

## 1. Ideas

- chloropleth showing areas of highly active conflict
- time based → use slider?
- simultaneous highlighting of price contributions and conflict
- area graph with selective highlighting for pricing contributions
- line chart
- volume contribution instead of price?
- use a glyph for a callout?
- several areas of focus → saturation may indicate relative contribution
- have play option instead of an addition to a slider?
- hovering over an area should call out history
- heat map with axes determined by political sphere + conflict activity

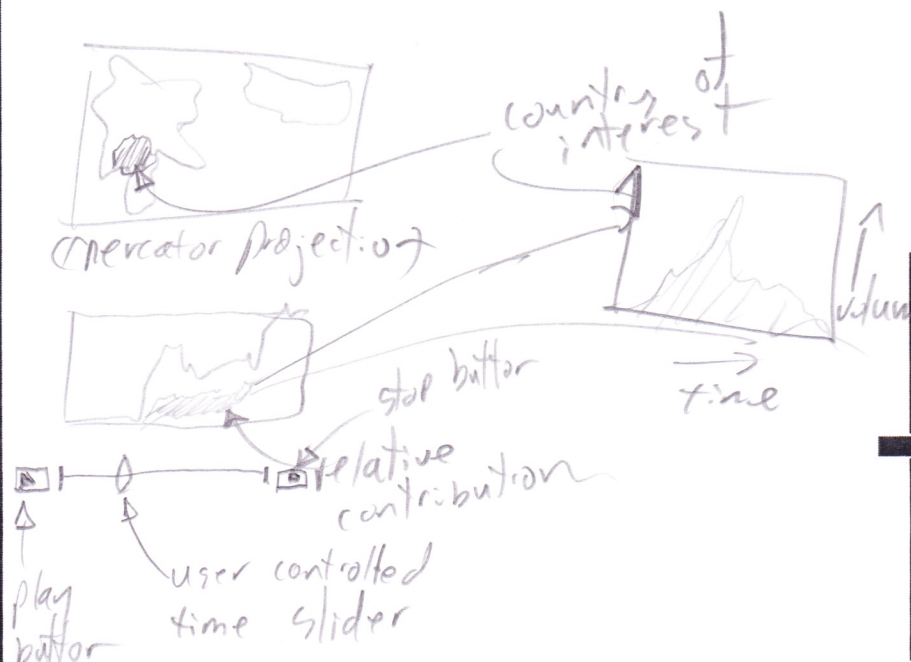
## 2. Filter

- use time slider to progress V's
- volume in certain currency better than price
- no glyph, but maybe hot link to drill down to specific data
- show area graph and chloropleth simultaneously
- background should include price but should not be focus, volume is better

## 3. Categorize

- price data (quantitative)
- volume data (quantitative)
- country contribution (categorical)
- relative contribution (quantitative)
- time based aspect (quantitative)

## 4. Combine and Refine



## 5. Question

## Layout



(Mercator projection  
of the world)

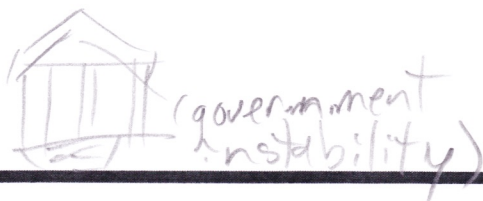
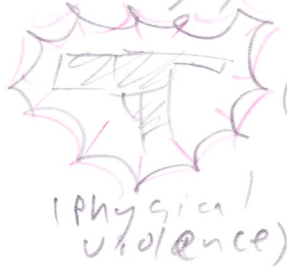
Title: Map Projection  
Author: Jason Orender  
Date: 18 Oct 17  
Sheet: #2  
Task: Flesh out Map

## Operations

- the individual countries should be clickable for extra info
- a slider to move through time

## Focus

- Add a glyph representing the type of activity?
- possibly just <sup>iconography</sup> symbology as opposed to glyph



## Discussion

- This would take up a lot of space
- location is important because the same event may impact multiple countries in close proximity

