

OSCARS.

# Demystifying the Acamedy Awards

Journey through the decades and explore the movie trends of the award-winning movies of the last century.

Discover movie truths and tropes from the lens of this industry's most prestigious award.

**Reynaldo Bonita Jr.**

2999804

# Introduction

## Why is this relevant? Why did I choose this?

Movies possess that innate power to consume us. It draws stories and insights from society, which it then reflects back to its source. Because of this power and its audience reach, the movie industry shapes worldviews by moving our hearts. It would do us good to understand and have a peek, lift the curtains to see some of the forces that shape this art form that can eventually shape society.

We have been told that this industry is “male and pale”, that is, filled with white men. Women on camera are underrepresented and many would consider misrepresented. Does this hold true for those behind the lens?

What better way to explore this than to look at the Academy award winning movies? The Academy Awards, established in 1928 recognizes the best and the brightest from the industry. Many consider the Oscars as the most prestigious award because it is the members of the Academy of Motion Picture Arts and Sciences who nominate and vote. It is prestigious because it is a recognition from one’s peers in the industry.

## Target audience and Objective

This visualization provides context about the people behind the lens. I hope to pique the interest of producers and directors in exploring gender parity in the movie industry. I hope to numbers behind the gender parity for Oscar winning movies. Movie critics and serious movie fans can benefit from this greater context about the industry too. It might help explain the reasons behind some themes in the industry, like how women are represented, why most heroes are men, and why women are mostly portrayed as accessories to the lives of men.

# Design

## Design Process.

Discussion of the 5 design sheets, detailing the alternatives considered and justification for choosing the final design.

## Summary of findings

- Popular Genres: Drama, Comedy, Documentary
- About 70% of the directors are “one-hit-wonders” only have one movie that won an award
  - Only 3 who won 11 awards: Steven Spielberg, John Ford, William Wyler
  - Only 2 who won 9 awards: Elia Kazan, James Aglar
  - Those who won 8 awards: Martin Scorsese, Joseph Barbera, George Stevens, Fred Zinneman, Frank Capra, Billy Wilder
  - Most directors of the award winning movies in the dataset diversify although there are a few who specialize on certain genres. Woody Allen, Billy Wilder and Frank Capra focus on making comedies while William Wyler and Elia Kazan focus on dramas.
  - All the top award winning directors though, are men.
- The movie industry is a male dominated field.
  - Among the directors and writers of the award winning movies of the last nine decades, only 11% are women. Among the directors only 6% are women and among the writers only 13% are women.
  - Over the years, the percentage of women never goes more than 17%.
    - Movies directed by women only started receiving recognition in the 1950s and steadily grew until it reached its peak in the 90s at almost 16%. We see more women as writers though, however, the proportion of women has been going down since the 1930 with its lowest point in the 70s at 9.6%. It steadily went up until the 90s then it has been decreasing over the last 2 decades.
  - 63% of award winning directors worked with only 1 woman
    - Peter Jackson’s worked with the most women in his award winning movies.

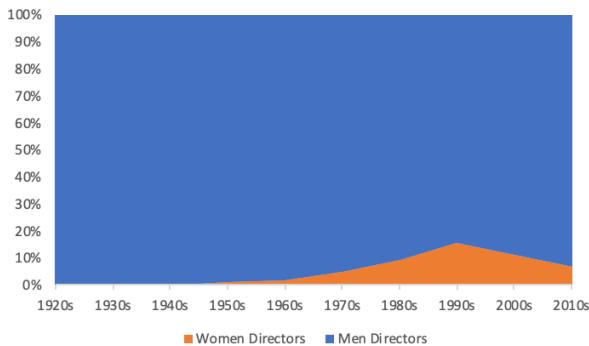
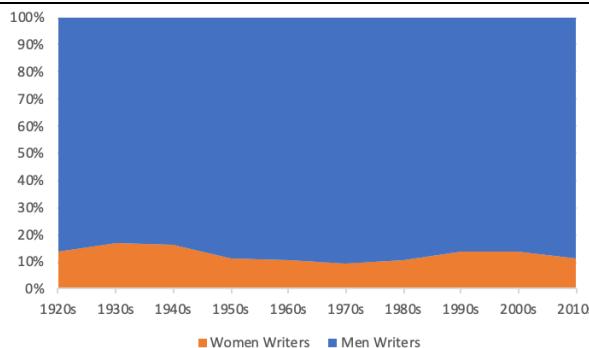
## Graph design Iterations

The following section shows the iteration of the designs.

