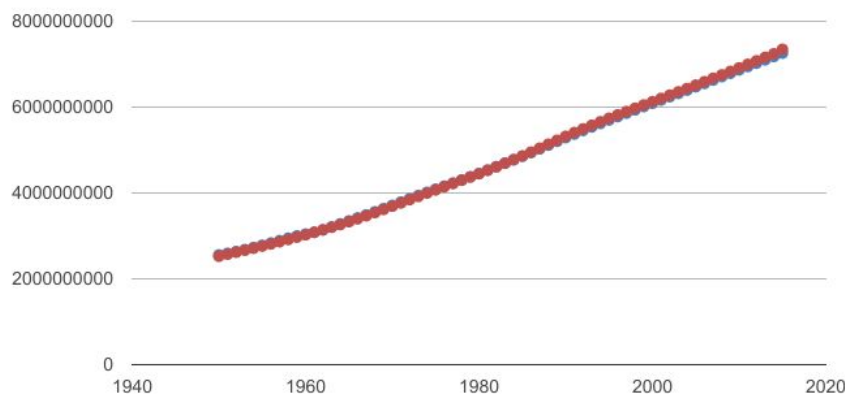


## Design 1: Population Data

### What trends do you see in the data?

If you plot the data from 1950 – 2000 of the United States Census Bureau and the UN Department of Economic and Social Affairs, you see a linear upward slope with a slight curve at 1960 (probably the baby boomers generation). Furthermore, the estimates of these bureaus are almost between 1.5% points. Although the world population growth has been positive, two declines have occurred between 1300-1400 and 1600-1650. This can be explained due to several diseases such as the black death.



### Analyze how big the differences between various estimates are. Do you see a trend, i.e., do the differences become smaller or larger over time?

Looking at the same estimates from 1950 - 2015, the smallest difference is at 1962 and the biggest is 2015. In between the differences get larger over time.

### Think about these differences relative to the estimates at the respective time points and in absolute terms. When are the uncertainties the largest in absolute, when in relative terms?

The further back you go, the more uncertain the data becomes. There are large gaps in documentation between different sources and the differences between sources are also more significant.

### Do you think you can faithfully represent the uncertainty and the data in the same plot? Why, or why not?

I think you can show uncertainty if you include multiple sources and different plots by using a bandwidth plot where you can represent a spread of multiple values in just one plot.

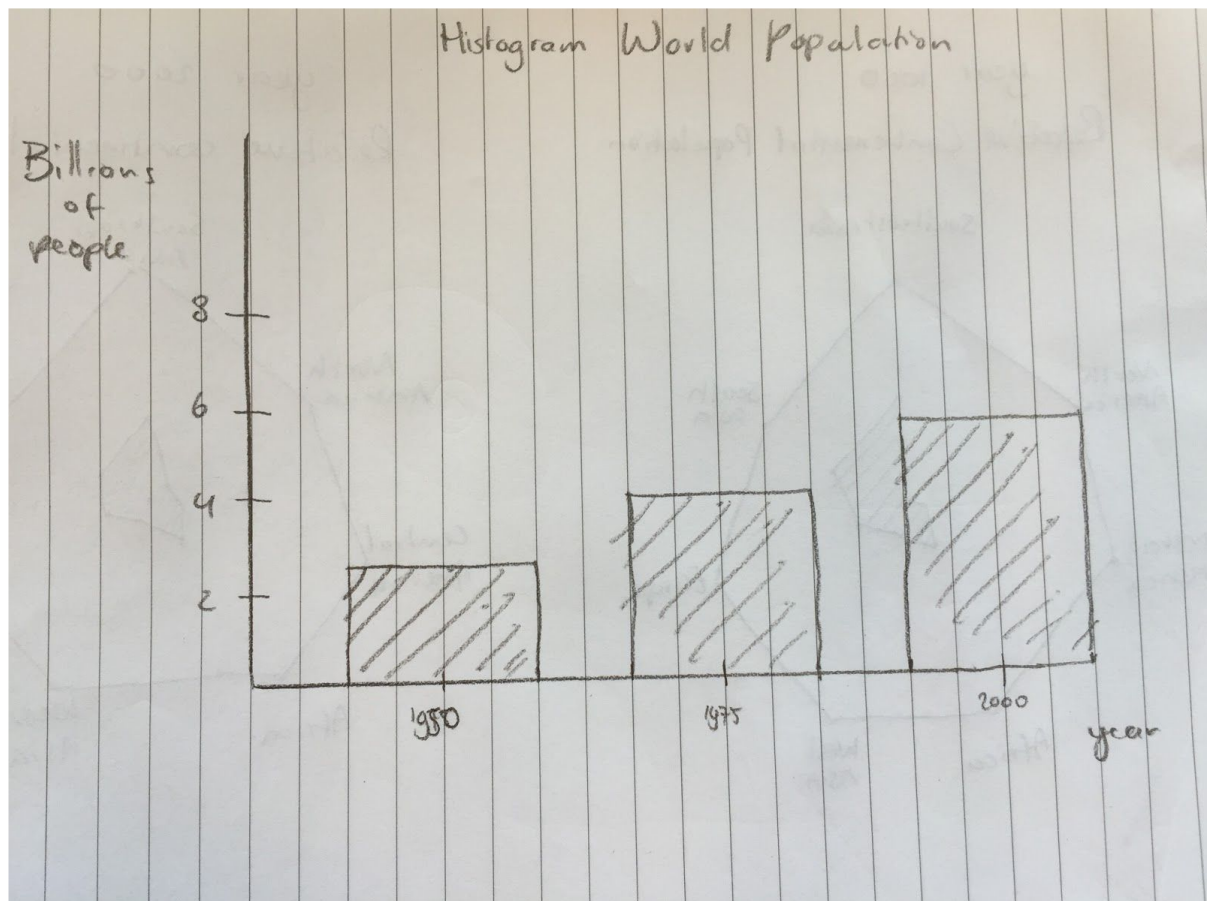
### What effect do you think will the linear interpolation have on the uncertainty?

