ can occur either after the main verb or the object of the verb without affecting the meaning of the sentence (Jaisser et al., 1995, p. 161; Li, 1991, p. 37), as seen with the adapted examples below (Li, 1991, p. 35).

(47) a. kuv has tau lug Moob
    1SG speak can language Hmong
    ‘I can speak Hmong.’

    b. kuv has lug Moob tau
    1SG speak language Hmong can
    ‘I can speak Hmong.’

Li (1991) has noted the strange fact that the potential mode tau does not occur in preverbal position like its auxiliary-modal counterparts, i.e. tsis/tsi ‘negative marker,’ yuav ‘will,’ yuav tsum ‘must,’ and pheej ‘reiterative mode’ (p. 36). Li has also noted another deviation of tau from the other modals: its ability to be negated. To indicate inability, tsis/tsi is placed before tau, as seen below (Li, 1991, p. 36).

(48) a. kuv has tsi tau lug Moob
    1SG speak NEG can language Hmong
    ‘I cannot speak Hmong.’
Like the attainment aspect marker *tau*, the ability for the potential modal *tau* to be negated could also be its association with the verb *tau* ‘to get.’ Negation appearing before the main verb *hais/has* ‘to speak’ produces an ungrammatical sentence.

\[(49)\] *a.*
\[
\begin{array}{llllll}
  & kuv & has & lug & Moob & tsi & tau \\
 1SG & speak & language & Hmong & NEG & can
\end{array}
\]

‘I cannot speak Hmong.’

Another difference with *tau* is its ability to be preceded by the question particle *puas*, which only occurs before a verb complex, i.e. (auxiliary) + (NEG) + verb; however, it can appear together with *tau* at the end of a sentence (Li, 1991, pp. 31, 37). In addition, Li also points out that *tau* can be used as a reply to a question but not its pre-verbal auxiliary-modal counterparts. The following sentences illustrate three different ways of asking a similar question by rearranging *puas* and *tau*.

\[(50)\] *a.*
\[
\begin{array}{llllll}
  & koj & puas & pab & tau & kuv \\
 2SG & PQ & help & can & 1SG
\end{array}
\]

‘Can you help me?’
b. Question – Option 2:

\[ koj \quad pab \quad puas \quad tau \quad kuv \]

2SG help PQ can 1SG

‘Can you help me?’

c. Question – Option 3:

\[ koj \quad pab \quad kuv \quad puas \quad tau \]

2SG help 1SG PQ can

‘Can you help me?’

In (50a), \textit{puas} modifies the main verb \textit{pab} ‘to help,’ and in (50b) it modifies \textit{tau}. In (50c), both \textit{puas} and \textit{tau} are moved into sentence-final position, which Clark (1985) notes as a tag question. All three sentences are somewhat similar and can either refer to ability or permission based on its context.

Following are three possible answers that can be given to the preceding questions.

(51) a. Reply – Option 1:

\[ kuv \quad pab \quad tau \quad koj \quad mas \]

1SG help can 2SG FPART

‘(Yes), I can help you.’

b. Reply – Option 2:

\[ tau \quad mas \]

can FPART

‘(Yes), (I) can.’ / ‘Sure.’
c. Reply – Option 3:

\[ \text{tau } \text{kawg} \ (\text{mas}) \]

\[ \text{can } \text{INT } \text{FPART} \]

‘(Yes), (I) sure can.’ / ‘Of course.’

(51a) is a full sentence reply. (51b-c) are reduced but well-formed and more natural responses. In (51b), tau can stand alone with only the accompaniment of a final particle to form a complete sentence. (51c) demonstrates that tau can be modified with the intensifier kawg. All of the above findings reveal that tau is in fact a verb that has the ability to function like a modal. According to Jarkey (2006), the potential mode construction refers to the “…successful ‘attainment’…of the performance of the action itself” (p.129) and is derived from a serial verb construction in which she calls ‘Attainment SVC’ (see Jarkey, 2004). This is the reason why tau deviates so much from the other proposed Hmong modals.

* Tau and taus are both translated as ‘can’ in English; however, there is a distinction between the two words. Jaisser et al. (1995) has observed that “…taus is to be used when there is a personal hindrance or lack of hindrance…physical, psychological, or due to the extent or nature of one’s holdings” (p. 171). Below are examples illustrating the usage of taus adapted from Jaisser et al.

(52)  a. \[ \text{nws } \text{khiav } \text{taus} \]

\[ \text{3SG } \text{run } \text{can} \]

‘He can run.’
b.  *tus poj niam laus sawv tsis taus*
   CL woman old stand NEG can
   ‘The old woman can’t get up.’

Following are additional examples contrasting *taus* and *tau* within their appropriate contexts. *Taus* is more restrictive, while *tau* is more general and is used to cover a wider range of situations. Like *tau*, *taus* is also a verb.

(53) a.  *kuv pw tsis taus vim kuv mob plab*
   1SG sleep NEG can because 1SG hurt stomach
   ‘I can’t sleep because I have a stomachache.’
   (physical/personal hindrance)

b.  *kuv pw tsis tau vim kuv muaj hauj lwm*
   1SG sleep NEG can because 1SG have work
   ‘I can’t sleep because I have work.’ (external hindrance)

c.  *kuv yuav tsis taus vim kim dhau lawm*
   1SG buy NEG can because expensive too PERF
   ‘I couldn’t buy it because it’s too expensive.’
   (personal hindrance-lack of resources)

d.  *kuv yuav tsis tau vim tsis muaj lawm*
   1SG buy NEG can because NEG have PERF
   ‘I couldn’t buy it because there’s no more.’ (external hindrance)

*Yuav tsum* and *yuav tau* have been identified by Jaisser et al. (1995) as modal verbs meaning ‘must.’ *Yuav tsum* seems to have a stronger obligation and
takes on the meaning ‘must,’ while yuav tau seems to be less firm and takes on the meaning ‘have to.’ Below are examples adapted from Jaisser et al. (p. 167).

(54)  a. koj yuav tsum mus
       you must go
       ‘You must go.’

       b. peb yuav tau muab ua kom loj dav
       we must take make so that big wide
       ‘We have to make it bigger and wider.’

Both can co-occur with negation. The uncertainty negation marker (see Jaisser et al., 1995), txhob/xob, used for imperatives, seems to be preferred perhaps because ‘must’ expresses a command. Txhob is positioned before the verb in a negative imperative.

(55)  a. kuv yuav tsum txhob noj nqaij lawm
       1SG must NEG eat meat PERF
       ‘I must not eat meat anymore.’ / ‘I must no longer eat meat.’

       b. kuv yuav tau txhob noj nqaij lawm
       1SG have to NEG eat meat PERF
       ‘I have to no longer eat meat.’

In the previous section, yuav had been identified as a future aspect marker and is apparently present in both yuav tsum and yuav tau. Yuav tsum then can partially be broken down into yuav ‘future aspect’ + tsum ‘?’ and yuav tau can be broken down completely and identified as yuav ‘future aspect’ + tau ‘attainment aspect.’ From this analysis, yuav tau is revealed to be an aspectual construction
that functions like a modal. Even though *tsum* is not analyzable, it could be that *yuav tsum* is a similar case or that it is a ‘future aspect’ + ‘verb’ construction similar to *yuav luag* ‘almost.’

The construction *yuav tau* can be ambiguous due to *tau* having multiple functions, as illustrated in (56). It can have either the modal meaning of ‘have to’ in (56a) where *tau* is an attainment aspect marker or ‘to get’ as in (56b) where *tau* functions as a verb. The actual meaning can only be cleared up by the context.

(56)  a.  *kuv yuav tau mus tsev*
     1SG  FUT  ATTAIN  go  home
     have to
     ‘I have to go home.’

     b.  *kuv yuav tau mus tsev*
     1SG  FUT  get  go  home
     ‘I will get to go home.’ / ‘I’m going to get to go home.’

Li (1991) claims that *tau* as a verb can co-occur with the future tense *yuav*; however, *tau* as an aspect marker cannot (p. 31). The above examples clearly show that *tau* as an aspect marker can co-occur with the future aspect *yuav*. What happens is that the interaction of the future and attainment aspects results in a modal meaning, in this case, ‘must; have to; need to.’

*Yuav tsum* and *yuav tau* are separate constructions; however, they can be combined to form *yuav tsum tau* and still get a similar meaning. The negation marker would still go before the verb.
‘S/he has to eat meat.’ / ‘S/he must eat meat.’

‘S/he has to not eat meat.’ / ‘S/he mustn’t eat meat.’

However, another meaning can be read with \textit{tau} functioning as a verb.

The difference can clearly be seen by the placement of the uncertainty negation marker \textit{txhob} before \textit{tau} here, in contrast to preceding the verb \textit{noj} in (57b).

In summary, the Hmong modals that have been identified in the literature are \textit{tau}, \textit{taus/taug}, \textit{yuav tsum}, and \textit{yuav tau}. \textit{Tau} and \textit{taus} both indicate the potential mode and can be translated as ‘can, be able to.’ As opposed to other modal auxiliaries, they are positioned after the verb. Although very similar, there
is a subtle distinction between \textit{tau} and \textit{taus}. \textit{Taus} is used when there is a personal hindrance, such as a physical hindrance or a lack of resources. \textit{Tau} is used elsewhere and pertains to external hindrances. \textit{Yuav tsum} and \textit{yuav tau} are defined as ‘must’ and ‘have to,’ respectively. They can co-occur with the uncertainty negation marker \textit{txhob/xob} to form a negative imperative. The analyses revealed that the Hmong modals above are actually not modals, but instead words from a different word class or syntactic constructions that have the ability to function like modals. \textit{Tau} and \textit{taus} are in fact verbs because they have all of the properties that verbs do. \textit{Yuav tsum} and \textit{yuav tau} are both aspectual constructions, built up from combining \textit{yuav} ‘future aspect’ with \textit{tsum} ‘?’ or \textit{tau} ‘attainment marker.’ \textit{Yuav tsum} and \textit{yuav tau} can also be merged to form \textit{yuav tsum tau}, which still retains the modal meaning as well as a secondary meaning.

2.3 Cinque (1999): Adverbs and Functional Heads

This section provides a summary of portions of Cinque’s (1999) book titled, \textit{Adverbs and Functional Heads: A Cross-Linguistic Perspective}. Cinque proposes a universal adverb hierarchy and claims that adverbs occur in a fixed order across all languages. In addition, he links the order of adverbs to the order of functional heads (tense, aspect, mood) from observing a correspondence between the two. Taking this into account, Cinque argues that lexical adverbs occur in the specifier (Spec) of functional projections, and tense, aspect, and mood are located in the head of each projection. His study results in a universal hierarchy of clausal functional projections.

This section will be presented in the following order: 2.3.1 – A Universal Hierarchy of Adverb Phrases, 2.3.2– Location of Advs in Spec, 2.3.3 – Order of
Clausal Functional Heads, and 2.3.4 – Relationship Between Adverbs and Functional Heads.

2.3.1 A Universal Hierarchy of Adverb Phrases

Cinque proposes a universal adverb hierarchy and supports his theory with evidence taken mainly from Italian and French. In his study of the adverb classes of these two languages, he found that multiple adverbs within a sentence occur in a specific order. He identifies two groups of adverbs: ‘lower’ adverbs, which are located in the lower portion of the clause and precede verbs (pre-VP), and ‘higher’ adverbs, which are located higher in the clause (sentential). Example (59) illustrates the order of ‘lower’ adverbs for both Italian and French.

(59) ‘Lower’ (pre-VP) adverbs (Adapted from Cinque, 1999, p. 11)

**Italian:** solitamente > mica > gia > piu > sempre > completamente > tutto > bene

**French:** generalement > pas > deja > plus > toujours > completement > tout > bien

**Translation:** usually > not > already > any longer > always > completely > everything > good

**Adverb class:** habitual > negation > already > any longer > always > completely > everything > manner

In example (59) for Italian, *solitamente* precedes, and therefore is higher in the syntactic tree structure than *mica*. *Mica* precedes *gia*, *gia* precedes *piu*, and so forth. A similar interpretation goes for the French data. Each adverb listed represents a larger class of adverbs. For example, the Italian adverb *solitamente* ‘usually’ falls under the habitual adverb class, which also contains the adverbs
abitualmente ‘habitually’ and normalmente ‘normally’ (p. 8). Cinque referenced a number of authors (Steinitz, 1969, Jackendoff, 1972, and Quirk, Greenbaum, Leech, & Svartvik, 1985) who observed that only one member per class can appear at a time in a clause.

Example (60) shows the order of ‘higher’ adverbs for Italian and French, which are also shown to be parallel.

