# DVFx, and Modernization of Technology: Audience's Changing Taste in the 21<sup>st</sup> Century

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### ABSTRACT

The changes from analogue to digital in the film industry occurred rapidly and triggered a change in the landscape, especially in the usage of digital visual effects (DVFx). Thus, films that use the digital visual effects have developed a demand for technology exploitation among audiences. The most powerful effect afforded by digitization is the changes in the relationship between film and audience, especially in the aspect of cinema spectacle. Previously, the use of digital visual effects served merely to fix or modify damaged or negative elements in the post-production process, but it also has contributed to transformation of the tastes of audiences in 21st century cinemas. Tastes and aesthetic judgments are manifestations of aspects of class inequality and social, cultural and reproduction ideology. To evaluate tastes especially within different systems of society is not a simple matter as there has been a change in various aspects of society due to technological advances. This judgment involves complex processes and variables. This paper explored how globalization impacts audiences' changing tastes with the juxtaposition of the digital visual effects revolution. The research used qualitative research methods, which is focus group discussions involving three groups of moviegoers from Malaysia, India and Australia. The analysis of the findings is divided into two main themes: modernization and technology. In general, the findings show that taste among movie audiences is a typical representation of the middle class society.

**Keywords:** Audience, digital visual effects, film studies, genres, technology.

## INTRODUCTION

Movie audiences or spectators means people who watch movies whimsically. However, the definition of 21st-century cinema audiences has changed in tandem with current technological advances and circulation of generations. Today's audience is more geared towards individual viewers who can be versed through the fields of psychology, anthropology and sociology. Dixon and Foster (2011) define 21st-century cinema audiences as audiences using movies as a means of escapism. The cinema audience of this century is also a young audience, which finds cinema an easy way to escape their increasingly mundane lives. In addition to that, audiences in this century are exposed to the use of digital media platforms including alternative viewing modes through interactive online streaming such as Netflix and Amazon Prime Video.

Digital visual effects (DVFx) have been widely used in almost all genres of films, commercials and even television drama series. Their use is not only intended to create spectacular elements but also serves to support the storytelling, overcome cinematic limitations and reduce production costs (Dinur, 2017). The use of this technology has enabled an increase in film production not only in Hollywood but also in other countries' film industries. DVFx have become important in film production because they have led to a great degree of technical advancement and improved storytelling presentation as well as elements that are

spectacular for the audience. Worldwide high-grossing films of 2018 such as *Avengers: Infinity War, Black Panther, Jurassic World: Fallen Kingdom*, and more are among films that use DVFx and have received outstanding worldwide audience reception. DVFx have enormous potential as a contemporary area of 'serious' media and communication scholarship, considering the capability of DVFx technology in the film industry not only to enhance the creativity in both visual and narrative but also to the moviegoers. From another perspective, the globalization of technology through the advent of DVFx needs to be seen as a new opportunity for industry players to capture the audience especially on spectatorship.

According to Fink and Morie (2014), visual effects are widely used in the film industry, referring to digital, altered or enhanced images that cannot be performed during the actual or live filming process. This inherent limitation leads to a process of integrating digital computer elements and shooting techniques to produce a creative and spectacular scene. This process is usually performed in the post-production stage after primary image capture is completed. In the use of this technology, visual effects can also be applied to live action capture or fully utilized in the creation of scenes using techniques such as matte painting, computer graphic objects, compositing and character creation, and animation effects.

DVFx have also revolutionized the consumption of creative works, enabling and refreshing new forms of distribution and transforming the interaction with the audience. Indirectly, today's technology has also brought a new perspective to the definition of 'creativity'. Through the use of digital cameras, mobile devices, apps and software, creativity in film productions has entered a new phase. Technology-based creativity has also brought a new culture to film studies and the field of communication. According to Rakhe (2012), techno-creativity studies refers to an intensive study of various theories, campaigns and views of creativity to refer to the use of the most advanced technology in advertising to creatively communicate to the masses such as the use of 3D graphics to shoot high-definition commercial videos.

Both the economic and cultural effects of globalization boost the development of movies around the world through processes and practices such as increasing investment in film production, and the diversity of cinema marketing channels supported by improved government policies to promote the film industry and technology. Globalization in the movie industry also affects audiences' tastes, not only in the global free market but of niche audiences as well. This segmentation of the audience has happened because globalization opened up cross-border production or transnational cinema.

