Viz Assignment 1

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Today, let's take a look at the babynames dataset. There are countless routes of investigation to play around with, but we will focus on three questions:

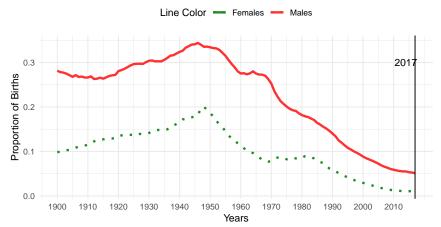
- 1. What are the most popular names since 1900 and how has their popularity changed over time?
- 2. How have rare or uncommon names trended over time?
- 3. How have gender neutral names trended over time?

I. Trend of Popular Names

The first part of this is finding the 10 most popular names for males and females since 1900. We considered the most popular names to be those with the most babies born with that name between 1900 and 2017.

Yearly Proportion of Births with Most Common Given Names since 1900

Male names are James, John, Robert, Michael, William, David, Richard, Joseph, Charles, Thomas Female names are Mary, Patricia, Elizabeth, Jennifer, Linda, Barbara, Margaret, Susan, Dorothy, Jessica



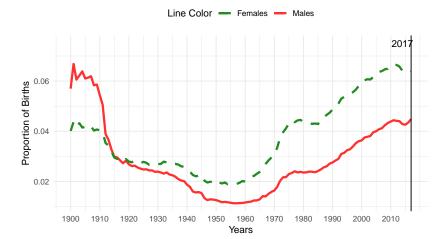
Proportions are calculated by gender

Common names are much more common amongst males than females. At one point, almost 35% of male babies had one of 10 common names! Males and females follow a very similar trend despite this difference with peaks during the baby boomer generation and declines from there.

II. Trend of Rare or Uncommon Names

We consider uncommon names as those where less than 20 babies were given that name in that year. We calculated the proportion of births with these names for each year and for each gender.

Yearly Proportion of Births with Rare Given Names since 1900 Rare names determined as less than 20 individuals in a year

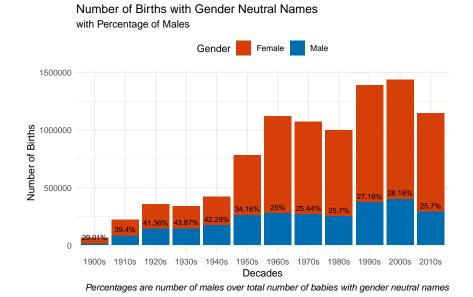


Note that the babynames dataset does not contain data on names with less than 5 births.

Although our data is incomplete because we don't have all rare names, we still see that rare names had a severe dip in relative popularity around the 1950s (when common names were very popular) but they are making a resurgence!

III. Gender neutral names

We identified gender neutral names by first filtering out names that had less than 5000 total births and then calculating the ratio of males and females. After sorting this list by gender ratio and number of births, we compiled a list of 200 popular gender neutral names. Below is the gender distribution amonst babies that had gender neutral names over time.



Gender neutral names are slowly increasing in popularity overall, although the largest spike looks like it occurred between the 1940s and 1960s. However, gross number of males with gender neutral names has actually not changed dramatically since the 1950s. Gender neutral names for females on the other hand are increasing in popularity and constitute most of the growth in gender neutral names. Since the 1950s, around 70% of babies with gender neutral names are female compared to the 20s-40s where it was closer to half.