The Disyllabic Trochee in Bangla, Punjabi and Tamil: Variations on a Theme

In this paper we examine the requirement that the minimal word be a disyllabic trochee encoded as the constraint Disyllabic Trochee partially or fully satisfied in different ways in three unrelated languages spoken in India namely, Punjabi, Bangla and Tamil. In the framework of Optimality Theory, like all constraints, the constraint Disyllabic Trochee too is violable, though minimally, in two of these languages. Whereas in Bangla it is ranked high and hence always satisfied, in Punjabi and Tamil, it is not surface true. In Punjabi, a higher ranked constraint renders the constraint Disyllabic Trochee violable resulting in a few subminimal bimoraic lexical words and in Tamil, the disyllabic requirement is freely violated as disyllables are in free variation with monosyllables which we attribute to specific ranking strategies adopted by the grammar of Tamil.

We first take up the case of Bangla where we argue that the constraint Disyllabic Trochee is undominated and hence inviolable. In Bangla which does not have a phonemic vowel length distinction and where closed syllables count as bimoraic and heavy attracting prominence (1 below), monosyllables whether closed or open invariably have a long vowel (2). We argue that the monosyllabic lengthening is due to a catalectic syllable (Kiparsky (1991), Kager (1995)) which renders these minimal words ‘virtual’ disyllables. We bring independent arguments to support our catalectic analysis.

1) Bangla Prominence
   i. p taka ‘flag’  ii. kon i h o ‘youngest’

2) Bangla Monosyllabic Lengthening
   i. /din/ [di:n] ‘day’  ii. /g h i/ [g hi:] ‘clarified butter’

We then consider Punjabi, which has a three-way distinction in syllable weight, a monomoraic light syllable, a bimoraic heavy syllable and a trimoraic superheavy syllable. Following the assumption in the literature, we assume that trimoraic syllables are really virtual disyllables. We find that, by and large, monosyllables are trimoraic with a geminate final consonant augmenting the monosyllable to a superheavy status. Thus, apart from a few, systematic exceptions which are bimoraic (satisfying the Foot Binarity constraint), most of the monosyllabic lexical words are superheavy satisfying the Disyllabic Trochee (3 below).

3) Punjabi Monosyllables
   i. c h d l ‘a mean act’  iii. sukk h ‘comfort’

Finally, turning to Tamil, we note an intriguing pattern of optional, final epenthesis in monosyllables.

4) Tamil Word Final Sonorants
   i. para ~ * para ‘loft’  ii. ayal ~ * ayal ‘field’
   iii. puha ~ * puha ‘fame’  iv. ki a ar ~ * ki a ar ‘old man’

5) Tamil Monosyllables
   i. ja: ~ ja: ‘a measure’  ii. a:l ~ a:l ‘tail’
   iii. ku: ~ ku: ‘porridge’  iv. mo:r ~ mo:r ‘buttermilk’

In addition, when the monosyllables contain a short vowel (as in 6), we find that the optional disyllabic variant has a geminated consonant in addition to the epenthetic vowel requiring the
invocation of another constraint namely, the Base = Foot (satisfying Foot Binarity with a foot dominating two moras).

6) **Tamil Monosyllabic Doubling and Epenthesis**
   i. ka ~ ka ‘eye’
   ii. pal ~ pall ‘tooth’

We show that the Tamil facts may be explained as a consequence of an optional constraint conjunction in the constraint hierarchy of Tamil (Smolensky (1997)).

In this paper we observe that the disyllabic minimality requirement is met (to varying extent depending on the constraint hierarchy of the language in question) by exhausting the three logical possibilities of stem augmentation namely, vowel lengthening (in Bangla), consonant gemination (in Punjabi) and both consonant gemination and vowel epenthesis (in Tamil).

**References:**