## Instruction

1) Please describe your experience about designing/implementing data visualizations and animations of the visualizations. How many years of experience do you have? How often do you create visualizations and animations?

I have worked designing data visualizations and interactive graphics in the context of journalism since 2013. I have also designed visualizations and animations for exploratory analysis tools. I have about 6 years of experience and create visualizations as part of my day-to-day work flow.

Here are the different stages of visualization LINK (ANONYMIZED TO GET REVIEW) (The white circles represent the countries.)

Imagine that you're an animation designer such that you want to design the animation for the transitions between the stages.

2) Please explain how you're going to animate the *components* of the visualization with the *timing information*?

To transition between stage (1) and stage (2) I would:

- start animating the points to their final location
- Once the points are about halfway through the animation, fade in the axes and axis labels ("rich" and "poor")
- Make sure that the above two animations end simultaneously

I would play around with this setup to test various timings and easing functions, but I would start off by making transition one take ~1s and transition 2 take approximately 0.5s with a 0.5s delay

To do the transition from stage (2) to stage (3) I would:

- For each of the three circles: (staggered)
  - Turn it green and making them bigger
- Fade out the other non-green circles
- After a delay, add the "tail lines" to the circles

The timing would be something like 0.3s to change the size and color of the highlight circles with a short delay in between each. Then once that finishes fade out the other circles (~.3-0.5s); then after that I would wait a bit to show the tail lines. I think I would want the audience to process the previous change before adding more information. Again I'd want to test the timing of all of these transitions and delays to make sure it feels good to watch before publishing it.

## 3) Could you think another animation design?

(To motivate to alternate the design, you can assume: more/less number of data, shorter/longer animation time, different data distributions, the different number of cardinality (the number of categories), or the different message/task that you want to convey through the transition.)

I think that the transition from stage (1) to stage (2) is fairly straightforward so I would be hesitant to use a significantly different animation design other than just tweaking things such as timings or whether or not the points stagger in their movement to their final location.

For the second transition I think there is a wider space of possibilities for how you might want to animate this. Given that we are going from showing a static snapshot of the data to one that includes temporal information, we might consider showing an animation where all of the points move according to the time (e.g. play an animation going from Start Year  $\rightarrow$  end year) and trace out the lines, before finally fading the other points out and highlighting the three with their "tails"

Here is one version of the animation for the transitions. LINK (ANONYMIZED TO GET REVIEW)

- 4) Please describe the changes of the visualization *components* with the *timing information*?
  - Fade in Y axis line and labels (0.125s)
  - Animate points points to new positions (2s)
  - For each of the three green points (staggered, 2s delay each):
    - Draw the green circle at time 0, and the path at 0% of its length
    - Animate circle to its final location, and animate the path to 100% of its length, 5s
    - Fade in the text label