

Sahaptin Intonational Phonology*

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Characteristics of word-level prosody

Sahaptin like a pitch accent language (assuming three types of prosodic systems: stress, pitch-accent, tone (McCawley 1978, Yip 2002, much other work))

- Unpredictable location of accent: [wjáɳawi]- ‘arrive’, [anáwi]- ‘be hungry’, [k^wájawí] ‘mountain lion’
- Surface contrasts on monosyllables. accented vs. unaccented: [kú]- ‘do’, [ku] ‘and’; [húu] ‘hey’, [uu] ‘or’
- Underlying contrasts on morphemes.
 - ❖ all lexical morphemes accented: e.g. [kú]- ‘do’
 - ❖ grammatical morphemes
 - some accented: [pá]- inverse
 - some unaccented: [ku] ‘and’, [pa]- 3pl nominative
- Phonological phenomena. one surface accent per word, predictable accent shifts and deletions (Hargus and Beavert 2006)
- Pitch contour. ‘stress and high tone are one phenomenon in northern Sahaptin; they are very strongly marked in northwest Sahaptin’. (Jacobs 1931:117)

‘short vowels have high tone’ (Jacobs 1931) ([tk^walá] ‘small freshwater fish’)

t k^w a l á

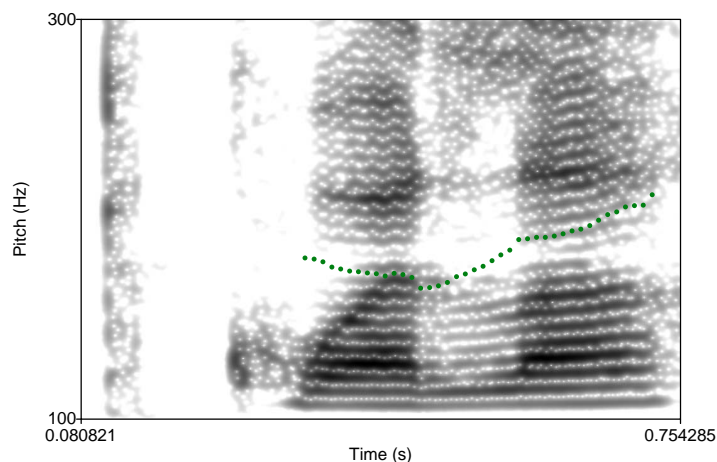


Figure 1. Short vowel with high pitch.

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‘long vowels or diphthongs in accented syllables have falling tone, high to normal.’
(Jacobs 1931) ([k^wl^háa] ‘slight’)

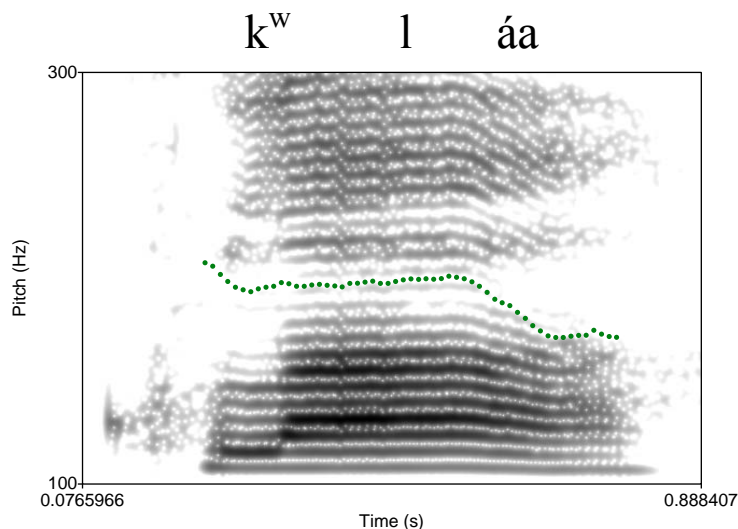


Figure 2. Long vowel with falling pitch.

