



ALO

A Lao Font System

VERSION 1.3 of this document, March 2011. We are making this booklet, some fonts, and possibly some other software, available for a few businesses who have expressed interest. The Alo system was originally developed just for our own use at Big Brother Mouse. As time allows, we are doing more work to make it easier for others to use. Our website, www.BigBrotherMouse.com, will have the most up-to-date information about the status of this. (Click Special Projects in the Menu, then Lao Fonts.)

Big Brother Mouse uses the Alo font system to produce Lao-language books. (“Alo” is the letters in “Lao”, in a different sequence.) I created it in 2005-2007, because all existing Lao font systems had too many drawbacks. It has worked well for us, and we’ve been happy to hear from others that they’ve found it useful. Sebastian at Elefantasia was able to produce a book on it, which he had not been able to produce with any other system he had tried.

This booklet is created to help others who would like to evaluate or use the Alo system. Please note that we cannot provide support. However, if you have problems or suggestions, or want to improve the system, we’ll be happy to try to address them on our website, or in updates of this booklet, if you will send them by email.

I regret that this booklet is currently only in English. Everyone reading it probably knows the difficulties of translation; and for this subject, many terms are difficult to translate. If we find that many people are using the Alo system, we’ll try to get a Lao handbook prepared.

Sasha Alyson, March 2011

Keyboard change, March 2011: Please see details, page 16.

About fonts and computers in Laos

Computers were largely designed by people using the English alphabet. (Properly it should be called the Roman or Latin alphabet; here, I'll follow common usage and call it English.) Adapting other alphabets to computer use will create some special problems, depending on the characteristics of the other alphabet. Lao has these special characteristics:

1. Tone marks and vowels can go above or below the main “consonant” line. There are four horizontal zones in which letters and other characters (sometimes called “glyphs”, in this context) can appear.

2. Some Lao consonants (ຢ ປ ຝ ພ ຊ ຖ) have ascenders and descenders which can easily overlap a vowel that is placed above or below them. Some vowels (ື ຶ ີ ິ ີ ຶ ື ຸ ູ) have only a small difference between them, and if that's covered by a consonant, the reader can't tell what vowel is being used. A font designer has to choose between several ways to minimize overlap, none of which is entirely satisfactory.

3. Lao sentences don't usually have a space between words. A word-processing program that looks for a space toward the end of a line, to know where it can start a new line, may have to go all the way back to the beginning of the line to find a space, or may not find one at all.

4. A tone mark may belong in either of the top two zones, depending whether there is also a vowel above that consonant. A font designer may decide (a) to always place the tone mark in the top zone, which is simple but results in a “floating” appearance that I think reduces legibility because a reader may not notice the tone mark; or (b) to allow the user to select between two locations; or (c) to provide software which places it appropriately.

There are various ways to accommodate these issues. No one way is necessarily best for every user. Often there will be a trade-offs between simplicity of use, aesthetics, compatibility with certain software, and compatibility with other users and systems.

Should you use the Alo system?

Alo works very well at Big Brother Mouse to produce books. You should consider your needs, and how they might differ from ours.

Strengths

- Alo is as simple as possible to install and get started. Just install the font, and type. You do not need to install any programs, or make any changes in Windows or other operating systems.
- The keyboard arrangement is easier to learn than other Lao keyboards. It is easier for

2-finger typists, and requires less use of the Shift key than others. For touch-typists, it is faster than other arrangements.

- Numbers and major punctuation are all in the same position as in English.
- Because of its simplicity, it should work on any system and with any program that can accommodate new fonts. It never unexpectedly turns to nonsense characters, as some fonts and systems do. It does not require a background program, running all the time, which may clash or not work with some software.
- Each font includes Roman (English) characters as well as Lao. There is a simple way to access these, involving a module that we can supply. The Roman alphabet is designed in a size to look good with the Lao.
- When you make a PDF file, fonts are included in the file, so it doesn't matter if others have Alo fonts, or not. (This is true for whatever font you use.)
- There is a font Alo Lek, consisting only of old-style Lao numerals (໑ ໒ ໓ ໔ ໕ ໖ ໗ ໘ ໙ ໐.), in several styles. This is primarily useful if you want Lao numerals to appear as page numbers, or in other places where a computer automatically puts a number.

