\<A\> Double Dutch (1/2)

(3 points)

Dutch, a close relative of English, has a great number of homonyms. Homonyms are words that have the same spelling, but at least two different meanings. For example, in English the word 'bank' can be a financial institution as well as the side of a river. Typically, much Dutch humour comes from playing on the double (sometimes even triple) meanings of the language's frequent homonyms.

Example sentence:

Dutch sentence:	De deken wil het kussen laken.
English word-by-word (literal) translation:	*The deacon (type of priest) wants the kissing prohibit.*
English translation:	The deacon wants to prohibit kissing.

This sentence becomes accidentally amusing, when the alternative meanings of the key words are considered:

Dutch Homonym:	Meaning 1: (as in example sentence)	Meaning 2:
deken	deacon	blanket
kussen	kissing, to kiss	pillow
laken	to prohibit	bedsheet

The following sentences all contain homonyms like the words above, but this time doubled or tripled to make silly (but still grammatically correct) sentences.

Dutch sentences with homonyms:

1	Wij laken het graven graven.
2	Graven graven nooit graven.
3	Als vliegen vliegen laken, vliegen vliegen nooit.
4	Als achter vliegen vliegen vliegen, vliegen vliegen vliegensvlug.
5	Twee vliegen vliegen over de weg weg en er is een bij bij.
6	De weg is weg.
7	De vliegen vliegen bij de bij.

<A> Double Dutch (2/2)

English translations of the Dutch sentences above (not in order):

a.	The road is away.
b.	If behind flies flies fly, flies fly as fast-as-a-fly.
c.	If flies prohibit flying, flies will never fly.
d.	The flies fly with the bee.
e.	Counts (noblemen) never dig graves.
f.	Two flies fly over the road away and there is a bee with [them].
g.	We prohibit the digging of graves.

Task 1: Fill in the table below for each of the homonyms' two meanings, using the silly sentences and their mixed-up translations. NOTE: Meaning 1 and meaning 2 for a given Dutch word can be expressed by an English translation equivalent in either order. 0.25 each correct = 1.5 points

Dutch word:	Meaning 1:	Meaning 2:
vliegen	(to) fly	flies (insects)
bij	bee	with
weg	road	away

Task 2: The Dutch word "graven" has three different meanings or uses. Fill in the three different meanings of this word in the table below. 0.5 each correct = 1.5 points

Dutch word:	Meaning 1:	Meaning 2:	Meaning 3:
graven	(to) dig	graves	counts (nobles)

\<B\> Greek Roots (1/2)

(10 points)

When scientists discover a new idea or thing, they have to decide what to call it, and often invent a new word for it. For instance, the word *dinosaur* didn't exist until it was created by scientists working on dinosaur remains. These new words are often based on words in Classical Greek, which was spoken about two thousand years ago. The word *dinosaur* was based on the Greek words *dino*- 'terrible' and *saur*- 'lizard'. (The '-' at the end of these words shows that the Greek words normally carried various suffixes which we can ignore.) The word-parts in English words are called 'roots', so *dinosaur* contains the roots *dino* and *saur,* each with its separate meaning. (There's no need to write '-' at the end because these aren't actual Greek words, just bits of English words.)

Task 1: Each of the words listed below contains two Greek roots, giving a total of four different roots. Write these roots (in any order) in the Table below and indicate their meanings. HINT: If you can't work out the meaning straight away, come back to it later, as the later questions may help. 0.5 each correct = 2 pts (any sensible answer like those given)

MICROPHONE, TELEPHONE, MICROSCOPE, TELESCOPE

Root	Meaning in English
micro	small/little
phone	sound/voice
tele	far off/ distant
scope	sight /see/ look

Task 2: What do you think a *microlith* is, and (if you didn't know the answer already) how could you work it out from the meanings of the word's roots? Write your answer by completing the sentences in the Table below.