<b>Question: Which genres win the most awards?</b>																																												
		Option 1: Bubble chart. Area does not seem to be a good way to compare values in this case. The arrangement of the bubbles does not indicate order or sequence, but only for aesthetical reasons. The bubbles are also not sorted																																										
		Option 2: Tree map. Although using area as an indicator of sequence is not ideal, the arrangement and proximity of the boxes relative to each other shows an arrangement from largest to smallest. It seems like																																										
<table border="1"> <thead> <tr> <th>Genre</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>Drama</td><td>30.56%</td></tr> <tr><td>Biography</td><td>14.08%</td></tr> <tr><td>Comedy</td><td>13.57%</td></tr> <tr><td>Adventure</td><td>8.98%</td></tr> <tr><td>Documentary</td><td>7.91%</td></tr> <tr><td>Action</td><td>7.04%</td></tr> <tr><td>Crime</td><td>5.87%</td></tr> <tr><td>Animation</td><td>5.77%</td></tr> <tr><td>Short</td><td>3.83%</td></tr> <tr><td>Family</td><td>0.77%</td></tr> <tr><td>Horror</td><td>0.51%</td></tr> <tr><td>Western</td><td>0.26%</td></tr> <tr><td>Romance</td><td>0.20%</td></tr> <tr><td>Musical</td><td>0.20%</td></tr> <tr><td>Mystery</td><td>0.10%</td></tr> <tr><td>Music</td><td>0.10%</td></tr> <tr><td>Film-Noir</td><td>0.10%</td></tr> <tr><td>War</td><td>0.05%</td></tr> <tr><td>Thriller</td><td>0.05%</td></tr> <tr><td>Fantasy</td><td>0.05%</td></tr> </tbody> </table>		Genre	Percentage	Drama	30.56%	Biography	14.08%	Comedy	13.57%	Adventure	8.98%	Documentary	7.91%	Action	7.04%	Crime	5.87%	Animation	5.77%	Short	3.83%	Family	0.77%	Horror	0.51%	Western	0.26%	Romance	0.20%	Musical	0.20%	Mystery	0.10%	Music	0.10%	Film-Noir	0.10%	War	0.05%	Thriller	0.05%	Fantasy	0.05%	Option 3: Bar chart. Length is best at indicating order. However, in this dataset, since the number of categories is not significant, it does not seem to be too difficult to tell which are the top ones. Also a bar chart is not as visually appealing as a bubble chart or tree map.
Genre	Percentage																																											
Drama	30.56%																																											
Biography	14.08%																																											
Comedy	13.57%																																											
Adventure	8.98%																																											
Documentary	7.91%																																											
Action	7.04%																																											
Crime	5.87%																																											
Animation	5.77%																																											
Short	3.83%																																											
Family	0.77%																																											
Horror	0.51%																																											
Western	0.26%																																											
Romance	0.20%																																											
Musical	0.20%																																											
Mystery	0.10%																																											
Music	0.10%																																											
Film-Noir	0.10%																																											
War	0.05%																																											
Thriller	0.05%																																											
Fantasy	0.05%																																											
<b>What are the trends over the years?</b>																																												

