The life cycle of phonological patterns explains drift in sound change

In this paper I address the nature of 'drift' (Sapir 1921) in phonological change from the perspective of the life cycle of phonological processes (Kiparsky 1995; Bermúdez-Otero 2007; 2015; Bermúdez-Otero & Trousdale 2012). I support the basic account of drift offered by Joseph (2013); Natvig & Salmons (2020), in which parallel changes arise from shared patterns of phonetic and phonological variation inherited from the proto-language. Specifically, I propose that a complete account of drift can be provided if we complement the insight that parallel changes draw on the inherited pool of variation with the proposition that change proceeds along the trajectory guided by the life cycle.

In historical phonology, 'drift' refers to similar or identical innovations that occur in related varieties after their separation. Some instances of this phenomenon can be explained with reference to relatively ordinary propagation, especially when the languages remain in contact: a classic case is Slavic, in which the last common innovation – the loss of the yers – post-dates the diversification of the proto-language by several centuries (cf. Trubetzkoy 1924). Other instances clearly represent parallel changes, such as the [s]-retraction of Germanic discussed by Joseph (2013), or West Germanic 'breaking' processes (Howell 1991). For yet other cases, the respective rôles of parallel development and contact remain controversial: cf. Natvig & Salmons (2020) on the uvular rhotic in Germanic or Sandøy (2003) on common developments in Western Nordic.

The insight that languages inherit similar patterns of structured variability (Joseph 2013) accounts for similar starting points in such changes. A second challenge is explaining why developments arising from similar pools of variation need to follow similar lines. Often, parallel development can usefully be explained with reference to typology and the phonetic grounding of much sound change (Garrett & Johnson 2013; Kümmel 2015). However, this is not always the case. In this regard, a particular challenge is presented by examples where drift involves changes that are typologically rare, lack clear functional grounding, or otherwise confound synchronic and/or diachronic expectations.

In this paper I consider just such a case: the 'consonant gradation' of the Finnic and Sámi languages. This complicated phenomenon (for handbook overviews, cf. Laanest 1982; Korhonen 1981) involves a number of non-trivial convergences, such as consonant weakening after even-numbered vowels, a 'strength' asymmetry between consonants (and clusters) determined by the presence of a coda in the following syllable, the lengthening of consonants before long vowels, and the creation of ternary quantity distinctions. This constellation of highly unusual features could suggest that gradation is the result of a single innovation in Proto-Finnic-Sámi (cf. relatively recently Gordon 1997). However, I argue that there are good reasons to reject common origin. They include fundamental differences in the nature of the alternations in the two subgroups (lenition in Finnic, fortition in Sámi [Ravila 1951; Sammallahti 1998]) and the demonstrably late relative date of the changes.

I offer a reconstruction of the development of gradation that takes seriously the idea that 'phonetic' gradation is shared by the two branches and goes back to an earlier period than the separate rise of 'phonological' gradation (Ravila 1960; Leppik 1968), framing it within the context of the life cycle model of phonological processes. I argue that inherited phonetic tendencies related to timing, which had the status of phonetic rules (the 'phonologization' stage of the life cycle) followed broadly similar paths as they 'stabilized' into phonological rules; the details, however, inevitably differed, giving the attested diversity of outcomes. I conclude that the life cycle model is successful in accounting even for drift involving typologically unusual changes.

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