



Aalto University  
School of Science

# Cultural influence on viewership?

Srikrishna Raamadhurai

Department of Information and Computer Science, Aalto University

## 1 Introduction

Movies have been entertaining us for over centuries. They are a vital reflection of the contemporary society. For example when a country is struggling for freedom, movies portraying freedom fighters and people willing to sacrifice their lives for the country's sake would be released. This would influence the attitude of the people and foster a spirit of oneness within the countrymen. Starting from the olden days, where stage skits were played, cartoons evolved, until recently the HD cinemas, the primary goal of movies have been to represent their culture or present ideas that promote a better 'tomorrow'. This inevitably means that movies and the society are reciprocated implicitly. In order to make a factual conformity, a data set compiled by IMDB (Internet Movies Database) is used for visualizing the vital statistics and finding the hidden dependency of movies on culture. This visualization is useful for anyone interested in noticing the effect of the new century on viewership.

## 2 Data set

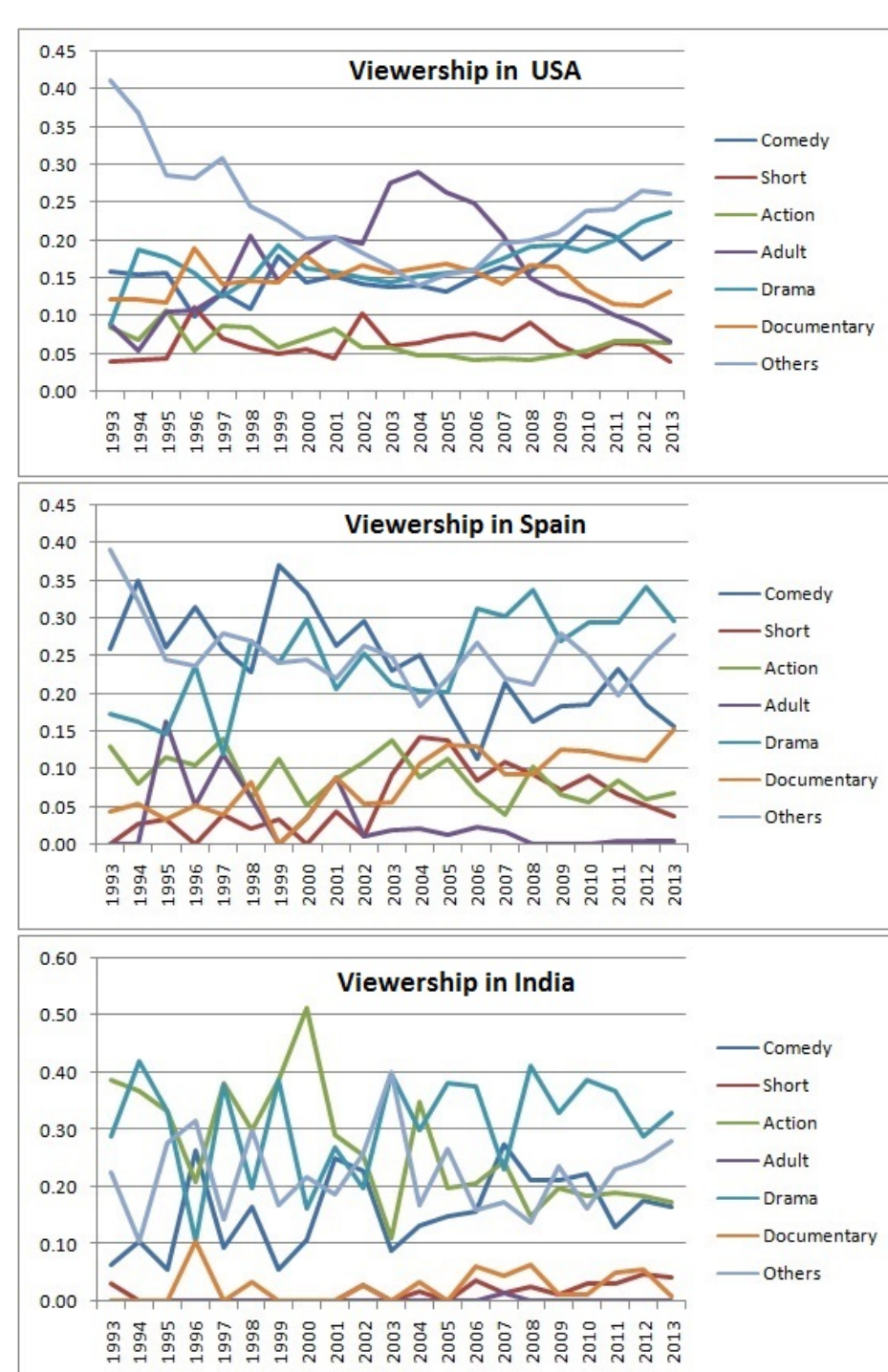
The data set used for this task consists of six tables containing information about genre, language, plot, release dates, links and movie names with unique identifier key across all tables. The first visualization task considers movies released between 1993-2013 (21 years) in countries such as USA, Spain and India, in order to present the relation between Genres and Countries. In the second visualization the movies within the same time period, but in languages such as English, Spanish and Hindi irrespective of the country they were released in were considered to depict the relation between Genres and Languages. The selection of countries and the corresponding languages was to ensure a mix of Developed (USA, Spain) and Developing (India) countries whilst maintaining a geographical continental variance as well.

