

## Appendix A: Production Stimuli

Parentheses indicate segments that may or may not be realized and that cannot be phonologically derived. As all syllabic nasals may or may not be realized, they are not parenthesized.

Table 1: Target Words

| Comparison  | Word                 | Gloss                  |
|---|----------------------|------------------------|
| unaspirated modal vs. breathy                     | ŋkɛ:ŋ                | ‘waist’                |
|   | ŋkɛ:ŋ                | ‘side’                 |
|   | ku:                  | ‘to exist’             |
|   | kɯ:                  | ‘every’                |
|   | pi:r                 | ‘flower’               |
|   | pɿ:r                 | ‘to wind’              |
|   | po:t                 | ‘swelling’             |
|   | pɔ:t                 | ‘too much’             |
|   | pu:ʔ                 | ‘sun’                  |
|   | pɯ:ʔ                 | ‘beard’                |
|   | taʔ                  | ‘to grab (from above)’ |
|   | tɔʔ                  | ‘to place under’       |
|   | tah                  | ‘to divorce’           |
|   | tɔh                  | ‘to slap’              |
|   | ti:                  | ‘old’                  |
|   | tɿ:                  | ‘tall’                 |
|   | to:ŋ                 | ‘coconut’              |
|   | tɔ:ŋ                 | ‘male (animal)’        |
|   | t(iɔŋ)pat            | ‘west’                 |
|   | tpat                 | ‘six’                  |
| aspirated modal vs. breathy                       | ŋc <sup>h</sup> u:n  | ‘to hide’              |
|   | cɯ:n                 | ‘to send’              |
|   | p <sup>h</sup> o:m   | ‘fragrant’             |
| unaspirated modal vs. aspirated modal vs. breathy | mpɔ:m                | ‘just (now)’           |
|   | (s)nte: <sup>1</sup> | ‘to tell’              |
|   | t <sup>h</sup> e:    | ‘jar’                  |
| sonorant modal vs. sonorant breathy               | tɛ:                  | ‘no’                   |
|   | lɔp                  | ‘to return’            |
|   | lɔp (lɔp)            | ‘dusk’                 |
|   | lu:                  | ‘to howl’              |
|   | lɯ:                  | ‘thigh’                |

Table 2: Vowel quality counts for target words

| Vowel Quality | Count |
|---------------|-------|
| i:            | 4     |
| u:            | 8     |
| e:            | 3     |
| o:            | 6     |
| ɛ:            | 2     |
| a             | 6     |
| ɑ             | 2     |

<sup>1</sup>This word may be realized as [snte:], [nte:], or [te:]. Theoretically, [ste:] should also be possible, as other words with an onset and syllabic nasal in the first syllable of a sesquisyllabic word often show dropping of just the syllabic nasal, but this form was not borne out in any of the participants in this study.

Table 3: Distractor Words

| Word                               | Gloss                   |
|------------------------------------|-------------------------|
| buʔ                                | ‘to sow’                |
| ɲɕɛ:                               | ‘louse’                 |
| ɲɕ <sup>h</sup> ɑ:ʔ                | ‘hay’                   |
| ɲɕ <sup>h</sup> ɔʔ                 | ‘smelly’                |
| (c)ɲtrɿɿŋ                          | ‘diligent’              |
| cɣ:l                               | ‘tiger’                 |
| dɿh                                | ‘to bite (and break)’   |
| daʔ                                | ‘to place’              |
| k <sup>h</sup> al                  | ‘scooping bowl’         |
| kɿl                                | ‘tree’                  |
| k <sup>h</sup> o:k <sup>h</sup> o: | ‘toasted rice’          |
| kɔ:                                | ‘cow’                   |
| ktɿ:                               | ‘season’                |
| ɲkɿŋ                               | ‘eggplant’              |
| lɲpa:ʔ                             | ‘shoulder’              |
| ɲpɛ:ʔ                              | ‘mother’                |
| p <sup>h</sup> (at)lu:m            | ‘lightning’             |
| rɲpɿt                              | ‘stick’                 |
| sɛh                                | ‘horse’                 |
| sɿ:ŋ                               | ‘five’                  |
| sɲki:l                             | ‘sensitive’             |
| tɲpo:m                             | ‘that which is wrapped’ |
| ɲtɔ:l                              | ‘star’                  |
| ɲtra:ŋ                             | ‘red ant’               |
| t <sup>h</sup> rɛ:                 | ‘rice paddy’            |
| ɲtrɛ:l                             | ‘egg’                   |
| ɲtri:m                             | ‘shovel’                |

<sup>1</sup>This word may be realized as [cɲtrɿɿŋ], [ctrɿɿŋ], or [ɲtrɿɿŋ]. [trɿɿŋ] was not observed in any of the participants.