

# AN ANALYSIS OF SCIENCE AND TECHNOLOGY DISCOURSES IN TAMIL CINEMA AND ITS IMPACT ON PUBLIC UNDERSTANDING OF SCIENCE AND TECHNOLOGY

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**Abstract**— Cinema is one medium which has a deep impact on its audiences. India is the largest producer of films and has millions of people going to cinema every day. Films provide content for all other media in India, as films are a major chunk of fillers for 24 hour entertainment channels. Hence, it is vital to study the impact of these films on audiences as it plays a major role in shaping their perspectives and perception of the world they live in. Science and technology based narratives are a common feature in cinema especially in the regional language films. There was a spurt in science and technology based films after millennium in Tamil cinema. As ordinary people do not have access to science and technology information, it is cinema through which they see the scientific world. This study critically analyzes the biotechnological discourses that are being portrayed in Tamil movies. This study critically analyses science and technological discourses in Tamil movies. The study aims at categorizing the dominant ideologies of science and technological discourses in Tamil movies and also analyses the impact of these portrayals on the audience. Content analysis of films and an online survey of film goers conclude that cinema in fact has a great impact on the public understanding of science and technology.

## 1. INTRODUCTION

There are very few platforms through which scientists communicate about their inventions to the general public. India being the largest producer of films and having the largest population of film goers in the world, it is this medium which generally takes science and technology related ideas and information to the general public. Cinematic discourses relating to science and technology involve creatively mediated texts. In the absence of science programmes in regional media, cinema has a major influence on the public perception of science and technology. Narratives based on science and technologies have evolved over the years in Tamil cinema, a regional language film industry. Post millennium, there was a sudden spurt in science and technology-based films, which included issues like time travel, clinical trials and cloning.

Thus, it is important to study the messages conveyed by such films, in order to understand the perceptions held by the pub-

lic on science and technology which are majorly influenced by Tamil cinema. There is little or no research in this area of study and hence, this study will attempt to critically analyze the dominant science and technology discourses in Tamil cinema. This study will also examine the representation of scientists in science and technology based narratives in Tamil cinema. Also through a survey, this study analyses the effects of science and technology based cinematic narratives on the public understanding and perception of the same.

## 2. METHODOLOGY

Two methods namely content analysis and survey was used in this study. Content analysis was done to understand the dominant ideologies prevalent in the cinematic discourses and a survey among public was done to decipher their understanding of science and technology through the cinematic lens. Around 20 Tamil movies, which have science and technology

as the central narrative, have been chosen for the content analysis.

The following twenty Tamil movies are selected for the study:

“Ezham Arivu”, “Ambuli”, “Vyabari”, “Enthiran”, “24”, “New”, “Dasavatharam”, “Indru Netru Naalai”, “E” “Maatran”, “Miruthan”, “Appuchi Gramam”, “I”, “Thani Oruvan”, “Vaiyai Mudi Pesavum”, “Kaana Kandain”, “Tamizhuku En Ondrai Azhuthavum”, “Iru Mugaan”, “Saitaan”, “Anegan”.

The selected movies are the ones which were released after 2000. A survey was also conducted among the general public to judge their perception and understanding of science and technology. A questionnaire was used to elicit answers on the behaviours, preferences and attitudes of the respondents on this issue. Online survey was done and around 100 respondents participated in the survey. The sample for the survey was restricted to respondents who have access all media and who are active in social media. All respondents in the survey have completed their under graduation education.

### **3. FINDINGS OF CONTENT ANALYSIS**

#### **3.1 SCIENTISTS AS PROTOGANISTS**

Out of the 20 movies analyzed, the protagonists were scientists only in four movies. Whereas in the rest of the movies, the scientists were antagonists. All these movies have a storyline where either a scientist with a bitter experience in the past wants to avenge the society or the scientist's invention goes wrong and creates a crisis. In 14 of the chosen movies, science is the major cause of conflict in the narrative. Science even acts as a serious threat to human life.

#### **3.2 SCIENCE THEMES**

An analysis was carried out to find the type of science which generally formed the crux of the movies. It was found that a new virus, a new type of drug, time travel, genetics and robot-

ics were themes widely used in the narratives of these films. Virus caused disasters are portrayed in 6 movies out of the chosen 20. A new type of drug which causes problems is dealt with in 5 movies. Only one of the analysed movies had robotics as its theme and four films were based on genetics. Time travel concept was used in only two of the 20 movies. Positive attributes of science and technology are not at all shown, with its negative effects stealing the show. This will definitely have an effect on the people's perception of science and technology.

#### **3.3 ROLE OF SCIENCE & TECHNOLOGY IN THE NARRATIVE**

In majority of the films analysed, science is the major cause of the conflicts in the narratives. Scientific invention and technology was portrayed as a serious threat to human life. On the other hand, science plays a major role in solving the problems of humans only in four films. A virus disease, natural and man-made disasters are resolved using the scientific inventions in these 4 films. Hence, the dominant ideology in majority of the films analysed is that science and technological inventions are a threat to mankind.

