

Background

- Epenthesis is a cross-linguistically preferred way to adapt non-native sound sequences in loanwords, over other options like deletion or substitution: $*/C_1C_2/ \rightarrow /C_1VC_2/ > \{ \rightarrow /C_1/, \rightarrow /C_1C_3/ \}$. (Paradis & LaCharité 1997, i.a.)
- This bias for preserving (even if also inserting) is also apparent at the level of phonetic cues, such as loanword adaptation phonologizing excrescent bursts and vocoids as full vowels: $[_C^*] \rightarrow /_CV/$ (Kang 2003)
 $[C^{\circ}C_] \rightarrow /CVC_ /$ (Davidson 2007)
- May be explained by Recoverability Principle of L2 sound processing: (Weinberger 1994)
 - In L1, the speaker is familiar with what sound cues are expendable.
Expendable: "You're my bes[t] friend."
Not expendable: "We'll meet by the car[t] in 5 minutes."
 - In L2, less sure. So the speaker errs conservatively, preserving sound material to ensure word recoverability.
- If this bias arises from a conservative caution against deleting potentially meaningful sound cues in a non-native language (or word), this may hold whether or not the sound sequence itself is non-native. (i.e., $*/C_1C_2/$)

Study Aims

- Test if listeners are more inclined to preserve a sound cue in the transmission of a new word when they think it's foreign:
 - ambiguous $[C^{\circ}C] \rightarrow /CVC/ > \rightarrow /CC/$, even if $/CC/$ is licit in L1
- Account for how this may be socially mediated by speakers' attitudes about foreign people and/or languages. (e.g., Lev-Ari & Peperkamp 2014, Jagers 2018)

Method

- Online audio transcription experiment (via Qualtrics + MTurk)
 - Listen and fill in a blank that auto-transcription software failed at.
 - Diagnose why it failed. (filler/distractor task)
 - Target trial (1 per subject)
 - nonce word: [b_up], [s_num]
 - 6-step $[CC\dots] - [C\text{e}C\dots]$ continuum: e.g., [bruup] - [bærup]
 - framing: 1) native unfamiliar vs. 2) loan
- stimuli example:
bit.ly/StimDemo
- 1) "When I was a kid in Missouri I always loved this dessert. A ____ cake. Yeah I'd never seen it outside of Missouri before but I just saw it at a restaurant here in the city the other day."
 - 2) "When I was a kid in The Netherlands I always loved this dessert. A ____ cake. Yeah I'd never seen it here in America before until just the other day at a restaurant I went to."
 - same Dutch-English bilingual speaker: guise-switched to lightly Dutch-accented English
- Filler/distractor trials: ____ as slurred speech or embedded in noise.
 - Post-test questionnaire re: mediating social factors (9-point Likert scales)
 - "I enjoy learning about and/or traveling to places outside the US."
 - "I think it would be important to learn some of the language of a place I were traveling to."
 - "I think it would be important to say someone's name the way they say it, even if I'm not used to saying it that way." (see Kohli & Solórzano 2012, Bucholtz 2016)

Results

- Participants (N=225)
 - native, monolingual speakers of American English
- Analysis: Transcription provided
 - Of primary interest: $\langle CVC\dots \rangle$ vs. $\{ \langle CC\dots \rangle, \text{other} \}$
 - Also anticipated possible bias re: spelling of [u] across framings: e.g., $\langle \text{broop} \rangle$, $\langle \text{broup} \rangle$, $\langle \text{barup} \rangle$, $\langle \text{barupe} \rangle$

The effect of framing (Fig 1)

- Higher step \rightarrow more $\langle CVC\dots \rangle$, as expected
- Loan framing \rightarrow fewer $\langle CVC\dots \rangle$, counter expectations \rightarrow more use of $\langle u \rangle$ for [u] (Fig 2)

Interpretation

- English vowel reduction leads to low threshold for $[C^{\circ}C]$ to be posited as $/CVC/$ in a native-framed nonce word.
- Loan-framing may be inducing an accent adaptation mode, where the posited sound system may... (Baese-Berk et al. 2013)
 - 1) have less vowel reduction than a native monolingual English speaker would (e.g., Baker et al. 2011)
 - 2) and/or, have more open $[CC]$ articulations (e.g., Zsiga 2000), leading $[C^{\circ}C]$ to more likely be treated as excrescent.

Social mediation (Fig 3)

- Higher composite index score with respect to interest and accommodation re: foreign people and/or languages \rightarrow more $\langle CVC\dots \rangle$ when loan-framed

Interpretation

- The application of the recoverability hypothesis to loanword adaptation may best be limited to certain speakers.

Conclusions, Discussion, Further Directions

- Non-nativeness of the sound or sound sequence may be a prerequisite for the epenthetic, sound (cue) preservation bias after all.
- And/or, word newness may induce the same bias, regardless of posited word foreignness.
- But, English might not be the best test case for this method:
 - The phonologization threshold for $[C^{\circ}C]$ in a native-framed nonce word may be especially low, given English vowel reduction and/or its close $[CC]$ articulation overlap (cf. Spanish, Russian).
 - Though, does this call into question how cross-linguistic the epenthetic bias in loanword adaptation may be?

