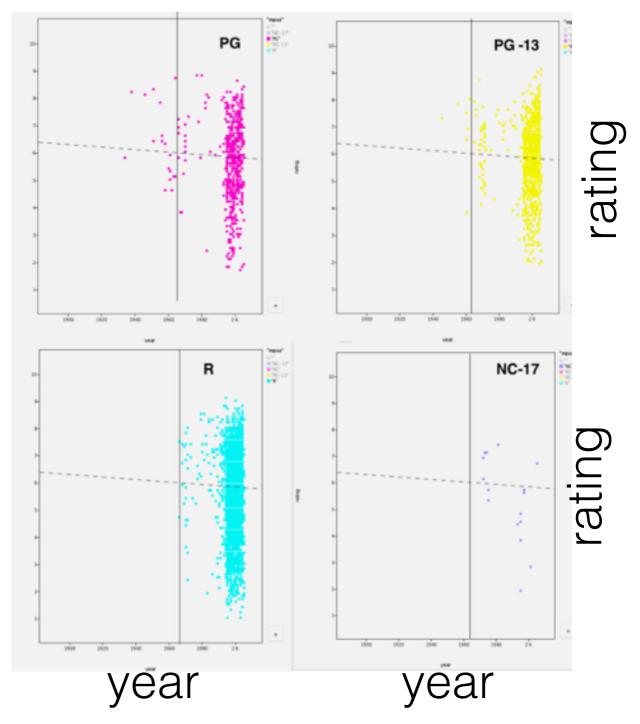
# Summer school Beijing 2016: Challenge Results

# Participation

- challenge 2: no participants. :"(
- challenge 1: 10 participants.

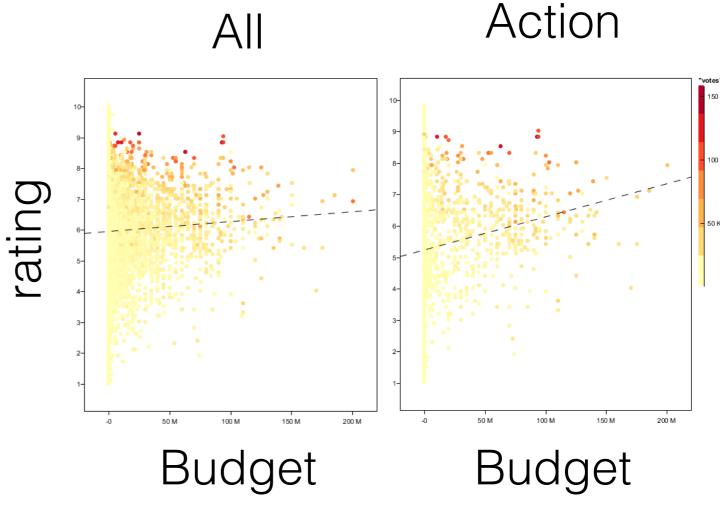
# Fei Fang: MPAA ratings

- Most movies with ratings started to appear at around 1968: when ratings system was established by the MPAA.
- A few before 1968 have been Re-issued, so there are some data points before 1968.
- Movies with NC-17 rating, (the most restricted one), appear far less than the other ratings.



## Shuo Gao: budget vs. rating

- rating is slightly positive related to budget: Action movies are more obvious than all kinds of movies.
- number of votes are basically not related to budget.



# Jin Sun: budget vs. rating

movies since 1960 with budget over 0 and rating not less than 7

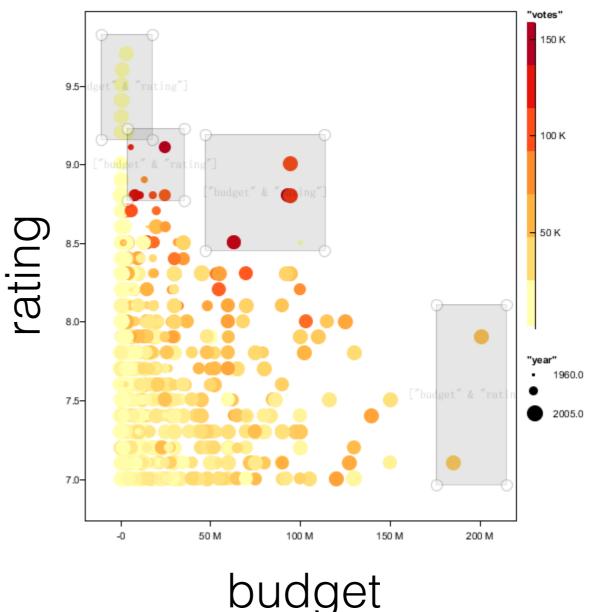
"more budget" is not "higher rating"

class 1: low budget, high rating and few votes: mainly because few people rated them high.

