

Practical 4 - More on advanced graphics

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Getting started

We aim to practice on how to use `theme` and `facet` concepts in `ggplot2`, we'll use the same plots created in the previous practical session on advanced graphics.

Firstly, We should load the `ggplot2`

```
library("ggplot2")
```

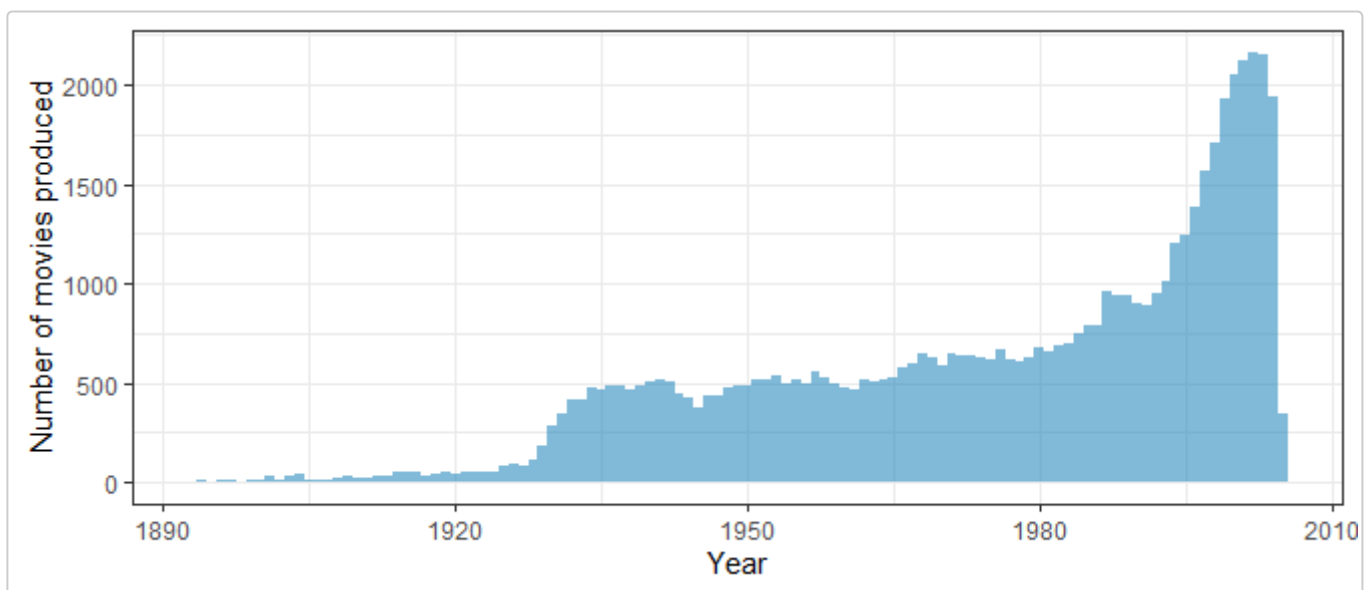
Next, we load the `movies` data set

```
# Details of the movies dataset can be displayed by:  
library(ggplot2movies)  
data(movies, package="ggplot2movies")  
?movies
```

When loading in data, it's a good idea to check some basic characteristics:

```
head(movies)
```

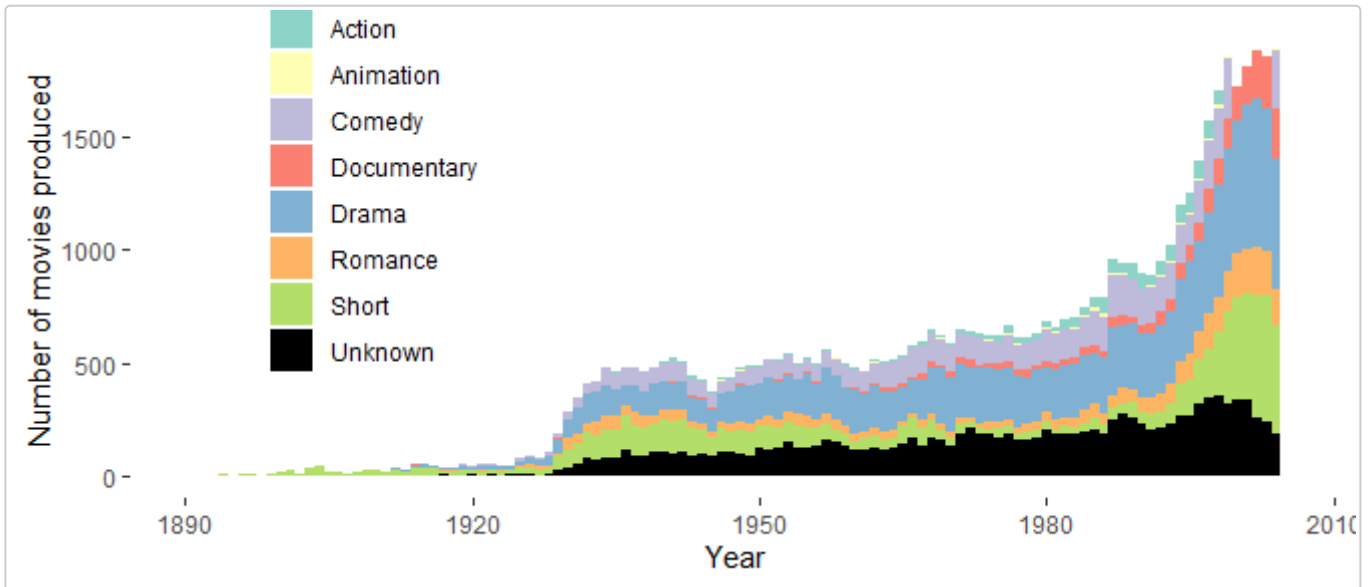
1. What is the number of movies produced per year? Use the black-and-white theme with this plot. Can you notice changes when you compare your answers, with and without the requested theme?