Weaknesses

- If you frequently need to exchange documents (other than PDFs) with other people, they will need to install Alo fonts to read your documents; and they will have to learn Alo to edit your documents. You can convert them to other formats first (we have software for this) but it's an extra step every time you exchange a document.
- Use of the hyphen as a word-break key (explained below) creates some problems. It is more difficult to get a visible hyphen (you have to remember to use the + sign) and the hyphen you get will be a non-breaking hyphen.
- Some programs assume that English letters will always occupy the space in computer memory where we've put Lao. In some versions of Microsoft Word, the list of font names is displayed in the font being displayed; if that is an Alo font, it will be unreadable. (Since there are many symbol fonts that don't have English letters in those positions, we hope these manufacturers will stop doing this. Until then, in Word, it's possible to put the names of your most common fonts up in the toolbar, where they can appear in English.)

Other things to consider

- English letters are included with the Alo font, but should only be used for single words, or sometimes short sentences. You will encounter problems if you use these English letters extensively. For a full paragraph in English (or French, etc.), you should change to an English font.

- In at least one older program (Microsoft Access 97), superscript and subscript characters (those above or below a consonant, such as in ຫຼຸ້, ນີ້ນ) won't appear immediately. They only appear after you hit backspace, or leave the field, or insert a character before them. This does not happen in MS Word, Photoshop, InDesign, or most other programs. (The same issue may come up with other Lao font systems. In Access, our workaround solution is to have most Lao fields centered instead of flush left; this makes all characters show up immediately.)
- On a computer screen, Alo letters sometimes appear softer and grayer than commercial fonts. Sometimes this looks better, but usually it's not as good. This difference appears only on the screen; when printed, the letters will all be equally sharp. (There is a way to make them sharper on the computer, which commercial font producers use, but it's very time-consuming.)
- Alo should not be used for numerical data where you may need a negative sign. Most systems use the hyphen as a negative symbol, and it will be invisible. (There is a visible hyphen, but your computer will not understand that it is a negative sign.) Do not use Alo in spreadsheets, or other situations where the computer will add or operate on numbers. Within text, this should not be a problem, just be sure to use a visible hyphen or en-dash for a negative sign.
- All fonts consist Lao and English alphabets, numbers, and common punctuation, in compatible styles. All fonts also have other common symbols and old-style Lao numerals, but for less commonly used fonts, we have not always have time yet to redraw all of these in a style compatible with the Lao letters.

Elements of Alo

The Alo system combines several separate elements.

Coding for storage in computer memory

This background is more detail than some of you will want, but it will help you understand the choices made in using a Lao font.

When you type the letter “A”, your computer doesn't remember “A”, it remembers the number 65. (“B” is 66, and so on to “Z” which is 90.) When the computer shows you what it has remembered, it will look at the font you've selected, and show you whatever is in position 65. On a standard English font, that will be “A”. On a font with symbols, it might be a butterfly. Or it could be a letter from another alphabet.

Early computers, with very limited memory, could remember only 128 different characters. The first 32 (numbered 0 to 31) were reserved for special purposes, so only 96 (numbers 32 to 127) were available for the alphabet, numbers, symbols, etc. This was enough for a full

English alphabet and other common symbols and numbers, but not much else. This was known as ASCII. Virtually all computer systems (as far as we are concerned here) handle ASCII in a simple, predictable way. When you sit down at a keyboard, with no special programs running, you can create all of these ASCII characters (and no others) just by hitting one key, or Shift plus a key.

Later, this number was doubled, to 256 (with 64 reserved for other uses, and 188 for the alphabet, etc.) Now a font could include additional letters, such as European letters with accents above them. This is called Extended ASCII. Most computers handle Extended ASCII easily, but not always in exactly the same way.

By the mid 1990s, with more alphabets being used on computers, this wasn't enough. An expanded system, Unicode, was introduced, with (as I recall) about 65,000 characters. This was enough for one font to contain every character in every alphabet in the world, although only a few fonts actually do so. The Unicode designers specified exactly which letters, in each alphabet, would be assigned to which numbers. English letters remain in the lower ASCII range, below 127. The location for the Lao alphabet starts at 3713.

