

Rotten Tomatoes

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Are Movies Getting Better?

Our analysis focussed on lists of movies from Rotten Tomatoes giving the top 100 movies in any given year. We took the most recent 20 of these lists with their critic scores and number of reviews in order to ask the following questions: Have the scores of movies increased over time? If so, why? Does the number of reviews come into play? Audience score? how do movies with a 100% critic score fare in other categories?

Our goal in this analysis is not to definitively answer if movies have gotten better, but to see if there is statistical backing to the trend of recent movies getting high scores. Are the critics giving higher scores? Are audiences getting more involved in scoring online?

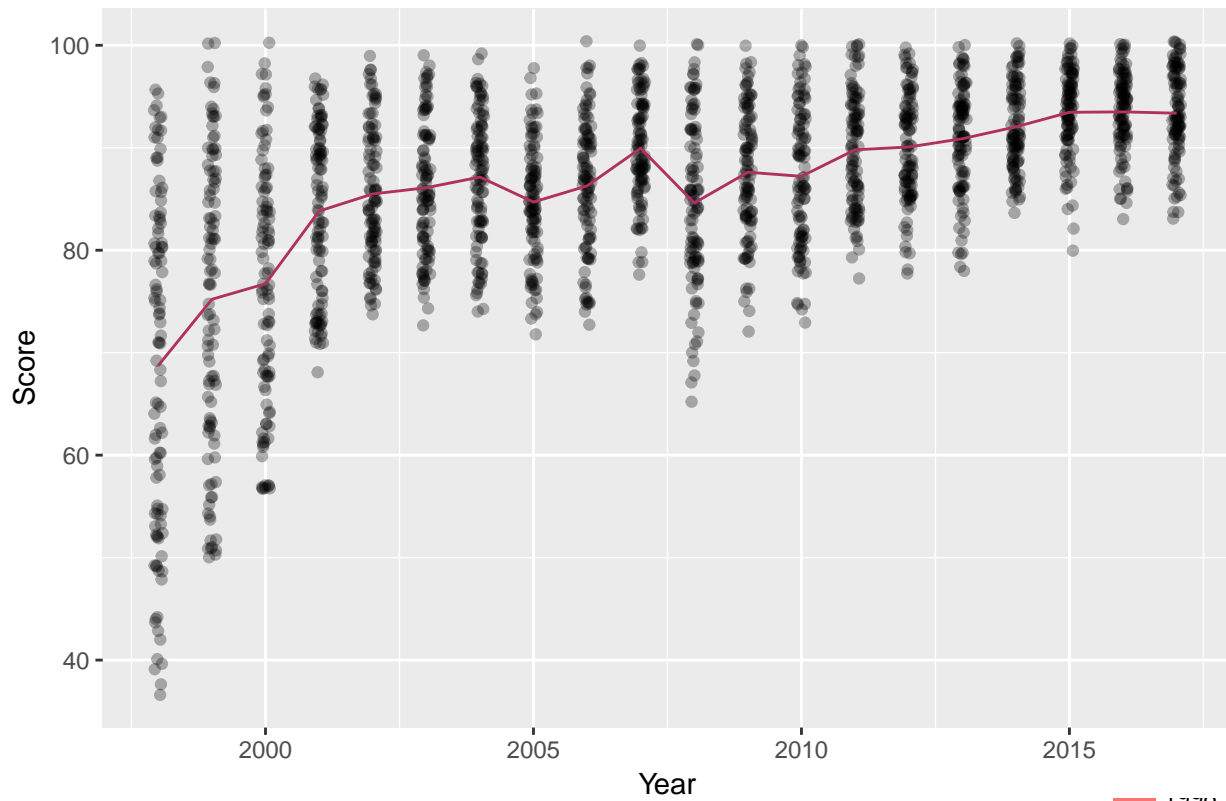
Are movies getting better?

Our preliminary graph shows that the average score of films has gone up over the past 20 years. This line graph is simply the average score per year, connected to show the basic trend. The points show each individual score, with a slight jitter added for visibility.

