

Contrast Emergence, Preservation, and Loss: A case study of initial geminates

We discuss some issues posed by word-initial geminates (IG). We focus on the diachronic pathways leading to the emergence of this rare phonological pattern [6]. We offer a detailed typology of these processes and argue that certain synchronic properties of these segments, e.g., moraic structure, follow from their diachronic trajectories. We also present a preliminary acoustic study of Salentino (Italo-Romance) and Patani Malay (Austronesian) that probes the relationship between the universally assumed instability of IG and synchronic variation in their phonetic implementation. We conclude that phonetic implementation alone cannot be responsible for the disappearance of these segments as they are phonetically ‘stable’ in languages that have synchronic ‘gemination’ rules and other geminate contrasts.

Background. Blevins [1,2] proposed 8 diachronic pathways that can lead to the development of geminates and account for asymmetries observed in their cross-linguistic distribution. Blevins has further suggested that the rarity of IG may be due to their expected change to other phonation types when hyper-articulated and degemination when hypo-articulated [1]. In this paper, we try to extend and refine Blevins’ proposals.

Diachronic typology. Drawing from a sample of 34 languages that we have assembled, we discuss all the known phonological changes that lead to the development of IG. We first show that virtually all cases of IG are the result of vowel deletion or reduplication/function words loss in initial syllables (the only exception being languages with templatic morphology like Moroccan Arabic, the reinterpretation of voicing contrast like Swiss German varieties, besides sporadic cases of ‘expressive gemination’). However, a general label of vowel syncope is not informative as the individual case allows us to tease apart different types of vowel reduction as a result of metrical effects (Patani Malay, etc.), vowel aphaeresis (Italo-Romance), across-the-board sound change (several Austronesian languages) and others. We suggest that the specifics of vowel reduction may be responsible for the different synchronic moraic status of IG (see e.g. [5], [3], [8], [11]) resulting of diachronic mora preservation under particular reduction conditions [10].

Acoustic study. We present an acoustic study of IG in two languages: Salentino and Patani Malay. We hypothesize that Patani Malay IG should be an example of the hyper-/hypo-articulation continuum suggested by Blevins [1], while Salentino may represent a previously undescribed example of stable IG. The expectation is based on incipient degemination observed in some varieties of Malay [12] (for another case of loss of initial geminates in Trique see [4]) and previous work on the phonetic cues of Salentino geminates [9]. Our preliminary findings suggest that the phonetic manifestations of IG are more consistent in Salentino than in Patani Malay. We wonder whether potential factors responsible for a more stable phonetic cueing of IG can be identified. We contend that, in Salentino and other Southern Italo-Romance varieties, IG may be ‘stable’ due to (i) the presence of Raddoppiamento Fonosintattico [7], a phonological process that triggers word-initial gemination in specific phonological context, and (ii) because of word-medial geminates (both absent in Patani Malay).

Conclusions. In the spirit of Evolutionary Phonology [1], we conclude that certain properties of geminate inventories can be understood as realities shaped by diachronic processes. On the other hand, phonetic implementation of contrasts that are universally assumed to be poorly cued cannot be taken as the main responsible for sound change, as these contrasts can be synchronically stable due to the interactions of phonetics and phonological structure. Thus, phonological structure cannot be readily disposed of as it is crucial for the understanding of contrast maintenance and loss.

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