This is the second supplemental document for the master’s paper entitled “Developing a Visualization Tool for Archived Social Science Research Data” by Brian Leaf. It is associated with Appendix H.
Major Revisions

While the functionality presented in the original diagram has been maintained, only new features are being shown in this demo. Aside from major cosmetic changes, several new features have been added. An explanation of the new interface will be given on the next page.

Interacting

While this is a non-functional demo, there are three main modes of interacting with this tool:

Mouseover - Move cursor over elements to see more information.

Click - Select a path or variable for further manipulation.

Alt-Click - Select multiple paths or variables for manipulation.
**Diagram Sections**

This tool is a web application that pops up next to the normal Data Viewer application. Variables selected here can be manipulated from both places. The letters below correspond with the sections on the wireframe to the left.

**A. Scenario Menu**
User can select the most common scenarios or key themes by which to sort the variables. Users can also customize their queries (i.e., Cross-Tabulation).

**B. Status Window**
- Provides user with information regarding selections when variables/paths are clicked on or mouse-over.

**C. Diagram Key**
Key will pop up on screen.

**D. Comments**
Provides contextual information about survey and variables within the survey. Sometimes provides explanatory information.

**E. Basic Summary**
Summarizes variable data and path frequencies.

**F. Question Box**
Questions appear here. If paths are selected, answers that those paths are contingent upon will appear.

**G. Toggle Heat Map**
Overlays colors that represent frequency of travel.
This is the base state for the tool. Notice that the comments box in the lower right hand corner has contextual information regarding this section of the survey.

Since this is a pop-out window, there is a "Close Window" link in the top right hand corner.
The double lines around SP3 indicates that the user has moused-over the entity. Information appears in the status window (regarding what the shape means), question box, and summary area. However, SP3 has not yet been selected.
Two events have occurred:

First, when a variable has been selected, the space in between the double lines are filled.

Second, as seen in the focus group, we can select an answer from the question box and see its path bordered and blackened throughout the survey.
By hitting the "Esc" button on the keyboard, the tool will return to its base state.

Notice the "Toggle Heat Map" box in the lower left corner.
Toggling the heat map highlights all the paths with various colors. The status window shows us how often each path is traversed.

The current heat map is not reflective of any actual data. It is merely a demonstration of how the heat map might look.
Next, we will press "Esc" again and bring the mouse over one of the paths. Notice how the cursor turns into a hand on mouse-over. This indicates that an event will occur upon selecting the link.
By clicking on that path, it will light up and give us a variety of information. In the status window, we see the question itself along with information about the path. Alternative (A) is an arbitrary name given to the selected path. The question window tells us which answers are necessary in order to take that path. The summary tables states the percentage of respondents who took that path.

Notice how SP2 is also bolded because it determines the chosen path.
Now, what if we want to try to select another path in conjunction with SP4/Alternative(A)?

We will select a path originating with SP2.
There is an error message in the status window that says it's not possible to select that path. Additional feedback is given from the path itself, which is now highlighted red.

This indicates that the logic of the survey does not allow the user to take both paths when taking the survey.

Although the user of this tool does not necessarily know the question, it is clear from the diagram that SP4 would not be possible if SP3 slipped directly to SP5.
We will select another path this time. Notice the hand on the path that travels from SP7 to SP8(1-5).
If a path is possible, the line will be highlighted green upon mouse-over.

Additional information about the path is then given in the status window, basic summary, and comments.
When selected, we see that it turns yellow like the previous path. We are now free to add paths if desired.
Next, we will reset the tool by again pressing "Esc" and then click on the drop-down menu at the top marked "Select scenario..."

This is the last feature to be demonstrated.
These options are representative of what might be available. The brackets indicate either a placeholder value, or one that can be defined by the user.

These options may contain a combination of the most popular scenarios and types of analysis.
We will now select an option that can be visually seen in this diagram.

Other options that do not use any type of visualization would output in text on a separate browser window, or on an existing Dataviz tree that is already opened.
We see the diagram now reflects the selected scenario, and we are given information about that scenario in the status window and summary box.
This is the end of the demo.