

***itwêwina*: Towards a morphologically intelligent and user-friendly on-line dictionary of Plains Cree**

We will present the current state of *itwêwina* (URL: <https://itwewina.altlab.app/>), a morphologically intelligent on-line bilingual dictionary for Plains Cree (*nêhiyawêwin*) – English, showcasing our *morphodict* platform (<https://github.com/UAlbertaALTLab/morphodict>). This dictionary integrates a computational model of Plains Cree word-structure (Snoek et al. 2014; Harrigan et al. 2017) with the contents of a lexical database underlying *nêhiyawêwin : itwêwina / Cree : Words* (Wolvengrey 2001), as well as the *Maskwacîs Dictionary of Cree Words / Nehiyaw Pîkiskweninisa* (Maskwachees Cultural College 2009) and the *Alberta Elders Cree Dictionary* (LeClaire et al. 2002).

The Plains Cree computational morphological model allows for the linking of practically all inflected word-forms with corresponding lexical entries, and the dynamic generation of inflectional paradigms. Moreover, using computational transcriptors we can recognize and present all linguistic content in the three currently common orthographies. Furthermore, we have developed transcriptors to generate and analyze simple English phrases corresponding to core inflected Cree word-forms, as their rough translations.

In addition, we have continued incorporating the contents of the *Spoken Dictionary of Maskwacîs Cree* (Littlechild et al. 2018), other Cree recordings, and synthesized word-forms (Harrigan et al. 2019) for select paradigms. Moreover, we have reconsidered the software code and user interface design to best work on mobile devices and by non-linguistic/non-academic end-users, where we foresee such a digital dictionary to be most used.

Besides presenting the functionalities of *itwêwina*, we will discuss our design decisions and their changes, in reaction to feedback from the academia and Cree communities.

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