New computers and software can usually handle Unicode, but some older system cannot.

In creating a font for Lao we had to decide how to code the letters. The choices were:

1. Put them in the standard ASCII area, numbers 32 to 127, which is usually used for English letters. Then anyone can type them, simply by installing the font. No special program is needed.
2. Put them in the upper ASCII area. Most computers and software will have no trouble storing them. But you will need a special “background program”, running whenever you want to type Lao, which changes the key that you hit (number 65, for example) into a higher number, such as 193. Sometimes, that special program won't work right, or other software will interfere with it. When that happens, you'll probably have no idea what to do about it.
3. Use the Unicode system, and put the alphabet at positions starting with number 3713. This also requires a special “background program”, but often that will come with the operating system and is more likely to work smoothly. But Unicode brings other complexities.

All 3 of these systems have been used in the past for Lao fonts. We chose #1 for Alo. This makes it simple to use, and no special programs are needed. English-speaking computer technicians consider this the “wrong” way. Standard ASCII should be used only for English, they say. But they all have new computers, they usually type in English, and they aren't the ones who have to deal with the problems of other systems.

Keyboard Layout

“Keyboard Layout” means: Which key do you hit on the keyboard, to get a certain Lao letter? There were at least two keyboard layouts already in use in 2005 when I began this,

plus a variant:

1. Saysettha Lao, Alice95, Alice0 (etc.): This is the most common arrangement. It seems to have derived from the Lao typewriter layout, which in turn presumably, evolved from the Thai typewriter layout. The Thai alphabet is much longer than the Lao alphabet, so a keyboard derived from Thai typewriters has several disadvantages:

* Some keys in the middle of the keyboard are assigned to obsolete or less-used letters, while more common letters require a long stretch of the fingers. That makes it easy for touch typists to lose their place on the “home keys”.

* Most numbers are assigned to the upper shift of the number keys, but not always to the corresponding numbers, while the number 0 is down in the letter section.

* Punctuation is in a different place than on an English keyboard.

1b. Alice_1 (etc.), Mac N font, some Hongkad fonts: This arrangement is almost like #1, except that the letters ທ and ທ are switched, perhaps a single mistake at some point, which was perpetuated. I have not seen any other differences.

2. Laos1, LaoMay3, (etc.): In this layout, each letter is assigned, as closely as possible, to the key for a corresponding English sound. For an English-speaking typist it’s much faster to learn, but isn’t widely in use, and has its own inefficiencies: Assigning letters on this basis means that commonly-used keys may require using the shift key, or will be in less accessible locations, than needs to be the case.

For the Alo keyboard, I decided to start from scratch, aiming for the following goals, which sometimes involved tradeoffs.

- Put consonants on the left, vowels on the right. This speeds up typing because the typist will tend to alternate hands from one letter to the next.
- Put the most common letters on the “home” keys (the middle row), and the next most common letters in the next easiest-to-use spots.
- Use upper and lower shift of the same key for the “high” and “low” forms of letters that are otherwise the same. (Note that on the top row, QWER, the “high” form is the lower-shift, because those letters are more common. If you type “QWER qwer” you’ll get: ຜຄຊວ ທຂສຫ.)
- When a vowel and tone mark are combined in a single key, usually use the shift of the key for that vowel. “yuiop YUIOP” = ັັັັັັັ ັັັັັັັ
- Allow tone marks to be placed in either of the two zones above the consonant zone, depending whether there is a vowel below them. This keeps them closer to the consonant and avoids the appearance of “floating” tone marks

- Keep the numbers in the same place as in English.
- Keep common punctuation the same as in English.
- Use a “Word Break” key to tell computer software that it’s ok to break a line at a particular point. This is really just the hyphen, which virtually all software interprets as allowing a new line to start. (In Alo, the hyphen is replaced by a blank, which does not show up, and does not move ahead. But it’s there; the computer records the keystroke.) This is necessary because there is typically no space between most Lao words, so either the software goes back to the last space, which might be far back, or breaks at a bad spot.

