# *SIL FieldWorks Language Explorer (FLEx):* Digitization of Field Data

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# Tool (software) for managing data

After data collection, there comes an **immediate requirement** of a good software to digitally record, store and manage the data collected during the field.

FLEx is one such software which is a **suitable** for the required purpose.

# FLEx: What is it?

FieldWorks Language Explorer helps to manage cultural and linguistic data from initial stage of collection of data through submission for publication.

It is a **data management** program that helps in **recording, organizing and analysis of linguistic data.**

FLEx is a specialized software with **built-in capability** for the kind of data linguists need to store and manage.

Various components of FLEx interact together to help in managing data.

# Accessing the software

FLEx is developed by an organisation named SIL International. This software can be freely downloadable from the link given below:

Available for **free download** from http://fieldworks.sil.org/download/

# What does FLEx does?

Creates **dictionaries** (including ***multilingual support*** (for example, English, Hindi, Tamil) and multiple ***scripts*** (for example, Roman, Devanagari, Bengali etc.))

For example: Great Andamanese dictionary is a tri-lingual (Great Andamanese, English, Hindi) and tri-scriptal (IPA, roman, devanagari) dictionary with pictorial illustrations and audio files (in digital version).

# What does FLEx does?

**Collects words** based on ***semantic domains*** (such as Animal, Body parts, Food)

# What does FLEx does?

Stores **sentences** and helps in their morphological **analysis**.

Shows **concordance (**details of occurrence of **words, sentences in the database).**

Create a grammar sketch

Record anthropological field notes

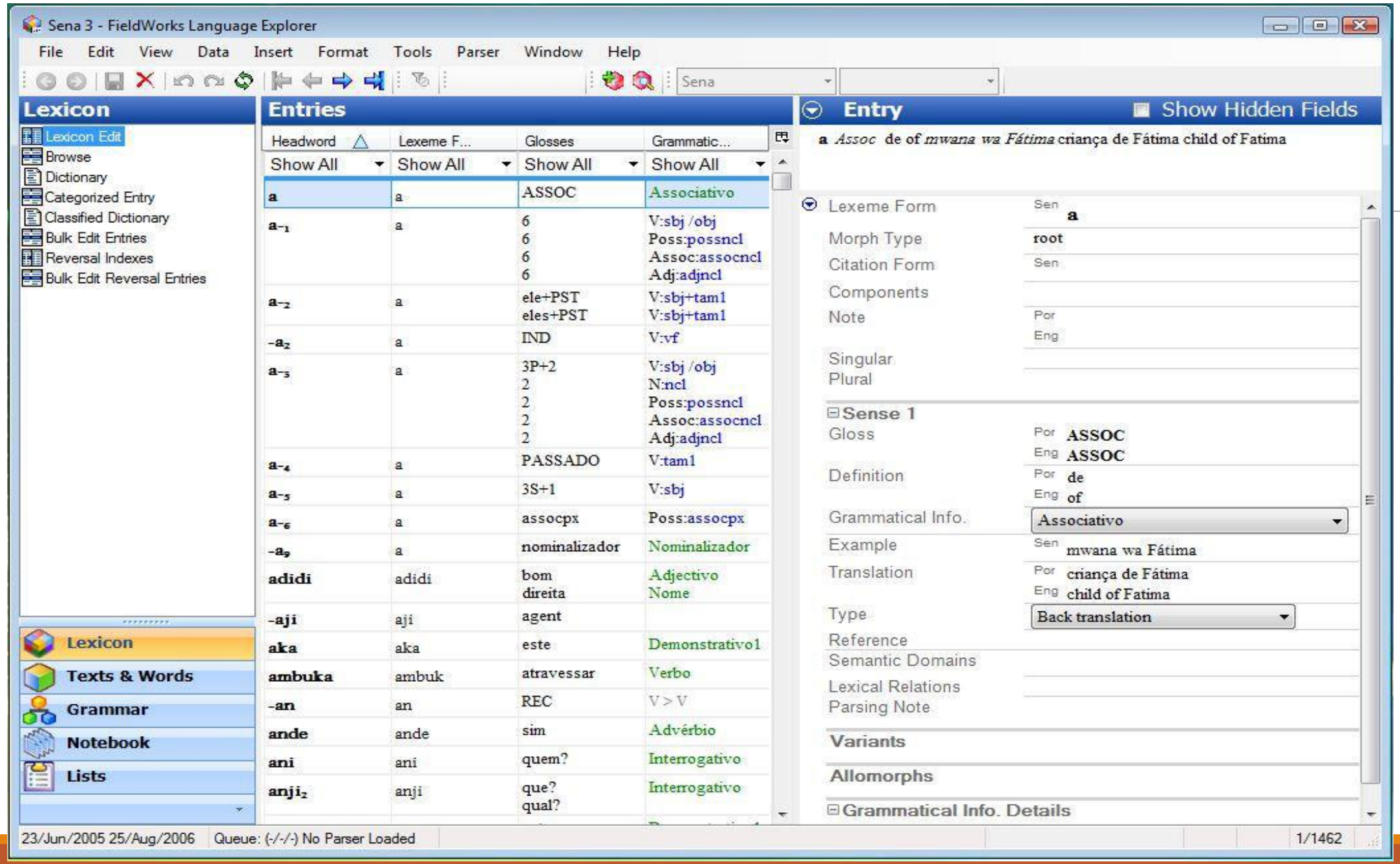
And much More…..