## 3 What are we seeing?

Comedy, Short, Action, Adult, Drama, Documentary are six of the more frequent genres in the data set. The rest of the genres are classified as 'Others'. Thus effectively we have seven genres that can be visualized for the three countries USA, Spain and India. The primary languages of the selected countries are English, Spanish and Hindi.

The first set of visualizations are 'Genre versus Country' charts followed by the 'Genre versus Language' charts.

- Genre vs Countries



## 4 Interactive Visualization

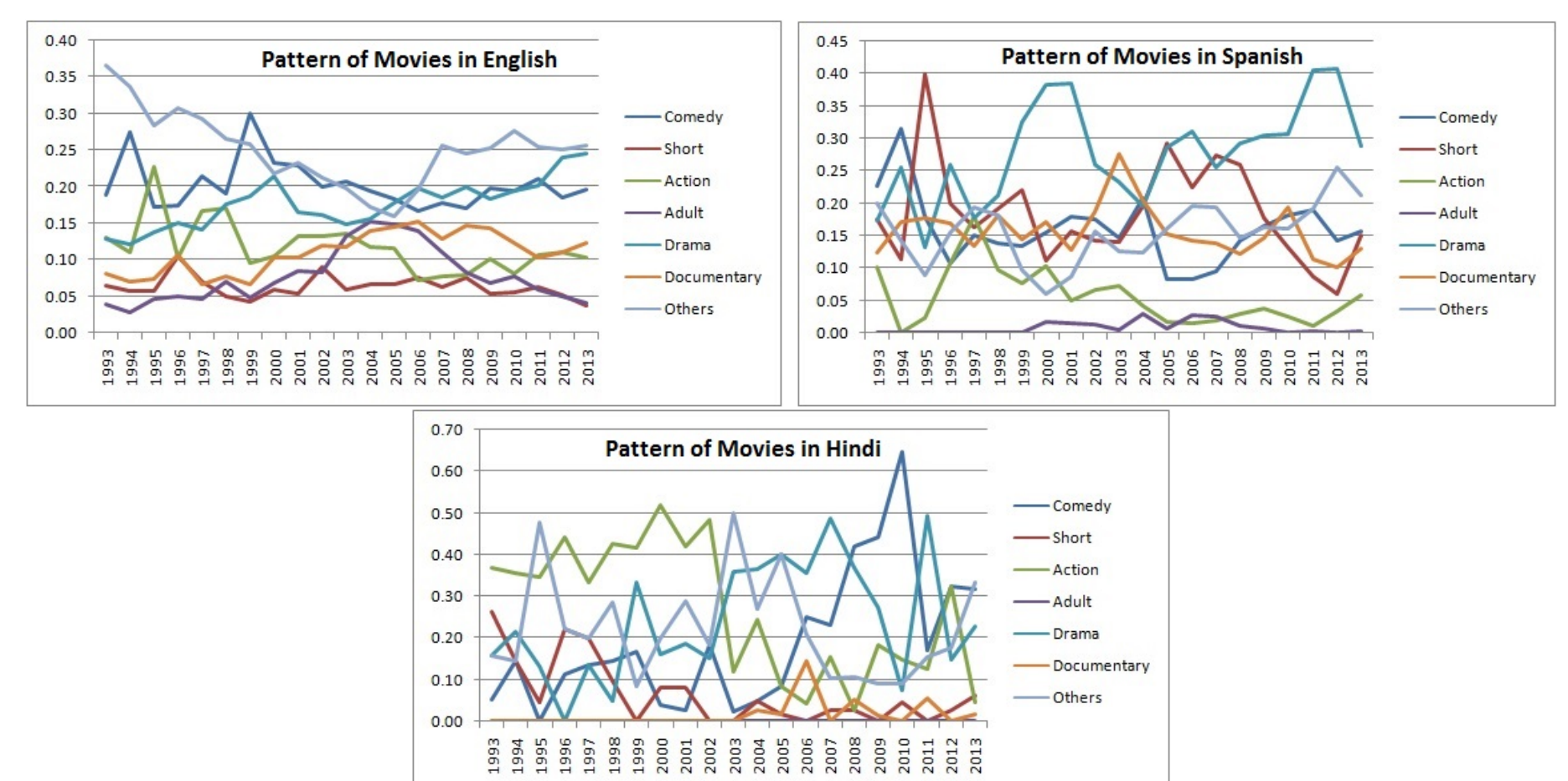
The six charts presented here are uploaded as 'Motion Charts' on <https://code.google.com/apis/ajax/playground/?type=visualization>  
Username: t616040srikrishna

