

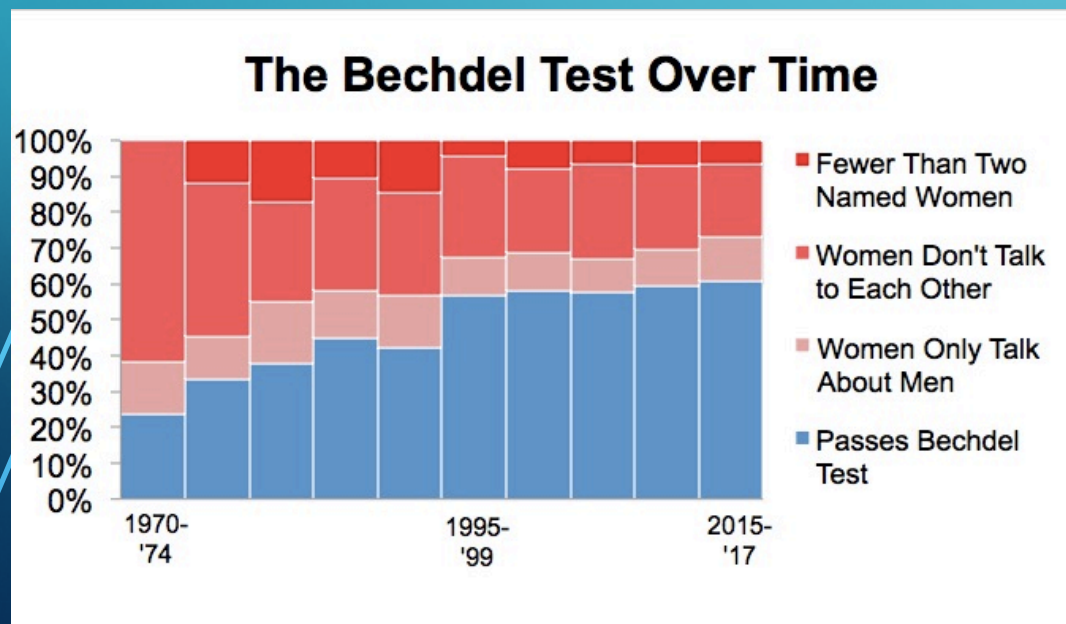
QUANTIFIED FEMINISM AND THE BECHDEL TEST



WHAT IS THE BECHDEL TEST?

The Bechdel Test is a litmus test for whether a film includes a community of women. There are three criteria:

1. There at least two named women
2. Who talk to each other
3. About something other than a man



OUR DATA:

- We started with dataset used by FiveThirtyEight in their article “The Dollar-And-Cents Case Against Hollywood’s Exclusion of Women.”
- Next, we collected data from bechdeltest.com and the-numbers.com to get up-to-date dataset.
- Finally, we received datasets on people in production roles and speaking times from Matt Daniels, writer/researcher for The Pudding.

Although the proportion of films passing the Bechdel test increased during the period from 1970 to 1995, the proportion has plateaued from 1995 to 2017.

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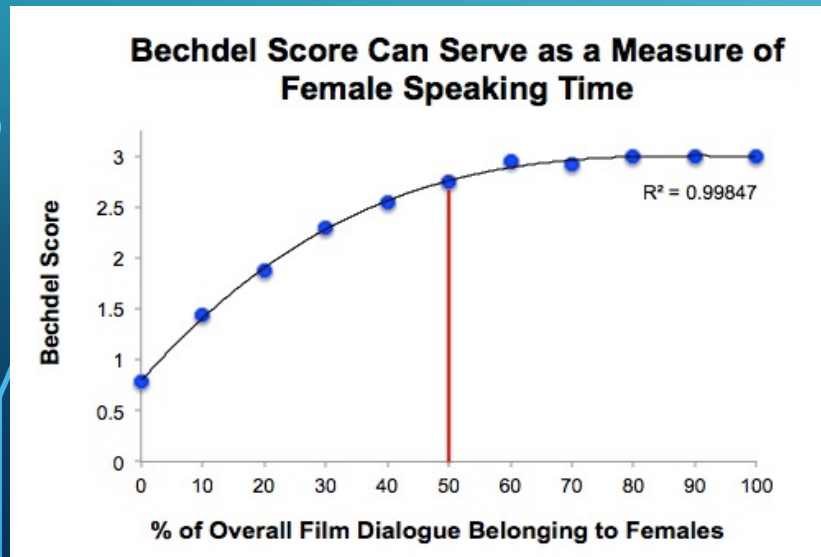
BECHDEL SCORES

We made a Bechdel score for each movie by counting the number of criteria that it passes (e.g. A film that passed the test earned a 3).

We also found a Bechdel score for each person involved in the production of a film (writer, director, producer) by averaging the Bechdel scores of all of their films.

We found that male production professionals had an average Bechdel score of 2.16, and female production professionals had an average Bechdel score of 2.46.

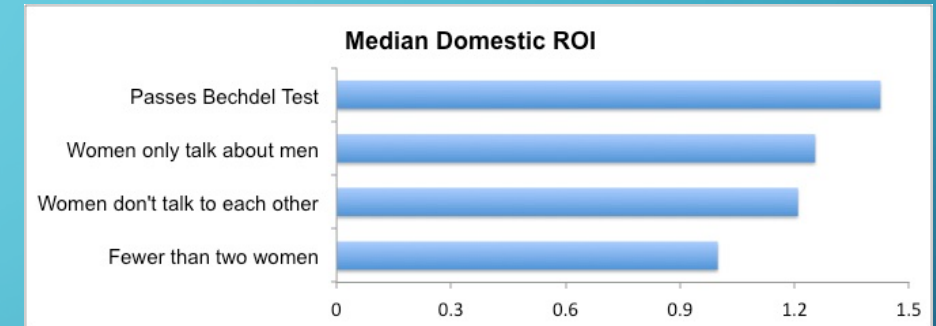
STRENGTH OF BECHDEL TEST



The Bechdel Score is almost perfectly cubically related to the amount of female dialogue, which means that the test is stronger than we previously thought. On average, once half of a film's dialogue is spoken by women, a film will pass the Bechdel Test.

