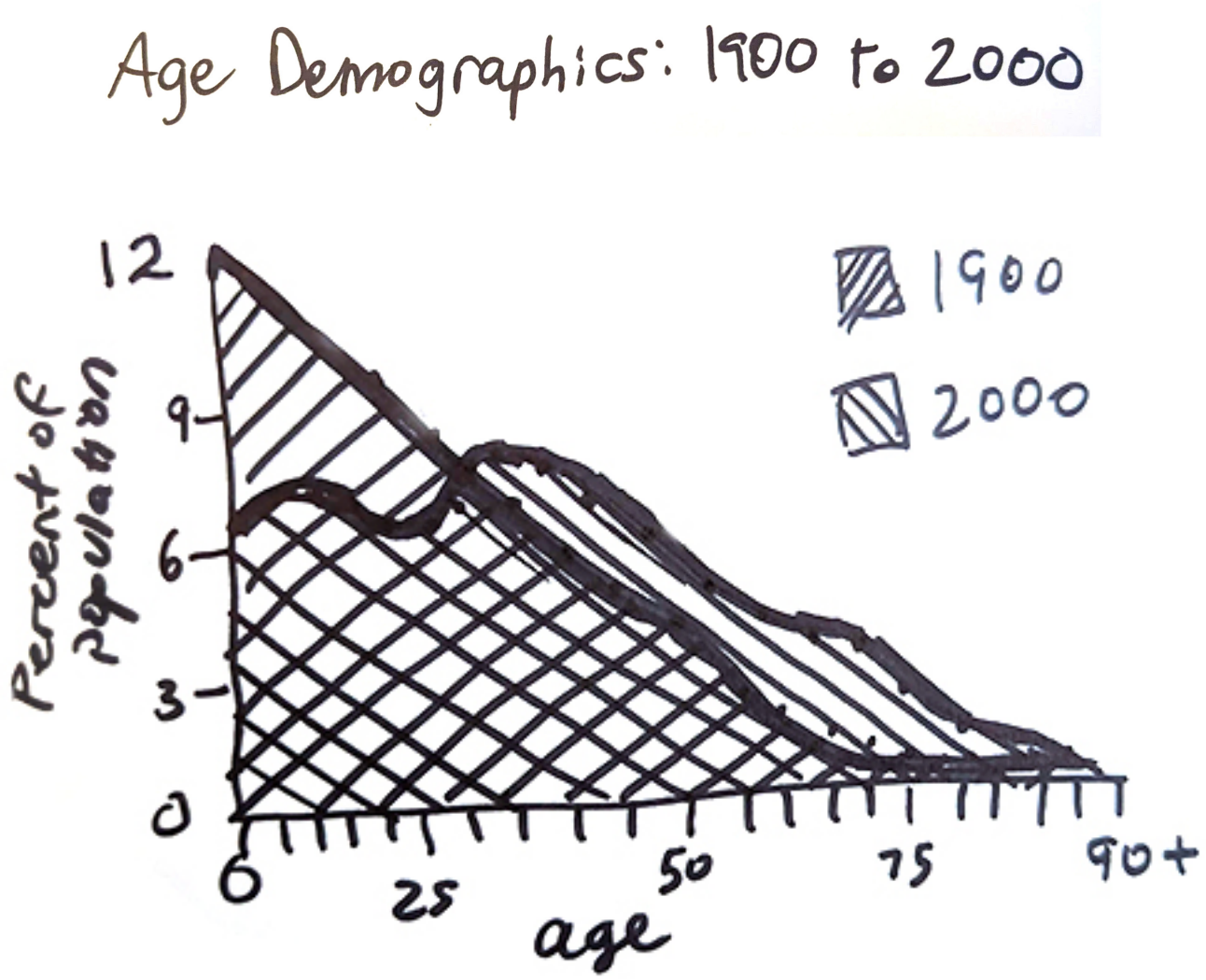
CENSUS DATA: 1900 AND 2000

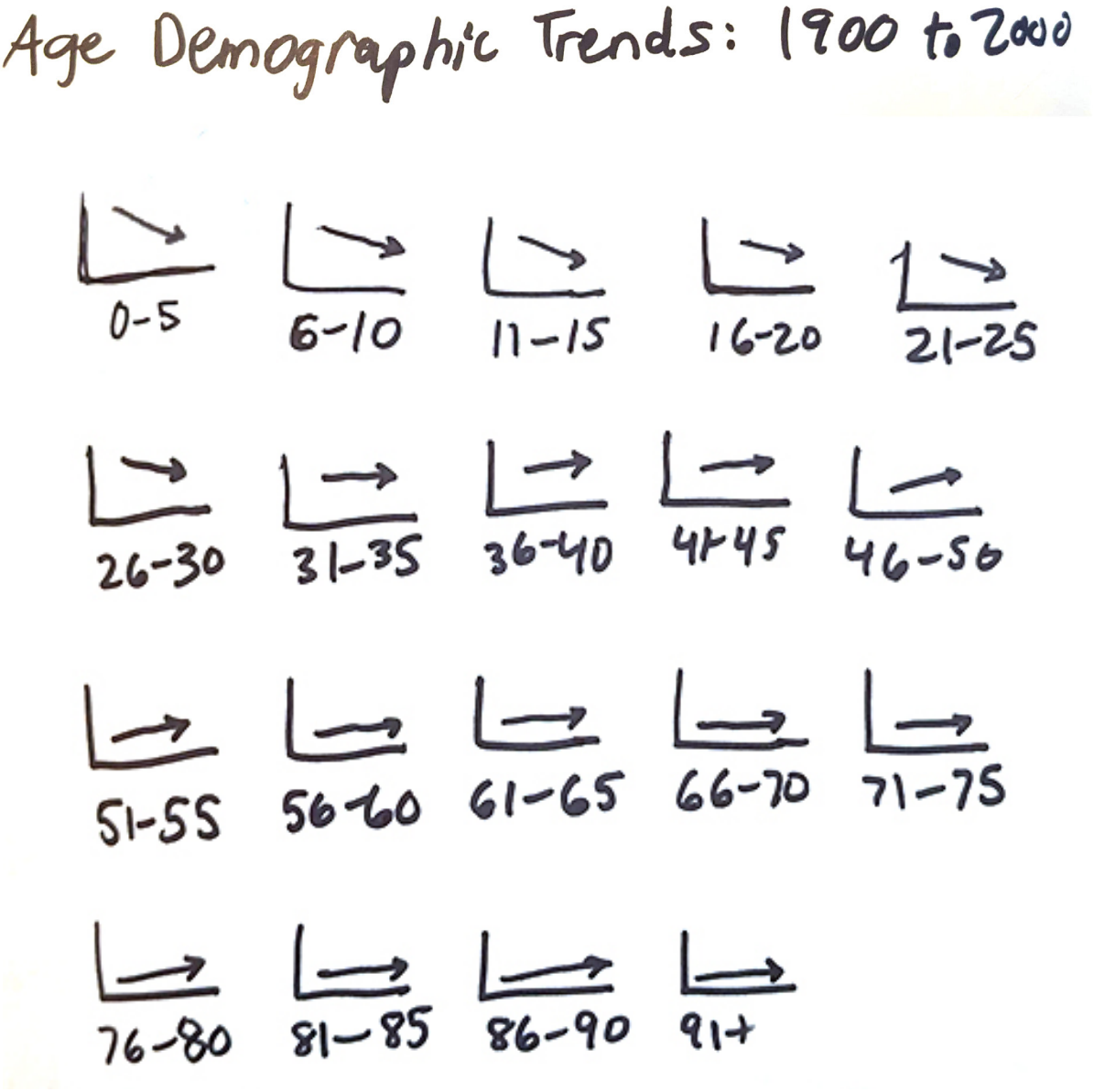
What is the population spread for each year and how has it changed?

