

Adapting a Plains Cree Morphological Model for Woods Cree

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Within the Cree dialect continuum, Woods Cree/*nihithawîwin* (ISO:cwd), the variety of Cree predominating throughout northern Saskatchewan and Manitoba, has often been described as the “least studied” (Starks 1992:8) of the group, particularly compared to its neighbouring dialects of Plains Cree (ISO:crk) and Swampy Cree (ISO:csw). This lack of documentation is paralleled by a general paucity of language resources specifically for Woods Cree, both online and in traditional media. However, given the high level of mutual intelligibility and morphosyntactic cognacy between Western Cree dialects, Woods Cree is well situated to adapt language resources from its neighbours, rather than needing to begin its resource development from scratch. This paper therefore outlines the adaptation of a finite-state transducer-based morphological model of Plains Cree (Harrigan et al. 2017) into a model for Woods Cree, detailing the necessary changes in affixation and morphological categories, as well as the use of subdialectal tags to denote geographic variation. We also discuss the practical implementation of this morphological model into an intelligent online dictionary of Woods Cree (the first major online dictionary of any kind in the language), making use of lexical materials from a recently revised print dictionary (Charles et al. 2021) and the user interface and underlying database structure of an existing online dictionary of Plains Cree (Arppe et al. 2018). Finally, we describe plans for the creation of further Woods Cree adaptations of Plains Cree resources, and discuss the advantages and limitations of resource adaptation, as opposed to fully novel resource creation.

References

Arppe, A., Harrigan, A., Schmirler, K. & Wolvengrey, A. (2018). *A morphologically intelligent online dictionary for Plains Cree*. Presentation conducted at the meeting of Stabilizing Indigenous Languages Symposium (SILS).

Charles, C., Goulet, K., McKenzie, M. (2021). *Colin Charles Cree Dictionary*. Lac La Ronge Indian Band.

Harrigan, A. G., Schmirler, K., Arppe, A., Antonsen, L., Trosterud, T. (2017). Learning from the computational modelling of Plains Cree verbs. *Morphology*, 27(4), 565-98.

Starks, D. J. (1992). *Aspects of Woods Cree Syntax*. Doctoral dissertation, University of Manitoba Press