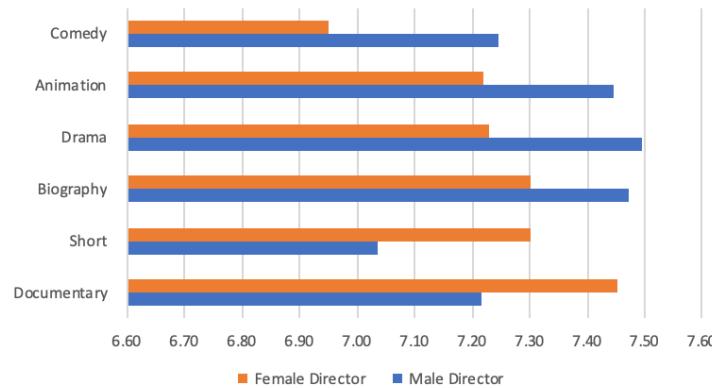
<p>Drama</p> <p>Time (year)</p>	<p><b>Option 1: Stream graph.</b> Since there are multiple categories whose value have to be shown over time, a stream graph seems to be a good option. Since the values add up every year, it seems ideal to stack them too. However, the data graphed here has too many bumps and does not show a clear trend.</p>																																																																																							
<p># of baby born</p> <p>Time (year)</p> <ul style="list-style-type: none"> <li>Drama</li> <li>Biography</li> <li>Documentary</li> <li>Comedy</li> <li>Animation</li> </ul>	<p><b>Option 2: Stacked area chart.</b> The features are very similar to a stream graph but the values starting at 0 seem to be more understandable and intuitive. However, the current data points has to many peaks and bumps and it is hard to see a trend.</p>																																																																																							
<p>Time (year)</p> <ul style="list-style-type: none"> <li>Western</li> <li>War</li> <li>Thriller</li> <li>Short</li> <li>Romance</li> <li>Mystery</li> <li>Musical</li> <li>Music</li> <li>Horror</li> <li>Film-Noir</li> <li>Fantasy</li> <li>Family</li> </ul>	<p><b>Option 3: Stacked area chart with the data points summarized per decade instead of plotting all the data points per year.</b> I decided to group the data points by decade and this made the graph more readable and understandable. One can identify the top three genres over the Oscar's history with relative ease compared to plotting every data point.</p>																																																																																							
<p><b>Who are the directors with the most award winning films?</b></p> <table border="1"> <thead> <tr> <th>Director</th> <th>Count of Title F*</th> <th>Avg. IMDb Rating</th> </tr> </thead> <tbody> <tr><td>Steven Spielberg</td><td>25</td><td>7.481</td></tr> <tr><td>Woody Allen</td><td>20</td><td>7.009</td></tr> <tr><td>Martin Scorsese</td><td>20</td><td>7.660</td></tr> <tr><td>Clint Eastwood</td><td>18</td><td>7.225</td></tr> <tr><td>Ridley Scott</td><td>18</td><td>7.071</td></tr> <tr><td>Tim Burton</td><td>18</td><td>6.931</td></tr> <tr><td>Steve McQueen</td><td>18</td><td>6.796</td></tr> <tr><td>Spike Lee</td><td>18</td><td>6.569</td></tr> <tr><td>Renny Harlin</td><td>18</td><td>5.747</td></tr> <tr><td>Oliver Stone</td><td>18</td><td>6.950</td></tr> <tr><td>Sam Raimi</td><td>15</td><td>6.908</td></tr> <tr><td>Rob Howard</td><td>15</td><td>6.931</td></tr> <tr><td>Brian De Palma</td><td>15</td><td>5.682</td></tr> <tr><td>Robert Rodriguez</td><td>15</td><td>6.638</td></tr> <tr><td>Michael Bay</td><td>15</td><td>6.915</td></tr> <tr><td>John Carpenter</td><td>15</td><td>6.408</td></tr> <tr><td>Joel Schumacher</td><td>15</td><td>6.577</td></tr> <tr><td>Barry Levinson</td><td>15</td><td>6.000</td></tr> <tr><td>Wes Craven</td><td>15</td><td>6.792</td></tr> <tr><td>Tarantino</td><td>15</td><td>6.033</td></tr> <tr><td>Shawn Levy</td><td>12</td><td>6.825</td></tr> <tr><td>Richard Donner</td><td>12</td><td>6.765</td></tr> <tr><td>Peter Jackson</td><td>12</td><td>6.567</td></tr> <tr><td>Kevin Smith</td><td>12</td><td>6.683</td></tr> <tr><td>Brian De Palma</td><td>12</td><td>7.127</td></tr> <tr><td>Stephen Frears</td><td>12</td><td>7.018</td></tr> <tr><td>Rob Reiner</td><td>12</td><td>5.732</td></tr> <tr><td>Rob Cohen</td><td>12</td><td>7.046</td></tr> </tbody> </table>	Director	Count of Title F*	Avg. IMDb Rating	Steven Spielberg	25	7.481	Woody Allen	20	7.009	Martin Scorsese	20	7.660	Clint Eastwood	18	7.225	Ridley Scott	18	7.071	Tim Burton	18	6.931	Steve McQueen	18	6.796	Spike Lee	18	6.569	Renny Harlin	18	5.747	Oliver Stone	18	6.950	Sam Raimi	15	6.908	Rob Howard	15	6.931	Brian De Palma	15	5.682	Robert Rodriguez	15	6.638	Michael Bay	15	6.915	John Carpenter	15	6.408	Joel Schumacher	15	6.577	Barry Levinson	15	6.000	Wes Craven	15	6.792	Tarantino	15	6.033	Shawn Levy	12	6.825	Richard Donner	12	6.765	Peter Jackson	12	6.567	Kevin Smith	12	6.683	Brian De Palma	12	7.127	Stephen Frears	12	7.018	Rob Reiner	12	5.732	Rob Cohen	12	7.046	<p><b>Option 1: Stacked Bar charts.</b> The best way to show the order is through length, and the bar chart is a classic representation of that. To indicate the genres of the movies, color-coding the bars to indicate the genre seems ideal.</p>
Director	Count of Title F*	Avg. IMDb Rating																																																																																						
Steven Spielberg	25	7.481																																																																																						
Woody Allen	20	7.009																																																																																						
Martin Scorsese	20	7.660																																																																																						
Clint Eastwood	18	7.225																																																																																						
Ridley Scott	18	7.071																																																																																						
Tim Burton	18	6.931																																																																																						
Steve McQueen	18	6.796																																																																																						
Spike Lee	18	6.569																																																																																						
Renny Harlin	18	5.747																																																																																						
Oliver Stone	18	6.950																																																																																						
Sam Raimi	15	6.908																																																																																						
Rob Howard	15	6.931																																																																																						
Brian De Palma	15	5.682																																																																																						
Robert Rodriguez	15	6.638																																																																																						
Michael Bay	15	6.915																																																																																						
John Carpenter	15	6.408																																																																																						
Joel Schumacher	15	6.577																																																																																						
Barry Levinson	15	6.000																																																																																						
Wes Craven	15	6.792																																																																																						
Tarantino	15	6.033																																																																																						
Shawn Levy	12	6.825																																																																																						
Richard Donner	12	6.765																																																																																						
Peter Jackson	12	6.567																																																																																						
Kevin Smith	12	6.683																																																																																						
Brian De Palma	12	7.127																																																																																						
Stephen Frears	12	7.018																																																																																						
Rob Reiner	12	5.732																																																																																						
Rob Cohen	12	7.046																																																																																						
	<p><b>Option 2: One-hit-wonders</b></p>																																																																																							
<p><b>What is the gender parity behind the lens of the Award Winning Films?</b></p> <table border="1"> <thead> <tr> <th>Role</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>director</td><td>94%</td></tr> <tr><td>writer</td><td>87%</td></tr> <tr><td>Overall</td><td>89% Male, 11% Female</td></tr> </tbody> </table>	Role	Percentage	director	94%	writer	87%	Overall	89% Male, 11% Female	<p><b>Option 1: Pie chart.</b> Since there are only two categories for this graph, showing the percentages is best done through a pie chart.</p>																																																																															
Role	Percentage																																																																																							
director	94%																																																																																							
writer	87%																																																																																							
Overall	89% Male, 11% Female																																																																																							