# How does it looks!

Screens are typically divided into **two or more panes**.

The far **left** pane is the **Navigation pane** (***modules and sub-areas of modules***)

**Other panes** that displayed ***depend on the choice selected in the Navigation pane***.


Sena 3 - FieldWorks Language Explorer
File Edit View Data Insert Format Tools Parser Window Help
Sena
Lexicon
Lexicon Edit
Browse
Dictionary
Categorized Entry
Classified Dictionary
Bulk Edit Entries
Reversal Indexes
Bulk Edit Reversal Entries
Lexicon
Texts & Words
Grammar
Notebook
Lists
Entries
Headword
Lexeme F...
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Show All
a a ASSOC Associativo
a–1 a 6 V:sbj /obj
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6 Assoc:assocncl
6 Adj:adjncl
a–2 a ele+PST V:sbj+tam1
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-a2 a IND V:vf
a–3 a 3P+2 V:sbj /obj
2 N:ncl
2 Poss:possncl
2 Assoc:assocncl
2 Adj:adjncl
a–4 a PASSADO V:tam1
a–5 a 3S+1 V:sbj
a–6 a assocpx Poss:assocpx
-a9 a nominalizador Nominalizador
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direita Nome
-aji aji agent
aka aka este Demonstrativo1
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-an an REC V > V
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ani ani quem? Interrogativo
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Entry
Show Hidden Fields
a Assoc de of mwana wa Fátima criança de Fátima child of Fatima
Lexeme Form Sen a
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Citation Form Sen
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Note Por
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Eng ASSOC
Definition Por de
Eng of
Grammatical Info. Associativo
Example Sen mwana wa Fátima
Translation Por criança de Fátima
Eng child of Fatima
Type Back translation
Reference
Semantic Domains
Lexical Relations
Parsing Note
Variants
Allomorphs
Grammatical Info. Details
23/Jun/2005 25/Aug/2006
Queue: (-/-/-) No Parser Loaded
1/1462

# 5 Modules (areas) of FLEx:

- Lexicon: dictionary
- Texts & Words: interlinear analysis
- Grammar: grammar sketch
- Notebook: store cultural and other research notes
- Lists: semantically categorized word lists

# Integration among different areas

The Lexicon, Texts, and Grammar areas have the **same database** on which they work.

**Lexicon area**: work on Lexicon.

In the **Texts & Words area**, sentences are glossed , new lexical entries are created directly from Text.

In the **Grammar area**, helps in getting grammar of the language.

# Opening an existing project

1. *Choose **‘Open a project’***
2. *Select the desired project from ‘**Choose a project**’*

# Lexicon Module

The Lexicon area is where we can ***create, edit, and manage dictionary***.