HINT: Things to do with the Old Stone Age and the New Stone Age are called 'paleolithic' and 'neolithic'. 1.5 point if all correct (otherwise no mark)

The first root is micro	which means small
The second root is lith	which means stone
So a microlith must be a small stone	

<B> Greek Roots (2/2)

Task 3: Now do the same for the word *megalith* and write your answers in the Table below. 1 point if all correct

The first root is mega	which means big
The second root is lith	which means stone
So a megalith must be a big stone	

Task 4: Suppose you had discovered a bird with rather frightening wings and needed a name for it. You know that *dino* means 'terrible' (as in *dinosaur*) and you know that *helicopter* contains *helico* (spiral) and *pter* (wing), so you could combine *dino* with *pter* to make *dinopter* - a suitably frightening name for your bird.

Now do the same for the things listed below. You should be able to make names for them without going beyond the roots we've already met in this problem. 0.5 each correct = 1.5 points

thing	name
a small lizard	microsaur
a machine for looking at new things	neoscope
a machine for listening to people speaking old languages	paleophone

Task 5: Each of the words in the Table below contains two Greek roots, and each of these roots is found in a number of other English words. For example, *telescope* shares one root with *television* and another with *microscope*, so it is related to both these words. Complete the table by putting just one related word in each empty cell. 0.5 each appropriate = 4 points

Word	Other word with the first root	Other word with the second root
telescope	television	microscope
diameter		
geography		
synonym		
trigraph		

<C> Aymara rules (1/2)

(7 points)

This problem concerns Aymara, an indigenous language spoken in Bolivia, but it also raises general questions about the kinds of rules that are possible for 'phonotactics' – for explaining how sounds should be put together to make words. Not just any combination of sounds can be a word; for instance, in English *blid* is a possible word (although it doesn't actually exist), but *bnid* is impossible because it breaks the phonotactic rules of English. There are many types of rules one can write to describe sound patterns. In this problem we consider three rule types:

Type A: These constraints require that a certain sound occur either an even or odd number of times. We write Type A constraints as follows: either **X=Even**, meaning the sound X must occur an even number of times, or **X=Odd**, meaning the sound X must occur an odd number of times. For example, b=Even requires that there be an even number of b's in every word. Thus, b=Even rules out words like "bas" or "bisbanib" while allowing words like "tas" or "bistanib". The rule b=Odd would do the exact opposite: allow "bas" and "bisbanib" but rule out "tas" and "bistanib".

Type B: These constraints prohibit a certain sound from occurring right before another sound. We write Type B constraints as follows: ***XY**, meaning that X must not occur right before Y. For example, *bn prohibits b from immediately preceding n. Thus, *bn rules out "abnik" as a possible word while allowing words like "atnik" or "anbik".

Type C: These constraints prohibit a certain sound from occurring before another sound at any point in the word. We write Type C constraints as follows: ***[XY]**, meaning that X must not occur before Y, no matter what may or may not come in between. For example, *[bn] prohibits b from preceding n anywhere. Like *bn, *[bn] allows words like "atnik" or "anbik" and rules out "abnik", but unlike *bn, *[bn] also rules out "abitnik".

Your task is to write constraints in the forms just described in order to account for some of the phonotactics of Bolivian Aymara. The following tables list acceptable and unacceptable words in Aymara:

Acceptable Aymara words:

kawki	sipita	pisi	janana	purapa	alwa	qawa
kikpa	oqara	kunka	tarkaka	seqe	qemi	putu
qolqeni	yuru	taqe	jiliri	qapa	jaqet	mayni
toqe	nayra	tukjata	tiwula			

Unacceptable Aymara words:

ekawu	okatu	qaqira	kutaqa	qulwaqa	maqetuq	toqaki

<C> Aymara rules (2/2)

Task 1: Write a set of constraints that will rule out all of the bad forms while permitting all of the good forms. Use as few constraints as possible. Follow the format described above for writing constraints. Note: you don't need to account for every pattern you might find. You will lose points only for ruling out the acceptable forms, failing to rule out the unacceptable forms, or using more constraints than necessary. Take off 1 point for any rules which disallow acceptable forms, or fail to disallow unacceptable forms, or use more constraints than required. **6 points** (if they get these)

*ek, *ok, *uq, *qi, *qu, *[kq], *[qk]

Task 2: Out of the three types of rules described in the introduction, only two are known to be needed when describing the phonotactics of human languages. Which type of constraint isn't needed for the Aymara data? 1 point

Type A

<D> Maxakalí (1/1)

(9 points)

Maxakalí is an Amazonian language spoken in the eastern Brazilian region of Minas Gerais by about 1200 indigenous people living in small villages. This language belongs to the Macro-lê language family. The Maxakali endonym (or name for themselves) is 'Tikmũ'ũn'. These people have a strong sense of cultural identity and clearly separate themselves from 'Ãyuhuk' (outsiders).

