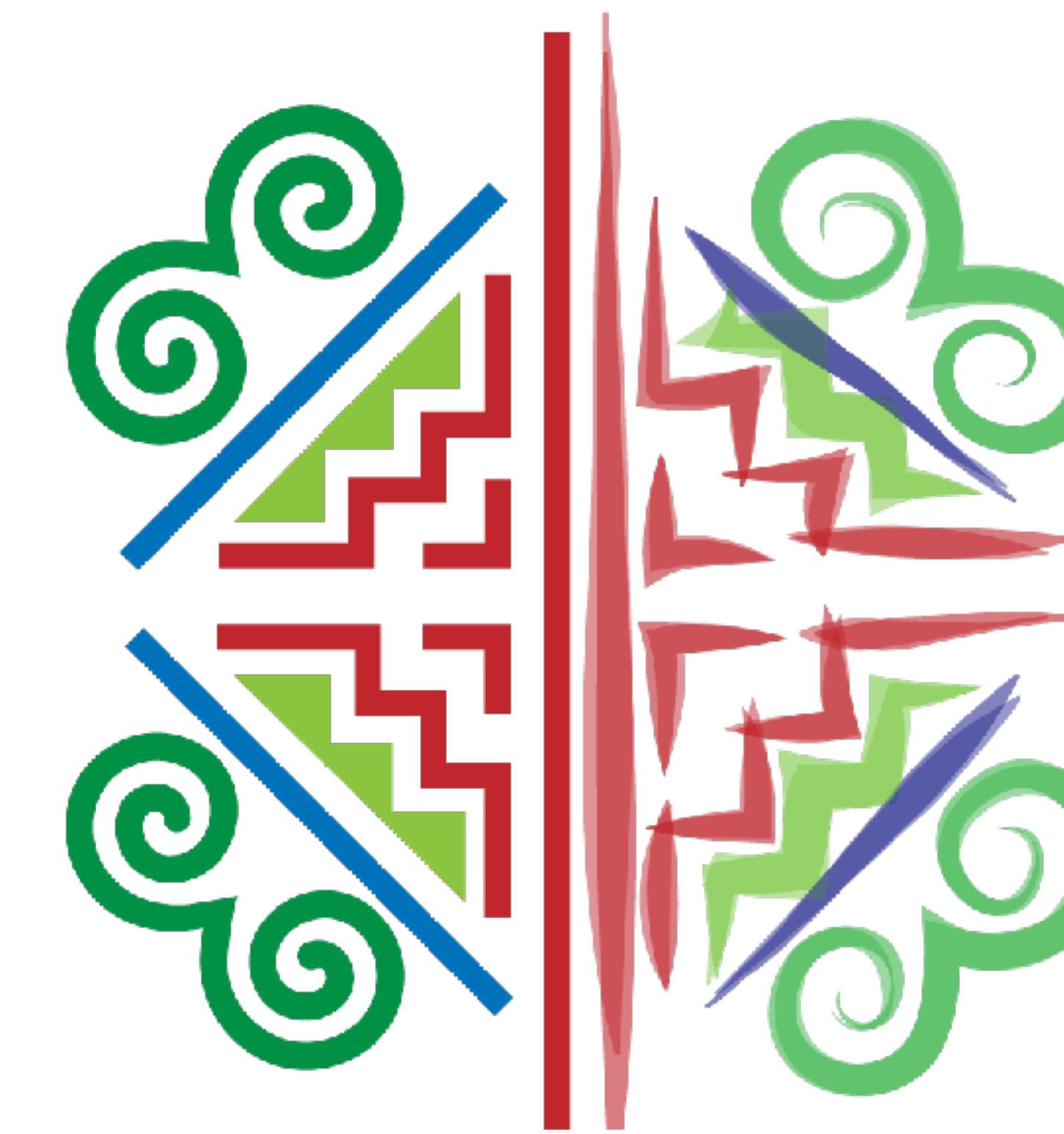




SPEAKING MUSICALLY.

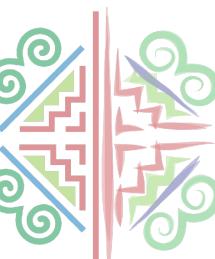
THE HMONG WHISTLED LANGUAGE(S)



NENG NOW

WHISTLED LANGUAGE

- ~70 whistled languages (Julien Meyer, University of Grenoble)
 - ~7,000 total global languages
- Hmong speaks with more than just whistles:
 - Aerophones
 - edge-blown (*raj ntaws*)
 - free reed (*raj nplaim, qeej*)
 - double reeds (*raj ntees, kav nplej*)
 - uropygial reed (*raj lev les, kav nplej, leaf*)
 - Lamellophone (*ncas, leaf*)
 - Internal duct flutes (*raj ntsaws, raj hliav ncauj, raj nplooj*)
 - Composite Chordophones (*nkauj nog ncas / xim xaus*)