<h3>Which genres have the most women? Which have the least?</h3> <table border="1"> <thead> <tr> <th>Genre</th> <th>percentage_women</th> <th>percentage_men</th> </tr> </thead> <tbody> <tr><td>War</td><td>~1%</td><td>~99%</td></tr> <tr><td>Thriller</td><td>~1%</td><td>~99%</td></tr> <tr><td>Fantasy</td><td>~1%</td><td>~99%</td></tr> <tr><td>Horror</td><td>~1%</td><td>~99%</td></tr> <tr><td>Action</td><td>~2%</td><td>~98%</td></tr> <tr><td>Crime</td><td>~2%</td><td>~98%</td></tr> <tr><td>Family</td><td>~2%</td><td>~98%</td></tr> <tr><td>Western</td><td>~2%</td><td>~98%</td></tr> <tr><td>Comedy</td><td>~2%</td><td>~98%</td></tr> <tr><td>Animation</td><td>~2%</td><td>~98%</td></tr> <tr><td>Adventure</td><td>~2%</td><td>~98%</td></tr> <tr><td>Drama</td><td>~2%</td><td>~98%</td></tr> <tr><td>Film-Noir</td><td>~2%</td><td>~98%</td></tr> <tr><td>Short</td><td>~2%</td><td>~98%</td></tr> <tr><td>Romance</td><td>~2%</td><td>~98%</td></tr> <tr><td>Biography</td><td>~2%</td><td>~98%</td></tr> <tr><td>Musical</td><td>~2%</td><td>~98%</td></tr> <tr><td>Music</td><td>~2%</td><td>~98%</td></tr> <tr><td>Documentary</td><td>~20%</td><td>~80%</td></tr> </tbody> </table>	Genre	percentage_women	percentage_men	War	~1%	~99%	Thriller	~1%	~99%	Fantasy	~1%	~99%	Horror	~1%	~99%	Action	~2%	~98%	Crime	~2%	~98%	Family	~2%	~98%	Western	~2%	~98%	Comedy	~2%	~98%	Animation	~2%	~98%	Adventure	~2%	~98%	Drama	~2%	~98%	Film-Noir	~2%	~98%	Short	~2%	~98%	Romance	~2%	~98%	Biography	~2%	~98%	Musical	~2%	~98%	Music	~2%	~98%	Documentary	~20%	~80%	<p>Option 1: Stacked bar chart. Using this shows both the trend and its proportion and gives the viewer a sense of how small it is, and the comparison of the different proportions per genre.</p>
Genre	percentage_women	percentage_men																																																											
War	~1%	~99%																																																											
Thriller	~1%	~99%																																																											
Fantasy	~1%	~99%																																																											
Horror	~1%	~99%																																																											
Action	~2%	~98%																																																											
Crime	~2%	~98%																																																											
Family	~2%	~98%																																																											
Western	~2%	~98%																																																											
Comedy	~2%	~98%																																																											
Animation	~2%	~98%																																																											
Adventure	~2%	~98%																																																											
Drama	~2%	~98%																																																											
Film-Noir	~2%	~98%																																																											
Short	~2%	~98%																																																											
Romance	~2%	~98%																																																											
Biography	~2%	~98%																																																											
Musical	~2%	~98%																																																											
Music	~2%	~98%																																																											
Documentary	~20%	~80%																																																											
<h3>What are the trends over the years?</h3>	<p>Option 1. Line chart. Like the graphs about the genres over the years, showing the annual data points for percentage of women in the movie industry seems messy and unorganized. The bumps and the peaks make it hard to see a trend.</p>																																																												
<table border="1"> <thead> <tr> <th>Decade</th> <th>Average of percentage_women_directors</th> <th>Average of percentage_women_writers</th> </tr> </thead> <tbody> <tr><td>1920s</td><td>0.00%</td><td>~14.0%</td></tr> <tr><td>1930s</td><td>0.00%</td><td>~17.0%</td></tr> <tr><td>1940s</td><td>~0.5%</td><td>~16.5%</td></tr> <tr><td>1950s</td><td>~1.5%</td><td>~11.0%</td></tr> <tr><td>1960s</td><td>~2.5%</td><td>~11.0%</td></tr> <tr><td>1970s</td><td>~5.0%</td><td>~10.0%</td></tr> <tr><td>1980s</td><td>~10.0%</td><td>~11.0%</td></tr> <tr><td>1990s</td><td>~16.0%</td><td>~14.0%</td></tr> <tr><td>2000s</td><td>~14.0%</td><td>~14.0%</td></tr> <tr><td>2010s</td><td>~7.0%</td><td>~12.0%</td></tr> </tbody> </table>	Decade	Average of percentage_women_directors	Average of percentage_women_writers	1920s	0.00%	~14.0%	1930s	0.00%	~17.0%	1940s	~0.5%	~16.5%	1950s	~1.5%	~11.0%	1960s	~2.5%	~11.0%	1970s	~5.0%	~10.0%	1980s	~10.0%	~11.0%	1990s	~16.0%	~14.0%	2000s	~14.0%	~14.0%	2010s	~7.0%	~12.0%	<p>Option 2. Line chart with the data grouped and summarized per decade. It is easier to notice the trends when the dataset is grouped per decade. The lines are smoother and less irregular. However, this graph does not clearly show how small these percentages are, and scaling the Y axis from 0 to 18% may seem to overstate the changes in the proportion of women in the industry. This graph can be used to show an optimistic side of the problem, where we say that there is change and improvement, even if it is incremental.</p>																											
Decade	Average of percentage_women_directors	Average of percentage_women_writers																																																											
1920s	0.00%	~14.0%																																																											
1930s	0.00%	~17.0%																																																											
1940s	~0.5%	~16.5%																																																											
1950s	~1.5%	~11.0%																																																											
1960s	~2.5%	~11.0%																																																											
1970s	~5.0%	~10.0%																																																											
1980s	~10.0%	~11.0%																																																											
1990s	~16.0%	~14.0%																																																											
2000s	~14.0%	~14.0%																																																											
2010s	~7.0%	~12.0%																																																											



