

In various works on phrasal stress (henceforth PS), several general operations of PS placement have been formulated (henceforth Nuclear Stress Rules, NSRs). Some relying on the word-order (e.g., [1]), some relying on phonological phrasing (e.g., [10]), some relying on syntactic hierarchy (e.g., [4]), and some relying on syntactic hierarchy, selection, and independent prosodic principles (e.g., [7]). What all these major analyses agree upon, however, is that syntax generates a word order / structure, and the relevant syntactic output is the input to the NSR.

In addition, all these major works appear to assume that there are exceptions to the NSR, caused by certain lexical or interpretive properties. Some works (e.g., [2, 7]) explicitly rely on exceptionality to adequately model the data they consider. Four particular examples of such putative exceptions are underlined below (the relevant contexts are ones in which G-marked items are not discourse-new, but all else is discourse-new; the bolded syllable with the accent bears nuclear stress):

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|-----|----|---|----------------|
| (1) | a. | Bananas are nutritious. Bill sélls <u>bananas</u> _G . | given elements |
| | b. | Sara discússed <u>herself</u> . | reflexives |
| | c. | Zack would like to márry <u>someone</u> . | indefinites |
| | d. | Speaking of TV, I'll turn the néws <u>on</u> . | verb particles |

This may lead one to formalize an exception-based model whereby givenness, anaphoricity, indefiniteness, or lexical class influence the placement of nuclear stress, such as (2):

- (2) Statement of Exceptions to the NSR:

Given items, anaphors, indefinites, and functional words don't bear nuclear stress.

Modeling a statement like (2) raises a major theoretical issue: Minimalist architectures disallow a phonological operation (such as the NSR) that is sensitive to features like syntactic labels or discourse-status.

- (3) Legibility Condition:

Uninterpretable/non-phonological features must not reach PF. ([5]; [14])

Instead, any phenomenon that exhibits particular PF- and LF-effects must result from the syntactic derivation. From this viewpoint, the lexical/interpretational properties in (2) and the phonological property of not bearing nuclear stress would need to be **rooted in the syntax, independently of one another**.

In this way, we might expect that manipulating the syntactic structure may affect the PF properties (bearing nuclear stress or not) while not affecting the formal/LF properties (having particular lexical/interpretation properties). This is indeed the case; the same items that must not bear stress in (1a-d), must under different syntactic conditions.

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|-----|----|---|----------------|
| (4) | a. | Bananas are nutritious. Bill sells apples and <u>banánas</u> _G . | given elements |
| | b. | Sara discussed someone besides <u>hersélf</u> . | reflexives |
| | c. | Zack would like to marry <u>some héiress</u> . | indefinites |
| | d. | Speaking of the news, I'll turn the news <u>ón</u> . | verb particles |

This provides strong empirical evidence against a model employing statements like (2).

To account for the broad validity of an “exceptions” approach like (2), e.g. (1), while also accounting for where it fails, e.g. (4), this paper employs an NSR that does not reference lexical/discourse-status properties. Instead, the location of PS depends on depth of embedding, as determined cyclically, at Spell-Out (e.g. [7, 13]). The particular NSR used here is in (5):

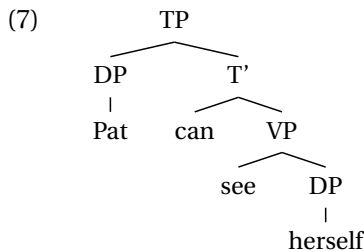
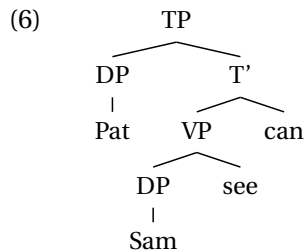
- (5) Hierarchy-Based Nuclear Stress Rule:

Assign PS to the most deeply embedded element of a Spell-Out Domain.

By making this hypothesis, one is led to conclude that each of the final words in (1) must not be most embedded (despite appearances and general assumptions). This is **independently supported** by previous analyses (below) that find motivation outside of prosody.

This provides a new framework for thinking about PS data to minimize the effects of these two issues. Specifically, PS should be used as word-order has been used: as observable data that informs the theo-

retician of what abstract syntactic structures are possible. Like word order is used to rule out a structure like (6) for ‘Pat can see Sám’, so PS patterns can rule out a structure like (7) for ‘Pat can sée herself’.



In particular, the analysis for (1a) & (4a) and (1b) & (4b), is that given material and reflexives both move, as much as grammatically possible. The result of this movement is that they are not most deeply embedded (thus not candidates for PS) – when that movement is impossible (as in (4a-b)), they are candidates to bear PS. (The details of this analysis are already laid out in [12] and [15])

Building upon this past work, (1c) & (4c) are argued to be derived because determiners are merged above the verb (independently concluded in [11]), thus N-to-D movement renders the *one* of *someone* less embedded than the verb at Spell-Out. Similarly, at Spell-Out, verb particles are structurally higher than NP objects (independently concluded in [8]) but lower than given material, deriving (1d) & (4d).

Thus, complex prosodic patterns in PS distribution, as in (1) & (4), only require an NSR sensitive to syntactic hierarchy —consistent with (3)— and such prosodic information can be used to support/refute syntactic analyses. Each of the (a-d) data has a different syntactic structure that induces apparent exceptionality (or not), but **a single unviolated NSR applies equally to all of them, unifying “exceptions” and “non-exceptions”** under a single analysis. Just as word-order is seen as a necessary bootstrap for children and theoreticians to make the correct conclusions about the syntax, so too PS can be treated the same way. This is an especially desirable result, given claims about the power of prosodic bootstrapping in the acquisition of syntax (e.g., [3], [6], [9], among many others).

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