## Layout



Exchange Rate Vs US\$

Title: Exchange Rates  
 Author: Jason Orlander  
 Date: 16 Oct 17  
 Sheet: #3  
 Task: Explore Exchange Rates

## Operations

- the time slider controls this graph as well
- hovering over a spot should provide a callout on the graph
- selection of a country in a map view should provide

## Focus



## Discussion

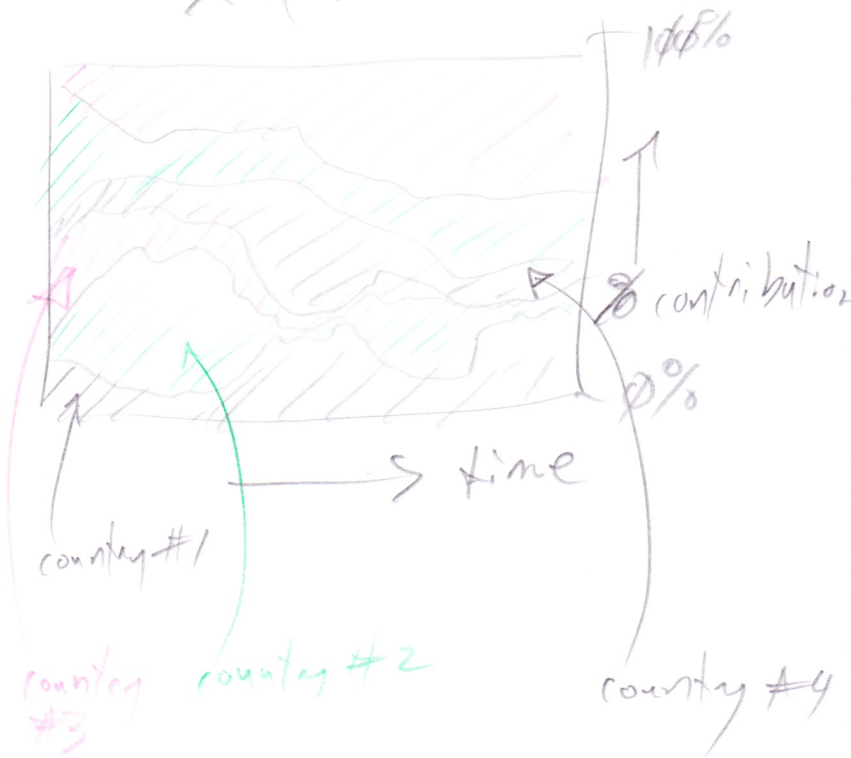
focus here, as well.

- this will provide a moving window of forex rate vs. time, with a window about a month wide
- slider should control the midpoint of the window



## Layout

### sand Plot



Title: Overall contribution  
 Author: Jason Orender  
 Date: 16 OCT 17  
 Sheet: #4  
 Task: Refine overall display

## Operations

- normalized area chart (sand plot) used to describe each country's relative contribution to crypto-currency price
- Always visible
- takes up full width of display

## Focus

- not tied to time slider or map view
- should provide an unchanging overview of the entire time period being considered
- iconography could also be super-imposed here, but probably as an overlay that could be turned on and off to avoid overcluttering the display

## Discussion

- based on local bitcoins data
- color coded to country

## Layout



Title: Final Design  
Author: Jason Orendor  
Date: 18 OCT 17  
Sheet: #5  
Task: Relational design

## Operations

- Moving the time slider and selecting a country will update the lower part of the screen.
- Some iconography should also be visible on the top portion to provide guidance on when/where might be of interest

## Focus

- data is largely already gathered
- iconography will take some work, but in general should not take long
- coding the map and graphs in D3 will take the most time and effort
- some refining of the data will also be necessary to ensure that all times are synchronized between data sets

## Detail

- country-specific data will be derived from local bitcoins data and Google Trends
- Forex data will come from Yahoo Finance
- Bitcoin pricing/volume data will come from blockchain.info data