LING 432/830 Spring, 2019 Worksheet #5	Name:Stress & Metrical Foot structure			
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We have learned that Hul'q'umi'num' has a very general process where unstressed vowels reduce to schwa. So, one important part of learning Hul'q'umi'num' pronunciation is knowing about the stress pattern. Let's start off by being able to identify stress in a language we all know: English. It has some similar properties to Hul'q'umi'num' stress, and one important difference. Then we will learn more about some of the ways to identify stress in Hul'q'umi'num'.

Preliminaries:

Stress is a rhythmic part of language, where there is a tendency to have an alternating pattern of stressed and unstressed syllables. Some languages just have one stressed syllable, either at the beginning or end, but English and Hul'q'umi'num' have a system where there can be more than one stressed syllable. The general way that linguists approach understanding stress patterns is that segments grouped into syllables, and then syllables are grouped into feet Each foot has one and only one strong syllable, which is the stressed syllable. So, if there is more than one stressed syllable, there will be more than one metrical foot. The first step in identifying where the stress is, relates to determining how many syllables there are.

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Q1: How many syllables are there in each of the following words?					
rabbit	apple		tomato	photography	
t'ilum	lumnuhw		'iluqut	le'lum'ut	
After figuring out how many syllables there are, we then need to figure out where					

After figuring out how many syllables there are, we then need to figure out where the stress falls and see if we can find a general pattern for the language. Let's start with English then apply what we learn to Hul'q'umi'num'.

English stress:

In English, the vowel in the stressed syllable is longer, louder and has a higher pitch. Pitch is like the melody or tone you use when speaking and singing. Identify the stressed syllable in the words below. One way to do this is to hum the word or tap your finger to the word as you are saying it, so you are just focused on what vowels are longer, louder, have higher pitch, etc.

banana happy photo

Q1:	What syllable is stressed counting from the end of the word?

English groups syllables into feet which have stress on the first syllable. There's a couple of different ways to indicate the grouping of syllables into feet.

One is to indicate the syllables with the following symbol: σ . Then group the syllable units σ into feet: Ft.

Q2: Draw representations of the English words in Q1. above.

Not all the stress patterns can be predicted by just counting syllables. Sometimes we need to look at the types of syllables themselves [which we won't be doing today]. And quite often we find that adding a suffix shifts the stress.

Q3: Determine where the stressed syllable is for the following words.

photo photograph photography photographic

Q4: What happens to the vowels when stress shifts?

Hul'q'umi'num' stress

Some of the general trends we found for English can be found in Hul'q'umi'num'.

- 1) Unstressed vowels reduce to schwa. So, if there is a strong vowel, that is a good clue to the location of stress.
- There is a tendency for the strong syllable to be the first syllable in a metrical foot
- 3) Suffixes and other word patterns can influence the location of stress.
- 4) There is also secondary stress, so we know that there can be more than one metrical foot in a word.

One aspect of Hul'q'umi'num' stress that is different from English relates to the types of vowels that prefer stress. Once again, schwa is special: it avoids being stressed. We can state this generalization as follows:

5) Stress tends to fall on a strong vowel, over schwa.

The general pattern, where strong syllables and strong vowels go together, can be found throughout the language with different word formation processes. For example, the vowel strengthening that occurs with progressives is an example where a weak vowel —schwa— is strengthened when it is in a strong syllable. Also, unstressed vowel reduction can be understood as preferring a weak vowel in a weak or unstressed position in the foot.

Most examples below come from Bianco (1996) *The role of sonority in the prosody of Cowichan*. There is still a lot to learn about syllable structure and stress, so these are just preliminary observations. We have seen lots of examples of point 1) above. Let's look at some examples that support 2) and 5).

Stress is marked with an accent over the stressed vowel, and all markings come from the work that Violet Bianco did for her MA thesis. The following will be groupings based on the vowel patterns and number of syllables.

(1) $2-\sigma$ words with initial stress

kw'áyukw 'to fish'

'éwu 'come here'

qélux 'digging stick'

xúlum' 'chiton'

mún'u 'child, offspring'

Q5: Where is the strong syllable in the metrical feet in (1)?

There are	e also	some	words	like	the	foll	owing

(2) $2-\sigma$ words with final stres	(2)	2)	2-σ w	ords	with	final	stres
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shumén 'enemy'

sqwuméy' 'dog'

'usúp' 'get finished with'

wutl'úts' 'stumble'

Q6: Which words follow the principle in (5)? Now let's look at words with three syllables.

(3) $3-\sigma$ words with stress on second syllable

ts'uwxílum 'Tzouhalem'

stutíwun 'neices, nephews'

hwu'álum' 'go back'

kwunánulh 'over there'

tsul'équlh 'yesterday'

Q5: Where is the foot located in the words in (3)?