Studies on film audiences have further focused on spectatorship. Theoretical development in spectatorship began in the early 1970s with a study on how the cinema addresses its viewer. According to Baudry and Williams (1975), spectators also refer to the position or structure of cinema. In this theory, the term 'ideal spectator' is used to define the viewer as the subject of the film's textual address (Kredell, 2018). Barker (2012) believes that film 'spectatorship' does seem to have some distinctive characteristics especially for engaging with and evaluating film encounters. Besides, audiences in particular from the spectator's aspect also indirectly provide guidance on the relationship between cinema and other cultural traditions. Hence, to understand the audience, this study aims to investigate the influence of different aspects of culture and geographical locality on the evaluation of quality and creativity

in films, especially among young adults. Fleming (2010) thinks that if a study focuses solely on the artist, then the researcher can evaluate the aspect of creativity that is expanded from the 'form and technique', while focusing on the product itself can further complicate the aspect of 'taste'. Therefore, in order to assess audiences, a combination of individual and product (film) research is the best way to answer the research questions in this section.

## **RESEARCH BACKGROUND**

Film studies and cultural studies are two forms of research that enable researchers to find relationships between text media and audiences. According to Christie (2012), audience definition will always be a problematic discussion among scholars because the 'audience' is an ambiguous concept. There are two main concepts dominating the definition of the cinema audience (Christie, 2012). The first is 'imagined audience', which is often associated with the preferences of the author and responses to the author's assumptions. Through this concept, the definition of the audience is based on stakeholders' perspectives, such as the views of producers, directors and filmmakers in the industry. They see 'the audience' as a creation of the industry that serves its needs and interests (Sundet, 2016). The second concept is from an economic or statistical perspective. In this concept, 'audiences' refers to box-office receipts, and this is the dominant definition in the current film industry. This understanding shows that the audience is comprised of individuals which at the same time are part of the crowd.

However, the definition of 21st-century cinema audiences has changed in tandem with current technological advances and generational changes. A contemporary audience is more geared towards individual. Dixon and Foster (2011) define 21st-century cinema audiences as predominantly a young audience, which finds cinema an easy way to escape their increasingly mundane lives. In addition to that, audiences in this century are exposed to the use of digital media platforms as well. Television has been a typical platform and Internet usage is a new platform. For example, today's cinema audience no longer just watches movies in the cinema but has alternative viewing modes through interactive online streaming such as Netflix and Amazon Prime Video.

This demonstrates that technologic globalization not only gives rise to the content but also other elements of the medium. While audiences can simply mean those who select the content and value of a medium, this selection has evolved to become a culture or 'taste culture'. Lugg (2011) states that public taste is how consumers show a preference for a particular taste culture. This selection should not involve judging a culture using the values of another. For example, we cannot assume people with a certain age, education level, religion, class and ethnic background like or are interested in the same culture and have similar tastes. This situation means that audiences' tastes are different depending on certain factors.

There are numerous scholarly studies on movie audiences. Respected names like Roland Barthes, Wolfgang Iser, Hans Robert Jauss, Jean-Louis Baudry and Jacques Lacan have contributed much to audience and media research. Beginning in the late 1960s, scholars began to develop the theoretical framework to understand the relationship between film and audience, borrowing from other disciplines such as psychoanalysis, semiotics, feminist theory and structural Marxism (Kredell, 2018). The evaluation of a medium begins when a work meets audiences (Sefton-Green, 2000). In this case, the audience acts as a bridge that relates cognitive

and sociocultural aspects of what is produced in a film to improve literacy. This is because not every audience understands what media is trying to convey. So, it does not matter if the definition of the audience is seen from two main points of views, as expressed by Christie (2012). It is essential for scholars to know and appreciate that every criterion or quality standard in respect of a particular literary product, especially films, will always be related to cultural factors and this situation will always change.

According to Osorio (2014), movie audiences consist of multiple configurations, which leads to the emergence of film cultures through revolutions and developments from time to time. These film cultures have also formed specific paths for the practice and discussion of film discourse interpreted through local, national and transnational contexts as well as historical factors. Therefore, to evaluate a film and audience, these factors need to be addressed. A study conducted by Halverson et al. (2014) shows that young people evaluate a film according to the genre and narrative as well as the creative process within the film. The study also represents the beginnings of the demonstration of the potential power of 'reportability' and 'criteria' as elements in evaluating aesthetic product narratives.