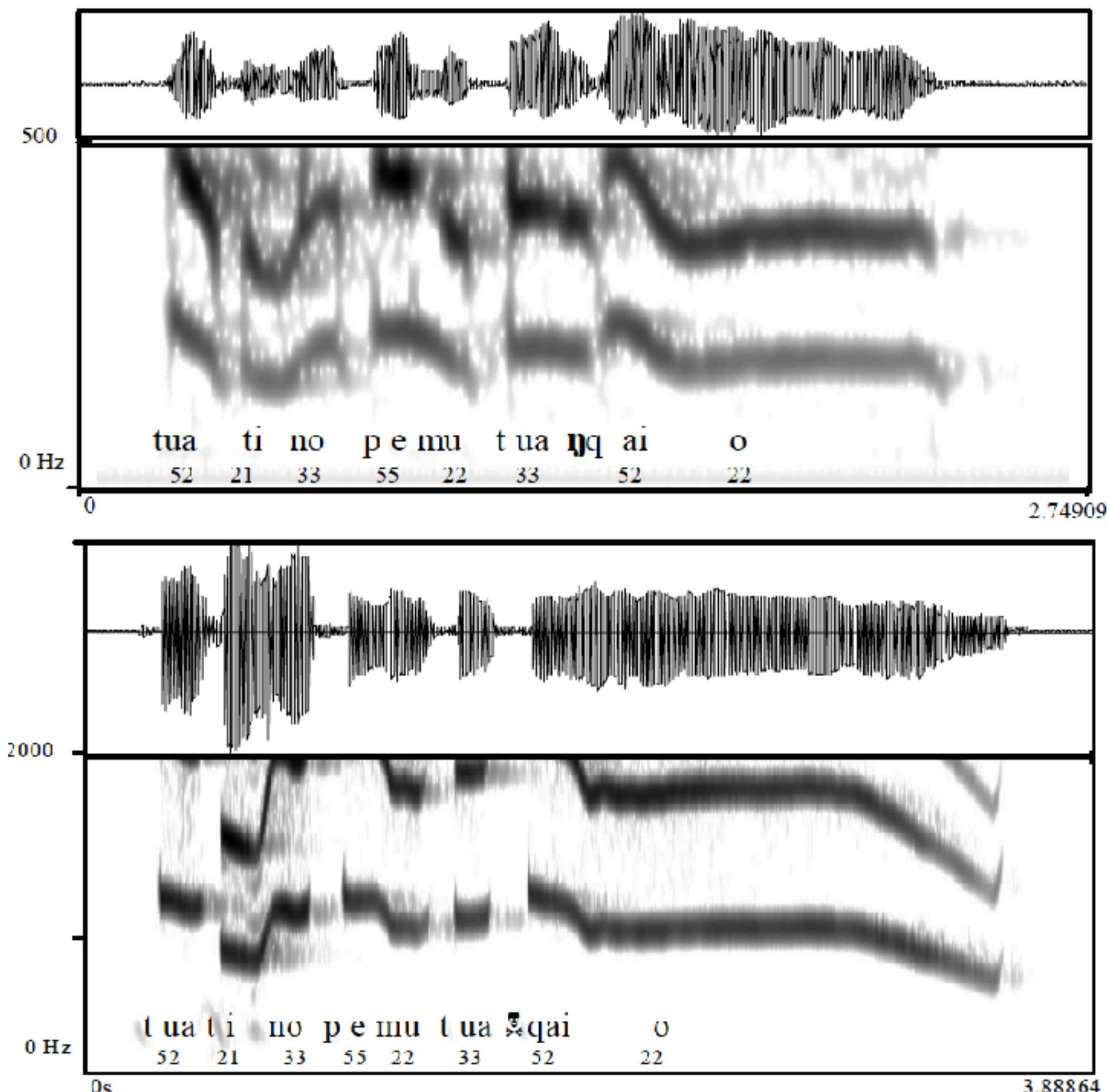


SOCIAL SETTINGS

- Languages, best learned through immersion
 - Buffalo, Leaves, and kids
 - Ncas, kwv txhiaj, and txiv xaiv
- Music and Emotion
 - Largely love
 - War and diaspora—death, loneliness, longing
 - Patriarchy—women vs. men (Hmong vs. Chinanteco)
- Age and life
 - Orphans—Hmong people metaphor
 - Twenty-something-year old...(like me...)
 - daj deev vs. tshoob vs. performance
 - Death, religion, and the afterlife

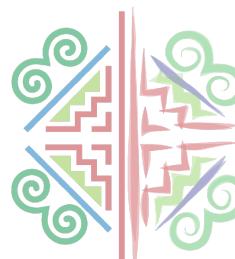


LANGUAGE MIMICRY



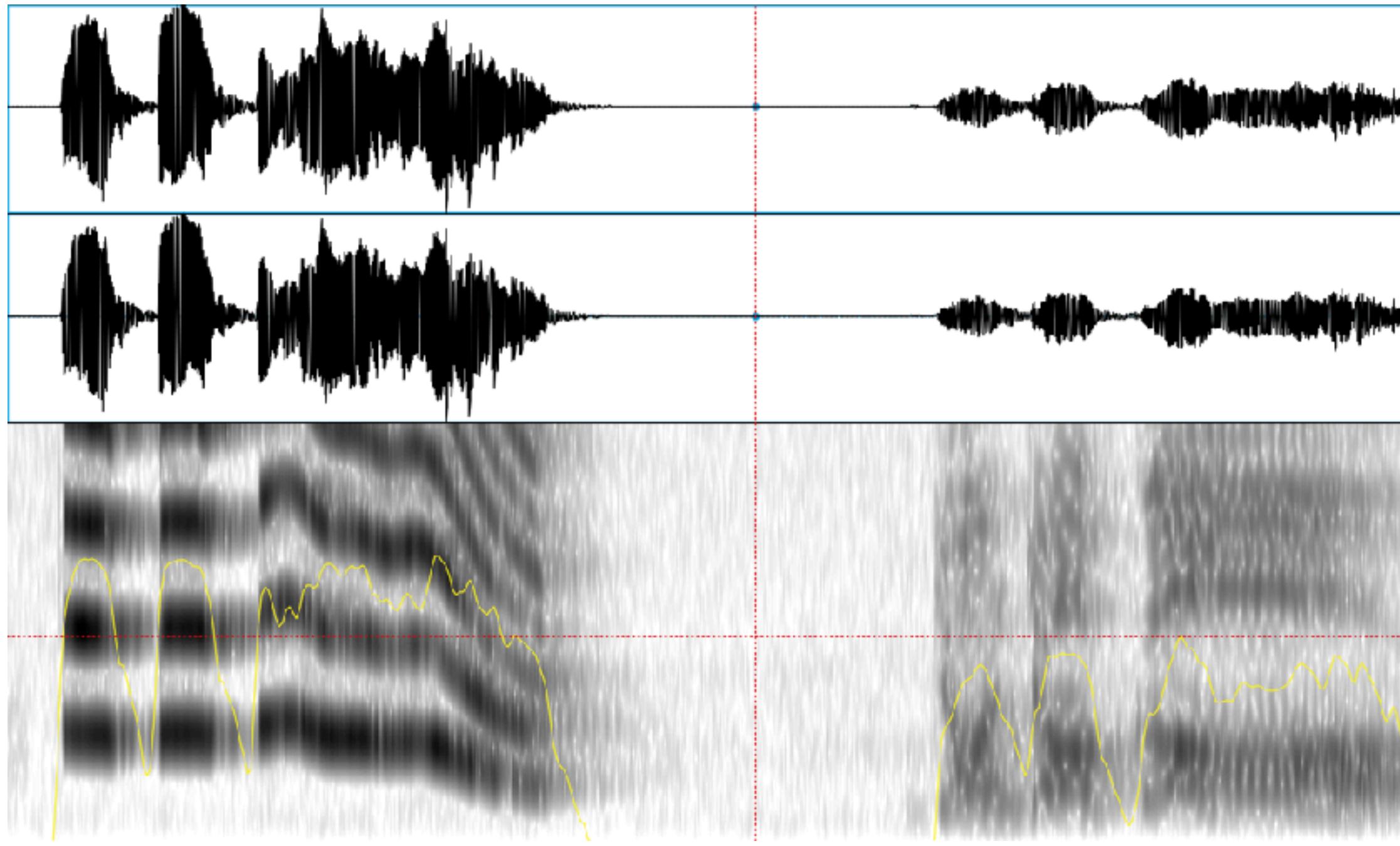
- Far from perfect
 - mind reading vs. speaking different languages
- Level of understanding varies based on:
 - usually there is 100% understanding of subject
 - subject of conversation
 - ability of whistlers
 - familiarity of whistlers with each other
 - overlap of musical styles

