Unicode Cree Syllabics for Windows 5.0

Background

Since 1988 I have been working with the Naskapi language at Kawawachikamach with the primary purpose of Bible translation, sponsored by Wycliffe Bible Translators and the Summer Institute of Linguistics. Related work includes training in translation and literature and curriculum development.

Since those early days I have been working on methods of production of Naskapi language materials in syllabics by means of the computer. With the advent of high quality publishing capabilities in the newer computers, I continually upgraded the procedure to keep pace with the improving technology. With resources available from the Summer Institute of Linguistics computer services department, I have developed a very satisfactory system of keyboarding syllabic texts in Naskapi.

At the urging of my colleagues, I have adapted the system to include the wider inventory of standard Eastern and Western Cree syllabics. While this has pushed the limit of what is possible with the current technology, Unicode makes this practical. Note that the system I first developed to keyboard Naskapi syllabics is similar to but different from the Cree system, because of the unique local orthography in use at Kawawachikamach. The Cree system described here is intended to be useful for most Cree communities.

An important feature of this system is the method of keyboarding. There are currently two basic philosophies with regard to keyboarding syllabics. The first has its roots in the early Cree "typewriters", where each symbol had it's own key on the keyboard. A special keyboard layout had to be learned, but once learned the typist could keyboard syllabics rather quickly. Also, the keyboard layout could be arranged mnemonically, so that one horizontal row corresponds to the /e/ syllabic series, and another corresponds to the /i/ series, and so on. This system also requires holding down a control key (like Shift or Alt or Both) while pressing the key to get the various orientations of the characters.

The other system described below, and that we use at Kawawachikamach, follows the other philosophy of keyboarding.

Taking into account that a growing number of Native people have had some education in one of the majority languages, and more and more Native people are increasingly computer literate, and the standard QWERTY keyboard is familiar to them. This is also the generation of Native people, Naskapi people anyway, who have a desire to be able to read and write in their own language and the syllabic orthography. It has a high traditional value to them, but it seems out of reach. We have found, for the Naskapi people we have trained, that a system that combines what they already *know* (the English alphabet and computer keyboard) with what they *want to know* (how to read syllabics) has a very high success rate and a sharp learning curve.

The system is essentially this: the user type in roman letters on a standard keyboard the way the word "sounds" in Indian. What he sees on the screen as soon as he types is the word written in syllabics. With the advent of scaleable "TrueType" fonts and sophisticated word processors, anyone can now produce clear, publication quality syllabics with a minimum of training.

We have several Naskapi persons, some elders but mostly people in their 20's and 30's who thought that they would never read syllabics, now producing their own syllabic literature in a

quality that is accepted and read by others in the community. Note that we have had the best success training people who have never written in syllabics before, but we have also several people who could read and write but never "typed": and they caught on quickly as well. A benefit to this system is that the hardware, the keyboard, does not need to be modified in any way with special key-caps or stickers, a new keyboard does not have to be learned and memorized, and that syllabics and non-syllabics (roman) words can be mixed in at any time in any place in the document. Users are able to choose which method they prefer to type in whenever they like.

Unicode

Unicode font encoding was developed in the 1990s in order to address the many requirements for multilingual and multi-platform computing. As of this writing, Windows 2000 and Office 97 or 2000 fully support Unicode word processing. It is expected that more applications will be produced in the near future with this capability.

Office 97 or 2000 running on Windows 98 also natively process all documents in Unicode, and can be made to support Unicode keyboarding by means of a document template and a Word Add-In, also included with this release.

This system includes not only the Unicode TrueType font(s) but also the keyboard drivers for typing syllabics in roman.

Installation:

Self-Install

Simply double click on the CreeKeysUni.EXE file in your computer. The self-extracting installer will install the Keyman program, the keyboards and supporting documents, and the fonts. Accepting the default installation folders is recommended. After the installation, you will find the files here:

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C:\Program Files\Tavultesoft\Keyman\
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Using the Font(s)

It should work in any windows application that supports Unicode: Windows 2000 running Word 97 or 2000, Windows WordPad, etc. As of this writing there are few other software applications that support Unicode. The industry is slowly moving in the direction of Unicode support, however.