Your task is to match words and phrases to their English meanings, whose identifying letter (A, B, etc) you should write before the corresponding Maxakalí expression.

Pronunciation Notes: A tilde (~) above a vowel means that it is pronounced nasally. The letter 'x' represents a sound like English 'sh' and the apostrophe (') represents a glottal stop like the break between the vowels represented by the hyphen in 'uh-oh'. Other letters are reasonably similar to their equivalents in English. 0.5 each correct = 9 points

	Maxakalí		English
G	ka'õgãhã	A.	cover
F	ka'ok	B.	eye
H	kuxa	C.	eyelid
P	kuxa ka'ok	D.	foot
J	mĩkax	E.	go
K	mĩkaxxax	F.	hard
I	mĩptut	G.	harden
N	mĩptut mõg	H.	heart
M	mĩptut mõg kuxa	I.	house
Q	mĩptut mõg pata	J.	knife
E	mõg	K.	knife sheath
L	mõgãhã	L.	lead
B	pa	M.	motor
R	pa ka'ok	N.	motor vehicle
D	pata	O.	shoe
O	pataxax	P.	stubborn
C	paxax	Q.	tyre
A	xax	R.	wide awake

<E> By Hand and Foot in Murrinhpatha (1/3)

(20 points)

Murrinhpatha is a language from the Daly River region in Australia's Northern Territory. It has around 3000 speakers, most of whom live in the community of Wadeye (Port Keats). It is one of a small number of Australian indigenous languages still being learned by all children in the community as their first language. Murrinhpatha has long, complex verbs that can express meanings that require a whole sentence in English. Murrinhpatha has a number of sounds that are not found in English: *rr* is used to represent a sound similar to a very short rolled 'r'; *nh* and *th* represent single sounds that are made like 'n' and 't' respectively, but with the tongue between the teeth.

Here are some verbs in Murrinhpatha and their meanings in English.

1	manthap	I touched it (by hand)
2	namnginthathap	You two who are not siblings touched it (by hand)
3	numamkathap	You two siblings touched it (by hand)
4	thununganthap	You (singular) touched it (by foot)
5	thunungamnginthathap	You two who are not siblings touched it (by foot)
6	nunungamkathap	You two siblings touched it (by foot)
7	thanthap	You (singular) tasted it (e.g. touched it by mouth)
8	thamnginthathap	You two who are not siblings tasted it
9	narramkathap	You two siblings tasted it
10	namlerrkperrk	You (singular) crushed it (by hand)
11	thunungamlerrkperrk	You crushed it (by foot)
12	nanthap	You (singular) touched it (by hand)
13	mamnginthathap	They two who are not siblings touched it (by hand)
14	pumamkathap	They two siblings touched it (by hand)
15	nunganthap	He/she (singular) touched it (by foot)
16	nungamnginthathap	They two who are not siblings touched it (by foot)
17	punnungamkathap	They two siblings touched it (by foot)
18	danthap	He/she (singular) tasted it
19	damnginthathap	They two who are not siblings tasted it
20	parramkathap	They two siblings tasted it
21	mamlerrkperrk	He/she crushed it (by hand)
22	nungamlerrkperrk	He/she crushed it (by foot)
23	manthap	He/she (singular) touched it (by hand)
24	ngumamkathap	We two siblings touched it (by hand)
25	ngununganthap	I touched it (by foot)
26	ngunungamnginthathap	We two who are not siblings touched it (by foot)
27	ngunnungamkathap	We two siblings touched it (by foot)
28	nganthap	I tasted it
29	ngamnginthathap	We two who are not siblings tasted it
30	ngarramkathap	We two siblings tasted it
31	mamlerrkperrk	I crushed it (by hand)
32	ngunungamlerrkperrk	I crushed it (by foot)
33	mamnginthathap	We two who are not siblings touched it (by hand)

<E> By Hand and Foot in Murrinhpatha (2/3)

Task 1: Identify the two verb stems in the above Murrinhpatha verbs, and write them below their English equivalent. 2 pts each correct = 4 points

touch	crush
thap	lerrkperrk

Sometimes when a Murrinhpatha verb is put together, we end up with two consonants in a sequence that is not allowed by the language. In this case one of the consonants changes so that the combination acceptable. This is called a **morphophonemic** change.

