Phonology without Strata

Heather Newell, UQAM

This talk has two goals, one mechanical and one theoretical. The mechanical goal is to demonstrate that hiatus resolution in Ojibwe (Algonquian), NC cluster repair in Malagasy (Austronesian), and exceptional stress patterns in Turkish (Altaic) do not find tenable solutions within a stratal account (OT or otherwise). Even though each of these phonological patterns is demonstrably affected by cyclic application of rules/constraints, in each of these cases it is clearly apparent that the various methods employed by the phonology to repair illicit sequences all fall within the phonological word (PWd). (I will subsequently call these alterations ‘rules’ here, abstracting away from the exact mechanism that triggers phonological change).

(1) a. nò:komis 'my grandmother'
   ni-o:komis
   1-GRANDMOTHER
b. nídodè:nimà: 'I am jealous of her'
   ni-ode:n-im-a:
   1-BE JEALOUS-FINAL-TS(3 THEME)
(2) a. mamatra 'y measures x'
   m+an+fatra
   EVENT-CAUSE-MEASURE
b. ma+mipfatra 'z makes x be measured'
   m+an+f+ifatra
   EVENT-CAUSE-MEASURE
(3) a. gidecëktim 'I will have gone'
   gid-ecek-i-ti-m
   GO-FUT-COP-PAST-1SG
b. gördûn 'I saw'
   gör-dû-m
   SEE-PAST-1SG

In (1) we can see that hiatus is resolved between the person marker ni and the following morpheme either by deletion or epenthesis. What is also evident is that in both cases the person marker falls within the domain of main stress in Ojibwe: the PWd. In (2) NC sequences in Malagasy, where the N in both cases forms part of the causative morpheme, are resolved either by coalescence or prenasalization. As neither the features of the coalesced segments nor the parts of the prenasalized segments can belong to separate PWds, the phonological domain of these two repair rules must be identical. In (3) we see that the past tense marker –dl can be either stressed or unstressed. Notably, the variable nature of stress assignment in Turkish does not affect whether this affix is subject to Vowel Harmony, a process that is limited to application within the PWd. It is argued here that in each of these cases there is no conceivable manner in which the two repair strategies can be logically linked to either (1) morpheme-specific rules or (2) different rules applying at different phonological strata (stem, word, phrase).

The theoretical goal of this talk is to situate the above argument within the discussion of theoretical frameworks in generative phonology. The implications of the above are that neither phonological rules nor morphemes belong to different strata in the grammar. It is put forth here that rules apply when their structural description is met (McCarthy 1988), that cyclic derivation is mediated by the morpho-syntax (Halle & Marantz 1993), and that the same rule may result in a different phonological output depending on the timing of its application in relation to the cyclic interpretation of its parts (Newell 2014). The conclusion here is that these aspects of the grammar converge to give the appearance of strata where there are none.
Newell, H. 2014. Phonological Persistence. talk given at NAPhC 8 (Concordia).