Stress Shift and Prosodic Structure in Wamesa

This paper presents an analysis of stress shift in Wamesa [wad], an Austronesian language of West Papua, Indonesia, with approximately 8,000 speakers along the southeastern coast of Cenderawasih Bay. This analysis requires that unstressed covert feet (after i.e. Bennett 2012) be built in the course of the derivation, and that a constraint be used enforcing faithfulness to underlying (lexically assigned) stress (after i.e. Hyde 2012), providing evidence that these somewhat controversial aspects must be incorporated into phonological theory.

Wamesa stress placement is lexically determined and not predictable. (Some statistical tendencies do, however, exist, including a preference for penultimate stress, reflecting a likely historical stage). The sole restriction throughour the lexicon is that primary stress always occurs within a three-syllable window at the end of the stem, similar to Macedonian (Franks 1989; Hyde 2012). In words with antepenultimate stress, the addition of a clitic determiner *ne* (definite proximal), *pa* (definite mid-distance), or *wa* (definite distal) causes stress to shift to the stem-final syllable. Words with penultimate stress do not undergo this shift.

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(1) a. ['si.ni.tu] 'person' → [si.ni.'tu=pa-i] 'the person'
b. [ma.'ne.ta] 'friend' → [ma.'ne.ta=pa-i] 'the friend'
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Stress never shifts rightwards beyond the edge of the stem and onto the enclitics, regardless of how many adjacent syllables this leaves unstressed at the end of the word. (Secondary stress may precede primary stress in sufficiently lengthy words to avoid initial lapse.)

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(2) a. ['si.ni.tu] 'person' → [si.ni.'tu=pa=ta.ta] 'we people'
b. [ma.'ne.ta] 'friend' → [ma.'ne.ta=pa=si.a] 'the friends'
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The one exception to this stress-shifting pattern comes from words with five syllables, and demonstrates that it is in fact lapse avoidance which drives shift. In isolation, these longer words always receive antipenultimate stress. With a definite determiner, stress fails to shift, as this would cause a word-initial lapse (four syllables) worse than the one it would avoid (three syllables).

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(3) a. [a.pa.ˈra.pi.ri] 'gnat' → [a.pa.ˈra.pi.ri=wa-i] 'the gnat' (never *[a.pa.ra.pi.ˈri=wa-i])
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This pattern is best accounted for under an analysis in which covert feet are built within the Pword when two syllables exist in the stem to the right of the stressed syllable. The presence of this foot in a word such as sinitu ['(si).(ni.tu)] provides the necessary prosodic structure for stress to move rightwards and avoid excessive lapse caused by the addition of the clitic. A constraint enforcing faithfulness to lexical stress allows a monosyllabic foot to be built on the initial syllable of sinitu. However, FootBinarity(σ) outranks Parse, which, in concert with a strong preference for right-headed feet, prevents the final syllable of $man\acute{e}ta$ [(ma.ˈne).ta] from being likewise footed, thereby preventing stress shift here. A separate, undominated constraint is required to prevent the footing of clitic material, as evidence from compounds shows that feet must be able to be freely built at the level of the derivation at which clitics attach.

This approach requires a stratal (Kiparsky 2000) or serial (McCarthy 2009) framework, as a strictly parallel OT analysis is stymied by a ranking paradox between the Faith(stress) and *Lapse constraints. It is also necessary to follow McCarthy's suggestion that once created, feet cannot be altered.

References

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