Italo-Romance Metaphony as non-concatenative morphology. A bracketing paradox?

Italo-Romance Metaphony builds a linearization of complex morphological forms. There is no coincidence between morphemic and syllabic structures. Occurrences of primitives I, A, U produce sequences of concatenation by construction.

Traditionally, Italo-Romance metaphony is interpreted as a height harmony where stressed mid vowels undergo a raising triggered by post-tonic high vowels (see last - different approaches in Torres-Tamarit et al. ed. 2016). Metaphony emerges therefore classically as a licensing triggered by inflectional vowels of the final syllable, the vowel in the stressed syllable assimilates in height features to a post-tonic high vowel.

In this talk I propose a different account of metaphony in a theoretical model which lets us to build a derivation of the Righthand Head principle (Williams 1981 Righthand Head Rule) and of the Mirror Principle (Baker 1985: 375): “Morphological derivation must directly reflect syntactic derivation (and vice versa)”. In this approach, the morphological structure is hierarchized, and the phonological interpretation of two heads builds linearity: [head°1[comp]head°2]. Both heads have phonological material.

In concatenative morphology we have concatenation from the head to the dependent, as in Fre. chanteur ‘singer’ [œu [chant], in other cases between gender and number [Ge°][N°].

What about the status of intermediate morphemes? In non-concatenative morphology of Semitic languages there is not an immediate correspondence between morphology and syllabification: the phonology produces the morphology. In metaphony and apophony discontinued morphemes are also heads, treated conjointly not successively: through interdigitation. Interdigitation of (non-concatenative) morphology is just a marked case.

In the case of apophonic verbs Eng. sing /sang/sung, the vowels are Tense markers. Past is a morpheme F° (Fusional morpheme) which is treated conjointly with the dependent: Past/v.

[Past°[v°] s-n-g (i°-P°) Two heads treated conjointly

This gives a complex content which is a complex morphological identification: ((sA°N)(g)).

The root and the vowel heads trigger simultaneously the syllabification; H₁/H₂ are the two competitors forms, both pronounceable. One of the two morphemes supplies the complementary vocalic support (integrable).

In Italo-Romance Metaphony, the morphology is also a result of phonology:

r-u-s- Adj [rossA] U°/A° ----A

Here above the final morpheme, the primitive element A° (which is the feminine morpheme), is the head which triggers the process of interdigitation. Its properties are integrated and built into the phonological object, the root: U°/A° = (o°): russ-A → [rossA]. I consider A° as a functional head higher than N, categorially transparent, which identifies the feminine Ge(nder) or the Nu(mber) (singular).

In Italo-Romance metaphony or in English apophony (sung), as in Semitic languages we can have internal functional heads, as in Semitic the Tense Perfective is Head₁ and the melodic content v° Head₂, two disjoint contents Tense/v° (H₁/H₂), as in œ-k-t : (œ)(ku°)(t). I consider that
the following morphological resolution applies to Semitic languages as well as to Italo-Romance metaphony or to Germanic apophony:

**Morphological resolutions**
Theoretical configuration: [Functional Category [Lexical Category

**Successive resolution (concatenative morphology):**

\[ a \text{-Funct.C} [k \text{-t-Lex.C} \]
\[ a° \text{-Funct.C} [k \text{-t-Lex.C} \]
\[ k \text{-} (t-a°) < \text{Funct.C-Lex.C} \]
\[ k<\sigma>)(ta°) < \text{FunctC-Lex.C} \]
\[ k(\sigma)ta] \]

**Resolution by fusion (co-syllabification) (non-concatenative morphology)**

\[ a \text{-Funct.C} [k \text{-t-Lex.C} \]
\[ a \text{-Funct.C} \text{-Lex.C-t-k} \]
\[ a° \text{-Funct.C} \text{-Lex.C} \text{-} (t)-k \]
\[ ([k\alpha](t) < \text{Funct.C-Lex.C} > [kat] \]

Our approach allows to solve what Williams (1981) called relatedness paradoxes, and Pesetsky (1985) the bracketing paradoxes. These paradoxes have in common that a suffix can be added to a root which has already a prefix, or to a second item of a compound, as it could have done as being attached to a root without a prefix or to a second item of the compound if it was used in isolation:

**Bracketing paradox**

(1) a

\[
\{ \{ \text{un} \} \{ \text{al-A} \{ \text{grammatic-Root} \} \} \}
\]

\[
\text{al]}
\]

\[
\text{grammatic-al}
\]

\[
[\text{un-grammatic-al}]
\]

b

\[
\{ \{ \text{ity-N} \{ \{ \text{un} \} \{ \text{al-A} \{ \text{grammatic-Root} \} \} \} \}
\]

\[
\text{ity]}
\]

\[
\text{al-ity]
\]

\[
\text{grammatic-al-ity}
\]

\[
[\text{un-grammatic-al-ity}]
\]

Thus, there is an asymmetry between the prefix and the suffix. In predicting the secondary systematic character of linearization and of the syllabification for prefixes, proclitics and internal complex heads, this approach makes the paradox disappear. Therefore, there are two sources of linearity in Syntax and in Phonology, movement in the first, syllabification in the second.

**References**