class 2: old movies of low budget, high rating and many votes: the high ratings is real enough.

class 3: new movies, medium budget, high rating and many votes. Their high ratings is real enough but in contrast to the 2nd class, more budget.

class 4: new movie, not popular enough, very high budget and not high enough rating: Maybe that's so-called "commercial blockbusters".

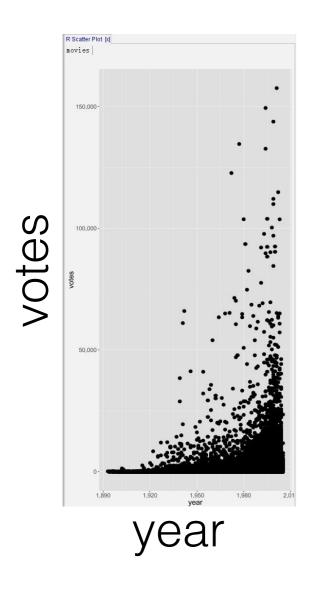


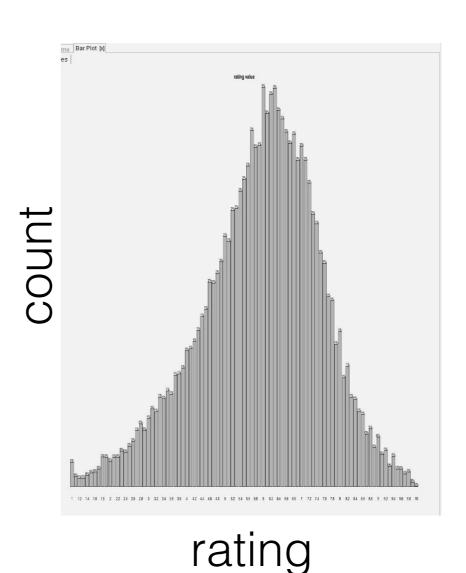
### Peiyan Wang: Year

- two sharp increases to the number of movies: the 1930s and the 1980s.
- during 1980s, the budget also increased sharply.
- was 1980s the booming era for movies?