Raillard et al., *Phonological and Phonetic aspects of whistled languages*, 2005



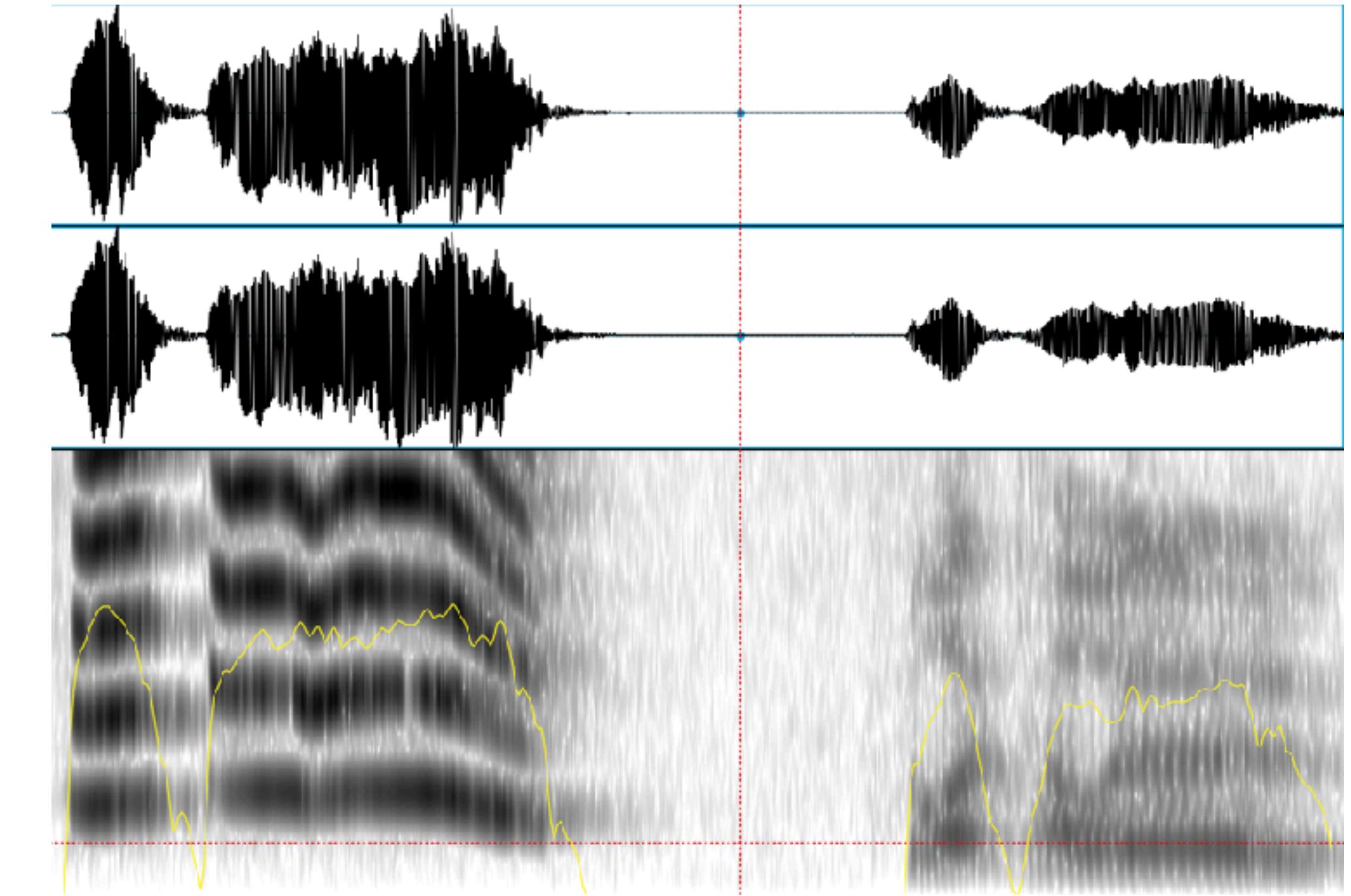
MUSICAL WORDS OF THE LEAF

Musical Leaf vs. Spoken Spectrograms



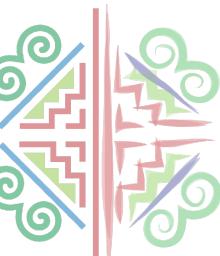
“nco nco koj os”

(I miss you a lot)



“hluas nraug aw”

(oh boyfriend)



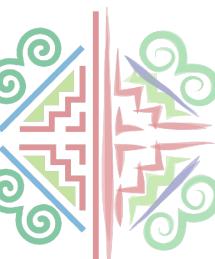
MUSIC STRUCTURE



DO - RE - MI - FA - SOL - LA - TI - DO

- HMong tones overview

- neeb ("mi" tone) — shaman "b" — high — mi
 - neev nee_ ("re" tone) — stilts "_" — mid — re
 - nees ("do" tone) — horse "s" — low — do
 - neej — life
 - (h)neev — bow (bow & arrow)
 - dab neem — hunting spirits
 - neeg — person
 - need — "d" tone varies, often question
- "do, re, mi..." — "nees, nee, neeb"