Morgan Gelfand



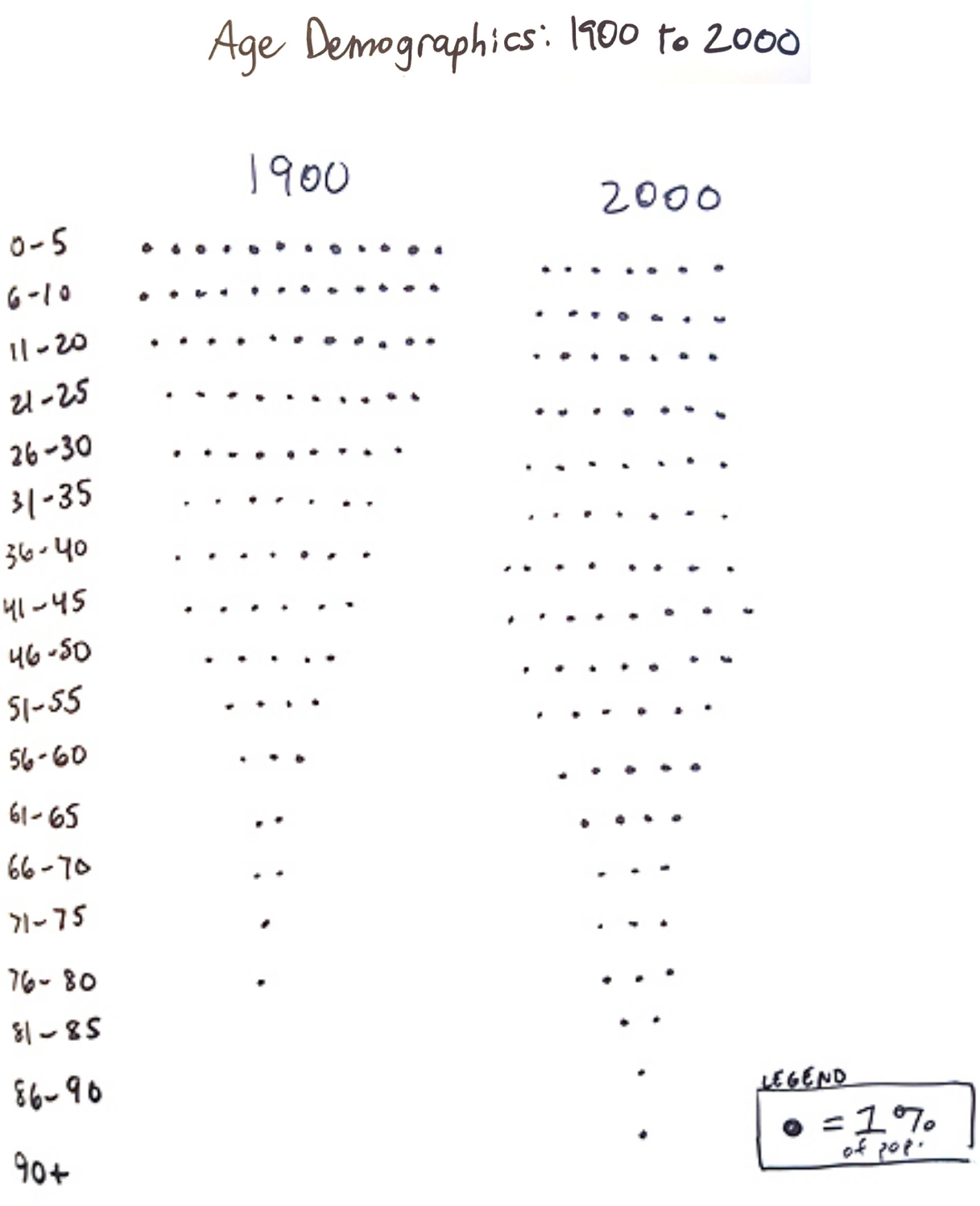
Area Chart

This visualization is an area chart that shows percent of population by age. People are very good at reading simple line and area charts such as this one, which is why I wanted to do one for this dataset. The lines themselves show the change in percentage of population between age groups for each year. The reason I chose an area chart rather than a line chart is that the area gives the viewer some interesting information that is harder to see on a line chart. The areas that are only one pattern show population that doesn't exist in the other year.



Small Multiples

This visualization shows the trend of each age group's population percentage from 1900 to 2000. Ideally positive trends would be colored green and negative trends would be colored red. This type of chart isn't good for comparing each age group to each other within a given year, but is great for seeing overall trends and where the changes are happening by the steepness and colors of the arrows. I think if I were to make a more detailed version of this I would include small numbers on the axis so the viewer could get more details if they wanted them. I have always thought small multiples are really cool, but have never actually made a visualization with them!



Pictogram

This visualization shows, with icons (probably people icons if I made a more detailed version), the percentage of people in each age demographic for both years. Each dot represents 1% of the population in that year. This visualization isn't great for finding exact numbers, because you have to count the icons, but is good for seeing a trend for each year and comparing the years to each other.

ANALYSIS

Census Data Sketches

Each of these three visualizations represents the variables in a different way. The area chart shows a direct comparison of the population percentages as ages go up. This is the most straightforward visualization in my opinion. The small multiples chart shows how each demographic group has changed over time rather than how the population is distributed in a given year. The pictogram is a visual representation of the people that the numbers stand for in the other charts and quickly gives the viewer a visual comparison between the years.

Each of these has its merits, and could be the right chart depending on why the information designer is making the visualization. If I go back to my original question, “What is the population spread for each year and how has it changed?” I would rule out the small multiples as a good answer to the question, because it’s not easy to see the spread for each year, only the change. Between the other two, I think the area chart answers ‘how has it changed’ better, while the pictogram answers ‘what is the population spread’ better. It all depends on which of those two things is more important for the viewer to grasp at first sight.