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Potential Improvements to Many Eyes Visualizations

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I recently had the pleasure of working in Many Eyes as part of my Information Visualization coursework at the University of Maryland. I would like to share my experience using Many Eyes and the features I found most useful. I would also like to suggest a few additional features I would like to see added to Many Eyes.

When creating a visualization, most of my time is spent trying each of the visualization types on my dataset. This process is slow since each visualization must load every time I browse to it. To streamline this process, Many Eyes could offer users a visualization preview page. This page would contain a thumbnail preview of each visualization type when loaded with the users’ data. This thumbnail is not interactive, so the time required to render it should be less than the time required to load the data into the interactive equivalent. A preview page would not only streamline visualization creation, but would give users a glimpse at a potentially more powerful visualization type than they might have otherwise considered.

The bubble chart seems to be the staple of Many Eyes visualizations. It’s novel, attractive, and easy to view. Smaller points in bubble charts, however, are often left unlabeled and can be extremely difficult to select with a mouse. One can search for the smaller points by name, but that defeats the purpose of the visualization. This shortcoming could be overcome by allowing the user to “invert” the data set. In the inverse view, bubble size would be inversely proportional to its value. Users typically want to know the extreme values of their data. This feature would allow them to see the minimum values in their data with the simplicity of the bubble chart.

There are extremely limited coloring options available to users. Typically only the first column of values in a dataset can be used to color points in visualizations. Unfortunately the first column is typically a unique identifier for a row, resulting in a unique coloring for each point. Users should have the ability to color points according to the values in any column of their data. This would be especially useful in the bubble chart, since bubble size only visualizes one column. The combination of color and bubble size would allow users to find interesting two dimensional correlations in their data.

Many Eyes is hands down the easiest way to create country visualizations. These maps are extremely powerful and intuitive. They suffer, of course, from the classic problem of country’s area being disproportionate to the value it represents. A small country, for example, tends to escape the user’s view regardless of its value. In contrast, a large country will always catch the eye regardless of its value. To address this problem, Many Eyes could offer a cartogram map view. Many cartograms are awkward because they preserve their boundaries with other countries. This view can be made less awkward by simply resizing a country while preserving its position on the globe.

I hope these suggestions were helpful. Many Eyes is a fantastic visualization resource. Thanks to all that have helped develop it. Good work, and best of luck.

Regards,
Kyle King