Q6: Draw syllables and feet for the words in (3) in the space below.

(4) há'yul'uq wave

stl'éluqum dangerous

námut kwu (you are) welcome

páshuluqw yellow cedar

Q7: Draw syllables and feet for the words in (4)

Q8: How is the location of feet different for the words in (4) and (5)?

It seems that locating the strong syllable of a foot on a strong vowel is more important than having a foot at the end of a word. Let's see where the preference is for the foot.

(5) $3-\sigma$ words with stress on first syllable

t-hwúmutsun 'September'

yuxwule' 'bald eagle'

sil'anum 'year'

Let's look at some spectrograms to see whether stressed syllables have a higher pitch, are longer and are louder.

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Worksheet 6: Lexical Suffixes

Let's look at the following words:

(1) Ihhw=elu three people

lhhw=ey'lh three children

Ihhw=iws three ducks

Ihihw=a'qw three fish (heads)

Ihhw=elqlh three pieces of game

slhihw=ulhp three trees

lhuhw=nets three root plants

Ihhw=eenhw three plan parts

Ihhw=ulhtsup three pieces of firewood

Ihhw=unup three plots of land

lhihw=uw't-hw three houses

Ihhw=uwulh three canoes

Ihhw=ulwut three garments

Ihihw=us three dollars

Ihhw=alus three loops

Ihihw=uy'us three coils

Ihhw=als three spheres

Ihihw=umutth' three long thin objects

Ihihw=utth'e' three strands

Ihihw=uqun three containers

lhihw=e'le'ts three loads

Ihhw=umat three pieces, piles

Q1:	What is the root? Provide both the meaning of the root and the various different ways it is pronounced.
	different pronunciations of the root arise be because different processes changed the pronunciation of the root.

Q3. What processes occurred to change the pronunciation of the root?

Q2: What is the base or underlying form of the root?

These suffixes are called lexical suffixes, because the meanings are easier to define than suffixes like -ut, and they have some properties similar to roots. There are about 120 lexical suffixes in Hul'q'umi'num' (Gerdts, Hinkson, Hukari, 2002). When a lexical suffix is attached to a root, the stress can stay on the root, or shift to the suffix, and can even cause the root vowel to delete.

The following vowel changes can also be found with some lexical suffixes.

(2) =a'qw	'head'	
'atha'qwt Ihal'a'qwt	√'ath=a'qw=t √lhel'=a'qw=t	bake it aside, towards the wall: turn someone face toward wall
s'atha'qw	s=√'eth=a'qw	baked (potato, carrot), wrapped and baked by the fire
q'ikw'a'qwt	√q'ikw'=a'qw=t	bite its head
qw'uma'qwum	√qw'um=a'qw=m	pull out one's hair; lose hair
qw'uma'qwt	√qw'um=a'qw=t	pull out someone's hair; pull tops off (ex, dandelions)
ťxuma'qw	√t'xum=a'qw	six heads
yukw'a'qwt	√yukw'=a'qw=t	scrub it (head)
yum'q'a'qwt yut'a'qwum yut'a'qwt	√yumq'=a'qw=t √yut'=a'qw=m √yut'=a'qw=t	scrub someone's head ceremonially shampoo, scrub your head scrub someone's head

Q4. What vowel change occurs in the words above?

Now let's look at the following words to see the vowel change.

(3) =tses 'hand'

nugw'tsus √nagw'=tses put your hand on something dirty √qiq'=tses handcuffed, hands or hand tied quq'tsus √gwul'u=tses qwul'utsus cedar boughs rattles (hand rattles) shulmuhwtsus √shul=muhw=tses gooseberry bush t'um'hwtsus √t'em'hw=tses change hands (paddling, chop wood) ts'ultsus √ts'al=tses hammer hand: get hit on the hand √tth'as=tses tth'ustsus

skwuschus $s=\sqrt{kwus}=tses$ adze sts'ushtutsus $s=\sqrt{ts}$ 'esht=tses branch

sxutl'tsustun s=√xetl'=tses=ten form for gillnet=making

(for ex, a wood square)

Q5: What vowel change occurs in the words in (3)?

(4)

le'tsus √le'=tses basket: open=weave

hwme'tsustum hw=√me'=tses=t=m take it out of someone's hand

Q6: Why are the words in (4) unexpected?

Hul'q'umi'num' avoids having a syllable ending in u'.

Q7: How is this observation helpful in understanding the pattern in (4)?