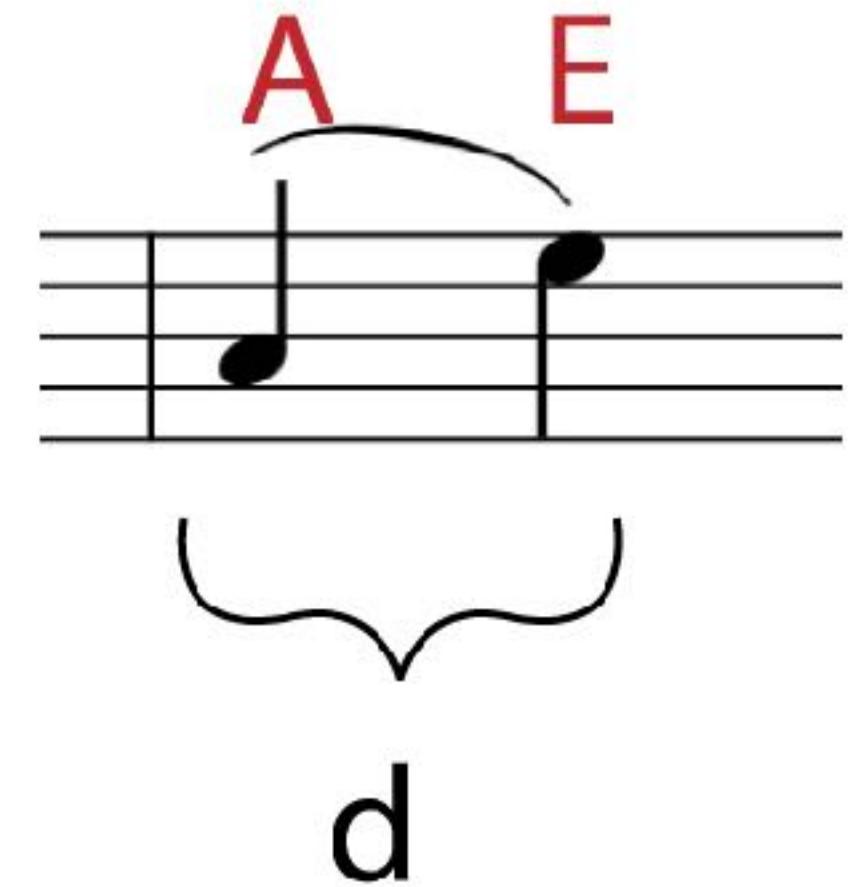
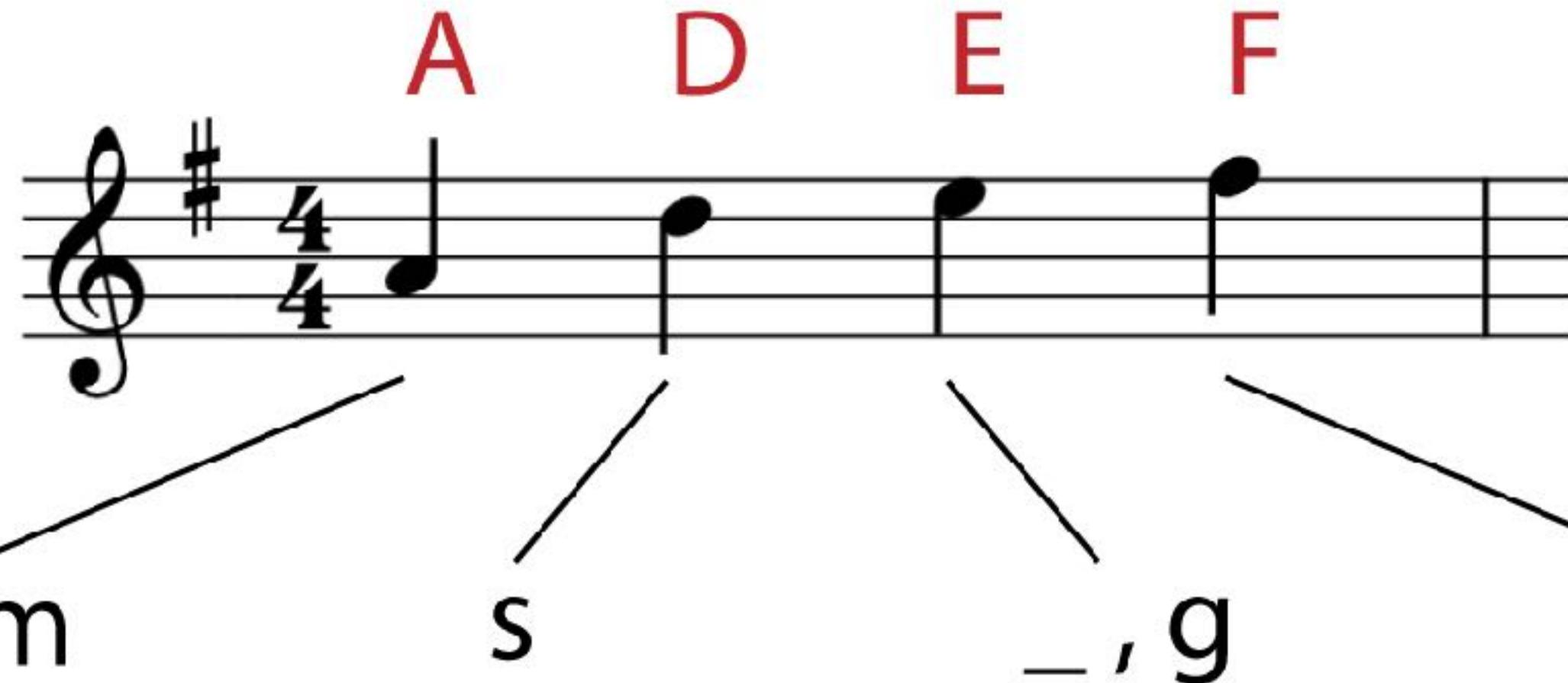


MIMICKING TONES

In the Key of G

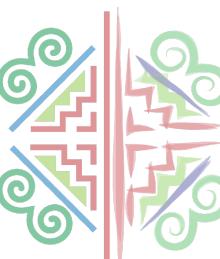
Note(s):

Tone(s):



