

Data Science

CodeAcademy
Berlin

Box Office Analytics

An analysis of the intricacies of the top
600 grossing movies

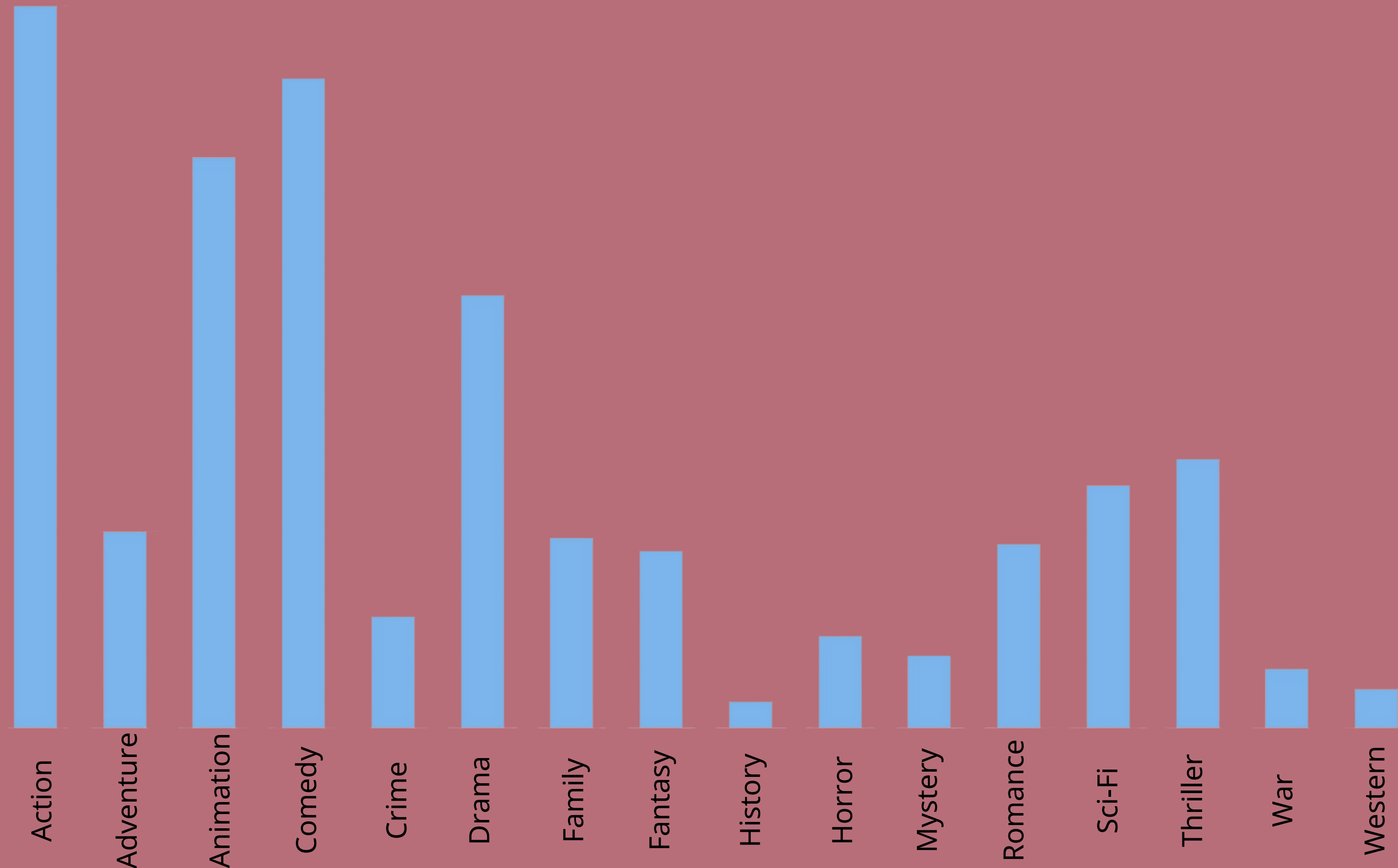
MPAA Ratings



- G (General Audiences)
- PG (Parental Guidance Suggested)
- PG-13 (Parents Strongly Cautioned)
- R (Restricted)

