# WordSurv 7 – Quick Reference Guide

Updated on 7/8/2011 5:22:00 PM

### **Word List Management tab**

### New Gloss Dictionary

• Click **New Dictionary** on **File** menu. Type name. Click **OK**.

### Add Gloss Dictionary entry

• Select the gloss dictionary. Click a cell in an empty row, and type data. Tab to the next cell. Alternatively, copy and paste data from an Excel spreadsheet directly in the grid.

### Add Survey

- 1. Click New Survey on Survey menu. Type name. Click OK.
- 2. Select dictionary. Click OK.
- 3. Type names of new varieties. Click **OK**.
- 4. Enter metadata in center pane.

### Add Variety

- 1. Select survey in **Survey** box.
- 2. Click New Variety on Variety menu.
- 3. Enter metadata in center pane.

### **Enter Transcription**

• Click cell in **Transcription** column twice (*not* double click). Type IPA phonetic transcription. Press **Enter** key.

# Alphabetize gloss dictionary

1. On **Dictionary** menu, click **New Dictionary Sort**. Type a name (e.g. "Alphabetic sort"). Click **OK**.

**Tip:** This is an important step! If you don't make a new sort order, your previous sort order will not be saved.

- 2. Use Ctrl+A to select all gloss dictionary entries.
- 3. On the **Dictionary** menu, click **Make Current Sort Selection Alphabetic**.
- 4. Save sort (Ctrl+S).

There are three **Gloss Sort** boxes you can use to choose sorts.

### Comparisons tab

### New Comparison

- Click New Comparison on Comparison menu. Type name. Click OK.
- 2. Select survey (with varieties) for comparison, click **OK**.

### **Enter Aligned Rendering**

- 1. Select comparison.
- 2. Left pane: Select gloss.
- 3. Right pane: Click cell in **Aligned Rendering** column twice (*not* double click) that needs alignment characters (/ or .). Type alignment character to vertically align corresponding phones.
- 4. Repeat for each variety, as required. And continue to other glosses

☑ **Tip:** Use up and down arrows to edit Alignment for several glosses at once. Use **Control-E** to exclude all and **Control-Enter** to advance to next gloss, **Control-G** to find ungrouped glosses. (See Comparison menu)

# **Enter Grouping Character**

- 1. Left pane: Select gloss.
- 2. Right pane: Click cell in **Grouping** column twice (*not* double click). Type an 'a'. Repeat for each similar transcription.
- 3. Click a variety without an 'a'. Type a 'b'. Repeat for each apparent cognate.
- 4. Repeat, using 'c', 'd', and so on, until all varieties have a grouping character.
  - Separate multiple groupings for a single gloss with a space. Separate grouping characters for synonyms with commas.

# **Comparison Analysis tab**

## View Comparison Analysis results

- 1. Select comparison.
- 2. Select **Tally** for *number of apparent cognates*; **Total** *for total number of words in each varity* (included); **Percent** for **Tally** / **Total**.

# **Degrees of Difference tab**

### Change Degree of Difference values

- 1. Select Comparison.
- 2. Examine value at phone pair intersection.
- 3. Click cell two times (not double-click). Type number that is Degree of Difference for phone pairs.
- 4. Repeat for each phone pair.

# **Phonostatistical Analysis tab**

### View Phonostatistical Analysis results

- 1. Select comparison.
- 2. Select Number of Correspondences for number of individual phones that appear as pairs (set in Aligned Rendering); DD Summation for total sum of all Degrees of Difference values for all corresponding phones of apparent cognates (set in Grouping); Correspondences Totals for total number of corresponding phones in all the apparent cognates that are in the two varieties which intersect in the grid; Ratio for DD Summation / Correspondences Totals.

# Comparativist's Assistant (COMPASS) tab

# View COMPASS Results

- 1. Select a comparison, and then two varieties.
- 2. Select **Counts** for number of glosses with phone correspondence; (see back for **Strengths**)
- 3. In **Phone Correspondences** pane, click a cell with a number to display words with phone pair in **Words** pane. Click a word, then the Comparison tab, to see the word's comparison.