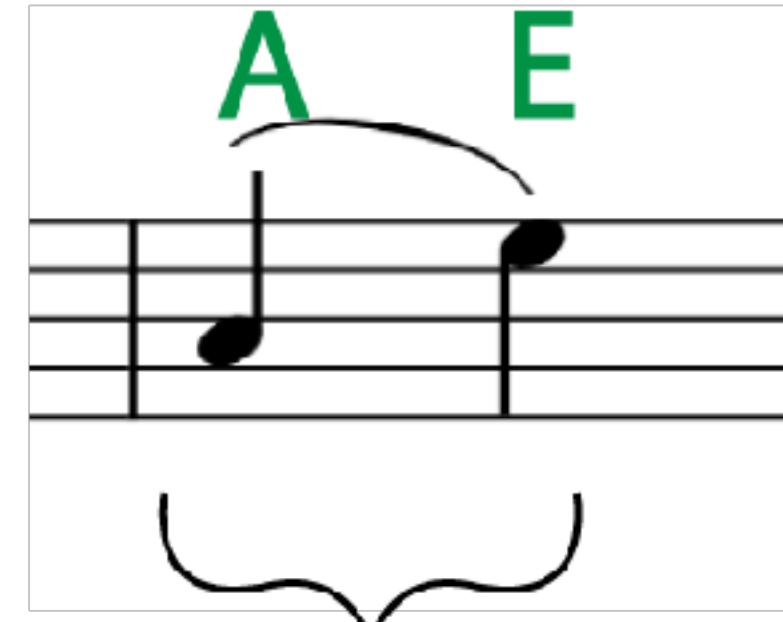
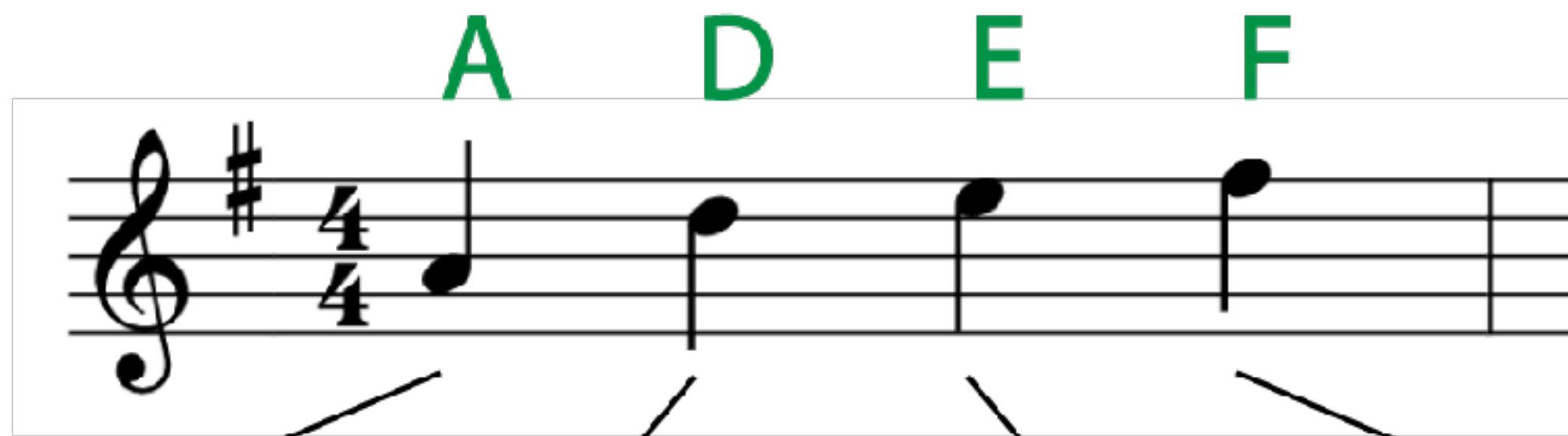
“..cas niam tsav ntuj nrig os kuv tus me hluas nkauj tus zoo zoo nkauj aw..”

...oh, it is so clear, my sweet beautiful beautiful girl...