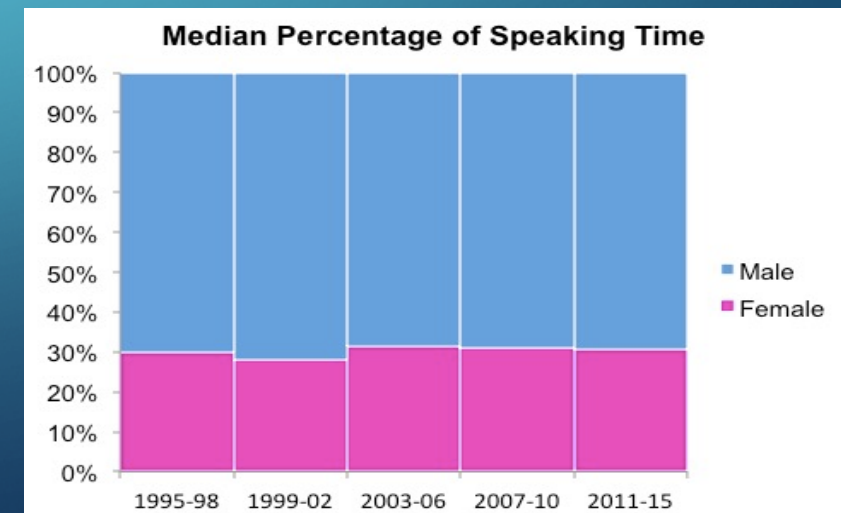
FINANCIAL ANALYSIS

We found that movies that pass the Bechdel test have a statistically **significantly better** return on investment, both domestically and internationally, than movies that fail the Bechdel test.



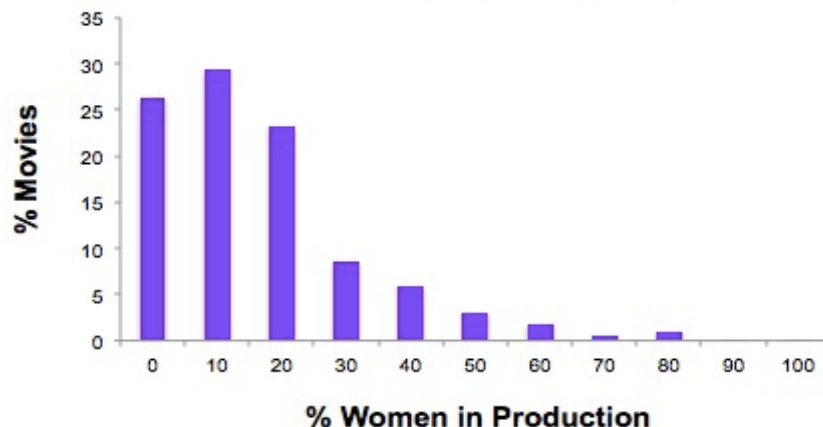
SKEWED SPEAKING TIMES

Men often speak twice as much as women do in films.



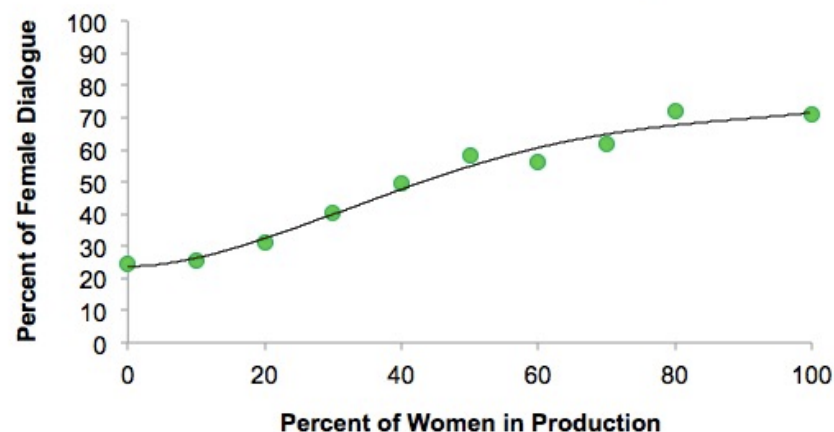
Women continue to be vastly underrepresented in top production roles (top). However, having women involved in top production roles is positively related to the amount of dialogue spoken by women in films (bottom).

Very Few Films Have Production Crews of at least 30% Women



CONNECTION BETWEEN CONTENT AND INDUSTRY

Increase in Women in Production is Related to Increase in Female Dialogue



NETWORK CENTRALITY

We created a network of the American film industry, using writers/directors/producers as nodes, with each edge representing two people working on the same movie. For these 10,000+ people in production, we calculated their closeness, betweenness, and degree centrality scores. Of the top 10 people in each type of centrality, none were women.

HOW DO WE FIX THIS INDUSTRY?

There is a positive relationship between the amount of women in a production and its Bechdel score. Therefore, we need to increase the number of women in influential production positions to increase the representation of women on screen. Since movies that pass the Bechdel test fare well in the box office, we see both a financial and social incentive to do so.