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Corpus of East Cushitic Languages (CEC)

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Abstract

This paper introduces a newly built corpus of East Cushitic Languages which include Dhaasanac, Rendille, Burji, Somali, and Afar. The face-to-face data collection has taken place in East Africa with generous support from local communities.

1 Corpus of East Cushitic Languages

Indigenous languages in East Cushitic languages in East Africa tend to be more oral than written. For example, the writing system of Dhaasanac (also written as Dasenach, Daasanach, and so forth) has developed only recently and uses International Phonetic Alphabet (IPA) [cf. 15]. With relatively small number of speakers, there is no dictionary made yet for Dhaasanac and there are few publications to read. Even the Bible translation is only partial [16]. Given such a situation, building corpora of East Cushitic languages contributes to translation, communication, and documentation. I have spent fifteen years working on East Cushitic languages including Dhaasanac, Somali, Afar, Rendille and Burji for theoretical linguistics and have collected data via oral communication with native speakers who include linguists and translators. The sessions generally entailed transcription, glossing, translation by the informants, and some recordings. The published papers contain a lot of examples for argumentation so that the data themselves can be separated as independent corpora. Being the single author of these papers, building corpora out of them does not interfere with authorship of publications.

2 Source of Data

As mentioned, the data in the corpus originates in face-to-face communications with native speakers living in Kenya and Djibouti. Giving pens and paper to the informant, mishearing or transcriptive errors have been reduced. Although some data come from [15] and [13]. the majority of sentences derive from [1, 2, 3, 4, 5, 6, 8, 7, 9, 10, 11].

3 Content

CEC is an aligned parallel corpus with word by word gloss between Cushitic languages and English using Aligned Corpus Reader in *Natural Language Tool Kit* (NLTK) [14], following [12]. (2) is one of the examples. At the moment, transferring data from papers to corpus is an ongoing project and two files on Dhaasanac are included.

- (1) a. DasenachWords1.txt (15 words)
 - b. DasenachSentences1.txt (5 sentences)

- (2) Um sugul maa niini dee child.PLO-0 school1-1 person2-2 none3-3 a word4-4 wodh-e yu arg-e-man. utter-PAST5-5 I6-6 see-PAST-NEG7-7
 - "I did not see students speak anything."

4 Challenges with Making a Corpus of East Cushitic Languages

In making a corpus of East Cushitic languages, the following challenges have to be overcome:

- Diacritics and tone marking
- IPA forms
- Long journey
- Languages

Writing a paper with LaTEX eases complications with diacritics and tone marking which coincide with these languages. The writing system uses IPA fonts which have to be represented in the corpus. The areas that speak these languages tend to be isolated and traveling may take time. Communication in English may not be possible in some places and higher educational institutes may not be available in the area.

5 Value

- Rare language
- Few written publications

Even so, there is tremendous value in making language resources of indigenous languages.

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