Vowel-length contrasts and phonetic cues to stress: an investigation of their relation

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Supplementary materials

Stress Correlate Database: information and codes

These supplementary materials give the 140 entries present in the Stress Correlate Database (Lunden & Kalivoda 2017) at the time numbers were compiled for this paper. It is in the form of an Excel spreadsheet; each row lists a language and the codes of its stress correlates and use of contrastive length and pitch. The columns included are listed below. Those with ‘(yes/no)’ after their name are coded ‘1’ for ‘yes’ and ‘0’ for ‘no’ in the database. Each potential stress correlate (duration, pitch, intensity, vowel quality) is marked with a ‘1’ if sources report it to be involved in the realisation of stress in the language. Notice this does not necessarily mean being part of the realisations of all stresses in a straightforward manner (for example, it might be a reported correlate of either primary or secondary stress, but not the other). Correlates that are reported to be present ‘often’, ‘frequently’ or ‘generally’ are marked with a ‘1’. A ‘0’ denotes either that the potential correlate is reported to not be part of the realisation of stress, or that the description mentioned other factors but not this one, or that it is mentioned as a possible correlate with a strong hedge (i.e. ‘may sometimes also include?’ or ‘optionally involves …’). The quote that the stress correlate coding was based on is available if you mouse over the duration column code for each language (as it is the leftmost stress
Anya Lunden, Jessica Campbell, Mark Hutchens and Nick Kalivoda correlate column). This allows other researchers to perhaps recode the data with a different set of criteria. The vowel reduction column includes its own mouse-over quotes, as vowel quality was typically not discussed in the context of a language’s stress correlates.

The database also includes whether or not vowel duration and/or pitch is used contrastively in the language, with mouse-over quotes available in most instances. (Many of the cells in the pitch = contrastive column lack mouse-over quotes because many grammars do not explicitly discuss the use of pitch.) While pitch = contrastive is coded 0/1, duration = contrastive is coded 0/1/2/3, where ‘0’ means the language does not have a vowel-length contrast, ‘1’ means the language has a vowel-length contrast both in stressed and unstressed syllables, ‘2’ means the vowel-length contrast exists only in stressed syllables and ‘3’ means the language uses vowel duration allophonically. In this paper, a ‘0’ or ‘3’ language is considered to lack contrastive vowel length, and a ‘1’ or ‘2’ language is considered to have contrastive vowel length. The further distinction in the codes is made available so that other researchers may potentially make use of it.

**Database parameters**

a. **Language information**
   - Language name
   - Primary family
   - Secondary family
   - ISO 639-3 code

b. **Stress system information**
   - Stress system type
     - (single stress, binary stress, dual stress, ternary stress)
   - Primary stress edge (left/right)

c. **Stress correlate information**
   - Duration as reported correlate (yes/no)
   - Pitch as reported correlate (yes/no)
   - Intensity/loudness/energy/spectral tilt as reported correlate (yes/no)
   - Primary correlate, if known
   - Vowel reduction (phonological) in unstressed syllables (yes/no)

d. **Phonological uses of suprasegmentals**
   - Duration used contrastively outside of stress (yes/no)
   - Pitch used contrastively outside of stress (yes/no)

e. **References**
   - Sources consulted (full bibliographical entries are given below)
REFERENCES


Crosswhite, Katherine M. (2001). *Vowel reduction in Optimality Theory*. New York & London: Routledge. (Dutch; English; Icelandic; Italian; Polish; Spanish (European))


Faehndrich, Burgel (2007). *Sketch grammar of the Karlong variety of Mongghul, and dialectal survey of Mongghul*. PhD thesis, University of Hawai‘i at Mānoa. (Mongghul (Karlong))


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Harvey, Mark (2001). A grammar of Limilngan: a language of the Mary River Region, Northern Territory, Australia. Canberra: Australian National University. (Limilngan)


(Totonac (Misantla))


(Leti)


(Leti)


(Kurtöp)

Jackson, Jason (2014). *A grammar of Irarutu, a language of West Papua, Indonesia, with historical analysis*. PhD thesis, University of Hawai‘i at Mānoa.

(Irarutu)


(Yupik (Siberian))


(Czech)


(Sahaptin (Yakima))


(German)


(Wyandot)


(Sidaama (Sidamo))


(Wik-Mungkan)


(Waima)


(Waima)


(Huave (San Francisco del Mar))


(Upper Chehalis)


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(Norwegian)


(Yupik (Siberian))


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