1. Launch Keyman (this is the Keyboard driver)

   • click START | PROGRAMS | Tavultesoft Keyman | Keyman

2. "Tavultesoft Keyboard Manager" will briefly flash across the screen as the program loads. If everything works, it will disappear when one small icon appears in the taskbar "Tray"

   (normally on the lower right-hand side of the screen) like this: This is the Keyman Button.

3. Open any Windows word processor, or other application.

(I have tested it with Word, Windows Write and Paintbrush)

Change the active font to **BJCree Uni**.

To type in Roman and get Cree:

Now click on the Keyman button in the "Tray". Now click on the **BJCree (east)** button. The icon in the tray changes to let you know which keyboard is active.

Now type in Roman. You should get syllabics. Double the vowels to get the diacritic (that is, type "paa" to get the long vowel dot over "pa"). "Ch" is "c". or "ch" Back vowel is "u", or "o"

To change back to English, just click on the button in the "Tray". Choose "No Keyman Keyboard". You can keep typing in roman in the BJ Cree font to get normal roman characters.

A complete syllabic chart may be found in:

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C:\Program Files\Tavultesoft\Keyman\Keyboard\bjcruni
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To type using the Cree Keyboard Layout (like on the Mac):

Now click on the Keyman button in the "Tray" again. This time, click on the **Creeboard** button. The icon in the tray changes to let you know which keyboard is active.

Now type following the Cree Keyboard layout. Press Shift+Alt+L to get   "suu". You can find a copy of this keyboard layout to print out in:

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C:\Program Files\Tavultesoft\Keyman\Keyboard\crbrduni
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To change back to English, just click on the button in the "Tray". Choose "No Keyman Keyboard". You can keep typing in roman in the BJ Cree font to get normal roman characters.

To open the Keyman Configuration window (Help, Options, About, etc.) just Right Click on the Keyman button in the "Tray".

Notes

I have designed other members of the font family for both Eastern and Western. (Bold, etc.) These all work together.

There are other versions of the Roman keyboard available. The one for Eastern Cree has been set up according to the preferences of the Cree School Board. This places the w-dot to the LEFT and the final u = small circle ( ). The filename is bjcruni.kmx.

Acknowledgments:

The syllabic fonts I designed myself: drew them from scratch, using a program called "Fontmonger", and later "Fontographer" to refine them. They are scaleable "TrueType" outline syllabic fonts.

Tavultesoft Keyboard Manager was written by Marc Durdin. See "About Keyman" in the Keyman configuration menu.

The keyboard files BJCrUni.KMX (This is the file that changes your keystrokes to the syllabic character) were based on the roman spelling of Cree, and adapted from source keyboard files designed by SIL. The other keyboard file CrBrdUni.KMX I designed myself to match the Mac keyboard layout that the Cree School Board has been using.

I thank Rod Bartlett for showing me a pre-release version of Keyman in September 1994.

Special thanks to David Denton for his encouragement to produce the keyboard packages for distribution on the World Wide Web, and for generous support from the Cree Regional Authority and the Cree School Board.

The whole system may be shared with anyone who is interested provided there are no charges for it. Include these acknowledgments. If you received these keyboards and fonts for free and decide that they meet your needs, a donation may be made to the Naskapi Bible Translation Project. Please contact me for details.

Windows versions previous to Win95 need to use the earlier version of Keyman, fonts and the keyboards. Contact me for details.

It is possible with Windows 98 and Word 97 to keyboard Unicode characters. You must copy the Wordlink files (found in c:\Program Files\Tavultesoft\Keyman\ to your Word "startup" folder.

It is possible to convert CreeKeys (8-bit) documents to Unicode and back again. You must copy the Cree Unicode VBA Template-PC.DOT file to your Word "startup" folder. You may also read this file for more instructions.

The easiest way to share it is to give away a copy of the original installation file and these instructions.

(These instructions are in a file named CreeKeysUni.DOC that you'll find in:

`C:\Program Files\Tavultesoft\Keyman\`

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