Phonetic correlates of stress: higher pitch, greater intensity (but not longer duration)
(Hargus and Beavert 2005)

Questions about sentence-level prosody

- What, if any, intonational tones can be identified?
 - Are there boundary tones associated with different sentence types?
 - Are there nuclear pitch accents apart from lexical pitch accents associated with different sentence types?

Materials

- Recordings to accompany Beavert and Hargus to appear
 - 4434 sentences, questions
 - “out-of-the-blue” sentences should minimize possible complications involving focus
- Beavert is a native speaker of the Yakima (Yakama) dialect (NW Sahaptin)
- Examined declarative sentences, wh- questions, yes/no questions

Declarative sentences

- General syntactic characteristics of Sahaptin
 - Non-configurational: pragmatically determined order of major sentence constituents (Rigsby and Rude 1996)
 - Nominal constituents
 - Elaborate case system
 - Head-final

- Intonational characteristics
 - Most declarative sentence lack nuclear pitch accents: pitch differences between accents probably not significant.

Miimápa iníitpa áwtkwʃ áwa atʃʃiix.
 in.old in.house ceiling its.is worn out
 ‘The ceiling in the old house is worn out.’

miimápa iníitpa áwtkwʃ áwa atʃʃiix

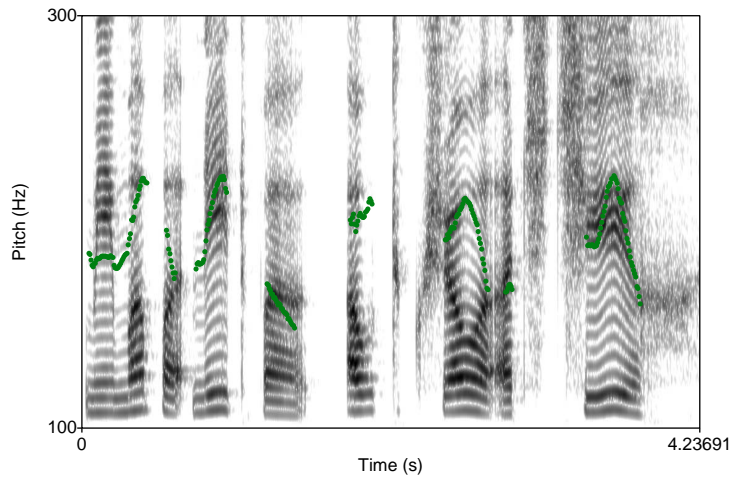


Figure 3. Notice similarity of highest pitches in each word.

- Some sentences show evidence of intonational pitch accents: Semantic effect is added emphasis.

Náxʃ ájat iwatʃá n̄mniwíit xáaʃ páwinitpa.
 one woman she.was really aggressive at.give-away
 ‘One woman was really aggressive at the give-away.’

náxʃ ájat iwatʃá n̄mniwíit xáaʃ páwinitpa

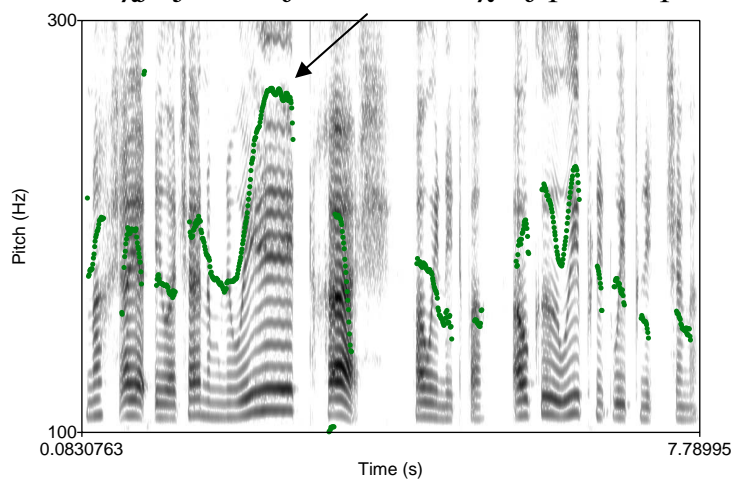


Figure 4. Pitch accent on [n̄mniwíit]

- General absence of evidence for boundary tones
 - Lack of downdrift or updrift (see Fig. 3)
 - No sentence-final fall

Awkuniik patún ápxwʃa tʃjawitmi.
 continuing things his.are.scattered of.dead.person
 ‘The dead person’s things remain scattered around.’