(60) ‘Higher’ (sentence) adverbs (Adapted from Cinque, 1999, p. 13)

**Italian:** francamente > fortunatamente > evidentemente > probabilmente
> ora > forse > intelligentemente

**French:** franchement > heureusement > evidemment > probablement > maintenant > peutetre > intelligemment

**Translation:** frankly > luckily > evidently > probably > now > perhaps > intelligently

**Adverb class:** speech act > evaluative > evidential > epistemic > temporal
> perhaps > subject-oriented

Example (61) below provides an illustration of the presence of an adverb hierarchy within a sentence among the Italian ‘lower’ adverbs *mica, piu,* and *sempre;* ‘not,’ ‘any longer,’ and ‘always,’ respectively (Cinque, 1999, p. 6). Any changes in the order would lead to an ungrammatical sentence, as can be seen in (61b-f).
When appearing together within the same sentence, ‘higher’ adverbs linearly precede ‘lower’ adverbs (p. 13), as illustrated in examples (62) and (63).

(62)  **(Higher)** frankly > luckily > evidently > probably > now > perhaps > intelligently >  **(Lower)** usually > not > already > any longer > always > completely > everything > good

(63)  *Evidently, Julie has completely changed her study habits.*

The fixed orders of ‘lower’ and ‘higher’ adverb phrases apply more directly to Romance languages. However, Cinque also found cross-linguistic evidence that supports this fixed adverb order, such as in English, Mandarin Chinese, Turkish, Hebrew, etc.

2.3.2 Location of AdvPs in Spec

Cinque also argues that adverb phrases (AdvP) are located in the specifier (Spec) branch of distinct maximal projections, in contrast to being located within adjunct phrases. Because AdvPs naturally occur on left branches and appear in a fixed adverb order, they fit into Kayne’s (1994) ‘location-in-Spec’ proposal, which asserts that only one specifier is available per projection and its location is on left
branches (as cited in Cinque, 1999, pp. 44-45). Adjunction of AdvPs would not be able to account for a fixed adverb order, since order of adjunction is free, by hypothesis. Additional support for AdvPs in Spec is evidence of verb movement in Italian. Example (64) illustrates the Italian active past participle, *rimesso*, moving around ‘lower’ adverbs (Cinque, 1999, p. 45).

(64) Active past participle movement in Italian
a. Da allora, non hanno *rimesso* di solito mica piu sempre completamente tutto bene in ordine.
b. Da allora, non hanno di solito *rimesso* mica piu sempre completamente tutto bene in ordine.
c. Da allora, non hanno di solito mica *rimesso* piu sempre completamente tutto bene in ordine.
d. Da allora, non hanno di solito mica piu *rimesso* sempre completamente tutto bene in ordine.
e. Da allora, non hanno di solito mica piu sempre *rimesso* completamente tutto bene in ordine.
f. Da allora, non hanno di solito mica piu sempre completamente *rimesso* tutto bene in ordine.

‘Since then, they haven’t usually not any longer always put everything well in order.’

From the above example, the active past participle *rimesso* is jumping in between the different ‘lower’ adverbs, except for the adverbs *tutto* and *bene* (see Cinque, 1999, p. 46). Cinque suggests that there is a distinct head position to the left of each adverb to which the verb may raise, represented in the following syntactic structure below where ‘X’ represents a head (p. 45).
A similar verb movement is also found in ‘higher’ AdvPs with Italian finite auxiliary verbs (p. 49).

Compared to adjunction, Cinque concludes that the ‘AdvPs-in-Spec’ proposal is superior because it aligns with X-bar theory’s one-Spec-per-XP on the left branch, which makes it more restrictive, and supports the fixed order of adverbs.

2.3.3 Order of Clausal Functional Heads

Additional support for an adverb hierarchy is found in the order of functional heads (Cinque, 1999, 52). The functional head is the head slot of the functional phrase and holds particles (tense, aspect, mood) that encode aspectual information in the form of bound morphemes (nonclosing and closing affixes) or unbound morphemes (auxiliaries and particles). AdvPs occur in the Spec position of these functional phrases.

Cinque argues that “if agreement and negation are ignored, the partial relative orders of functional heads in different languages appear to be compatible with a single overall order” and that “the partial orders found overtly in different languages are subsequences of a single universal sequence of functional heads, present in all languages” (p. 52). Cinque presents empirical evidence on the order of bound and unbound morphemes as well as mixed cases in different languages. Bound morphemes include nonclosing (agglutinating) and closing (inflectional) affixes. Example (66) illustrates nonclosing suffixes in Korean and the order of its functional heads in a given sentence.
Korean, nonclosing suffixes (Adapted from Cinque, 1999, p. 52)

\[ Ku \ say \ -ka \ cwuk \ -ess \ -keyss \ -kwun \ -a! \]

that bird NOM die ANT EPIST EVAL DECL

‘That bird must have died!’

\[ \text{Mood}_{\text{speech act}} > \text{Mood}_{\text{evaluative}} > \text{Mod}_{\text{epistemic}} > T(\text{Anterior}) \]

Example (67) illustrates closing suffixes in English and the order of its functional heads in the given sentence.

(67) English, closing suffixes (Adapted from Cinque, 1999, p. 57)

These books have been being read all year.

\[ \text{Tense} > \text{Aspect}_{\text{perfect}} > \text{Aspect}_{\text{progressive}} > \text{Voice} (> V) \]

Unbound morphemes include particles, which precede the main verb.

Below is an example of Gungbe, a West African Gbe language, which has particles that reveal the order of functional heads.

(68) Gungbe, particles (Adapted from Cinque, 1999, p. 64)

\[ Àsîbá \ tò \ ná \ xɔ \ mótò \ lɔ \]

A. PROG PROS buy car the

‘A. is about to buy the car.’

\[ \text{Asp}_{\text{progressive}} > \text{Asp}_{\text{prospective}} \]

Languages that contain both suffixes and particles include Celtic languages, such as Welsh.

From the analysis of the ordering of functional heads in a variety of languages, the following overall order was derived (Cinque, 1999, p. 76).
2.3.4 Relationship Between Adverbs and Functional Heads

There is a very close resemblance when comparing the order of adverbs to the order of functional heads. Cinque observes that there is a one-to-one correlation between each adverb class and functional head, a Spec-head relation (p. 77). Apparent examples are the matching of the speech act adverb class (frankly, honestly, sincerely, etc.) with the speech act mood (declarative, interrogative, imperative, etc.) and the habitual adverb class (usually, generally, regularly, etc.) with the habitual aspect (“describes a situation which is characteristic of an extended period of time” (Comrie, 1976, p. 27, as cited in Cinque, 1999, p. 91). Adverbs or functional heads that do not have a counterpart may be because the corresponding word is still not known at this point (p. 77).

With only a few exceptions, languages usually have more AdvPs than the corresponding functional heads (p. 106). The presence of a particular adverb in a language shows that there is a corresponding functional projection and head even though there is no overt morphology (p. 106). After matching and refining the individual hierarchies of adverbs and functional heads, the following complete hierarchy in Table 1 is produced (p. 106):
Table 1

Universal Hierarchy of Clausal Functional Projections (A 2nd Approximation) (Cinque, 1999, p. 106)

\[
\begin{array}{c}
\text{frankly Mood}_{\text{speech act}} \quad \text{fortunately Mood}_{\text{evaluative}} \quad \text{allegedly Mood}_{\text{evidential}} \\
\text{probably Mod}_{\text{epistemic}} \quad \text{once T(Past)} \quad \text{then T(Future)} \quad \text{perhaps Mood}_{\text{irrealis}} \\
\text{necessarily Mod}_{\text{necessity}} \quad \text{possibly Mod}_{\text{possibility}} \quad \text{usually Asp}_{\text{habitual}} \\
\text{again Asp}_{\text{repetitive(I)}} \quad \text{often Asp}_{\text{frequentative(I)}} \quad \text{intentionally Mod}_{\text{volitional}} \\
\text{quickly Asp}_{\text{celerative(I)}} \quad \text{already T(Anterior)} \quad \text{no longer Asp}_{\text{terminative}} \\
\text{still Asp}_{\text{continuative}} \quad \text{always Asp}_{\text{perfect(?)}} \quad \text{just Asp}_{\text{retrospective}} \quad \text{soon Asp}_{\text{proximative}} \\
\text{briefly Asp}_{\text{durative}} \quad \text{characteristically(?) Asp}_{\text{generic/progressive}} \quad \text{almost Asp}_{\text{prospective}} \\
\text{completely AspSgCompletive(I)} \quad \text{tutto AspPlCompletive} \quad \text{well Voice} \\
\text{fast/early Asp}_{\text{celerative(II)}} \quad \text{again Asp}_{\text{repetitive(II)}} \quad \text{often Asp}_{\text{frequentative(II)}} \\
\text{completely AspSgCompletive(II)}
\end{array}
\]

2.3.5 Summary

Cinque (1999) proposes a universal adverb hierarchy claiming that adverbs occur in a fixed order. He identifies two groups of adverbs: ‘lower’ (pre-V) and ‘higher’ (sentential) adverbs. Cinque provides data from various languages conforming to his adverb hierarchy, including English and Mandarin Chinese. In relation to the adverb hierarchy, Cinque also argues for the ‘Adv-in-Spec’ hypothesis, suggesting that adverbs occur in the specifier (Spec) branch of distinct maximal projections. Support for the ‘AdvPs in Spec’ hypothesis comes from AdvPs occurring naturally on left branches, a fixed adverb order, and empirical evidence of verb movement in Italian. Additional support of an adverb hierarchy is offered by the order of functional heads. Cinque observes that there is a one-to-one correlation between each adverb class and functional head, a Spec-head relation. His analysis results in a universal hierarchy of clausal functional projections.
2.4 Objectives and Research Questions

To reiterate, the objectives of this study are to:

1. Determine a classification for Hmong lexical adverbs, aspects, and moods following Cinque’s (1999) classification scheme.
2. Describe the general sentence placements of Hmong lexical adverbs, aspects, and moods.

The research questions are:

1. Are there lexical adverbs in Hmong?
2. If lexical adverbs are present, where are there placement(s)?

Chapter 3 provides the methodology and data of the study.
CHAPTER 3: METHODOLOGY AND DATA ANALYSIS

In this chapter, a lexical/functional diagnostics test will be presented and applied to morphemes that are possibly adverbs, aspects, or moods. Additional analysis will take place to pinpoint each morpheme’s meaning and function. The order of morphemes is then investigated to see whether each morpheme can pair up and in what order to produce the functional heads hierarchy of Hmong.

3.1 Lexical/Functional Diagnostics Test

From the literature review and analyses, it seems that there are no or possibly very few lexical adverbs in Hmong. The following questions will be used to identify whether a morpheme is a lexical category (adverb) or a functional category (aspect, mood) in Hmong.

1. Can the morpheme be negated with tsis preceding it?
2. Can the morpheme be modified with heev ‘very’ or other intensifiers?
3. Can the morpheme stand alone with only the accompaniment of a final particle (os, mas, li, etc.)?

Negatability, modifiability, and the ability to stand independently are good criteria for determining that a morpheme is a lexical category, as opposed to a functional category, in that these properties point to a morpheme having ‘descriptive content,’ a property that functional categories lack. On the other hand, functional categories are characterized as closed class elements that lack ‘descriptive content’ which contribute to the interpretation of other elements via only grammatical or relational features (Abney, 1987).

By answering ‘Yes’ to all three questions above, it is likely that a morpheme has a lexical function, and therefore is an adverb. By answering ‘No’ to
all or at least two of these questions (specifically 2 and 3), a morpheme does not function lexically but instead grammatically as an aspect, mood, or possibly something else.

For illustration, the diagnostics test is applied to the English words ‘quickly’ and ‘should.’

(70) ‘quickly’ = Lexical, Adverb

1) Read it slowly, not quickly.
2) He very quickly read the book.
3) Quickly, please! (command, as in ‘hurry’)

‘should’ = Functional, Modal

1) *not should
2) *very should
3) *Should, please!

The test demonstrates that ‘quickly’ meets the criteria and indeed is an adverb. On the other hand, ‘should’ fails the test and is therefore a functional morpheme.

Once a morpheme is identified as a lexical adverb or a functional morpheme, additional questions will be asked to pinpoint its meaning(s) and function(s).

4. Can the morpheme co-occur with negation?
5. What are the function(s) or meaning(s) of the morpheme?

3.2 Adverb, Aspect, and Mood Candidates

The morphemes that will be tested using the diagnostics test in Section 3.1 are listed below in (71). Cinque’s (1999) universal hierarchy of clausal functional
projections in Table 1 was used as a template to determine the location of some of the words in the clause structure, based on the grammatical judgments of this author (a native speaker of WHM). Three other native WHM speakers, in their 50’s, were also consulted for help. The data in this chapter and hereafter will be written in WHM.

(71)  a. *pheej* ‘keep (on), continuous aspect’
b. *tab* ‘always’
c. *tseem* ‘still, progressive aspect’
d. *tab tom* ‘currently, progressive aspect’
e. *mam (li)* ‘will, benefactive future aspect’
f. *twb* ‘already’
g. *yeej* ‘certainly’

All of the words above occur in preverbal position and have been observed to have a meaning similar to an adverb, aspect, or mood. As we have seen, (71a, c, d, and e) have been proposed in the literature as aspect markers, but the results are inconsistent. Aspect markers that have been clearly identified in the literature, i.e. *lawm* ‘perfective aspect,’ *tau* ‘attainment aspect,’ and *yuav* ‘future aspect,’ are excluded from the list. (71a-d, f-g) can be translated using English adverbs, but are these ‘true’ lexical adverbs? *Twb, tab, and yeej* are the new additions to this study.