#### **3.4 WOMEN AS SCIENTISTS**

In all the films analysed, it is the male protagonist who fights against the antagonist and resolve the crisis/conflict in the narrative. Only in “Ezham arivu”, the female lead is portrayed as scientist who helps the protagonist with her scientific knowledge to end a bio war. Role of women or presence of women scientists in the movies analysed is miniscule. Tamil films have male oriented stories as still patriarchy strongly reigns in all spheres of film making.

## 4. FINDINGS OF THE SURVEY

### 4.1 SCIENCE & TECHNOLOGY BASED MOVIES

#### WATCHED BY THE RESPONDENTS

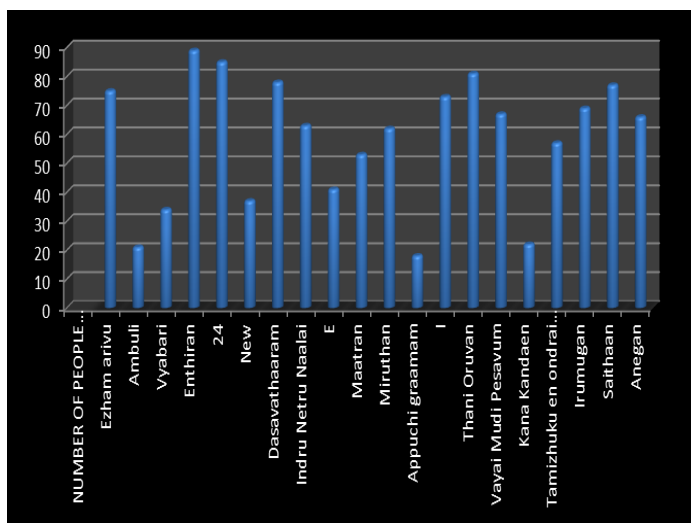


Fig: 4.1 Respondents and the movies watched

The above bar graph indicates the number of movies analysed in this study watched by the respondents who participated in the survey. The chart clearly indicates that science and technology based narratives are watched by viewers. Hence, there is a potential that these films would have impacted the respondents perception of science and technology.

### 4.2 SOURCE OF INFORMATION ON SCIENCE AND TECHNOLOGY

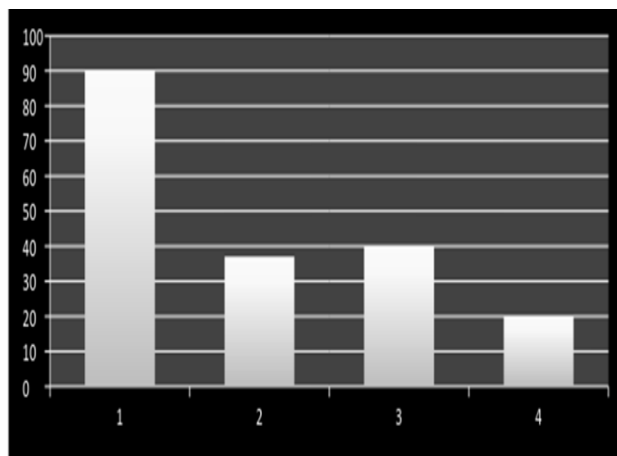


Fig 4.2 Source of information about science

Television acts as a major source of information for the respondents when it comes to information on science and technology. Television is followed by newspapers as a medium for getting information on science and technology.

### 4.3 PORTRAYAL OF SCIENTISTS IN THE MOVIES

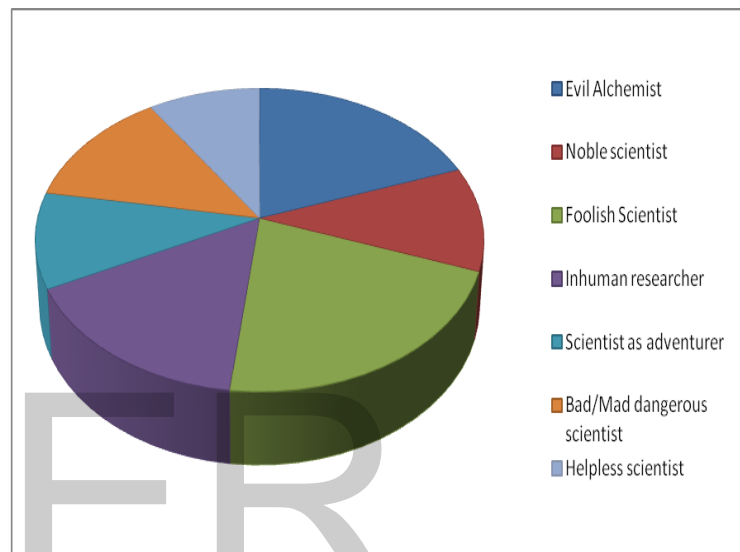


Fig 4.3 Portrayal of scientists in Tamil movies

When enquired about the portrayal of scientists in Tamil films, nearly half the respondents said the scientists were always portrayed in a negative manner. As many as 33 people have said that scientists in films fall in the helpless side and hence become the root cause of the crisis in the society. Films, thus, tend to build a negative image of scientists in the minds of viewers generally.

