

LDTC - Toolbox

Burgel R.M. Levy

Preliminaries:

1. Toolbox can be freely downloaded at <http://www.sil.org/computing/toolbox/downloads.htm>
2. download Toolbox to a folder in C://Program Files
3. install Toolbox

Setting up a Project:

It generally makes sense to have one project for each language you are working on. A project may contain the following things: a dictionary (and a dictionary database file), one or more texts linked to the dictionary (and a text database file), and language encodings.

1. open Toolbox
2. click on Project > New
3. when asked “To start a new project, you need to install the required files. Do you want to do that?”, click “Yes” and follow the instructions:
4. go to Start > Programs > Toolbox > Start New Project
5. follow the Wizard instructions
6. go to the Desktop and open the new Project
7. You will see an open file for texts, and two versions of the same dictionary. These files are located in C:\Toolbox.
8. Close the Texts.txt file. We will not work with it today. Also close the Dictionary.txt: 2 file.

Dictionary:

The Dictionary comes with some preset settings. For example, you already have the following fields:

\lx Lexeme → for the word in your language

\ps Part of speech → for part of speech information (noun, verb, adjective, etc.)

\ge Gloss (E) → for the gloss in English

\dt Date (last edited) → for the date at which you last edited this data.

1. enter your word after the \lx field
2. enter part of speech info
3. enter the English gloss
4. to enter a new word, click Ctrl+N

If you need other fields, you can enter them also. For example, if you want a tri-lingual dictionary, add a field for \gn (gloss national). Make sure you use the field markers from MDF. To check for field markers you can use, do the following:

1. go to Project > Database Types
2. make sure MDF 4.0 is selected
3. click on Modify
4. you will see a list of markers

To make sure that all further entries will have your new fields, go to Database > Template
click on OK
now click on Ctrl+N

Setting up Fonts:

You can use a number of different fonts in Toolbox.

1. right-click on the field for which you want to change the font
2. in the window that opens, click on Language Properties
3. click on the Options tab
4. click on Choose Font
5. choose your font type

If you want to use and input IPA directly:

1. go to Project > Language Encodings
2. click on Add...
3. go to the Options tab, give it a Language Name (e.g. IPA)
4. click on OK
5. click on Close
6. go to C:\Toolbox, open the Settings Folder
7. right-click on the file "IPA"
8. Open with Notebook
9. delete everything in it
10. find the file "vernacular" in the same folder
11. open it with Notebook
12. copy everything in it into the "IPA" file
13. close the "vernacular" file
14. go to the very bottom of the "IPA" file
15. find "\kbdKeyman IPA93 1.0 (FF)" and delete it
16. find the symbols you are going to need in the file above, and copy them (one under the other) between the KeyDefs markers:

```
\+KeyDefs  
your  
symbols  
go  
here  
\-KeyDefs
```

17. next, in front of the symbols, put the characters you will use to type these symbols. I recommend using capital letters, or letters you are sure you won't need for your language. The key letter needs to be separated from the symbol by a space. Like this:

```
\+KeyDefs  
q æ  
N ŋ  
C ɛ
```

18. save "IPA" and close it
19. go back to Toolbox
20. go to Projects > Language Encodings, find IPA, select it, and click on Modify
21. go to the Options tab, and check "Use internal keyboard"
22. click on OK and then on Close
23. right-click on the \lx field marker in the Dictionary
24. change "Language Encoding" to IPA, and click on OK
25. you should now be able to type IPA into your Lexeme field

LDTC - Advanced Workshops

Toolbox

Burgel R.M. Levy

Preliminaries:

4. Toolbox can be freely downloaded at <http://www.sil.org/computing/toolbox/downloads.htm>
5. download Toolbox to a folder in C://Program Files
6. install Toolbox

Setting up a Project:

It generally makes sense to have one project for each language you are working on. A project may contain the following things: a dictionary (and a dictionary database file), one or more texts linked to the dictionary (and a text database file), language encodings.

9. open Toolbox
10. click on Project > New
11. when asked “To start a new project, you need to install the required files. Do you want to do that?”, click “No” (this is an easy way to set up a new project, but it only works when you are an administrator on the computer you are working on)
12. in the window that opens, navigate to the folder where you want to save your Toolbox materials (for this exercise, the LDTC Toolbox folder on the Desktop)
13. type “Project1” in the File name field, make sure File Type is “Project Files (*.prj)”, and click “Save”
14. your project name should appear in the bottom bar of the Toolbox window.