# **Move Rows**

### Move row into desired order

- Right-click a row you want to move.
   Right-click and choose Cut Rows or Control-Shift-X
- 2. Click the row above which you want to move the cut row. Right-click that row, and click **Paste Rows Control-Shift-V**

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# **Using WordSurv**

#### Overview

- 1. Set names and fonts for language, and for the transcription font (assumed IPA keyboard available).
- 2. Add gloss dictionary; enter gloss entries.
- 3. Add survey, add varieties, and enter phonetic transcriptions (IPA).
- 4. Add comparison of a survey. Enter grouping characters. Enter aligned renderings to use PhonoStat or COMPASS.
- 5. Review comparison analysis results.
- 6. Enter degree of difference values.
- 7. Review phonostatistical analysis results.
- 8. Review COMPASS results: For words with low strength values, review aligned renderings and groupings.

### Open a WordSurv 7.0 database:

- 1. Click Open Database on File menu.
- 2. Select <name>.wsv file. Click Open.

# Setup languages and fonts

- 1. Click **Set Primary Language** on **Options** menu. Type a language name. Click **OK**.
- Click Set Primary Font on Options menu. Make selections. Click OK.
- 3. Repeat for secondary language and secondary font.
- 4. Click **Transcription font** (IPA) on **Options** menu. Make selections. Click **OK**.

# **About Strength (COMPASS tab)**

- With Strengths selected, the Phone Correspondences pane shows the *strength index* values for phone correspondences.
   The *strength index values* are computed using the number of times each correspondence occurs and list thresholds values by way of a formula (described in Help).
  - From +1.00 to -1.00: It represents the likelihood that the correspondence is the result of a regular sound change. A value of +1.00 represents that maximum confidence that it *is regular*; a value of -1.00 represents the maximum confidence that it *is not regular*. Values between the two extremes represent intermediate degrees of likelihood.

The Words pane displays a Strength column which contains the

average correspondence strength for the proposed cognates. This is also known as *cognate strengths*.

The average correspondence strength is computed by adding the strength index for each correspondence in a given word pair, and then dividing by the number of correspondences in that pair.

The average correspondence strength values range from +1.00 to -1.00. When the average strength for a word pair is *positive and high*, we can continue to assume they are cognate with justified confidence. When the average strength is *negative*, there is not enough evidence to justify the claim that the words are cognate: the varieties should be updated to put words in different cognate sets. Proposed cognates with low positive strength are borderline cases; further recurrence in more data or the discovery of a regular conditioning environment are needed to determine if the

### **Import/Export Data**

# Import data

- On the File menu, point to Import, and then click the version of WordSurv.
- 2. For version 2.5 and 6 data, choose the \*.db file and an encoding converter. Click **OK**. For version 7 data, choose the \*.wsv file. Click **Open**.
- ☑ **Tip:** Use normal copy (**Ctrl+C**) and paste (**Ctrl+V**) to copy data from Microsoft Excel and paste it into the appropriate grid, such as to populate a gloss dictionary.

### Export data

- 1. On the **File** menu, point to **Export**, point to the data you want to export, and then click the output format (Excel or Comma Separated Values (CSV)).
- 2. Enter a name for the export file. Click Save.

# **Phonetic Degree of Difference**

Consider a hypothetical language with this consonant inventory:

correspondences involved are truly regular or not.



The lines in the diagram show the minimal number of steps to change between the sounds in the system. The degrees of difference (DD) between two phones is defined as the least number of steps between those two phones on a chart like the example above.

Using this chart, one would calculate the following DD values for these pairs: d/d - 0; d/t - 1; d/s - 2; b/s = 3.

Initially, the **Degrees of Difference** grid identical prione pairs a **v** (zero), and all other pairs a **1** (one). You need to review and change, if necessary, the value for each phone pair.

☑ Tip: Set Ignored Characters (Degrees of Difference menu) lets you specify any characters you want to ignore for the grid and also from subsequent phonostatistical analysis.

### Adjusting List Threshold Values

WordSurv 7 can adjust List Threshold Values based on size of database (**COMPASS** menu, **click Adjust Thresholds for List Size**); or you can manually adjust each value.

#### **Colors in Grids**

Some grids display data with background colors from shades of green (good; higher strength values) to shades of red (suspect; lower strength values).

### **Synonyms**

Type synonyms in same cell, separated by commas. Type grouping characters in same cell, separated by commas.