The goals of all this were:

- Make it easier to touch type faster, and with fewer errors.
- Simplify use of the keyboard on computers.
- Make it easy to learn the keyboard, and reduce the search time for a new typist to find a particular letter.

Fonts

We have also been creating fonts for our books. This is a completely separate issue from keyboard layout. We’ve set them up for the Alo layout, but they could easily be re-arranged for other systems, including Unicode.

All fonts are drawn by myself and BBM staff. We often using existing Lao or Thai fonts for ideas about the general shape and look, but fully redraw each character. We try to use smooth curves, so our letters will look good at large sizes. Some of the things we try to do are:

- We look for the best compromises for the problem for minimizing overlaps, so the difference between ັ and ັ (long or short vowel) are more clear. On text fonts, we’ve often flared the ascender to the right, as in this example. On display fonts, sometimes we keep the ascender short, and put the vowel zone above it: ັ ັ. Here they are in larger sizes:

ັ ັ ັ ັ

- We usually make the ມ consonant slightly wider than it is in most Lao fonts, so that vowels are better centered over it. We also keep its ascender as short as possible, to avoid overlap in words like ມ.
- We try to match our Lao font with a reasonably similar English font.

We have both text and display fonts:

Text: Three text fonts are available, each with bold and italic versions, and sometimes others.

These are intended to be easy to read as long text. They can be used for headings, but Display fonts are usually more interesting for this purpose. The text fonts are:

Alo Mekong: Medium, SemiBold, Bold, Italic, and Bold Italic

ໝາຈອກກະໂດດສູງຂຶ້ນ ໝາຈອກ ໝາຈອກ ໝາຈອກ ໝາຈອກ

Alo Nam Khan: Medium, Italic, Bold

ໝາຈອກກະໂດດສູງຂຶ້ນ ໝາຈອກ ໝາຈອກ

Alo Nam Ou: Medium, Italic, Bold (suggested for shorter texts in larger point sizes)

ໝາຈອກກະໂດດສູງຂຶ້ນ ໝາຈອກ ໝາຈອກ

Alo Editor: This font is like Alo Mekong, but instead of being invisible, the WB is represented by a dot. This is sometimes helpful when you're editing. It is easiest to use this font in programs like Word or InDesign, where you have paragraph styles. Then it's easy to change the font after editing, and before final layout. We also use this font for the Story Editor in InDesign (to set that, go to Edit | Preferences | Story Editor Display).

This font increases the length of a text, so it's less convenient to use it when a layout is nearly finished; line endings will change when you change back to a standard font.

Display: We have created about 15 fonts that are primarily suited for larger display sizes. Some, such as Freehand, are also suitable for short text, but they do not have bold and italic variations. Some of our display fonts need more refinement before we circulate them widely; we'll make them available when they are ready. Those available now are shown here:

Alo Dam: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

Alo Flame: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

Alo Freehand: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

Alo Vera: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

Alo Spain: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

Alo Sopnok: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

ALO TAANG LUANG: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

Alo Joy: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

Alo Deua: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

ALC LAK KAL: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

Alo Egypt: ໝາຈອກກະໂດດສູງຂຶ້ນ (ໝາຈອກ)

Line space and font size settings

The “point size” of a particular font measures the distance from the top of the highest letter to the bottom of the lowest letter. In English, letters of the same font size look approximately the same size.

In Lao, if we measure from the top of the highest possible tone mark, to the bottom of ອູ, a consonant occupies a smaller percentage of that distance than in English. Here are two sets of letters in 20-point size:

Elderly ຜູ້ເຖົ້າ

From the top to the bottom is the same distance, but the Lao seems smaller and is harder to read.

Some Lao fonts designers have defined sizes so that for a given size, Lao and English will look equally readable. But this causes other problems. We’ve defined sizes according to the standard definition, and that means you’ll need to use a Lao font in a size about 40% larger than for English. Here is 20 pt. English and 28 pt. Lao:

Elderly ຜູ້ເຖົ້າ

When you need a single English word or phrase within a Lao sentence, you can switch to the English that’s on that font. The visual size will be compatible. (Font-switching is described below.) For longer text, especially a full paragraph, you should change to an English font, and will probably want to use a smaller point size.

