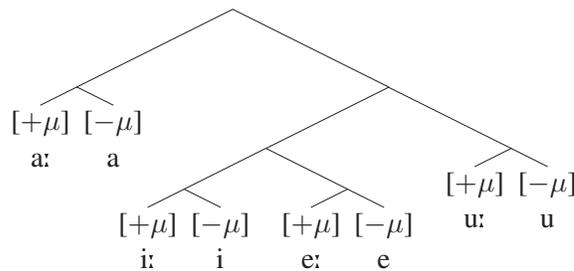


On the contrastive status of vowel length

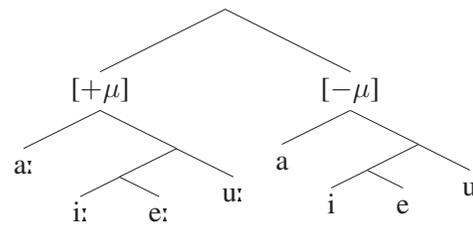
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Vowel length is contrastive in many languages, but language-particular realizations of the length contrast vary. At one extreme are “GEMINATE VOWEL” languages such as Japanese or Finnish, in which the length contrast is realized solely by duration, allowing long vowels to be analyzed as sequences of short vowels (Shibatani 1990:162; Harrikari 2000). At the other extreme are “TENSE-LAX” languages such as English, in which the “length” contrast is realized by quality as well as duration (Durand 2005). Can both kinds of contrasts truly be characterized as length? I will argue that they can. Using Dresher’s (2009) approach to contrast, I will propose a unified framework for vowel length in which the realization of the length contrast is related to its rank in the contrastive hierarchy. When length (represented as $[\pm\mu]$) is the lowest-ranked contrast, as in (1), the inventory is divided into a set of long-short pairs; when it is the highest-ranked contrast, as in (2), the inventory is instead divided into independent long and short subsystems. I propose that the close hierarchical relationship between long and short vowels in (1) is characteristic of geminate vowel languages while the more distant relationship in (2) is found in tense-lax languages.

(1) GEMINATE VOWEL LANGUAGE
quality contrasts > length contrast



(2) TENSE-LAX LANGUAGE
length contrast > quality contrasts



Under the hypothesis that diachronic changes can be conditioned by the contrastive hierarchy, the above distinction has a further consequence. If mergers can only affect phonemes that are “contrastive sisters” (Ko 2010a, 2010b; Oxford 2011), we should expect to find different merger patterns in the two kinds of length systems. In geminate vowel languages, mergers should affect long-short pairs, while in tense-lax languages, mergers should occur independently within the long and short subsystems. I will explore whether the facts support these strong predictions. There are some indications that they may be borne out: in American Finnish, for example, long-short pairs tend to fall together (Campbell & Muntzel 1989:187), while in English, long (tense) and short (lax) vowels have undergone entirely independent changes such as the Great Vowel Shift (affecting tense vowels) and the Canadian Shift (affecting lax vowels; Clarke et al. 1995). Of course, intermediate rankings of the length contrast are also possible; I will propose that this is the case for the Algonquian language Potawatomi, in which short /i, e, a/ have merged with each other while short /o/ has merged with long /o:/ (Hockett 1948).

References

- CAMPBELL, LYLE, and MARTHA C. MUNTZEL. 1989. The structural consequences of language death. In *Investigating Obsolescence: Studies in Language Contraction and Death*, ed. by Nancy C. Dorian, 181–196. Cambridge: Cambridge University Press.
- CLARKE, SANDRA, FORD ELMS, and AMANI YOUSSEF. 1995. The third dialect of English: Some Canadian evidence. *Language Variation and Change* 7.2: 209–228.
- DRESHER, B. ELAN. 2009. *The Contrastive Hierarchy in Phonology*. Cambridge: Cambridge University Press.
- DURAND, JACQUES. 2005. Tense/lax, the vowel system of English and phonological theory. In *Headhood, Elements, Specification and Contrastivity*, ed. by Philip Carr, Jacques Durand, & Colin J. Ewen, 77–97. Amsterdam: Benjamins.
- HARRIKARI, HELI. 2000. *Segmental Length in Finnish: Studies within a Constraint-Based Approach*. Publication 33, University of Helsinki, Department of General Linguistics.
- HOCKETT, CHARLES F. 1948. Potawatomi I: Phonemics, morphophonemics, and morphological survey. *International Journal of American Linguistics* 14: 1–10.
- KO, SEONGYEON. 2010a. A contrastivist view on the evolution of the Korean vowel system. In *MIT Working Papers in Linguistics (MITWPL) 61: Proceedings of the Sixth Workshop on Altaic Formal Linguistics (WAFSL 6)*, ed. by Hiroki Maezawa & Azusa Yokogoshi.
- . 2010b. Vowel contrast and vowel harmony shift in the Mongolic languages. Presented at the Seventh Workshop on Altaic Formal Linguistics, University of Southern California, Los Angeles, October 29.
- OXFORD, WILL. 2011. Contrast shift in the evolution of Algonquian vowel systems. General paper, University of Toronto.
- SHIBATANI, MASAYOSHI. 1990. *The Languages of Japan*. Cambridge: Cambridge University Press.