Unified representations for the syllable and stress (abstract for 10mfm)

Tobias Scheer (scheer@hermes.unice.fr), University of Nice
Péter Szigetvári (szigetva@nytud.hu), Eötvös Loránd University, Budapest

It is held since early Generative Phonology (Liberman 1975) that phonological theory is called to recognize two distinct levels of representation for syllables and stress. The reason for this supraskeletal split is the fact that a single syllable may count double for the purpose of stress assignment, depending on its rhymal complexity (V=light, VV=heavy, VC=light or heavy language specifically). This impairment of stress and syllable has led to two concurrent approaches to stress, that is, moraic structures (e.g., Hayes 1980, 1995, Hyman 1985) and models recurring to metrical grids (e.g., McCarthy & Prince 1986, 1990, Halle & Vergnaud 1987).

In this talk we show that the facts related to both stress and syllabic processes may be handled by a single theory. We submit that the two major stress patterns fall out naturally if a strict CVCV approach to syllabic structure is assumed (Lowenstamm 1996). It has been previously demonstrated that CVCV is able to handle the usual phenomena involving syllabic structure such as Closed Syllable Shortening, Compensatory Lengthening etc. without recurring to any level of representation above Onsets and Nuclei. In this view, constituent structure boils down to a strict consecution of nonbranching Onsets and nonbranching Nuclei (no Codas, no branching constituents). This model expresses syllable weight naturally, by assigning one nucleus to light and two to heavy syllables: [CV]=CV, [CVV]=CVCV, [CVC]=CVCv (where c/v=empty skeletal position). In this analysis it is possible to differentiate between languages such as Latin where Codas make a Rhyme heavy (Weight-by-Position) and those that count VC-Rhymes as light by a simple parameter-setting: the former do count empty Nuclei, the latter do not (all languages seem to interpret V-Rhymes as light, and VV-Rhymes as heavy). Consider the relevant representations for Latin where stress is antepenultimate unless the penultimate syllable is heavy, i.e., either bears a long vowel or a Coda. In all cases, stress falls on the third Nucleus, counting from the right edge, and including explicitly empty Nuclei of the kind that occur in arísta (cVCVCvCV; also cf. habère : CVCvCVcVC, fácere : CVCVCv). In a language like Khalkha Mongolian which is reputed not to possess Weight-by-Position, empty Nuclei are ignored for the purpose of stress-assignment, to the effect that only long vowels count as heavy, whereas short vowels followed by a Coda do not.

The possibility of deriving the two fundamental stress patterns by the simple parameter “empty Nuclei are counted vs. ignored” is achieved by the fact that each consonant is inherently bound to a vocalic position. This view also provides answers to the following questions that are either never asked by current models of stress-assignment, or lack response.

a. Stress is a fundamentally vocalic property. How come that some consonants enjoy a vocalic status when playing a role in stress-assignment?

b. Why do Onsets never contribute weight?

Under the above analysis, no consonant ever counts as a vowel. Stress is an exclusively vocalic property. The illusion that some consonants (typically those seen as Codas) may penetrate into the vocalic sphere is due to the fact that they are usually defined with respect to a consonantal constituent. In the CVCV model they are not. Rather, the difference between an Onset- and a Coda-consonant is that the former, but not the latter, occurs before a pronounced Nucleus. It is this pronounced Nucleus that the stress rule takes into account, thus an Onset will never have the chance to have any influence, it will behave as a transparent portion of the skeleton. The Coda-illusion stems from the fact that empty Nuclei have no direct phonetic manifestation, but may still be visible for the stress rule. Hence, Nuclei are the only thing that stress-assignment takes into account. The talk will also provide a CVCV-analysis of complex Onsets.

Moraic frameworks and analyses using metrical grids simply observe the facts mentioned under (a) and (b). They do not ambition to provide an explanation. For instance, consonants in Coda-counting languages are granted a mora. There is no theory-internal answer to the question why Onset-consonants are never dominated by a mora. In the same way, grid-based analyses transport the Coda-information from level 0 to higher levels by a rule (or a constraint). There is no answer to the question why “syllable marking rules” of that kind do not apply to Onsets.

In sum, we propose an analysis of stress-assignment that does away with the unnatural split of the supraskeletal area into a syllabic and an accentual world, and where cross-linguistic generalisations are not simply observed, but explained. The only objects needed in order to achieve an explanatory and unified analysis are non-branching Onsets and non-branching Nuclei.