

## The Indic scripts of Sumatra, Sulawesi and the Philippines as an insular post-Nagari group

### Regularities in chirographic structure and shared orthographic practices

Christopher Miller, Montreal, Canada

This presentation proposes a new account of the origins and relationships of Indic scripts indigenous to the Philippines, southern Sulawesi (with Sumbawa and Flores) and Sumatra. The data on which the theory is based come from several newly exploited original sources for the Philippines and for Devanagari, Gujarati and related scripts in India, as well as the work of earlier generations of researchers, including some little-known early Dutch sources describing scripts of Sumatra.

The evidence supporting the theory is of two types: *chirographic* (i.e. related to the internal structure of individual letters and signs as written by hand) and *orthographic* (i.e. related to the sound or meaning values of letters and signs individually or in combination, and their arrangement on the writing surface), together with strategies for teaching orthographic knowledge. In addition to these two primary sources of evidence, certain cultural aspects of the use of the scripts appear to be shared across the archipelago.

The key to reconstructing the relationships between these scripts and with scripts further afield lies in the oldest attestations of Philippine script from the 1590s through the 1600s. On the one hand, archival evidence shows clear patterns of variation and change in the form of characters over time and on the other, the earliest letter shapes show systematic, regular and structure-dependent correspondences to old variants of Gujarati script as it developed out of Nagari. On the basis of these correspondences it is possible to reconstruct a “proto-script” by applying regular changes to the original early Gujarati post-Nagari letter shapes, to which further idiosyncratic changes apply afterward. This proto-script, with three Bugis-Makassarese letters directly related to their Gujarati counterparts, reveals direct relationships with Sumatran scripts, again with structure-dependent changes specific to these scripts as a whole and to the northern and southern groups individually. A further advantage of these observed regularities is that these form the basis for constructing a more generally valid theory of character structure and change.

Orthographic evidence also places the origins of Philippine script in Sulawesi: the non-spelling of final consonants, shared with Bugis-Makassarese script, only makes sense for South Sulawesi languages, and the Philippines and Sulawesi also share an abbreviation for pairs of syllables beginning with the same consonant, likely derived from a practice for teaching consonant plus vowel sign combinations.

The Sumatran scripts also share unusual spelling rules for closed syllables that appear to derive from a similar practice — in which the Sulawesi-Philippine practice itself quite likely originated.

Unlike the base letters, the vowel and coda consonant signs clearly derive from Javanese/Kawi script, borrowed to supplement an early “vowelless” commercial script from northern India: the analogous case of Sourashtran script in South India supports this hypothesis. This hybrid structure is reflected in several cipher scripts across the archipelago, including the Sulawesi *Lontara’ bilang-bilang* based on an Indo-Arabic numeral cipher, and Makassarese *Jangang-jangang* (bird) script, largely based on a vertically-oriented South Sumatran script style.