Thai to Lao Translation

An Add-In for Microsoft Word

User Guide

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Dr. John M. Durdin

Lao Script for Windows

https://laoscript.net

Contents

Introduction

Translation of Word documents from Thai language into Lao has for many years been aided by using the Thai to Lao translation function in the LaoScript Add-In for Microsoft Word. However, to take advantage of newer technologies and more comprehensive available dictionaries for both languages, a completely new Thai to Lao Translation Add-In for MS Word has now been developed.

The new Thai to Lao Translation Add-In substitutes identified Thai words by the equivalent Lao words, or by phonetically transliterating the Thai word into the Lao writing system. Unidentified Thai words or character sequences are also transliterated, and flagged as possible errors.

The Thai – Lao wordlists are contained in an Access database in which entries may be added, modified or deleted. One or more Lao words can be linked to each Thai entry as equivalents. Thai and Lao word lists can be imported into the database, and the entire list may be exported for backing up or transferring to a different dictionary.

This User Guide describes how to use the Add-In functions for checking Thai spelling and translating to Lao, how to use the dictionary form for looking up or editing dictionary entries, and the various options available for managing the translation process and dictionary.

The Add-In does not require the installation of (any version of) Lao Script for Windows. The Add-In has been developed and tested for use with Windows 10 and Word 2013 or later. Use with earlier versions of Word or Windows is untested. The dictionary is a Microsoft Access database, but Access itself does not need to be installed.

Installation

Download the package ThaiLao2020.zip from the LaoScript website and unpack the contents into a new folder within your Documents folder. The zip archive is a "Click-Once"[1] installation package with the following contents:

setup.exe	Installer app.
ThaiLao2020.vsto	COM Add-In manager for ThaiLao2020.
Application Files	Folder with the Add-In Library, Dictionary, Help File and other files used by the Add-In.

Close all open Word documents and the Word app before installing the Add-In. Double-click the Explorer entry for **setup.exe** to install the Add-In to MS Word. The following prompt dialog will be displayed (with the file location you used for the installer contents):
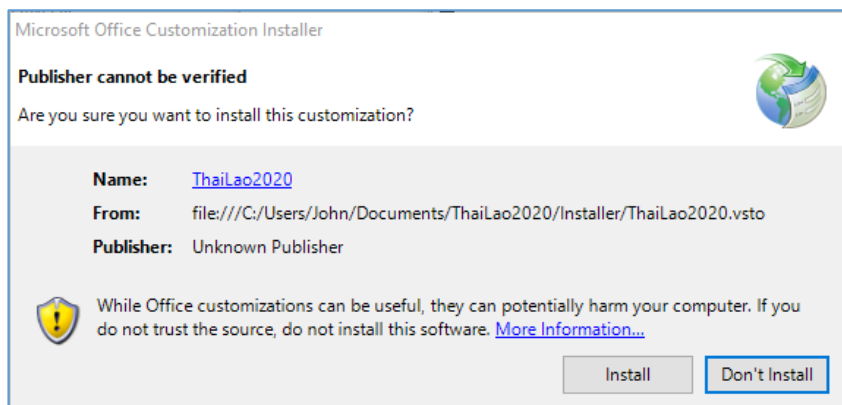
Click **Install** to install the Add-In. When Word is re-opened, the **Thai-Lao** tab should be visible in the Ribbon Menu.

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[1] "Click-Once" is a Microsoft trademark for the simplified installation process used. The package must be installed separately by each user, it cannot be used to install the app for all users on a computer.

Using Thai to Lao Translation

After installing the Thai-Lao Add-In, when any document is opened, it is checked to determine if it is:

- the Lao result of a previous translation from Thai,
- the Thai result of Add-In spell-checking,
- a new, empty document, or
- any other document (assumed to possibly contain Thai).

Different buttons and options are visible in the Thai-Lao ribbon tab accordingly.

Translating from Thai

To translate a Thai document into Lao, open the document. The **Thai-Lao** ribbon tab will appear initially as shown here:
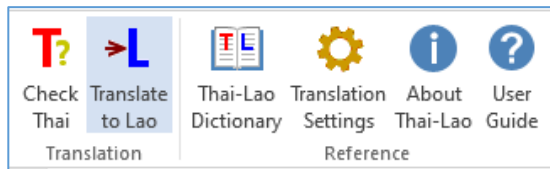
Click the button **Translate to Lao** to translate the entire document into Lao. The generated document will have a file name that has the suffix "_Lao" appended to the original file name, so, for example, the result of translating the file *Sample.docx* will be a file in the same folder named *Sample_Lao.docx*.

To translate only part of a document, select the paragraph or paragraphs to be translated before clicking **Translate to Lao**. Note, however, that any untranslated paragraphs before the selected text will also be translated.

Errors in the translated text will be highlighted and may be corrected as required, or the text may be re-translated after adding or modifying dictionary entries.

The Translated Document

The following paragraph of Thai is used as an illustration of the translation result using the (default) highlighting option of marking both spelling errors (or unidentified Thai words) and Lao words with alternates where no default choice of Lao word has been set. (Some typographic errors have been added for the purpose of the example.)

