

Assignment on Graph Decoding, Critique and Re-design

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Graph Decoding

The data items represent:

Amount of money spent

Different categories of money spent

The marks used for the data items are:

Area

The data attributes are:

Categorical: Category of money spent for different categories

Quantitative: Money amount

The visual channels used are:

Color

Size

Encoding strategy

Amount of money is encoded with area

Category is encoded with color

Sub-categories are represented by labels

Graph Critique

1) The graph does not use meaningful position to visualize the data.

Poor use of position makes it difficult to compare the relationship of spending between the different categories. An interesting aspect of the information provided is comparing the different categories which is harder to do when the areas representing the money amount are placed randomly.

2) Small areas do not have labels

Without a label it's nearly impossible to know what the area is representing.

3) Coloring of sub-sections of the areas is hard to understand.

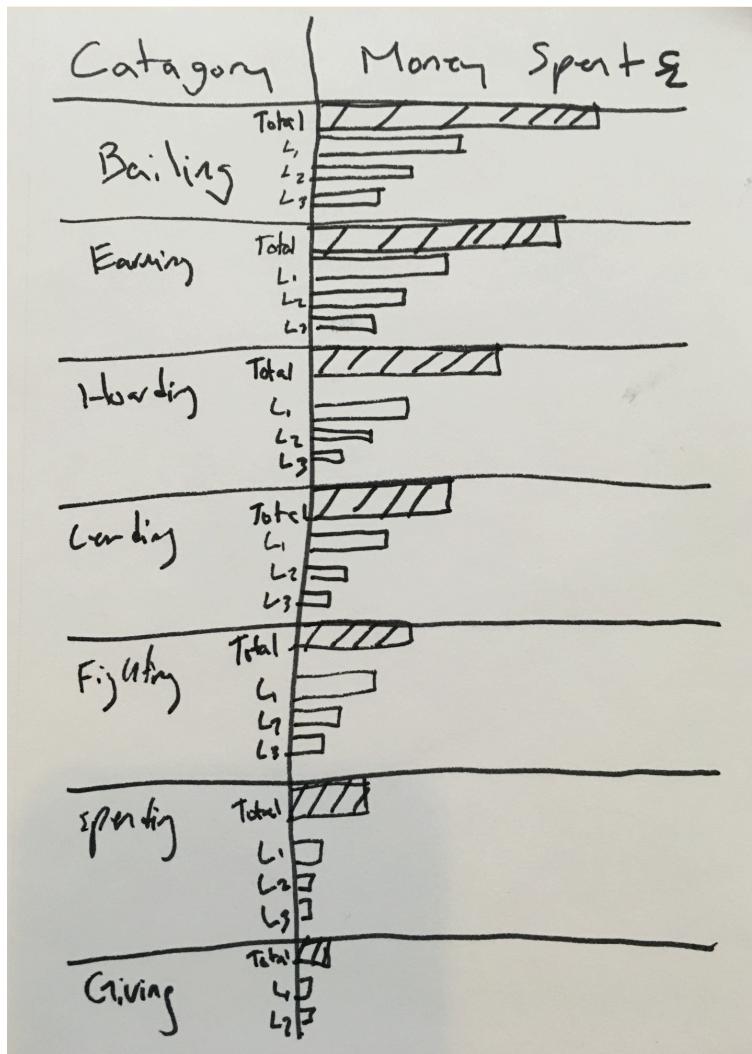
There seems to be an inconsistent use of color compared to the legend.

4) Some areas are labeled with a year date while others are not.

In the case of mortgage lending there are two areas with one labeled 2007 the other 2008.

There is no explanation of the label making it hard to understand.

Graph Redesign



How to read this sketch:

The concept of the proposed chart is to position each category in a descending order. The first bar chart would represent the total of all the sub-categories. Subsequently, each sub-category would be represented with its total and additional horizontal bars. This sketch represents showing

each category with a horizontal bar chart for each sub-category. The totals would match in color or texture so they could be easily compared. The sub-categories I would probably leave as a neutral color.

Note about sketch: Not all information is shown. Generic text is used to show concept only. The bars represent only a descending order and are not on a true scale. As mentioned above, the original diagram is hard to understand, probably due to mislabeling, and thus this sketch is only meant to convey a concept.

Why I think my design is an improvement over the original design:

This chart is an improvement because it uses the length over area to compare quantitative values.. Additionally, an improvement is the use of position, which allows for an easier comparison between the ordinal ranking by amount spent between the various categories.. Also this style of chart allows more room for the labeling.