Task 2: There is one morphophonemic change that occurs in some of the words above. Describe this change by filling in the blanks in the sentence below: 1 point

The consonant m changes to n when it occurs before the consonant th

Task 3: Some of the verbs include the form –*ngintha.* On the basis of the examples above, what do you think –*ngintha* means? (Explain the meaning on the lines below.) 2 points (need to get 'two' and 'not siblings')

-ngintha means 'two who are not siblings'

Task 4: If *mamkurrk* means 'I scratched it (by hand)',

(a) What does *thunungamkurrk* mean? 2 points (you + by foot)

You (singular) scratched it (by foot)

(b) How would you say 'We two siblings scratched it (by hand)' in Murrinhpatha? 2 points

ngumamkakurrk

(c) How would you translate 'They two who are not siblings scratched it (by mouth)?'2 points

damnginthakurrk

Task 5: The verb stem –*thurr* means 'to tread on something'. Translate the following into Murrinhpatha: 2 points each of (a) and (b) = 4 points

(a) 'We (e.g. my brother and I) trod on it.'

ngunnungamkathurr   (Note the use of the 'by foot' classifier here)

(b) 'He trod on it.'

nunganthurr (note the application of the morphophonemic rule here)

**Task 6:** If *mamkamit* means 'I obstructed it (by hand)', **how** would you translate

'I said no' (i.e., 'I refused it')? 3 points

ngamkamit (note the use of the 'by mouth' classifier form here)

<F> Navajo Turing Machines (1/5)

(30 points)

Turing Machines are a type of computing machine first described by Alan Turing in 1936. Although they have a very simple design, Turing Machines are very powerful – in fact, every computational task that a modern computer is capable of can also (theoretically) be done by a Turing Machine.
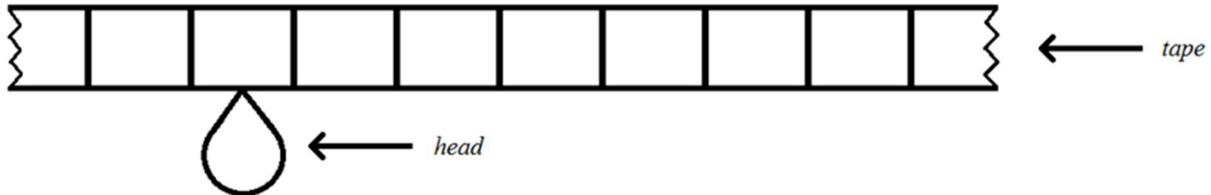
Turing Machines consist of a tape (an infinite series of cells, each containing a blank or a symbol), and a head, which reads a particular cell on the tape and performs an operation according to the 'state' it is in: either writing something in that cell, moving left or right, both of these, or neither. A Turing Machine is defined by its instructions, which determine what operations it performs. Below are the instructions for a particular Turing Machine. Note that the symbol ⬚ indicates a blank on the tape:

Entry state	Read	Write	Move	Exit State
S0	w	∅	R	S0
S0	∅	[N/A]	[N/A]	HALT
S0	[otherwise]	[N/A]	R	S0

This Turing Machine deletes all w's on a given tape. So, if the machine were fed this tape:
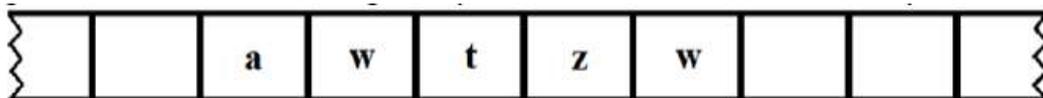
...that tape would look like this when the machine was finished:

This transformation can be summarized as:

     awtzw → atz (blanks within the letter sequence are not transcribed)

Some things to note:

- Turing Machines always start on the leftmost non-blank space on the tape
- Input tapes always contain a single string of symbols, unbroken by blanks
- A Turing Machine will only stop if it arrives at a HALT state or if there are insufficient instructions to proceed
- The initial state of a Turing Machine is also S0

\<F> Navajo Turing Machines (2/5)

Turing Machines can operate on strings of O's and 1's, on arbitrary strings of letters (like above), or on words – in this last case, Turing Machines can be used to perform useful linguistic tasks.