#### Are movies directed by women better than those directed by men?

	Male Director	Female Director
IMDb Rating	7.37	7.36

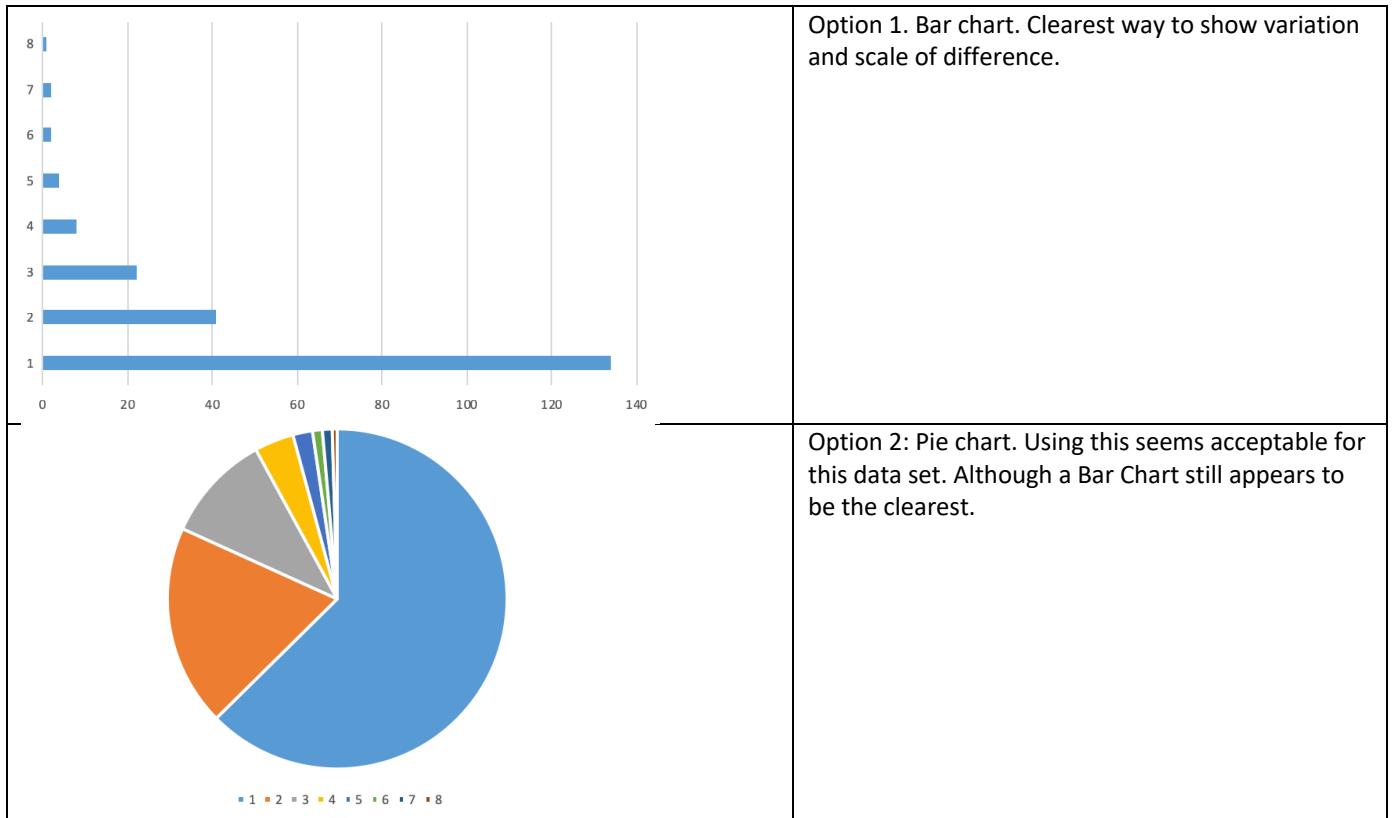


Option 3. Stacked area chart. Using this shows both the trend and its proportion and gives the viewer a sense of how small it is, and how little the improvement is.