Supplemental programs

We have several programs that make the system easier to use, and which require varying degrees of computer experience or software. These have not been tested on Apple computers. Some of them were written in Visual Basic and are used as procedures within our MS Access database. Others are macros for use with MS Word, and can probably be adapted for other programs.

Font-switcher: Allows user to switch from the English to the Lao keyboard by hitting Alt+Shift. See section below.

Alo Spa: Makes small changes to Alo text, mostly invisible to the user but which may be useful. If a tone mark can be placed lower, Alo Spa moves it down. If a consonant has both a vowel and a tone mark above or below it, AloSpa ensures that the vowel is the first key in the sequence. For example, when you type: ສີ່ you could type the vowel before you type the tone, or after. Either way will look exactly the same. But without Alo Spa they will be stored differently in the computer memory, and if you search for that word, you’ll have to search for both spellings.

WordBreak: This adds Word Breaks (WB) between syllables. (There are a very few cases where no computer algorithm can decide where to put the break, without actually understanding the words, for example: ຫາກວ່າ, but this gets well over 99% of them in place.)

It may insert breaks in the wrong place when a foreign word is spelled in Lao letters, not following normal Lao rules, such as having an “s” at the end. These need to be removed during proofreading. If and as such usage gets more prevalent, we can probably tweak this program somewhat, but if this trend continues, there will be more errors. When there is an “S” without an attached vowel, for example, the computer will have no way to know whether it should go at the beginning, or the end, of a foreign word.

AloSpa and WordBreak were originally written in Microsoft Access 97. In this form, however, they operate only on raw text. Formatting (boldface, italics, size and font changes) is lost.

I made each into a macro, which works fine on MS Word 97, works with a little tweaking on Word XP. Someone tried it on Vista and said it did not work, but I haven’t investigated; it might need just a simple fix.

I hope at some point to find a programmer who can make a program that will convert them, while retaining formatting.

Conversion between Alo and other systems: Our friend Nick, in England, has developed a program that will let you convert between Alo and the two other common systems: Uni-Code and Saysettha 2000. You can use his website to convert in any direction between these 3 systems, or download a program that you can put on your computer. Please see:

<http://www.anotherurl.com/laofont/>

Alphabetization: I have also written a program which assigns an alphabetization number to a Lao word. Sorting words by this number puts them in order. This program is written in Visual Basic. It can be incorporated by someone with basic programming experience to use in another application, such as Access.

Availability of these programs

These programs were developed for our own use. Some need more work before they will be useful for others. We will make these available, on a CD or on our website, as we get this work done.

Font-switcher

This software allows a user to switch from the English to the Lao keyboard by hitting Alt+Shift. It has installed without problems on Windows XP, and we’ve been told it works

on Vista. It will presumably not work on a Mac. Here are installation instructions:

First, install at least one Alo font on your computer. This software is of no use without an Alo font.

Install the keyboard driver

This software consists of two small files. One, "AloEN.msi", must be in a folder on your computer which can have any name; here we'll call the folder "FontSwitchingSW". The second, "AloEn.dll", must be in a subfolder named "i386" which is in the folder "FontSwitchingSW". The structure will be like this, although you may not be able to see both files at the same time on a normal Windows Explorer screen:

(If you get this software on a CD, it will probably already be arranged like this on the CD. You can install from the CD. If you download these files, you will need to create the "i386" subfolder, and put the "AloEN.dll" file into it.)

