

A Historical Exploration of Velar Consonants in isiXhosa

This paper explores the origins of certain velar consonants in isiXhosa, a Nguni-branch Bantu language spoken principally in South Africa. The sounds in question are [kxʰ], [x] and [ɣ]. These three velars exhibit phonological contrasts that are otherwise well-established in the Xhosa sound system (which also has distinctions like tsʰ~s~z, and tʰ~t~ɬ, etc.) (Tshabe et al. 2006). However, unlike Xhosa's many other consonants, the historical origins of these velars are rather unclear. This poster explores their potential origins, based on analysis of their distribution in the Xhosa lexicon, and comparison with other Southern Bantu languages.

Much of Xhosa's phonological inventory can be traced clearly back to reconstructed Proto-Bantu (*PB), in a body of philological scholarship extending back nearly a century (Meinhof 1932, Doke 1954). Xhosa's consonant inventory includes nearly all the consonants of *PB, which is unsurprising given how many lexical items have remained almost unchanged (e.g. PB *-bona > Xh. bona 'see'). Moreover, many of the consonants found in Xhosa that are *not* in *PB have straightforward sources of origin. Some of them clearly arose from regular sound changes that produced new segments in certain conditions. Xhosa's many fricatives, for instance, were identified by in early philological work as the result of spirantization of stops before superhigh vowels; lateral obstruents were derived from *k or *t before high front vocoids like *i and *j.

Other Xhosa consonants, notably clicks, arose from borrowing – an effect of contact with Khoisan languages. For example, the Xhosa word [ʰ!ixa] 'medicine man' is thought to be borrowed from Khoisan [!aixab]. Louw (1977) suggests this as the origin of Xhosa [kxʰ] and [x], based on limited data. This analysis leaves a significant loose end, however: no Khoe languages are reported to have [ɣ], so where did this come from?

Both of these sources of origin make clearly testable predictions about the distribution of the velar fricatives in Xhosa. If the sounds {kxʰ x ɣ} derive from Proto-Bantu, then it should be possible to pin down a specific phonotactic context as the conditions under which these new sounds emerged from previously-existing phonemes. Moreover, they should then also have discernable cognates elsewhere in the Southern Bantu languages, particularly the Nguni branch (which Xhosa belongs to, along with Zulu, Swati, Ndebele, and others).

If, on the other hand, these novel velar sounds arrived in Xhosa as a result of contact, this too should leave its own traces in the lexicon. For example, we might expect to find that Xhosa words with {kxʰ x ɣ} have cognates in either Khoisan or Germanic languages. While many Khoisan languages were extirpated with only spotty documentation, we do have excellent lexical sources for !Ora (du Plessis 2017), thought to be a close relative of the Khoe language with which isiXhosa is presumed to have been in closest contact. We can also look for cognates in Nama, the best-documented Khoisan language, and one that happens to be a close cousin of the Khoekhoe varieties formerly spoken in South Africa. Additionally, even in the absence of determinable etyma, we might expect the set of words to show hallmarks typical of loanwords. They should tend to be content words rather than function ones; should be non-core vocabulary; and should tend to have the sorts of meanings typical of loanwords.

This study examined the *Greater Dictionary of isiXhosa* (Tshabe et al. 2006), to find all lexical items that include any of the sounds {kxʰ x ɣ}. Surprisingly, the raw counts show an asymmetry: lists approximately 350 words containing the sound [kxʰ],

600 words containing [x], and 60 words containing [y]. [kxʰ] and [x] are used highly productively, in a vast number of semantic domains and word classes, but the distribution of [y] is far more limited. These lexical lists were then compared against dictionaries of other languages, including other Nguni languages, non-Nguni southern Bantu languages, and Khoisan languages from both the Khoe-Kwadi and Tuu families. These comparisons reveal that there are affines containing [kxʰ] and [x] – words that seem related but with no proven shared source – in isiZulu, isiNdebele, Siphuti, and Sesotho (Tshabe et al., 2006, 2006, 1989; Doke & Vilikazi, 1972; Pelling, 1971; Donnelly, 2007; Chitja, 2010).

I conclude that these sounds originate from a variety of sources. Some of the words containing [kxʰ], [x] and [y] may have been borrowed from Khoe-Kwadi languages into isiXhosa or proto-Nguni, and others formed from productivity within the language. Word-borrowing continued in isiXhosa later and the sounds proliferated. The contact between isiXhosa and other languages in this area allowed [kxʰ] and [x] to be disseminated across the Nguni languages to varying degrees. This would account for the possibility of borrowing into isiXhosa and other Nguni languages at different chronological points in the history of language contact in South Africa. This also means that these sounds may occur as an areal feature, having arisen out of a particular contact situation and spread around the south-eastern region of South Africa.

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