#### How common is it for directors to work with? Which directors worked with the most number of women?

Option 1: Table. For this data point, there seems to be no other way to present it but as a table or as text. The averages of the rating for male-directed vs female-directed movies are very close to each other. In this visualization, I only settled for averaging but other statistical methods could be used for comparison and for providing a broader context on the similarity or difference between the critical acclaim of the films by both genders.

Option 2: Bar Chart. The idea here is to communicate that there is very little difference between the critical rating of male-directed versus female-directed films.



## Implementation

Implementation was done using D3. Despite the challenges and the difficulty of using this tool, it seemed appropriate because of its aesthetical flexibility. Since the topic is heavily linked to the performing and visual arts, the visualizations should be done using D3, HTML and CSS to have a better control of the design. It was extremely challenging and I felt like I failed to execute the ideas that I had in mind. Adding labels, legend and managing colors were especially difficult to do in D3. However, I showed the essential graphs.



OSCAR<sup>®</sup>

MENU 

# Demystifying the Acamedy Awards

Journey through the decades and explore the movie trends of the award-winning movies of the last century.

Discover movie truths and tropes from the lens of this industry's most prestigious award.

- GENRES  
what's popular

- DIRECTORS  
who's good

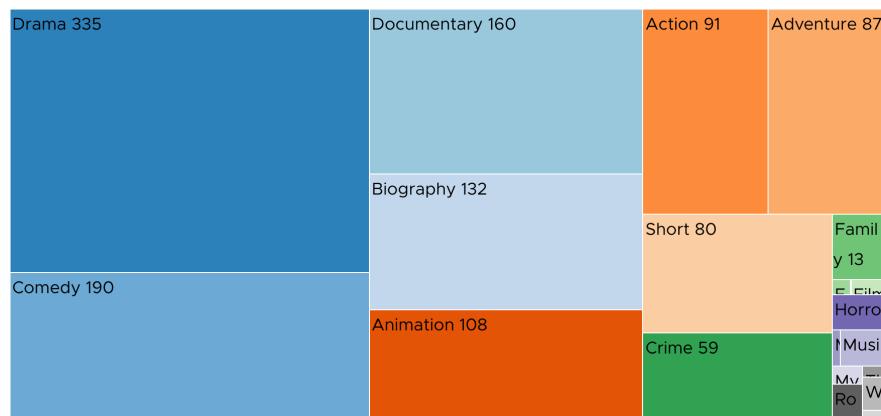
- WOMEN  
behind the lens



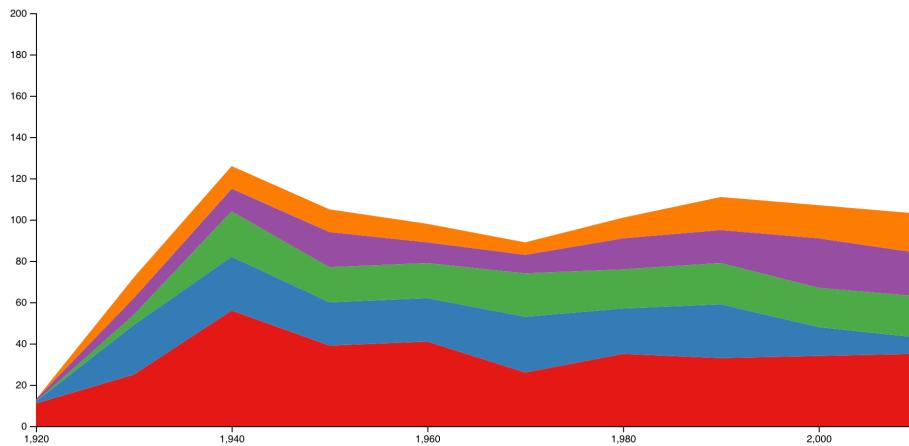
# Drama, Comedy and Documentary films bag the most Oscars since the 1920s.

Drama films unsurprisingly overtake every other movie genre since the 1920s. About one out of three Oscar awards are given to Drama films. What's surprising is documentaries rank third. Many directors take pride in producing documentaries. Outside the usual pressures of making money and entertainment, directors consider the creative freedom and exposing nobler themes.

Drama films unsurprisingly overtake every other movie genre since the 1920s. About one out of three Oscar awards are given to Drama films. What's surprising is documentaries rank third. Many directors take pride in producing documentaries. Outside the usual pressures of making money and entertainment, directors consider the creative freedom and exposing nobler themes.