3.3 Application of Diagnostics Test and Analyses

In this section, the lexical/functional diagnostics test will be applied to the list of morphemes in Section 3.2 to identify whether they are adverbs or aspects/moods. Additional analysis will also take place to pinpoint the meaning and function of each morpheme.
3.3.1 *Pheej*

*Pheej* has been called a morpheme indicating a reiterative mode (Li, 1991) and a continuous aspect (Ginsburg, 2011), both suggesting a grammatical function. It has the meaning ‘still’ or ‘keep’ (Ginsburg, 2011). The diagnostics test will be able to confirm whether *pheej* is a functional category. Additional analysis will distinguish whether it is a modal or an aspect.

1. Can the morpheme be negated with *tsis* preceding it? No.

(72)  

*tsis  pheej* 

NEG

2. Can the morpheme be modified with *heev* ‘very’ or other intensifiers? No.

(73)  

*pheej  heev* 

very

3. Can the morpheme stand alone with only the accompaniment of a final particle (*os, mas, li*, etc.)? No.

(74)  

*pheej  mas* 

FPART

Answering ‘No’ to all three questions above confirms that *pheej* has a grammatical function and therefore is not a lexical adverb.

4. Can the morpheme co-occur with negation?

Yes. The examples below show that *pheej* precedes the negation marker *tsis* but not vice versa.
5. What are the function(s) or meaning(s) of the morpheme?

_Pheej_ tends to be translated as 'keep (on)' in English. Other characteristics of _pheej_ observed by Ginsburg include its usage when an action is still in progress before and during the time referred to and a “slightly unexpected and negative connotation.”

Following are examples illustrating the usage of _pheej_. (76a) and (76b) can be contrasted, showing _pheej_ adding the notions ‘keep on, continuously, repeatedly’ to the sentence.

(76) a.  
\[\text{ua cas kaj hais lus}\]

\[\text{why 2SG talk word}\]

‘Why are you talking?’

b.  
\[\text{ua cas kaj pheej hais lus}\]

\[\text{why 2SG talk word}\]

‘Why do you keep on talking?’

‘Why are you continuously talking?’

‘Why are you talking repeatedly?’

Below are more examples of _pheej_ used within different contexts.
(77) Person A talking to Person B:

a.\textbf{ua li cas kaj tsis ua dab tsi li} \textbf{why 2SG NEG do what PART}

‘How come you don’t do anything at all?’

b. \textbf{pheej pw thiab pheej niaj hnub saib muv vim xwb} \textbf{sleep and every day watch movie only}

‘All you do is keep on sleeping and keep on watching movies every day.’ / ‘All you do is sleep and watch movies continuously everyday.’

In sentence (77b) above, \textbf{pheej} takes on the meanings ‘keep on, continuously.’ \textit{Pheej} occurs preverbally and can precede the verb \textit{pw} ‘sleep’ in addition to the time adverbial \textit{niaj hnub} ‘every day.’ (The other morphemes in this study also have the ability to precede a time adverbial, e.g. \textit{tseem niaj hnub, twb niaj hnub, yuav niaj hnub, yeej niaj hnub} but not \textit{*tau niaj hnub} and \textit{*tab tom niaj hnub}.) \textit{Pheej} is also found to have a similar meaning below.

(78) Monologue:

a. \textbf{thaum puas ta kuv noj dab tsi ne} \textbf{when earlier 1SG eat what FPART}

‘What did I eat earlier?’

b. \textbf{ua cas kuv pheej mob plab} \textbf{why 1SG hurt stomach}

‘How come I keep on having a stomachache?’

‘How come I continuously have a stomachache?’

‘How come I repeatedly have a stomachache?’
The examples that we have seen thus far show that *pheej* tends to be employed when making a complaint, or as having a negative connotation as observed by Ginsburg. Although it may not be apparent from the examples presented, *pheej* has a restriction that can clearly be seen when compared with *tab* (discussed in the next section). *Pheej* refers to a repetitive action or event that occurs on a single occasion at the present time.

In summary, the diagnostics test confirmed *pheej* as having a grammatical function. Further analysis revealed that it has the meanings ‘keep on, continuously, repeatedly.’ *Pheej* was found to precede negation, verbs, as well as time adverbials located in between the subject and verb. Most of these findings are parallel to Ginsburg’s (2011) findings. She labels *pheej* as a ‘continuous aspect.’ The term ‘continuous aspect’ has been used inconsistently in the literature. For this study, I will follow Cinque’s (1999) classification and suggest the label ‘repetitive aspect’ (REP) for *pheej*, which seems to be more suitable.

3.3.2 *Tab*

*Tab* can be translated into English as ‘always.’ Following Cinque’s (1999) classification, I hypothesize that *tab* is an aspect based on its meaning and occurrence in preverbal position. This is perhaps the first time *tab* is suggested to be an aspect. The diagnostics test and analysis will confirm whether it is or not.

1. Can the morpheme be negated with *tsis* preceding it? No.

\[
(79) \quad ^*\text{tsis} \quad \text{tab} \quad \text{NEG}
\]

2. Can the morpheme be modified with *heev* ‘very’ or other intensifiers? No.
3. Can the morpheme stand alone with only the accompaniment of a final particle (os, mas, li, etc.)? No.

(81) *tab mas
     FPART

A ‘No’ answer to all three questions above confirms that tab is indeed a grammatical morpheme and not an adverb. The following is additional analysis to pinpoint its meaning.

4. Can the morpheme co-occur with negation?
   Yes. (82b) shows tab preceding tsis.

(82) a. nws tab noj mov xwb
     3SG eat rice only
     ‘S/he always eats.’ / ‘She’s always eating.’

b. nws tab tsis noj mov xwb
     3SG NEG eat rice only
     ‘S/he always doesn’t eat.’

5. What are the function(s) or meaning(s) of the morpheme?

   Following is an example illustrating the usage of tab within a particular context. In (83b), tab precedes the verb sawv ‘to rise’ and can be translated as ‘always.’
(83) 

a.  
\[
\text{kuv niam nquag heev li}
\]

1SG mom energetic very PART

‘My mom is very energetic.’ (not lazy)

b.  
\[
nws \text{ tab sawv ntxov los ua tshais peb noj}
\]

3SG rise early come make breakfast 1PL eat

‘She always wakes up early to make breakfast for us to eat.’

Below is another example. Again, \text{tab} takes on the meaning ‘always.’

(84)  
\[
\text{ua cas koj tab noj mov xwb}
\]

why 2SG eat rice only

‘How come you’re always eating?’ (every time I see you)

\text{Tab} and \text{pheej} are similar with subtle distinctions. Table 2 displays a comparison.

Table 2

\begin{center}
\textbf{Comparison of Pheej and Tab}
\end{center}

\begin{tabular}{llllllll}
\textbf{PHEEJ} &  &  &  &  &  &  &  \\
\textbf{nws} & \textbf{pheej} & \textbf{ua} & \textbf{li} & \textbf{ntawd} &  &  &  \\
3SG & keep & do & like & that &  &  &  \\
\hline
\text{\textquoteleft S/he keeps on doing that.	extquoteright} &  &  &  &  &  &  &  \\
\text{Definition: Repetitive action/event on a single occasion at the present time (action is occurring repeatedly at the moment)} &  &  &  &  &  &  &  \\
\textbf{PHEEJ + NEGATION} &  &  &  &  &  &  &  \\
\textbf{nws} & \textbf{pheej tsis ua li} &  &  &  &  &  &  \\
3SG & keep & NEG & do & like &  &  &  \\
\hline
\text{\textquoteleft S/he keeps on not doing it.	extquoteright} &  &  &  &  &  &  &  \\
\text{\textquoteleft -Often occurs with negation\textquoteright} &  &  &  &  &  &  &  \\
\textbf{TAB} &  &  &  &  &  &  &  \\
\textbf{nws} & \textbf{tab} & \textbf{ua} & \textbf{li} & \textbf{ntawd} &  &  &  \\
3SG & always & do & like & that &  &  &  \\
\hline
\text{\textquoteleft S/he always does that.	extquoteright} &  &  &  &  &  &  &  \\
\text{Definition: Repetitive action/event occurring consistently on different occasions linking past to present (action is occurring consistently at the moment and also in the past)} &  &  &  &  &  &  &  \\
\textbf{TAB + NEGATION} &  &  &  &  &  &  &  \\
\textbf{nws} & \textbf{tab tsis ua li} &  &  &  &  &  &  \\
3SG & always & NEG & do & like &  &  &  \\
\hline
\text{\textquoteleft S/he always doesn’t do it.	extquoteright} &  &  &  &  &  &  &  \\
\text{\textquoteleft -Occurrence with negation is less common\textquoteright} &  &  &  &  &  &  &  \\
\end{tabular}
Above, *pheej* refers to the repetition of an action or event at the moment. *Tab*, on the other hand, links repetition in past occasions to the present, indicating a consistent repetition of an action or event. *Tab* can occur with negation but it is less common. Out of the two, *pheej* seems to be more common. *Pheej* and *tab* can co-occur in the orders *pheej tab* or *tab pheej*.

In summary, *tab* was found to be an aspect with the meaning ‘always.’ It can co-occur with negation; however, its construction with negation is not always preferred. *Tab* is similar to *pheej* with subtle distinctions. *Pheej* refers to the repetition of an action or event within a single occasion at the present time. On the other hand, *tab* links the repetition of an action or event that consistently occurred in the past to the present time. *Tab* is not as commonly used as *pheej* due to its restricted context. They can co-occur in the orders *pheej tab* or *tab pheej*. I will identify *tab* as a habitual aspect (HAB) following Cinque (1999).

### 3.3.3 Tseem

*Tseem* is often translated as ‘still.’ Ginsburg (2011) is perhaps the first to suggest it to be an aspect. She labels *tseem* as a progressive aspect and identifies what most of the literature has called a progressive aspect, *tab tom*, as a word with the meaning ‘currently.’ The diagnostics test will reveal whether *tseem* is a lexical adverb or an aspectual morpheme. Additional analysis will determine its function and confirm if it is a progressive aspect.

1. Can the morpheme be negated with *tsis* preceding it? No.

   (85)  *tsis  tseem*

   NEG

2. Can the morpheme be modified with *heev* ‘very’ or other intensifiers? No.
3. Can the morpheme stand alone with only the accompaniment of a final particle (os, mas, li, etc.)? No.

(87) *tseem mas

FPART

Note: The homophone *tseem ‘to be genuine’ would work in all three cases but not the morpheme with the meaning ‘still.’ Answering ‘No’ to all three questions above confirms that tseem is not a lexical adverb, but an aspect.

4. Can the morpheme co-occur with negation?

Yes. The following sentences in (88) show that *tseem can occur in multiple positions and is preverbal. Tsis tau ‘NEG + ATTAIN’ is versatile and can be placed in two different positions, before or after noj mov ‘eat rice.’ Tseem always precedes negation either directly as in (88a) and (88c) or indirectly as in (88b). If it were to follow negation, an ungrammatical sentence would result as in (88d).

(88) a. kuv noj mov tseem tsis tau tag

1SG eat rice NEG ATTAIN finish

‘I’m still not done eating.’

b. kuv tseem noj mov tsis tau tag

1SG eat rice NEG ATTAIN finish

‘I’m still not done eating.’

c. kuv tseem tsis tau noj mov tag

1SG NEG ATTAIN eat rice finish

‘I’m still not done eating.’
5. What are the function(s) or meaning(s) of the morpheme?

As we have already seen, tseem has a meaning similar to the English adverb ‘still.’ The following example compares two sentences, one with and one without tseem. Sentence (89b) clearly illustrates the presence of the notion ‘still.’

(89) a. *kuv tsis tau tseem noj mov os
    1SG NEG ATTAIN eat rice FPART
    ‘I haven’t eaten.’

b. kuv tseem tsis tau noj mov os
    1SG NEG ATTAIN eat rice FPART
    ‘I still haven’t eaten.’

Although tseem corresponds to ‘still,’ it does not always translate into English with that same meaning, as demonstrated in the following sentences.

(90) a. nws siab zoo kawg,
    3SG nice INT
    ‘S/he’s really nice,‘

    nws tseem tau pab kuv thiab
    3SG ATTAIN help 1SG also
    ‘s/he even helped me.’

b. ua tsaug, kaj tseem ua mov rau kuv noj thiab
    thank you 2SG cook rice for 1SG eat also
    ‘Thank you, you even cooked for me.’
c.  \textit{Maiv tseem siab tshaj Pov}  
Mai tall COMP Pao  
‘Mai is \textit{even} taller than Pao.’

