Palatalization in Bunun
Hui-chuan J. Huang
National Tsing Hua University

This paper discusses the phenomenon of palatalization in Bunun, an endangered Formosan Austronesian language spoken in central and southern Taiwan. The two dialects under investigation are Takituduh, a northern dialect spoken in the central part of Taiwan, and Isbukun, a southern dialect spoken in a much wider region of southern Taiwan. The paper shows that the triggering environment of palatalization is identical in the two dialects, but the segments targeted by palatalization are different. In Isbukun, all the voiceless obstruents undergo palatalization while in Takituduh, palatalization affects only those voiceless obstruents that are stridents as well.

Isbukun Bunun has the phonemes /p t k ʔ b d s h ʋ ɬ ɪ a u/ (He et al. 1986, Li 1997, H. Lin 1996, T. Lin 2001 et al. 2000, among others). The phonemes /t/ and /s/ becomes an alveolopalatal affricate [çi] and fricative [si], respectively, when they appear before tautosyllabic high front vowels or glides, as illustrated by the examples /tina/ [çiina] ‘mother’ and /siʔa/ [siʔa] ‘to take’. Takituduh Bunun contains, in addition, the phonemes /c/ (which represents a voiceless alveolar affricate) and /q/ (a uvular stop). Although palatalization in Takituduh occurs in the same environment as that in Isbukun, it targets a different set of sounds: /c/ and /s/ palatalize to [çi] and [si], respectively, but the phoneme /t/ is not affected, as shown by /tina/ [tina] ‘mother,’ /siʔaʔ/ [siʔaʔ] ‘to take,’ and /mačjal/. Therefore, the same phonetic sequence [çi] is the surface manifestation of underlying /ti/ in Isbukun, but of underlying /ci/ in Takituduh.

In the framework of a constraint-based model such as Optimality Theory, palatalization can be viewed as the high ranking of some sequence constraints over featural faithfulness constraints. Assuming that front vowels are characterized as Coronal-[-anterior] and that alveolar consonants are Coronal-[+anterior], palatalization in Bunun results from the high-ranking of the constraints against the sequences *si, *ci, and *ti. These constraints are similar to one another in avoiding Coronal-[+anterior] directly preceding Coronal-[-anterior], but different in terms of the feature characterization of the preceding members: *si involves [+continuant, +strident], *ci involves [-continuant, +strident] and *ti involves [-continuant, -strident, -voiced]. The paper argues that these sequence constraints are inherently ranked, with the rankings *si>> *ci>> *ti, and that languages may display differences along the continuum. When the preceding Coronal-[+anterior] segment is [+continuant] or [+strident], the prohibition against [+anterior][-anterior] sequence is stronger and palatalization is more likely to take place. The hierarchy accounts for the Bunun data, and makes the prediction that languages are unlikely to palatalize ti sequences without affecting si and ci sequences.