Drama's (red) lead is consistent through the decades, followed by Comedy (blue) and Documentary (green).



/ WHO'S GOOD



## William Wyler, Steven Spielberg and John Ford made the most award-winning films.

Followed by James Algar and Elia Kazan who each had 9 award-winning films.



John Ford

In over 50 years, 11 of John Ford's



Steven Spielberg

Very few directors enjoy the honor of



William Wyler

Wyler is a three-time winner of the

He is known for How Green Was My Valley (1941), Stagecoach (1939), The Searchers (1956), and The Man Who Shot Liberty Valance (1962).



**James Algar**

His work with Walt Disney productions for 43 years brought us the classics like Fantasia (1940) and Bambi (1942).

E.T. the Extra-Terrestrial (1982), Jurassic Park (1993), and Saving Private Ryan (1998). He was awarded Best Director twice.



**Elia Kazan**

Among his wide body of work, 21 were nominated to the Oscars and 9 of them won. He was awarded as Best Director twice too. He is known for A Streetcar Named Desire (1951), On the Waterfront (1954), and East of Eden (1955).

winning Best Picture for all of them too.



NEXT

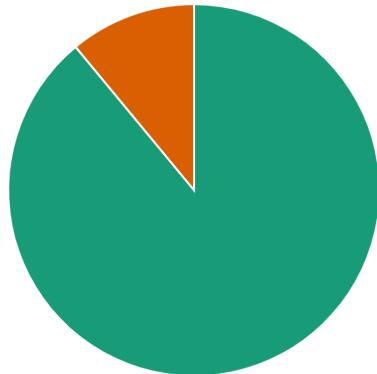
/ WOMEN BEHIND THE LENS

## The hand that makes film is 'pale and male'. Men out number the women in every category of the Academy Awards.

Female directors are a rare sight. It goes without saying that all the top directors are male. Only 6 out of 100 directors are women. However, we see more women as screenwriters. About 13 out of 100 writers are women. Overall, only about 1 in 10 who work in key roles for the film industry are women.



Only 6 out of 100 directors are women. However, we see more women as screenwriters.  
About 13 out of 100 writers are women. Overall, only about 1 in 10 who work in key roles for the film industry are women.



OVERALL

DIRECTORS

WRITERS

Lamp



**Kathryn Bigelow**  
First Woman to win Best Director.  
"The Hurt Locker", 2010



localhost:8080/design/transcend/images/portfolio/gallery/g-lamp.jpg

/ IN 91 YEARS



## Women struggle to find a place in the film industry, much less recognition.

4

Nominated for Best Director

1

Awarded Best Director

1133

Nominated

12

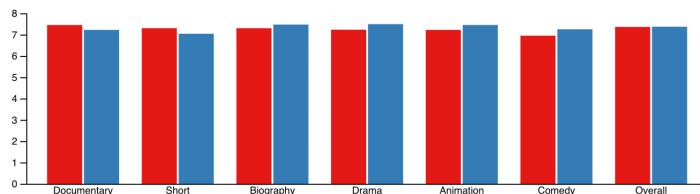
Average Nominations Annual

/ JOB WELL DONE



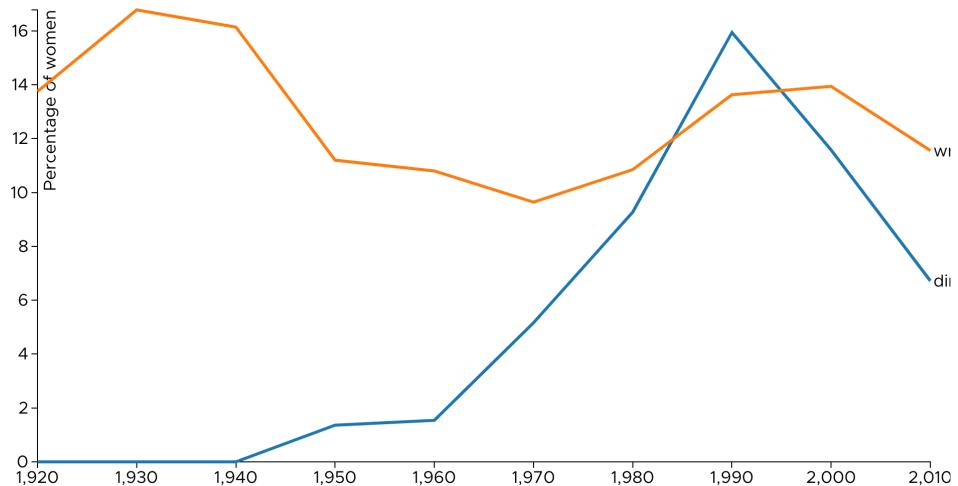
## Women do as good a job as men.

Female-directed award-winning films have an average IMDb rating of 7.36 while male-directed films have 7.37. When grouped per genre, female-directed films have a slightly higher rating of 7.3 and 7.4 for Short and Documentary films respectively, while male-directed films have a rating of 7.1 and 7.2 for the same categories. Men do better for Comedy, Animation, Drama and Biography films.