From the examples above, \textit{tseem} can also function like a ‘pre-verbal intensifier,’ one of the functions given to the morpheme \textit{twb} by Riddle (1995).

Ginsburg is correct in suggesting that \textit{tseem} is an aspect marker. However, her identification of its function as a progressive aspect is not quite right. The following sentences show a distinction between \textit{tseem} and \textit{tab tom}.

\begin{enumerate}[a.]
\item \textit{koj tab tom ua dab tsi}  
2SG do what  
‘What are you doing?’
\item \textit{koj tseem ua dab tsi}  
2SG do what  
‘What are you \textit{still} doing?’
\item \textit{koj tseem tab tom ua dab tsi}  
2SG do what  
‘What are you \textit{still} doing?’
\end{enumerate}

In (91a), \textit{tab tom} functions like a progressive aspect. When \textit{tab tom} is replaced by \textit{tseem} in (91b), the notion of ‘still’ appears, which was not present in (91a). (91c) demonstrates that \textit{tseem} and \textit{tab tom} can co-occur with the meaning of the sentence unchanged from (91b). More evidence of \textit{tab tom} as a progressive aspect is discussed in Section 3.3.4.
From the diagnostics test and empirical evidence, *tseem* was found to not be an adverb after all. Instead, it is an aspect marker that has the meaning ‘still.’ This shows that Hmong uses an aspect in place of what in English would be an adverb to represent a similar notion, in this case ‘still.’ This also aligns with Cinque’s (1999) proposal linking adverbs and aspects. *Tseem* can also function as a pre-verbal intensifier with the meaning ‘even’ in certain contexts. Both *tab tom* and *tseem* differ in that *tab tom* functions as a progressive aspect, while *tseem* functions as an aspect with the meaning ‘still.’ I will give *tseem* the label ‘continuative aspect’ (CONT) following Cinque’s classification.

3.3.4 *Tab tom*

In the literature, *tab tom* has been described the majority of the time as a progressive aspect. However, it was translated as ‘currently’ by Ginsburg (2011). From the test and analysis, *tab tom*’s function will be more apparent.

1. Can the morpheme be negated with *tsis* preceding it?

   No. This is similar to Li’s (1991) finding.

   (92)  *[kuv  tsis  tab tom  noj  mov]*

   1SG  NEG  eat  rice

2. Can the morpheme be modified with *heev* ‘very’ or other intensifiers? No.

   (93)  *[tab tom  heev]*

   very

3. Can the morpheme stand alone with only the accompaniment of a final particle (*os, mas, li*, etc.)? No.
(94) *tab tom mas
FPART

4. Can the morpheme co-occur with negation?

   No. (95b) below demonstrates that tab tom cannot co-occur with tsis. It is preferred to have tab tom omitted as in (95c) if one wants to say the negative form of (95a). This is similar to Jaisser et al.’s (1995) finding.

(95) a. kuv tab tom noj mov os
   1SG eat rice FPART
   ‘I’m eating.’

b. *kuv tab tom tsis noj mov os
   1SG NEG eat rice FPART

c. kuv tsis noj mov os
   1SG NEG eat rice FPART
   ‘I’m not eating.’

   Li notes that although tab tom cannot co-occur with tsis, it can when the future aspect yuav is present. His reasoning is because tab tom is not within the scope of the negation. The following example is adapted from Li into WHM (p. 52).

(96) Tuam tab tom yuav tsis noj nqaij
   Toua PROG FUT NEG eat meat
   ‘Toua is in the process of getting ready not to eat meat.’
As a native speaker, I would say that the sentence above ‘sounds’ good but it does not make sense. It does not seem to fit realistically into any context (even the English meaning is awkward). The reason that it ‘sounds’ good could be because the aspects and negation are in their proper places as seen below in (97).

\[(97) \ (tab\ tom + yuav) \ + \ (yuav + tsis) \Rightarrow \ tab\ tom + yuav + tsis\]

*Tab tom* can co-occur with *yuav* but not with *tsis*. *Yuav*, on the other hand, can co-occur with *tsis*. The resulting combination of *tab tom + yuav + tsis* sounds fine, i.e. it is structurally well-formed; however, it is semantically ill-formed.

5. What are the function(s) or meaning(s) of the morpheme?

   Like the others, my findings also suggest *tab tom* is a progressive aspect.

\[(98) \ a. \ koj\ ua\ dab\ tsi\]
\[2SG\ do\ what\]

   ‘What are you doing?’

\[b.\ koj\ tab\ tom\ ua\ dab\ tsi\]
\[2SG\ PROG\ do\ what\]

   ‘What are you doing?’

Both (98a-b) have the same meaning, demonstrating that *tab tom* is optional. This aligns with Jaisser et al.’s finding that *tab tom* is often omitted.

Below is additional evidence to support *tab tom* as a progressive aspect and *tseem* as a continuative aspect. In contrast to (98a-b) above, (99a-b) below has the notion ‘still’ when *tseem* is present. In (99b), both *tseem* and *tab tom* can co-occur and the meaning of the sentence is unchanged from (99a).
(99) a. \textit{koj tseem ua dab tsi}  
\begin{tabular}{lcc} 
2SG & CONT & do what \\
\end{tabular}  
‘What are you still doing?’

b. \textit{koj tseem tab tom ua dab tsi}  
\begin{tabular}{lcc} 
2SG & CONT & PROG do what \\
\end{tabular}  
‘What are you still doing?’

Similar to Li, I also found that \textit{tab tom} seems to prefer dynamic (activity) verbs over stative verbs.

(100) a. *\textit{kuv tab tom nco qab nws}  
\begin{tabular}{lcc} 
1SG & PROG remember 3SG \\
\end{tabular}  
‘I still remember him/her’

b. *\textit{koj tab tom zoo li qub}  
\begin{tabular}{lcc} 
2SG & PROG look like old \\
\end{tabular}  
‘You still look the same.’

c. *\textit{kuv tab tom niaj hnub pom nws}  
\begin{tabular}{lcc} 
1SG & PROG every day see 3SG \\
\end{tabular}  
‘I still remember him/her’

As opposed to \textit{tab tom}, \textit{tseem} can occur with stative verbs, as illustrated below with the same stative verbs from (100) above.

(101) a. \textit{kuv tseem nco qab nws}  
\begin{tabular}{lcc} 
1SG & CONT remember 3SG \\
\end{tabular}  
‘I still remember him/her’

b. \textit{koj tseem zoo li qub}  
\begin{tabular}{lcc} 
2SG & CONT look like old \\
\end{tabular}  
‘You still look the same.’
c.  kuv  tseem  niaj  hnub  pom  nws
    1SG  CONT  every  day  see  3SG
    ‘I still see him/her every day.’

The data above provide evidence that *tab tom* functions like a progressive aspect. However, it may have a secondary function. When functioning as a progressive aspect, *tab tom* is unable to stand alone, but the context below shows that it can in specific environments.

(102) a.  Person A:
    lub  tsho  no  puas  haum  kuv
    CL  shirt  this  PQ  fit  1SG
    ‘Does this shirt fit me?’

b.  Person B:
    *tab tom*  mas
    FPART
    ‘Perfectly.’

In (102b) above, *tab tom* is shown to be able to stand alone, which leads to the following questions: 1) Is *tab tom* in the above context the same as the progressive aspect but serves a secondary function? or 2) Is it a completely distinct word? Xiong (2005) also notes this difference and lists two separate entries for *tab tom* in his dictionary, identifying them both as adverbs. The following example demonstrates why *tab tom* is able to stand alone.
(103) a. Person A:

\[ \text{lub } \text{tsho } \text{no } \text{puas } \text{haum } \text{kuv} \]

\[ \text{CL shirt this PQ fit 1SG} \]

‘Does this shirt fit me?’

b. Person B:

\[ \text{lub } \text{ko } \text{tsis } \text{haum} \]

\[ \text{CL that NEG fit} \]

‘That one doesn’t fit,

\[ \text{tab sis } \text{lub } \text{no } \text{tab tom } (\text{haum}) \text{ mas} \]

\[ \text{but CL this fit FPART} \]

‘but this one (fits) perfectly.’

In (103b) above, the verb \text{haum} ‘to fit’ may undergo ellipsis. The reason why \text{tab tom} is able to stand alone here and in (102b) is because it is functioning adverbially, taking on the meaning ‘perfectly/good.’ So, why is \text{tab tom} functioning adverbially here and not as a progressive?

Below are additional examples illustrating \text{tab tom} functioning like an adverb.

(104) a. \text{ob niag ntawd tub nkeeg ib yam}

\[ \text{two } \text{?CL those lazy same} \]

‘They’re both lazy.’ / ‘Those two are equally lazy.’

b. \text{nkawd tab tom sib phim xwb}

\[ \text{3DU RECIPR match only} \]

‘They both match perfectly.’ / ‘They sure do match.’
(105) a. Person A:

lub txiv tsawb no lwj~lwj lawm
CL banana this rot PERF

‘This banana is rotten.’

b. Person B:

li ko tab tom qab xwb
like that tasty only

‘It’s perfectly tasty like that.’ / ‘Like that is just right.’

(106) a. Person A:

kuv qig taub dhau voz
1SG short too FPART

‘I’m too short, aren’t I?’

b. Person B:

siab li ko tab tom zoo nkauj xwb
tall like that pretty only

‘That height is perfectly good.’ / ‘That height is just right.’

It was shown earlier that *tab tom* can only appear with dynamic verbs. However, (104)-(106) above demonstrate that it can co-occur with certain stative verbs as well, e.g. *haum* ‘to fit,’ *phim* ‘to match,’ *qab* ‘to be tasty,’ and *zoo nkauj* ‘to be pretty.’ When *tab tom* pairs up with these stative verbs, the adverbial ‘perfectly’ results and is the reason why *tab tom* can stand alone. I am not sure at this point why *tab tom* has the ability to occur with some stative adverbs and not others, e.g. *nco qab* ‘to remember,’ *zoo* ‘to look (like),’ and *pom* ‘to see’ as in (100). Below is a summary of the functions of *tab tom.*
(107) a. tab tom + dynamic verb $\rightarrow$ progressive aspect
   b. tab tom + stative verb (some?) $\rightarrow$ adverbial ‘perfectly’

Knowing that the Hmong language is mainly monosyllabic and from evidence of the aspects that we have seen so far, it is likely that tab tom is made up of two distinct morphemes (possibly two aspect markers), although the individual meanings are not apparent. The habitual aspect tab ‘always’ and the first morpheme in tab tom happen to be homophones as well as aspects. The difference is that tab can co-occur with negation but tab tom cannot. However, it is interesting to point out that although tab can co-occur with negation, its negative form is not always preferred. (108) below is an illustration. (108a) is the positive sentence and (108b) is the negative sentence; however, (108b) is ungrammatical. In this context, the repetitive aspect pheej is preferred to produce the negative form of (108a).

(108) a. ua cas tab yog kuv xwb
   why HAB is 1SG only
   ‘How come it’s always me?’

   b. *ua cas tab tsis yog kuv xwb
   why HAB NEG is 1SG only

   c. ua cas pheej tsis yog kuv li
   why REP NEG is 1SG PART
   ‘How come it keeps on not being me.’
Since both *tab tom* and *tab* are aspects, it would be worth looking to see which aspects and moods they each can co-occur with. The results are illustrated below in Table 3.

Table 3

**Tab and Tab Tom – Pairing Test With Other Aspects and Moods**

<table>
<thead>
<tr>
<th></th>
<th><em>tab</em> ‘always’</th>
<th><em>tab tom</em> ‘progressive’</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>yuav</em> ‘future’</td>
<td><em>tab yuav</em></td>
<td><em>tab tom yuav</em></td>
</tr>
<tr>
<td><em>tseem</em> ‘still’</td>
<td><em>tseem tab</em></td>
<td><em>tseem tab tom</em></td>
</tr>
<tr>
<td><em>twb</em> ‘already’</td>
<td><em>twb tab</em></td>
<td><em>twb tab tom</em></td>
</tr>
<tr>
<td><em>pheej</em> ‘keep on’</td>
<td><em>pheej tab, tab pheej</em></td>
<td><em>pheej tab tom</em></td>
</tr>
<tr>
<td><em>yeej</em> ‘certainly’</td>
<td><em>yeej tab</em></td>
<td><em>yeej tab tom</em></td>
</tr>
<tr>
<td><em>tau</em> ‘attainment’</td>
<td><em>tab tau</em></td>
<td><em>tab tom tau</em></td>
</tr>
<tr>
<td><em>lawm</em> ‘perfective’</td>
<td><em>tab_lawm</em></td>
<td><em>tab_lawm</em></td>
</tr>
<tr>
<td><em>tab</em> ‘always’</td>
<td>--</td>
<td><em>tab tab tom</em></td>
</tr>
<tr>
<td><em>tab tom</em> ‘progressive’</td>
<td><em>tab tom tab</em></td>
<td>--</td>
</tr>
</tbody>
</table>

The test above demonstrates that *tab* and *tab tom* are in complementary distribution. Whichever aspects or moods that *tab* can co-occur with, *tab tom* cannot and vice versa. The only aspect that both can co-occur with is *twb*. They cannot co-occur with one another or with the aspect *tau*. This test provides evidence that the habitual aspect *tab* is the same morpheme found in the progressive *tab tom*.