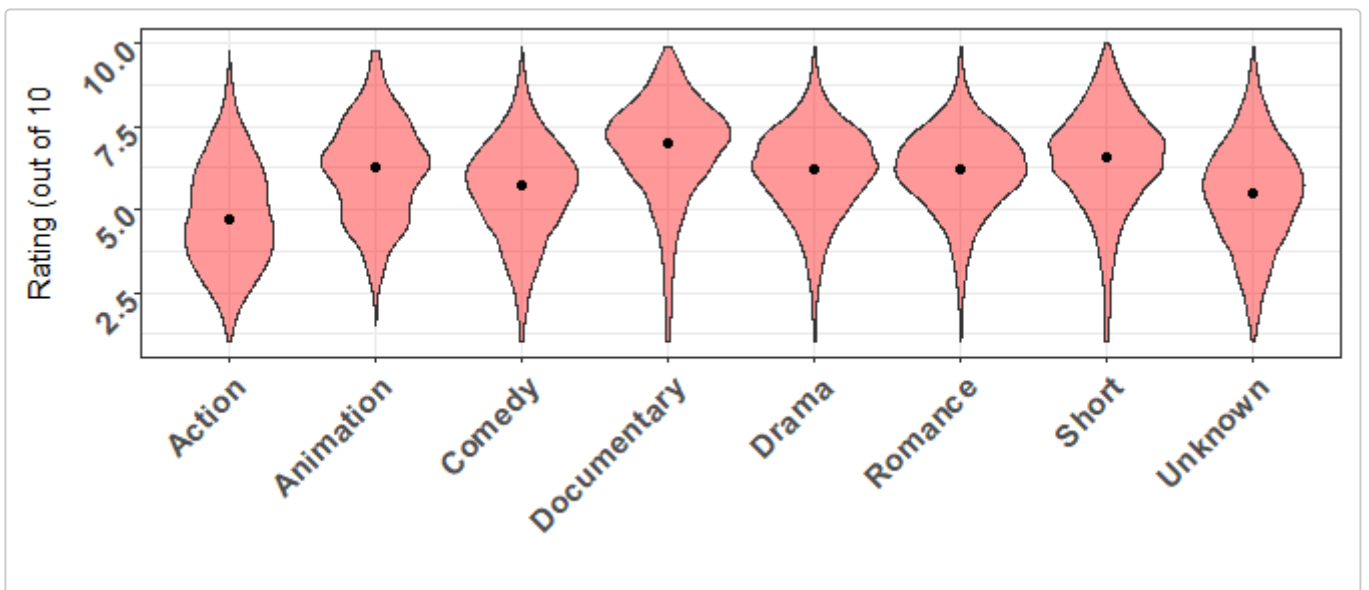
2. What is the number of movies produced per year per genre (action, animation ect)? Use the black-and-white theme customised to: relocate legend position;

remove legend background (if any); remove panel.grid; etc. (if you wish)

```
# TIP: You need first to create a genre variable:
genre <- rep(0, nrow(movies))
for(i in 18:24)
{
  genre[movies[,i]==1] <- names(movies)[i]
}; genre[genre==0] <- "Unknown"
movies$Genre <- genre
```



3. Is there a difference on rating depending on genre? Use the black-and-white theme customised to get the axis.text: bold, of 12 font size; with an angle of 45; with horizontal justification to right (hjust = 1)



4. Does the length of the movie change per genre? (you may use facet_wrap)

