Affricates occur in over two thirds of the world’s languages. They are therefore a common type of segment, and, typologically, they are by far the most frequent type of “complex segment”. It is also common for languages to have some type of segmental modification, such as secondary articulation, aspiration or (pre)nasalisation. In traditional theories of feature geometry (e.g. Sagey 1986, Clements & Hume 1995), these different types of complexity are represented by branching within the segmental structure, at different organising nodes in the geometry, as shown in (1) below.

A number of comments are in order concerning the representations in (1). First, the status of affricates and prenasalized stops as complex segments has been the topic of some debate in the literature in the past years (e.g. Kehrein 2002, Downing to appear, among much other work). The same holds for secondary articulation and laryngeal modifications such as aspiration, which are analysed as a prosodic (not segmental) properties by Kehrein (2002). Our investigation is to some extent independent of this question, although it assumes, in line with earlier work (Hinskens & van de Weijer 2003), that there is a close connection to segment type (e.g. velars, or voiceless stops) and modification type (e.g. labialization, or aspiration, respectively), which we prefer to express by assuming a direct, segmental (not prosodic) relation between both.

In this paper, we will consider questions regarding the relation between the phonological complexity in affricates (and other types of complex segments) and that in segments with segmental modification. Given the fact that both are expressed by a similar structural relation in the segment, do languages prefer to have both (in line with the idea of “segmental economy” (Clements 2003)) or to ban both? This would argue for a quite general, structural constraint on segmental complexity which languages permit or violate generally. Another possibility would be that languages compensate a lack of affricates by allowing for modified segments, or vice versa. This would argue for a trade-off relationship between “primary” (i.e. Manner feature) and secondary segmental complexity. Both scenarios would seem feasible off-hand, and in fact we do find both patterns, although not equally commonly. We will analyse the available data with respect to this question on the basis of a broad, yet detailed cross-linguistic investigation (making use of Maddieson 1984).

It is also possible to raise the same kind of questions with regard to the relation between prenasalized stops on the one hand and secondary articulation on the other, or between supralaryngeal modification types and laryngeal ones. We will investigate whether there are correlations, and if there are, how they might be interpreted and expressed. Finally, if it should turn out that properties like affrication are positively correlated with segmental modification types such as labialization, what does this mean for the segmental (vs. prosodic) status of these properties?
affricates  prenasalized stops  labialization  aspiration

References


