Cinematic Delicacies that do not Expire:
Long-term Impact of Films Based on Network Centrality

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How to define “influential”?  
• Was the film profitable?  
• Is the film famous?  
• Is the film memorable?  
• Is the film sophisticated?  
• Is the film ... ?

Traditional measures of success  
• Box office revenue  
• Audience numbers  
• Awards  
• Critical acclaim

Problems of traditional measures  
• Inflation adjustment  
• Subjective bias  
• Number of existing films  
• Critics are not filmmakers

A new, bibliometric approach [2][3]  
• Treat films as sources of inspiration  
• Include the filmmakers voice  
• Measure importance through influence  
• Combine multiple types of citations where appropriate  
• Find films that are central in the network

Centrality indices

Network centrality indices based on:  
• Different citation types  
• Time span of influence  
• Number of influenced films  
• Propagation of influence

Ranking / Results

• Combine ranks of individual centrality indices $r_i$ into one ranking for films $X$:

$$i(X) = \frac{1}{|R|} \sum_{r \in R} \frac{1}{\log(i_r(X)) + 1}$$

• There is no correlation to awards, nominations and average IMDb ratings

Evaluation vs. Top-Lists

Evaluation of diversity  
• Comprehensive top-lists should contain a diverse selection of films (minimal overlap)  
• Amount of typecasting:  
  Actor & Genre  
  Creative elements:  
  Director, Writer & Composer

Evaluation of similarity  
• Intuition: Cinematic milestones should be ranked high  
• Compare to top-lists by summing the ranks of their films in our ranking

References

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