Based on the MPAA ratings, almost 3/4 of the movies produced are made for an audience of at least over 13 years old. About a quarter is marketed towards adult and young adult audiences, while the movies appropriate for all ages are a miniscule fraction of the total produced

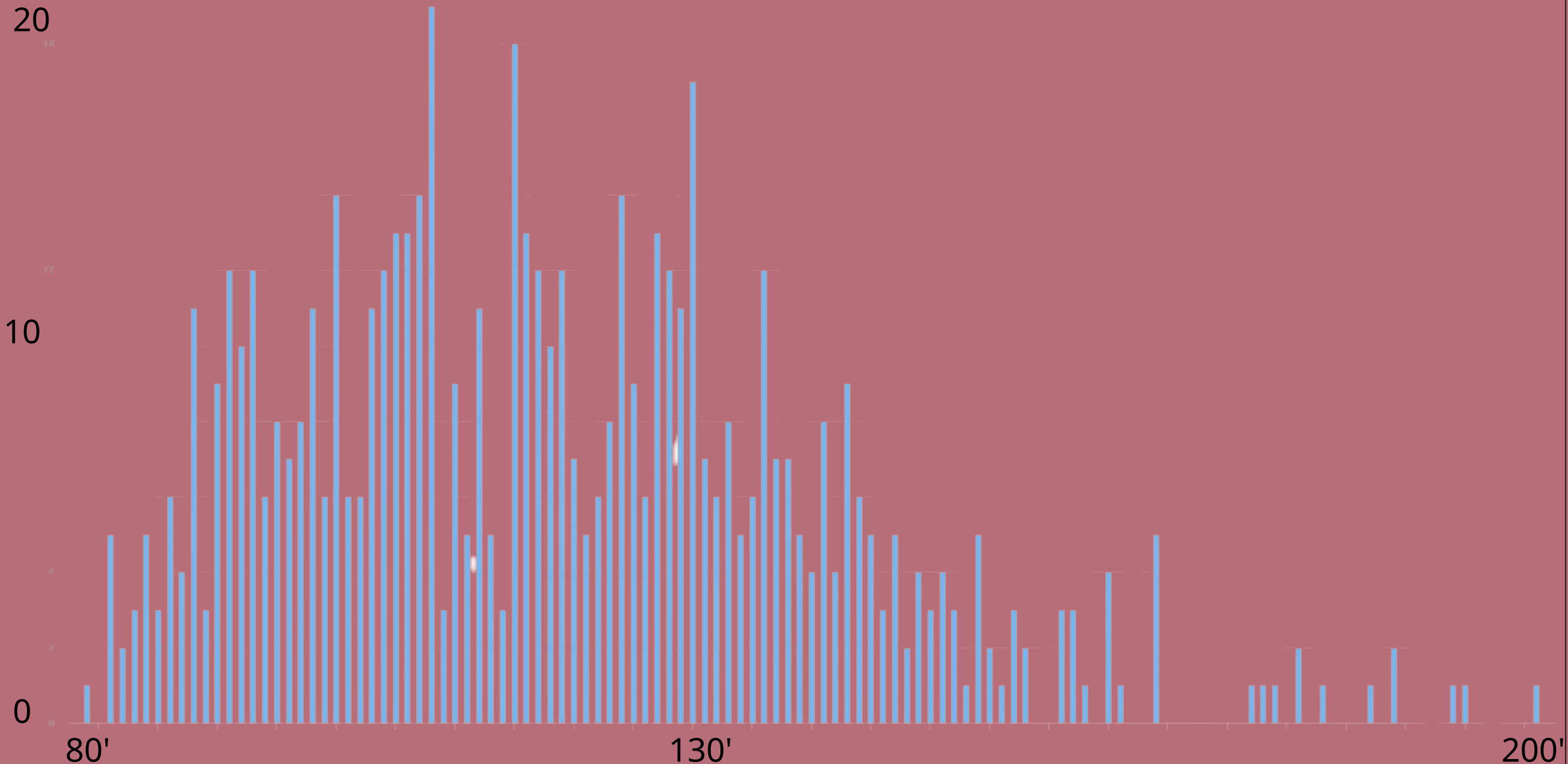
Movies by Genre



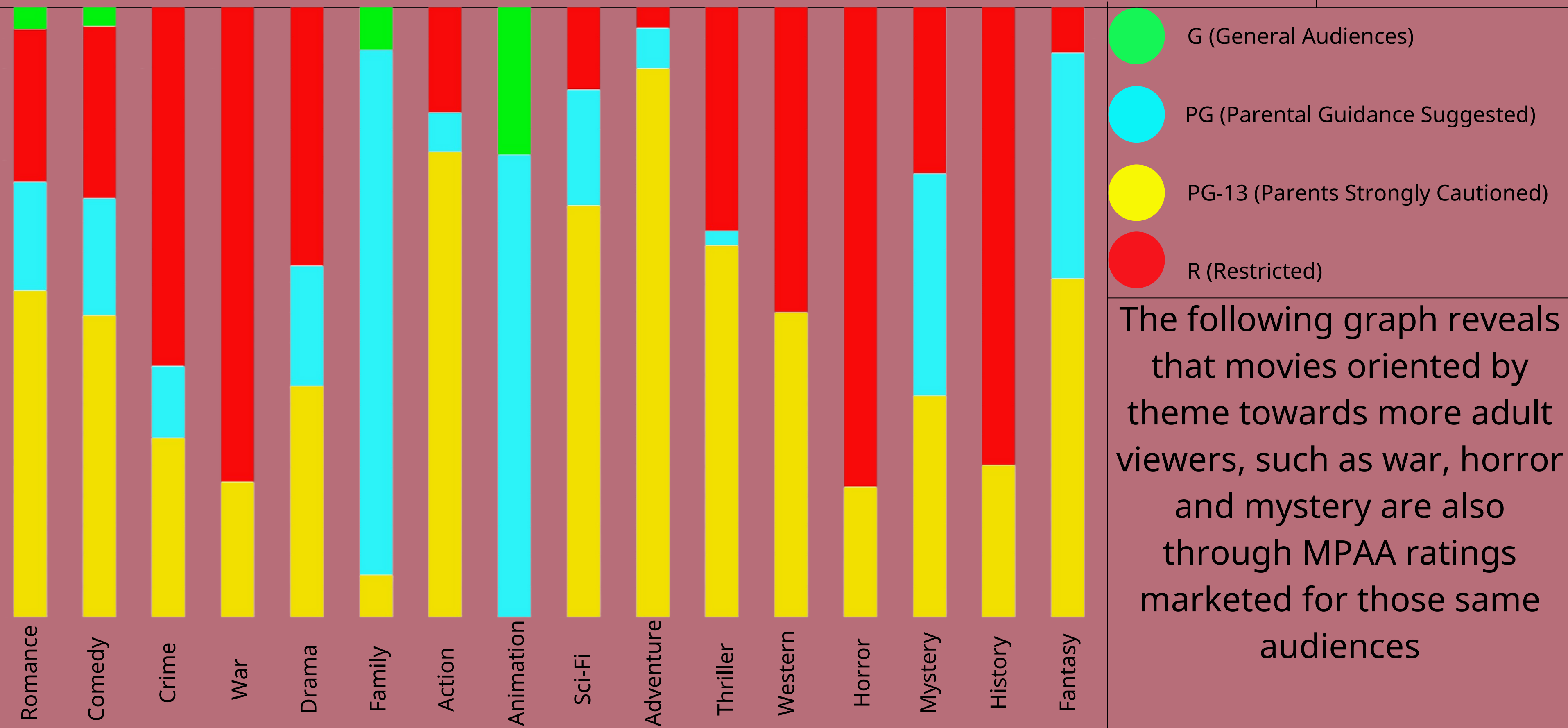
The following graph shows us that most movies released are, by far, action, comedy and animation, while war, western and history movies are among the least common movies