Setting up a Dictionary database type:

A dictionary is a database type. Other possible database types are texts, metadata collections, etc. You have to tell Toolbox what kind of database type you are making, and what the properties of that database type are going to be. Here is how to do that:

1. go to Project > Database Types
2. in the Database Types window, click on “Add”
3. as the Name for this database type, write “dictionary” (replace “added”)
4. as the Record Marker, write “lx”
5. click OK
6. go to the Markers tab (here is where you will tell Toolbox what kind of information will be in your database type, and how to mark each unit of information)
7. select \lx
8. click on Modify
9. in the “Field Name” field, enter “Lexeme”
10. click OK
11. in addition to \lx, we are going to set up the following markers:
 - a) ps (part of speech)
 - b) ge (Gloss English)
12. to add a marker, click on Add
13. enter the marker (two letters)
14. enter the full name of the field in the “Field Name” field
15. click OK

16. when you have added all three markers, click OK
17. click Close

(Of course you can set up many more markers. To see a list of possible markers, go to Project > Database Types, and look at MDF 4.0.)

Setting up Fonts:

You can use a number of different fonts in Toolbox. We are going to set up IPA to use for the lexeme field.

1. go to Project > Language Encodings
 2. the Default language encoding is already there. It is the regular Latin font with the US keyboard.
 3. click on Add and then on Modify
 4. in the “Name” field, replace “added” with “IPA”
 5. click OK
 6. select the “Options” tab
 7. in the “Language Name” field, write “IPA”
 8. in the “Description” field, write “International Phonetic Alphabet” (or whatever makes sense to you)
 9. make sure that “US” is selected as the “Keyboard”
 10. make sure that “Use internal keyboard” is checked
 11. click “Choose Font”
 12. in the Font menu, select an IPA font (Arial Unicode MS, Charis SIL, Doulos SIL, etc.)
 13. in the Font Style menu, select “bold”
 14. in the Size menu, select 12
 15. click OK
 16. click OK again to close the Language Encoding Properties window
 17. click Close to close Language Encodings
 18. (eventually you also need to set up Case and Punctuation, as well as Variables. If you need help with that, let me know)
-
19. click on File > New
 1. make sure you are in the Toolbox folder on the Desktop
 2. write “Dictionary1” in the File name box
 3. click Save
 4. in the “Select Database Type” window, make sure that “dictionary” is selected
 5. click OK
 6. the first dictionary entry window will open
 7. right-click on the line with \lx
 8. make sure that “IPA” is selected as the “Language Encoding”
 9. click OK
 10. close Toolbox

Making a dictionary:

We will now make a small dictionary

1. open your Project1 (double click on Project1 in the Toolbox folder on the Desktop)
 2. your dictionary should open automatically (if it doesn't open it through File > Open)
 3. your cursor should be right after the \lx marker
 4. type your first word: kæt (‘cat’). Refer to your Fonts document for keyboard mappings
 5. hit Enter
 6. click the backslash key (“\”): a drop-down menu should open, containing the field markers we set up earlier
 7. select \ps (part of speech) and hit Return
 8. enter n. (for noun)
 9. hit Return, type backslash, and select \ge (gloss English), and type “cat”
-
10. So we don't have to select field markers in the future, we are going to save this set-up as a template
 11. click on Database > Template. When you see the message “The record template will be set to the fields in the current record”, click OK.
 12. let's add some more words:
 13. click on Database > Insert Record (or Ctrl + N)
 14. in the window that opens, enter the next word: drɪŋk (‘drink’) and click OK

15. Toolbox will create a new dictionary entry, with the field markers (\ps and \ge) already there
 16. enter v. for part of speech, and “drink” for gloss English
 17. insert another dictionary entry for milk, n., “milk”
 18. insert another dictionary entry -s, part of speech n.s. (nominal suffix), gloss English “plural”
 19. save your work frequently by clicking on Ctrl+S
- This is our complete dictionary for now.

Adding Another Language:

If you need another language, e.g. Chinese, Japanese, or Spanish, you need to set it up before you can make the dictionary. You can use any language that is set up on your computer.

1. go to Project > Language Encodings
2. click on Add
3. go to Options
4. change the Language Name
5. change the keyboard (all keyboards which are installed on your computer should appear in the drop-down menu)
6. click on Choose Fonts and select the proper font. For example, if you are setting up Chinese and are working with Microsoft Word on your computer, you should select “PMingLiU”.
7. click on OK, OK, and Close
8. right-click on the field marker for the field in which you want to use this language (e.g. \gn for Gloss National)
9. change the language in the Language Encoding menu
10. click on OK
11. you should now be able to type your language in this field (but only in this field) in every entry

Interlinearization

Setting up a text:

Next we are going to set up a text, so that we can try out the interlinearization function of Toolbox. In order to do that, we need to set up a database type “text”, in addition to our database type “dictionary”.

