

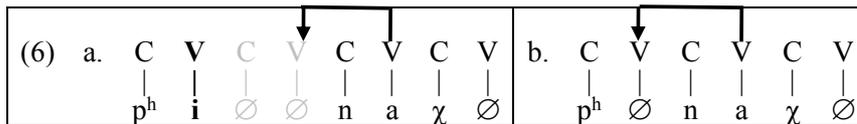
**There is no *word*.** Linguists have long proposed that there is no morpho-syntactic(M-S) entity that equates to what we call *word*. Some recent works dedicated to this point are (E, F, & J). What are classed as Prosodic Words(PW) may be realizations of M-S structures of various sizes, from small (1a), to large (1b); examples in (1) evidence the smallest prominence domains in each language(C). Additionally, we have evidence for complex phonological structure inside of morpho-syntactically larger words (2a), inside relatively smaller words (2b) and, conversely, evidence for complex M-S structure inside of smaller words that do not offer evidence for parallel phonological(PF) complexity (2c; German).

- (1) a. [ {small-er} DEGREE PHRASE ] { } = PW, [ ] = syntactic phrase, ( ) = foot  
 b. [ {uqa-limaar-vi-liung-inna-nngit-tunga} COMPLEMENTIZER PHRASE ] (Inuktitut)  
 speak-all.of-NOM-make-always-NEG-DEC.1SG ‘I was not always making libraries.’ (C)
- (2) a. [ { { (gi:) } { (bó:)(ni) } { (mawí)PW } PW } PW } COMPLEMENTIZER PHRASE ] (Ojibwe)  
 PAST - stop -cry ‘He stopped crying’ (K)
- b. [ { { párent PW } hood PW } NOUN PHRASE ]  
 c. [ { d-er PW } [mann] DETERMINER PHRASE ] [D<sup>0</sup>-[AGR<sup>0</sup> [man<sub>NP</sub>]<sub>AgP</sub>]DP] ‘the man’ (G)

What is clear from the above is that *words* are epiphenomenal; they do not map to specific M-S constituents, nor to a specific class of M-S constituents. **Words are formed at PF.** That PF does not build words by making reference to the M-S in a cross-linguistically uniform manner entails that there is no universal system of Direct Reference(DR); where a M-S category  $\alpha$  consistently maps to PF domain  $\beta$ . Further, language-specific systems of DR do not capture all of the data either. Consider any morpheme (bound or free) that has variable PF behaviour. In (3) we see a well-known example from English, and in (4) an example from Nivkh.

- (3)a. [cómpar-able<sub>AP</sub>] ‘similar’ b. [[compár-Ø<sub>VP</sub>]-able<sub>AP</sub>] ‘able to be compared’
- (4)a. [p<sup>h</sup>-naχ [naχ<sub>NP</sub>] DP] refl-eyes ‘one’s eyes’ b. [p<sup>h</sup>i-[naχ<sub>NP</sub>] DP] refl-bed ‘one’s bed’ (L)
- In (3) the affix *-able* has two PF behaviours(D,B); one where it emerges as part of the PF domain of the base to which it attaches (3a), and one where it does not (3b). A *cómparable* pattern is seen in (4). In (4a) the reflexive *p<sup>h</sup>-* (possessor agreement) emerges inside the PF domain of the possessed noun (eyes), as part of a complex onset. In (4b) it emerges outside of the domain of the homophonous ‘bed’. This mono-consonantal morpheme must be syllabified; an epenthetic vowel emerges to do so in the latter case(L). Crucially here is that these morphemes (and other morphemes like them) project the same M-S structure in each construction. *-able* projects an adjectival node in the M-S, and *p<sup>h</sup>-* an AGR node within the DP (whether AGR is a narrow syntactic head is irrelevant here). This being the case, the different PF patterns in (3) and (4) in no way reflect the *absolute* syntactic positions of the affixes in question, but rather, their *relative* syntactic positions. In (3/4b) the complements of *-able* and *p<sup>h</sup>-* constitute separate PF domains/cycles, while in (3/4a) they do not. In 4a *naχ* indicates the initial-merger site of the inalienable possessed noun ‘eyes’, which raises to D<sup>0</sup> to check AGR features, an operation not required of alienably possessed nouns like ‘bed’ in (4b)(K). **No DR: IR, or NO REFERENCE?** As an alternative to DR we have Indirect Reference(IR). IR refers to any theory where PF rules reference the Prosodic Hierarchy(PH), and the PH references M-S structure (L<sup>0</sup>). This type of theory is exemplified by Selkirk’s Match Theory, where each M-S node  $\alpha \rightarrow$  a PF node  $\beta$  in the PH ( $X^0 \rightarrow$  PW,  $XP \rightarrow$  PPH). In an IR grammar, the differing behaviour of, e.g., the Nivkh possessive morpheme will be due to whether a PF domain is matched with said morpheme’s complement, where NP and DP are both cyclic nodes in either a multi- or mono-stratal framework; giving [p<sup>h</sup>-naχ<sub>DP=PW</sub>] (<sub>NP</sub> = null) and [p<sup>h</sup>i-[naχ<sub>NP=PW</sub>] DP=PW]. This type of account captures the patterns in

