Where do redundant features come in?

Daniel Currie Hall, Saint Mary's University

In the theory of Radical Underspecification (Archangeli 1988; Archangeli & Pulleyblank 1994), feature values are underlyingly unspecified if and only if they are filled in by redundancy rules. Redundant values are thus absent from underlying representations, but not from the phonological computation: "predictable values are inserted by rule during the course of the derivation" (Archangeli 1988: 192). This contrasts with the Contrastivist Hypothesis pursued by Dresher (2009), Mackenzie (2009), and Hall (2007), which holds, in its strongest version, that non-contrastive feature values are not present in the phonological computation at all. However, Hall (2007: ch. 2–3) argues that there are some cases in which redundant 'prophylactic' features must be present in the representation before certain phonological processes apply, even though they are not phonologically active, because they would be impossible to fill in afterward.

This talk explores a middle ground between these views of redundant features, suggested by Hall (2011), in which redundant features may be inserted during the course of a derivation, but are never visible to subsequent phonological rules. Under this view, 'prophylactic' features are not an exception to the Contrastivist Hypothesis, but rather a consequence of it. I will present an updated version of Hall's (2007) analysis of Yowlumne (Newman 1944), one of the languages that appears to challenge the Contrastivist Hypothesis. With respect to harmony, the four-vowel system of Yowlumne behaves symmetrically, with /i/ rounding to [u] after /u/ and /a/ to [o] after /o/. Lowering, however, changes /u/ to [o] but /i/ to [e]. Purely contrastive feature specifications would predict symmetrical patterns in both processes. The insertion of a (phonetically interpretable but phonologically invisible) redundant feature [low] on /a/ can account for the unexpected pattern. While more flexible in some ways than a stricter implementation of the Contrastivist Hypothesis, this approach leads to some interesting restrictions—in particular, it requires that the phonological computation consist of ordered processes, rather than the parallel evaluation of candidate forms against constraints.

References

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