Resources from our Elders: Language Technology of the Past for the Future

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Abstract

Akuzipik (ISO 639-3: ess) is the language of the St. Lawrence Island / Siberian Yupik people of St. Lawrence Island, Alaska and Chukotka, Russia. This work describes recent work and ongoing efforts to

- 1. identify and digitize legacy text and audio resources in Akuzipik,
- 2. engage with stakeholders and Yupik elected governing bodies regarding data sovereignty and distribution of digitized resources,
- 3. distribute these digitized resources to members of the Yupik community,
- 4. incorporate legacy resources, including bilingual dictionaries, into broadly accessible, multi-purpose cross-platform language apps that can be utilized by community members, educators, language activists, and linguists

Due to the isolated nature of the Bering Strait and the Soviet / Russian Far East, American and Russian colonial contact with the Yupik people occurred much later (late 1800s / early 1900s) than with almost any other Indigenous group. This isolation contributed to colonial language dominance taking place much later for the Yupik people. Hegemony of the colonial language as L1 among Yupik children can be traced to the 1960s – 1970s in Chukotka and the 1990s – 2010s on St. Lawrence Island.

During the immediately preceding decades (1930s – 1950s in Russia, 1970s – 1990s on St. Lawrence Island), significant government-sponsored funding was invested in the development of Akuzipik pre-primers, primers, readers, and written collections of oral narratives and stories from elders. Bilingual Akuzipik-English and Akuzipik-Russian dictionaries were also later produced and published. The result is a significant collection (on the scale of 100-200 publications), divided between Cyrillic-orthography Soviet-era publications and Latin-orthography Alaskan publications.

Collectively, these materials served a critical role in bilingual / bicultural education programs that succeeded in their stated goal of developing Akuzipik

literacy as a bridging mechanism for establishing oral proficiency and literacy in the colonial language. A draft K-12 Akuzipik language curriculum from the late 1980s / early 1990s references this substantial body of Akuzipik texts, but assumes that students are L1 Akuzipik speakers, an assumption that no longer holds. The current generation of Yupik students on St. Lawrence Island have modest levels of passive oral proficiency and generally very limited oral proficiency in Akuzipik.

Substantial recent efforts over the past five years have resulted in the digitization and archiving of nearly all of the Latin-orthography Akuzipik language materials and a substantial collection of Akuzipik audio cassette tapes. Contemporaneously, substantial engagement has taken place with the respective copyright holders and with the elected governing bodies in the St. Lawrence Island Yupik communities of Sivuqaq (Gambell) and Sivungaq (Savoonga), resulting in an agreed-upon data policy for distribution. A web site incorporating the digitized Akuzipik-English dictionary and a morphological analyzer / generator has also been developed. This resource and the digitized text corpora have been broadly distributed in Sivuqaq and Sivungaq, both among community members and in the schools. Discussions and prototypes are in development for a multi-purpose cross-platform app incorporating digitized corpora, read-along audio, morphological analysis, and dictionary lookup.