คุณชอบธรรมชาติไหมครับ? คนเกือบทุกคนรักและคิดว่าเธรรมชาติเป็นสิ่ง มหัศจรรย์ที่น่าประทับใจ ผมเองก็ชอบธรรมชาติเหมือนกัน ธรรมชาตินั้นยอด เยี่ยม สวยงาม น่าสนใจมากทีเดียว ผมมีคำถามอีกข้อ ไม่ทราบว่าคุณจะช่วย ผมตอบได้ไหม คือ บางคนคิดหรือเดาเอาว่าธรรมชาตินั้นเกิดขึ้นมาเองโดย บังเอิญหรือเกิดขึ้นโดยธรรมชาติ   แต่พวกเขาก็มักจะยอมรับว่าตนเองก็ไม่ แน่ใจเหมือนกันว่าธรรมชาติเกิดขึ้นได้อย่างไร


When **Translate to Lao** is clicked, translating by word substitution, the resulting document appears as:

ທ່ານຂອບທຳຊາດໄຊມຄຣັບ? ຄົນບເກືອບທຸກຄົນຮັກແລະຄິດວ່າເຈຳມະຊາດ ເປັບສິ່ງມະຊັດສະຈັບທີ່ຄອບປະທັບໃຈ ຂ້າພະເຈົ້າເອງກໍຂອບທຳຊາດຄືກັບ ທຳ ມະຊາດນັ້ນດີເລິດ ສອຍງາມ ທີ່ໜ້າສົນໃຈຊລາຍທິສຸດ ຂ້າພະເຈົ້າມິຄຳຖາມອິກຂ້ ບ່ຮູ້ວ່າທ່ານຈະຊ່ວຍຂ້າພະເຈົ້າຕອບໄດ້ໄຊມ ຄື ບາງຄົນຄິດຊລິເດົາວ່າທຳມະ ຊາດນັ້ນເກີດຂຶ້ນມາເອງໂດຍບັງເອິບຊລິເກີດຂຶ້ບໂດຍທຳມະຊາດ ແຕ່ພວກເຂົາກຳ ມັກຈະຍອມຮັບວ່າຕົບເອງກຳບ່ແມ່ໃຈຄືກັບວ່າທຳມະຊາດເກີດຂຶ້ບໄດ້ຢ່າງໃດ

Typing errors and unidentified words in the Thai are transliterated by syllable or character into Lao and highlighted in yellow as shown above. Identified Thai words without a corresponding Lao word in the Thai-Lao dictionary are transliterated phonetically by syllable and shown highlighted in gray, as ໄຊມຄຣັບ above.

For translated documents, the Thai-Lao ribbon tab changes to:
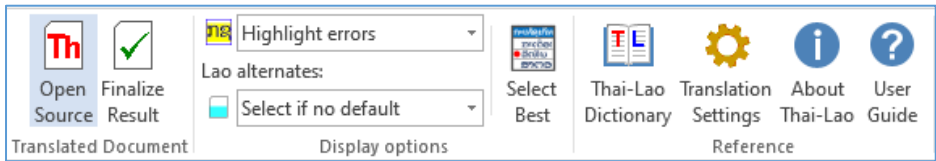
## Thai words with more than one Lao equivalent

Many Thai words have more than one corresponding Lao word, which may be either variants or synonyms. Frequently, one of the "Lao alternates" will be much more common and will be specified as the default word to use. In that situation, the default Lao word will be inserted and not highlighted, as seen in the example above.
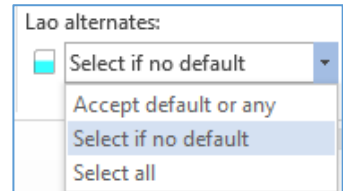
However, if **Select all** is selected in the **Lao alternates** drop-down list, with the translation of the above sample text will appear (with more words highlighted) as:

ທ່ານຊອບທຳຊາດໄຫມຄຣັບ? ຄົນບໍເກືອບທຸກຄົນຮັກແລະຄິດວ່າເຊາທຳມະຊາດ ເປັນສິ່ງມະຫັດສະຈັບທີ່ຄອບປະທັບໃຈ ຂ້າພະເຈົ້າເອງກໍຊອບທຳຊາດຄືກັນ ທຳ ມະຊາດນັ້ນດີເລິດ ສວຍໆງາມ ທີ່ໜ້າສົນໃຈຫລາຍທີ່ສຸດ ຂ້າພະເຈົ້າມີຄຳຖາມອ້ຮກຂ້ ບໍ່ຮູ້ວ່າທ່ານຈະຊ່ອຍຂ້າພະເຈົ້າຕອບໄດ້ໄຫມ ຄື ບາງຄົນຄິດຫລືເດົາວ່າທຳມະ ຊາດນັ້ນເກີດຂຶ້ນມາເອງ ໂດຍບັງເອີນຫລືເກີດຂຶ້ນໂດຍທຳມະຊາດ ແຕ່ພອກເຂົາກໍ ມັກຈະະຍອມຮັບວ່າຄົນເອງກໍບໍ່ແນ່ໃຈຄືກັນວ່າທຳມະຊາດເກີດຂຶ້ນໄດ້ຢ່າງໆໃດ

The button **Select Best** simplifies the task of choosing the best Lao word for a given Thai word. If the cursor (caret) is placed at the start of the document (or anywhere before the first highlighted word that needs to be checked), and the **Select Best** button is clicked, a small pop-up form will appear beside the Lao word showing the Thai word (in the form title bar) and the dictionary-listed Lao words that are linked to that Thai word:
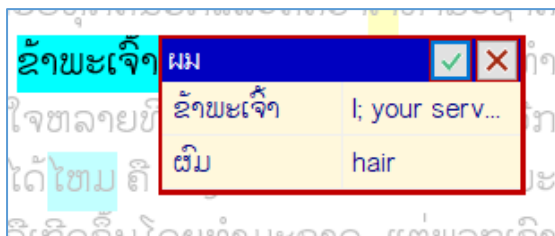
In this example, the word selected is clearly correct for the context.

