
有史以来最具影响力的电影是哪部？桃乐丝带着小伙伴得第一

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有史以来最具影响力的电影是哪部？桃乐丝带着小伙伴得第一。最近发表在Applied Network Science上的一项研究指出，历史上最具影响力的电影前三名分别是《绿野仙踪》、《星球大战》和《惊魂记》。



意大利都灵大学的研究人员为IMDb(互联网电影数据库)中的47000部电影计算了影响力分值。分值的计算是基于后来拍摄的电影对该电影的参考程度。作者发现影响力最大的20部电影均制作于1980年之前，且绝大部分出自美国。

研究的第一作者Livio Bioglio博士说：票房收入会受到除电影质量以外的因素影响，比如广告、发行，还有非常主观的影评，我们提出的是另一个用来分析电影成功与否的方法。我们开发出了一个算法，利用电影间的相互参考、借鉴来衡量电影是否成功，这个方法还可以通过导演和演员在高分电影中的参与程度来衡量他们的发展情况。

将这一算法应用于导演后，会发现五位参与过《绿野仙踪》的人打进了导演组8强，其中排名第三、第五和第六的分别是阿尔弗雷德·希区柯克、史蒂文·斯皮尔伯格和斯坦利·库布里克。当研究人员用另一种方法去除老电影的干扰因素(它们成片更早，因此可能会影响更多之后拍摄的电影)后，导演前三名分别变成阿尔弗雷德·希区柯克、史蒂文·斯皮尔伯格和布莱恩·德帕尔玛。

研究人员将这一算法应用于演员后，发现位列前三的分别是塞缪尔·杰克逊、克林特·伊斯特伍德和汤姆·克鲁斯。作者们注意到对男性演员而言存在着更强的性别偏好，唯一打入前十的女演员为露易丝·麦斯威尔，她曾在007系列电影中反复出演过Moneypenny小姐。

Bioglio博士说：得分最高的女演员们相比她们的男性同事分数更低。唯二的例外一是音乐片，音乐片的统计结果显示两性得分较为均衡；二是在瑞典拍摄的电影，这里女演员的得分比男演员更高。

为了计算本研究中47000部电影的影响力分值，作者们将电影视作一个网络中的节点，并计量每一部电影与其他电影之间的连接数以及这些连接电影的影响力。类似的网络科学方法已经被广泛应用于其他领域——如科学出版领域，衡量各项工作的影响力。

Bioglio博士说：用网络分析来为电影排名的思路并不算新，但据我们所知，本研究是第一个用这

些技术来同时衡量电影参与者影响力的研究。

作者指出他们的方法可以用于艺术品，电影历史学家也可以使用。不过他们提醒说，这些结果只适用于在IMDb上有数据的西方电影，这个数据库对西方国家的电影存在较强偏好。

摘要：

The success of a film is usually measured through its box-office revenue or through the opinion of professional critics; such measures, however, may be influenced by external factors, such as advertisement or trends, and are not able to capture the impact of a film over time. Thanks to the recent availability of data on references among movies, some researchers have started to use citations patterns as an alternative method for ranking movies. In this paper, we propose a novel ranking method for films based on the network of references among movies, calculated by combining four well known centrality indexes: in-degree, closeness, harmonic and PageRank. Our objective is to measure the success of a movie by accounting how much it has influenced other movies produced after its release, from both the artistic and the economic point of view. We apply our method on a subset of the IMDb (Internet Movie Database) citation network consisting of around 47,000 international movies, and we derive a list of films that can be considered milestones in the history of cinema. For each movie we also collect data on its year of release, genres and countries of production, to analyze trends and patterns in the film industry according to such features. We also collect data on 20,000 directors and almost 400,000 performers (actors and actresses), and we use the network of references and our score of movies for evaluating their career, and for ranking them. Since the IMDb dataset we employ is highly biased toward European and North American movies and personalities, our findings can be considered relevant principally for Western culture.

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期刊介绍:

Applied Network Science (ANS)(<https://appliednetsci.springeropen.com/>) is an open-access and strictly peer-reviewed journal giving researchers and practitioners in the field the ability to reach a larger audience. ANS encompasses all established and emerging fields that have been or can be shown to benefit from quantitative network-based modeling. Contributions from all fields of science, technology, medicine and humanities will be considered, in particular from newly emerging research areas formed and developing at the interfaces of presently established sub-disciplines.

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