Movie Runtime Frequency

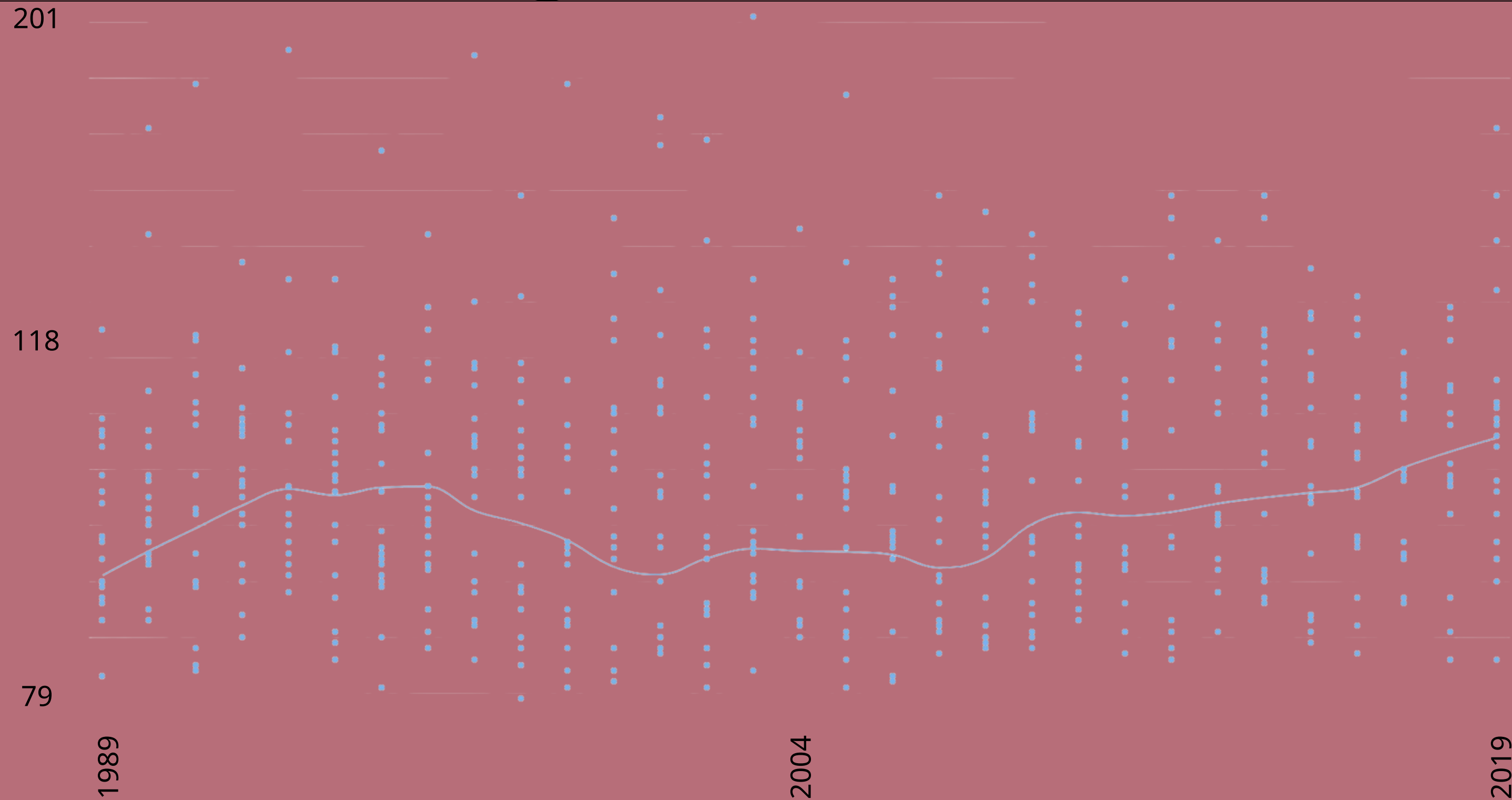
By this graph we can discern that most movies tend to be around 120' long, and there seems to be an abrupt stop after reaching around 150' of length, signifying that movies more than that are the exception



MPAA Ratings by Genre



Length of Movies Through the Years



From the graph we can discern that length of movies has, on average been increased by approximately 20 minutes in the last 30 years

Average Movie Gross by Month



The graph shows us that on average, April is the highest grossing month for new movie releases, followed by May and October

