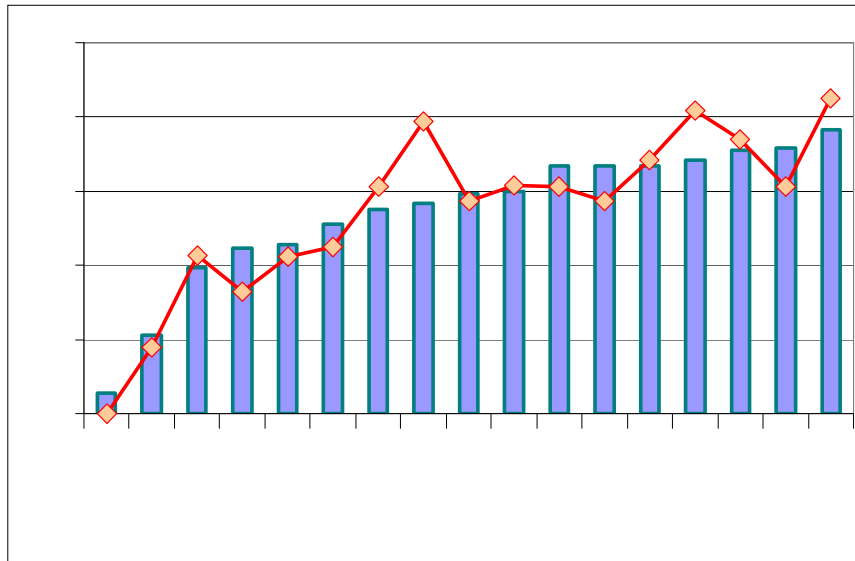


The reduplication data suggests that the most similar consonants to t are, in order, t , ts , $tsʰ$, $tʰ$, $tʰs$, $tʰsʰ$, $tsʰ$, $tʰ$, $tʰs$, $tʰsʰ$, $tʰ$, $tʰs$, $tʰsʰ$, $tʰ$, $tʰs$, $tʰsʰ$. This order assumes that aspiration is the least contrastive feature, i.e. unaspirated and aspirated sounds sharing all other features will be the most confusable sounds. $tʰ$ would be slightly more contrastive, minor place above that, and ts or $tsʰ$ being the most contrastive.



- xamples of stimulus items illustratin the three conditions

creenshot of the C experiment run in raat. he instructions at the top read

Confusion matrix for stop and affricate consonants in onset position with pin noise.

Confusion matrix for stop and affricate consonants in onset position with multi-talker babble.

The most typical confusions in *en ali* onset consonants across all three background noise conditions are in voicing and aspiration, primarily in the former. Confusions in minor place are almost nonexistent in the clear condition, with only a handful seen in the noise condition. Confusions in major place are only seen in the babble condition, where all types of confusions are common. These results are similar to the predictions of *Qhan*, except that voicing was found to be more confusable than aspiration.

The current study should only be seen as the initial part of a larger investigation of the connections between similarity as measured by confusability and similarity as revealed through phonological alternation. More subjects will no doubt need to be run to reach the statistical power needed for confident claims about this connection. However, even with the current findings, it is clear that similarity as measured by confusability shows notable resemblances to the predictions proposed by *Qhan*'s phonological study of consonant similarity in *en ali*.

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oersma, *and* *leenin*, *Phonetic* *phonetics by computer*, version *5.0.3*, <http://www.praat.org>, retrieved *1/10/2013*.
Qhan, *Similarity avoidance in en ali fixed-se ment reduplication*, unpublished master's thesis, *CA*.
Qhan, *Similarity avoidance in ast en ali fixed-se ment reduplication*, *Proc. 1st C*, edited by *ainbride* and *A bayani resno*, California State University, pp. *1-10*.
Qhan, *en ali an ladeshi tandard*, *IA*, pp. *1-10*.

rice *university* *ital i nal rocessin roup* *noise data*, http://spib.rice.edu/spib/select_noise.html, retrieved *1/10/2013*.