

## Morpho-phonological ‘controversy’.

### On “visibility” of morphological information in English word stress.

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The idiosyncratic stress behaviour of morphologically complex items in English was usually linked in the literature (Fudge 1984, Lieberman & Prince 1977) with special accentual properties of particular morphemes, described by complicated derivational “repair” mechanisms (SPE, Halle & Vergnaud 1987), or certain ‘unruly’ suffixes were labelled ‘extrametrical’. (Hayes 1995)

Ideally, simple morphological domains should carry over their accentual potentials onto morphologically complex domains, a situation that would guarantee a perfect stress preservation within independently stressable domains. Such a morpho-phonological alignment, however, offers no universally valid generalisations concerning the nature of a “phonological word” in English:

1. controversy	2. PHOTO-	3. PHONO-	4. ANTI-
a. 'contro,v[ɜ:]sy	a. * ,photo'graphy	a. * ,phono'logy	a. * ,anti'logy
b. controv[ə]sy	b. 'photo,graph	b. ,phono'logical	b. an'tilogy
c. * contro'v[ɜ:]sial	c. pho'tographer	c. pho'nology	c. * an'tibody
d. ,contro'v[ɜ:]sial	d. ,photo'graphic	d. 'phono,typy	d. 'anti,body

5. -METER	6. -BODY	8. MIXED	9. -VALENT
a. 'kil[əʊ],m[ɪ:]ter	a. 'someb[ə]dy	a. 'sentim[ə]nt	a. am'biv[ə]lent
b. ki'l[ɒ]m[ɪ]ter	b. 'some,b[ɒ]dy	b. ,senti'm[e]ntal	b. ,ambi'v[er]lent
c. ,milli'meter	7. -MAN	c. ,sentim[e]n'tality	
d. * mi'limeter	a. 'super,m[æ]n	d. ,sentim[ə]n'tality	
e. * 'thermo ,meter	b. 'postm[ə]n		
f. ther'mometer			

Evidently, morphological complexity is not responsible for phonologically different behaviour of morphologically identical domains. Past accounts (Kaye 1995) attributed the inconsistencies to analytic (5c,d) vs. (5e,f) non-analytic structure of a compound, admitting to a fair amount of lexical arbitrariness, as in (5a,b).

The apparent irregularities above receive a non-arbitrary treatment within the framework of metrical phonology, whose central idea is the organisation of metrical material (syllables or moras) into metrical feet, subject to the principles of metrical well-formedness and exhaustiveness. (e.g. Burzio 1994)

The metrical foot, viewed as a type of a governing domain, consists of the head-rhyme (stressed) and the complement-rhyme(s) (unstressed). In English, the head position is licensed by: (a) weight (heavy syllable head, e.g. **H**L) or (b) position (left edge of the “stress window”, in the absence of a penultimate heavy syllable, e.g. **L**LL). Note the ill-formedness of the foot (**L**H**L**) (\**veranda*), where a less complex rhyme (**L**ight) would dominate a more complex one (**H**heavy).

If the presence of a morphological boundary should be respected by metrical structure, there would be little justification for the forms in (1b), (2c), (3c), (4b), (5b), (5f), (8a), (9a) since each of the component morphemes is an independently attested word or foot. Similarly, the incorrectness of the forms in (2a), (3a), (4a), (5e) seems inexplicable. Additionally, vowel reductions in the head position of rightmost domain prevent the creation of ill-formed feet \*(**L**H**L**), as in (1b) - *versy*, (5b) - *meter*, (8b) - *valent* and render morphological information irrelevant.

The accentual discrepancies between morphologically similar compounds (4b vs. 4d) or (5c vs. 5f) may, hypothetically, be due to a different lexical frequency of the forms.

Existent ‘free-variation’ stress patterns, like (1a,b), (5a,b) suggest that morphological information may be visible to phonology of stress if it independently respects metrical requirements, yet the forms preferred in RP English seem to be those in which morphology was ‘erased’.

The inconsistent metrical behaviour of the word ‘*controversy*’ can be then summarized as follows. In the form (1a) [kɒntɹəvɜːsi] morphological domains are naturally respected as they correspond to independently well-formed feet: ‘*contro-* (**H**L)<sub>#</sub> and ‘*-v[ɜː]sy* (**H**L)<sub>#</sub>, therefore there is no need for melodic re-adjustments. In (1b) [kən'trɒvəsi], however, morphological boundaries are ‘overridden’ in the parsing process, which applies to create a maximal foot within the confines of the tri-syllabic stress window. As a result, the structure: \**con'trov[ɜː]sy* \*H(**L**H**L**) appears, which does require a melodic re-adjustment, i.e. the vowel shortening:

[ɜ:] > [ə ] to guarantee the well-formed metrical structure *con'trov[ə]sy* H(LLL)

The scale of re-adjustments, both metrical and melodic (vowel reduction) in the form *con'troversy* seems to justify, still a hypothetical claim, that the metrical structure is built independently of morphological structure. If so, the phonology of word stress in English renders morphology invisible. In cases when morphological structure would require no metrical changes ('*contro,versy*), variant pronunciations exist. Bearing in mind that analytic morphology may be diachronically lost (e.g. *cup + board = [kʌbəd]*), in time only the morphologically "blind" forms will remain. With higher frequency words it is already the case. (*thermometer* vs. '*alti,meter*)

Morphology-Phonology interaction in relation to English word stress is, therefore, a game whose rules are imposed by phonological (metrical) licensing and metrical constituency, respecting morphological information only where it is, coincidentally, possible.

#### REFERENCES

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