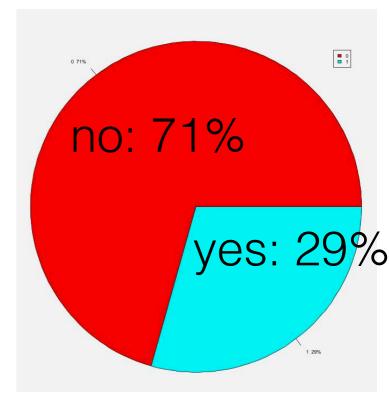
count Year Budget

# Xiaomin Du: votes per year



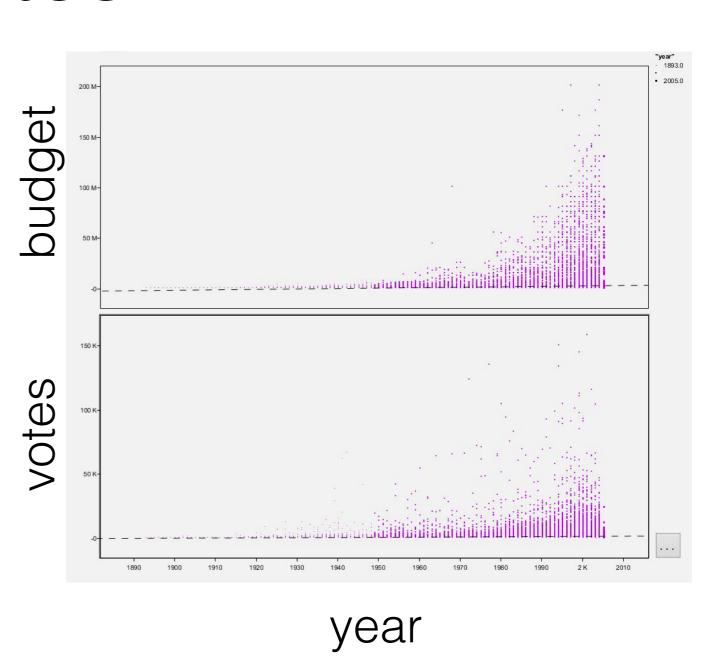




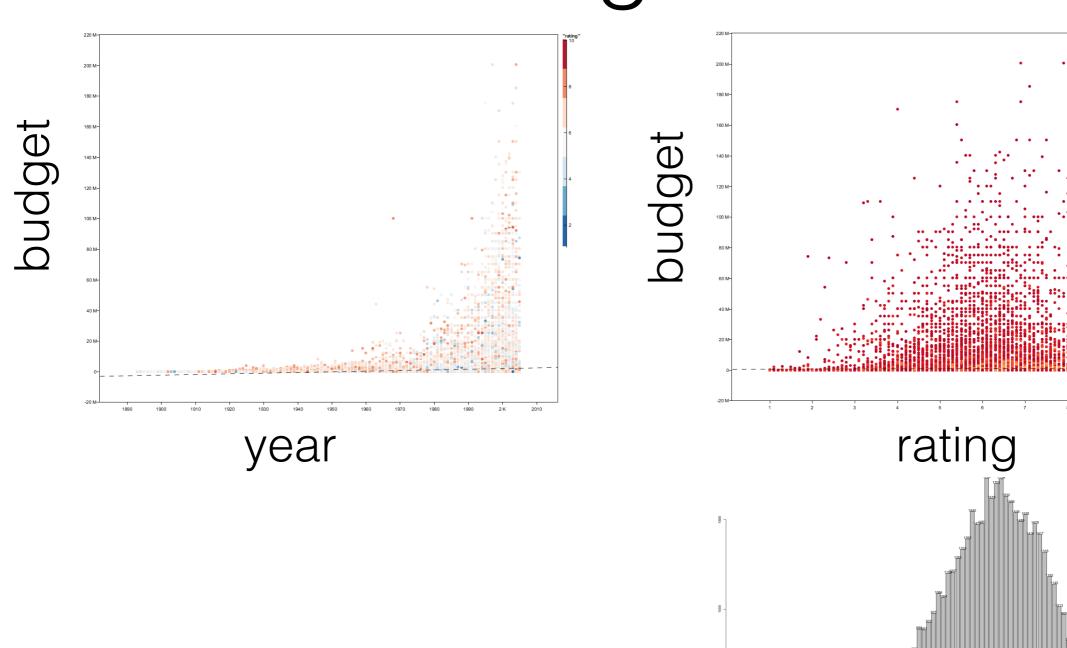


# Xiaoxiao Yang: budget and votes

- value of the "budget" would become bigger with the increase of the year.
- So does the value of the variable "votes".

