













What was witnessed is that the formant values provided acoustic validity that /ɔ/, /ɔ:/, /ɔ:/ are distinctive back vowels in SSLE. Discriminant analysis illustrated that they differed from the SSBE /ɒ/ and /ɔ:/ as well as AE /ɔ/ and /o/. In Sinhala and Tamil /a/, /a:/ are central open vowels whereas the SSBE /ʌ/ is central mid while /ɑ:/ is an open back vowel. Thus a strong influence of the vernaculars is witnessed in the enunciation of /a/, /a:/ as central vowels by SSLE bilinguals.

Keeping in mind that this investigation is of a preliminary nature I propose that the results from this study, improved with a larger corpus of participants and further articulatory parameters can serve as a base-line for pronunciation characteristics of back and central vowels of SSLE. However, acoustic recordings of this study illustrate that central open/mid vowels of SSLE can be identified through discriminant analysis with a high degree of accuracy through formant change information.

### References

- [1] J. Heinz, J. Kobele, J. Riggle, Evaluating the complexity of Optimality *Linguistic Inquiry*, 2009, 40, 277-288.
- [2] [17][20][27][30][34][39] M. Gunsekera, *The Post Colonial Identity of Sri Lankan English*. Katha Publishers, Colombo, 2005.
- [3] B. Hayes, *Introduction to General Phonetics: Vowel Chart with Sound Files*, 2013. (Retrieved on April 03, 2012). <http://www.linguistics.ucla.edu/people/hayes/103/Charts/VChart/>
- [4] [24] W. Styler, *Using Praat for Linguistic Research*. University of Colorado at Boulder Phonetics Lab., 2012. Document Version: 1.1. (Retrieved on May 20, 2013).
- [5] [savethevowels.org/praat/html/UsingPraatforLinguisticResearch.html](http://savethevowels.org/praat/html/UsingPraatforLinguisticResearch.html)
- [6] [h.html](http://h.html)
- [7] [31] J. C. Catford, A practical introduction to phonetics. Oxford: Clarendon Press, 1988.
- [8] [19][26] [33] P. Ladefoged, *A Course in Phonetics*. (Fifth Edition). Boston, MA: Thomson Wadsworth, 2006.
- [9] [21] [23] B. Lindblom, J. Sundberg.: A quantitative theory of cardinal vowels and the teaching of pronunciation; in Perren, Trim, Applications of linguistics, Cambridge University Press, Cambridge, 1971.
- [10] N. P. Himmelmann, Language documentation: What is it and what is it good for? In J. Gippert., N. P. Himmelmann., U. Mosel (eds). *Essentials of Language Documentation (Trends in Linguistics. Studies and Monographs)*, 2006, 1-30. Berlin: Mouton de Gruyter.
- [11] P. Tench, Methodology in phonological interlanguage. *International Review of Applied Linguistics*, 1996, 34: 241-260.
- [12] R. C. Widyalkara, *Dialectal variation in Sri Lankan English Pronunciation: An acoustic analysis*. LAP Publications: Amazon, 2014.
- [13] [22] [25] [29] D. Deterding, Measurements of the /e/ and /ə/ vowels of young English speakers in Singapore.
- [14] In A. Brown, D. Deterding and L. E. Ling (eds). *The English Language in Singapore: Research on*
- [15] *Pronunciation*. Singapore: Singapore Association for Applied Linguistics, 2000, 93-9.
- [16] R. D. Kent, *The Speech Sciences*. San Diego/London: Singular Publishing Group, Inc., 1997.
- [17] [15] D. Deterding, Speaker Normalization for Automatic Speech Recognition. Ph.D. Thesis, Cambridge University, 1990.
- [18] J. Hillenbrand, L. A. Getty, M. J. Clark, K. Wheeler, Acoustic characteristics of American English vowels. *Journal of the Acoustical Society of America*, 1995, 97, 5: 3099-3111.
- [19] J. Cheshire, P. Kerswill, A. Williams, *On the non-convergence of phonology, grammar and discourse*, 2005. (Retrieved on March 15, 2013).
- [20] <http://webpace.qmul.ac.uk/jlcheshire/pdf%20papers/chesh%20kers%20%26%20williams3.pdf>
- [21] [36] R. Mannell, *Speech Waveforms*, 2008. (Retrieved on January 04, 2013).
- [22] [http://clas.mq.edu.au/acoustics/waveforms/speech\\_waveforms.html](http://clas.mq.edu.au/acoustics/waveforms/speech_waveforms.html)
- [23] [32] K. Hayward, *Experimental Phonetics*. Longman. New York, 2000.
- [24] A. Wasala, K. Gamage, Research report on phonetics and phonology of Sinhala. *Language Technology Research Laboratory, University of Colombo School of Computing*, 2005. (Retrieved on October 30, 2013).
- [25] <http://www.docstoc.com/docs/29472624/Research-Report-on-Phonetics-and-Phonology-of-Sinhala>
- [26] J. Gair, S. Suseendrarajah, W. S. Karunatilaka, *An introduction to spoken Tamil*. Godage Publishers. Colombo, 2005.

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