The number of female directors was increasing from the 60s to the 90s. However, despite

male directors. This still results in a lower percentage of women as directors. Writers, on the other hand, have generally kept a stable number of women. However, there was an increase in the number of men in the field from the 50s to 80s resulting in a lower percentage of women in the field.



#### / WORKING TOGETHER

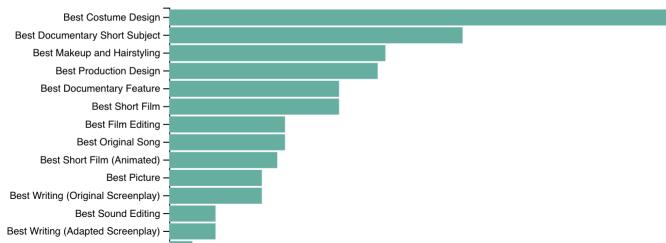
**Most of the male award-winning directors have at least one film that was nominated for or won an Oscar.**

About 6 out of 10 directors have worked have at least one film that was nominated for or won an Oscar. Twenty percent have worked with two and 10% worked with three women. It's worth noting that Peter Jackson had the most instances of working with women that earned a nomination or an Academy Award.



# Women are still under-represented in the other awards.

Women get the most nominations for Best Costume Design (218), Best Production Design (143) and Best Documentary Feature (110). They received the most number of wins for Best Costume Design (65), Best Documentary Short Subject (38) and Best Makeup and Hairstyling (28). However, no woman was ever awarded Best Cinematography yet.



## Conclusion

### Summary of findings.

This visualization explored the trends in Award Winning movies from 1927 to 2018. It showed the popular genres, the prolific directors and their works. Most importantly, it explored the gender parity in the industry.

### Reflection

**What did I learn.** Exploring and investigating a subject that was genuinely interesting for me had its ups and downs. Among the advantages is a strong drive for discovery and understanding. I find myself wanting to get to the bottom of things. On the other hand, among the disadvantages is finding it hard to stop looking. As I eventually realized, the problem of gender-parity in the movie industry is multi-faceted and cannot be explained by what is available in the IMDb database. For example, to assess the effects of the number of women behind the lens to the representation of women in on screen, one can gather data on the number of women in leading roles, or the proportion of women versus men speaking, or more importantly, what they talk about (women in films rarely talk to each other, and when they do, it's usually about a man). Gathering data about these requires one to watch the films. Although there are several datasets available about this, and several researches done about this, the information is not standardized and uniform. Although Google is said to be developing a way to analyze film content, at the moment it is hard to scale gathering and maintaining such a dataset.

Furthermore, I find the lectures about the various chart types insightful, especially the less common ones. Even if I did not get to use them in my visualization, I appreciate knowing that there are other ways to represent hierarchical, spatial and temporal data. I am also quite satisfied that relatively simple graphs were enough to communicate the insights I from the dataset I chose. I felt that choosing a more visually complex graph can distract the user from understanding the insights I want to communicate.

Moreover, I can say that I learned a lot on the technical side of building the visualization. I was happy to take this opportunity to dabble with front-end programming. Design is one of the areas I am most interested in. However, I still found it difficult to execute the visualization via D3. Coming from an object-oriented background in programming, the shift to function-oriented programming was difficult for me. I struggled with learning how

Javascript works and I find my understanding to be half-baked. However, the final project served as a good learning ground to build something meaningful under a strict and limited timeline.

**What would I have done differently.** One of the key things I learned from doing the data exploration project is to refrain from being myopic on the technical details of the project. I realized that the topic is vast and I can easily get lost in the depth and breadth of information about this industry. What I did in this visualization project was to peg my analysis on key questions and the key findings. This guided my research and prevented me from going into rabbit holes in the Internet.

Furthermore, I had an extremely limited technical background in the technical execution of the design, especially in D3, Javascript, HTML and CSS. I knew that my technical abilities in D3 might not be sufficient to deliver the kinds of graphs I wanted to do. To balance putting excessive pressure on myself and actually finishing the assignment, I set a *minimum viable product* which is sufficient to communicate the insights and a *shot to the moon* version of the visualization. I would have wanted to spend more time diving deep into D3.

## References

Jones, E. (2019). *Why don't superhero films win awards?*. *Bbc.com*. Retrieved 28 April 2019, from <http://www.bbc.com/culture/story/20180306-why-dont-superhero-films-win-awards>

Littlejohn, G. (2019). *What's the difference between the Golden Globes and the Oscars and why are the Academy Awards more prestigious?*. *The Sun*. Retrieved 28 April 2019, from <https://www.thesun.co.uk/tvandshowbiz/2589715/oscars-golden-globes-difference-academy-awards-prestigious/>

Robb, D. (2018). *U.S. Film Industry Topped \$43 Billion In Revenue Last Year, Study Finds, But It's Not All Good News*. *Deadline*. Retrieved 27 April 2019, from <https://deadline.com/2018/07/film-industry-revenue-2017-ibisworld-report-gloomy-box-office-1202425692/>

## Appendix