

The Anti-cyclic Nature of Cognitive Phonology

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Cyclicity (see Chomsky et al., 1956) – the notion that phonological computation starts with the most embedded structures going to less embedded ones – has been a very important tool in Generative Phonology (Bermúdez-Otero, 2011). There have been some efforts in Generative models such as Optimality Theory to eliminate cyclicity which are called cyclicity-killers (Scheer, 2011).

In this research, I show that in Cognitive Phonology (CP) (see Langacker, 1987; Nerset, 2008) there is no need for cyclicity-killers because the non-derivational and non-modular assumptions of CP automatically carry out this anti-cyclic task. The relevant concepts are the “generalization commitment” (i.e. the non-modularity of language), the “rule/list fallacy” (i.e. the presence of predictable information in the lexicon), and “integration” (i.e. the relation between a whole and its parts).

The non-modularity of CP causes phonological and morphosyntactic information to appear together, thus enriching the representations. The rule/list fallacy allows the lexicon to include predictable information, minimizing the procedural load and maximizing the representational load. The integration relation obviates the need for concatenation in more entrenched and frequent constructions which makes it easier to explain the morphophonology of exceptional grammatical morphemes.

Evidence is drawn from the demonstrative and possessive suffixes of Azerbaijani and it is shown that the need for cyclicity comes from a pointless insistence on the “Unique Underlier Condition” (i.e. single Underlying Representations (see Lass, 1984)); a situation that can easily be solved via networks.

For example, in a generative account of the word “tsaj-wm-a” ‘tea-1SG.POSS-DAT’, Inkelas (2014: 190-193) assumes 3 cycles: 1) /tsaj/ syllabifies as [tsaj]σ; 2) [tsaj]σ is concatenated with /m/ and the ‘jm’ cluster induces insertion leading to [tsa]σ [jum]σ (with w produced with respect to vowel harmony); 3) [tsa]σ [jum]σ is concatenated with /E/ leading to the resyllabified form [tsa]σ [ju]σ [ma]σ (again with vowel harmony at work for the last vowel). Inkelas argues that a non-cyclic account would produce the ungrammatical form *[tsaj]σ [ma]σ from the UR /tsaj-m-E/.

I suggest that this problem can easily be solved via a 1SG.POSSESSIVE network that includes the schemas [1SG.POSS/...V+m] and [1SG.POSS/...C+Im]. These schemas can exist in the lexicon because 1) non-modularity has no problem with morphological and phonological information being side by side; 2) the presence of predictable information in the lexicon which in this case includes consonant-final roots choosing the possessive form “-Im”; 3) the integration relation that in this case involves the presence of [tsaj-wm] alongside [tsaj] and [wm]. Using these schemas, an ungrammatical form such as *[tsaj]σ [ma]σ would never be produced since ‘tsaj’ is a consonant-final root and therefore chooses ‘-Im’ as its possessive suffix.

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