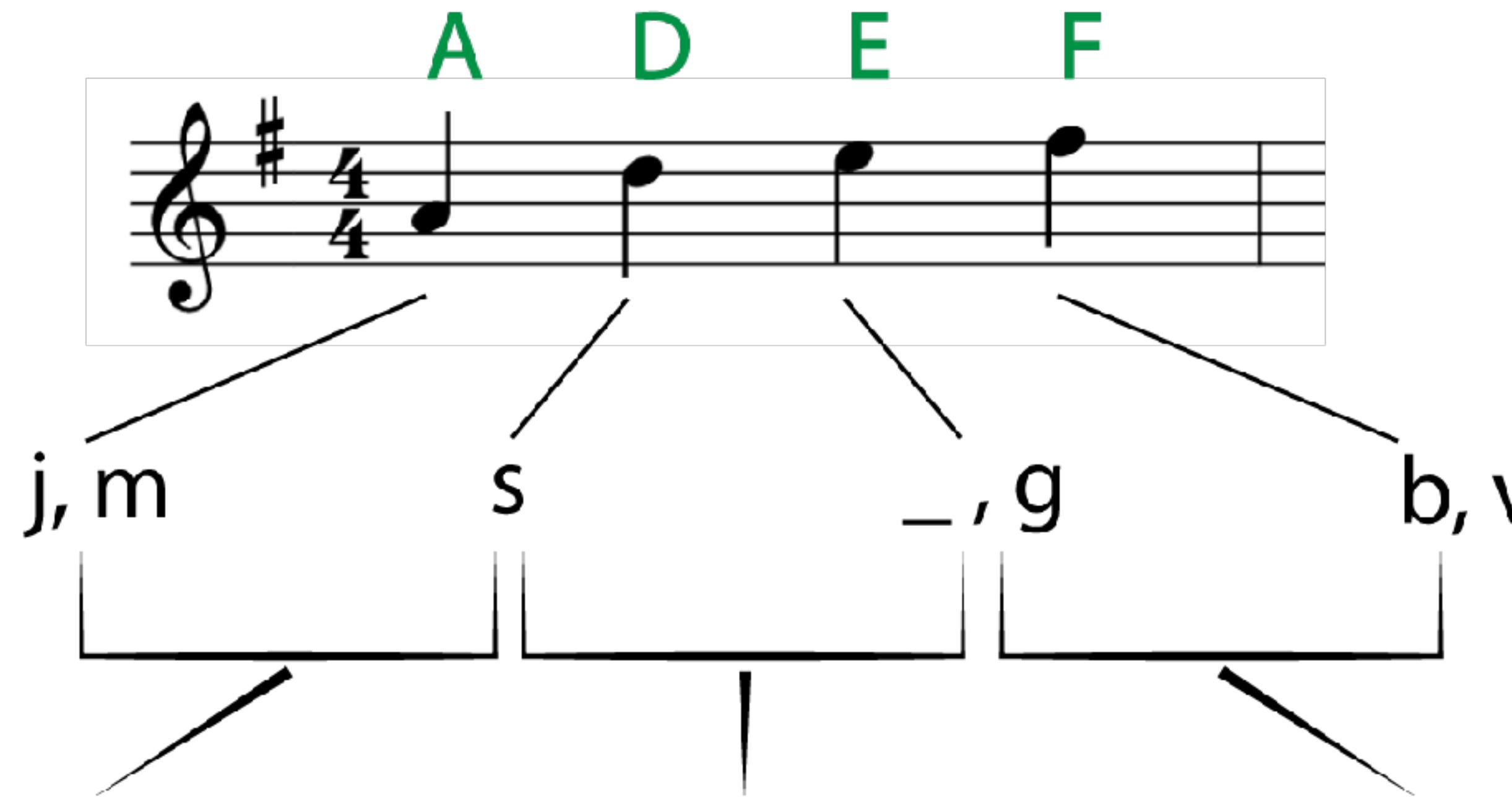


MUSICAL INTERVALS (OTHER KEYS)

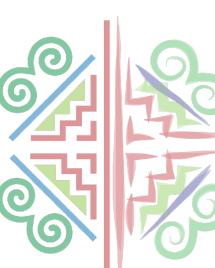
Note(s):



Tone(s):



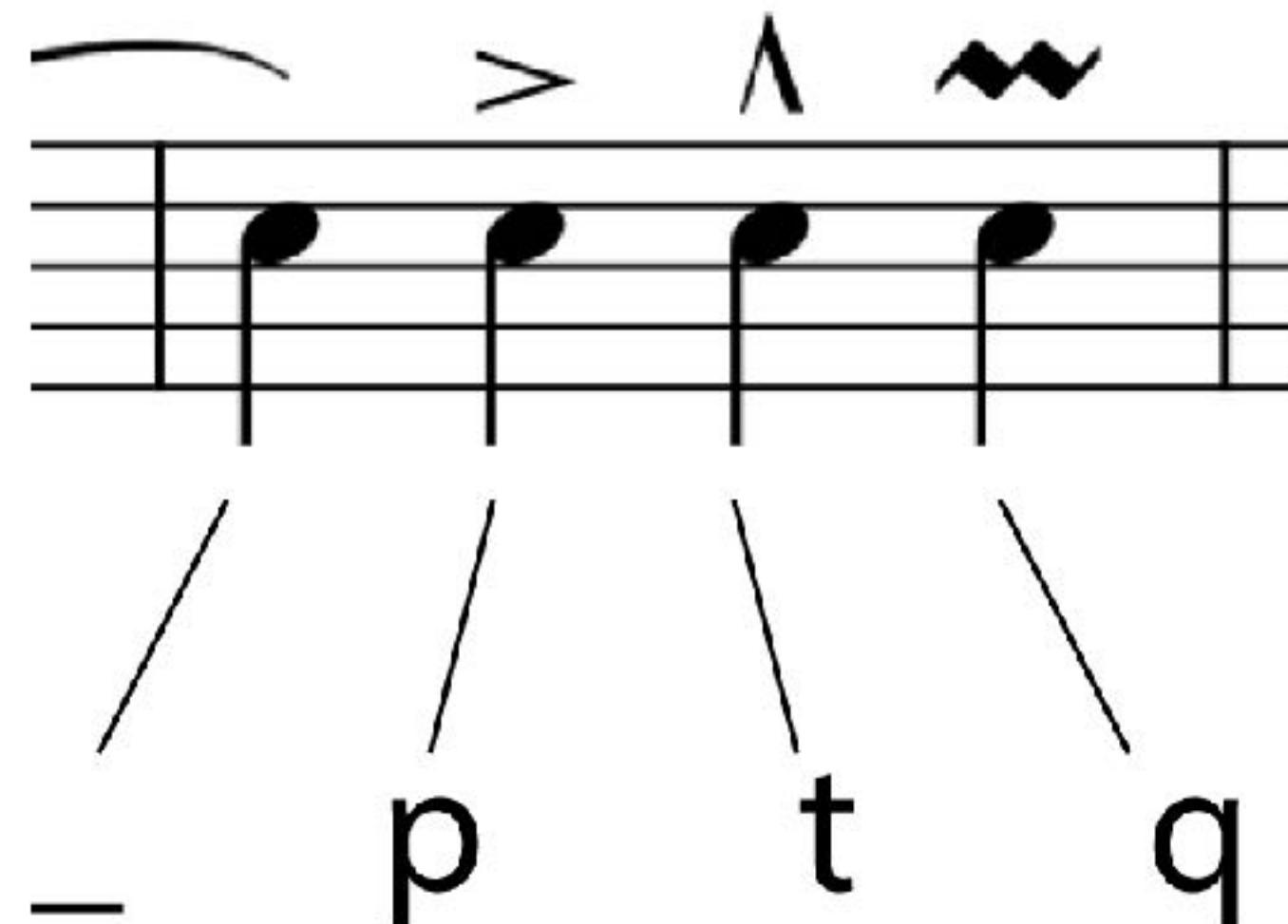
Intervals(s):	<ul style="list-style-type: none">• $A \rightarrow D$• <i>5 half-steps</i>• <i>Perfect fourth</i>	<ul style="list-style-type: none">• $D \rightarrow E$• <i>2 half-steps</i>• <i>1 whole step</i>	<ul style="list-style-type: none">• $E \rightarrow F \#$• <i>2 half-steps</i>• <i>1 whole step</i>
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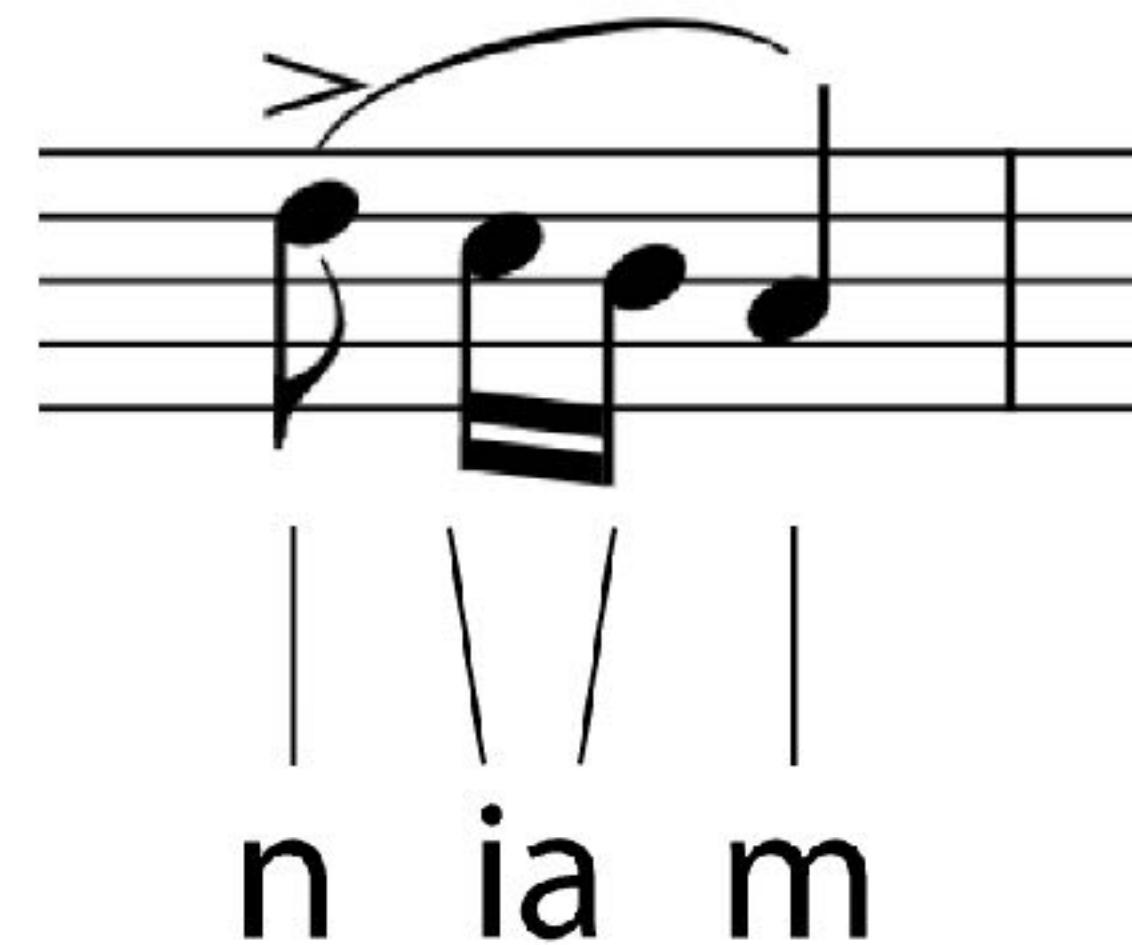
CONSONANTS & VOWELS

