Part 4. Comparative Visualization

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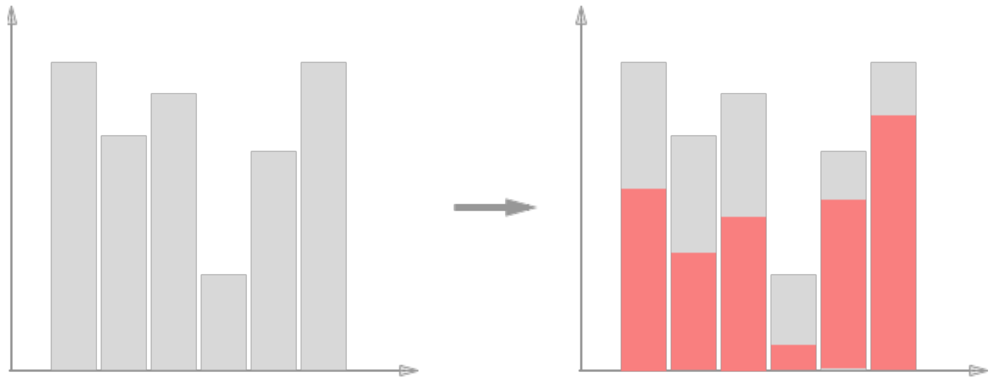
4a. Design

To compare the priorities of overall and selected data, here we have two optional designs,

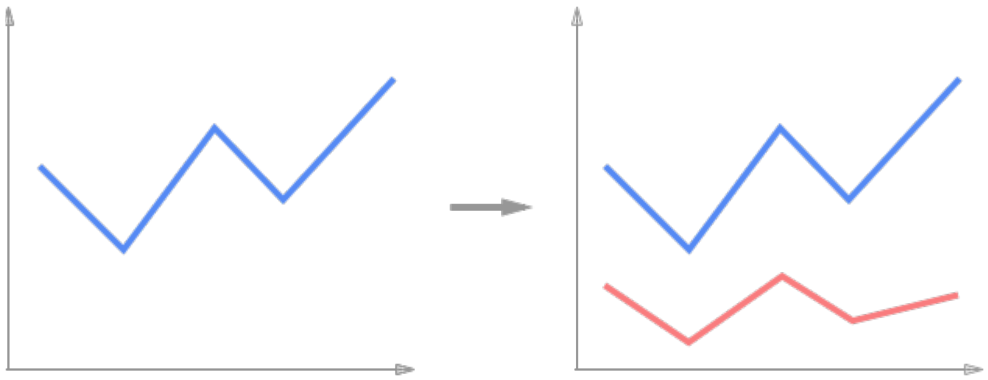
Option 1: The original priority visualization is bar chart, so we cant still use bar chart for comparison. As the following prototype shows, the left figure is the visualization of overall, and when we want to compare the selected brush, overlay some new bars on the chart, and use different color to distinguish them.



overall

overall and selected

Option 2: Another option is using line chart. The left figure shows the overall status, and when we want to compare overall with selected area, we will draw another line, and use different color to distinguish them.



overall

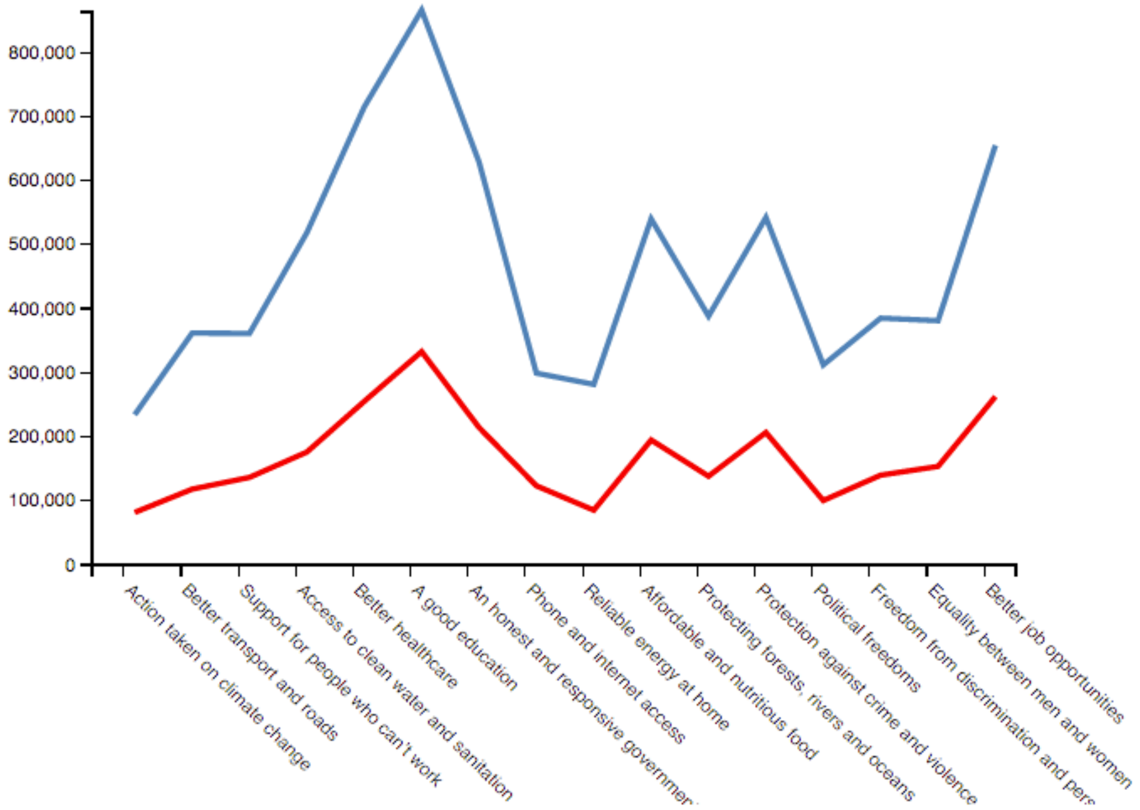
overall and selected

4b. Implementation

See the `js/compvis.js` file.

4c. Analysis

Here I implemented the option 2, the screenshot is shown in below.



My implementation is in file `js/compvis.js`, the class is called `CompVis`. To implement this, I found I can reuse the pattern of `js/priovis.js` file. But there are still have some differents:

1. The overall line chart just need be drawn only once. So I add an `overallData` item in `self` which is processed by `auxFilterAndAggregate` method. And I also add a `initOverallChart` method to `CompVis.prototype`, which will draw the overall status of priorities, it will be called in `initVis` method, and here `updateVis` method doesn't need for calling anymore.
2. `updateVis` method becomes simpler. In `updateVis` method, we don't need to redraw the y axis since we need to provide a consistent ruler for comparison. we can also reuse the `lineGenerator` to draw lines.