

HMONG CLASSIFIERS*

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The data presented in this problem set come from Hmong, a language spoken by minority hill-tribe people in southern China and Southeast Asia. Many of those living in Laos had to flee to Thailand following the fall of the Lao government in 1975 and were resettled in the Western world, so that there are now about 60,000 Hmong speakers in the United States. As to genetic affiliation, Hmong belongs to the Hmong-Mien (also known as Miao-Yao) language family; the wider relationship of the Hmong-Mien family, however, remains a controversial issue among linguists, with some affiliating it to Austro-Tai and others to Sino-Tibetan.

Hmong nouns appear in a single form: there are no suffixes, no grammatical genders, no case markings, no definite/indefinite articles. What characterizes them is that they have a classifier associated with them; the choice of which classifier goes with a particular noun is determined by what the noun refers to. For instance, all nouns referring to *spoken* words (e.g. 'story', 'legend', 'song', 'prayer') are preceded by the classifier *zaj*. While as many as 76 classifiers have been recorded for the language, we will look only at some of the most common ones in this problem set. In the first section of the exercise you will categorize nouns semantically depending on the classifier associated with them, and in the second section you will determine the syntactic functions of classifiers.

Transcription notes: the data are presented in the Romanized Popular Alphabet (RPA), which was developed in the early 1950's by missionaries. The RPA is like the IPA, except for the following:

RPA	IPA	RPA	IPA	RPA	IPA	RPA	IPA
x	/ s /	s	/ ʃ /	r	/ ʈ /	ee	/ eŋ /
c	/ tʃ /	z	/ ʒ /	w	/ ɨ /	oo	/ ɔŋ /

Since Hmong words are primarily monosyllabic, and since the language does not have final consonants (except for /ʒ/), the developers of the RPA chose 7 arbitrary consonant letters and attached them at the end of words to represent the 7 tones of the language. The consonants and their tonemic values are listed below:

Final "b" represents a high level tone (55).

Final "j" represents a high falling tone (52).

Final "v" represents a mid rising tone (24).

Final "ø" (i.e. no consonant) represents a mid level tone (33).

* Editor's Note: This problem set was prepared for a graduate seminar at Berkeley called "Analysis of Linguistics Problem Sets" [Ling. 302], a course intended to give students practice in constructing and debugging self-contained corpora of data for classroom use.

Hmong is rapidly becoming the object of classroom study in the U.S. This summer it will be offered for the third year in a row at the SEASSI Language Institute (this time at the University of Hawaii). High school teachers in several California towns (e.g. Merced and Visalia) are beginning to receive training in the basics of Hmong phonetics and grammar to help them deal with the huge influx of Southeast Asian students to their classes.

Final "s" represents a low level tone (22).

Final "g" represents a breathy tone (4 2).

Final "m" represents a short, slightly falling tone ending in a glottal stop (21?).

SECTION I: SEMANTIC CATEGORIZATION

Part A: Carefully examine the data below and determine which semantic categories of nouns the following classifiers are associated with:

1. rab: _____
2. daim: _____
3. txoj: _____
4. phau: _____
5. tawb: _____
6. tsab: _____

- | | | | |
|--------------------|--------------------------|----------------|------------------------|
| 1. txoj hlua | <i>rope</i> | 18. rab cial | <i>pliers</i> |
| 2. daim txiag | <i>(wooden) board</i> | 19. phau ntawv | <i>book</i> |
| 3. rab rauj | <i>hammer</i> | 20. txoj cai | <i>law</i> |
| 4. daim nplooj | <i>leaf of a tree</i> | 21. rab diav | <i>spoon</i> |
| 5. tawb qaub ncauj | <i>spit, spittle</i> | 22. daim teb | <i>field</i> |
| 6. rab phom | <i>rifle</i> | 23. rab taus | <i>axe</i> |
| 7. daim tiab | <i>skirt</i> | 24. txoj xov | <i>string, twine</i> |
| 8. tsab xov | <i>(written) message</i> | 25. rab liag | <i>sickle</i> |
| 9. daim ntawv | <i>sheet of paper</i> | 26. txoj hmoov | <i>destiny, fate</i> |
| 10. rab hneev | <i>crossbow</i> | 27. rab kaw | <i>saw</i> |
| 11. phau nyiaj | <i>wad (of money)</i> | 28. daim liaj | <i>rice paddy</i> |
| 12. txoj hmab | <i>creeper (vine)</i> | 29. rab hlau | <i>hoe</i> |
| 13. rab koob | <i>needle</i> | 30. daim sev | <i>apron</i> |
| 14. txoj sia | <i>life</i> | 31. rab riam | <i>knife</i> |
| 15. tawb zis | <i>urine</i> | 32. txoj kev | <i>road, path</i> |
| 16. rab txiab | <i>scissors</i> | 33. tawb quav | <i>dung</i> |
| 17. daim pam | <i>blanket</i> | 34. tsab ntawv | <i>letter (mail)</i> |
| 18. txoj hauj lwj | <i>work</i> | 36. phau khaub | <i>pile of clothes</i> |

