

Synchronic intervocalic fortition in Sula: a counter-universal

In Sula, an Austronesian language of Indonesia (ISO szn), a phonetically unmotivated sound alternation occurs where morpheme-initial voiced plosive stops /b, d, g/ devoice in intervocalic position as the result of prefixation or compounding (see ex. 1). The alternation has been recorded in all documented dialects of Sula, and it is verified by acoustic phonetic analysis. A phonological process of intervocalic devoicing is not only synchronically unattested in other languages (except see Schutz 1968), scholars have speculated that it would be so contrary to universal language tendencies that it is unlikely to exist at all (e.g. Beguš 2015). This talk demonstrates that such a phonological process is not only attested, but productive. This finding challenges the fundamental Neogrammarian hypothesis that all sound change is regular and without exception (Osthoff and Brugmann 1878) and that it can be conditioned only by phonetic factors (Hock 1991). Finally, the data lend theoretical corroboration to a contested instance of historical devoicing discovered in Kiput and Berawan (Blust 2005).

Evidence from recent fieldwork by the author suggests a phonemic voicing contrast in Sula for plosives. Voiced variants of the alternating segments are the underlying forms; it is not possible to analyze the segments as underlyingly voiceless, since the non-alternating forms in (1) do not voice when unprefixated. Moreover, the alternating segments are seldom produced with a voiceless variant in non-intervocalic positions, and most speakers report perceiving the segments as voiced even when they are produced with a *voiceless* variant. While speakers vary with respect to the frequency of the alternation, no individual phonetic or social condition can be identified as triggering the alternation.

Incomplete, pronoun-specific inflection systems that are superficially similar have been proposed for some Central Maluku languages (e.g., the neighboring Soboyo; Fortgens 1921:20-22). However, a similar analysis cannot explain the Sula data for several reasons. First, the proposed systems do not describe alternations in intervocalic position that are exclusively limited to voicing. Second, the hypothetically inflected forms do not occur in pro-drop constructions (where V_V is not present). Third, the alternation is also present in affixed forms and compound words with intervocalic environments, without indicating person inflection. Fourth, under an inflection analysis, the variable distribution in Sula would indicate that segments must be underlyingly voiceless, but independent minimal pairs contradict this. Lastly, the alternation appears to be exceptionless in Sula; initial-segment devoicing is available to all verbs beginning with voiced stops when a target environment is present, and not, as inflection proposals describe, a system which affects only some words. In Sula, an intervocalic environment is the only apparent condition that is consistent in all situations, and this makes an active phonological process the most likely explanation for the alternation. (447 words)

(1) Voicing alternation occurs only to underlyingly voiced plosives

voiced (alternation)		voiceless (no alternation)	
(a) /b/ <i>basel</i>	<i>basel fia-kau neka</i> ‘plant that tree’ ‘to plant’ <i>i-pasel fia-kau neka</i> ‘3SG plants that tree’	/p/ <i>pia</i>	<i>pia makata bau munara</i> ‘the doctor is working’ <i>i-pia moya</i> ‘3SG is not alive’
(b) /d/ <i>det</i>	<i>det moya kau neka</i> ‘don’t cut that tree’ ‘to cut’ <i>a-tet kau neka</i> ‘I cut that tree’	/t/ <i>ted</i>	<i>ted lepa nui fat hia</i> ‘lift one coconut’ ‘to hold’ <i>ak dad a-ted mua-mua</i> ‘I can hold all of them’
(c) /g/ <i>gaya</i>	<i>gaya moya pel</i> ‘don’t eat anymore’ ‘to eat’ <i>a-kaya</i> ‘I eat’	/k/ <i>kag</i>	<i>kag moya pel</i> ‘don’t be afraid anymore’ ‘to fear’ <i>a-kag moya</i> ‘I’m not afraid’

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