

To demonstrate the capabilities of the Phonology Assistant computer application, do the following:

# Setup

Create a PA folder under My Documents.

Copy Sekpele 1 folder to the PA folder.

## Create a new project from SFM data.

1. On the File menu, and click New Project.
  - The New Project Settings dialog box appears. In the Project Name and Language boxes, enter Sekpele 1. Then click Add. Select Non FieldWorks data source.
2. The Choose data Source File(s) dialog box appears. Navigate to Sekpele 1 folder and select Sekpele 1.db and then click Open.
3. The New Project Settings dialog box reappears. Click Properties.
4. The Standard Format Data Source Properties dialog box appears.
  - In the Parsing Options area, set Parse only the phonetic.
  - In the Field Mappings area, in the Map this marker column, set
    - Record marker to \ref
    - Audio File to \sf
    - Gloss to \ge
    - Part of Speech to \ps
    - Phonetic to \ph
    - Reference to \ref
  - Then click OK.
5. The New Project Settings dialog box reappears. Click OK. The Save Phonology Assistant Project File dialog box appears. Click Save. Then click Yes.

Create a new project from a FieldWorks database.

1. On the File menu, and click New Project.
  - The New Project Settings dialog box appears. In the Project Name and Language boxes, enter Sena 3. Then click Add. Select FieldWorks data source.
2. The FieldWorks Projects dialog box appears. In the Choose a project box, select Sena 3, and then click OK.
3. The New Project Settings dialog box reappears. Click Properties.
4. The FieldWorks Data Source Properties dialog box appears.
  - In the Writing Systems area, in the Writing System column, set
    - Phonetic to Sena
    - Phonemic to Sena
    - Gloss to English
    - Orthographic to Sena
    - Part of Speech to English
  - Then click OK.
5. The New Project Settings dialog box reappears. Click OK. The Save Phonology Assistant Project File dialog box appears. Navigate to the appropriate folder and click Save. Then click Yes.
6. The Undefined Phonetic Characters dialog box appears. Reset Show this dialog each time data sources are read and click OK.

## Show more columns

1. On the Tools menu, click Options, and then click the Word Lists tab.
2. The Options dialog box appears, with the Word Lists tab selected.
  - In the Column Display Options area, select Secondary Gloss and Orthographic.
  - Click OK.
  - The Data Corpus view will be updated to include these two columns.

## Datas Corpus View

1. On the File menu, click Sekpele 1 to open the Sekpele 1 project.

The Data Corpus view is displayed.

The data corpus view can be sorted by any of the columns shown in the list. Click on any column heading will alternate its sort order between ascending and descending. Phonology Assistant supports nested sorting with the primary sort field being the last clicked column heading. For example, clicking on the Gloss column heading and then clicking on the Part of Speech column, will primarily sort by Part of Speech and secondarily by Gloss.

Sorting by the Phonetic column is unique because sorting can be done by manner or place of articulation, or by Unicode values by right clicking on the column header.

## Consonant and Vowel Charts

1. Click Consonant Chart tab.
    - The consonant chart is displayed. The dental 'd' is in the wrong column because when a 'd' is modified by the dental diacritic, it is no longer considered to be alveolar. Therefore, it needs to be moved to the dental column.
  2. Click, hold and drag the dental 'd' to the dental column, adjacent to the t.
  3. To remove all empty rows and columns, on the toolbar, click the Remove button and then select All Empty Rows and Columns.
  4. To restore the chart to its default layout, on the toolbar, click the View button and then select Restore Default Layout.
  5. Hovering over a phone in the chart will display information about the phone's frequency.
1. Click Vowel Chart tab.

The vowel chart is displayed. Repeat steps 3 through 5 with the vowel chart.