Part B: Classifiers and body parts. Carefully examine the data below and determine the characteristics of the body parts the following classifiers are associated with:

1. txhais: _____
2. tus: _____
3. txoj: _____
4. lub: _____

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|--------------------|---------------|---------------------|-------------------|
| 1. lub siab | <i>liver</i> | 14. txhais tes | <i>hand</i> |
| 2. tus nplaig | <i>tongue</i> | 15. txoj hnyuv | <i>intestines</i> |
| 3. lub cev | <i>body</i> | 16. tus tw | <i>tail</i> |
| 4. txoj leeg | <i>nerves</i> | 17. lub xub pwg | <i>shoulder</i> |
| 5. lub plawv | <i>heart</i> | 18. txoj hlal ntsha | <i>veins</i> |
| 6. tus qau | <i>penis</i> | 19. lub hauv caug | <i>knee</i> |
| 7. lub taub hau | <i>head</i> | 20. txhais ceg | <i>leg</i> |
| 8. txhais caj npab | <i>arm</i> | 21. tus pob txha | <i>bone</i> |

9. lub mis	<i>breast</i>	22. lub ntaws	<i>navel</i>
10. txoj sawv	<i>tendons</i>	23. txhais ko taw	<i>foot</i>
11. txhais ncej puab	<i>thigh</i>	24. lub qhov muag	<i>eye</i>
12. lub pob ntseg	<i>ear</i>	25. tus ntiv	<i>finger</i>
13. txoj ntaws	<i>umbilical cord</i>	26. lub pim	<i>vagina</i>

Part C: Using your answers to Parts A and B determine which classifier is associated with the following words:

1. qhib ntsia	<i>screwdriver</i>	-----
2. plab	<i>stomach, abdomen</i>	-----
3. ntawv sau	<i>notebook</i>	-----
4. xov hlau	<i>iron wire</i>	-----
5. tav	<i>rib</i>	-----
6. duab	<i>photograph, picture</i>	-----
7. caj hlaub	<i>lower leg</i>	-----
8. duav hlau	<i>shovel</i>	-----
9. hauv siab	<i>chest</i>	-----
10. ntaub	<i>(piece of) cloth</i>	-----
11. ntiv taw	<i>toe</i>	-----
12. diav hmuov	<i>fork</i>	-----
13. raum	<i>kidney</i>	-----
14. kab dab	<i>blackboard</i>	-----
15. quav twm	<i>cow-dung</i>	-----

SECTION II: SYNTACTIC FUNCTIONS OF HMONG CLASSIFIERS

Carefully examine the data on pages 5-6 and determine in what type of noun phrases the classifier is obligatory. You should come up with 5 types of noun phrases; please list them below:

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DATA (CLF = classifier, Q = question marker, NEG = negation marker):

