**Supplemental File 3:** Mismatches affecting voiceless nasals and liquids.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Age** | **[+sg] mismatch** | | | | **[+sg] match: other mismatches** | | | | | | |
|  | (yr) | **C Deletion** | **[+spread glottis] > [-spread glottis]** | | | **Metathesis** | **Stop deletion** | **Manner** | **Place** | **Manner plus Place** | | |
|  |  | (of +sg C) | Stop Gem. | [+vd] | [-sg]&Othera |  |  | [l̥], [θ]b | of stop | [h] only | Pre-asp. stop | [s, f, ç] |
| [-vd] nasals | 2 | - | - | **85.7%** | - | - |  | - | - | - | - | - |
| Word-initial | 3 | - | - | **73.1%** | - | - |  | - | - | - | - | - |
|  | 4 | - | - | **59.7%** | - | - |  | - | - | - | - | - |
|  | 5 | - | - | **61.5%** | - | - |  | - | - | - | - | - |
|  | 6 | - | - | **39.7%** | - | - |  | - | - | - | - | - |
|  | 7 | - | - | **34.8%** | - | - |  | - | - | - | - | - |
| [-vd] liquids | 2 | 1.6% | - | 6.3% |  | - |  | **20.3%** | - | **12.5%** | - | 7.8% |
| Word-initialc | 3 | 0.4% |  | 3.1% | 5.7%  (M & sg) | - |  | **15.7%** | - | 3.9% | - | 3.9% |
|  | 4 | - | - | 0.9% | - | - |  | 7.5% | - | 0.9% | - | 8.4% |
|  | 5 | - | - | - | - | - |  | 3.8% | - | 1.1% | - | 2.2% |
|  | 6 | - | - | - | - | - |  | 3.1% | - | - | - | - |
| [-vd] sonorants | 2 | 1.1% | **9.7%** | 2.2% | - | - | - | 3.8% | 1.6% | - | **36.0%** | - |
| Word-medial | 3 | - | 3.8% | 0.3% | 0.1% (M&P&sg) | - | - | 3.9% | 0.9% | - | **24.0%** | - |
| C1 of CC | 4 | - | 1.1% | 0.8% | - | - | - | 4.0% | - | - | 3.4% | - |
| with stop | 5 | - | 0.6% | - | - | - | - | 1.3% | - | - | 1.3% | - |
| (includes nasals) | 6 | - | - | - | - | - | - | 1.7% | - | - |  | - |
|  | 7 | - | - | - | - | - | - | 07% | - | - | 0.4% | - |
| [-vd] liquids | 2 | **15.3%** | - | - | 0.3% (M&P&sg) | - |  | **17.1%** | - | 1.5% | - | - |
| Word-final | 3 | 4.5% | - | - | 0.3% (M&P&sg) | - |  | **18.8%** | - | 0.4% | - | - |
| singletons | 4 | 0.8% | - | - | 0.3% (M&P&sg) | - |  | **10.2%** | - | 0.1% | - | - |
|  | 5 | 1.3% | - | - | 0.3% (M&P&sg) | - |  | 4.6% | - | - | - | - |
|  | 6 | 0,2% | - | - | - | - |  | 4,0% | - | - | - | - |
| [-vd] liquids | 2 | **11.1%** | **13.9%** | - | - | 5.5% | **11.1%** | **19.4%b** | **38.8%c** | 5.5% | **30.6%** | - |
| Word-final | 3 | 0.7% | 5.5% | - | 1.4% | 11.0% | - | **12.4%b** | **21.3%** | - | **31.7%** | 4.1% |
| r̥p (útvarp) | 4 | - | 1.60% | - | - | 2.3% | - | **13.3%b** | **17.2%** | - | 6.3% | - |
|  | 5 | 2.0% | - | - | 4.1% | 13.3% | - | 6.1% | 9.1% | - | 3.1% | 1.0% |
|  | 6 | - | - | - | - | - | - | 5.5% | - | - | - | - |
|  | 7 | - | - | - | - | - | - | - | - | - | - | - |
| [-vd] liquids | 2 | 4.9% | 1.6% | - | - | - |  | - | 16.4% | - | - | - |
| Word-final | 3 | 1.7% | 2.2% | - | - | - |  | 0.5%b | 23.5% | - | - | - |
| kl̥ tl̥ | 4 | - | 0.5% | - | - | - |  | 0.5% | 12.6% | - | - | - |
|  | 5 | 1.6% | 1.1% | - | - | - |  | 1.0%b | 10.4% | - | - | - |
|  | 6 | - | - | - | - | - |  | - | 2.7% | - | - | - |
|  | 7 | - | - | - | - | - |  | - | 4.4% | - | - | - |

Note. Data reported where one age group registered 5+% mismatches for any target. Gem = gemination; vd = voiced; M(an) = Manner; P = Place; asp. = aspirated.

a For [-vd] sonorants, the [-sg] substitutions were primarily unaspirated stops but could be glides. Some clusters were produced, primarily through metathesis.

b [-grooved] [θ] was a frequent substitution for the voiceless |r̥| (over 80% of word-initial manner only replacements and all but 1 of the replacements for *útvarp*)

c The word-final [p] sometimes appeared in place of the |v| as an ambiguous metathesis, but metathesis was counted only if the |v| remained.

There were many productions of [t] for the word-final [p], about 75% of which co-occurred with other mismatches for the cluster.