## Search View

1. Click Search tab.
  - The search view is displayed
2. In the Current Search Pattern box, enter **b/\*\_\*** and then on the toolbar, click Show Results button.
  - All the words with a b in them are displayed.
3. In the Current Search Pattern box, enter **Bilabial/#\_\*** and then on the toolbar, click Show Results button.
  - All the words starting with a bilabial consonant are displayed.
4. In the Current Search Pattern box, enter **Back/\*\_#** and then on the toolbar, click Show Results button.
  - All the words ending with a front vowel are displayed.
5. Click New Tab. Then in the Current Search Pattern box, enter **Back/#\_\*** and then on the toolbar, click Show Results button.
  - All the words ending with a front vowel are displayed.
6. Right click on the result tab **Back/#\_\*** and select Move to New Side-by-Side Tab Group.

- Both results are displayed side by side.
7. Right click on the result tab [Back/#\\_\\*](#) and select Close All Tab Groups.

## Advanced Searching

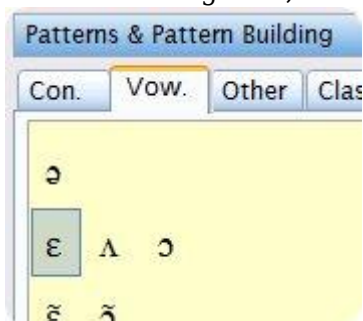
1. Click Consonant Chart tab.
  - Hold down the Ctrl key while clicking the two phones p and b. Then in the toolbar, click the Search button.
  - This displays results of the phones p and b in separate tab groups.
2. Right click in the blank area, right of the last results tab and select Close Tab Group.
  - In Current Search Pattern box, enter {p,b}/\*\_\* and click Show Results button.
  - This displays a single results word list containing all the occurrences of the phones p or b.
3. Click Clear.
4. In the Patterns & Pattern Building area, click Art. Features tab and then select Alveolar.
  - In the Current Search Pattern box, enter [Alveolar](#)/\*\_\* and then on the toolbar, click Show Results button.
  - Scroll down the list and notice the record 0139 contains a dental 'd' which doesn't make sense since alveolar and dental are mutually exclusive features.

diade	goûter	V	0139
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1. To correct this, click the Phone Inventory tab.
  - In the Phone List box, select the dental d.
  - Click the Articulatory Features box and then deselect Alveolar.



- Click Apply Changes.
  - Click Search tab and notice the record 0139 is no longer in the search results.
  - Click Clear.
2. In the Patterns & Pattern Building area, click Classes tab and hover over the class ExArtFtrsClass\_VclssPlosives to see that the class contains phones that are plosive and voiceless.
    - Double-click ExArtFtrsClass\_VclssPlosives and in the Current Search Pattern, enter /\*\_\* and then in the tool bar click Show Resultsbutton.
    - In the toolbar, click Clear button.
  3. In the Current Search Pattern box enter the following pattern: {e,}/\*\_\*.
    - Place the insertion point between the comma and the closing brace. In the Patterns & Pattern Building area, click the Vow. tab and select the epsilon character.



The final pattern looks like: {e,ε}/\*\_\*. Click Show Results button.

- To ensure the primary sort field is Phonetic, in the toolbar click Group by Primary Sort Field button, and then click Collapse All Groups button. Notice there are now two groups, one for

each of the vowels in the search pattern.

4. To find minimal pairs, in the Current Search Pattern box, enter the following pattern: **C/\*\_\***, and then in the toolbar click Show Results button.
  - In the toolbar, click on the Minimal Pairs Options button. This displays a list of minimal pairs.
  - In the toolbar, click Clear button.
5. Click XY Charts tab. In the Charts & Chart Building area, click the Con. Tab.
  - For your three rows, Select p. Press Down Arrow key and select b. Press Down Arrow key and select m.
  - For your three columns, enter the following: **#\_\***, **+\_+** and **\*\_#**.
  - In the toolbar, click Fill Chart. The chart is displayed.
  - To see the examples of one of the cells of the chart, double-click the cell. The examples are displayed. To close the the examples display, right click on the display tab and select Close Tab.
  - In the toolbar, click Clear button.