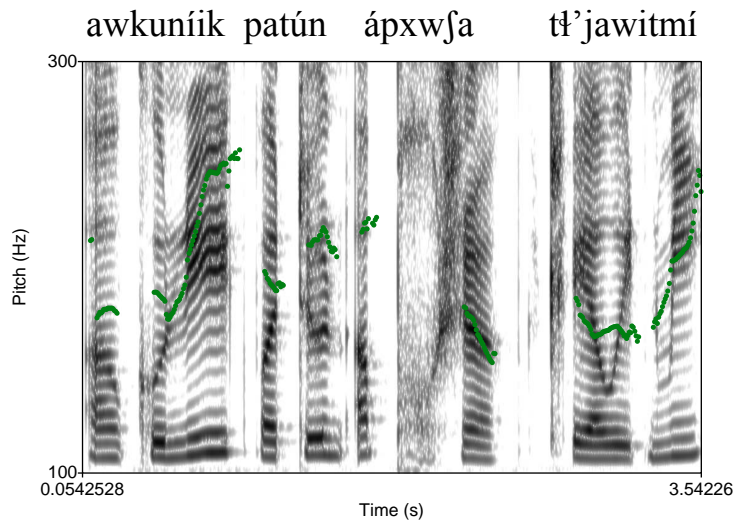


Figure 5. No sentence-final fall

Wh- questions

- Syntactic structure of wh- questions
 - Wh- word always sentence-initial
- Intonational characteristics of wh- questions: like declaratives
 - In the general case, likely non-significant differences in pitch among accented syllables

Mumán=maʃ wá ítʃi káa?
 how.old=your is this car
 ‘How old is your car?’

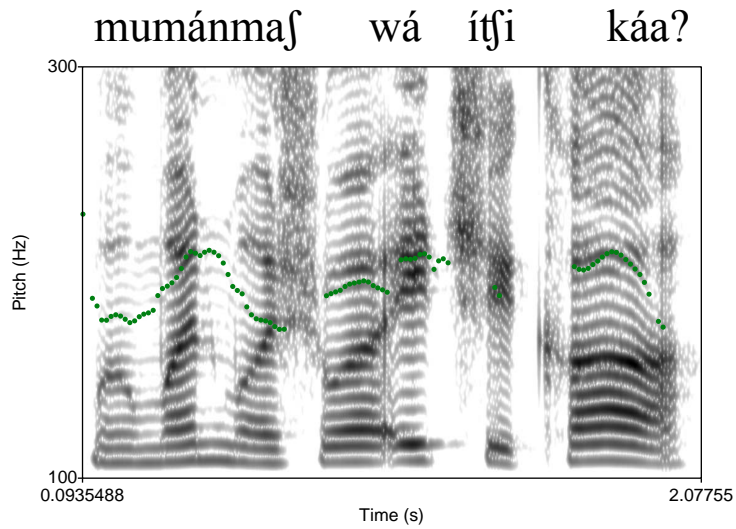


Figure 6. Notice similarity of highest pitches in each word.

- No sentence-final fall

ʃín=maʃ wá ptʃá?
 who=your is mother
 ‘Who’s your mother?’