The cinema viewing experience is also a factor in the audience's acceptance based on genre and narrative factors. Thus, the study conducted by Srinivas (1998) on the active audience experience of Indian spectators at the cinema shows significant results. Ethnographic research involving engagement processes cannot be understood without precise knowledge and understanding of the activities and practices of audiences in which the process creates a cinematic experience. Srinivas found that active Indian audiences have been trained with certain 'expectations' when watching a movie. Although most films in India borrow storylines, scenes, characters, costumes and even music from Hollywood, however, they assume that films from the West are too short in duration and boring as they have too much emphasis on conversation rather than action. Most foreign films that have succeeded in the Indian film market are action-adventures, comedies, martial arts films and also films containing digital visual effects such as *Jurassic Park* and Marvel movies. Srinivas also categorizes audiences in India into five main categories: selective viewing, social and interactive viewing, participatory viewing, re-making film and evoking transformation.

In contrast to Srinivas, Fu (2012) shows that cultural, language and economic factors affect how audiences respond to media content such as movies. This finding indirectly enhances our understanding of the transnational media that can be used in examining audience acceptance and preference. Looking at the response of local audiences to universal content sharing helps to better understand how world tastes are created. Nevertheless, there are several weaknesses in studies of audiences especially film spectators. Osorio (2014) lists four types of problems found in studies involving movie audiences. First of all, non-homogeneous identities mean that studies should not focus on specific audiences. This problem means that each audience is different and an outcome of audience research may not represent the entire audience. Secondly, in general, audience points of view have been formed by several factors and these factors will determine and reflect the scope and importance of a study, which means study results can be uneven and biased. Thirdly, the complexity of the audience is not only interpreted through diversity and other variables, but also historical background. While the fourth is the complexity of audience research, separated by how movie audiences express themselves, which is closely related to their lifetime experiences. As such, studies of film

audiences in this context should emphasize the diversity of audiences that is substantially formed from their cultural and historical backgrounds. Film cultures shared by audiences are what make up the concept of the new audience. The response of this film culture means that every audience shares a discourse and practices that define specific pathways.

The concept of the judgment of taste has been widely used for the last 20 years along with the concepts of clarification, modification and improvisation, which are related to cultural exclusion (Warde, 2008). Some scholars also have studied the appraisal of the tastes of movie audiences. Wanderer (1970) states that there are two clashing perspectives. The first is to involve popular taste and the second is popular culture created by professional critique. This clash has been described more deeply by Osorio (2014). In his research, he addressed the question of what causes audiences to change their tastes. For example, do audience tastes change in line with legitimate taste, or in other words, do audiences today reflect the true meaning of 'good taste' and 'bad taste'? The answer to this question is far from neutral because there are significant implications for the behaviour of the audience and for cultural policy. According to Debenedetti and Larceneux (2011), in order to influence an audience to go to a movie, the professionals in this field use expert opinions as their product marketing strategy, but this way will not work unless audience tastes are in line with those of the specialists or professionals.

However, there are specific issues in film and communication studies because they are dominated by two theoretical perspectives. First, a sociological perspective describes the divergence between specialist and audience preferences because of the social differences in the criteria used to judge excellence. The second perspective assesses the 'convergence of tastes'; that is, the distortion of the hirer's differences among cultural-based work recognized by experts and popular culture is not the same as ordinary audiences. As such, the situation is closely related to the influence of social class and level of education determining an audience's viewing preferences as stated by Bourdieu. Hence, it is important that the framework of audience-based evaluation of the professional or industry should take into account Bourdieu's factors of social class, education level and cultural structure. The technological advancement factor and time shifting are the elements that need addressing because these elements are likely to be catalysts for the 21st century's audience taste transformation.

## METHODOLOGY

The use of digital visual effects (DVFx) in film indirectly follows current trends and is undoubtedly causing a revolution in the audience's taste. Hence, this article analyse the audience's changing tastes regarding the DVFx as spectacular elements. The data sources are a combination of in-depth interviews with experts as well as findings involving focus group discussions in India, Malaysia and Australia. A total of three focus group discussions were conducted involving respondents in the age group of 20 to 25 years. The duration of the discussion for each focus group was 30 to 40 minutes and involved five to seven respondents per group. Respondents in each country were asked about their film taste, selection and viewing and how much DVFx technology has to do with their choice of film. The analysis in this section is divided into three main sections to answer the question of the audience's changing

tastes, that is, social class and cultural proximity, modernity and DVFx technology and genres and generation gaps.