In summary, the diagnostics test confirmed *tab tom* as a functional category and as a progressive aspect. It was found to favor dynamic verbs over stative verbs, whereas the continuative aspect *tseem* can co-occur with both types of verbs. *Tab tom* was also found to have a secondary function as an adverbial with
the meaning ‘perfectly’ when it occurs with certain stative verbs, e.g. *haum* ‘to fit’ and *zoo nkauj* ‘to be pretty.’ When functioning like an adverbial, it can stand alone due to ellipsis of the verb. The data also provided evidence that the habitual aspect *tab* is the same morpheme found in *tab tom* due to their phonetic resemblances, both being aspects, and both occurring in complementary distribution when paired with other aspects or moods. Since *tab tom* are two distinct morphemes and I have already identified *tab* as a habitual aspect, I will posit *tom* as the counterpart to the adverb ‘characteristically’ as a ‘progressive’ aspect (PROG) following Cinque’s (1999) classification.

3.3.5 *Mam (li)*

The definition of *mam (li)* has been inconsistent. *Mam (li)* has been proposed as a benefactive future by Ginsburg (2011), which she defines as “speaker will do something in the future for the listener.” Riddle (1995) defines *mam (li)* as ‘and then, therefore, so then, in that case’ in her glossary. The diagnostics test and analysis will be able to confirm the grammatical function of *mam (li)*.

1. Can the morpheme be negated with *tsis* preceding it? No.

(109) *tsis  mam (li)*  
     NEG

2. Can the morpheme be modified with *heev* ‘very’ or other intensifiers? No.

(110) *mam (li)  heev*  
     very
3. Can the morpheme stand alone with only the accompaniment of a final particle (os, mas, li, etc.)? No.

(111) *mam (li)  mas
     FPART

A ‘No’ answer to all three questions above confirms that *mam (li) is not a lexical category, but a function word. Additional analysis is needed to determine its function.

4. Can the morpheme co-occur with negation? Yes.

(112) kuv  mam (li)  tsis  mus
     1SG   NEG   go
     ‘I will not be going.’ / ‘I won’t be going.’

5. What are the function(s) or meaning(s) of the morpheme?

Following is an example illustrating the use of *mam (li). (113a) is a question to set the context and (113b-c) are the replies. When compared to *mam, the future aspect *yuav does not work in this context, although grammatical, as seen in (113c) (%) indicates that an utterance is structurally well formed but pragmatically odd).

(113) a. Question:
      ua li cas  koj  tsis  tau  mus
      why   2SG  NEG  ATTAIN  go
      ‘Why haven’t you left?’
b. Reply:

\[ib \ pliag \  kuv \  mam \ li \  mus \  os\]

a while  1SG  go  FPART

‘I will go in a bit.’

c. Reply:

\[%ib \ pliag \  kuv \  yuav \  mus \  os\]

a while  1SG  FUT  go  FPART

‘I’m going to go in a bit.’ (grammatical, unsuitable for this context)

From above, \(mam\ (li)\) can be translated as the English auxiliary verb ‘will,’ which is also seen below in (114).

(114) a. Question:

\[thaum \ twg \  koj \  mam \  los\]

when  2SG  come

‘When will you come back?’

b. Reply:

\[tsib \ moos \  kuv \  mam \  los\]

5 o’clock  1SG  come

‘I will come back at 5.’

\(Yuav\) cannot replace \(mam\) above to achieve the same meaning, seen below in (115). (115a-b) are grammatical subordinate clauses; however, unsuitable for this context.
(115) a. Question:
\[
\%\text{thaum twg} \ \text{køj} \ \text{yuav} \ \text{los} \\
\text{when} \ \ 2\text{SG} \ \text{FUT} \ \text{come} \\
\text{‘When you come back…’}
\]

b. Reply:
\[
\%\text{tsib moos} \ \text{kuv} \ \text{yuav} \ \text{los} \\
\text{5 o’clock} \ \ 1\text{SG} \ \text{FUT} \ \text{come} \\
\text{‘I’m going to come back at 5…’}
\]

As opposed to occurring in subject position, \text{thaum twg} ‘when’ has to be placed postverbally in its wh-in-situ position when occurring with \text{yuav}, as seen in (116) below.

(116) a. Question:
\[
\text{køj} \ \text{yuav} \ \text{los} \ \text{thaum twg} \\
2\text{SG} \ \text{FUT} \ \text{come} \ \text{when} \\
\text{‘When will you come back?’ / ‘When are you going to come back?’}
\]

b. Reply:
\[
\text{kuv} \ \text{yuav} \ \text{los} \ \text{thaum} \ \text{tsib moos} \\
1\text{SG} \ \text{FUT} \ \text{come} \ \text{when} \ \text{5 o’clock} \\
\text{‘I will come back at 5.’ / ‘I’m going to come back at 5.’}
\]

Below is another example illustrating the use of \text{mam (li)}. (117a) is a question and (117b-c) are some of the possible replies containing \text{mam (li)}. 
(117) a. Question:

\textit{ua cas koj tsis tau noj mov}

why 2SG NEG ATTAIN eat rice

‘How come you haven’t eaten?’

b. Reply – Option 1:

\textit{saib ntawv tag mam li noj os}

study finish eat FPART

‘(After I) finish studying (I) \textbf{will} eat.’

c. Reply – Option 2:

\textit{mam noj os}

eat FPART

‘(I) \textbf{will} eat.’

Below is an example of a command containing \textit{mam}. Sentence (118a) has undergone ellipsis, leaving just the verbs and \textit{mam}. (118b) is the full sentence.

(118) a. \textit{noj tag mam ua si}

eat finish play

‘(You) finish eating (then you) \textbf{will} play.’

b. \textit{koj noj tag ces koj mam ua si}

2SG eat finish then 2SG play

‘You finish eating then you \textbf{will} play.’
From the literature, Ginsburg (2011) has shown that *mam li* and *yuav* are in complementary distribution. Although they cannot occur within the same sentence, they can occur within the same context, as in (119) below.

(119) a. Person A:

```plaintext
koj puas tau noj mov
2SG PQ ATTAIN eat rice
‘Have you eaten?’
```

b. Person B:

```plaintext
kuv tseem yuav mus kawm ntawv
1SG CONT FUT go study writing
‘I’m still going to go to school.’
```

```plaintext
ib me chim kuv mam li noj
a little later 1SG eat
‘I will eat a little later.’
```

From above, it seems like *yuav* is used to express a fact and *mam (li)* is used in a reply, similar to ‘going to’ and ‘will’ in English.

Can *mam (li)* and *yuav* co-occur with other aspect markers? In (120) and (121) below, *mam (li)* and *yuav* are tested to see if they can combine with the aspects *tseem* ‘still’ and *pheej* ‘keep on.’

(120) a. `nws tseem yuav mus
3SG CONT FUT go
‘S/he is still going to go.’
b. \textit{nws pheej yuav mus} \\
3SG REP FUT go \\
‘S/he keeps on wanting to go.’

c. \textit{*nws yuav tseem mus} \\
3SG FUT CONT go

d. \textit{*nws yuav pheej mus} \\
3SG FUT REP go

\textit{Yuav} has the ability to co-occur with \textit{tseem} and \textit{pheej} with \textit{yuav} following them as in (120a-b); however, not vice versa as in (120c-d). This shows that the aspects have a fixed order.

\textit{Mam (li),} on the other hand, cannot pair up with either \textit{tseem} or \textit{pheej}.

(121) a. \textit{*nws tseem mam (li) mus} \\
3SG CONT go

b. \textit{*nws pheej mam (li) mus} \\
3SG REP go

c. \textit{*nws mam li tseem mus} \\
3SG CONT go

d. \textit{*nws mam li pheej mus} \\
3SG REP go

In summary, \textit{mam li} was found to be a functional morpheme with the meaning ‘will.’ Ginsburg (2011) found that \textit{yuav} and \textit{mam} are found in complementary distribution. To form a wh-question, \textit{thaum twg} ‘when’ follows
the verb when appearing with *yuav*, whereas it is in subject position with *mam*. *Mam li* seems to be used in a reply, while *yuav* is used to express a fact, which is similar to ‘will’ and ‘going to’ in English, respectively, although not exactly equivalent. *Yuav* has the ability to co-occur with the aspects *tseem* ‘still’ and *pheej* ‘keep on;’ however, *mam li* cannot. I will be labeling *mam (li)* as a benefactive future aspect (BEN.FUT) following Ginsburg and place it in the irrealis mood slot in Cinque’s (1999) functional heads hierarchy with *yuav*.

3.3.6 *Twb*

*Twb* is usually translated as ‘already’ and therefore is assumed to be an adverb. The diagnostics test and analysis will reveal its true properties.

1. Can the morpheme be negated with *tsis* preceding it? No.

(122) *tsis   twb

  NEG

2. Can the morpheme be modified with *heeve* ‘very’ or other intensifiers? No.

(123) *twb   heev

  very

3. Can the morpheme stand alone with only the accompaniment of a final particle (*os, mas, li,* etc.)? No.

(124) *twb        mas

  FPART

Answering ‘No’ to all three questions above reveals that *twb* is a grammatical morpheme and not an adverb as previously assumed.
4. Can the morpheme co-occur with negation?

Yes. Like the other aspects that we have seen, \textit{twb} has to precede the negation marker \textit{tsis}, illustrated in (125a). Following it would lead to an ungrammatical sentence as in (125b).

\begin{align*}
\text{(125) a. } & \quad nws \quad twb \quad tsis \quad tau \quad mus \\
& \quad 3\text{SG} \quad \text{NEG} \quad \text{ATTAIN} \quad \text{go} \\
& \quad \text{‘He hasn’t even left.’} \\
\text{b. } & \quad *nws \quad tsis \quad twb \quad tau \quad mus \\
& \quad 3\text{SG} \quad \text{NEG} \quad \text{ATTAIN} \quad \text{go}
\end{align*}

5. What are the function(s) or meaning(s) of the morpheme?

\textit{Twb} is often translated as ‘already’ in English. In her glossary, Riddle (1995) defines \textit{twb} as ‘already, to express unexpected fact, indeed, even, really, pre-verbal intensifier.’ Many things are revealed from the sentences in (126) below. (126a) is a question that sets the context of the situation and (126b-e) are some of the possible answers. (126b-c) are both positive replies with (126c) containing the morpheme \textit{twb}. On the other hand, (126d-e) are both negative replies with (126e) containing \textit{twb}.

\begin{align*}
\text{(126) a. } & \quad \text{Question:} \\
& \quad Pov \quad puas \quad tau \quad mus \\
& \quad \text{Pao} \quad \text{PQ} \quad \text{ATTAIN} \quad \text{go} \\
& \quad \text{‘Has Pao left yet?’ / ‘Has Pao gone?’}
\end{align*}
b. Positive reply:

\[ \text{mus mas} \]
\[ \text{go FPART} \]
\[ (\text{He has}) \text{ left.} \]

c. Positive reply with \textit{twb}:

\[ \text{nws } \text{twb} \text{ mus lawm} \]
\[ 3SG \text{ go PERF} \]
\[ \text{He has already left.} \]

d. Negative reply:

\[ \text{nws tsis tau mus} \]
\[ 3SG \text{ NEG ATTAIN go} \]
\[ \text{He hasn’t left.} \]

e. Negative reply with \textit{twb}:

\[ \text{nws } \text{twb tsis tau mus} \]
\[ 3SG \text{ NEG ATTAIN go} \]
\[ \text{He hasn’t even left.} \]

In (126c), \textit{twb} takes on the meaning ‘already’ in the positive reply containing the morpheme. However, it takes on the meaning ‘even’ in the negative reply in (126e), which corresponds to one of Riddle’s (1995) definitions of \textit{twb} as a pre-verbal intensifier. It seems that when \textit{twb} interacts with negation, a different meaning results, in this case, the meanings ‘even, indeed.’ As we have seen earlier, \textit{tseem} can sometimes take on the meaning ‘even’ too. However, the examples provided for \textit{tseem} did not contain negation. Although \textit{tseem} and \textit{twb}
can both be translated as ‘even’ in certain contexts, they are not equivalent and cannot be used interchangeably.

In summary, *twb* was found to be an aspect marker and not an adverb. It usually takes on the meaning ‘already.’ However, in certain contexts it can take on the meanings ‘even, indeed’ as some sort of pre-verbal intensifier also pointed out by Riddle (1995). *Twb* has not been proposed as an aspect marker in the literature. Following Cinque’s (1999) classification, I will place it in the ‘anterior tense’ (ANT) slot and call it an ‘anterior aspect.’

3.3.7 *Yeej*

*Yeej* can be defined as ‘surely, certainly, and definitely.’ Based on its meaning and preverbal position, I hypothesize that *yeej* is a modal, following Cinque’s (1999) functional heads hierarchy. This is perhaps the first proposal of *yeej* as a modal.