However, clicking any entry in the list will change the selected word (immediately to the left of the pop-up form) accordingly. Pressing **Enter**, or clicking the green check mark button, will move the pop-up form to the next word to be disambiguated, and display the list of possible Lao words (with glosses, if defined in the dictionary) for selection, until all words have been checked. Pressing **Escape** (or clicking the ✕ **Close** button) ends the disambiguation process. It can, however, be re- started at any time anywhere in the document until the document has been finalized (see Finishing a Translation below).

Correcting errors

If error highlighting was disabled during translation, selecting **Highlight errors** from the upper drop-down list will update the document and highlight errors. (In the same way, error highlighting can be cleared by selecting **Do not highlight errors**.)

Errors identified during the translation process may be corrected in one of three ways:

- If the error is due to an actual Thai word that is not in the dictionary, or a missing Lao word corresponding to an identified Thai word, add the missing Thai or Lao words to the dictionary, then click **Open Source** to re-open the source document , and re-translate.
- If the error is due to a mis-typing in the source document, re-open and correct the source document then re-translate, as above.
- Simply edit the translated document.

Spell-checking Thai

Since the Thai to Lao translation Add-In uses word identification and a fairly large Thai dictionary, it may also be used to check the spelling of a Thai document, by clicking the **Check Thai** button. For this use, the target document will be given the suffix **_Checked**. Errors or unidentified Thai words will be highlighted in yellow as for translation to Lao, but buttons and options relating to Lao translation will not be applicable.

Finishing a Translation

When the correction of errors and selection of Lao alternates in a translated document is finished, click **Finalize** to remove all highlighting and hidden text from the document. After finalizing, changing the **Highlight errors** and **Lao alternates** drop-down choices will have no effect.

Finalize can also be used to remove highlighting and hidden text from a checked (Thai) document.

The Thai-Lao Dictionary

The **Thai-Lao Dictionary** form, which is opened directly from the ribbon menu, manages entries in the bilingual dictionary used for translating Thai text into Lao.

Looking up a Thai word

To look up a Thai word, just type the word into the Thai word text box. If the word exists, it will be selected and highlighted in the list, and any corresponding Lao entries shown in the lower right hand list:

A Thai word may also be selected from the list below the text box.

When entering text into the Thai text box, the keyboard will automatically be switched for typing Thai.

Looking up a Lao word

To look up a Lao word, type the word into the Lao word text box. If the word exists, it will be selected and highlighted in the list, and any corresponding Thai entries shown in the lower right left hand list:
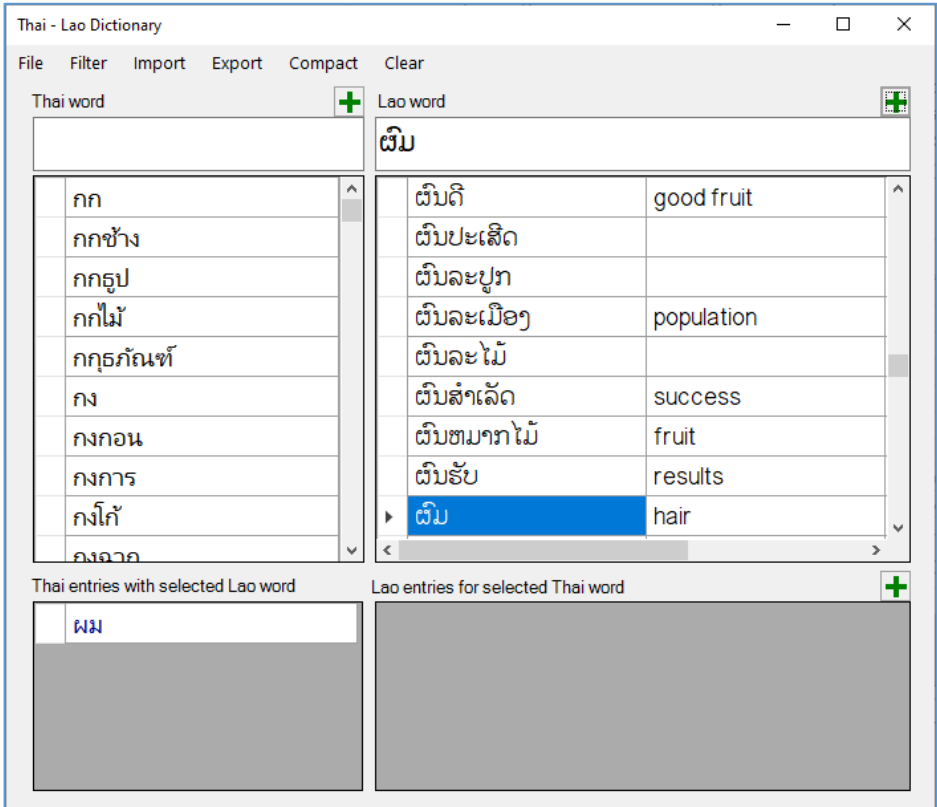
In the same way as for Thai, Lao words may be selected from the list below the Lao text box, and when entering text into the Lao text box, the keyboard will automatically be switched for typing Lao.