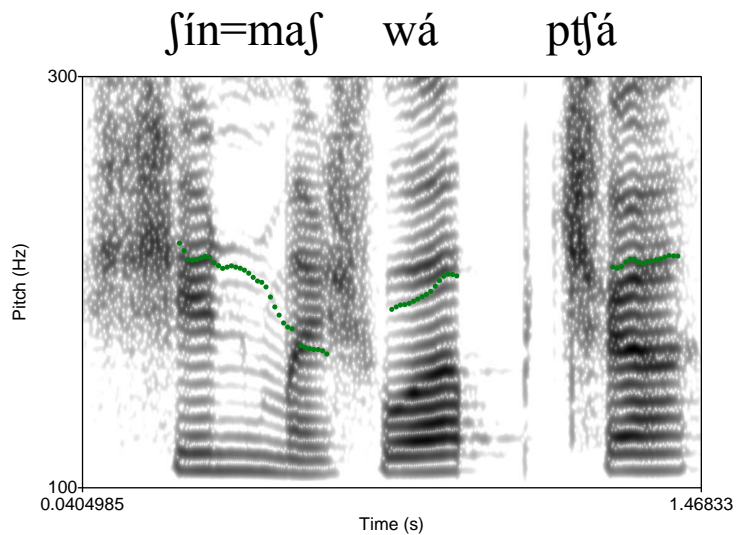


Figure 7. No final fall in pitch.

Intonational pitch accents in some wh-questions: higher than average accented syllables

ʃín iwá pínk?
 who he.is he
 ‘Who is he?’

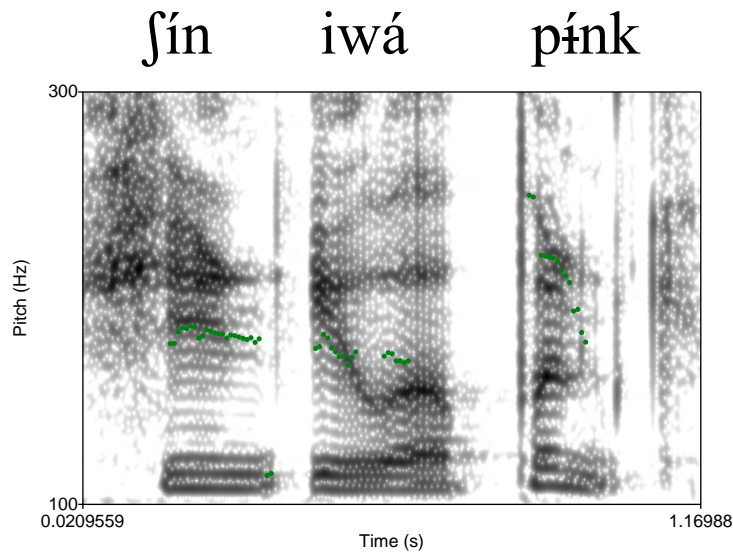


Figure 8. Phrasal accent on [pínk].

Yes-no questions

- Syntactic structure of yes-no questions
 - Frequent but not obligatory sentence-initial yes-no question word ([míʃ], [wáat] (polite))
 - Frequent but not obligatory sentence-final glottal stop, especially after sonorants
- Intonational characteristics of yes-no questions
 - Rightmost accented syllable in sentence usually highest in pitch.
 - often likely significantly higher than other accented words in question

Áw=nam wá wíʃúwani??

now=you are ready-Q

‘Are you ready now?’

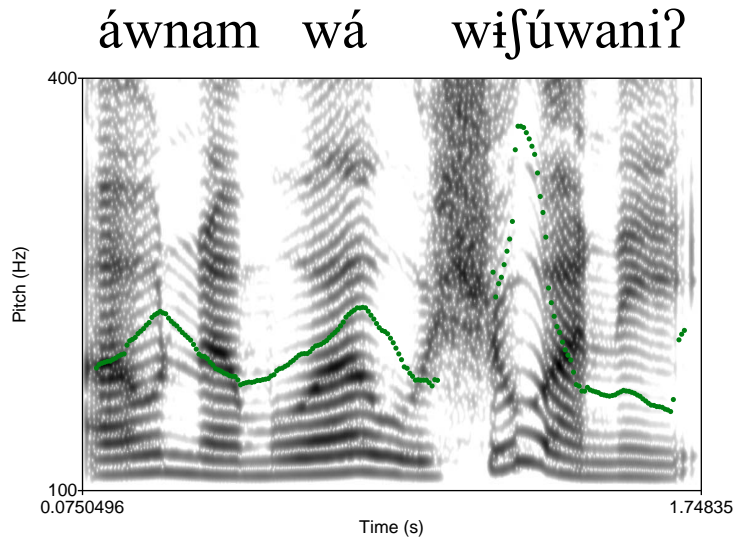


Figure 9. Yes-no question with extra high pitch on sentence-final accented syllable.