- | | |
|--|---|
| <p>1. Tus tsov tshaib tshaib plab
CLF tiger be hungry be hungry stomach
*Tsov tshaib tshaib plab
'The tiger was very hungry'</p> | <p>2. Muaj ib tus tsov
be one CLF tiger
*Muaj ib tsov
'There was a (literally 'one') tiger'</p> |
| <p>3. Tus txiv neeb kho tau txhia tus mob
CLF shaman cure can all CLF illness
*Txiv neeb kho tau txhia mob
'The shaman can cure all illnesses'</p> | <p>4. Lawv lub zos puas deb?
their CLF village Q be far
*Lawv zos puas deb?
'Is their village far?'</p> |
| <p>5. Lub tsev no
CLF house this
*Tsev no
'This house'</p> | <p>6. Ntau lub tsev
many CLF house
*Ntau tsev
'Many houses'</p> |

- | | |
|--|--|
| <p>7. Tus tswj lub tsev
CLF chief CLF house
*tswj tsev
'The chief's house'</p> <p>9. Tus npua ntawd zoo siab
CLF pig that be happy
*Npua ntawd zoo siab
'That pig is happy'</p> <p>11. Lawv muaj rau tus me nyuam
they have six CLF child
*Lawv muaj rau me nyuam
'They have six children'</p> | <p>8. Lawv muaj pes tsawg tus me nyuam?
they have how much CLF child
*Lawv muaj pes tsawg me nyuam?
'How many children do they have?'</p> <p>10. Tooj tus dev
Tong CLF dog
*Tooj dev
'Tong's dog'</p> <p>12. Tshuav tsawg tus ntoo
remain few CLF tree
*Tshuav tsawg ntoo
'Few trees are left'</p> |
|--|--|

Now look at #13 and #14: with what type of noun phrases are classifiers not used?

- | | |
|--|--|
| <p>13. Kuv ntshai tsov
I fear tiger
*Kuv ntshai tus tsov
I fear CLF tiger
'I'm afraid of tigers'</p> | <p>14. Mob tsis tu
disease NEG go away
*Tus mob tsis tu
CLF disease NEG go away
'Disease never disappears'</p> |
|--|--|

To summarize: What general statement can you make about the use of classifiers? Fill in the blank below with a single word:

Classifiers are used in _____ noun phrases (cf. #1-12).

Classifiers are not used in _____ noun phrases (cf. #13-14).

HMONG CLASSIFIERS: ANSWER SHEET

This problem set is designed to familiarize students with the concept and use of classifiers. If students are already familiar with classifier languages, this will provide further exposure and practice. If they are not, this will serve as an introduction. In the latter case, to introduce the concept of classifiers, you may want to start by explaining that there is a concept resembling "classifiers" in English: note that we can talk of a stick of gum but not *a gum, a grain of salt but not *a salt, a glass of water but not *a water, and so on. The words stick, grain, and glass in the examples above are parallel to classifiers in Hmong. But in Hmong every noun must appear with a classifier, whereas in English only certain nouns have a similar feature.

As you and your students may have noticed, a given noun can select more than one classifier, and hence have a different meaning depending on the classifier. For instance, daim ntawv (Part A, #9) means *sheet of paper*, phau ntawv (Part A, #19) means *book*, and tsab ntawv (Part A, #34) means *letter (piece of mail)*. Or tsab xov (Part A, #8) means *(written) message*, while txoj xov (Part A, #24) means *string/twine*. This raises an interesting theoretical question: is a "noun" the noun by itself, or is it the noun together with its classifier, since classifiers can affect meaning? I do not have the answer to this question, but you may want to point this out to your students (if they do not point it out to you!).

In the first section of the problem set, the students are asked to determine the semantic categories of nouns which certain given classifiers are associated with. This section includes three parts: in Part A the nouns to be categorized are of a general nature, in Part B the focus is on body parts, and in Part C the students will apply their answers from Parts A and B by associating given nouns with the (hopefully!) correct classifier.

In the second section of the problem set, the students are asked to analyze the syntactic functions of classifiers by determining in what types of noun phrases classifiers are obligatory and in what types they are not. This will appeal to the notion of definiteness vs. indefiniteness in NP's.

