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Research on areal linguistics provides ample evidence that languages in contact situations may come to share grammatical features that cannot be explained ontogenetically (Campbell 1997b, Matras 2011). In terms of phonology, the literature suggests that languages in prolonged contact develop similar segmental and suprasegmental characteristics (e.g. Aikhenvald & Dixon 2001, Curnow 2001, Muysken 2008, Thomason 2001). However, the effects of contact-induced change on deeper phonological structure such as syllable patterns remain largely unexplored. This study aims to investigate the claim that languages in intense contact situations such as those in linguistic areas are subject to borrowing not only individual phonemes but also phonological structure (Thomason & Kaufman 1988). Specifically, it looks at maximal syllable shape in languages belonging to four established *Sprachbünde*: the Caucasus Area (Chirikba 2008) in Europe, the Northwest Coast Area (Campbell 1997a) and the Pueblo Area (Bereznak 1995) in North America and the Southern Cone Area (Klein 1992) in South America.

Maximal syllable shape is the syllable type that contains the most possible segments in onset and coda positions, for instance CCCVCCCC in an English word like 'strengths' [stɹeŋkθs]. A core phonological characteristic of languages, maximal syllable shape has indeed served as a tool to categorize languages typologically (e.g. Maddieson 2013). Furthermore, studies on loan phonology show that syllabic patterns in borrowings are consistently adapted to a language's native syllable structure (e.g. Peperkamp 2004). At the same time, there is evidence that even this property may be subject to contact-induced change (Matras & Sakel 2007), granted there is a large enough influx of loan words (Aikhenvald & Dixon 2007, Muysken 2008). Thus, the literature suggests that maximal syllable shape constitutes a solid parameter to examine language convergence under intense contact.

Following a top-down approach (Muysken 2008), the study presented here examined the maximal syllable shape in every language for which data were available in each of the four linguistic areas under investigation. Languages were compared within a single *Sprachbund* and, with the exception of isolates, measured against related languages elsewhere as a control. The data discussed here were obtained from three sources: reference grammars, a database of phonotactic structure (Donohue et al. 2013) and a large phonological database with information on syllable patterns (Maddieson et al. 2014-2016).

Results suggest that despite centuries of contact and a possibly large influx of borrowings, languages belonging to different families within the four *Sprachbünden* show little similarity in terms of maximal syllable structure. Rather, it is demonstrated that genetic affiliation is the most decisive factor in determining these patterns. These findings are novel in terms of providing an insight into the impact of language contact on phonological systems, a domain that still deserves attention in areal linguistics. Furthermore, they have implications to the *matter* vs. *pattern* hypothesis (Sakel 2007) in that it shows that syllabic *patterns* mirror genetic affiliation despite considerable borrowing (*matter*) from languages in a same area.

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