Ling 113   Language and Diversity in the U.S.
            Second Survey of the Massachusetts dialect

How do you use Excel to look through the results of our second survey?

We want to look at answers people gave to some question, depending on their answer to another question. That is we want to see whether this latter question in some way predicts their answer to the first (*Predict* in a weak sense, we only look at the likelihood that across a number of people a certain correlation of this sort holds. We can't make actual predictions about the behavior of a particular individual.)

Lets call the latter question "Question 1", because that is the one we will look at first, and then depending on that examine the outcome of the initial question, lets call it "Question 2". What we're interested in is a correlation between the answers to these two questions.

Here are two ways in which you can get started:

1.   Look at the data right in the main table to get an impression of the data, and see possibly interesting pattern.

For this, is it useful to sort the data and to hide (and unhide) columns, so that the two questions you want to compare are right next to one another.

To *sort* the data, select either one or all cells (otherwise you will sort *only* the selected cells) and then select Data > Sort. Put Question 1 into the "Sory by" field and Question 2 into the "Then by" field. Make sure to check "My list has a header row".

To *hide* columns, select one cell in each column you want to hide, then select Format > Column > Hide. If your table contains hidden columns, the headers of the surrounding columns will be displayed in blue.

To *unhide* columns, select on cell in each of the columns that surround the hidden columns, then select Format > Column > Unhide.

2.   To get a better idea about the trends in the data, it is useful to count the responses to Question 2 categorized by responses to Question 1.

Excel can do those counts for you, you have to use a function called *Pivot Table Report*.

Select either only one, or all of the cells in the worksheet. Then select Tools > Pivot Table Report and click "Finish" (this is slightly different from what we did in class).

If Excel asks you whether you want to base the new Pivot Table on old ones, say "No".

Now Excel displays an empty Pivot Table. You can simply drag and drop the questions you're interested in.

Drag and drop Question 1 into the area marked "Drop Row Fields Here". (To see the full title of the question, just hover over it with your mouse pointer for a bit.)

Drag and drop Question 2 into the area marked "Drop Column Fields Here".

Now we need to tell Excel what we want to look at depending on those two questions. To do that, just drag and drop Question 2 again, but this time into the area marked "Drop Data Items Here".

Remember you can simply undo things if you dropped something in the wrong place, or chose the wrong question (Edit > Undo).

To change the layout of your table, select the "PivotTable Wizard" by clicking the first icon on the left in the little pop up window that hovering over your table. (Looks like a table with yellow first row and left column, and a two-way arrow.) Then select "Layout". This brings you to the interface we've used in class, where you can change the fields that you've selected for your table.

To delete a pivot table, simply delete the worksheet it is on. (By default the go onto a new worksheet when they're created.) To do so, choose Edit > Delete Sheet.

Good luck, and have fun.
Let us know what you find!