*Being nit***PIC***ky*

Heather Newell
UQAM

Claim: The Phase Impenetrability Condition (PIC) is epiphenomenal. It therefore cannot be appealed to to explain phonological phenomena. Freezing effects in the phonology can be mediated procedurally, however, without reference to representational domain delimiters (ex. the Prosodic Hierarchy). **Supporting Arguments:** The supporting arguments for the above are both empirical and theoretical. (1) There is evidence that the syntactic domains targeted by the PIC are not opaque after spell-out. (2) The PIC as originally proposed is not a restriction on the visibility of phonological domains with regard to one another within the phonological module. (3) Phonological domains are not opaque in the way one might predict if a PIC were active (They are permeable.). (4) Some effects of the prosodic hierarchy can be duplicated procedurally iff the PIC is not a restriction on syntactic operations/Spell-out.

(1) Bošcović (2007) offers arguments that the PIC is epiphenomenal in the syntactic module, using evidence from XP movement and long-distance Agree. Newell (to appear) adds to this evidence from X^0 movement, Late Adjunction, and Lower-Copy Spell-out. If the PIC is not active in the syntax, it is unclear what it would mean for it to be the mechanism used to delimit domains in the phonology.

(2) The original formulation of the PIC was as follows: "The computational burden is further reduced if the phonological component too can "forget" earlier stages of derivation. That follows from the Phase Impenetrability Condition (PIC), for strong phase HP with head H: The domain of H is not accessible to operations outside HP, but only H and its edge, the edge being the residue outside of H-bar, either SPECs or elements adjoined to HP." (Chomsky 2000). Note that the elements that the PF module is "forgetting" are syntactic objects/domains. The PIC says nothing about whether previously computed phonological domains in the memory buffer of PF are accessible at later domains within PF.

(3) It is uncontroversial that cyclic domains will bleed the environment for the application of some phonological operations (ex. d'Alessandro & Scheer to appear). But, it is also the case that domains which have been previously interpreted at PF can be altered. Examples of this include infixation, some sandhi, and the linearization of late adjuncts.

(4) If we do away with the notion of structural 'flattening for reasons of computational efficiency' then we predict that spell-out at each phase will process the entire phase domain, including those sub-domains that have been previously interpreted. The integrity of previously interpreted strings cannot be assured by a purely linear algorithm (Newell 2014, 2015). It can be assured through (1) a checking mechanism in the PF buffer: previously interpreted domains will only be altered if necessary, and (2) bottom up spell-out: multiple command units (ex. adjuncts, subjects vs. the trunk of the tree (Uriagereka 1999)) have independent bottom-most nodes, and therefore will always be spelled out separately.

Boskovic, Z. 2007. On the Locality and Motivation of Move and Agree: An Even More Minimal Theory Linguistic Inquiry, Volume 38, Number 4, pp. 589-644.

Chomsky, N. 2000. Minimalist inquiries. In Step by step: Essays on minimalism in honor of Howard Lasnik, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89-155. Cambridge, Mass.: MIT Press.

d'Alessandro, R. & T. Scheer. to appear. Modular PIC. *Linguistic Inquiry.*

Newell, H. to appear. Nested Phase Interpretation and the PIC. In *Word Structure at the interfaces.* (working title). H. Newell, M. Noonan, G. Piggott, et L. Travis eds. OUP.

Newell, H. 2014. Representation and Linearization: Interface Issues. Poster presented at Reading Tobias Scheer. EHESS. Paris. Feb 6-8.

Newell, H. 2015. Phase Shift. Presented at Spell-Out and the Syntax-Phonology Interface. Universitetet I Tromsø. 23 avril.

Uriagereka, J. 1999. Multiple spell-out.S. Epstein &N. Hornstein eds. Working Minimalism. MIT Press, Cambridge, Mass. 251-282.