Transcription note: the data are presented in the Romanized Popular Alphabet (RPA), the writing system which was developed for Hmong in the early 1950's by missionaries. The most "counter-intuitive" feature of the RPA is that graphic final consonants function as tone markers, and thus have to be converted into tonemic values rather than be pronounced as consonant sounds (cf. page 1 of the problem set for details). Nevertheless, since this problem set deals with semantics and syntax (and not with phonetics and/or phonology) and since the RPA is close to the IPA otherwise (cf. page 1 of the problem set for exceptions), the former was chosen over the latter for the purposes at hand. If students find the writing system troublesome, you may want to remind them, for example, of the glaring discrepancies between the written and the spoken language in English, or of the fact that most final consonants of written French are not pronounced. The RPA fares rather well, comparatively speaking. On to answers and techniques for finding them..

SECTION I: SEMANTIC CATEGORIZATION

Part A: In order to determine the semantic categories of nouns the given classifiers are associated with, the students should start by grouping together the nouns that share the same classifier. This yields the following:

1. rab:

3. rab rauj	hammer
6. rab phom	rifle
10. rab hneev	crossbow
13. rab koob	needle
16. rab txiab	scissors
18. rab cial	pliers

21. rab diav	spoon
23. rab taus	axe
25. rab liag	sickle
27. rab kaw	saw
29. rab hlau	hoe
31. rab riam	knife

2. daim:

2. daim txiab	(wooden) board
4. daim nplooj	leaf of a tree
7. daim tiab	skirt
9. daim ntawv	sheet of paper

17. daim pam	blanket
22. daim teb	field
28. daim liaj	rice paddy
30. daim sev	apron

3. txoj:

1. txoj hlua	rope
12. txoj hmab	creeper (vine)
14. txoj sia	life
18. txoj hauj lwv	work

20. txoj cai	law
24. txoj xov	string, twine
26. txoj hmoov	destiny, fate
32. txoj kev	road, path

4. phau:

11. phau nyiaj	wad (of money)
19. phau ntawv	book

36. phau khaub	pile of clothes
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5. tawb:

5. tawb qaub ncauj	spit, spittle
15. tawb zis	urine

33. tawb quav dung	
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6. tsab:

8. tsab xov	(written) message
34. tsab ntawv	letter (mail)

Next, the students should determine what semantic properties the nouns associated with each of the classifiers have in common. They should come up with the following:

1. rab: this classifier is used with nouns referring to *implements* (tools, kitchen utensils) and *weapons*.

2. daim: this classifier is used with nouns referring to *flat things* and *surfaces*.

3. txoj: this classifier is used with nouns referring to *long and thin things*. It is also used with *abstract nouns* which are metaphorically considered to be long: life, destiny, law, work (the latter two may require a stretch of the imagination, but this is a different culture, after all).

4. phau: this classifier is used with nouns referring to *stacks of things*, *things piled up on each other*.

5. tawb: this classifier is used with nouns referring to *bodily excretions*.

6. tsab: this classifier is used with nouns referring to *written messages*. (Recall from the introduction that there is a separate classifier for *spoken words*, *zaj*).

Part B: Again, the student should start by grouping together the nouns that share the same classifier. This yields the following:

1. txhais:

8. txhais caj npab *arm*
 11. txhais ncej puab *thigh*
 14. txhais tes *hand*

20. txhais ceg *leg*
 23. txhais ko taw *foot*

2. tus:

2. tus nplaig *tongue*
 6. tus qau *penis*
 16. tus tw *tail*

21. tus pob txha *bone*
 25. tus ntiv *finger*

3. txoj:

4. txoj leeg *nerves*
 10. txoj sawv *tendons*
 13. txoj ntaws *umbilical cord*

15. txoj hnyuv *intestines*
 18. txoj hlab ntsha *veins*

4. lub:

1. lub siab *liver*
 3. lub cev *body*
 5. lub plawv *heart*
 7. lub taub hau *head*
 9. lub mis *breast*
 12. lub pob ntseg *ear*

17. lub xub pwg *shoulder*
 19. lub hauv caug *knee*
 22. lub ntaws *navel*
 24. lub qhov muag *eye*
 26. lub pim *vagina*

Next, the students should determine what semantic properties are shared by the body parts associated with each of the classifiers. They should come up with the following:

1. txhais: this classifier is used for arms, legs, hands, and feet, i.e. *limbs and their extremities*.

