HUL'Q'UMI'NUM' LISTENING QUIZZES BLENDING RESEARCH AND PEDAGOGY

SONYA BIRD, CHLOË FARR, TESS NOLAN, UVIC

HENNY YEUNG, ELISE MCCLAY, SFU

MAIDA PERCIVAL, U OF T

HUY TSEEP Q'U

- HUL'Q'UMI'NUM' ELDERS FOR YOUR SUPPORT, AND YOUR RECORDINGS

- HLCS FOR YOUR SUPPORT

- HLA STUDENTS FOR YOUR INSIGHTS AND FEEDBACK

- SFU FOR HOSTING THE QUIZZES

- SSHRC PDG #890-2017-0026

BACKGROUND & RATIONALE

- SSHRC PDG: HUL'Q'UMI'NUM' PHONETIC STRUCTURES: EXPLORING PATHS TOWARDS FLUENT PRONUNCIATION

- ACTIVITIES

  - DOCUMENTING L1 AND L2 PRONUNCIATION

  - SEEING WHAT THE CHALLENGES ARE FOR LEARNERS

  - EXPLORING TOOLS, METHODS, STRATEGIES FOR OVERCOMING THESE STRATEGIES

    - EAR TRAINING: HELPS WITH LISTENING AND ALSO WITH SPEAKING (SAKAI & MOORMAN 2018) >> LISTENING QUIZZES

THE PROJECT

- GENERAL APPROACH/PRIORITY

  - ENSURING THAT RESEARCH AND TEACHING ARE WELL INTEGRATED, AND THAT RESEARCH FEEDS INTO TEACHING

- LISTENING QUIZZES

  - PEDAGOGY: TOOL FOR EAR TRAINING

  - RESEARCH:

    - ON QUIZZES AS A TOOL FOR EAR TRAINING

    - ON LEARNERS' LISTENING SKILLS/CHALLENGES

THE QUIZZES: CONTENT

- TARGET WHAT WE KNOW ARE CHALLENGING CONTRASTS FOR LEARNERS

- ORDERED IN A WAY THAT MIRRORS OTHER PEDAGOGICAL MATERIALS IN TERMS OF HOW/WHEN SOUNDS ARE INTRODUCED

Module	Quizzes (sample)
1: Vowels	a ~ e; a ~ u
2: Back sounds	Stops: k ~ q; kw ~ qw; k ~ kw ~ q ~ qw Fricatives: hw ~ x ~ xw ~ h Both: k ~ kw ~ q ~ qw ~ hw ~ x ~ xw ~ h
3. Ejectives	Word pairs, e.g. tahw ~ t'ahw Bigger sets, e.g. kw ~ kw' ~ qw ~ qw'
4. Front fricatives	lh ~ th; s ~ th; lh ~ th ~ s; lh ~ th ~ sh ~ x
5. Affricates	ts ~ ts' ~ tth'; tth' ~ ts' ~ tl' ~ ch'
6. S-clusters (initial)	st ~ ts ~ sts; st ~ ts ~ sts ~ tst; stth' ~ stl' ~ sts'
7. Glottal stop & glottalized resonants	Glottal stop: V# ~ V'#; VC ~ V'C; s ~ s'; hw ~ hw' Glottalized resonants: l ~ l' ~ 'l
8. Clusters - general	ts, pt, t'x, t'q, t-hw, shq, lhts, lhp, lht, lhn, lhx, qwlh, hwtl, tth'x

THE QUIZZES: PROCESS

	Step	Team member(s)
1	Identifying target sounds/sound sets	HLCS, HLA, Sonya, Maida
2	Pulling audio from existing recordings • Including as many speakers as possible – see research on high variability phonetic training (HVPT; Uchihara, Karas & Thomson, 2021)	Maida & Chloë
3	Creating quiz template in jsPsych • Over and over again…	Tess, Elise & Henny
4	Customizing each quiz • Listening tips and interesting notes	Sonya & Maida
5	Uploading and maintaining each quiz on JATOS	Tess
6	Posting each quiz on the Listening Quiz landing page https://onlineacademiccommunity.uvic.ca/hpl/listening-quizzes/	Sonya

