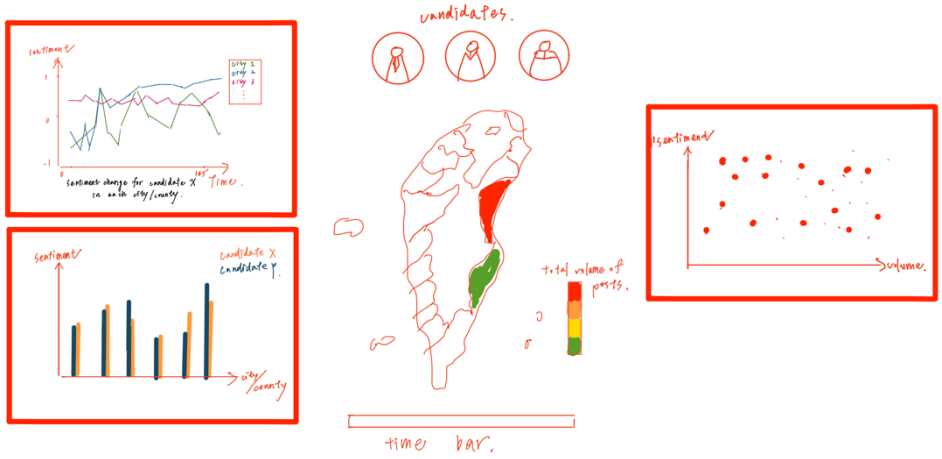
1. A. Gerrymandering
   Small Multiples: disjoint data and same encoding

   B. Olympic Feathers
   Small Multiples: disjoint data and same encoding

   C. How Much do I Really Use My Favorite Crutch World
   Multiform : same data and different encoding

2.



Line Chart: Q1 , Q2
Showing data changes over time. Different series for each candidate make it easy to track sentiment trends and compare them at any point in time.

Bar Chart: Q2
It is ideal for comparing quantities across categories. Grouped bars enable a direct comparison between candidates within the same city/county.

Choropleth Map: Q3 , Q6
Geographic patterns in data can be effectively displayed using color gradations. It's intuitive for identifying regional sentiment trends.

Scatter Plot: Q4 , Q5
It is useful for identifying relationships between two quantitative variables, such as

sentiment and post volume.

Interactive Elements:
Interactivity enhances the user's ability to explore data in depth, making complex data sets more accessible.

Annotations:
They provide context that can explain sudden changes or outliers in the data.

Visual Encodings:

Marks: Points on line charts, bars on bar graphs, regions on maps, and circles on scatter plots.
Channels: Position along the X (time) and Y (sentiment, volume) axes, color for differentiating data, size for volume representation, and opacity to manage overplotting.

Ease of Answering Questions:

Easy: Changes over time, direct comparisons at a point in time, and regional sentiment patterns are straightforward to observe with the proposed visual encodings.

Difficult: Identifying specific points where sentiment flips between candidates might require more interaction, such as selecting two time points and observing the map for changes.

3. First row: Change in hue
   Second row: Change in luminance
   Third row: Change in saturation
   Fourth row: Both hue and saturation