2. tus: this classifier is used with *body parts that come in "short" lengths*. (Compare and contrast with **txoj** below).

3. txoj: this classifier is used with *body parts that come in "great" lengths*, and are *thin and flexible*. (Recall from Part A that **txoj** is also used with non-body-part nouns referring to long and thin things).

4. lub: this classifier is used with *round and/or bulky body parts* (a kind of "elsewhere" category here).

Part C: Using their answers to Parts A and B the students should associate the following words with the following classifiers:

- | | | |
|---------------|----------------------------|---------------|
| 1. qhib ntsia | <i>screwdriver</i> | <u>rab</u> |
| 2. plab | <i>stomach, abdomen</i> | <u>lub</u> |
| 3. ntawv sau | <i>notebook</i> | <u>phau</u> |
| 4. xov hlau | <i>iron wire</i> | <u>txoj</u> |
| 5. tav | <i>rib</i> | <u>tus</u> |
| 6. duab | <i>photograph, picture</i> | <u>daim</u> |
| 7. caj hlaub | <i>lower leg</i> | <u>txhais</u> |
| 8. duav hlau | <i>shovel</i> | <u>rab</u> |
| 9. hauv siab | <i>chest</i> | <u>lub</u> |
| 10. ntaub | <i>(piece) of cloth</i> | <u>daim</u> |
| 11. ntiv taw | <i>toe</i> | <u>tus</u> |

12. diav hmuov	<i>fork</i>	<u>rab</u>
13. raum	<i>kidney</i>	<u>lub</u>
14. kab dab	<i>blackboard</i>	<u>daim</u>
15. quav twm	<i>cow-dung</i>	<u>tawb</u>

Note: Should some of your students answer tsab for #3 and/or #14, you can provide the following explanation: some classifiers preempt others; in this case, although notebooks and blackboards are used for writing, they do not directly refer to written messages. For "notebook" the salient feature in the Hmong world view is that it is made up of a stack of sheets of paper (hence phau), and for "blackboard" the salient feature is that it is a flat surface (hence daim).

SECTION II: SYNTACTIC FUNCTIONS OF HMONG CLASSIFIERS

To determine in what type of noun phrases classifiers are obligatory, the students should start by grouping together the sentences which have the same types of NP's, and label them: 1 and 3 (definite NP's), 2 and 11 (NP's with numerals), 3, 6, 8, and 12 (NP's with quantifiers), 4, 7, and 10 (possessive NP's), and 5 and 9 (NP's with demonstratives). By comparing the grammatical sentences with their ungrammatical counterparts, the students should be able to conclude that classifiers are obligatory in these types of NP's.

To summarize, the 5 types of noun phrases classifiers are obligatory in are the following:

1. definite NP's in the narrow sense, i.e. NP's which take a definite article in English (cf. #1, 3)
2. NP's with numerals (cf. #2, 11)
3. NP's with quantifiers (cf. #3, 6, 8, 12)
4. possessive NP's (cf. #4, 7, 10)
5. NP's with demonstratives (cf. #5, 9)

On the other hand, classifiers are not used in indefinite NP's (i.e. when nouns are used generically, cf. #13-14).

The generalization the students should be able to make goes as follows:

Classifiers are used in definite noun phrases (cf. #1-12).

Classifiers are not used in indefinite noun phrases (cf. #13-14).

(Note to TA: Since numerals and quantifiers are not precisely "definite", a better set of terms might be determined or specified. Credit, however, should be given for any of these.)

Note: Should you and your students wonder about the classifiers tus and lub in #1-14, here is the explanation: tus and lub are the most common classifiers in Hmong; tus is used with nouns referring to human beings, animals, things that closely affect people (such as "illness"), and things that come in "short" lengths (such as "tree"); lub is used with nouns referring not only to round and bulky things, but also to buildings (such as "house"), places (such as "village"), and means of transportation (such as "car", "boat", etc), which all fall into the "container" category. As far as I know, lub is the most inclusive classifier in Hmong; this is supported by the fact that new loanwords from English or French often (possibly exclusively, but I do not know this for a fact) appear with this classifier.