### 4.4 IMPRESSION ON SCIENCE & TECHNOLOGY AFTER WATCHING FILMS

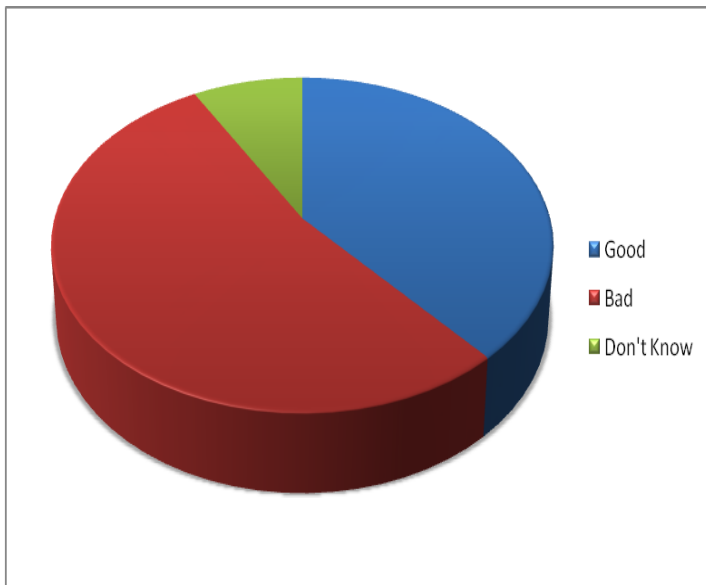


Fig 4.4 Impression on Science after seeing a sci-fi film

More than 50% of the respondents replied that they got a bad impression on science and technology after watching these films. Less than 30% respondents informed that they have a good impression about science upon seeing a scientific film.

#### 4.5 SCIENCE IN MOVIES CAUSE FOR FEAR

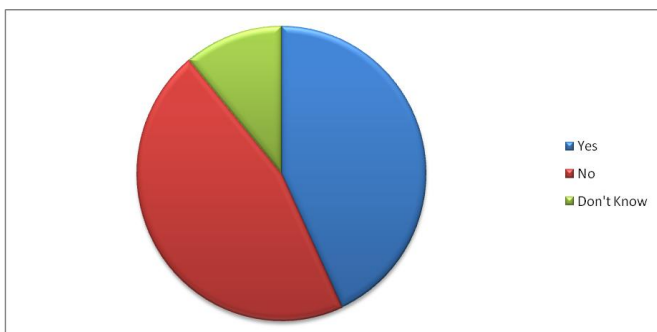


Fig 4.5. Science in Tamil Movies cause fear

When asked whether science as portrayed in Tamil movies causes fear in them, 45% of the respondents said it causes fear, whereas 43% of people said they don't fear the science shown in films.

#### 4.6 ROLE OF SCIENCE & TECHNOLOGY IN EVERYDAY LIVES

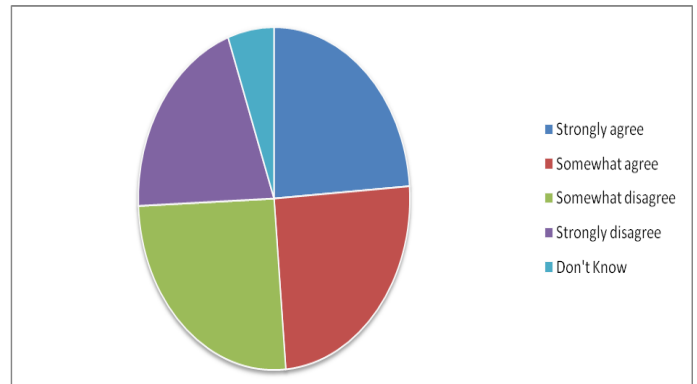


Fig. 4.6 Role of Science and technology in everyday lives

Around 48% of the respondents agree that science and technology actually enables them to improve their standards of living. Whereas 45% of the respondents feel the other way.

#### 5. CONCLUSION

Cinema is one medium which has a deep impact on the public perception on reality and cinematic narratives will definitely have an impact on public understanding of science and technology. With majority of the films analysed in this study, portraying scientists in negative shades, people's understanding of science and technology could be deeply impacted by such ideas from films. The movies portraying scientists as evil or bad people have an impact on audience as they fear science. Narratives based on original scientific facts can increase the knowledge of the audience on science

and technology. Scientists are never acknowledged for their inventions in majority of the movies and thus happen to become destructors in society. This study reveals that portrayal of science in a movie affects the understanding of science among the general public in real life. There are very few films which portray science as a problem solver for humanity, majority of the films attribute scientific discoveries and technology as a bane to humanity. If science is portrayed as a provider of better quality of life or as a solution to a crisis, then people would tend to have a positive image of science and technology.

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