Clicking a linked entry in either of the two lower text boxes will cause the primary entry for that Lao or Thai word to be selected and displayed. Thus, in the above example, clicking the Thai word ผม in the lower left list box will select ผม in the Thai text box and upper left list

box, displaying the two possible translations for ผม in the lower right list box. Then clicking the Lao entry ຂ້າພະເຈົ້າ will select and display that word in the main Lao list and text box, as seen here:
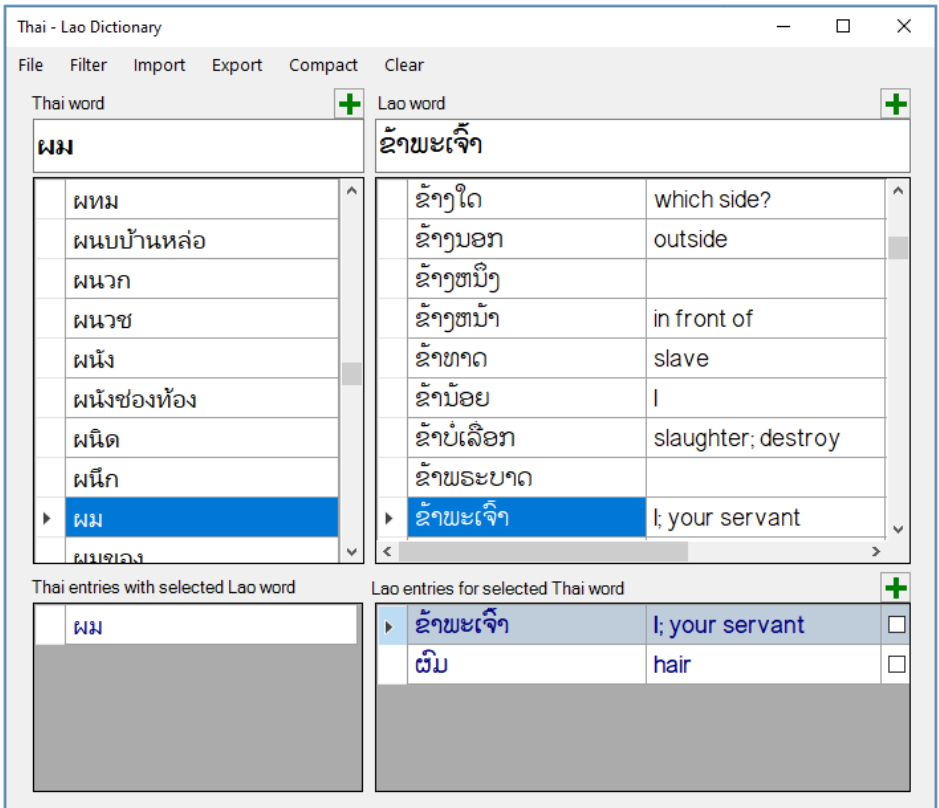
In this way, the user can move quickly between related entries in both word lists.

Default Lao entries

In this example, the correct Lao word for translating ผม will usually need to be determined from the context, so neither is marked as *default* and the best word should be selected after translating to Lao.

If one Lao word is more
likely, then that can be
marked as default by
clicking the check box
for that entry:

Inserting Thai or Lao entries

To add a new Thai or Lao entry, enter the word into the text box and
click the ➕ button above the text box (or press **Tab** then **Enter**). The
word will then be added as a new entry at the appropriate position in
the list. Words to be added may only contain Thai characters (for Thai
words) or Lao characters (for Lao words) but may include (non-initial)
period or hyphen, to allow the inclusion and matching of abbreviations.

Abbreviations will only be matched if following a space or non-Thai.

Editing Thai or Lao entries

If a Thai or Lao entry has been mis-spelled, it can be selected and
corrected in the main list. However, care needs to be taken to avoid
making changes that would result in Thai and Lao entries being
incorrectly linked. For that reason, changing a Thai or Lao word to
another word that is already contained in the dictionary is not
supported.

When a Lao word is inserted or
edited in the dictionary, a copy of
the word with automatically inserted
syllable breaks is generated and
added, and can be seen by scrolling
the Lao list to the right:

Syllable breaks appear as hyphens,[2]
and in most cases will be correctly

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[2] A syllable break in the "split" Lao word is stored in the database as the discretionary
hyphen SHY = &HAD (173).

placed. However, if a word has irregular syllables, automatic hyphenation may be overridden if preferred by removing the inserted hyphens or inserting breaks using the space bar, which will be changed to the correct hyphen code when the edited word is saved. (Do not use the normal minus/hyphen character as that will appear in the inserted word whether or not that word is at the end of a line.)

The English gloss for any Lao entry can also be edited in the main list (not in the lower "linked entry" list).

After changing a Thai or Lao entry (or the English gloss), move the text insertion point off the row with the change in order to save the change.

Deleting Thai or Lao entries

To delete either a Thai or a Lao entry from the dictionary, select the row with that entry in the appropriate list, and press **Delete**. A Thai or Lao entry cannot be deleted if it has been linked to a corresponding entry – you must delete the link entries first (see below).

