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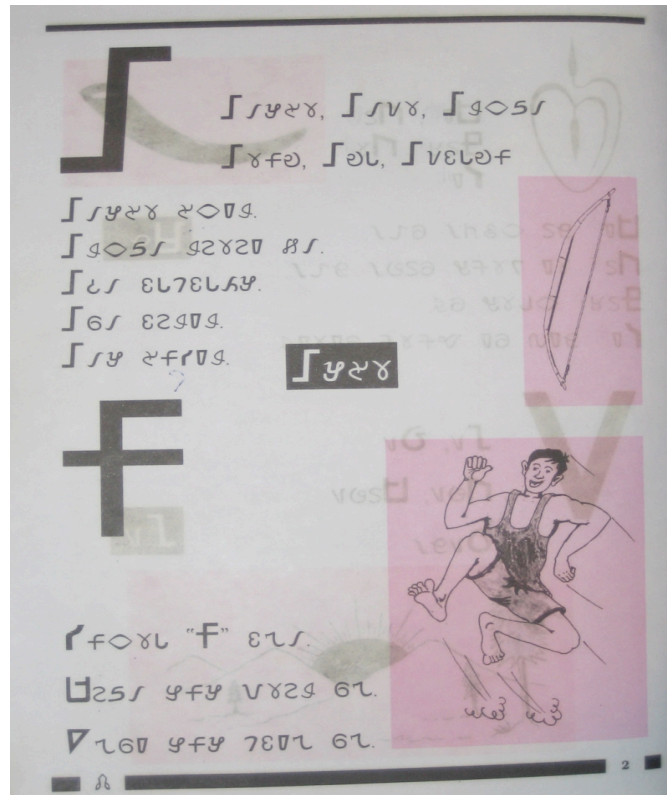
Re: Review of Proposal for Encoding Warang Chiti (Ho orthography) in Unicode

Date: 22 April 2007

The Ho community, according to India census data, numbers over 1 million persons, residing primarily in Orissa, Jharkand and West Bengal states. Use of the Ho language is vigorous in all speech domains and age groups. The Ho are typically bilingual or trilingual, and literate in languages of wider communication, e.g., Oriya, Hindi, English. Ho has been written using multiple scripts, including Devanagari and Oriya, but these are considered by the community as non-ideal, and the use of an exclusively Ho script is preferred. Following the rationale of other writing systems of the Indian sub-continent, the Ho orthography (called *Warang Chiti*) was designed by the scholar Lako Bodra to appear maximally distinctive from all other writing systems in nearly all its graphemes.

The current Unicode proposal (authored by Michael Everson, dated 1999-01-29) is incomplete in its current form and notably requires consultation and fact-checking with the user community. While it is crucial that the Ho orthography be included in Unicode, this can only be done in close consultation with Ho scholars at every step of the process. As a practical and ethical matter, we urge the Unicode consortium to accept only proposals that emerge from or are formulated in close consultation with native speaker communities. To do otherwise is to espouse a kind of linguistic colonialism that will only widen the digital divide.

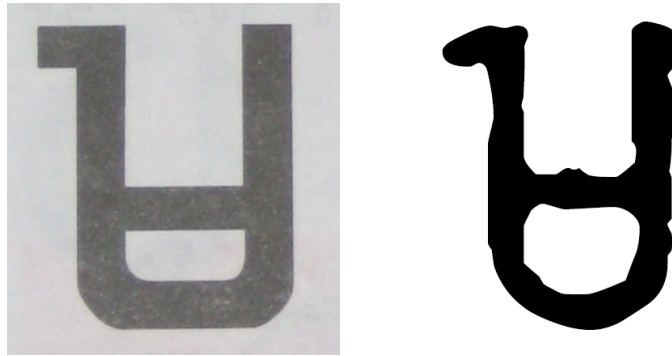
Our present review is based on two field trips to India, where we made extensive digital recordings of the Ho language, recording multiple speakers and diverse genres. We also recorded the use of the orthography and narratives about the meaning and cultural importance of the writing system. We were able to collect samples of Ho handwriting from five individuals, as well as one printed book, an alphabet primer (see Figure 1, cited herein as CHLEC 2002, full citation is unavailable pending translation).



*Figure 1: A sample page from the Ho alphabet primer book (CHLEC 2002), showing the use of both upper and lower-case forms, and (lower left) use of numeral 2.*

Ho scholars we recorded and consulted, such as Mr. K. C. Naik Biruli, a noted orator from Mayurbhanj, emphasized to us the deep spiritual and cultural significance of Ho writing. The syllabary begins with “om”, a grapheme of religious significance that serves no orthographic purpose. Each successive grapheme has a mythology that relates its shape, sound, or appearance to the unique Ho cultural context and worldview. This mythology serves as a mnemonic used in teaching and memorizing the Ho syllabary.

Due to individual and also possibly regional variation, we found that both the handwritten letters and the printed version we collected in 2005 and 2007 from different individuals differed non-trivially among themselves, and also from the version published in Zide (1996), which was taken as the basis for the current Unicode proposal. The differences may be found in the proportion and shape of the characters, and in elements such as the size or angle of the ligatures (see Figure 2). The order of the letters in Zide 1996 (and in the current Unicode proposal) is different from that in the alphabet primer (CHLEC 2002). Finally, all graphemes except “om” possess distinct lower-case forms, which are used in both printing and handwriting, but which have not yet been included in the proposal. These will need to be added.



*Figure 2. A Ho character from CHLEC 2002 (left), as compared to the same character reproduced from Zide 1996 and included in Everson's Unicode proposal (right).*

We suggest, at the recommendation of Ho scholars, that the printed version(s) now in use and circulation should serve as the sole basis for a Unicode font. This will require creating a font based on the orthography in its current printed version(s). We also recommend checking to see whether/what variation also exists among printed versions (we have only one book thus far), and continuing our consultations with the Ho community about an emerging norm.

The Ho orthography is rapidly gaining a wider user base, despite lack of representation of the language in official media and in state schools. We have encountered, for example, a Ho blogger and Ho speakers who use ASCII characters to write Ho in e-mails. This is an opportune time for the Unicode consortium to work with the Ho community to help them bridge the digital divide and be able to use their mother tongue in computer applications.

The current Unicode proposal can and should be revised, in consultation with the Ho community, and with linguists who are actively working with that community. The authors of this proposal are willing to work with the Unicode consortium on this.