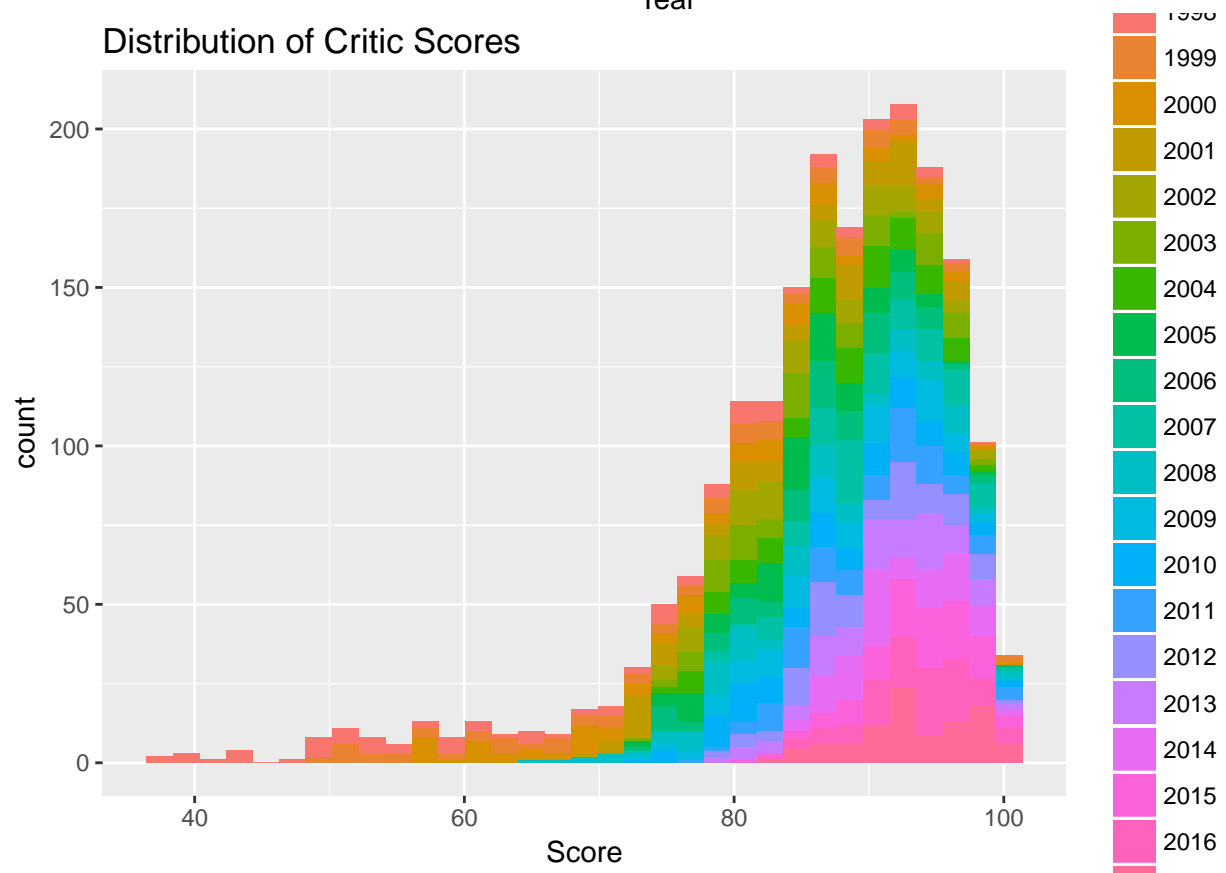
Next, we have the distribution of critic scores, where we can see the majority of films lie between 80 and 100. The movies below 80 tend to be from before 2010, with the lowest score in 1998.

The density plot below shows similar information, but with lines and clearer data.