1. Can the morpheme be negated with *tsis* preceding it? No.

(127) *tsis yeej*

    NEG

2. Can the morpheme be modified with *heev* ‘very’ or other intensifiers? No.

(128) *yeej heev*

    very

3. Can the morpheme stand alone with only the accompaniment of a final particle (*os, mas, li*, etc.)? No.
Note: The homophone *yeej ‘to win’ meets the criteria above but not the hypothesized modal morpheme. A ‘No’ answer to all three questions above shows that *yeej is a functional morpheme and not an adverb. Additional analysis is needed to determine which type of modal it is.

4. Can the morpheme co-occur with negation?
   Yes. (130a) shows that *yeej precedes negation. *Yeej following negation would lead to ungrammaticality as in (130b).

(130) a.  
   \textit{kuv yeej tsis mus}  
   \text{1SG NEG go}  
   ‘I certainly/definitely am not going.’

b.  
   \textit{*kuv tsis yeej mus}  
   \text{1SG NEG go}

5. What are the function(s) or meaning(s) of the morpheme?

The following is an example illustrating the usage of *yeej within a particular context. (131a) is a question to set up the context and (131b-e) are some possible answers to the question. (131b-c) are the positive replies with (131c) containing *yeej. In contrast, (131d-e) are the negative replies with (131e) containing *yeej.
(131) a. Question:

koj  puas  nco  nws  lawm

2SG  PQ  miss  3SG  PERF

‘Do you miss him/her?’

b. Positive reply:

tseem  nco  mas

CONT  miss  FPART

‘(I) still miss (him/her).’

c. Positive reply with yeej:

kuv  yeej  tseem  nco  nws  kawg

1SG  CONT  miss  3SG  INT

‘I sure/certainly still miss him/her a lot.’

‘I sure/certainly do miss him/her a lot.’

d. Negative reply:

tsis  nco  lawm

NEG  miss  PERF

‘(I) don’t miss (him/her) anymore.’

e. Negative reply with yeej:

kuv  yeej  tsis  nco  nws  kiaq  li  lawm

1SG  NEG  miss  3SG  INT  PART  PERF

‘I surely/certainly/definitely do not miss him/her at all!’
From the examples above, *yeej* occurs preverbally as expected in head-initial languages, and can precede the continuative aspect *tseem* in (131c). It seems to take on the meanings ‘surely, certainly, definitely,’ resembling a modal.

Below is another example of *yeej* within a different context. The example is presented with the same question and reply format.

(132) a. Question:

```
ua cas kaj tsis tau mus na
```

why 2SG NEG ATTAIN go FPART

‘Why haven’t you left yet?’ (as in to do a chore)

b. Positive reply:

```
mam mus mas
```

will go FPART

‘(I) will go.’

c. Positive reply with *yeej*:

```
kuv yeej yuav mus mas
```

1SG FUT go FPART

‘I WILL go.’ / ‘I surely/certainly/positively will go.’

d. Negative reply:

```
xis mus os
```

NEG go FPART

‘(I’m) not going.’
e. Negative reply with *yeej*:

\[ kuv \ yeej \ yuav \ tsis \ mus \ li \]

1SG FUT NEG go PART

‘I WON’T be going.’ / ‘I definitely/certainly will not be going.’

The above examples illustrate *yeej* functioning like an epistemic modal, which “…expresses the speaker’s degree of confidence about the truth of the proposition (based on the kind of information he/she has)” (Cinque, 1999, p. 86). Again, *yeej* takes on the meanings ‘surely, certainly, definitely’ and also ‘positively.’ It seems to have a similar effect as emphatic words in English, such as ‘WILL’ and ‘WON’T.’

In summary, the diagnostics test and data revealed that *yeej* is a grammatical morpheme with modal-like properties. Like aspects, it occurs in preverbal position. *Yeej* can be translated into English as ‘surely, certainly, definitely, positively’ and also resembles emphatic words in English, such as ‘WILL’ and ‘WON’T.’ These definitions correlate with epistemic modality. Following Cinque’s (1999) classification, I will label *yeej* as an epistemic modal (EPIST).

### 3.4 Ordering of Hmong Aspects and Moods

In this section, the ordering of the aspects and moods of Hmong identified in Section 3.3 is investigated. Sentences are provided for each possible pair of functional morphemes to illustrate their ordering preference. (*MORPHEME*-1, *MORPHEME*-2) and (MORPHEME*-1 ~ MORPHEME*-2) signify that a pair is incompatible and a pair can occur in either order, respectively. Once the hierarchy of Hmong aspects and moods is identified, it will be tested against Cinque’s (1999) functional heads hierarchy in Section 4.3 in the following chapter.
(133) *tseem ~ pheej

a. koj  tseem  pheej  ua  dab tsi  na
2SG  CONT  REP  do  what  FPART
‘What are you still (continuously/repeatedly) doing?’

b. koj  pheej  tseem  ua  dab tsi  na
2SG  REP  CONT  do  what  FPART
‘What are you (continuously/repeatedly) still doing?’

(134) twb > tseem

a. nws  twb  tseem  nyob  ne
3SG  ANT  CONT  be  FPART
‘She is still here, isn’t she?’
(Context: ‘How come you don’t ask her?’)

b. *nws  tseem  twb  nyob  ne
3SG  CONT  ANT  be  FPART

(135) *tseem, tab

(136) tseem > tab tom

a. kuv  tseem  tab tom  noj  mov  os
1SG  CONT  PROG  eat  rice  FPART
‘I am still eating.’

b. *kuv  tab tom  tseem  noj  mov  os
1SG  PROG  CONT  eat  rice  FPART
(137) yeej > tseem
   a. \text{kuv} \ yeej \ tseem \ hlub \ koj
      1SG \ EPIST \ CONT \ love \ 2SG
      ‘I sure do still love you.’
   b. \text{*kuv} \ tseem \ yeej \ hlub \ koj
      1SG \ CONT \ EPIST \ love \ 2SG

(138) tseem > tau
   a. \text{kuv} \ tseem \ tau \ mus \ kawm \ ntawv \ os
      1SG \ CONT \ ATTAIN \ go \ study \ writing \ FPART
      ‘I still have to go to school.’
   b. \text{*kuv} \ tau \ tseem \ mus \ kawm \ ntawv \ os
      1SG \ ATTAIN \ CONT \ go \ study \ writing \ FPART

\text{Tau} can also function as a verb meaning ‘to get.’
   c. \text{kuv} \ tseem \ tau \ mus \ kawm \ ntawv \ mas
      1SG \ CONT \ get \ go \ study \ writing \ FPART
      ‘I still get to go to school.’

(139) tseem > yuav
   a. \text{kuv} \ tseem \ yuav \ noj \ mov \ os
      1SG \ CONT \ FUT \ eat \ rice \ FPART
      ‘I’m still going to eat.’
   b. \text{*kuv} \ yuav \ tseem \ noj \ mov \ os
      1SG \ FUT \ CONT \ eat \ rice \ FPART
(140) twb > pheej

a. nws twb pheej mus ne
   3SG ANT REP go FPART
   ‘She always/repeatedly goes, doesn’t she?’
   (Context: ‘How come you don’t ask her?’)

b. *nws pheej twb mus ne
   3SG REP ANT go FPART

(141) pheej ~ tab

a. ua cas kuv tab pheej tshaib plab xwb ne
   why 1SG HAB REP hungry stomach only FPART
   ‘Why am I always/constantly hungry?’

b. ua cas kuv pheej tab tshaib plab xwb ne
   why 1SG REP HAB hungry stomach only FPART
   ‘Why am I always/constantly hungry?’

(142) *pheej, tab tom

(143) *pheej, yeej

(144) pheej > tau

a. nws pheej tau noj mov tas mus li xwb
   3SG REP ATTAIN eat rice all the time only
   ‘She keeps on having to eat.’ / ‘She continuously needs to eat.’
   (Context: ‘Because she gets hungry fast.’)
b. *nws tau pheej noj mov tas mus li xwb
   3SG ATTAIN REP eat rice all the time only

   *Tau can also function as a verb below.

c. nws pheej tau noj mov tas mus li xwb
   3SG REP get eat rice all the time only
   ‘S/he always/repeatedly gets to eat.’
   (Context: ‘How about me?’)

(145) *pheej, yuav

   Yuav can only function as the verb ‘to want’ below.

   nws pheej yuav mus tsev
   3SG REP want go home
   ‘S/he keeps on wanting to go home.’

(146) twb > tab

a. nws twb tab yeej xwb ne
   3SG ANT HAB win only FPART
   ‘She always/repeatedly wins, doesn’t she?’
   (Context: ‘How come you don’t ask her to help you?’)

b. *nws tab twb yeej xwb ne
   3SG HAB ANT win only FPART
(147) \( \text{twb} > \text{tab tom} \)
   a. \( nws \text{ twb tab tom mus lawm} \)
      3SG ANTI PROG go PERF
      ‘She’s already going.’
   b. \( *nws \text{ tab tom twb mus lawm} \)
      3SG PROG ANTI go PERF

(148) \( \text{twb} > \text{yeej} \)
   a. \( kuv \text{ twb yeej paub lawm} \)
      1SG ANTI EPIST know PERF
      ‘I already know for sure.’ / ‘I certainly already know.’
   b. \( *kuv \text{ yeej twb paub lawm} \)
      1SG EPIST ANTI know PERF

(149) \( \text{twb} > \text{tau} \)
   a. \( Pov \text{ twb (tau) mus lawm} \)
      Pao ANTI ATTAIN go PERF
      ‘Pao has already left.’
   b. \( *Pov \text{ tau twb mus lawm} \)
      Pao ATTAIN ANTI go PERF
      \text{Tau} functions as a verb below.
   c. \( Pov \text{ twb tau mus lawm} \)
      Pao ANTI get go PERF
      ‘Pao already got to go.’
(150) \( twb > yuav \)

a. \( kuv \ twb \ yuav \ mus \ os \)
   
   1SG  ANT  FUT  go  FPART
   
   ‘I’m about to go.’

b. *\( kuv \ yuav \ twb \ mus \ os \)
   
   1SG  FUT  ANT  go  FPART

(151) *\( tab, \ tab \ tom \)

(152) \( yeej > tab \)

a. \( kuv \ yeej \ tab \ ntsib \ nws \ xwb \)
   
   1SG  EPIST  HAB  meet  3SG  only
   
   ‘I certainly always see him/her.’
   
   (Context: Whenever I go to the store…)

b. *\( kuv \ tab \ yeej \ ntsib \ nws \ xwb \)
   
   1SG  HAB  EPIST  meet  3SG  only

(153) *\( tab, \ tau \)

\( Tau \) can only function as a verb below.

\( Maiv \ tab \ tau \ mus \ xwb \)

Mai  HAB  get  go  only

‘Mai always gets to go.’
(154) \( \text{tab} > \text{yuav} \)

Yuav can only function as a verb below.

\[
\begin{align*}
\text{nws} & \quad \text{tab} & \quad \text{yuav} & \quad \text{mus} & \quad \text{nws} & \quad \text{niam} & \quad \text{xwb} \\
3SG & \quad \text{HAB} & \quad \text{want} & \quad \text{go} & \quad 3SG & \quad \text{mother} & \quad \text{only}
\end{align*}
\]

‘She always wants to go to her mom only.’

(155) \*\( \text{tab \quad tom, \quad yeej} \)

(156) \*\( \text{tab \quad tom, \quad tau} \)

Tau can only function as a verb below.

\[
\begin{align*}
\text{nws} & \quad \text{tab \quad tom} & \quad \text{tau} & \quad \text{mus} & \quad \text{tam \quad sim \quad no} & \quad \text{lawm} \\
3SG & \quad \text{PROG} & \quad \text{get} & \quad \text{go} & \quad \text{now} & \quad \text{PERF}
\end{align*}
\]

‘He’s getting to go now.’

(157) \( \text{tab \quad tom} > \text{yuav} \)

a. \( \text{kuv} \quad \text{tab \quad tom} \quad \text{yuav} \quad \text{mus} \quad \text{tam \quad sim \quad no} \)

1SG \quad PROG \quad FUT \quad go \quad now

‘I’m going to go now.’ / ‘I’m about to go now.’

b. \*\( \text{kuv} \quad \text{yuav} \quad \text{tab \quad tom} \quad \text{mus} \quad \text{tam \quad sim \quad no} \)

1SG \quad FUT \quad PROG \quad go \quad now

(158) \( \text{yeej} > \text{tau} \)

a. \( \text{kuv} \quad \text{yeej} \quad \text{tau} \quad \text{muab \quad lawm \quad tiag} \)

1SG \quad EPIST \quad ATTAIN \quad take \quad PERF \quad true

‘I definitely have taken it for sure.’
It is interesting to note in (a) that lawm can occur between two verbs, in clause penultimate position as suggested by Ginsburg (2011). It can also occur clause-finally here or be omitted; however, (a) is preferred.

b. \*kuv tau yeej muab lawm tiag
   1SG ATTAIN EPIST take PERF true

(159) yeej > yuav
a. kuv yeej yuav mus mas
   1SG EPIST FUT go FPART
   ‘I certainly am going to go.’ / ‘I certainly will go.’

b. \*kuv yuav yeej mus mas
   1SG FUT EPIST go FPART

(160) yuav > tau
a. kuv yuav tau mus tsev
   1SG FUT ATTAIN go home
   ‘I have to go home.’ / ‘I will have to go home.’

b. \*kuv tau yuav mus tsev
   1SG ATTAIN FUT go home

\tau functions as a verb below.

c. kuv yuav tau mus tsev
   1SG FUT get go home
   ‘I’m going to get to go home.’
The Hmong aspect/mood hierarchy is presented below.