***Multilingual*** *support* - Multiple languages can be included in the dictionary to make multilingual dictionaries e.g. English, Hindi, Tamil

Multiple ***orthographies –*** Different scripts can be used e.g. Roman, Devanagari, IPA, Perso-Arabic

# Creating a new project

1. Choose **'Create a new project'**
2. **New FieldWorks Project**
   - ***Name the project –*** It is usually name of the language e.g. Toto
     - Choose **Ethnologue** code of the language
   - ***Vernacular language writing system –*** choose the script used for the language.
   - ***Analysis language writing system*** – choose a analysis language
3. **Click OK**
4. **Follow the instructions in the following dialogue box till the installation process gets completed.**

# Doing Lexicon

**Entering lexical items**

***Insert – New Entry  (ctrl + e)***

- type word in **Lexeme Form**
- type of morpheme in **Morpheme Type**
- give meaning in **Gloss**
- Select grammatical category (POS) from **Category** dropdown menu
- Click on **create**

# Lexicon: Basic Fields

**Lexeme, Gloss, POS**, ***Semantic Domain, Lexical relation, variant***

***Example***

***Culturally relevant information,***

***Source,***

***cross reference***

***Multimedia information***

***others***

# Source

A possible format of the source could be as follows:

Language-helper/Investigator/Date/Place/Original-Audio&Video-Recording-Detail/Notebook information

# Insert Sound

**1. Insert ---- sound or movie**

**2. Browse** to the sound file.

**3. Select** the audio file.

**Note:** Audio files should preferably in **WAV.**

preferrably < 1MB

# Picture insertion

Go to **sense area --- Insert --- Picture --- Browse** to the Picture folder**---- select** picture ----- **click** OK**.**

**Note:** Image files should preferably in **JPG/JPEG.**

preferably < 1MB

# Sub-areas of Lexicon

**Lexicon Edit:** create and edit particular lexemes.

**Browse:** In this view, dictionary entries are arranged in rows. Each row has consist of one dictionary entry.

**Dictionary:** presents your lexicon formatted as an alphabetized dictionary.

# Collecting words through Semantic domains

**Semantic domain** are used to group words on the basis of their meaning.

**Collect Words:** allows to collect words based on semantic domains. Each domain consists of a short description and a series of elicitation questions with example words in English.

**Classified Dictionary:** Displays the lexicon as a semantically classified dictionary using the list of semantic domains in the **Semantic Domain** field.

# Working on Lexicon

Sorting

Filtering

Bulk Edit

# Texts & Words

The Texts & Words module is designed to help in ***morphemic analysis.***

# Sub-areas of Texts & Words

The several **sub-areas/ views** in the Text & Words ***display data in various ways*** and help to accomplish specific tasks.

**Interlinear Texts:** morphological analysis of text.

**Concordance:** gives a *concordance of wordforms (words, morphemes)* from the text corpus.

**Complex Concordance:** concordance on basis of complex criteria.

**Word List Concordance**

**Word Analysis**

**Statistics:** Statistics of the words and sentences.

# Text and Words ---Interlinear Texts

***Info***:

Metadata regarding text

Title,  Abbreviation, Source, date etc

**Baseline**

Sentences are entered here. Each sentence is typed in a separate line.

# Gloss and Analyze

The gloss and analyze tabs are where the **interlinearisation** is carried out.

You can **break up a word into morphemes**, and associate each of those with a lexical entry (CREATE A NEW LEXICAL ENTRY).

The interlinear tool will suggest an analysis you have previously made for a word when you encounter it again.

# Print view

Print view is a read-only view of the data. This independent view is useful for configuring which lines are shown merely for the purposes of exporting.

# Texts and Words

**Concordance**

**Complex Concordance**

**Word List Concordance**

**Word Analysis**

**Statistics**

# Back up

***To save the loss of data***, FLEx projects should  be backed up regularly.

File --  Project Management – Back up this project ---  select the check boxes and browse to select a location to save the project- project is saved with a date and time stamp

# Collaboration among multiple partners

Send/Receive Project allows users to collaborate with different colleagues who are working on the same project.

# Interaction with other Language documentation tools

FLEx can interact with various language documentation tools such as Lexique Pro, ELAN, WeSay etc so that these softwares can work together to achieve various language documentation goals.

- Dictionary – digital and print
- Audio and video annotation
- Interlinear glosses

# Assignment

Assignment 1:

Lexicon:

- Minimum 20 words with lexeme, POS, gloss (meaning), semantic domain, source
- Provide pictures for 5 words

# Assignment

Assignment 2:

Texts and Words:

- Minimum 10 sentences in Baseline, Gloss and Analyze tabs

# *Thank you*