Releases per Month

113

72

8

January

February

March

April

May

June

July

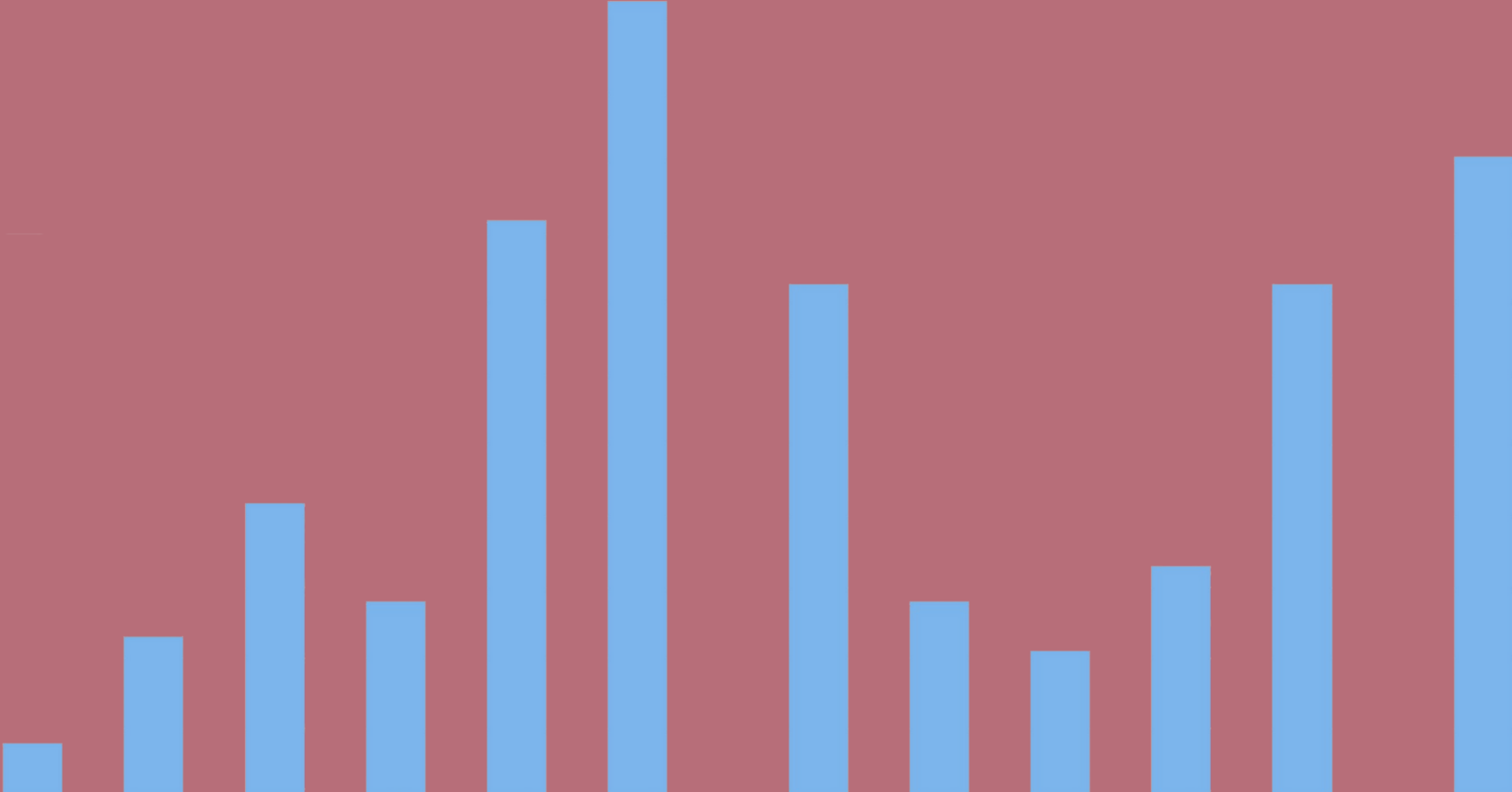
August

September

October