Password: assignment3  
Department of Information and Computer Science  
School of Science  
Aalto University, Finland

## 5 What can be seen?

India is a developing country with a huge population but rich in culture and tradition. The pattern of genres viewed in India is different from that of USA or Spain. For instance in the USA chart, we see that before year 2000 there were a lot Sci-Fi and Thrillers released which at the turn of the century decreased only for a lot of Adult movies to be released. However the Documentaries have continued to be pictured in the USA. Spain charts indicate their stability over the turn of the century by maintaining a consistent proportion of genres. India on the contrary has shown a marked change after year 2000. The action movies have reduced in number, while Comedy and Drama have remained consistent, which is a pattern similar to that of Spain. As far as the Adult movies are considered, India is still a conservative country with strict censor boards. As a result the takers for Adult movies are less in number thereby resulting close to zero on the chart.

- Genre vs Languages



From the genre charts based on languages, since a majority of the English movies have been released in the USA, the chart shows similarity to the country based (USA) chart which is intuitively understandable. Language and culture are deeply related and operate together. For instance, Spanish, Italian, French and a few other Latin languages are called Romance Languages. Therefore the culture in USA is similar to that of any country speaking English alone. But Spanish is also spoken in many other Latin American countries as their first or second language. Hence the movies released in those countries in addition to Spain still show a visually different proportion of genres, although the turn of the century has not had a deep impact on the variation of movies viewership. In the last chart we see that since Hindi is an official language only in India while also spoken in Pakistan and a few neighboring countries, the movies are especially made in India. As a result, there is a similarity between the Indian chart and the Hindi chart. The viewership towards Action movies have decreased, Comedy and Drama have increased. While Documentaries still attract low viewership, the number of movies in the Adult genre is the lowest.

## 6 Conclusion

The data set used and the visualizations thereby indicate that cultural affordances play an important role in the viewership of movies and the proportionality of genres. As we recall that certain language are called Romance Languages, languages are a medium to help understand a culture. The close resemblance of the USA chart with the English chart and that of India with Hindi establishes this relation. On the contrary, the Spain (country) chart and that of the Spanish (language) does not follow the same pattern. The reason being several Latin American countries also speak Spanish; hence the viewership patterns are also affected by their primary languages. The idea of Storytelling in this poster was influenced by a paper by Kosara and Mackinlay [1].

## References

[1] Kosara, Robert, and Jock Mackinlay, "Storytelling: The Next Step for Visualization." *IEEE I-1*

Email: srikrishna.raamadhurai@aalto.fi