

## Saysettha MX - Lao Unicode (OpenType) font optimized for use with Mac OS X

Since the Unicode standard for Lao only has a single code-point for each character, contextual adjustments of diacritic positions is required for high quality display. Ideally, this is implemented using diacritic anchoring and mark-to-mark position adjustments, but Apple's implementation of OpenType (for Mac OS 10.5.2) does not yet fully support those types of adjustment.

Nevertheless, the quality of a Lao Unicode font can still be enhanced substantially by the use of contextual substitutions, and such a corrected OpenType font can be used with many applications on the Mac, including Mail, Safari, TextEdit and Pages.

**Saysettha MX** (*Regular, Bold, Oblique, Bold Oblique*) has been created especially for use on the Mac using this approach, and (by default) implements the following adjustments:

- Lower tone marks when not over a superscript vowel
- Combine and center tone marks over superscript vowels
- Combine tone marks with SALA AM ( ຳ )
- Lower subscripts that collide with descenders
- Center MAI KAN, MAI KONG ( ັ ື ) when not following a prefix vowel

Using the *Contextual Ligature* (**clig**) feature has been found (empirically) to provide a way of allowing the adjustments to be selected by default, but disabled by the user if desired. (As some applications do not recognize Lao as a separate script, the feature has been enabled for both Lao and Latin alphabets, but of course only affects the Lao characters.) Only applications that use OS X's text rendering, or that implement OpenType directly, will show the enhanced text. With other applications, the text will be quite legible, but diacritics will occasionally collide or appear unevenly.

The difference between corrected and uncorrected Lao text is illustrated below:

Uncorrected Lao (*Format - Font - Ligature - Use None*):

ກາ ກິ້ນ ກໍາ ກໍ້າ ງ ທູ ກັນ ກົນ ເກົາ ເລັກ

Corrected Lao (*Format - Font - Ligature - Use Default*):

ກ່າ ກິ້ນ ກໍ່າ ກໍ້າ ງ ທູ ກັນ ກົນ ເກົາ ເລັກ

### **Font Options**

Two optional features have also been implemented in the Saysettha MX font.

By default, syllables with *sala am* will appear with the 'ring' immediately preceding the *sala aa* vowel, as shown below (and also in previous example):

Default display (*Typography - Alternative Stylistic Sets - No Change*):

ກໍາ ກໍ່າ ກໍ້າ

Users who prefer the ring to be approximately centered over the preceding consonant can achieve this simply by applying feature *Stylistic Alternates* (*salt*) or feature *Stylistic Set 01* (*ss01*) to the text:

Alternative display (*Typography - Alternative Stylistic Sets - Stylistic Set 1*):

ກໍ່າ ກໍ່າ ກໍ້າ

For users who prefer the old way of writing Lao, the Saysettha MX font also allows a user to choose how to display syllable-final LAO NY ( ຍ ) without modifying the underlying text (which would interfere with searching the text). If *Stylistic Set 2* is selected (under *Alternative Stylistic Sets* in the Typography menu opened from the Font window), then final ຍ will appear as າ. So for example, in the following text:

Default display (*Typography - Alternative Stylistic Sets - No Change*):

ກາຍ ໂດຍ ຍາກ ໃຫຍ່

*Alternative display (Typography - Alternative Stylistic Sets - Stylistic Set 2):*

ກາງ ໂລງ ຍາກ ໃຫຍ່

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