Here is a simple Turing Machine designed for the English language, called Pluralizing Machine.

Entry state	Read	Write	Move	Exit State
S0	Ø	s	[N/A]	HALT
S0	[otherwise]	[N/A]	R	S0

This machine makes the following successful (i.e., linguistically valid) transformations:

cat → cats   **apple → apples**   **microscope → microscopes**

However, this machine also makes the following unsuccessful (i.e., linguistically invalid) transformation:

fox → foxs (indicates an unsuccessful transformation)

The machines shown so far have used only a single state, SO (not including the HALT state). Turing Machines that perform more complex tasks, however, will require multiple states, each with its own set of instructions. In multi-state machines, some lines of instructions will cause the machine to change state – in other words, exit the line in a different state than it entered.

Consider Pluralizing Machine 2.0:

Entry state	Read	Write	Move	Exit State
S0	Ø	[N/A]	L	S1
S0	[otherwise]	[N/A]	R	S0
S1	x, s, z	[N/A]	R	S2
S1	[otherwise]	[N/A]	R	S3
S2	[otherwise]	e	R	S3
S3	[otherwise]	s	[N/A]	HALT

In addition to making the successful transformations made by Pluralizing Machine 1.0, this machine also makes successful transformations for many new words, including 'fox':

fox → foxes

Task 1: Give <u>three</u> more English words for which Pluralizing Machine 2.0 makes successful transformations, but that Pluralizing Machine 1.0 transforms unsuccessfully. Try to take advantage of all the added capabilities of the new machine. 1 pt each appropriate word choice, but must give examples of words with each of x, s or z to get full marks. Words ending in same sound get treated as 1 pt. (total = 3 points)

1. Any three nouns that end in x, s, or z and take an -es plural ending – ideally one each for each of those three last letters. For example, buzz ⇒ buzzes, class ⇒ classes, tax ⇒ taxes.

<F> Navajo Turing Machines (3/5)

Task 2: Pluralizing Machine 2.0 is not without its faults: what outputs does this machine give the inputs 'quiz' and 'child'? (Answer by completing these transformations.)

0.5 each correct = 1pt
2. * quiz ⇒ _quizes, * child ⇒ childs

Of course, Turing Machines can deal with any written language – not just English. The remaining Turing Machines in this problem perform tasks in Navajo, a languae in the Na-Dené family, spoken primarily in Arizona, Utah, and New Mexico. With almost 170,000 speakers, Navajo is the most widely-spoken indigenous language in the United States of America.

Consider the following verb forms from the Navajo language. NOTE: ł and y are consonants in Navajo. An accent above a vowel, as in é, indicates high tone (or pitch). A hook beneath a vowel, as in ą, indicates that the vowel is nasal.

Navajo	English
nidaahné	you (pl.) play
biyadahodiilyéés	we (pl.) frighten him
áchádahídéelni'	they (pl.) are greedy
bidajil'į	people (pl.) imitate him
nidaniiché	we (pl.) are on the run
dajidlą́	people (pl.) drink it

Navajo	English
naahné	you (dl.) play
biyahodiilyéés	we (dl.) frighten him
ácháhídéelni'	they (dl.) are greedy
bijil'į	people (dl.) imitate him
naniiché	we (pl.) are on the run
jidlą́	people (dl.) drink it

Sam designs a Turing Machine to transform the plural (pl.) form of a Navajo verb into its dual (dl.) form. A dual verb has exactly two people/entities as its subject, and in Navajo contrasts with singular verbs (one person as subject) and plural verbs (three or more people as subject). Here is Sam's Dualizer Machine 1.0:

Entry state	Read	Write	Move	Exit State
S0	d	Ø	R	S1
S0	[otherwise]	[N/A]	R	S0
S1	[otherwise]	Ø	[N/A]	HALT

