

Stat 210 Project

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Introduction and Data

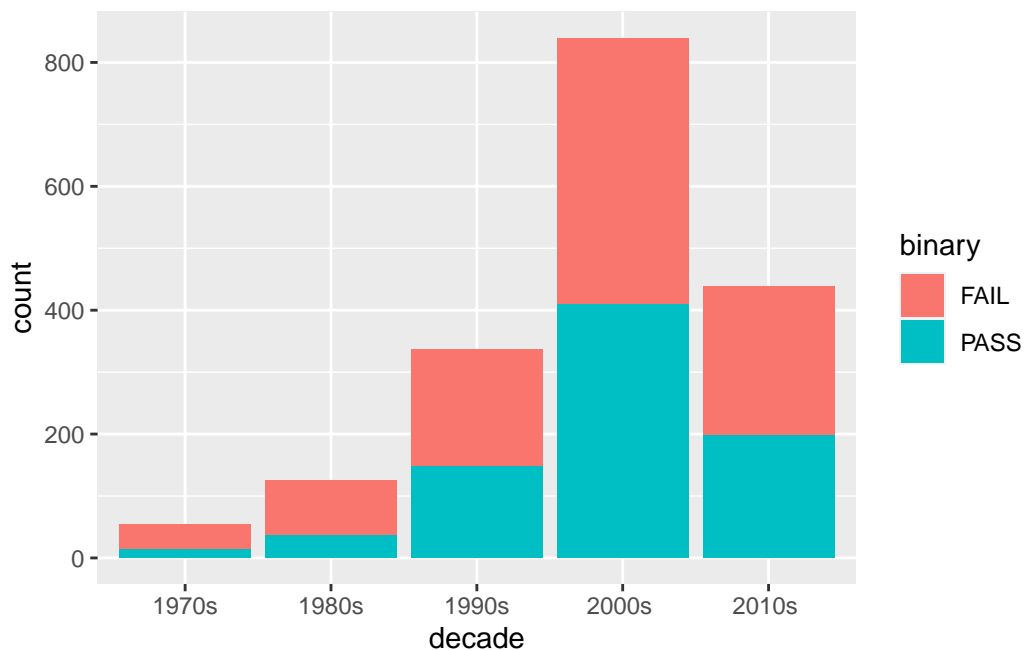
```
library(tidyverse)
library(ggfortify)
library(tidymodels)
library(ggplot2)
library(car)
library(leaps)
library(dplyr)
library(MASS)
library(lme4)
library(glmnet)
library(readr)
library(readr)
movies <- read_csv("movies.csv")
```

There has been recent discussion on adequation representation in film. The movie industry has changed a lot in the past couple of decades due to increased advocacy for diversity and inclusion. Over the years, we have seen more BIPOC representation in entertainment as well as gender identity and LGBTQ+ representation. Many in the film industry have also championed the increased representation of women in film. For a while Hollywood produced very little movies with female protagonists; let alone movies with appropriate representation of women (Goodman, 2017). But there has been recent progress in the recent years with an impressive increase in female lead movies in the 2010s; not only that but these films have achieved monetary success. In 2016 with, 29 percent of protagonists in the top 100 box-office hits were women (Goodman, 2017)

However, merely having female protagonists does not paint the full picture if whether a movie actually does a good job in female representation. Many have used the so-called Bechdel test to make this judgement. The Bechdel test is

Does the decade a movie was released predict whether it passes the bechdel test (logistic regression)

```
movies_decades <- movies %>%  
  mutate(decade= case_when(year < 1980 ~ '1970s' ,  
    1980<= year & 1990 > year ~ '1980s' ,  
    1990<= year & 2000 > year ~ '1990s' ,  
    2000<= year & 2010 > year ~ '2000s ' ,  
    2010 <= year ~ '2010s ' ))  
  
ggplot(data= movies_decades, mapping= aes(x=decade, fill=binary)) +  
  geom_bar()
```



##Sources

<https://www.nytimes.com/2017/02/21/movies/women-protagonists-movies-2016.html>

<https://www.tandfonline.com/doi/pdf/10.1080/14680777.2016.1234239?needAccess=true>

<https://fivethirtyeight.com/features/the-dollar-and-cents-case-against-hollywoods-exclusion-of-women/>