Thai to Lao Translation

? Are you sure you want to remove ກອງຈອງ from the Lao dictionary?

Yes   No

You will be prompted to confirm the deletion, and if confirmed, the entry will then be completely removed from the database.
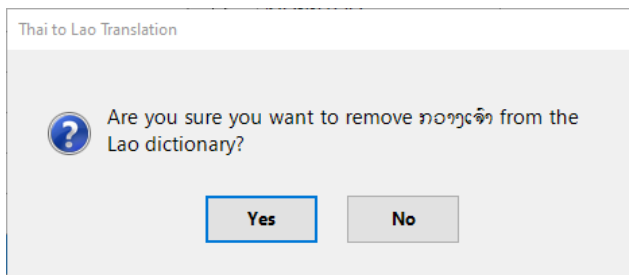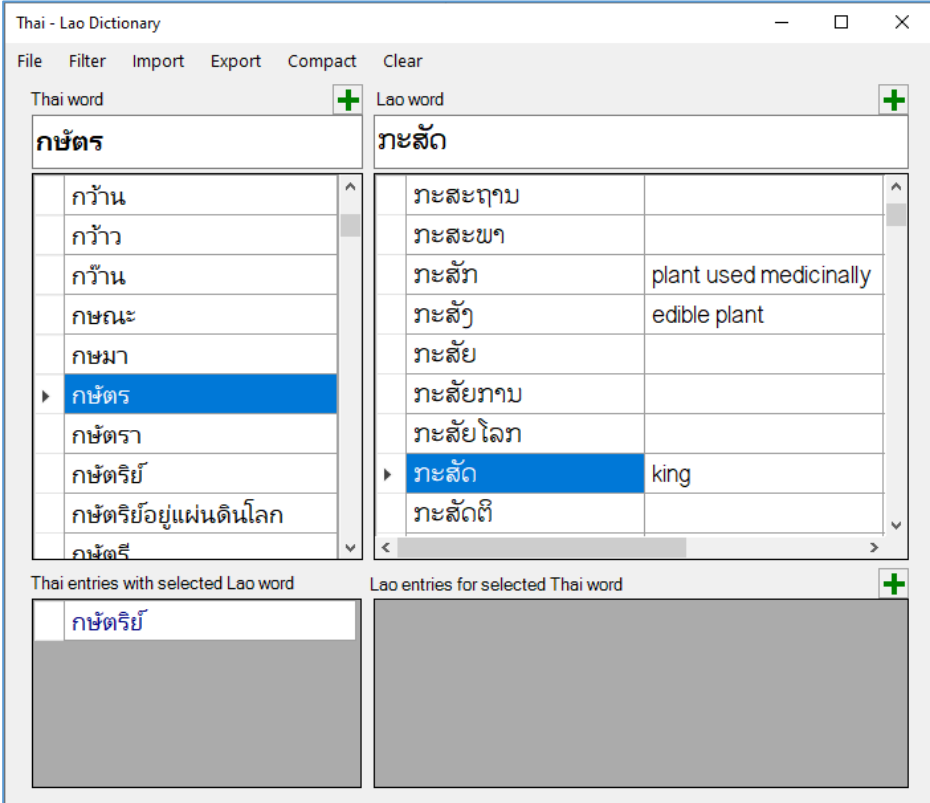
Most changes made to dictionary entries are saved to the database immediately, but to be sure that changes are taken into account, it is better to close the dictionary form before continuing translation.

Linking Thai and Lao entries

To add a link between Thai and Lao entries, enter or select the Thai and Lao words from the two lists, then click the ➕ button above the lower right-hand list, for example:

You will be prompted for confirmation before adding the link between the Thai and Lao entries:
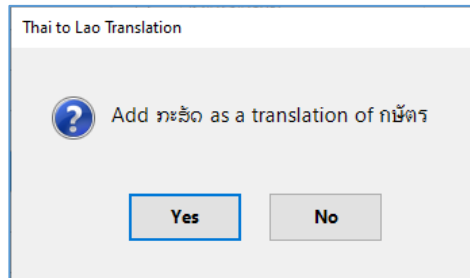
The new entry will then be added and can be seen in both the lower two lists:
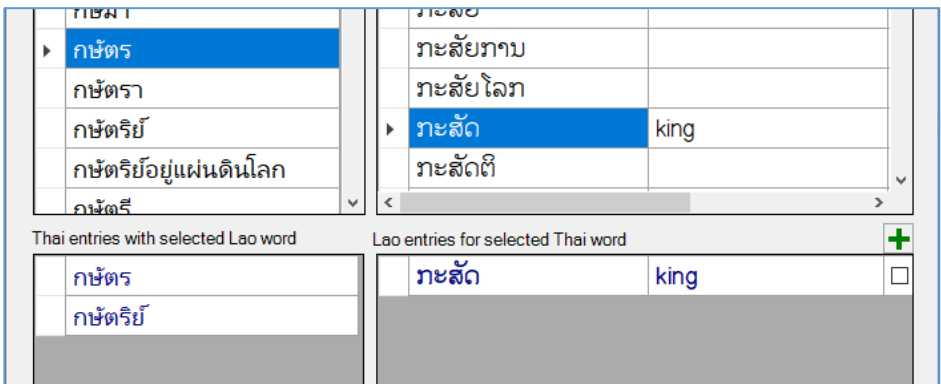
Unlinking a Lao word from a Thai entry

To remove a link between a Thai and Lao word pair, select the two words in their respective lists, then *select each corresponding word in the two bottom lists* and press **Delete**. You will again be prompted to confirm the deletion, after which the link will be deleted from the dictionary.