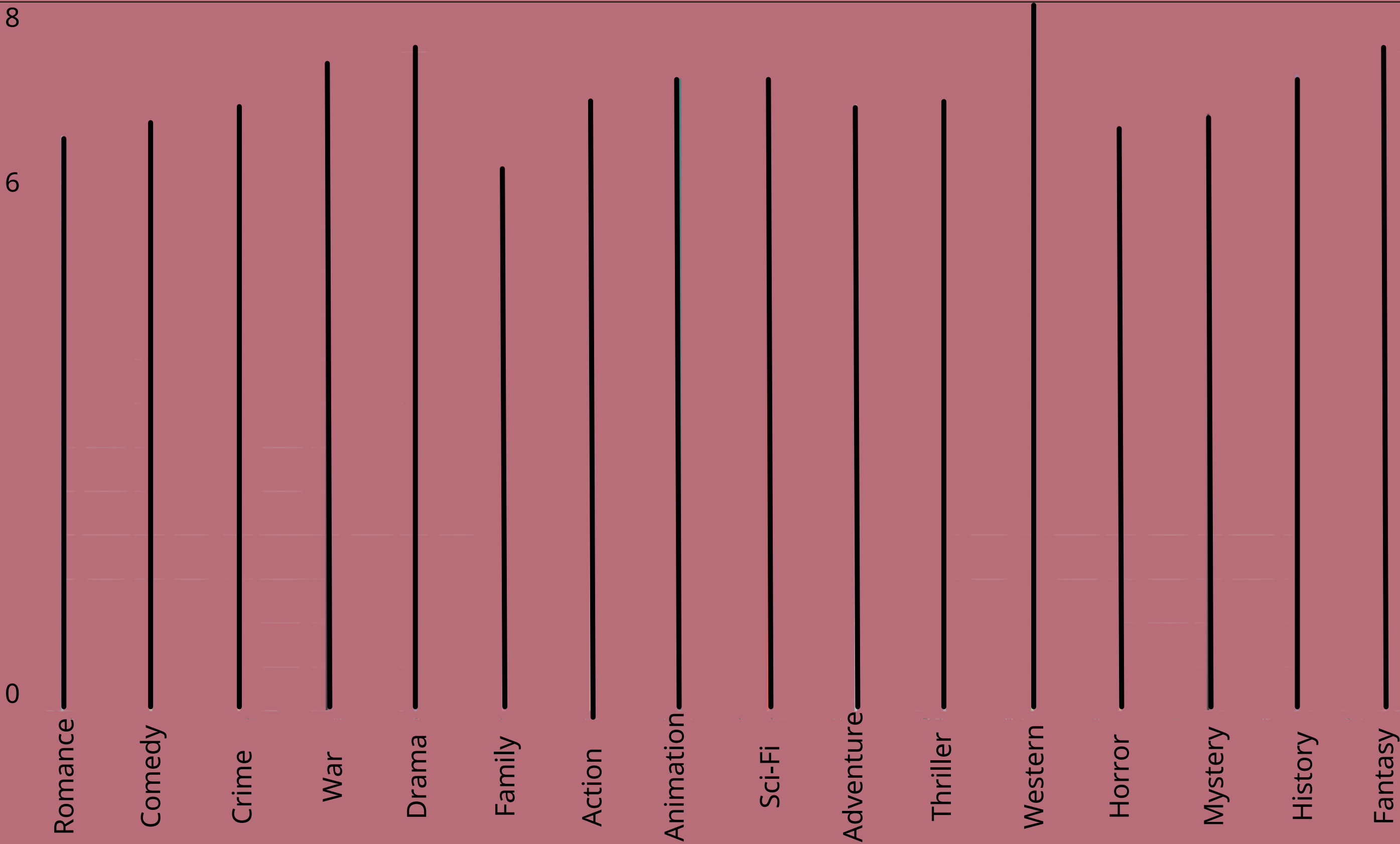
November

December



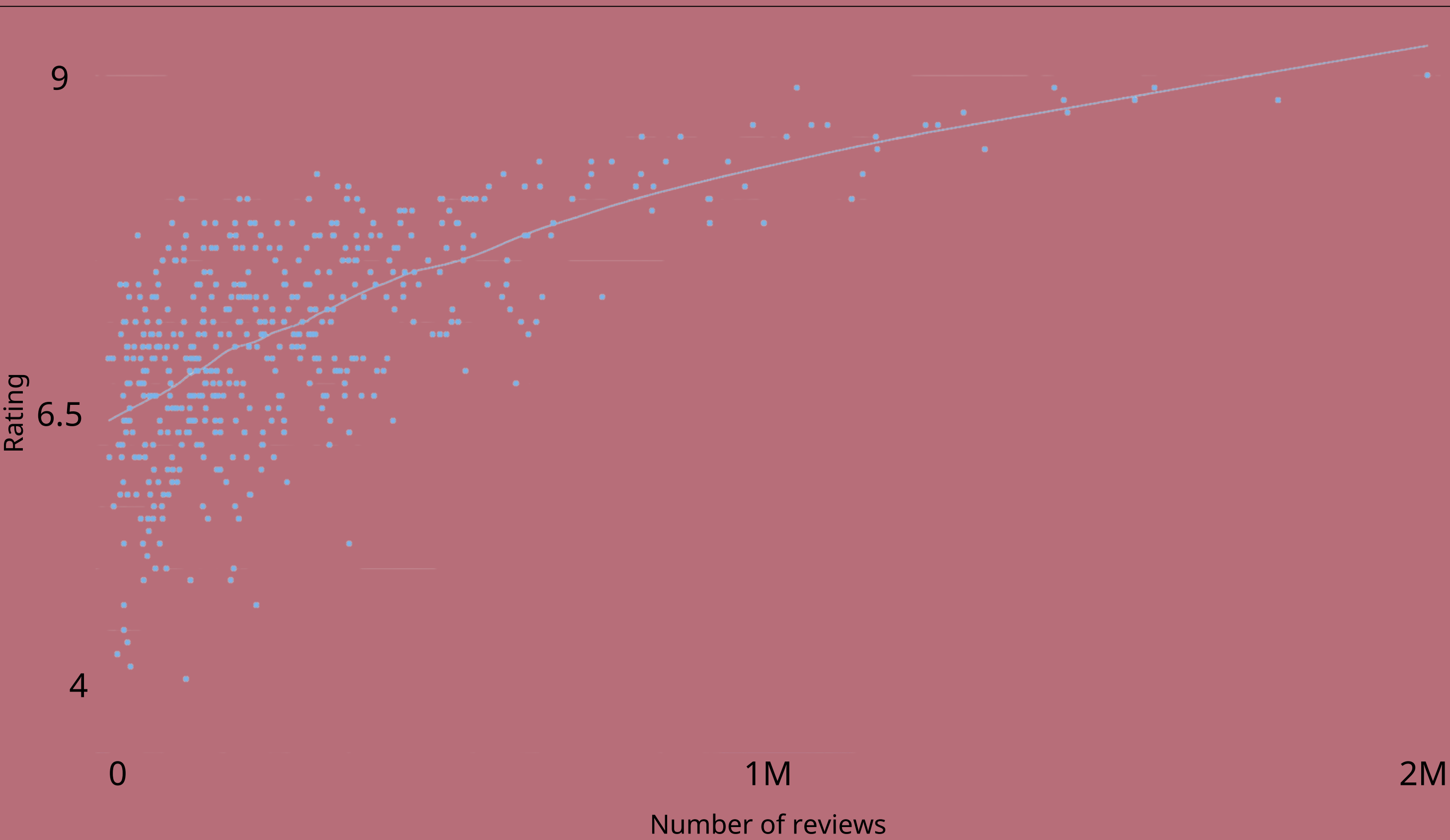
From the following graph we can see that most movie releases take place in June, December and May, respectively. From that we can extrapolate that most movies tend to be released during holiday season, such as summer and Christmas