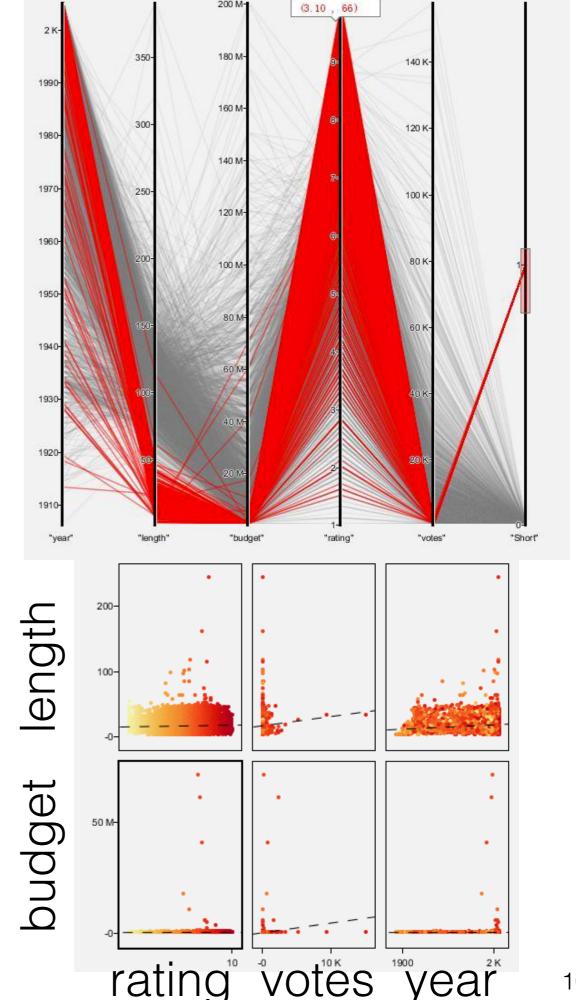


### Yan Chu: budget and rating

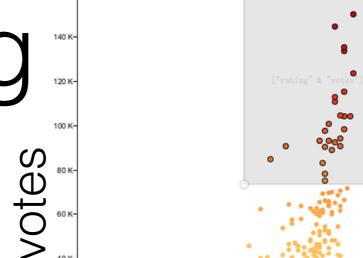


### Zhang Haocheng

- •short movies often get rating scores higher than average.
- •few short movies in the past compare to the amount of such in recent years.
- •short movies cost less.
- •short movies get less attention: fewer people gave votes to them.
- •A "short" movie with 112 minutes. a mistake among the data.



# Shilei Huang



20 K

#### Facts:

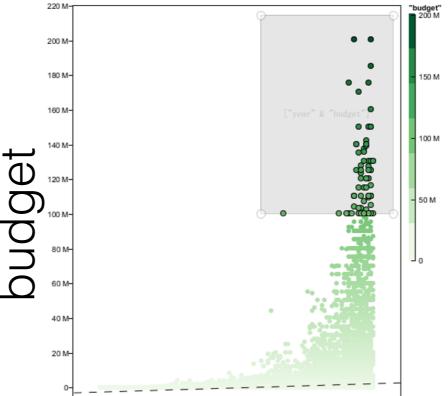
Most of the movies which have a relatively large number of votes get a higher rating, and those with lower rating tend to have less votes.

#### **Inferences:**

Higher rating has a positive influence on the potential movie audience, in a certain extent, which means more people will watch this movie and vote for it. The rising votes may give positive feedback too.

#### **Applications:**

The film company hires Internet marketers (paid posters) to make the rating higher, so as to attract more audience. Besides, some organizations (opponents or competitors) may do the same thing to make the rating down,



rating

#### **Facts:**

The release year of most movies which have an enormous budget (more than 100 million dollars) is after 1985s. A large quantity of budgets and huge budgets center around 1985s, and the budget has been skyrocketing since 1980s.

