Language maintenance and preservation in the digital age

Marie-Odile Junker
School of Linguistics and Language Studies
Carleton University, Ottawa, K1S 4X8 Canada
[marie-odile_junker@carleton.ca]

Abstract
Live demonstrations of cutting-edge projects show how information and communication technologies can support language documentation, maintenance and revitalization. All projects presented here are about Aboriginal languages spoken in Canada, most of which are endangered.

Résumé
Des démonstrations en direct de projets de pointe démontrent comment les technologies de l’information et de la communication peuvent soutenir la documentation, la maintenance et la revitalisation des langues. Tous les projets présentés ici concernent des langues autochtones parlées au Canada, et dont la plupart sont en voie de disparition.

For the first time at a FEL conference, there is an electronic poster session featuring live demonstrations of various projects aimed at supporting language documentation and language maintenance with the use of information and communication technologies. All languages featured here are indigenous languages from Canada. Issues addressed include overcoming challenges of different writing systems (syllabic fonts), standardization of orthography, the oral dimension of language, community involvement, speaker participation, how good pedagogy goes hand in hand with good documentation, etc. Conference participants will be able to try for themselves some of these tools, and be guided by developers and advanced users. Several presenters from Carleton University are aboriginal students working as research assistants on a project designed for their own language. We invite the reader to visit the associated websites and send comments!

Interactive Maps of Aboriginal Languages in Canada
Based on the Canadian census data, interactive maps of indigenous languages in Canada has been developed. 93 languages are identified, of which three have recently become extinct. The classification is a modified version of the one presented in the UNESCO Atlas of the world’s languages in danger (http://www.unesco.org/culture/languages-atlas/en/atlasmap.html). Changes include: a slightly revised language classification, to achieve agreement with First People Cultural Council (FPCC) in British Columbia and the Ethnologue; an improved methodology for estimating speaker populations; and an update of the census data from 2001 to 2006. Over 3,000 reserves and communities have been mapped, with each one assigned to a single “traditional” language of the community.

http://norrisresearch.com/abcomm/lang.kmz
http://norrisresearch.com/abcomm/comm.kmz

NOTE: Google Earth™ (a free download) is required to view these maps.

Presented by Mary Jane Norris & Stephen W. Adcock, Norris Research Inc.

Michif
Michif is one of the languages of the Métis people, created in the 19th century in the Red River Valley in Manitoba as a result of the intertwining of the French and Western Algonquian (primarily Plains Cree and Ojibwe) peoples. It is spoken primarily in Manitoba and Saskatchewan and is seriously endangered.

A number of digital resources have been recently created for the Michif language. We show the conversation tools developed for three dialects of Michif as part of the Algonquian Linguistic atlas as well as some classroom activities that have been designed to heighten linguistic awareness of Michif and related languages. Lastly, we will show a recent iPhone Michif oral dictionary app that was developed in coordination with Complexli, a linguistic consultancy firm.

http://www.atlas-ling.ca

Presented by Nicole Rosen, University of Lethbridge & University of Manitoba

The Innu Place Names Website: As we walk across our land/ sur les chemins de nos traditions/ pepamuteiati nitassinat
The award winning website for Labrador Innu place names is the result of years of collaboration between community elders and academic researchers. The site contains over 400 toponyms geo-referenced to a map of northern Labrador according to latitude and longitude. The names often give information about places that are

good for hunting or fishing, or they describe the land in some way that helps people when they are travelling. Most importantly, place names are used when telling stories about people’s experiences on the land and windows into people’s memories about the land; for that reason, they help record their history. Each place name is written in the common Innu spelling, with a translation and phonetic transcription, a sound file to demonstrate the pronunciation, and a short explanation of the reason for the name. Photographs or film clips have been provided for some names, and the multimedia section provides stories from elders and youth about events at specific locations. The process of documenting the place names and making them available to the Innu themselves, as well as the wider public, will be briefly discussed.

http://innuplaces.ca

Presented by Marguerite MacKenzie, Memorial University

**Ottawa Inuit Children’s Centre language resources**

The Ottawa Inuit Children’s Centre (OICC) strives to provide Inuit children and youth with a learning environment that will enhance their overall development, to foster positive parenting through support and education, and to promote the retention of the Inuit culture and language. We will show the podcasts and language videos that OICC has created to educate people about Inuit culture.

The Inuit Cultural Online Resource has been designed with the primary goal of teaching Canadian school age children about Inuit culture. We also hope that the content provided can help all Canadians learn more about this rich, proud and vibrant culture.

http://icor.ottawainuitchildrens.com

**Ojibwe People’s Dictionary**

The Ojibwe People’s Dictionary is an on-line bilingual dictionary of the variety of Anishinaabemowin (Ojibwe), an Algonquian language, spoken in Minnesota (USA) and adjacent parts of Ontario (Canada). Developed in the Drupal content management system, it has extensive digital recordings of head words, sample inflected forms, and example sentences recorded by native speakers. Word stems can be displayed in derivational families and with morphological breakdowns. New features include a "Share" feature through which users can contribute words, recordings, media examples, or texts, and the beginnings of an Ojibwe-only gateway with monolingual definitions.

http://oijibwe.lib.umn.edu

Presented by John Nichols, University of Minnesota

**GRASAC: Integrating Ojibwe Language into Museum Research**

The Great Lakes Research Alliance for the Study of Aboriginal Arts and Cultures (GRASAC) is an international collaboration of researchers based in universities, museums and Aboriginal communities, working together to digitally reunite Great Lakes heritage that is currently scattered in many museums and archives. The GRASAC Knowledge Sharing System (GKS) is an innovative, multidisciplinary database that promotes the interrelationship of images, texts and audio components. In this session, we will demonstrate the GRASAC GKS and discuss our recent participation in the Recovering Voices project at the Smithsonian’s National Museum of Natural History as part of our current and future work to integrate language materials into our database.