Figure 1: Transcription by Framing across exposure continuum steps

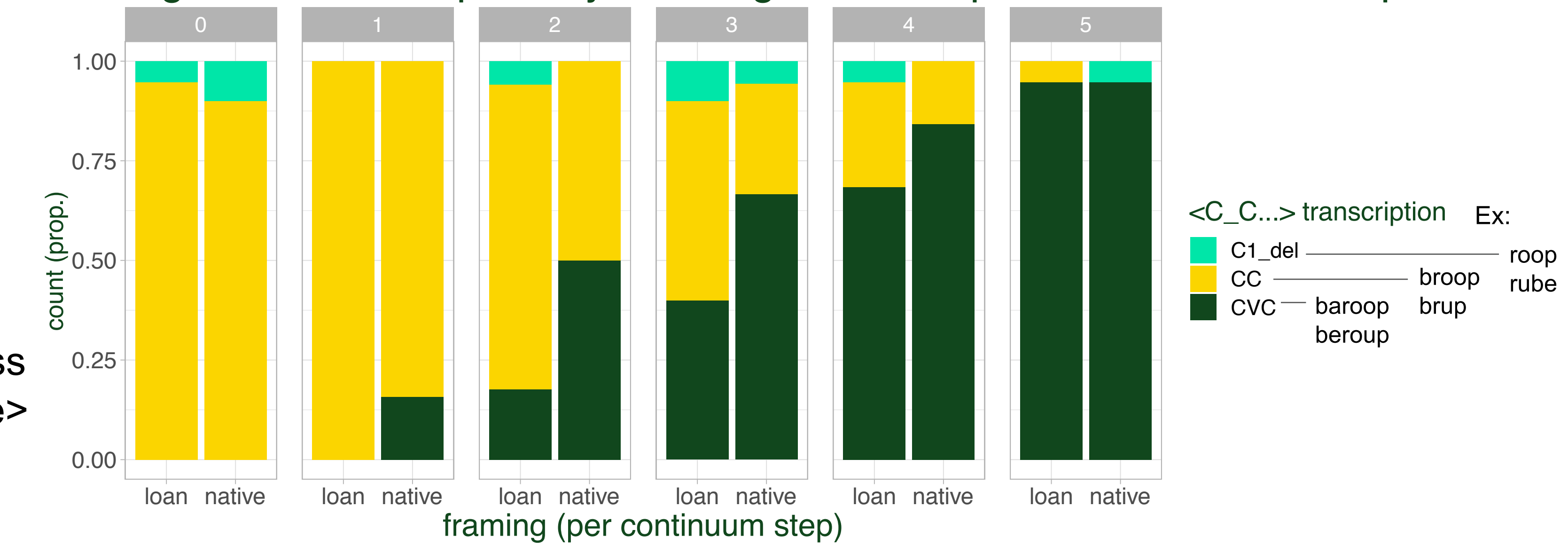


Figure 2: Spelling choice of [u] vowel by Framing

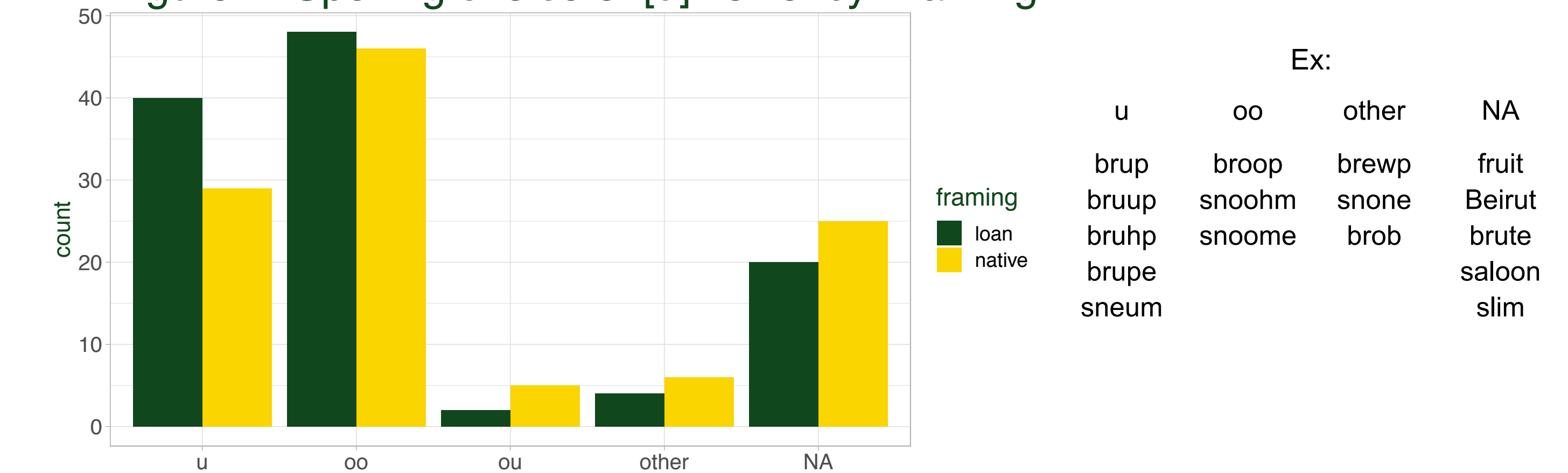
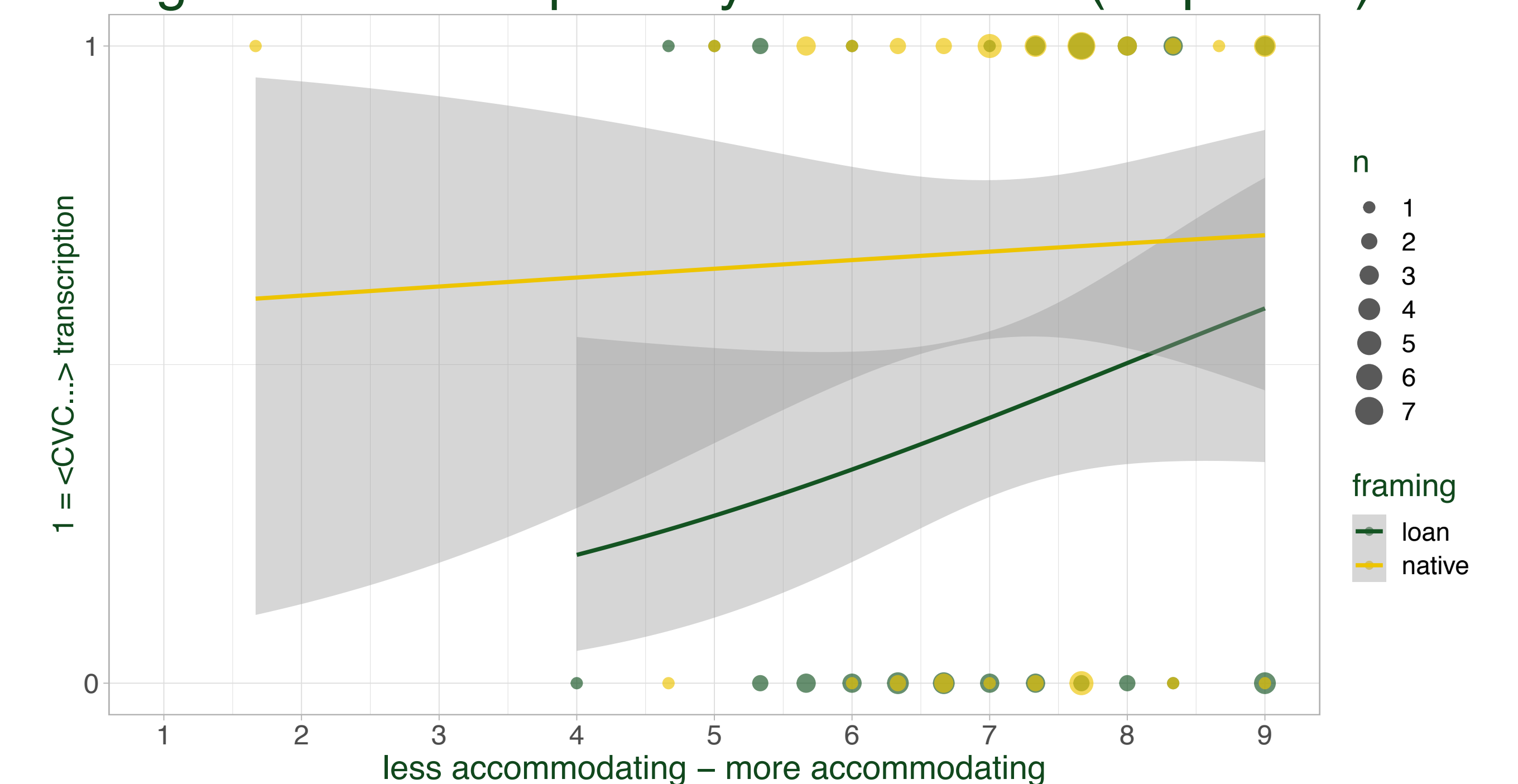


Figure 3: Transcription by Social Index (steps 2-4)



- Social mediation
 - Listeners who seem to be more accommodating with respect to foreign people and/or languages do show more caution in treating sound cues in a loan-framed nonce word as excrescent vs. potentially meaningful.
 - Cognition: Social influences may be upstream of any anticipated effect of foreign framing \rightarrow recoverability.
 - Dissemination: However, they may also be upstream in the process of loanword dissemination.
 - i.e., We might reasonably assume, on social grounds, that such speakers are those more likely to be the disseminators of loanwords in the first place.
- Should loanword adaptation be considered to potentially involve non-native accent adaptation? (cf. Paradis & LaCharité 1997)