ABSTRACT

Sound change in a language is a spatio-temporal phenomenon. Diachronic deals with sound changes over time in the ancestral path of the phylogenetic tree. During the same period of time sound system of a language may change due to geographical distribution and isolation of the speakers, giving rise to different dialects of the language. Synchronic changes deal with these spatial variations. In this project we studied both diachronic and synchronic sound changes in Assamese taking into account its ancestors Prakrit and Sanskrit and its dialects Nalbaria, Kāmrupiyā and Goālpariā. The sound change rules are extensively enumerated, modeled and implemented in a standard phonological transformation tool – Phonix. We have noted down the concerned words in IPA symbols of the respective languages to observe the phonological changes. We observed that the computational model matches almost perfectly with conventional linguistic results with some exceptions.

Keywords: *computational phonology, sound change, diachronic, synchronic, IPA, Indo-Aryan language, Sanskrit, Prakrit, Assamese.*