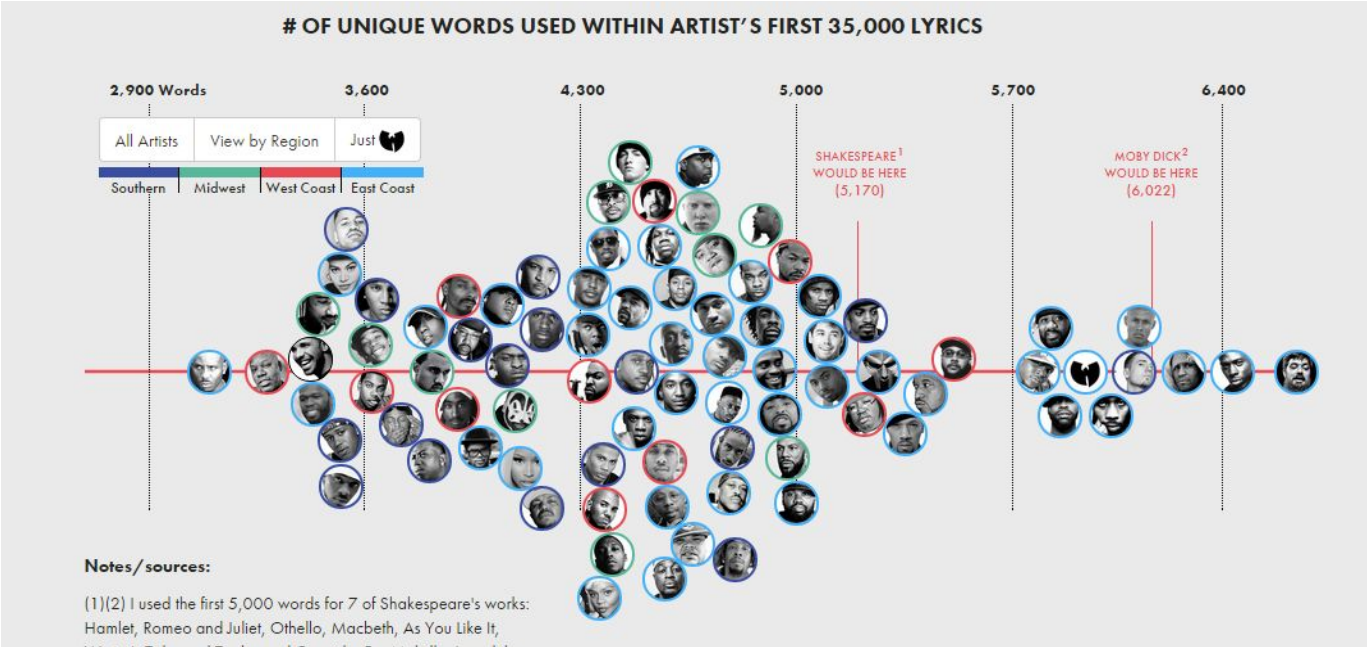
Questions

1. Find a visualization not discussed in class or used in a homework and answer the following questions pertaining to that visualization. Attach the visualization as a screenshot in your submission.



2. Consider Bertin's characterization of visual variables (position, size, shape, value, color, orientation, and texture). Pick 2 of Bertin's visual variables, and discuss them in relation to your visualization.

Position

In this visualization, the position of the dots on the x-axis have an important meaning, whereas the position on the y-axis has no meaning. The position on the x-axis shows us which artist has more/less number of unique words used within his/her first 35000 lyrics. The artists positioned on the left have a lower number of used unique words than artists on the right. This variable is selective.

Color

Color is used to group different artists by region, meaning the region where the artist comes from. The colors are purple, green, red and blue and respectively stand for Southern, Midwest, West Coast and East Coast. This variable is associative.

3. Munzner proposed a nested model for visualization design and validation. Discuss/validate your visualization with respect to domain problem characterization and data/operation abstraction design.

The visualization itself doesnt show us complicated information, and isn't intended to be used in relatively complicated domains (such as microbioligy). This visualization is rather meant for the average person. I think the makers have done a good job engaging with the target audience.

4. Based on Cleveland and McGill's results, does your visualization embody good practices (i.e. can people accurately perform the tasks based on the encodings?)

Yes I think it does. The simplicity of the visualization enabled the viewer to make a correct judgement of position rather than other judgements. From the start the viewer can see that the position on the x-axis of the dots have an important significance rather than the shape, angle or position on the y-axis. One this that helps in this regard are the vertical lines behind the dots that act as a visual aid in relative positioning of the dots. The fact that there are no horizontal lines aids in understanding the insignificance of vertical (y-axis) positoning.

5. Do you agree that visualization is a functional art? Explain.

This is a very subjective question. I'd have to say no, because in my opinion art is a tool of the artist to express himself. Although these visualizations can be made very pretty and artsy, I believe that, when it comes to visualizations, the functionality is more important than artistic expression.

6. Ask yourself what the designer is trying to convey and think of three to four possible tasks this visualization should help you with. Does the visualization achieve any of your tasks? (To view an example, see Albert Cairo, pages 26-28.)

I think the designer wants to show us the lyrical creativity rap artists have, and push back the stagnant impression rap music is all about money an violence by not only showing the number of unique words they have used, but also comparing it to moby dick and shakespeare, the lyrical genius who has invented a surprising amount of words we still use to this day.

Tasks:

Viewing
You can looks for your favourite artists and see how many unique words they have used. Sadly this graph lacks a search bar. The amount of artists in the visualization isnt too overwhelming, so one could look for an artis manually, but it could've been made easier for the viewer.

Comparison
Compare different artists. See how artists compare to each other, this is easily done by looking at the position of the artist on the x-axis, or by viewing their number of unique words

Organize
The visualization helps organise the artists in a simple line from left to right. The group left having fewer words than the group right. You can see a huge group of artists in the middle, while there are just a few on the right and left side.

Pesentation
It presents dots that are representations of artists, the represented color also has a meaning. The size however isnt a factor. The designer has done a good job in presenting the dots in a clear and non-cluttered way so it helps the user view the visualization without overloading the brain with information.