(161) \( twb > yeej > tseem ~ pheej ~ tab > tom > yuav (\textgreater tsu}m) \geq tau \geq lawm \\
\text{already} \geq \text{certainly} \geq \text{still} ~ \text{keep on} \geq \text{always} \geq \text{progressive} \geq \text{future} \\
(\geq \text{necessity}) \geq \text{attainment} \geq \text{perfective}

Here, I have separated the progressive aspect \textit{tab tom}. I speculate that \textit{tsu}m (from \textit{yuav tsum} ‘must’) is a modal occurring between \textit{yuav} and \textit{tau}.

3.4.1 Interaction Between Aspects, Moods, and Negation to Form New Meanings

As we have previously seen, Hmong aspects, moods, and the negation marker \textit{tsi}s have the ability to interact to produce new meanings that correspond to adverbial meanings. Table 4 displays some of the possible constructions along with their new meanings.

And the fact that these elements appear to stand in a fixed order corresponds to another characteristic of functional categories noted by Abney (1987): A functional category functionally selects for a specific unique complement, in which it is generally fixed in order with respect to that complement and is inseparable from it. If we find this property with these elements in particular, then they are likely functional aspect/mood elements rather than lexical adverbs.
Table 4

**Interaction Between Aspects, Moods, and Negation**

<table>
<thead>
<tr>
<th>Construction</th>
<th>New Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. <em>tab</em> + <em>tom</em></td>
<td>a. progressive aspect</td>
</tr>
<tr>
<td>(HAB + PROG)</td>
<td></td>
</tr>
<tr>
<td>b. <em>tab</em> + <em>tom</em> + <em>yuav</em></td>
<td>b. ‘about to’ (prospective aspect)</td>
</tr>
<tr>
<td>(HAB + PROG + FUT) (Li, 1991)</td>
<td></td>
</tr>
<tr>
<td>c. <em>twb</em> + <em>yuav</em></td>
<td>c. ‘almost’ (prospective aspect)</td>
</tr>
<tr>
<td>(ANT + FUT)</td>
<td></td>
</tr>
<tr>
<td>d. <em>twb</em> + <em>tab</em> + <em>tom</em> + <em>yuav</em></td>
<td></td>
</tr>
<tr>
<td>(ANT + PROG + FUT)</td>
<td></td>
</tr>
<tr>
<td>e. <em>twb</em> + <em>tsis</em></td>
<td>e. ‘not even…’</td>
</tr>
<tr>
<td>(ANT + NEG)</td>
<td></td>
</tr>
<tr>
<td>f. <em>yuav</em> + <em>tsum</em></td>
<td>f. ‘must’</td>
</tr>
<tr>
<td>(FUT + NEC)</td>
<td></td>
</tr>
<tr>
<td>g. <em>yuav</em> + <em>tau</em></td>
<td>g. ‘have to’</td>
</tr>
<tr>
<td>(FUT + ATTAIN)</td>
<td></td>
</tr>
<tr>
<td>h. <em>yuav</em> + <em>tsum</em> + <em>tau</em></td>
<td>h. ‘must’</td>
</tr>
<tr>
<td>(FUT + NEC + ATTAIN)</td>
<td></td>
</tr>
<tr>
<td>i. <em>pheej</em> + <em>tau</em></td>
<td>i(1). ‘keep on having to…’</td>
</tr>
<tr>
<td>(REP + ATTAIN)</td>
<td>i(2). ‘keep getting to…’</td>
</tr>
<tr>
<td>j. <em>tseem</em> + <em>tau</em></td>
<td>j(1). ‘still have to…’</td>
</tr>
<tr>
<td>(CONT + ATTAIN)</td>
<td>j(2). ‘still get to…’</td>
</tr>
<tr>
<td>k. <em>yuav</em> + <em>tsis</em> + <em>V</em> + <em>lawm</em></td>
<td>k. ‘will no longer…’</td>
</tr>
<tr>
<td>(NEG + V + PERF) (Li, 1991)</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 4 displays the results from this chapter followed by a discussion. Cinque’s (1999) predicted functional heads hierarchy of Hmong will also be compared with the actual Hmong functional heads hierarchy based on the data.
CHAPTER 4: RESULTS AND DISCUSSION

4.1 Lexical/Functional Diagnostics Test Results

Table 5 below displays the results of the lexical/functional diagnostics test and analysis from Section 3.3. (NEG) signifies that the morpheme occurs before the negative particle *tsis* and (NEG_) means that the morpheme follows it.

Table 5

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>tseem</em></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>still, even</td>
<td>_NEG</td>
<td>Continuative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>aspect</td>
</tr>
<tr>
<td><em>pheej</em></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>keep (on),</td>
<td>_NEG</td>
<td>Repetitive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>repeatedly</td>
<td></td>
<td>aspect</td>
</tr>
<tr>
<td><em>mam (li)</em></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>will</td>
<td>_NEG</td>
<td>Benefactive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>future aspect</td>
</tr>
<tr>
<td><em>twb</em></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>already, even</td>
<td>_NEG</td>
<td>Anterior</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>aspect</td>
</tr>
<tr>
<td><em>tab</em></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>always</td>
<td>_NEG</td>
<td>Frequentative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>aspect</td>
</tr>
<tr>
<td><em>(tab) tom</em></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>ongoing</td>
<td>No</td>
<td>Progressive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>aspect</td>
</tr>
<tr>
<td><em>yeej</em></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>certainly</td>
<td>_NEG</td>
<td>Epistemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>modal</td>
</tr>
</tbody>
</table>
Table 6 presents the diagnostic test results of the previously known aspect markers *yuav, tau*, and *lawm* to compare with those in Table 5. *Yuav* resembles the other aspects found in Table 5. *Tau* differs because it can be negated. From what we have previously seen, the aspect marker *tau* is similar but distinct from the verb *tau* ‘to get.’ However, its ability to be negated is because it was derived from the verb. Also, negation needs to precede *tau* in order to modify it and get the correct meaning of ‘not attain VERB.’ If negation were to follow *tau* and precede VERB, *tsis* would be modifying VERB instead, and an ungrammatical construction would be produced, ‘*attain not VERB.’ *Lawm* differs in that it follows negation and occurs in clause-final position. This deviation is probably due to the fact that it was borrowed from Chinese.

### Table 6

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>yuav</em></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>going to:</td>
<td>_NEG</td>
<td>Future</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>will</td>
<td></td>
<td>aspect</td>
</tr>
<tr>
<td><em>tau</em></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>attain V</td>
<td>NEG_</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>aspect</td>
</tr>
<tr>
<td><em>lawm</em></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>completion</td>
<td>NEG_</td>
<td>Perfective</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>aspect</td>
</tr>
</tbody>
</table>

The results from this study provide evidence that there are no lexical adverbs in Hmong. It looks like the only lexical categories found in Hmong are nouns and verbs, with the rest of the morphemes being functional categories. As previously mentioned, Lyman (1979) did not identify an ‘adverb’ lexical class in
his study of GM. Also, although Kunyot (1984) identifies an adverb phrase, he notes that GM adverbs are inherently verbs, i.e. descriptive verbs.

4.2 Description and Placement of Hmong Aspects and Moods

Aspects and moods in Hmong are generally found in between the subject and verb. The exception is the perfective aspect lawm, which occurs at the end of a sentence. When the negation marker tsis is present, aspects and moods generally precede it. The exceptions are lawm and the attainment aspect tau, which follows negation. Aspects and moods are one morpheme long and can combine with one another to produce new meanings.

4.3 Overall Hmong Functional Heads Hierarchy Compared With Cinque’s (1999)

Table 7 displays Cinque’s (1999) prediction of the functional heads hierarchy of Hmong. The Spec position, which holds adverbs, is posited as empty ‘Ø’ in the Hmong hierarchy.

Table 7

<table>
<thead>
<tr>
<th>Predicted Hmong Functional Heads Hierarchy Based on Cinque (1999)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ Ø Modepistemic YEEJ</td>
</tr>
<tr>
<td>[ Ø Asphabitual TAB</td>
</tr>
<tr>
<td>[ Ø Aspcontinuitive TSEEM</td>
</tr>
<tr>
<td>[ Ø Voice RAUG, MAG, YOG</td>
</tr>
<tr>
<td>[ VP</td>
</tr>
</tbody>
</table>

Empty categories have been deleted from the hierarchy. The passive voice markers raug, mag, and yog have been added (Creswell & Snyder, 2000). The negation phrase (NegP), containing tsis and txhob, and the verb phrase (VP) have
also been added. In the analysis, \textit{tab tom} was concluded to be made up of the frequentative aspect \textit{tab} and the unanalyzable morpheme \textit{tom}. \textit{Tab} already has a slot in the hierarchy. I speculate that \textit{tom} belongs in the progressive aspect slot based on its function. To reiterate, I also speculate that \textit{tsum} from \textit{yuav tsum} ‘must’ is a necessity modal and include it in the hierarchy.

Table 8 displays the functional heads hierarchy of a standard sentence in Hmong based on the data analysis in Section 3.4. ‘Voice’ is omitted from the hierarchy for now.

Table 8

\begin{table}[h]
\centering
\begin{tabular}{l}
\hline
\textit{Hmong Functional Heads Hierarchy Based on Data (Standard Sentence)} \\
\hline
[ Ø T(Anterior) \textit{TWB} [ Ø Mod\textsubscript{epistemic} \textit{YEEJ} [ Ø Asp\textsubscript{continuative} \textit{TSEEM} \\
[ Ø Asp\textsubscript{repetitive(I)} \textit{PHEEJ} [ Ø Asp\textsubscript{habitual} \textit{TAB} [ Ø Asp\textsubscript{generic/progressive} \textit{TOM} \\
[ Ø Mood\textsubscript{irrealis} \textit{YUAV, MAM} [ Ø Mod\textsubscript{necessity} \textit{TSUM(?)} [ NegP \textit{TSIS, TXHOB} \\
[ Ø Asp\textsubscript{SgCompleitive(I)} \textit{TAU} [ VP [ Ø Asp\textsubscript{SgCompleitive(II)} \textit{LAWM} \\
\hline
\end{tabular}
\end{table}

The Hmong functional heads hierarchy differs from Cinque’s prediction in the following ways. First, the anterior aspect \textit{twb} is ranked the highest and precedes everything else. When compared with Cinque’s full hierarchy, its location is positioned much closer to the moods and tenses, as seen below.

(162) [ Ø Mood\textsubscript{speech act} Ø [ Ø Mood\textsubscript{evaluative} Ø [ Ø Mood\textsubscript{evidential} Ø \\
[ Ø T(Anterior) \textit{TWB} [ Ø Mod\textsubscript{epistemic} \textit{YEEJ} [ Ø T(Past) Ø \\
[ Ø T(Future) Ø…

Secondly, the continuative aspect \textit{tseem} is higher and positioned between the epistemic modal \textit{yeej} and the irrealis moods \textit{yuav} and \textit{mam}. 
Third, the irrealis moods and the necessity modal *tsum* are lower and placed after the progressive aspect *tom*. Cinque’s prediction of the irrealis mood being adjacent to the necessity modal is correct. They both refer to a future event. Once they are moved, *tseem*, *tab*, *pheej*, and *tom* fall next to each other and all happen to refer to a continuous action. *Pheej* and *tab* can occur in either order so the order predicted by Cinque’s hierarchy, *tab pheej*, is also correct.

Fourth, the negation phrase is raised and placed in between the necessity modal *tsum* and the attainment aspect *tau*. As previously discussed, the reason why negation precedes *tau* in Hmong could be because it was derived from a verb.

Lastly, the perfective aspect *lawm* is lower and is placed in clause-final position following VP. The similarity between *tau* and *lawm* is that they both are completives (perfectives).

Besides these differences, Cinque’s functional heads hierarchy correctly predicts everything else.

