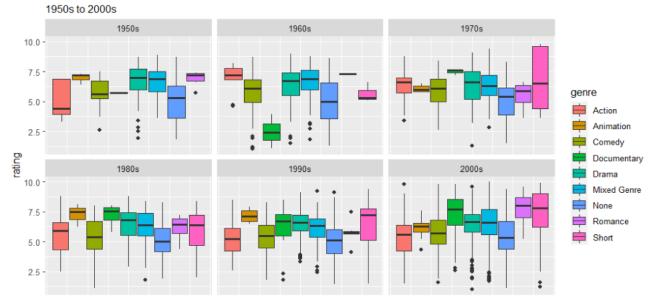
Plot 1:

Ratings of Genres over Decades

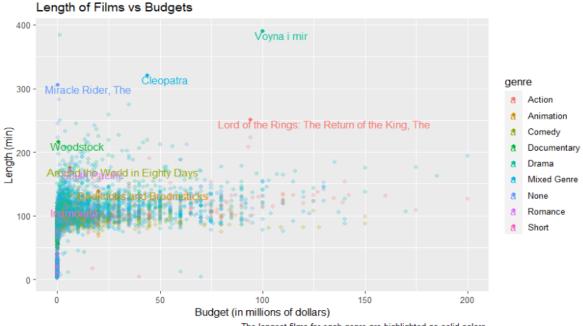


The median ratings of most genres improved over the decades, though the spread and numbers of outliers increased as well

Question: How has the rating of films for genres changed over the decades?

We are looking at the distribution of ratings for each genre from the 1950s to 2000s. Action films had a median rating that was below 5.0. Over the decades, the median ratings have increased. However, the spread has increased too. The rating for animations ranges from 6 to 7.5 and are quite high. Notice that there were no animation films available in the 1960s. The ratings for comedies, dramas, and mixed genres are consistent over the decade. Documentaries were not popular in the 1960s. The overall ratings increased by 2000s. Films that did not have a genre associated with them had a consistent distribution of ratings, with the median centered around 5.0. Ratings for romances and shorts were not available in 1950s but once they became available, the genres are more highly rated.

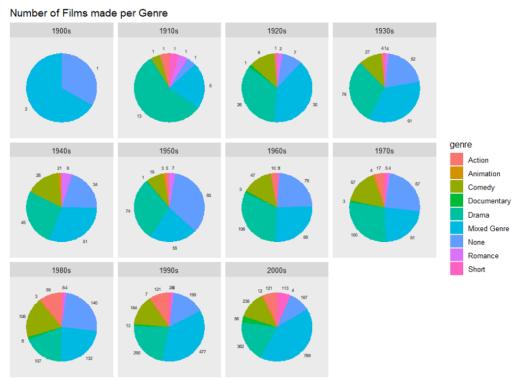
Plot 2:



The longest films for each genre are highlighted as solid colors. There seems to be a positive nonlinear relationship between budgets and lengths of films. Question: How does budget affect length of movies? (Which movies are the longest?)

There are many high budget films that skew the distribution to the right. However, not all high budgeted films are long. The longest film and their title for each genre is highlighted above by text annotations and the points are solid in color. Based on how clustered the distribution looks around the 0 to 25 million dollar range, most films tend to range around 100 - 150 minutes long.

Plot 3:



There were very few genres and films made in the early 1900s Many films by the 2000s are of mixed genres.

Question: What's been the most popular type of movies?

The pie charts above showcase the number of films for each genre for each decade. In the 1900s, there were not many films available to rate and the number of available films for any genre increases over the years. The top three film genre for most decades are dramas, mixed genres, or have no genre associated.