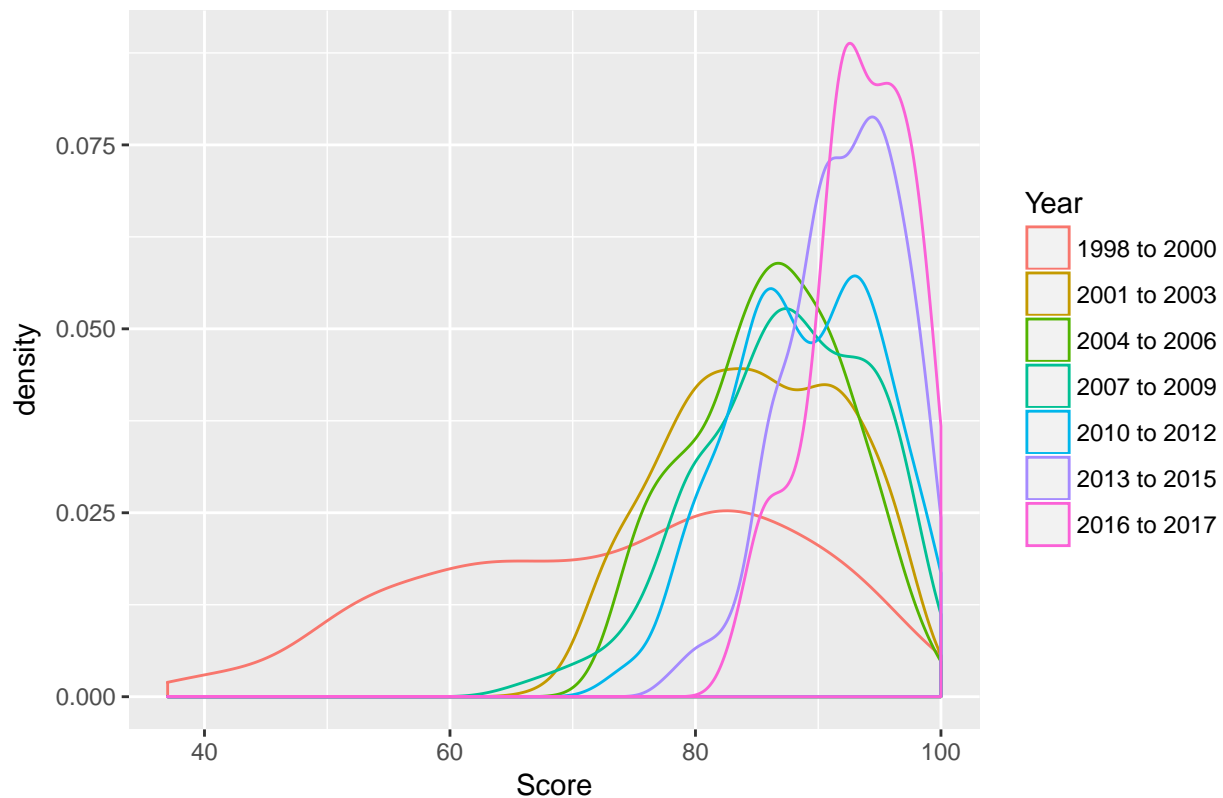
Critic Scores by Year



Distribution of Critic Scores

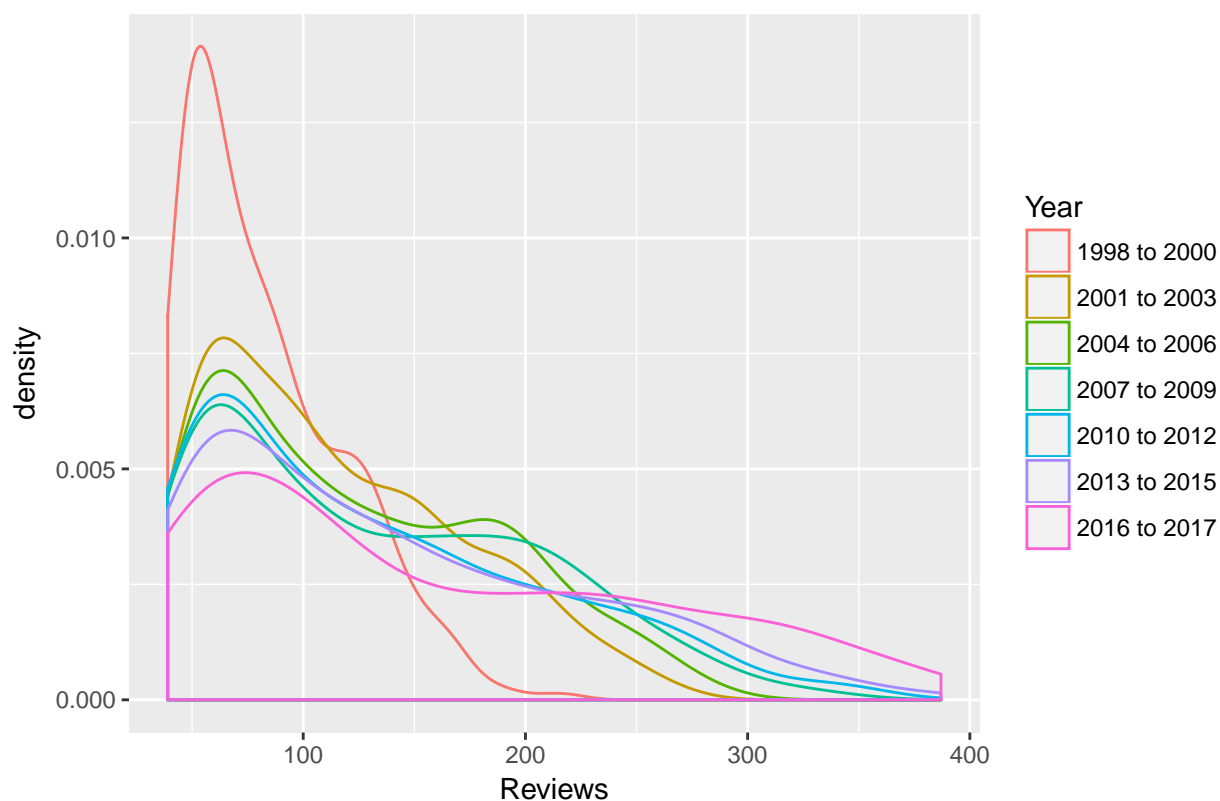


Density Plot of Critic Scores by Year

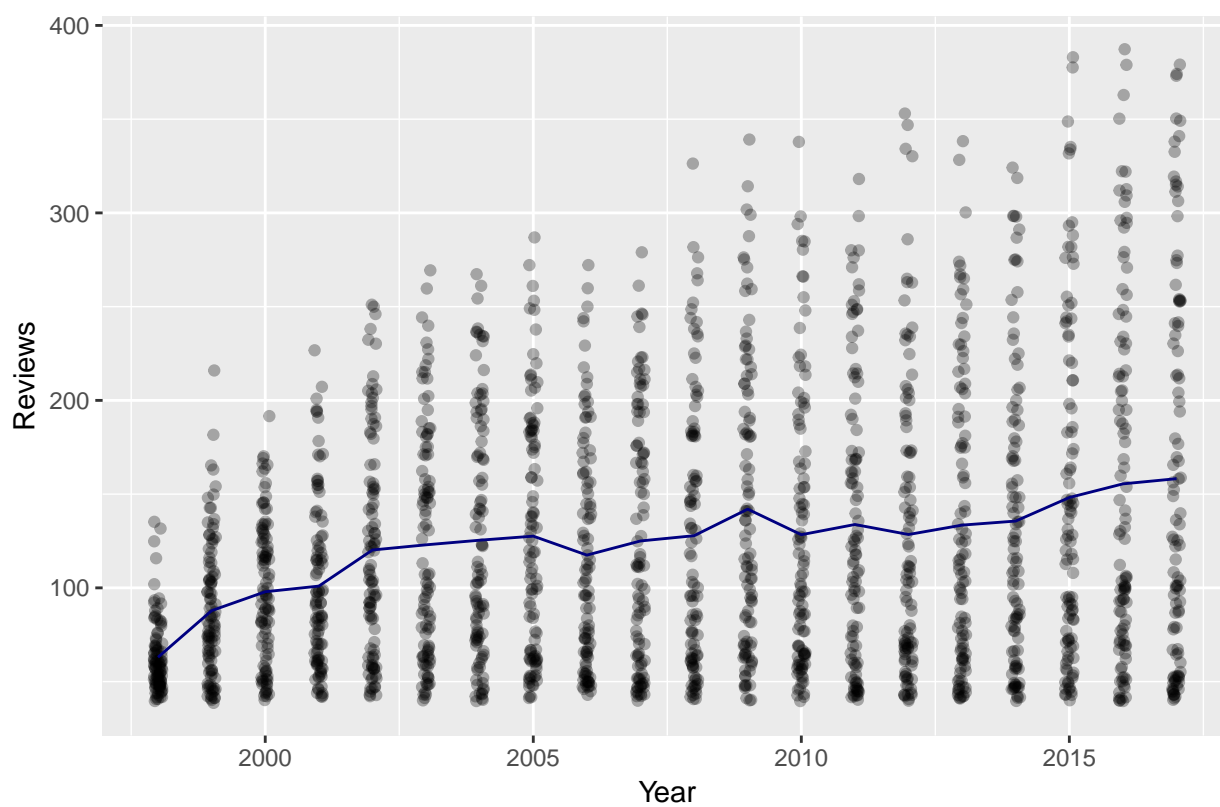


The average number of reviewers also goes up over time. What is interesting about this data is that we don't see a spike in the data at any point. Rotten Tomatoes was launched in August of 1998 and has only grown since then, and our data does reflect that through the increase in review numbers. The increase is not as large as one may expect, with Rotten Tomatoes being a go-to review site. This suggests that perhaps the number of reviews depends on the movie itself more than when the movie was released. Or, that Rotten Tomatoes has gained popularity and notoriety, but has not grown in its reviewer numbers. Either way, the number of reviewers does not seem to have an impact in scores, and .