Table 9 represents the functional heads hierarchy of a passive voice construction in Hmong based on additional analysis below.
Table 9

Hmong Functional Heads Hierarchy Based on Data (Passive Sentence)

| [ Ø T(Anterior) TWB | [ Ø Mod\_epistemic YEEJ | [ Ø Asp\_continuable TSEEM |
| [ Ø Asp\_habitual TAB | [ Ø Asp\_repetitive(I) PHEEJ | [ Ø Asp\_general/progressive TOM |
| [ Ø Mood\_irrealis YUAV, MAM | [ Ø Mod\_necessity TSUM | [ NegP TSIS, TXHOB |
| [ Ø Asp\_SgCompletive(I) TAU | [ ØVoice RAUG, MAG, YOG | [ NP [ VP |
| [ Ø Asp\_SgCompletive(II) LAWM |

The passive voice particles occur in the ‘Voice’ slot in between the attainment aspect tau and NP. Below are sentences contrasting an active sentence in Hmong with its passive counterpart to illustrate the differences and provide evidence for the order of the hierarchy above.

(167) a. nag hmo ib tug aub tom kuv
   yesterday one CL dog bite 1SG
   ‘Yesterday, a dog bit me.’

b. nag hmo kuv raug tom
   yesterday 1SG PASS bite
   ‘Yesterday, I got bitten.’

c. nag hmo kuv tseem raug dev tom thiab
   yesterday 1SG CONT PASS dog bite also
   ‘Yesterday, I even got bitten by a dog.

(167a) has regular SVO order. In (167b), the patient is moved to subject position followed by the passive marker raug ‘to get’ and the verb tom ‘to bite.’ In (167c),
the continuative aspect *tseem* precedes *raug*, and the agent *dev* ‘dog’ occurs in between *raug* and the verb.

The Hmong functional heads hierarchy predicted by Cinque correctly predicts the position of passive voice markers occurring between the attainment aspect *tau* and perfective aspect *lawm* as illustrated below.

(168) …[
💡 Asp\_{generic/progressive} *TOM* |
💡 Asp\_{SgCompletive(I)} *TAU* |
💡 Voice *RAUG, MAG, YOG* |
💡 Asp\_{SgCompletive(II)} *LAWM* |
NegP *TSIS, TXHOB* |
VP |
NP

Although very close in proximity, negation was predicted to follow ‘Voice’ when it should indirectly precede it. With *lawm* already accounted for, VP and NP correctly follow ‘Voice,’ although flipped in Hmong.

(169) …[
💡 NegP *TSIS, TXHOB* |
💡 Asp\_{SgCompletive(I)} *TAU* |
💡 Voice *RAUG, MAG, YOG* |
NP |
VP |
💡 Asp\_{SgCompletive(II)} *LAWM* |

Table 10 displays the reconstructed functional heads hierarchy incorporating the Hmong data. The hierarchy includes functional heads that I am more certain about and leaves out the rest for now.

As mentioned earlier, there seems to be an apparent pattern. It looks like the functional heads that have similar characteristics are grouped together. Viewing Table 10 starting from the top, we can see that all the moods are together or near each other and so are the tenses. They are followed by the group that pertains to a continuous action: continuative, habitual, repetitive, progressive, and frequentative. Following that are the moods that refer to future events: irrealis, necessity, and possibility. Lastly, the completives and ‘Voice’ are found near the negation phrase and VP.
Table 10

*Partial Reconstruction of FH Hierarchy Incorporating Hmong Data*

\[
[ \emptyset \text{ Mood}_{\text{speech act}} \emptyset ] [ \emptyset \text{ Mood}_{\text{evaluative}} \emptyset ] [ \emptyset \text{ Mood}_{\text{evidential}} \emptyset ] [ \emptyset \text{ T(Anterior)} \text{TWB} ]
\]
\[
[ \emptyset \text{ Mod}_{\text{epistemic}} \text{YEEJ} ] [ \emptyset \text{ T(Past)} \emptyset ] [ \emptyset \text{ T(Future)} \emptyset ] [ \emptyset \text{ Asp}_{\text{continuative}} \text{TSEEM} ]
\]
\[
[ \emptyset \text{ Asp}_{\text{habitual}} \text{TAB} ] [ \emptyset \text{ Asp}_{\text{repetitive(I)}} \text{PHEEJ} ] [ \emptyset \text{ Asp}_{\text{generic/progressive}} \text{TOM} ]
\]
\[
[ \emptyset \text{ Asp}_{\text{frequentative(I)}} \emptyset ] [ \emptyset \text{ Mood}_{\text{irrealis}} \text{YUAV, MAM} ] [ \emptyset \text{ Mod}_{\text{necessity}} \text{TSUM} ]
\]
\[
[ \emptyset \text{ Mod}_{\text{possibility}} \emptyset ] [ \text{NegP TSIS, TXHOB} ] [ \emptyset \text{ Asp}_{\text{SgCompletive(I)}} \text{TAU} ]
\]
\[
[ \emptyset \text{ Voice \text{RAUG, MAG, YOG}} ] [ \text{VP [ NP [ \emptyset \text{ Asp}_{\text{SgCompletive(II)}} \text{LAWM} ]]}
\]

Now that the pattern is more visible, we can attempt to place the remaining functional heads in their appropriate categories.

(170)  
[ *intentionally* \text{Mod}_{\text{volitional}} ] [ *quickly* \text{Asp}_{\text{celerative(I)}} ] [ *no longer* \text{Asp}_{\text{terminative}} ]

[ *always* \text{Asp}_{\text{perfect(?)}} ] [ *just* \text{Asp}_{\text{retrospective}} ] [ *soon* \text{Asp}_{\text{proximative}} ] [ *briefly* \text{Asp}_{\text{durative}} ]

[ *almost* \text{Asp}_{\text{prospective}} ] [ *tutto* \text{Asp}_{\text{PlCompletive}} ] [ *fast/early* \text{Asp}_{\text{celerative(II)}} ]

[ *again* \text{Asp}_{\text{repetitive(II)}} ] [ *often* \text{Asp}_{\text{frequentative(II)}} ]

Viewing Cinque’s original hierarchy, the volitional modal with the adverb counterpart ‘intentionally’ seems to be out of place. It is possible that the volitional modal can be placed with the other modals near the top of the hierarchy. The celerative aspects look like they can form their own group; however, they are separated with one occurring higher and the other occurring lower in the hierarchy (Cinque, 1999). The terminative aspect looks like it may fit in with the completives. The ‘perfect’ aspect with the adverb counterpart ‘always’ seems to fit in with the group referring to a continuous action. The retrospective, proximative, and durative aspects seem to be in a plausible order and looks like they can form their own group referring to time duration, although their placement in the
hierarchy is not certain at this point. Lastly, the prospective aspect seems to fit in with the moods referring to future events. The repetitive(II) and frequentative(II) aspects looks like they are in the proper order and can form one group. They are located in a lower functional projection than the other group pertaining to a continuous action that we have already seen (Cinque, 1999).

In summary, Cinque’s prediction of the Hmong functional heads hierarchy and the actual Hmong functional heads hierarchy are not identical. However, it did predict many things. One, it correctly predicted that the irrealis moods yuav and mam occur before the necessity modal tsum. Two, it correctly predicted that the epistemic modal yeej is in a high projection preceding most of the other aspects and moods. Three, although not in the exact order, Cinque’s predicted Hmong hierarchy predicted the habitual, repetitive, continuative, and progressive aspects as occurring next to or near each other. Four, it also correctly predicted that the passive voice markers occur after the attainment marker tau. Lastly, it also correctly predicted the completives as occurring near each other and near NegP and VP. We will see in the next section another correct prediction that Cinque’s functional heads hierarchy makes.

4.4 The Polar Question Marker Puas

The position of the polar question particle puas in Hmong has puzzled many (Clark, 1985). Puas’s position is highly marked when compared to most of the world’s languages, which have their question particles in either clause-final or clause-initial position (Dryer, 2013). However, puas is found in neither location. Instead, it occurs preverbally, in between the subject and the verb, as seen below.
(171) a. Question:

\[
\text{køj puas noj mov os}
\]

2SG PQ eat rice FPART
‘Do you want to eat?’

b. Positive reply:

\[
\text{noj mas}
\]

eat FPART
‘Eat.’ / ‘Yes.’

c. Negative reply:

\[
\text{tsis noj os}
\]

NEG eat FPART
‘Not eat.’ / ‘No.’

Interestingly, Cinque’s (1999) functional heads hierarchy can account for
\text{puas} and its position. Based on cross-linguistic evidence, Cinque predicts the
speech act mood, the counterpart to lexical adverbs such as ‘frankly,’ to be the
highest functional heads projection, preceding all other moods, tenses, aspects as
well as NegP and VP. Speech act moods include particles or affixes that refer to
the speaker’s intention, such as imperatives and interrogatives. \text{Puas} happens to fit
beautifully into Cinque’s hierarchy. (172a, c, and e) below show \text{puas} co-
occuring and preceding the following aspects: \text{tseem} ‘continuative,’ \text{tau}
‘attainment,’ \text{yuav} ‘future,’ and \text{lawm} ‘perfective.’ Any other ordering would
result in ungrammaticality as in (172b, d, and f).
The data above provide evidence that *puas* is a part of the aspects and moods system. Schaffar (2000) has also noted that *puas* is in a modal verb position and links it to the *ke*-type question formation found in Chinese (p. 12).

If this is the case for Hmong, it is possible that other languages might exhibit a similar type of phenomenon. Korean and Turkish are two out of the various languages that Cinque analyzed to derive his theory and the location of the speech act mood as the ‘highest head’ of the inflectional phrase (IP) (pp. 53-54, 84). This shows that some of the head-final languages that have question particles
occurring at the end of a sentence might possibly be part of the aspects and moods system and not the head (C) of the complementizer phrase (CP) as suggested by Cheng (1997) and Rizzi (1997) (Rizzi, as cited in Cinque, 1999).

Table 11 shows the full functional heads hierarchy of Hmong (to this point) with *puas* included.

Table 11

*Functional Heads Hierarchy of Hmong Including Puas*

| [Ø Mood<sub>speech act</sub> *PUAS* | [Ø T(Anterior) *TWB* | [Ø Mod<sub>epistemic</sub> *YEEJ* |
| [Ø Asp<sub>continuative</sub> *TSEEM* | [Ø Asp<sub>habitual</sub> *TAB* | [Ø Asp<sub>repetitive(I)</sub> *PHEEJ* |
| [Ø Asp<sub>generic/progressive</sub> *TOM* | [Ø Mood<sub>irrealis</sub> *YUAV, MAM* |
| [Ø Mod<sub>necessity</sub> *TSUM* | [NegP *TSIS, TXHOB* | [Ø Asp<sub>SgCompletive(I)</sub> *TAU* |
| [Ø Voice *RAUG, MAG, YOG* | [VP [Ø Asp<sub>SgCompletive(II)</sub> *LAWM* |
CHAPTER 5: CONCLUSION

The current study went in search of lexical adverbs, aspects, and moods and tested possible adverb candidates. The diagnostics test and analyses revealed that there are no lexical adverbs in Hmong. Instead, the morphemes turned out to be functional categories (aspects and moods). This study confirmed and found the following aspects and moods in Hmong:

(173)  
a. *pheej*  Repetitive aspect (REP), ‘keep on’
b. *tab*  Habitual aspect (HAB), ‘always’
c. *tseem*  Continuative aspect (CONT), ‘still’
d. *tom*  Progressive aspect (PROG)
e. *mam* (li)  Benefactive future aspect (BEN.FUT), ‘will’
f. *twb*  Anterior aspect/tense (ANT), ‘already’
g. *yeej*  Epistemic modal (EPIST), ‘certainly’
h. *tsum*  Necessity modal (NEC), ‘must’

Aspects and moods were found to be preverbal and occur before the negation particle *tsis*. The only exceptions are *tau* (ATTAIN), which can be negated, and *lawm* (PERF), which occurs in clause-final position. The aspects and moods in (173) above, as well as *tau, lawm, and yuav* (FUT) were also tested to find their preferred order. The Hmong functional heads hierarchy was then tested against Cinque’s (1999) predicted functional heads hierarchy. Although Cinque’s predicted hierarchy for Hmong was not identical, it did predict many things, including the position of the polar question particle *puas* that had never really been accounted for. The total number of known aspects and moods of Hmong is now 12, much more than what had previously been identified in the literature. Some of
the functional categories in Hmong were also found to produce new aspectual meanings or correspond to adverbials when interacting with one another or with negation. By incorporating the Hmong data into Cinque’s hierarchy, it revealed that functional heads that have similar functions or meanings are close in proximity.

5.1 Limitations and Further Studies

In this study, only a small number of aspects and moods were studied. There may possibly be more, especially when Hmong lacks adverbs. There are many more elements that occur in between the subject and verb that need to be analyzed. In addition, more native speakers could be consulted to check for other possible orderings. For example, in my speech I order pheej (REP) and tab (HAB) as pheej tab. However, my consultants also found tab pheej to be acceptable, which I do not use. Also, this study focused on the WHM and GM dialects. However, the ordering of functional heads was not tested on GM. Would the outcome be similar to WHM? How about other dialects of Hmong? Would they have similar aspects and moods that are ordered in pretty much the same way as in WHM? These are all important issues for future research.
REFERENCES
REFERENCES


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