- JSPSYCH & JATOS: STANDARD IN SPEECH PERCEPTION RESEARCH
  - BACK END ALLOWS FOR PROCESSING AND ANALYZING INDIVIDUAL AND GROUP RESPONSES

THE QUIZZES: FORMAT

- LANDING PAGE: HTTPS://ONLINEACADEMICCOMMUNITY.UVIC.CA/HPL/LISTENING-QUIZZES/

- ETHICS & CONSENT

- MODULES
  - ONE LINK PER MODULE, WITH QUIZZES EMBEDDED WITHIN THAT MODULE IN JATOS
    - TO ALLOW FOR ANALYSIS OVER ALL QUIZZES WITHIN A MODULE
      - E.G. IF WE WANTED TO TEST RELATIVE DIFFICULTY OF KW ~ QW VS. HW ~XW

- TWO TYPES
  - SETS OF SIMILAR SOUNDING SOUNDS
    - E.G. KW ~ KW' ~ QW ~ QW'
  - MINIMAL PAIRS (MOSTLY WITH PLAIN ~ EJECTIVE STOPS)
    - E.G. TAHW VS. T'AHW

THE QUIZZES: DATA & ANALYSIS

User-submitted

Generated by jsPsych

Generated by script

Goal: Automate as much as possible in the jsPsych script to reduce analysis by-hand after the fact

Correct answer? 1 = yes, 0 = no

Target response & response given

Is the word heard a repeat?

	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	taker	times_taken	rt	response	stimulus	word_stim	choices	trial	repetition	corr_response	chosen_seg	correct	repetition_counter	
46	tess	2	null	null	silence_750r	smi'mutth'	["ts","tth'","	gap	FALSE					
47	tess	2	1663	1	Module7_Afl	smi'mutth'	["ts","tth'","	quiz	FALSE	tth'	tth'	1		
48	tess	2	1988	0	<p style='fon	smi'mutth'								
49	tess	2	null	null	Module7_Afl	p'etth'	["ts","tth'","	first_hear	FALSE					
50	tess	2	null	null	silence_750r	p'etth'	["ts","tth'","	gap	FALSE					
51	tess	2	12469	1	Module7_Afl	p'etth'	["ts","tth'","	quiz	FALSE	tth'	tth'	1		
52	tess	2	1821	0	<p style='fon	p'etth'								
53	tess	2	null	null	Module7_Afl	ts'alhulhp	["ts","tth'","	first_hear	FALSE					
54	tess	2	null	null	silence_750r	ts'alhulhp	["ts","tth'","	gap	FALSE					
55	tess	2	2731	0	Module7_Afl	ts'alhulhp	["ts","tth'","	quiz	FALSE	ts'	ts	0		
56	tess	2	743	0	<p style='fon	ts'alhulhp								
57	tess	2	null	null	Module7_Afl	ts'alhulhp	["ts","tth'","	first_hear	TRUE					
58	tess	2	null	null	silence_750r	ts'alhulhp	["ts","tth'","	gap	TRUE					
59	tess	2	1669	1	Module7_Afl	ts'alhulhp	["ts","tth'","	quiz	TRUE	ts'	tth'	0		
60	tess	2	806	0	<p style='fon	ts'alhulhp								
61	tess	2	null	null	Module7_Afl	ts'alhulhp	["ts","tth'","	first_hear	TRUE					
62	tess	2	null	null	silence_750r	ts'alhulhp	["ts","tth'","	gap	TRUE					
63	tess	2	1637	2	Module7_Afl	ts'alhulhp	["ts","tth'","	quiz	TRUE	ts'	ts'	1		
64	tess	2	2285	0	<p style='fon	ts'alhulhp								
65	tess	2	null	null	Module7_Afl	p'isuts'	["ts","tth'","	first_hear	FALSE					
66	tess	2	null	null	silence_750r	p'isuts'	["ts","tth'","	gap	FALSE					
67	tess	2	2662	1	Module7_Afl	p'isuts'	["ts","tth'","	quiz	FALSE	ts'	tth'	0		
68	tess	2	775	0	<p style='fon	p'isuts'								
69	tess	2	null	null	Module7_Afl	p'isuts'	["ts","tth'","	first_hear	TRUE					
70	tess	2	null	null	silence_750r	p'isuts'	["ts","tth'","	gap	TRUE					
71	tess	2	2191	2	Module7_Afl	p'isuts'	["ts","tth'","	quiz	TRUE	ts'	ts'		1	
72	tess	2	1119	0	<p style='fon	p'isuts'								
73	tess	2	null	null	Module7_Afl	lhets	["ts","tth'","	first_hear	FALSE					
74	tess	2	null	null	silence_750r	lhets	["ts","tth'","	gap	FALSE					
75	tess	2	1547	0	Module7_Afl	lhets	["ts","tth'","	quiz	FALSE	ts	ts	1		
76	tess	2	1431	0	<p style='fon	lhets								
77	tess	2	null	null	Module7_Afl	stth'am'	["ts","tth'","	first_hear	FALSE					
78	tess	2	null	null	silence_750r	stth'am'	["ts","tth'","	gap	FALSE					
79	tess	2	1898	1	Module7_Afl	stth'am'	["ts","tth'","	quiz	FALSE	ts'	tth'	1		
80	tess	2	2070	0	<p style='fon	stth'am'								
81	tess	2	null	null	Module7_Afl	tth'ey'kw'	["ts","tth'","	first_hear	FALSE					
82	tess	2	null	null	silence_750r	tth'ey'kw'	["ts","tth'","	gap	FALSE					
83	tess	2	1411	1	Module7_Afl	tth'ey'kw'	["ts","tth'","	quiz	FALSE	tth'	tth'	1		
84	tess	2	1822	0	<p style='fon	tth'ey'kw'								
85	tess	2	1466	0	A NOTE ON PRONUNCIATION ts and ts' are pronounced with tongue in the same pr {"t'itsum":3,"ts'ehwt":								
86	tess	2	1590	0	<p>There were 16 words total in this quiz.</p><p>You responded correctly on your first try to 13 of them.</p><p></p><p>Good wo							
87														