Ratings per Genre



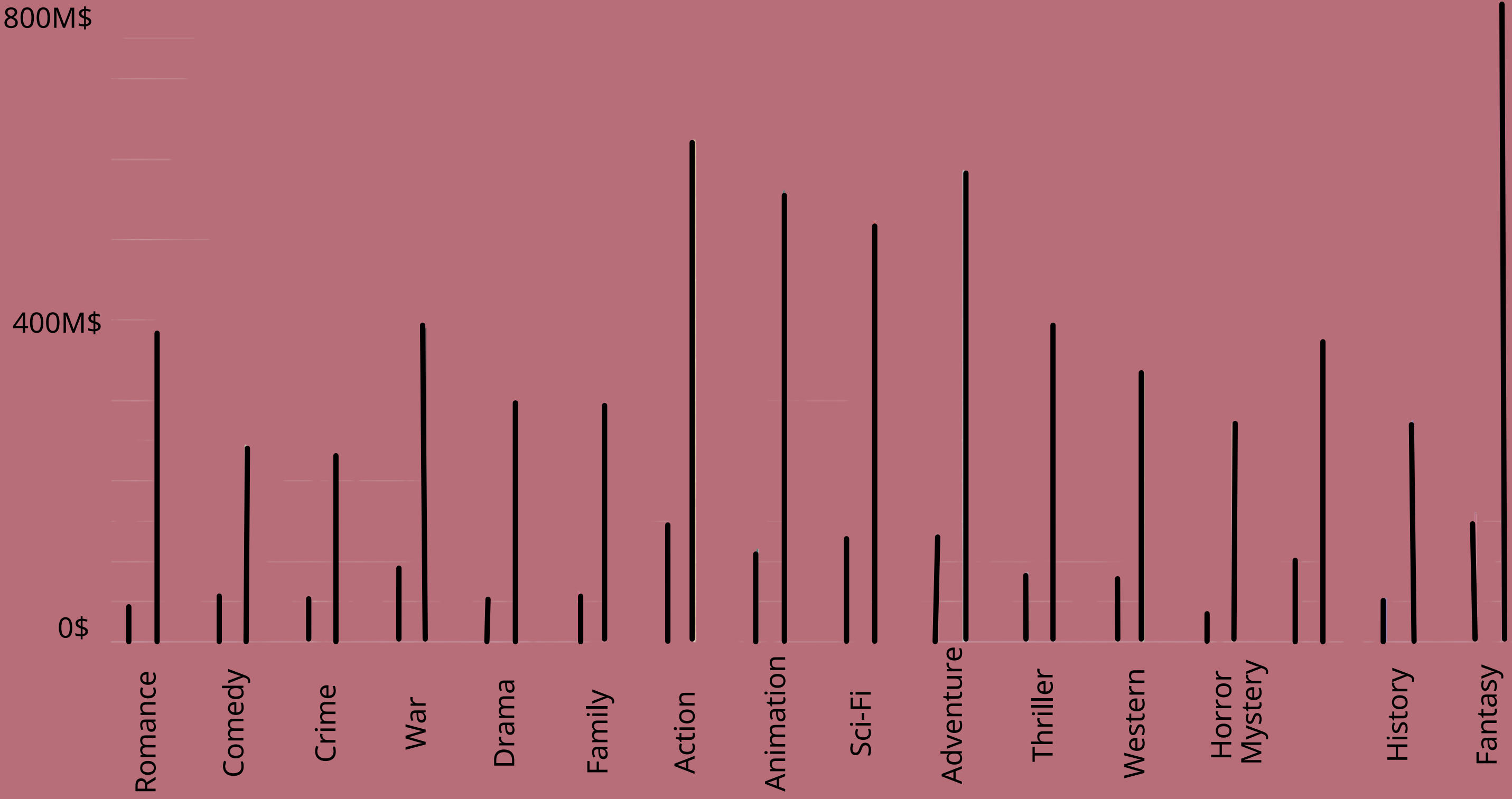
Breaking down the movie ratings in genre categories, we can realise that the highest rated movies tend, on average to be westerns, fantasy, drama and war movies. Compare that to the lowest rated, such as family, romance and horror

Ratings and No. of Reviews



By examining both the ratings as well as the number of reviews, we can discern a trend. The more reviewed a movie is, the higher its rating will be. Movies with more than 1M reviews tend to have a rating between 8 and 9

Average Return of Investment per Genre



We examine both the average gross and the average budget of each movie genre. From those we can calculate the RoI for each genre. The most "efficient" genres are romance, horror and drama, while the most "inefficient" ones are mystery, crime and sci-fi respectively