- Use of **ornamentation**:
 - "Soft" vs. "Hard" sounding consonants — "_" **vs.** "T" **vs.** "P" **vs.** "Q"
 - "ua" "ia" — "two-part" sounding vowels

eg. "_, p, t, q"
58 total consonants



eg. "niam"
mom/will

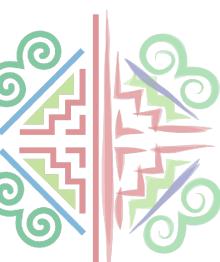


LANGUAGE STRUCTURE



LONG FORM DESCRIPTORS

- Gives more chances to understand a phrase — “hmlloog raug” — **and adds more music!**
- 3rd-person usage
 - “**kuv**” vs. “txiv leej tub li **kuv**” & “**koj**” vs. “niam leej ntxhais li **koj**”
 - “I” vs. “*a fellow man like me*” & “you” vs. “*a dear woman like you*”
- Action descriptors — says same thing multiple times
 - “**txog**” vs. “yuam tus roj, sua tus hneev, tuaj **txog** li ntua”
 - “arrive” vs. “*make a path, leave your footprints, to arrive here now*”
- Formal vocabulary “reserved” for whistled language
 - “**tsev saum roob**” vs. “**tsev txooj taug qas lias txawm lom rau nruab toj**”
 - “house” vs “*real estate property?*”— comparable to written vs. spoken English



RESERVED & LOST VOCABULARY

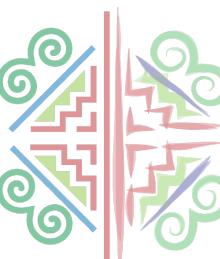
- Hmong religion, belief, and mythology encourage use of “evasive terms”
 - eg. “neem”

neem	The spirits of the woods or the spirits of hunting which some serve in order to gain skill and success in hunting.	
(a) coj neem	To serve or worship the hunting spirits.	
(b) coj dab neem	To serve or worship the hunting spirits.	
neem ntixhib (and) neem mos	Two different kinds of hunting spirits each with its observances.	
Note:	Those who worship or serve these spirits (coj dab neem) use some special evasive language to deceive the spirits and avoid calamity or ill fortune. For example:	
Evasive Term	Plain Speech	Meaning
hle lawm lauj	ua tag lawm lauj	Finished
tshav ntuj lawm	nquag lawm	Recovered
hov txuas	noj su	Eat lunch
nqia hnyuv	tshaib plab	Hungry
hov taus	ntov ntoo	Down a tree
los so	los noj mov	Come and eat
peb xuas kab	peb mus tsev	We go home.

religion

largely unused today

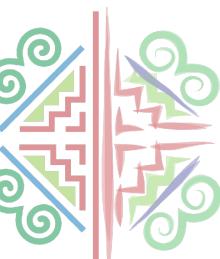
- Heimbach, Cornell University, *White–Hmong English Dictionary*, 1979



REDUPLICATION REDUPLICATION

Different structures:

- Basic reduplication for emphasis/clarity:
 - *khiav khiav* — “run run” meaning “run really far”
 - *zoo zoo nkauj* — “good good looking” meaning “really good looking”
- Two-syllable words/phrases gain articles on both syllables
 - tus txheeb ze, me roj ntsha (**close family**)
 - **tus** txheeb **tus** ze, **me** roj **me** ntsha
 - dab tuag (**ugly**)
 - **dab** phen **dab** tuag
 - vaj ncuab (**surname vang**)
 - vaj **li** ncuab **li** koj **e** (“e” is repeated tone, discourse marker, almost never left out)

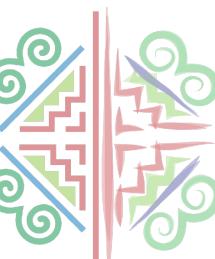


REDUPLICATION

- Abnormally high usage of reduplication in comparison to spoken language
 - Gives more chances to understand a phrase—and gives flow/rhyming “clues” (lus sib nrhos)