(1a), (2b), (3), and (4). Yet, there is an alternative approach that captures these types of phono-syntactic relations that has not received much attention. The procedural account, as in <sup>N</sup>, eschews reference to the PH. In such an account the above M-S structures are interpreted cyclically at the nP and DP nodes, and their PF outputs will be linearly determined. Assuming the beginning of a PF domain to be marked by an initial empty CV(grey)<sup>(H)</sup>, the derivations in (4) give the PF outputs in (6). The epenthetic vowel in (6a) emerges because it is not governed by a following overt vowel<sup>(I)</sup>. **No PH? No PPhs:** A linear account as in (6) is argued to capture all of the same data that



an IR account can, sans PH. Note: Government, or some account of phono-

tactics, is necessary independently of the PH. Now, if there are no PWs, then we have no expectation that a PW will mirror a particular M-S constituent. PF domains will be determined by the sub-PH phonology of the language (segment,  $\sigma$ , F). The implication of this type of framework is that in doing away with the PH, we also do away with Phonological Phrases (PPH). This leads us to expect no direct correlation between PPHs and XPs. Although XPs and PPHs often match, the literature abounds with examples where the same XP defines a PPH boundary variably. One example is the VP in Abrussezze <sup>(A)</sup>, which is *variably* a barrier for the application of gemination. This is also what we see in (1b) and (2a), where the English translations demonstrate the cross-linguistic variability of the definition of *phrase* vs. *word*. **The only stable syntax-phonology match is derivational:** If derivation rather than the PH gives us the mirroring of PF and M-S, such as it is, do we expect any stable cross-linguistic generalization in domain matches? We do. M-S analyses demonstrate that, in language after language, subjects and adjuncts are interpreted as separate domains from the structures to which they merge (in the M-S, at PF and at LF) <sup>(P)</sup>. If this is the case, a separate PF cycle for such structures will explain their stable PF independence, while a PH account does not explain their M-S and LF independence. Of note is that the examples of phono-syntactic mismatches in <sup>(I)</sup> used to support IR and the PH are cases of syntactic adjunction (phrases that neither project nor are selected for in the M-S) (relative clauses and stress in *this is the cat that ate the rat that stole the cheese* (p57), liaison blocking between nouns and modifiers as in *Jean a des livres assez nouveaux* (p179) etc.). It is argued here that the patterns that motivate IR, and the PH, are really evidence that the PH, like the word, is epiphenomenal.

<sup>A</sup>d'Alessandro, R., & Scheer, T. 2015. Modular PIC. *LI*. <sup>B</sup>Bermúdez-Otero, R. 2013. The stem-level syndrome. *UPenn Linguistics Department Speaker Series. Philadelphia, 11*. <sup>C</sup>Compton, R., & Pittman, C. 2010. Word-formation by phase in Inuit. *Lingua, 120-9* <sup>D</sup>Giegerich, H. J. 1999. *Lexical strata in English: Morphological causes, phonological effects* Vol. 89. CUP <sup>E</sup>Gribanova, V. & S. Shih. in press. *The morpho-syntax phonology connection*. OUP. <sup>F</sup>Julien, M. 2002. *Syntactic heads and word formation*. OUP. <sup>G</sup>Leu, T. 2014. *The architecture of determiners*. OUP. <sup>H</sup>Lowenstamm, J. 1999. The beginning of the word. In J. Rennison & K. Kühnhammer, eds. *Phonologica 1996: Syllables !?*. The Hague: Thesus <sup>I</sup>Nespor, M. & I. Vogel. 1986/2007. *Prosodic phonology*. DeGruyter. <sup>J</sup>Newell, H., M. Noonan, G. Piggott, & L. Travis. in press. *The structure of words at the interfaces* OUP. <sup>K</sup>Newell, H., & Piggott, G. 2014. Interactions at the syntax-phonology interface: Evidence from Ojibwe. *Lingua, 150* <sup>L</sup>Piggott, G., L. Travis & H. Newell. 2016. *The Phonology of Possession. Presented at OCP*. <sup>M</sup>Salanova, A. in press. The paradoxes of the Mëbengokre analytic causative. In Newell et al in press <sup>N</sup>Scheer, T. 2013. Why phonology is flat: the role of concatenation and linearity. *Language Sciences, 39* <sup>O</sup>Selkirk, E. 2011. The syntax-phonology interface. *The handbook of phonological theory, 2* <sup>P</sup>Uriagereka, J. 1997. Multiple spell-out. *Groninger Arbeiten zur germanistischen Linguistik, (40)*.