

Structural and algorithmic geolinguistic complexity. The case of Berber.

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Abstract

This paper examines, from both a qualitative (structural) and a quantitative (algorithmic) perspective, how certain phonological and morphological innovation processes triggered by the vocalisation of the liquids /r/, /r̥/, /rr/ and /rr̥/ in Tarifit (Rif-Berber, North Morocco) create language variation and change. In doing so, it shows how language is constantly modulated in the form of innovations that may emerge in structurally layered and causal formations mainly dictated by system-based properties. Additionally, several cases addressed in the paper confirm that innovation can also be formally motivated (e.g. aspectual opposition marking, plural formation). It goes without saying that social factors are important for the diffusion of variants. However, the Berber data examined here demonstrate the non-negligible share of certain system-internal factors in the diffusion of new phonetic/phonological and morphological items. Economy and code conformity are important functional motivations for the dispersal of the vocalised liquids in the Central Rif area. Structure adequacy and systematisation/generalisation of specific morphological patterns, however, play a significant role in the success of their distribution across the Tarifit varieties. Contrary to the language evolutionary claim that only social factors are responsible for variant selection (Milroy 1992: 201–202; Croft 2000: 38, 39, 54), the analyses here indicate how functional and social factors can interact in the selection and hence diffusion of language forms and how in some cases, as in the restructuring of the verbal paradigm, system-internal properties may dominate. Another interesting finding which regularly pops up in this study is that language change is gradual not only on an extra-linguistic level (geographical and social variation) but also on a linguistic one. Therefore, it is important to consider the continuous selection process of variants not solely from a social perspective (“propagation” as in Croft 2000: 38, 178) but also in terms of how the variants are formally and functionally integrated into ever-changing linguistic structures (Lafkioui 2011). In order to better understand the intricacy of the geolinguistic phenomena discussed in this study, the results of the structural analysis (synchrony and diachrony) are also compared to algorithmic results ensuing from computing geolinguistic distance by means of the Levenshtein distance calculating method. The combination of these approaches provides valuable insights into the geolinguistic patterns and their variability, and hence testifies of the importance of the “holistic” point of view in addressing complexity (Léonard et al. 2014, O’Sullivan 2004). The data considered in this contribution mainly come from the *Atlas Linguistique des variétés berbères du Rif* (Lafkioui 2007) as well as from recent fieldwork (autumn 2015).

References

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