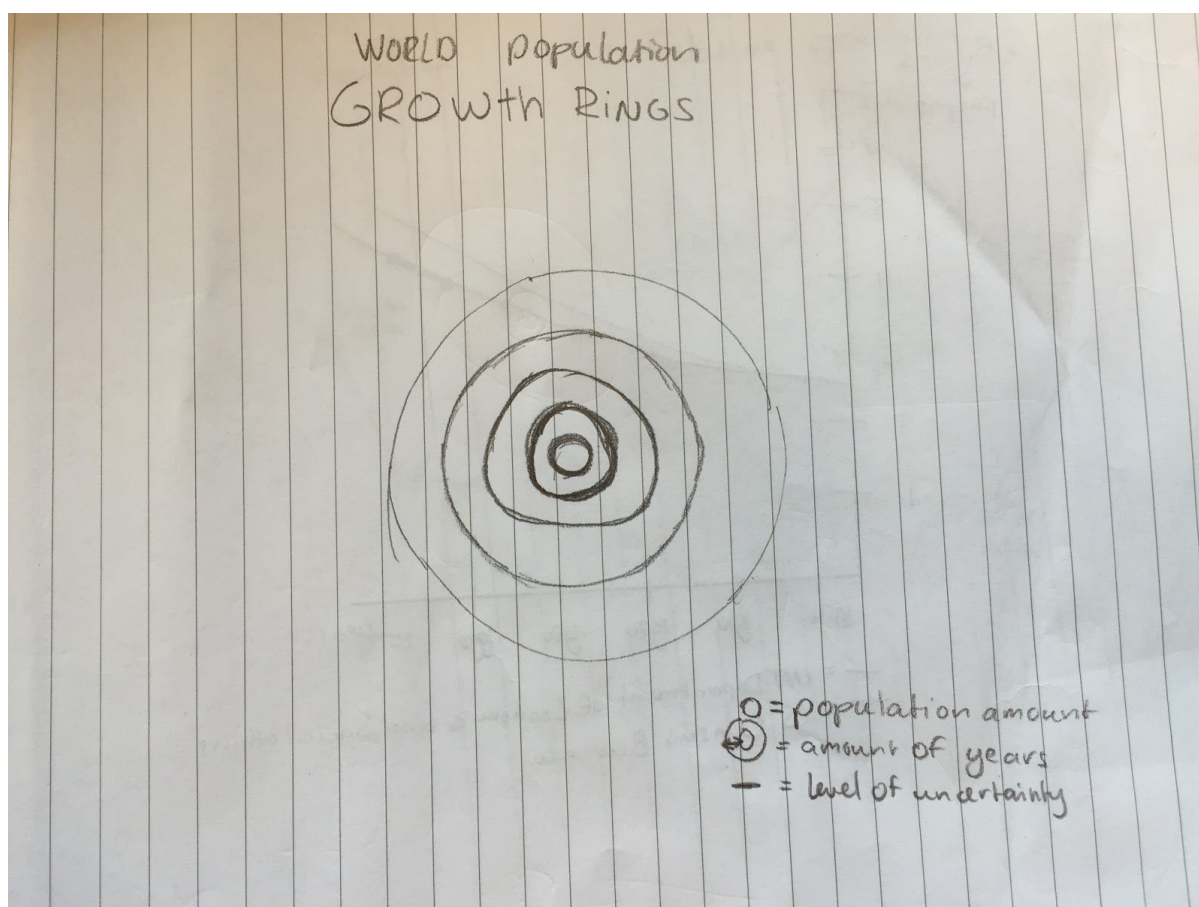
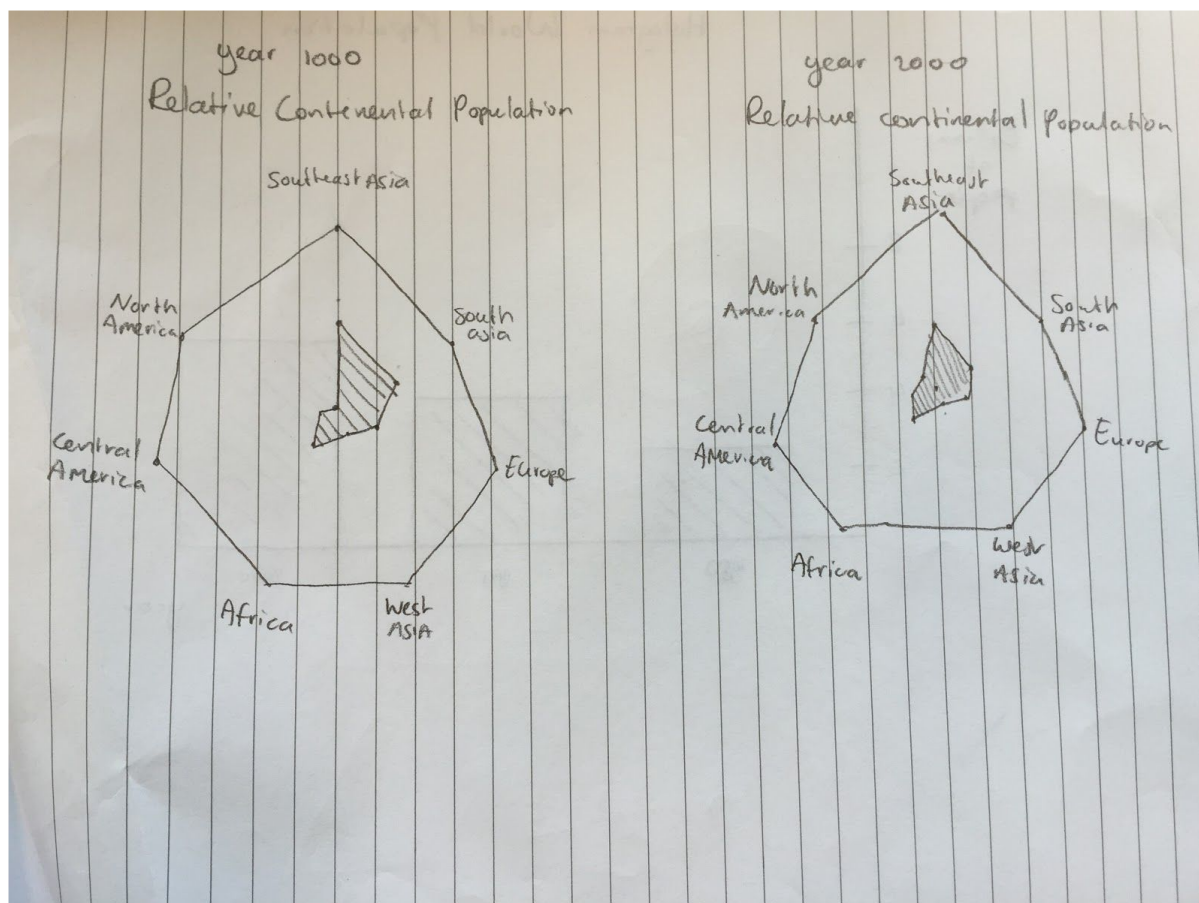
It will decrease the visibility of the uncertainty because you will draw a line that connects all points globally. You'll make assumptions based on estimates, which makes the uncertainty of these data points larger.