The following list of words have another suffix with the shape =CeC

(5) =shen 'foot'

'uxshun \(\sqrt{ix} = \shrt{shen}\) scrape one's foot accidentally

lhukw'shun √lhikw'=shen trip

nuqw'shun √naqw'=shen step on something dirty (esp. excrement)

xutl'shun $\sqrt{\text{xetl'}}$ =shen rain, pouring rain (v.)

tth'usshun √tth'as=shen hammer foot: get hit on the foot

p'ulhqw'shun √p'ulhqw'=shen twist ankle

q'ulq'shun $\sqrt{q'ulq'}$ =shen caught: foot gets caught t'um'shun $\sqrt{t'um'}$ =shen hit foot (get hit on the foot)

'ulhupshun $\sqrt{\text{ulhep=shen}}$ slip: foot slips (for ex while walking on board)

xwumshun √xwum=shen fast walker, walk fast

Q8: What vowel change occurs in the words in (5)?

(6)

me'shun $\sqrt{\text{me'}}$ =shen come off: shoe comes off

sq'a'shun $s=\sqrt{q'a'}=shen$ partner sts'e'shun $s=\sqrt{ts'}e'=shen$ rapids

Q9: What is happening to the root vowel in (6)? Explain why.

Now look at the words below. These have a change to the pronunciation of a consonant.

(7)

thul'shutun $\sqrt{\text{thil'}}=\text{shen}=\text{ten}$ mat: foot=mat by the bed puthshutun $\sqrt{\text{peth}}=\text{shen}=\text{ten}$ mat: foot=mat by the bed

xutl'shutun √xetl'=shen=ten sail boom

mulhwshut √mulhw=shen=t grease the wheels

thuq'shut \sqrt{t} hq'u=shen=t poke or pierce someone's foot or leg tl'eshut \sqrt{t} l'e=shen=t invite him/her to a dance, potlatch

yuxwshut $\sqrt{\text{yuxw}}=\text{shen}=\text{t}$ release the handbrake skw'i'shutun s= $\sqrt{\text{kw'i'}}=\text{shen}=\text{ten}$ ladder, step=ladder

Q10: What change to the pronunciation			of a consonant is happening?
Finally, it is as can be	•	. •	bs from words with lots of suffixes,
(8)	=shen and	d PROG	
q'ulq'shut q'el'q'shut		$\sqrt{q'ulq'}$ =shen=t $\sqrt{q'ulq'}$ =shen=t=PROG	bind someone's foot wrapping someone's foot
tl'umshenu tl'atl'um'sh		√tl'am=shen=m √tl'am=shen=m=PROG	try on shoes trying on shoes
Q11: What	is the pro	gressive form based on?	Put a check by the correct answer.
The r	non-progre	ssive form?	Or the underlying root?

lemuls Iumnuhw	√lem-els √lem-nehw	look: select, choose see
lumnamu	√lem-nehw-amu √lem-nehw-DIM-PL-	see you, saw you
hulil'e'lum'nuhw	PROG	seeing little things
hiil'e'lum'nuhw	√lem-nehw-DIM-PROG	seeing little thing
lumnewut	√lem-nehw-ewut	see PASS
lumnum	√lem-nehw-m	see PASS
le'lum'num'	√lem-nehw-m-PROG	see: being seen PASS
lumlumnuhw	√lem-nehw-PL	see them
le'lum'nuhw	√lem-nehw-PROG	seeing it
lumstuhw	√lem-stuhw	show (him,her)
lumstalu	√lem-stuhw-alu	show you-people
lumstam'sh	√lem-stuhw-am'sh	show me
	√lem-stuhw-am'sh-	
le'lum'stam'sh	PROG	showing me
lumstamu	√lem-stuhw-amu	show you
	/	showing him/her something
le'lum'stum'	√lem-stuhw-m-PROG	PASS
lemut	√lem-t	look at
hiil'e'lum'ut	√lem-t-DIM-PROG	looking at it DIM
1. (1. /)	/1	looking: keep looking,
lim'lum'et	√lem-t-DUR-PL	checking on
lumlemut	√lem-t-PL	look at them
lemlum'ut	√lem-t-PL-PROG	looking at them
le'lum'ut	√lem-t-PROG	looking at; looking after
lum'lum'ut	√lem-t-PROG-PL	looking at them several times,
lamuthut	√lem-that	checking every once in a while look at self, look after self
iamutmut	y letti-cilac	looking after self, being
la'lum'uthut	√lem-that-PROG	careful (concerned)
lumtsunum	√lem-tsun-m	look around, as at a stop sign
lumulnust	√lem-ulnus-t	look at someone's teeth
lemuxutun	√lem-uxen-ten	watchman
le'lum'i'lh	√lem-uylh-PROG	babysit
le'lum'uy'ulh	√lem-uylh-PROG	babysitting
lil'e'lum'ilh	√lem-uylh-PROG-DIM	babysit (young child babysitting a baby) DIM
lemilhtun	√lem-uylh-ten	babysitter
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