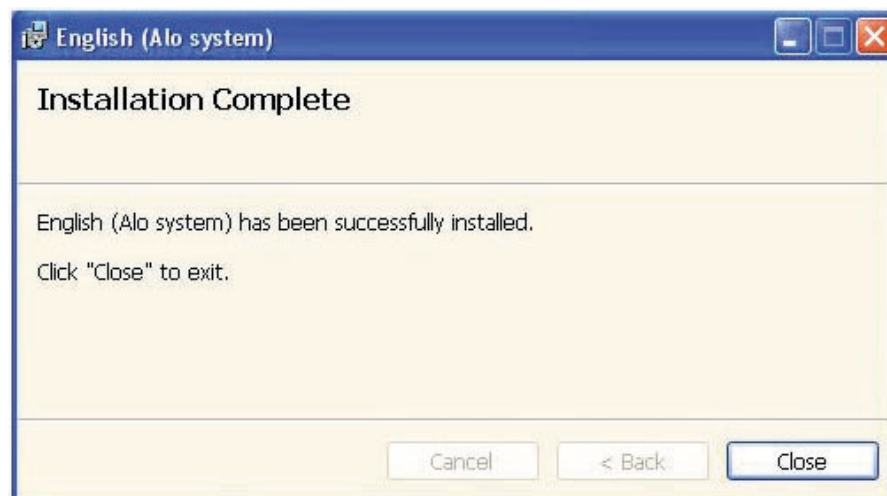
1. Browse to the FontSwitchingSW folder, and double-click LaoEN.msi.



2. Wait for a while. When the driver has installed, a confirmation dialog appears:
3. Click Close.

Configure Language and Regional Settings

1. Open Control Panel:
Windows XP Professional: From the Start menu, select Control Panel.
Windows XP Home: From the Start menu, select Settings..., Control Panel.
The Control Panel dialog is displayed.



2. Double-click Regional and Language Settings.



3. Select the Languages tab.
4. Click the Details... button.
5. Click Add...

The Add input language dialog is displayed.

6. In the Input language field, select a native language you do not usually use, for example Icelandic.
7. In the Keyboard layout/IME field, select US driver for "English (Alo system).

8. Click OK.

The dialog closes, and you are positioned on the Text Services and Input Languages dialog.

9. Click OK to close the Text Services and Input Languages dialog.
10. Click OK to close the Regional and Language Options dialog.
11. Close Control Panel.

Switching between fonts

To switch between English and Lao fonts, press the Alt key on the left hand side of your keyboard, and the Shift key. If you have more than two languages, you will have to press more than once to go through the full cycle.



To uninstall

Generally, this can be uninstalled from the Windows Control Panel, “Add or Remove Programs”, but in a few cases, it has not appeared there. Sorry, we don’t know why, but if anyone can explain, we’ll update this.

About Unicode

I did not investigate the possibility of using Unicode (explained above) because for some of our applications, it just doesn’t work. (We use an Access 97 database extensively and don’t want to switch -- some of the later versions were notoriously and disastrously unstable. But version 97 doesn’t do Unicode.)

One day, probably we’ll all use Unicode. If it currently meets your needs, you should probably use it now, rather than Alo.

Conversions

We do not currently have a way to convert between Alo and Unicode. We hope, before too long, to develop something; it would occasionally be useful for us and others, and should not be difficult for a programmer to do.

Keyboard compatibility

The only Unicode systems we’ve seen use a different keyboard from Alo. Keyboard arrangement and Unicode are entirely separate issues: As I understand it, a programmer can quite easily get the Alo keyboard, or any other arrangement, to generate Lao Unicode. If enough people are using the keyboard, some programmer will probably be happy to do this.

Availability of the Alo system

We are happy to provide copies of our existing fonts and software to others. However, Big Brother Mouse takes up all of our available time and resources; it is up to you to set it up. We regret that we are not able to answer technical questions or do trouble-shooting.

This could be an opportunity for some Lao person with some appropriate skills to set up a business, installing and explaining and tweaking the system for interested parties, and I’d be happy to talk with anyone who has used and understands Alo, and has computer experience, who might be interested.

Use with various software

Troublesome settings

Most computer software assumes that you are typing English. You may discover some settings and controls that you need to change. The location and names vary, of course. Microsoft Word has several “auto-correct” features, which by default are turned on. Other software often has similar settings. (InDesign CS2 and Photoshop version 7 do not seem to have any.) Here are the two most common:

Correct Two Initial Capitals: Type ຄຕ໋. If it turns into ຄ໋ then you need to find this setting and turn it off.

Capitalize First Letter of Sentences: Type ບໍ່. ນັ້ນ (Be sure to include the period.) If it turns into ບໍ່. ຫນັ້ນ then you need to find this setting and turn it off.