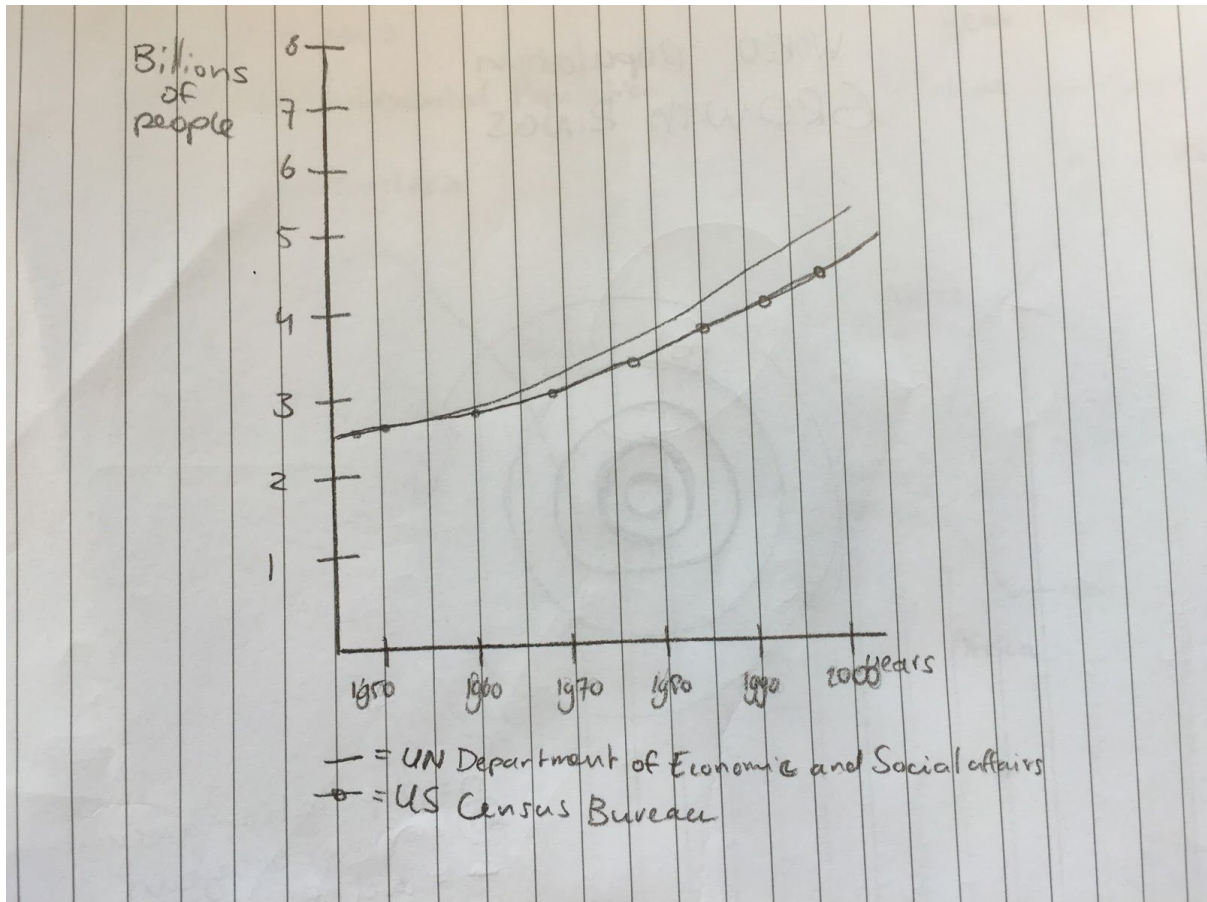
### Is linear interpolation a suitable method for this data?

It depends on the linear relation between the two variables. If there's a clear linear relation (over time) then it could be a suitable method for the data, however errors can occur when population growth is restricted due to various reasons.

## Part 2







<https://i.redd.it/i5ibxzoinaoy.gif>

(interessante .gif die ik tegenkwam over world population per continent)





Een schets van de wereldkaart die de bevolking per continent weergeeft in 2012. (weet niet of deze nog nodig was omdat we al vier schetsen hebben, maar het is in ieder geval een ander soort visualisatie, al is het wel minder nauwkeurig en maar in 1 punt in de tijd).