Nisinoon: A Database of Algonquian Components

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1. Introduction

This paper introduces Nisinoon, an NSF-funded, web-based, open source database of components (derivational morphemes) in Algonquian languages. The project's name is a Western Ojibwe form meaning 'there are three', reflecting the tripartite structure of the canonical Algonquian word. Nisinoon has two main goals: first, to provide language programs with a resource for working with the structure of Algonquian words, and second, to facilitate reconstruction of Proto-Algonquian.

2. Overview of project

Until now, no centralized source of components has existed. Relevant data is scattered throughout the literature. We have drawn data from 207 documents to date, resulting in data from 44 languages, with 14,257 individual components. The database is searchable by form (in English or a specific Algonquian language), language, and a number of other properties.

All data has been entered in the authors' original orthographies, and then transliterated to a standard project orthography for easy comparison. Tagging of components is on-going to facilitate the discovery of cognates, since authors are idiosyncratic in their translations, and there is no standardized set of glosses.

3. Technical summary

Nisinoon adheres to best practices in digital linguistics. We will briefly overview how the data have been made accessible, searchable, and citable. Nisinoon also provides the original bibliographic source of each datapoint in the database for maximum data accountability.

4. Uses

Nisinoon was created in response to the recurring morphological and lexical needs of tribal language programs. Those needs may be interpretive – understanding what a word from archival sources might have meant based on its structure. Other times, users need new words. Lexical expansion frequently involves the close examination of morphemes across the family. Nisinoon compiles morphological data from disparate sources in a single location so that tribes will have access to material that community members and heritage speakers may not even know exists.

Another intended use of the database is to facilitate more and more accurate reconstruction of Proto-Algonquian. Because of the complexities of Algonquian word structure, it can be helpful to reconstruct at the level of the component instead of the word.

We will demonstrate several use cases, illustrating different applications of the database.

5. Conclusion

Our intention is that the database will continue to grow indefinitely. We have set up a simple data entry process using Google Sheets, making it easy for others to contribute more data. There are a number of other databases that, with permission, can be used to augment Nisinoon. We hope eventually to incorporate Pentland's massive Proto-Algonquian contribution, for example. Another future goal is to hold workshops with communities to demonstrate how the database can be used in language revitalization.