THE LEARNING CURVE

- WORK FLOW: IT'S EASY TO LOSE TRACK WHEN LOTS OF TEAM MEMBERS AND QUIZZES (CURRENTLY 59 PLANNED) ARE INVOLVED!

- ACCESS: QUIZZES DON'T WORK EQUALLY WELL ON ALL DEVICES AND PLATFORMS

- BEST PRACTICES
  - CREATE CLEAR WORKFLOW AND EASY WAY TO TRACK IT
  - FINE TUNE 1-2 QUIZZES OF EACH TYPE BEFORE CREATING MORE
    - FRONT END: MAKE SURE USERS ARE HAPPY WITH THEM
    - BACK END: MAKE SURE THE RIGHT DATA ARE BEING TRACKED FOR ANALYSIS
  - AUDIO FILES: MAKE SURE THEY ARE NORMALIZED FOR
    - LOUDNESS
    - SILENCE BEFORE/AFTER EDGES OF TARGET WORD

DISCUSSION & CONCLUSION

- LIMITATION
  - ACKNOWLEDGMENT OF THE ROLE THESE PLAY IN THE MUCH BIGGER PICTURE OF LANGUAGE LEARNING

- FUTURE DIRECTIONS
  - SEQUENCING OF EASIER TO HARDER TASKS
    - CHOOSE AMONG OPTIONS PROVIDED >> FILL IN THE BLANK
  - SEQUENCING OF EASIER TO HARDER SOUNDS/CLUSTERS
    - INITIAL POSITION >> MEDIAL AND FINAL POSITION (C.F. MANDY'S WORDS YESTERDAY!)
  - OTHER IDEAS?

- OUR HOPE
  - QUIZZES WILL BE USEFUL FOR LEARNERS, FOR FINE-TUNING LISTENING SKILLS
  - TEMPLATE WILL BE USEFUL FOR OTHER COMMUNITIES INTERESTED IN CREATING QUIZZES & UNDERSTANDING CHALLENGES FOR LEARNERS
    - ASK US FOR DETAILS!

HUY TSEEP Q'U

- CONTACT INFORMATION:
  - SONYA BIRD: SBIRD@UVIC.CA

REFERENCES

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