Links between Thai and Lao entries must be deleted before either of the linked Thai or Lao entries can be deleted.

Dictionary Database Maintenance

A number of functions are provided through the menu at the top of the dictionary form, mainly for database maintenance. Note that all dictionaries opened or used must contain the three related tables **Thai**, **Lao** and **ThaiLao** with the same columns (data fields) as the default database. See Appendix 3: Database and Exported File Specifications for details.

File – New

With this function, you can build a new Thai-Lao dictionary (with the necessary tables and fields), giving it an appropriate name and path when prompted. Typically, after changing to a new database, you would import entries from an appropriately formatted list, either exported previously or created separately using the appropriate format (see Text File Import/Export Specifications).

File – Open

Change between existing Thai-Lao dictionaries using **File – Open**, selecting another (appropriately structured) dictionary database from the file browser as prompted.

File – Copy

Use **File-Copy** to make a copy of the current dictionary database, either to create a different dictionary based on the current dictionary, or to make a backup. The copy will become the current dictionary with the name assigned and in the same folder unless changed in the **SaveAs** file browser.

File – Default

File – Default selects the dictionary with the path set during installation, and is intended to make it easier to revert to using that dictionary after changing to a different dictionary later. You can choose whether to re-open the original dictionary (which may have been modified later), or to re-copy it from the protected master copy provided with the installer.

Filter

Selecting one of the sub-menu entries allows the list of Thai words to be limited to words with linked Lao entries, or just to words with more than one linked Lao entries, to make it easier to select default entries.

Import

Use **Import** to import dictionary entries from an appropriately formatted UTF-8 text file. Thai, Lao and/or linked Thai-Lao entries may be imported together or separately. When importing linked entries, any Thai or Lao words not already in the dictionary will also be added to those tables. Note that if a linked Thai-Lao entry being imported is identified as the Preferred entry, the Preferred status for any existing Lao alternates for that Thai word will be cleared. This is by design to allow users to easily update Lao alternate defaults according to their own preference. See Text File Import/Export Specifications for details of the format to be used for wordlists to be imported. *Note that importing a large word list may take several minutes.*

Export

Use **Export** to export the current dictionary data to a UTF-8 text file.   You will be prompted to select the tables to export and then to enter an appropriate file name.

Compact

The **Compact** function removes unused space in the dictionary database. This is only likely to be needed if wordlists have been exported or imported. Only databases using the older (.mdb) Access format can be compacted by this app. If a dictionary database has been created using the newer (.accdb) format, it must be opened in Microsoft Access in order to compact it. The **Compact** menu item will appear red if the database has increased in size enough for compacting to be advisable.

Clear

This function may be used to remove all entries from a dictionary.

Translation Settings

Clicking the Translation Setting ribbon button will
display a form with various user settings that allow
the user to configure the method of translation
and the appearance of the translated document:

Translation
Settings

Font use	Font family	Font style	Font size
Lao documents	Saysettha	Regular	16
Word selection (Thai)	Microsoft Sans Serif	Regular	12
Word selection (Lao)	Saysettha	Regular	12
Dictionary - Thai text	Saysettha Semibold	Bold	16
Dictionary - Thai list	Saysettha Semibold	Regular	16
Dictionary - Lao text	Saysettha Semibold	Bold	16
Dictionary - Lao list	Saysettha Semibold	Regular	16
Dictionary - Thai for Lao	Saysettha Semibold	Regular	14
Dictionary - Lao for Thai	Saysettha Semibold	Regular	14
Messages	Segoe UI	Regular	11.25

Translation Method
- Word substitution (use Dictionary)
- Phonetic by syllable

Lao Hyphenation
- None
- Hidden (ZWSP)
- Visible (Opt hyphen=#173)

Error highlighting (default)
- Do not highlight errors
- Highlight errors

Lao alternate highlighting (default)
- Hide all
- Display if no default
- Display all

☑ Insert ZWSP between all words (or syllables)

Restore defaults   OK   Cancel

Translation method

Two methods of translation from Thai to Lao are supported.

Word substitution

With this method, each identified Thai word in the document is
replaced by the corresponding Lao entry in the Thai-Lao dictionary.

Where several Lao words are listed in the dictionary as possible
translations for a given Thai word, a default may be assigned, or else
the first listed word will be used. However, alternatives for the
displayed Lao word are retained in the translated document (as hidden
text) and a different choice may be made later. See Thai words with
more than one Lao equivalent for further information.

If a string of Thai characters does not match any known Thai words, or no Lao words correspond to the Thai word, the Thai string will by phonetically transliterated by syllables into Lao (see below).

Phonetic by Syllable

Although not usually appropriate for translating an entire document, using this method causes every Thai syllable to be transliterated phonetically from Thai into Lao. However, the quality of the resultant translation is not usually very good since the Thai writing system does not permit reliable syllable identification without using a dictionary and like English, Thai is not phonetically consistent.