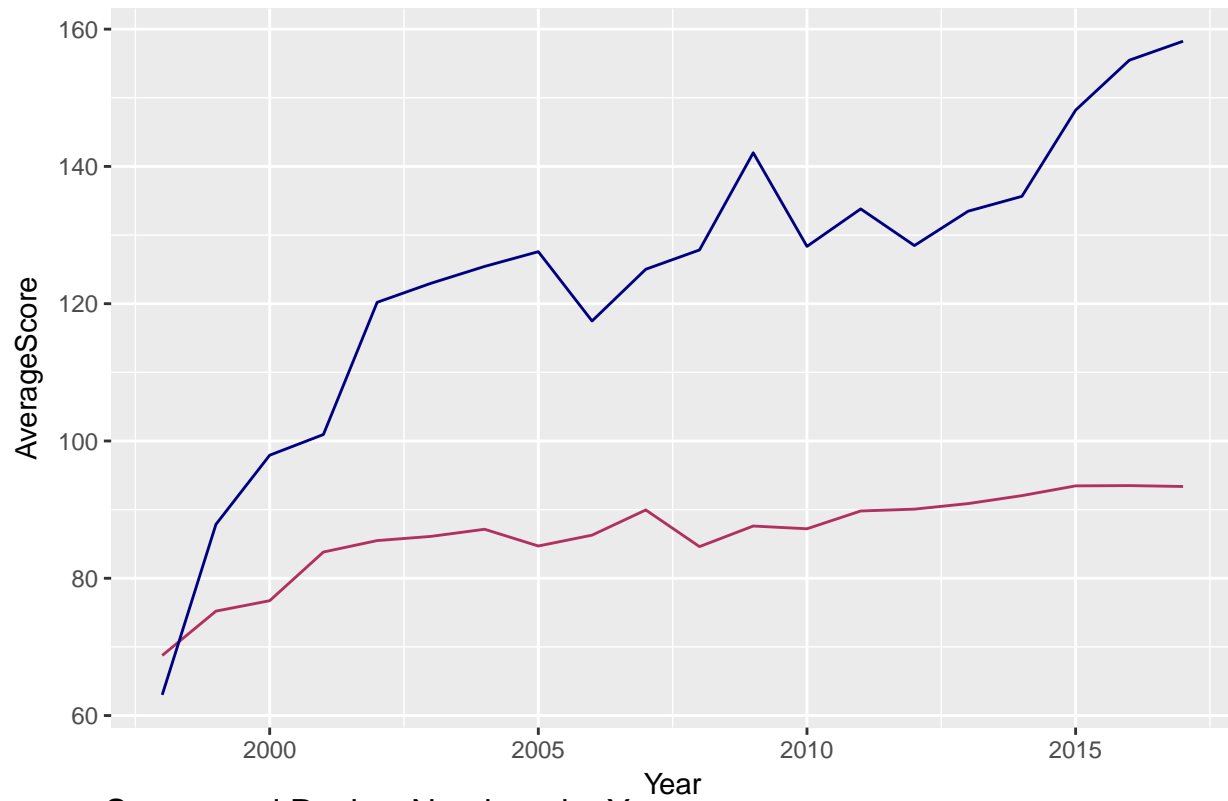
Number of Reviewers by Year



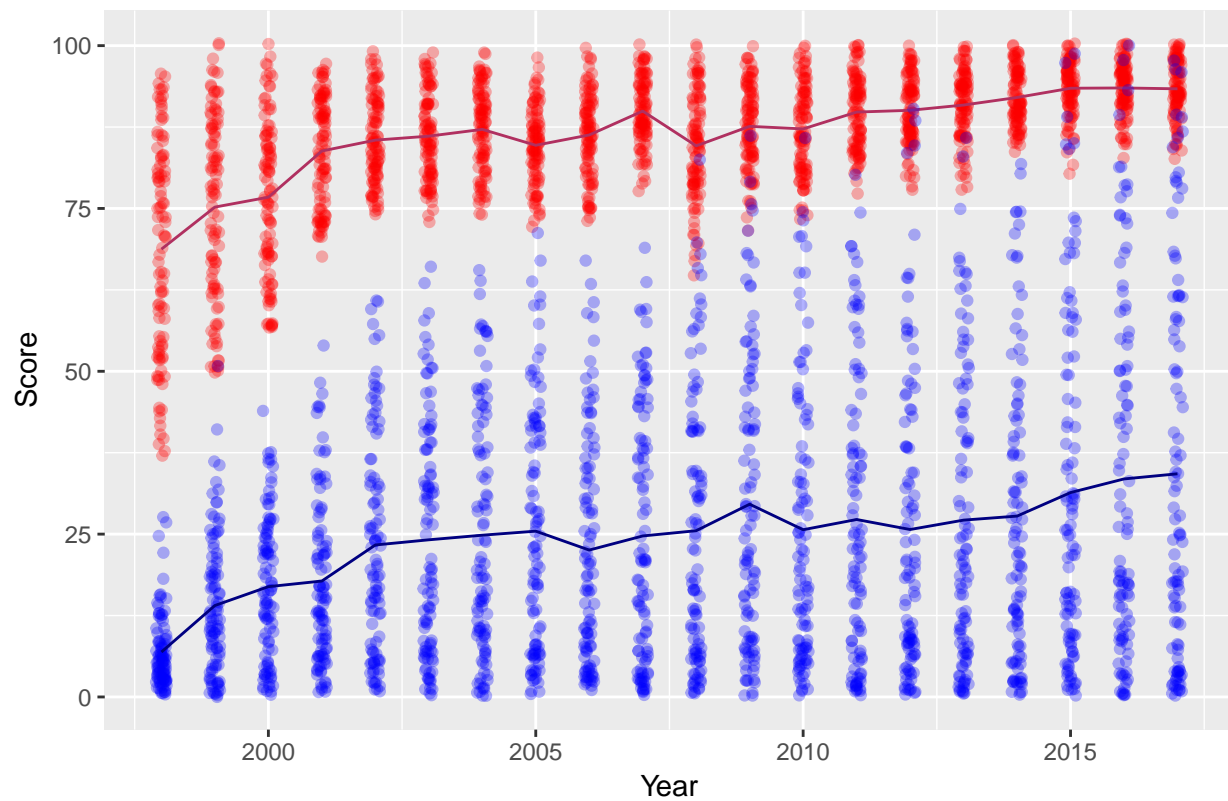
Number of Reviewers by Year



Scores and Review Numbers by Year



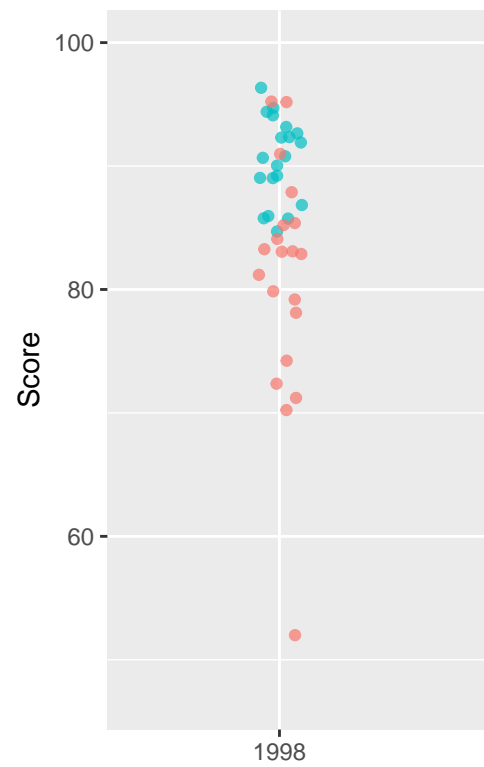
Scores and Review Numbers by Year



A tibble: 34 x 4

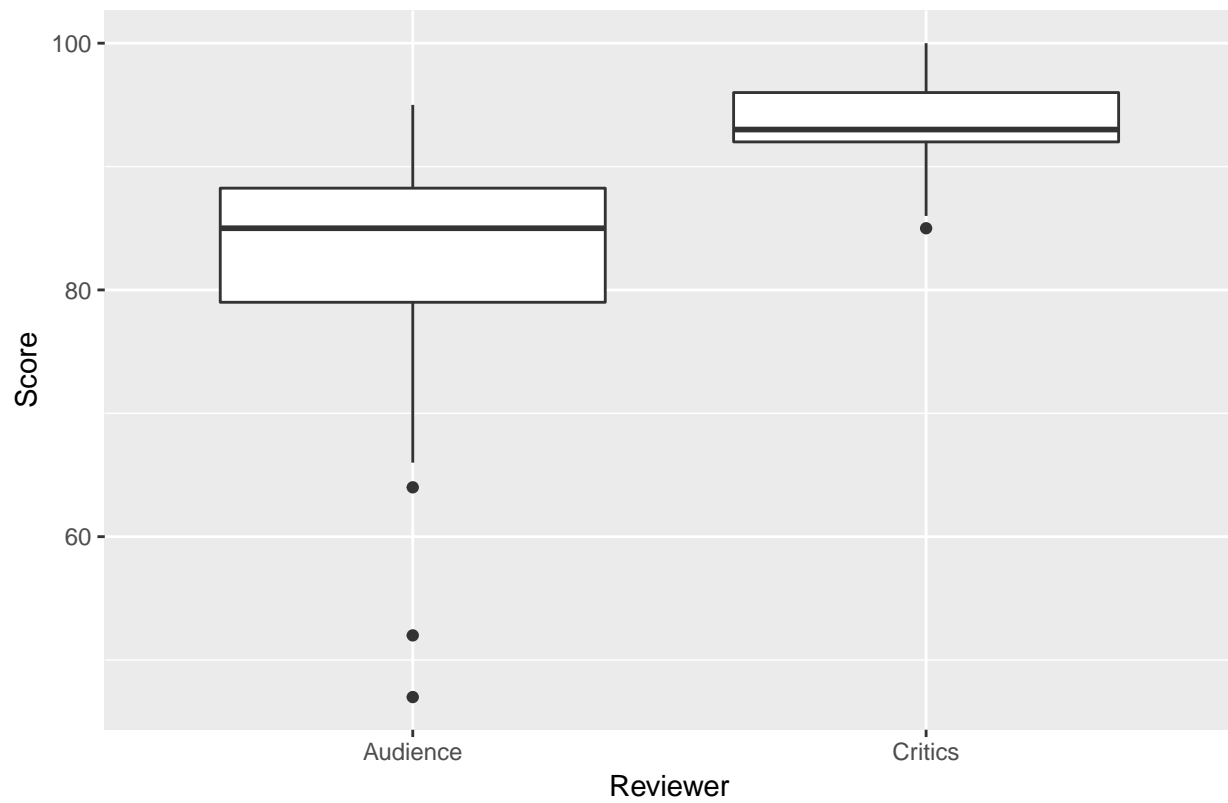
##	Title	Score	Review_num	Year
##	<chr>	<dbl>	<dbl>	<chr>
## 1	Quest (2017	100	53.0	2017
## 2	Bright Lights: Starring Carrie Fisher and Debbi~	100	53.0	2017
## 3	The Work (2017	100	52.0	2017
## 4	The Happiest Day in the Life of Olli Mäki (Hymy~	100	49.0	2017
## 5	Dawson City: Frozen Time (2017	100	45.0	2017
## 6	Dolores (2017	100	41.0	2017
## 7	Things to Come (L'avenir) (2016	100	130	2016
## 8	Tower (2016	100	78.0	2016
## 9	O.J.: Made in America (2016	100	50.0	2016
## 10	The Age of Shadows (2016	100	41.0	2016
## 11	Fireworks Wednesday (Chaharshanbe-soori) (2016	100	41.0	2016
## 12	GETT: The Trial of Viviane Amsalem (2015	100	73.0	2015
## 13	Seymour: An Introduction (2015	100	63.0	2015
## 14	Court (2015	100	46.0	2015
## 15	3 And 1/2 Minutes, 10 Bullets (2015	100	45.0	2015
## 16	The Tale of the Princess Kaguya (2014	100	85.0	2014
## 17	Ilo Ilo (2014	100	42.0	2014
## 18	The Square (Al Midan) (2013	100	61.0	2013
## 19	Sound City (2013	100	44.0	2013
## 20	Wake in Fright (2012	100	51.0	2012
## 21	Poetry (2011	100	64.0	2011
## 22	Everyday Sunshine: The Story of Fishbone (2011	100	45.0	2011
## 23	We Were Here (2011	100	43.0	2011
## 24	Nostalgia for the Light (2011	100	43.0	2011
## 25	Waste Land (2010	100	69.0	2010
## 26	Last Train Home (2010	100	54.0	2010
## 27	Afghan Star (2009	100	60.0	2009
## 28	Man on Wire (2008	100	157	2008
## 29	Aruitemo Aruitemo (Still Walking) (2008	100	62.0	2008
## 30	Taxi to the Dark Side (2007	100	93.0	2007
## 31	Deliver Us from Evil (2006	100	73.0	2006
## 32	Le goût des autres (The Taste of Others) (2000	100	58.0	2000
## 33	Toy Story 2 (1999	100	163	1999
## 34	Mr. Death: The Rise and Fall of Fred A. Leuchte~	100	39.0	1999

Audience and Critics Review



The plots below compare a select group of movies' critic scores to their audience scores.

Scores for the Top 20 Movies in 1998, 2008 and 2017



```
## # A tibble: 2 x 5
##   Title                `Critic Score` `Critic Reviews`  Year `Audience Score`
##   <chr>                <dbl>         <dbl> <dbl>         <dbl>
## 1 Hidden Figures (~    93.0           262  2017           93.0
## 2 The Dark Knight ~    94.0           326  2008           94.0
```



image:



image:

A tibble: 3 x 5

##	Title	`Critic Score`	`Critic Reviews`	Year	`Audience Score`
##	<chr>	<dbl>	<dbl>	<dbl>	<dbl>
## 1	Saving Private R~	92.0	132	1998	95.0
## 2	Central Station ~	94.0	48.0	1998	95.0
## 3	Rushmore (1998	89.0	102	1998	91.0