

Meeting morphological constraints by under- and over-marking

The following data, in French as in other Romance languages, show a discrepancy between formal and semantic marking.

(1) cancer > anticancér-**eux**, banque > interbanc-**aire**, Colomb > précolomb-**ien**, déluge > antédiluv-**ien** (Hathout 2011)

Traditionally, these examples are analyzed as cases of bracketing paradox (Corbin, 2000, Iacobini, 2003, Spencer, 1988). From a marking point of view, examples in (1) can be seen as over-marked data: in addition to the prefix semantic marking, they display a categorical marking realized by the suffix. This double marking ensures the simultaneous satisfaction of three morphological constraints: (a) a constraint on the transparency of derivational series (it favors the optimal identification of derivational series), (b) a constraint on categorical transparency (it favors those forms that resemble the ones of the other words belonging to the same category) and (c) a constraint on recycling (it favors the stems that resemble existing words).

Examples in (2), (3) and (4) include two suffixes from a formal point of view but only one from a semantic one (that is, the final one):

(2) personne > person-**al**-isme (Roché 2011), mort > mort-**al**-ité (Koel 2009), syntaxe > syntact-**ic**-ien (Lignon et Plénat 2009, Lignon et Roché 2011)

(3) Italie/italien > itali-**an**-ité (Dal et Namer 2010), Italie/italien > itali-**an**-isme (Roché 2008)

(3') Portugal/portugais > portugalité (Dal et Namer 2010)

(4) artère > artéri-**al**-iser, artériel > artérialiser (Namer 2010)

Several cases can be distinguished. Examples in (2) display **over-marking**, which is motivated by several constraints: a dissimilative constraint in the case of *mortalité*, which prevents the close succession of two /t/ (Plénat 2011); constraint on transparency of the derivational series in the case of *syntacticien* and (adequacy maximization between the sense of the derivative and the sub-series it belongs to). Conversely, examples in (3) and (3') are **under-marked**, since the distinction between the two possible bases for each of them (*Portugal* or *portugais*; *Italie* or *italien*) is of no importance: both bases being semantically almost identical, the choice between them is not crucial. This kind of confusion in the expression of property nouns that refer either to toponyms or to ethonyms is very common (Booij 1997, 2002). The situation in (4) is more complicated because the derivative may have two different meanings 'turn a blood vessel into an artery'/'make venous blood become arterial', depending on whether its base is *artère* 'artery' or *artériel* 'arterial'. Therefore, *artérialiser* is **polysemous**, justifying the appellation of under-marking: the double marking leads to the construction of two lexemes that are identical formally but different semantically. The derivation presents a discrepancy with the first base but not with the second one. It can be accounted for by the constraints on transparency of the derivational series (the *-aliser* ending better matches the meaning of the derivative than the more general *-iser* ending).

We propose in this paper a uniform treatment of all these derivatives, expressed in terms of stem borrowing whose aim is the satisfaction of constraints that regulate the correspondences between meaning, form and the morphological organization of the lexicon. The divergences that show up between form and meaning in these examples can be accounted for as the use, on the formal level, of stems which are able to refer to the base but are different from it. This stem is a form of a close member in the derivational family of the base: *cancéreux* for *cancer*, *bancaire* for *banque*, *colombien* for *Colomb*, *diluvien* for *déluge*, *personnel* for *personne*, *mortel* for *mort*, *syntaxique* for *syntaxe*, etc.

References

- Booij, Geert. 1997. Autonomous morphology and paradigmatic relations *Yearbook of Morphology* 1996:35-53.
- Booij, Geert. 2002. *The Morphology of Dutch*. New York: Oxford University Press.
- Corbin, Danielle. 2000. Pour en finir avec la parasynthèse. In *Mélanges de grammaire et de linguistique française en hommage au professeur Martin Riegel pour son soixantième anniversaire*, eds. Georges Kleiber, Jean-Christophe Pellat and Claude Buridant. Leuven: Peeters.
- Dal, Georgette, and Namer, Fiammetta. 2010. French property nouns based on toponyms or ethnic adjectives: A case of base variation. In *Variation and Change in Morphology*, eds. Franz Rainer, Wolfgang U. Dressler and Hans Christian Luschützky, 53-74. Amsterdam: John Benjamins.
- Hathout, Nabil. 2011. Une approche topologique de la construction des mots : propositions théoriques et application à la préfixation en *anti-*. In *Des Unités Morphologiques au Lexique*. eds. M. Roché, G. Boyé, N. Hathout, S. Lignon and M. Plénat. 251-318. Paris: Hermès.
- Iacobini, Claudio. 2003. Parasintesi. In *La formazione delle parole in italiano*, eds. Maria Grossmann and Franz Rainer, 165-188. Tübingen: Niemeyer.
- Koehl, Aurore. 2009. Are French -ité Suffixed Nouns Property Nouns? In *Morphology in Bordeaux - Selected Proceedings of Decembrettes 6*, eds. Fabio Montermini and Gilles Boyé, 95-110. Somerville, MA: Cascadilla Proceedings Project.
- Lignon, Stéphanie, and Plénat, Marc. 2009. Echangisme suffixal et contraintes phonologiques. In *Aperçus de Morphologie du français*, eds. Bernard Fradin, Françoise Kerleroux and Marc Plénat, 65-82. Paris: Presses Universitaires de Vincennes.
- Lignon, Stéphanie, and Roché, Michel. 2011. Entre histoire et morphophonologie, quelle distribution pour *-éen* vs *-ien* ? In *Des Unités Morphologiques au Lexique* , eds. M. Roché, G. Boyé, N. Hathout, S. Lignon and M. Plénat. 191-250, Paris: Hermès.
- Namer, Fiammetta. 2010. Adjectival bases of French *-aliser* and *-ariser* verbs: syncretism or underspecification? . In *Décembrettes 7 – International Conference on Morphology*. Toulouse.
- Plénat, Marc. 2011. Enquête sur divers effets des contraintes dissimilatives en français. In *Des Unités Morphologiques au Lexique* eds. M. Roché, G. Boyé, N. Hathout, S. Lignon and M. Plénat, 145-190. Paris: Hermès.
- Roché, Michel. 2011. Quel traitement unifié pour les dérivations en *-isme* et en *-iste*. In *Des Unités Morphologiques au Lexique* , eds. M. Roché, G. Boyé, N. Hathout, S. Lignon and M. Plénat. 69-144. Paris: Hermès.
- Spencer, Andrew. 1988. Bracketing paradox and the English Lexicon. *Language* 64:663-682.