#### **Inferences:**

The film market has been thriving since 1980s

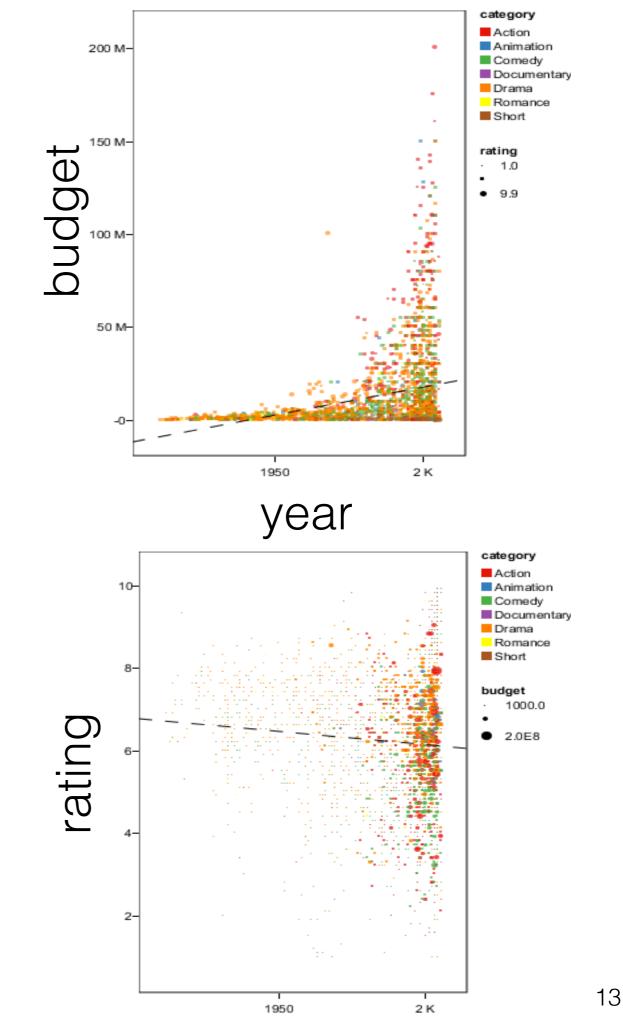
#### **Applications:**

More and more capital is brought to film industry.

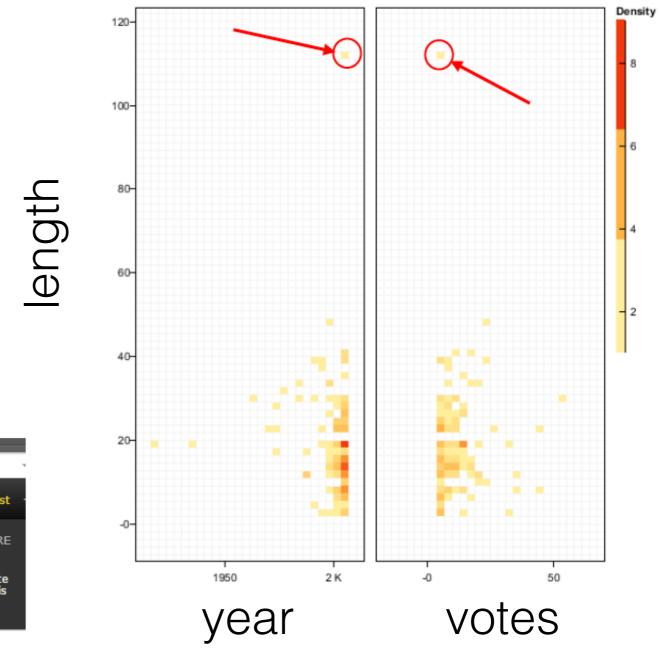
### And the winners are:

### Hao Wu

- Proportion of high-raking movies becomes lower and lower proportion of high-budget movies becomes more and more
- mainly action and drama like "The lord of the rings" (9.0 / \$94,000,000) or "Spider man2" (7.9 / \$200,000,000).
- Not all high-budget movies will get high raking like "Batman & Robin" (3.6 / \$110,000,000)



### Hao Wu:

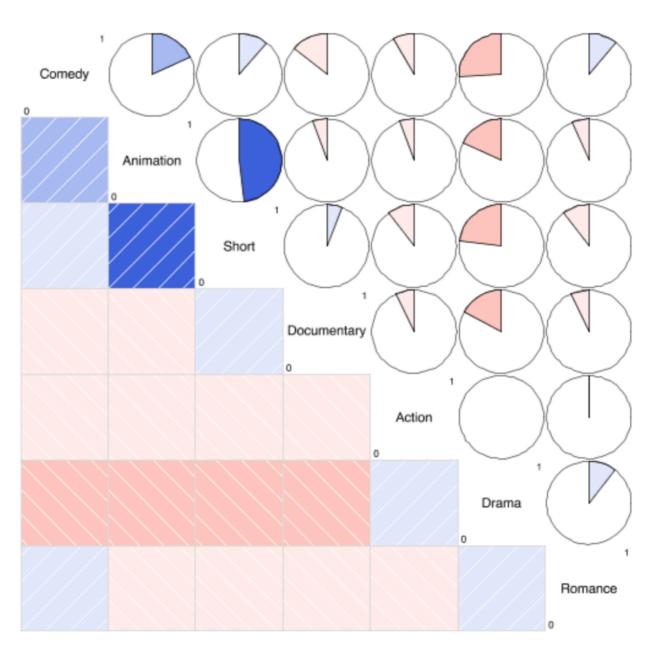




# Ying Lu

- "Animation" highly correlated to "Short"
- "Drama" negatively correlated to other types except "Action" (And Romance)

#### Correlogram of diffenrent movie types



### Thanks!

- Apologies for any frustrations, bugs, etc.
- Your feedback is more than welcome
- Please let us know what worked and what not.