- No final fall on short vowels even when followed by [ʔ]

Íŧi=matas̆ wá imamínk qaylí??
 this=your.pl is your.pl shoe-Q
 ‘Are these your (pl.) shoes?’

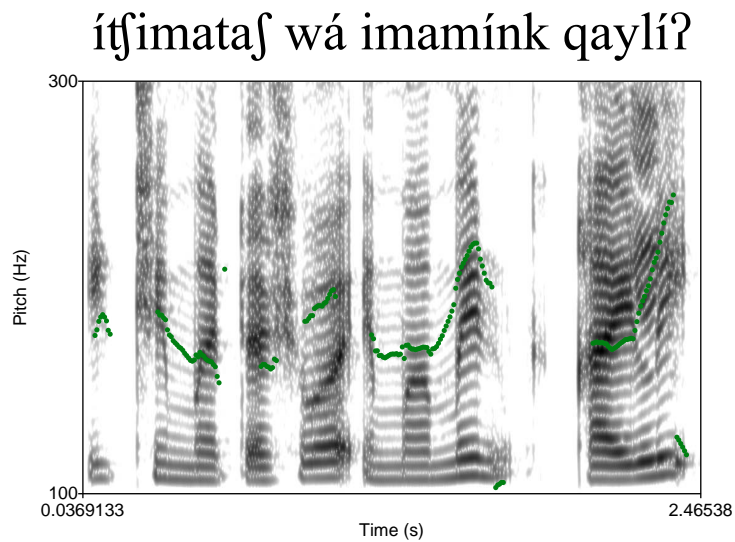


Figure 10. Final high pitch before sentence-final glottal stop.

Summary

- Minimal intonational phonology in Sahaptin
- Intonational phenomena identified to date can be described exclusively with nuclear pitch accents
 - Add emphasis to certain words within declarative sentences, wh- questions
 - In yes-no questions, tend to fall on rightmost lexical accent

Questions for future research

- Can these impressions be quantitatively substantiated?
- What happens in texts?

References

- Beavert, Virginia, and Sharon Hargus. to appear. *Ichishkiin Si-nwit Yakama/Yakima Sahaptin Dictionary*. Toppenish and Seattle: Heritage University and UW Press.
- Hargus, Sharon, and Virginia Beavert. 2005. 'A note on the phonetic correlates of stress in Yakima Sahaptin.' In *University of Washington Working Papers in Linguistics*, ed. by Daniel J. Jinguji and Steven Moran. 64-95.
- Hargus, Sharon, and Virginia Beavert. 2006. 'High-ranking Affix Faithfulness in Yakima Sahaptin.' In *Proceedings of the 25th West Coast Conference on Formal Linguistics*, ed. by Don Baumer, David Montero and Michael Scanlon. Somerville, MA: Cascadilla Proceedings Project. 177-185.
- Jacobs, Melville. 1931. 'A sketch of Northern Sahaptin grammar.' *University of Washington Publications in Anthropology* 4:85-291.
- McCawley, James D. 1978. 'What is a tone language?' In *Tone: A Linguistic Survey*, ed. by Victoria Fromkin. New York: Academic Press. 113-131.
- Rigsby, Bruce, and Noel Rude. 1996. 'Sketch of Sahaptin, a Sahaptian Language.' In *Languages*, ed. by Ives Goddard. Washington DC: Smithsonian Institution. 666-692.
- Yip, Moira. 2002. *Tone*. Cambridge: Cambridge University Press.