Lao Hyphenation

Substituted Lao words are inserted in one of three ways:

- **None** – no hyphenation between syllables.
- **Hidden** – hidden (ZWSP[3]) break codes, supporting line-breaking but never appearing as visible hyphens, will be inserted between syllables.
- **Visible** – optional-hyphen codes will be inserted between syllables, appearing as visible hyphens when occurring at the end of a wrapped line.

Note that syllable boundaries in Lao dictionary words are usually determined automatically but can also be set or changed manually. (See Editing Thai or Lao entries below.)

Word Break Code Insertion

Checking **Insert ZWSP between all words** causes a hidden ZWSP break code to be inserted between words (or between syllables if using the *Phonetic by Syllable* method of translation). Selecting this option is recommended but is no longer essential since current format Word documents are displayed wrapped at word or syllable boundaries by default.

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[3] ZWSP = zero width space, U+200B.

Error highlighting

Translated documents can optionally be highlighted to indicate characters that do not match Thai dictionary entries (in yellow) or phonetically transliterated Thai words (in gray) for which no corresponding Lao dictionary entry exists. The **Translation Settings** form determines how a document will be displayed when first translated, but the display mode can be changed later (using a button on the Thai-Lao ribbon tab) without changing the default setting or retranslating the document.

Highlighting and selection of Lao alternates

Lao words resulting from the translation of Thai words with more than one possible Lao equivalent may be highlighted (in pale blue) in one of two ways:

- Highlight only those Lao words for which the Thai word has no default Lao word assigned, and which require user selection for good translation.
- Highlight all Lao words with alternates, allowing the choice of default Lao word to be overridden.

As with **Error highlighting**, the **Translation Settings** form only determines the initial display of the Lao document after translation, and the highlighting of Lao alternates can be changed later using the Thai-Lao ribbon without changing the default setting or retranslating.

Note that assisted selection of Lao alternates requires that the Lao alternates highlighting mode is set either to **Display if no default** or to **Display all**, either using the user setting, or the drop-down option in the Thai-Lao ribbon.

See Thai words with more than one Lao equivalent for more information.

Fonts for translated documents and dialogs

The fonts chosen for translated documents and dialog controls have been carefully chosen to optimize readability. However, the user can choose a different font if, for example, a different character size is preferred, or a font with a different character set is required (for use with a different language such as Lao Pāḷī that uses Lao script but has additional characters).

Double-click any row in the list of configured fonts and select the appropriate font and character size to be used for the document or control selected.

Saving and restoring changes to settings

Always click **OK** to save any changes made to translation settings, or **Cancel** to return to the previous settings. Click **Set Defaults…** to restore all settings to the values originally configured when the app was installed.

About Thai-Lao

Clicking this button will display a form showing the dictionary currently being used and the number of entries in each table of the dictionary, as well as the creator and copyright information for the app:
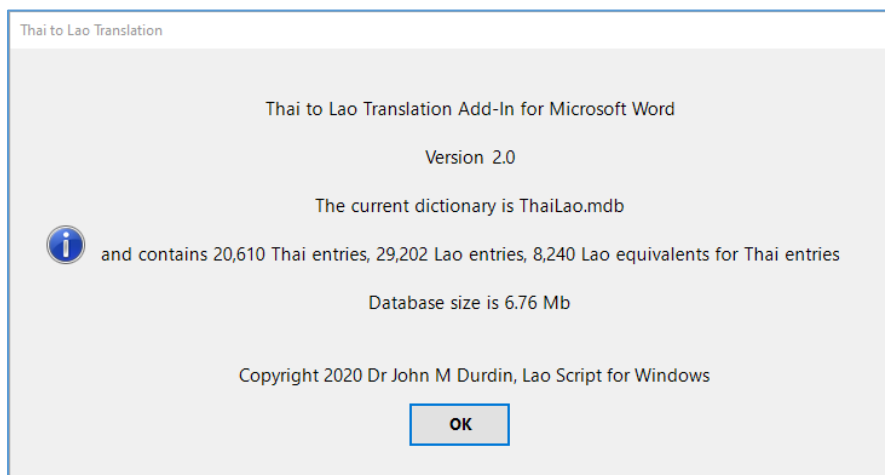
Uninstallation

To uninstall the Add-In, first close all copies of Word, then use **Settings – Apps** (or **Control Panel – Programs and Features**) and select **Uninstall**.

Do not simply remove the Add-In using the function provided in **Word – Options – Add-Ins** as that will not remove the app and may prevent re-installation or upgrading later.

Appendix 1: Limitations

The Thai to Lao translation app (Version 1.0.0) has the following known limitations:

- Documents including tables cannot be translated without converting the table rows to separate paragraphs of text. If tables are detected, the user is given the choice whether to continue, with the tables converted to text, or cancel the translation process.
- Imported (or entered) Thai and Lao dictionary words are limited in length to 31 characters and should not contain any punctuation other than period or hyphen, or any other non-Thai/non-Lao characters. Single-character Thai words cannot be added to the dictionary, but common single-character exceptions (such as ณ) are recognized and handled separately during translation.
- Differences in font style (bold, italic) within a paragraph will not always be retained in the translated document.

Appendix 2: Thai and Lao word ordering

The Thai and Lao languages use different alphabetization conventions that present special difficulties for ordering, especially when words with non-standard spellings must be taken into account.