Task 3: Sam's Dualizer Machine 1.0 makes successful transformations for only four of the six plural verbs given above. Identify the other two, for which the machine makes unsuccessful transformations, and show the machine's output. 1pt each correct = 4 points

	Unsuccessful transformations	**Machine's output**
1		
2		

3. * nidaahné ⇒ niahné, * nidaniiché ⇒ niniiché

\<F\> Navajo Turing Machines (4/5)

Here is the outline of a Dualizer Machine 2.0:

Entry state	Read	Write	Move	Exit State
S0	d	ø	R	S1
S0	[otherwise]	[N/A]	R	S0
S1	[otherwise]	(a)	(b)	S2
S2	(c)	[N/A]	(d)	S3
S3	i	[N/A]	(e)	S4
S3	(f)	(g)	[N/A]	HALT
S4	(h)	[N/A]	(i)	S5
S4	[otherwise]	[N/A]	[N/A]	HALT
S5	[otherwise]	(j)	[N/A]	HALT

Task 4: Fill in the blanks of Dualizer Machine 2.0. The machine should make successful transformations for all six of the verbs given above. (Answer by filling in cells to right of letters corresponding to those marked by letters (a-j) in table above. 0.5 pt each correct = 5 points

(a)	ø	(b)	L	(c)	[otherwise] or ø
(d)	L	(e)	L	(f)	[otherwise]
(g)	[N/A]	(h)	n	(i)	R
(j)	a				

Next, consider this set of Navajo verbs, with their English translations:

Navajo	English	Navajo	English
dádi'nishkaad	I sew it shut	dádi'niłkaad	you (sg.) sew it shut
ná'iishgááh	I bleach it	ná'iiłgááh	you (sg.) bleach it
nistséés	I extinguish it	niłtséés	you (sg.) extinguish it
yishchxǫǫh	I destroy it	niłchxǫǫh	you (sg.) destroy it
yishdééh	I scrape it off	niłdééh	you (sg.) scrape it off
hadishbin	I fill it up	hadíłbin	you (sg.) fill it up
ííníshta'	I read	ííníłta'	you (sg.) read
atk'íisgis	I entwine them	atk'íiłgis	you (sg.) entwine them
yiists'ił	I break it	yiiłts'ił	you (sg.) break it
yishhííh	I melt it	niłhííh	you (sg.) melt it
iishchííh	I dye it red	iiłchííh	you (sg.) dye it red

\<F\> Navajo Turing Machines (5/5)

Sam intends to design a Second-Personizer Machine that will transform the "I" form of each verbs (the first person singular form) to the "you (sg.)" (second-person singular) form.

Here is an outline of Sam's Second-Personizer Machine:

Entry state	Read	Write	Move	Exit State
S0	(a)	(b)	(c)	S1
S0	[otherwise]	[N/A]	R	S0
S1	(d)	Ø	(e)	S2
S1	[otherwise]	(f)	L	S2
S2	[otherwise]	(g)	(h)	S3
S3	(i)	[N/A]	[N/A]	HALT
S3	[otherwise]	(j)	L	S4
S4	(k)	[N/A]	[N/A]	HALT
S4	(l)	(m)	[N/A]	HALT
S4	[otherwise]	[N/A]	(n)	S5
S5	[otherwise]	(o)	[N/A]	HALT

Task 5: Fill in the blanks of Sam's Second-Personizer Machine. This Machine should be able to successfully form every verb above from its first-person ('I') form to its second-person ('you') form. 1 pt each correct = 15 points

(a)	s	(b)	ł	(c)	R			
(d)	h	(e)	L	(f)	[N/A]			
(g)	[N/A] or ł	(h)	L	(i)	i			
(j)	[N/A] or i	(k)	i	(l)	y			
(m)	n	(n)	R	(o)	i			

Here are two last Navajo verbs, with their English translations:

Navajo	English
íísínísts'ą́ą'	I listen
bigháníshdééh	I sift it (as flour)

Task 6: Only one of the two verbs above is transformed successfully by the Second-Personizer Machine. 1 pt each correct = 2 points
(a) Which verb do you think will be transformed <u>unsuccessfully</u>? íísínísts'ą́ą'
(b) What will be the Machine output for this verb? ííłínísts'ą́ą'

6. íísínísts'ą́ą' will be transformed unsuccessfully. Both verbs have predictable second-person forms (íísíníłts'ą́ą' and bigháníłdééh respectively), but the machine will attempt to apply its transformations on and around the first s in íísínísts'ą́ą', rather than the second s. The unsuccessful output for this verb will be ííłínísts'ą́ą'.