Presented by Lisa Truong, Carleton University

*Note: The following projects are on-going projects directed or co-directed by the author at Carleton University.*

**The Algonquian Linguistic Atlas / L’atlas des langues algonquiennes**

The Algonquian Linguistic Atlas started as a conversation manual and audio CD of East Cree produced in 2002 that went viral and got adapted to many languages of the Cree-Innu continuum. Developed from a language-activist perspective into an interactive map and website, the atlas project now documents languages from the entire Algonquian family, offering downloadable sound files, texts, and pedagogical resources for teachers and linguists. We will also show the administrative interface that allows distance collaboration for its development.

http://www.atlas-ling.ca

Presented by Claire Owen, Carleton University. Claire Owen is a graduate research assistant currently working as assistant director on the Linguistic Atlas project.

**Eastcree.org: 13 years of Participatory Action Research / Eastcree.org: 13 ans de recherche particip-action**

The eastcree.org website, started in 2000, is one of the first Aboriginal language website in Canada. It has grown to include many types of language resources, from an oral stories database of over 500 stories, to a full reference grammar, a dictionary of two dialects with over 15,000 Cree entry words each, resources including how-to videos, on-line lessons and exercises, and has served as a model for several language preservation projects, from Siberia to Australia. Last year, the dictionary alone had over 52,000 words queried and retrieved – that is, over 1000 per week – mostly from users from Northern Canada, indicating that it is the population of speakers that is being served by such resources.

http://www.eastcree.org

Presented by Marie-Odile Junker, Carleton University & Cree Programs/ Cree School Board staff members.
Outils en ligne pour la langue innue / Online tools for the Innue language
The Tshakapesh Institute, in partnership with Prof. Junker at Carleton University, has developed a number of language tools for Innue language preservation and learning. We will let you try our online language lessons and games for acquiring basic and advanced literacy skills in Innue, enriching vocabulary, and learning grammatical concepts (http://jeux.tshakapesh.ca). We will show our on-line oral stories database, categorized and searchable, with audio and video files download (http://histoires.tshakapesh.ca); our on-line catalogue for educational and cultural resources in the Innue language (http://catalogue.tshakapesh.ca), as well as our Innue blog (http://www.innu-aimun.ca/blog) and Facebook page used to promote Innue language activities (Facebook/Innu-Aimun).

http://www.tshakapesh.ca

Presented by Gaëlle Mollen, Carleton University & Yvette Mollen, Institut Tshakapesh. Gaëlle Mollen is an Innue student, working as a research assistant on the project.

East Cree Thematic dictionaries
The East Cree thematic dictionaries were developed with a commitment to offer a Cree worldview on categorisation. In collaboration with Cree elders, words from the existing two Cree dictionaries were grouped to form topics that tell the story of Cree traditional and modern culture.

We will demonstrate the many search functions of the on-line dictionary, and give a guided tour of the lexicographers’ on-line editing interfaces.

Presented by Mimie Neacappo, Carleton University, & Linda Visitor, Cree Programs, Cree School Board. Mimie Neacappo is a Cree graduate research assistant currently working as co-editor of the East Cree dictionaries.

The Pan-Innu Online Dictionary / Le dictionnaire pan-innu en ligne
The Pan-Innu dictionary is probably one of the largest dictionaries ever compiled for an Aboriginal language. With 27,000 entries using a standardized orthography spanning dialects spoken in Quebec and Labrador, the online version is now incorporating sound and images, and developing a thematic component using on-line database management technology that allows distance on-line editing.

http://www.innu-aimun.ca/dictionnaire

Presented by Jérémie Ambroise, Carleton University. Jérémie Ambroise is an Innue undergraduate research assistant working on the project.

Spokenscree.org: learning and preserving Cree dialects of Ontario - Swampy and Moose Cree
The Spoken Cree website gathers the language documentation work of linguist Dr. Douglas C. Ellis, now 90 years of age, especially audio files of legends and lessons, which were collected from 1950 onwards. A complete on-line glossary is also in the works, offering language resources for one of the areas of Canada that needs it most.

http://spokencree.org

Dictionary Apps for East Cree and Innu
With the rise and success of mobile devices, language specific apps become key in language maintenance. We will show the recently developed Innue dictionary app and other on-going projects for mobile devices, emphasizing database design that enables integrated management of web, print and mobile versions.

Presented by Delasie Torkornoo, Carleton University. Delasie Torkornoo is the current technical director of many of the above web-based projects.

References
Note: All sites retrieved August 1, 2013