1. go to Project > Database Types
2. in the Database Types window, click on “Add”
3. as the Name for this database type, write “text”
4. as the Record Marker, write “id”
5. click OK
6. go to the Markers tab (here is where you will tell Toolbox what kind of information will be in your database type, and how to mark each unit of information)
7. select \id
8. click on Modify
9. in the “Field Name” field, enter “texts”
10. click OK
11. we are going to set up the following other markers:
 - a) ref (Reference Number: unique reference for each sentence)
 - b) txt (text: here is where the actual text goes), Language Encoding = IPA
 - c) mb (morpheme breaks: this is the line for glosses), Language Encoding = IPA
 - d) ps (part of speech)
 - e) ge (English gloss for each morpheme)
 - f) ft (free translation)
12. to add a marker, click on Add
13. enter the marker (two letters)
14. enter the full name of the field in the “Field Name” field
15. click OK
16. after you have entered all field markers, click OK (to close the Database Type Properties: text window)
17. click Close (to close the Database Types window)

Now are going enter some actual text:

18. click File > New
19. write a file name in the File Name box, e.g. “Text1”
20. click Save
21. in the Select Database Type window, select “text” from the drop-down menu and click OK
22. the text document will open, with the cursor next to \id
23. write “Sentences”
24. click Enter click \
25. select \ref
26. enter a reference number (“sentence001”)
27. click Enter
28. click \
29. select \txt from the drop-down menu
30. write: kæts ɔlweiz driŋk mi:l k (since you selected IPA as the language encoding, you can use the same keyboard shortcuts as in the dictionary. Refer to the Fonts document.)
31. click Ctrl+S to save your text

Setting up Interlinearization:

In order to be able to interlinearize (gloss) your text, you have to link your text with you dictionary. Basically, you have to tell Toolbox where to look for translations of morphemes when it processes your text, and how to map morphemes to glosses and parts of speech.

1. click on Project > Database Types and select “text”
2. click on Modify
3. select the Interlinear tab
4. click on Add...
5. select Parse and click OK
6. in the From Marker field, select “txt Text”
7. in the To Marker field, select “mb Morpheme Break”
8. for “If parse fails”, add a check mark for “Insert into Lexicon”
9. click the Lexicon button
10. select “Dictionary1” in the Available Databases field, and click Insert. Dictionary1 should move to the Databases to Search field.
11. in the Available Markers field select “lx” and click Insert. “lx” should move to the Markers to Find field.
12. in the Marker to Output field, select “lx Lexeme”
13. click OK
14. click OK to close the Parse window
15. click on Add, select “Lookup” and click OK
16. choose “mb” as the From Marker, and “ge” as the To Marker
17. click on the Lexicon button
18. insert “Dictionary1” as the Database to Search
19. choose “lx” as the Marker to Find and “ge” the Marker to Output
20. click OK
21. click OK to close the Lookup window
22. click Add, select Lookup, and click OK
23. select “mb” as the From Marker, and “ps” as the To Marker
24. click on the Lexicon button
25. select “dictionary1” as the Database to Search
26. select “lx” as the Marker to Find, and “ps” as the Marker to Output
27. click OK
28. click OK to close the Lookup window

We also have to set up a Jump Path to the Dictionary1, for inserting new words into the dictionary when they appear in the text.

29. select the Jump Path tab
30. click Add...
31. write “JP1” as Jump Path name
32. select txt as the “Fields to Jump from”
33. insert Dictionary1 as the Jump Path Destination
34. click OK
35. click OK again to close the Database Type Properties: text window

36. click Close to close the Database Types window

Interlinearize a text:

1. go back to your text document in Toolbox
2. click your cursor into the \txt line
3. click the interlinearize button (or Alt+I)
4. the text will start to be interlinearized, but will stop at “always”, because this word is not in the lexicon. Your dictionary will open (if it was closed), and you will see a message window.
5. when you see the Lookup Failure window (“Insert in lexicon?”), click Yes.
6. enter ps and ge info into the lexicon
7. go back to your text, place the cursor in the beginning of the \txt line, and click the interlinearize button again
8. the rest of the sentence will be done
9. click Enter and “\” and select ft
10. enter your free translation

11. enter the next sentence of your text in the same document:
12. click Enter and “\”, select \ref, write the reference number
13. click Enter and “\”, select \txt, write your sentence
14. interlinearize