For this app, lists of both words are loaded and ordered in memory using exact (binary) matching rather than any kind of alphabetic order, to allow rapid searching and ensure that each entry is uniquely identified. For the Dictionary form, however, the lists for both languages are displayed ordered approximately according to Thai dictionary conventions, giving the initial consonant precedence over any prefixed vowel. So while the Thai and Lao word lists do not follow exact dictionary order, words should still be fairly easy to find. In any case, typing a word in either of the Thai or Lao text boxes will scroll the list and match a word if it exists in the dictionary.

Appendix 3: Database and Exported File Specifications

Dictionary databases used with the ThaiLao2020 app must contain the following tables and queries:

Tables

Thai

Field	Type	Description
ThaiID	Int32	Primary Key, added automatically by app.
Thai	Text	Thai word, must be between 2 and 31 characters long.
SortKey	Text	Automatically added alphabetic string used for dictionary ordering, non-uniquely indexed, with a maximum length of 63 characters.

Lao

Field	Type	Description
LaoID	Int32	Primary Key, added automatically by app.
Lao	Text	Lao word, limited to 31 characters long.
Split	Text	Lao word with inserted (SHY) syllable breaks, limited to 63 characters.
Gloss	Text	Unlimited length English gloss (or notes).
SortKey	Text	Automatically added alphabetic string used for dictionary ordering, non-uniquely indexed, with a maximum length of 63 characters.

ThaiLao

Field	Type	Description
ThaiID	Int32	Key of linked Thai entry, primary key part 1/2.
LaoID	Int32	Key of linked Lao entry, primary key part 2/2.
Preferred	Yes/No	Preferred Lao entry for this Thai entry.

One-to-many relationships are defined between tables **Thai** and **ThaiLao** (on *ThaiID*), and between **Lao** and **ThaiLao** (on *LaoID*), with referential integrity enforced.

Queries

Query	SQL
LaoForThai	SELECT ThaiLao.ThaiID, Lao.LaoID, Lao.Lao, Lao.Gloss, ThaiLao.Preferred, Lao.SortKey FROM Lao INNER JOIN ThaiLao ON Lao.LaoID = ThaiLao.LaoID;
ThaiForLao	SELECT Thai.ThaiID, ThaiLao.LaoID, Thai.Thai FROM Thai INNER JOIN ThaiLao ON Thai.ThaiID = ThaiLao.ThaiID;
LaoQuery	SELECT ThaiLao.ThaiID, Lao.LaoID, Lao.Lao, Lao.Gloss, ThaiLao.Preferred, Lao.SortKey FROM Lao INNER JOIN ThaiLao ON Lao.LaoID = ThaiLao.LaoID;
ExportThaiLao	SELECT Thai.Thai, Lao.Lao, ThaiLao.Preferred FROM Thai INNER JOIN (Lao INNER JOIN ThaiLao ON Lao.LaoID = ThaiLao.LaoID) ON Thai.ThaiID = ThaiLao.ThaiID ORDER BY Thai.SortKey, Lao.SortKey;

Text File Import/Export Specifications

Exported files are UTF-8 coded comma-separated text, with the **Thai**, **Lao** and **ThaiLao** tables exported separately, in that order, and each set of entries is preceded by a line containing the appropriate identifier, THAI, LAO or THAI-LAO. Each exported entry is a single line of text.

Exported Thai entries list only the Thai word on each line.

Exported Lao entries, list the Lao word, gloss and "split" Lao (Lao word with word breaks). Only the Lao fields is required when importing.

Exported Thai-Lao entries consist of the Thai word, the Lao word, whether the Lao entry is preferred (1) or not (0), gloss, and "split" Lao. (Only the Thai and Lao fields are required when importing Thai-Lao entries.)

Thai, Lao and Thai-Lao entries may be imported in a single file or separately as long as the above structure is observed. Header lines are optional in wordlists being imported.

When preparing a list of entries for importing, do not include commas in glosses. If no "split" Lao field is included in a Lao (or Thai-Lao) import row, it will be automatically recalculated during the import process.

ThaiLao entries are identified in the dictionary by the (unique) Thai and Lao ID numbers, not by the actual words, but are exported as Thai-Lao word pairs. If any Thai or Lao words are encountered that are not already listed, they will be imported into the appropriate lists first. Duplicated entries in any table are ignored, except that if a Lao alternate is marked as Preferred, that will update the Preferred status for that entry and clear Preferred for all other Lao alternates for the same Thai word. Glosses (and optionally split-Lao) may also be added to a Thai-Lao text file. This allows a list of Thai and Lao equivalents, with or without glosses, to be prepared in Excel and saved as a UTF-8 text file then imported into the Thai-Lao dictionary for use in translation.

A sample text file is shown below:

THAI

กดขี่ข่มเหง

กดเหลือง

กตเวทิตา

กตัญชลี

กตัญญุตา

กตัญญู

กตาธิการ

…

LAO

ກວດນ້ຳ,bottle of water,ກວດ-ນ້ຳ

ກວດເບິ່ງ,control,ກວດ-ເບິ່ງ

ກວດສອບ,detect,ກວດ-ສອບ

ກວນ,bother; disturb; annoy,ກວນ

ກວນໃຈ,bother; trouble,ກວນ-ໃຈ

…

THAI-LAO

กรัม,ກຣັມ,0

กราฟ,ກຣາຟ,0

กรัม,ກຣາມ,1

กราม,ກຣາມ,0

กวย,ກວຍ,0

…