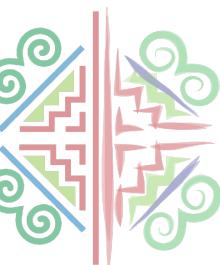
ntuj es ntuj es,
cas txiv leej tub li kuv es niam yuav **khiav khiav** tuaj txog,
nej rab mi teb rooj ntug no es niam **deb deb** tag npaum no es,
niam yuav tso **leej** niam, **leej** txiv, **leej** kwv, **leej** tij,
pov tseg rau qab mi teb rooj ntug **deb deb** mus tom ub es,
niam yuav tsis muaj **tus** txheeb **tus** ze hais **zoo zoo** rau kuv es,
cas niam yuav **kho kho** siab ua luaj no es,
yuav ciaj los yuav tuag **os hmoob os hmoob** aw,
os yuad, **os** yom?

- Reduplication in every line
- Still makes sense without
- Normal in whistled language



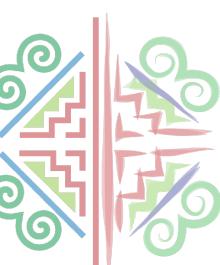
DISCOURSE MARKERS

- “es, os, i, na, li, pes, sis”...etc.
 - *Lus tas haj*, “plain words” in literal HMong translation
 - most of the time, no real concrete meaning
 - adds to music, rhyme, rhythm, etc.
 - adds breaks
 - ends verses
 - often ambiguous
 - substitute for in-person speaking expression

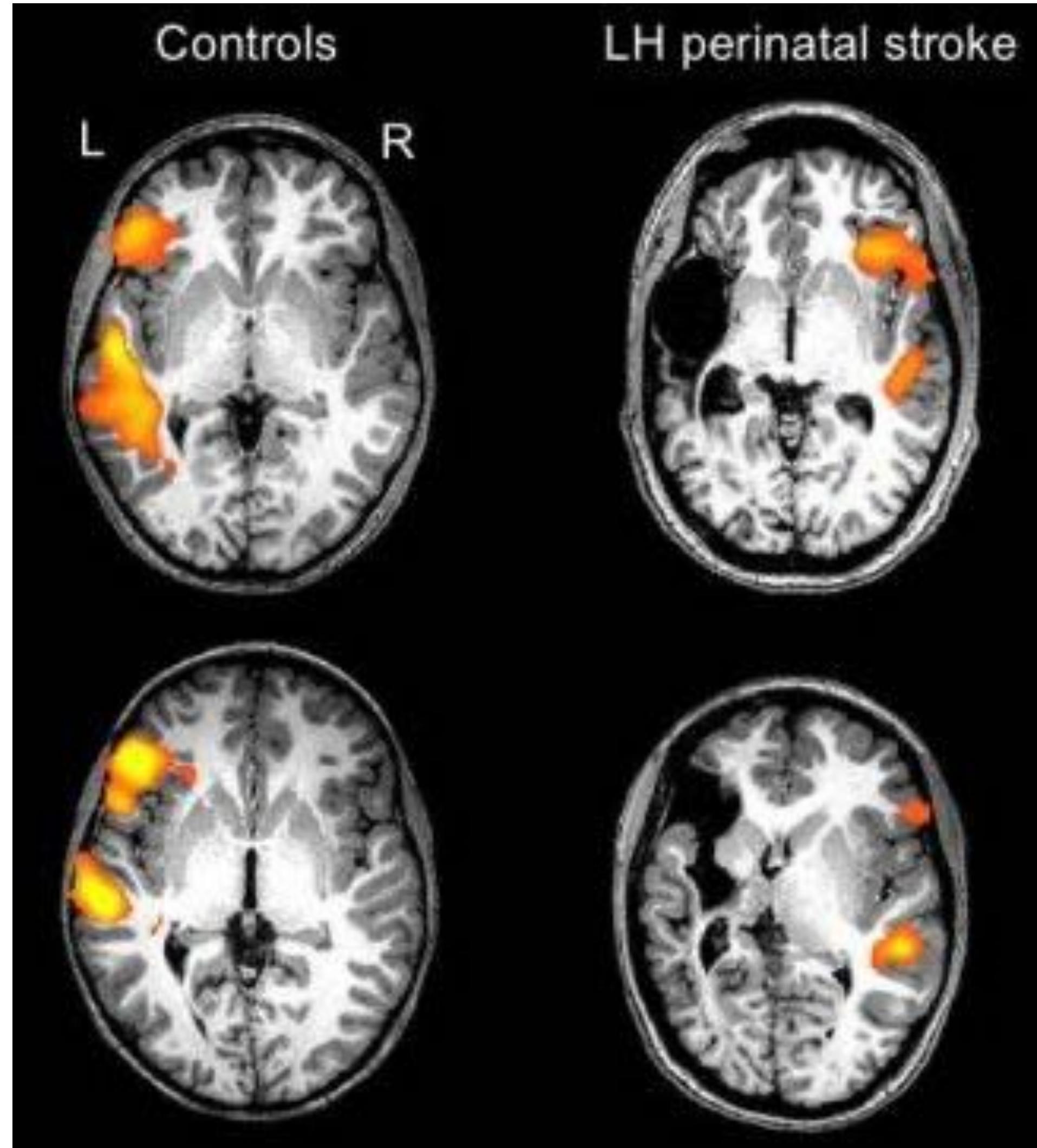


ENDING & BEGINNING (PAUS NTSIS)

- Lus Hauv Paus (beginning words)
 - “ntuj es, ntuj es” “pwm, pwm, e” “pwm pwm si ceb” “nib yai” “om caum hau”
 - Indicates style of music
 - Indicates new train of thought + creates time to think
 - dictates musical octave
 - Also varies heavily based on region
- Lus Xaus (ending words)
 - “om yuad” “om yom” “nkauj ntxhais aw” “zoo tas lub laj xeeb” “chim tas lub laj xeeb”
 - “okay, I’m done talking now”
 - ends in “good-sounding” musical note
 - Adds mythology into emotion — “laj xeeb”



NEUROLINGUISTICS



Newport et al., *Developmental Plasticity and Language Reorganization After Pediatric Stroke*, 2018

Güntürkün et al., *Whistled Turkish alters language asymmetries*, 2015