\<G> Do-This-Do-That in Hmong (1/2)

(21 points)

Hmong is a language of Southern China and Southeast Asia, especially the countries of Vietnam, Laos, and Thailand. One dialect of Hmong that is spoken in all of these countries is called Hmong Daw (or White Hmong). The sentences and phrases that you see below are from Hmong Daw. They are written in a writing system called RPA (Romanized Popular Alphabet). In this writing system, the initial consonant of a syllable is written first, followed by the vowel. If this vowel is doubled in writing, it is pronounced as nasalized or with a following "ng" sound. Last of all, a consonant symbol is used to represent the tone of the syllable (whether it is produced with high, mid, low, rising, or falling pitch). Hmong Daw has seven tones, one of which is indicated by the absence of any symbol. In this system, Hmong is written as *Hmoob*.

The table on the next page contains 31 Hmong Daw sentences and phrases, and 31 English translations. NOTE:

- the Hmong expressions and their English translations are in a different order.
- within a Hmong expression and its translation, words may be arranged differently.
- an English word may translate more than one word in Hmong, and vice versa.
- the abbreviations *sg*, *du* and *pl* mean singular, dual (two participants) and plural.

Task 1: Pair each Hmong expression with its English translation by writing the latter's number in the first column of the table <u>on the next page</u>. 0.5 pt (x 30) for each correct = 15 points

Task 2: Translate these English phrases into Hmong Daw. 0.5 pt each correct word in correct order = 6 points

English	Hmong Daw
Lao and Hmong people	neeg Hmoob neeg Nplog
behave as primates	ua liab ua cuam
have precious metals	muaj nyiaj muaj kub

<G> Do-This-Do-That Do-This-Do-That in Hmong (2/2)

#	Hmong	#	English
31	Neeg them nyiaj rau koj.	1.	a very tall tree
5	Nej sib pom lawm.	2.	behave as one group
28	phem dab phem tuag	3.	grass sprouts
9	Kuv lub tsev nqeeb phem heev.	4.	He planted a grass plant.
26	Ua ib pawg.	5.	People fear spirits.
13	Wb sib ntsib.	6.	some legal proceedings
27	Khib kuv heev.	7.	He is very upset.
7	Dab tsis ntshai.	8.	It offends me very much.
25	Nwg cog ib tsob tauj.	9.	We (du.) are very ugly.
17	Nej tsis tau pom kuv.	10.	speak Hmong language
11	Ntuj no lawm.	11.	Heaven is cold now.
30	Neeg Nplog pe mlom.	12.	petition deities
21	tej plaub tej ntug	13.	a band of monkeys
10	Kuv tsis tau ntsib nwg.	14.	You (pl.) did not see me.
2	tsev hais plaub	15.	You (pl.) see each other now.
3	neeg loj neeg siab	16.	ugly as spirits and death
1	hais lus Hmoob	17.	People pay silver to you.
12	sib ntsib sib pom	18.	Lao people reverence images.
19	tsis khib tsis chim	19.	not angry or offended
4	pe dab pe mlom	20.	My grass house is very ugly.
16	ib pab liab	21.	big and tall people
29	Koj muaj kub.	22.	Apes are like people.
8	ntau pab ntau pawg	23.	Spirits dont fear.
22	Nej muaj tej tsev loj.	24.	You (sg.) have gold.
23	Wb phem heev.	25.	many factions
14	Neeg ntshai dab.	26.	I did not meet him.
20	Nwg chim heev.	27.	worship images and spirits
15	ntsis tauj ntsis nqeeb	28.	court (house of speaking legal proceedings)
18	Cuam zoo li neeg.	29.	encounter one another
24	thov ntuj thov dab	30.	You (pl.) have some big houses.
6	ib tsob ntoo siab heev	31.	We (du.) met each other.