Specific software:

Microsoft Word: Go to Tools | Auto-correct. It’s best to turn off all of these, unless you understand what they do, and that they will not interfere with typing Lao.

Adobe InDesign: In Paragraph Styles, there is a Hyphenation menu. These settings should be changed for all paragraphs that use Alo fonts. I suggest making a paragraph tag called “Simple Alo”, and give it these settings. Then copy that tag, rename it, and change it, to make more tags for Alo, so you don’t have to keep re-entering this. Instructions below are for InDesign 2; there may be differences in future versions.

In the Hyphenation menu, set the boxes to:

Words with at least 5 letters

After first 2 letters

Before last 2 letters

Hyphen limit: 25 (that’s the maximum)

Hyphenation zone: (doesn’t seem important, leave at default)
move slider most of the way toward **better spacing**.

DO check the boxes to Hyphenate Capitalized Words and Hyphenate Last Word.

Then, **uncheck the box near the top** to turn OFF “Hyphenation”. (Sometimes doing this greys out the boxes, sometimes it doesn’t. I haven’t figured yet figured out why.) The setting you made will still be visible, even if they are grey.

As you unclick this box, it may seem like you are preventing hyphenation, or making the settings irrelevant, but that’s not how it works.

If you ever find that a line ends far before the margin, even though there are word breaks later in the line where it should have broken, the most common cause is that the “hyphen

limit” wasn’t set properly.

How to install a font on Windows

Installation varies slightly between different versions of Windows, but is generally fairly simple. If these steps don’t work, go to the START / HELP and search for help about “Add Font”.

1. Put the disc or CD or USB drive with the fonts into your computer.
2. Click START (lower left corner), then click CONTROL PANEL.
3. Double-click on FONTS to open that folder.

If you don’t see a FONTS folder, but see only about 10 categories with icons, try to “Switch to Classic View” (button in top left).

4. Now you should see a list of the fonts that are already installed. If you are installing a new version of a font that’s already on your computer, you’ll need to first delete the old version. Click on the name (or hold down CTRL as you click on several names), then click FILE (in top left)/ DELETE.

5. To install one or more fonts, click FILE / Install New Fonts. Under DRIVES (and/or FOLDERS) go to the place where the new fonts are listed. It may take a few seconds for the computer to retrieve the font names, once you go to the right folder.

6. Click the font(s) you want to install, or just click “SELECT ALL”, then “OK”.

7. When it’s done, you should see the new fonts in the list with all the other fonts on your computer. Some programs will have to be re-started before they will find these fonts. If you still cannot find them, try restarting your computer.

Keyboard Changes, March 2011

In March 2011 we made several changes in the font layout. The first will affect a few users, but probably not most; the second is unlikely to affect any users.

#1. The wavy underline, **ꜥ**, which is used to change **ຫ** to **ທ**, is not needed for that purpose, the **ທ** should be typed in one stroke, simply by using the “T” key. But that **ꜥ** symbol can also represent the “R” sound, after a consonant, as in **ກຳມ** (gram). As more foreign-derived words come into the language, it seems likely this this symbol will be used more often, so we’ve made it easier to type it. It is now where the “” key was, in the top left of most keyboards. (Previously, you had to type a special code to access it. Now, an empty square will appear if you type that code.)

#2. Special type-related characters at CHR\$252 and CHR\$255 were eliminated. This

was done because they were rarely if ever used, and it creates space that can be used in the future if new needs arise. (For example, it was useful in 2000 to be able to add the Euro character.) Until then, an empty square will appear if you type those codes.

Fonts downloaded from the Big Brother Mouse site after 31 March 2011 will have these new arrangements.

Thank you’s and credits

Matti in Finland kindly donated his time to write the Font Switcher program, with Jane Burren in Australia helping as liaison for that and much else. Several people at Big Brother Mouse have designed or adapted fonts, most notably Thongkham and Link.

In setting up this system, we have benefited from the work of others who also created Lao fonts and font systems, including John Durdin, Dr. Architect Hongkad Souvannavon, and Alice Computer. Their efforts helped people produce all sorts of written material in Laos long before Big Brother Mouse was here.