## **RESULT AND DISCUSSION**

## Modernization and DVFx Technology

The concept of modernization has been debated, as there are various opinions in cinema discussions over time which are not closely related to geopolitical positioning. However, this discussion is necessary as it leads to the essential elements of audience analysis as well as understanding the real meaning of modernity. In the context of audience studies, modernity affects the value to audiences of film commodities. This value is likely to include aspects of modern technology used in the production process as well as the aspects of viewing in the audience. This modernization process has also led to cosmopolitanism, which has led to the transformation of social structures through new technology disputes, subsequently leading to the new culture. For example, today's movie audience is not required to go to the cinema to watch movies, as there is an alternative interactive technology in online streaming and also smart TV or VR technology. Hence this aspect of modernization has led to a change in the new audience's tastes.

To find out the changing movie viewing media amongst audiences, respondents were asked how frequently they watch movies in the cinema. As expected, the findings show that they do not often watch movies in cinemas. Watching movies in the cinema is not precedence for respondents. According to respondent BM5 from Malaysia:

I only go for movies which suit my taste. If my favourite movie is released in the cinema, and the movie that I wanted to see, I will follow the trailer then I go watch the movie. (InfotmantBM5)

Respondents from Australia also said they less frequently go to the cinema due to the presence of other movie-viewing platforms like online streaming websites such as Netflix. According to respondent GA4:

I watch movies on a regular basis like 3–5 times a week. I use Netflix regularly and go to the cinema less frequently. Maybe once in every couple of months. (InformantGA4)

The same opinion was given by respondent BA2, stating that web streaming like Netflix made it even easier to watch movies:

Very much frequent considering on a daily basis, with Netflix establishment watching movies at my fingertips. Cinema, only when there are any blockbuster movies, comes to the screen. I can say once in two months. (InformantBA2)

Respondents from India stated that the landscape of the film industry in India is extensive and causes audience segmentation. There are various types of film industry in India derived from different regions and cultures, together with different audiences and fans. For example, respondent INDB1 stated:

Indian film industry is too diverse. There is Bollywood, Kollywood and Tollywood. Bollywood for the mainstream, Tollywood for Southern India and Tamil Naidu and I am not sure about Kollywood. It is too diverse, but I think Bollywood movies and some Kerala, Tamil and Telegu movies are good. (InformantINDB1)

The diversity of the cinema industry in India has given audiences a diversity of choices as well. Respondent INDB3 explained:

Audience is very open, so there are people like too dramatized the storytelling, but in Bollywood now people start to appreciate and produce inspiring movies. Youngsters are more open to all kind of movies [genres]. (InformantINDB3)

It cannot be denied that films provide entertainment to audiences. However, there are also audiences that use films as escapism from the real world. Entertainment can be interpreted differently by different audiences. Based on the analysis, many respondents measure entertainment based on the elements of storyline and not just additional constituents like actors and technical achievements. Some respondents choose to watch a movie due to the storyline, such as a respondent from India, INDB3:

I always see through the story. The story should be the selling point and what it represents about the culture of India, what it represents about what the world is and how the world is. A movie like that completely nails the point. (InformantINDB3)

Respondent INDB1 said:

I watch the movies for the stories. Based on the story first not the actors or actresses. It does not matter who act the story, if the story's good the movie is going to be good. (InformantINDB1)

Respondent INDG3 added:

If I go to the cinema, I will go for the storyline first. I do not see the actress and actor at all. Like Baahubali, one of the best films here, the main reason the film got blockbuster is because of the storyline and also the animation on the movie with the CGI as well. (InformantINDG3)

Similar findings were also obtained from Australian respondents, who stated that the storyline was the most important consideration over entertainment factors, actors and technical achievements. GA4 agreed that the storyline is an important part of her selection of a movie, and at the same time she also agreed that social media equally influences her choice:

I usually choose to watch movies based on if it has been very hyped up or bound to be popular, but the overall is a storyline and the genre of the movie. Social media has a big influence on what I am to watch as it provides me with lots of details beforehand, determining if the movie is something I will enjoy or not. (InformantGA4)

The advancement of DVFx technology has generally impacted not only the landscape of creative film production but also audiences, especially 21st-century audiences. Audiences in this era of technology crave certain levels of quality in the produced film (Rohlf, 2017). Undoubtedly, DVFx affect the quality and creativity of the visual representation, but they also affect the audience's satisfaction. According to Felschow (2015), many studies have been done on the DVFx usage and audience impact, but there is a lack of deeply quantitative analysis to understand its effects. Hence, respondents in this study were also asked about the influence of DVFx on their viewing preferences. Most respondents from Malaysia think that watching international films is more attractive than local films because of the visual technological advances. They think DVFx technology provides a much more engaging and spectacular viewing experience than local films. Respondent GM1 said:

For me, I started to be attracted to Marvel movies. I think they have a lot of visual effects and it is desirable. I want to see the visual effects especially for the superheroes movies like Thor. I wanted to watch something different from the others especially something that is not in reality. Yes, fantasy. (InformantGM1)

Respondent BM4 also gave an example of a local production from Malaysia, *Merong Mahawangsa*, which used DVFx technology in its production. He agreed that the use of special effects techniques such as DVFx in the film was able to attract the audience. According to BM4:

Visual effects are one of the factors besides I follow the chronology and the previous movies. Why am I saying visual effects can be an attraction to the moviegoers? Let's see, Merong Mahawangsa by KRU Studios, they have the VFX facilities, they have the experts, and we were expecting so much with the movie because of the CGI. However, when I go watch it, it is below the expectation. (InformantBM4)

Respondent BM5 thinks DVFx technology is steadily improving in international films but not in Malaysia. BM5 argued:

Special effects are getting better every time but maybe not in Malaysia. I do not follow much in Malaysia, but I think internationally, I take the example of the franchise Fast and Furious. We can see how much they grow from the previous one until now. (InformantBM5)

Respondent BM5 added that the use of DVFx indirectly attracts audiences to watch movies, even movies with weaknesses in the storyline and narrative. BM5 said:

Their graphics and visual has spent and become better, and I will not deny that it's the main reason why they can pull the audience. They can break the box office because of the quality, and yes, I go watching those movies because of the visual effects, and sometimes they do not have a storyline, but just the visual effects are very nice. (InformantBM5)

Respondent GM3 supported respondent BM5's stance. She also considers that the use of DVFx technology in local films has not reached the level that satisfies audiences who have watched international films. According to GM3, the impact of the spectacle makes them feel it is worthwhile watching the movie:

When we watched local movies we cannot achieve our satisfaction especially the visual effects. So we need to move to international films and when we watched that films, for example, Marvel movies, it gives satisfaction. That satisfaction makes us feel worth it to watch a movie in the cinema. (InformantGM3)

The identical notion was also expressed by respondent BM1, who argued that the use of DVFx in international films has more impact on audiences and indirectly helps them to appreciate the storyline better. Respondent BM1 agrees that DVFx is the crucial factor that led him to go to the cinema. According to him:

I like to watch a movie based on true events because it will use less CGI but surprisingly when Western movies do it with the CGI and visual effects it is more interesting. That means, they put the CGI even if the genre does not require that elements, so as an audience we can feel it and touched by the story. For me, CGI is part of the factor why I am going to watch the movie at the cinema. (InformantBM1)

Respondents were also asked about their thinking on films using DVFx and whether they should be considered creative films. Most respondents agreed with this notion. A respondent from Australia, GA4, gave this opinion:

Yes. I believe movies with DVFx is a creative as they use additional resources to bring life to fictional things and open the door for many different movie plots because they can now create things that could not be done before. (InformantGA4)

Respondent BA2 considers that creativity is a subjective thing, but the use of DVFx is an advantage to a movie because the process of using DVFx is complicated and creative. According to him:

Creativity is a very subjective topic. Some movies do not require any digital effects but yet provide a succinct storyline to it. Producing movies with DVFx certainly, requires lots of hard work and creativity. It is always a bonus to get dessert after the main course but of course, a good kind of dessert that concludes the great meal. (InformantBA2)

Respondents from India also agreed with the notion. Respondent INDB1 thinks DVFx complements the storyline of a movie. He used *Baahubali* as an example:

Yeah. For example in Baahubali. We, and we cannot make the hero fly in the sky without anything. We can't hang the camera in the sky, right? So CGI is the place that we can do all that things. I agree that CGI contributes to the creative elements in the movie. It is more to the storyline, but if you want to portray the storyline a bit more, you have to do it with CGI. (InformantINDB1)

Respondent INDB2 argued that DVFx technology should operate in parallel with the inclinations of the spectators. He elaborated that the audience should be satisfied with the cost of tickets to watch a movie using DVFx:

It is good to have more CGI is like what the audience wants. You have to use the CGI to make it what the audience likes. The audience wants something awesome if they are going to pay \$15 for the ticket and watch something like wow! The wow factor. CGI is a must, but he said not too much. (InformantINDB2)

Respondent BM2 added that it is imperative for filmmakers to meet audiences' high expectations. DVFx technology should be able to translate the creative ideas of filmmakers into visual form and turn them into a creative visual presentation. According to BM2:

For me, filmmakers need that artistic values because they need to think what should happen and what should not. Moreover, the most important thing is that audience expectation. All that things need a creative mind. (InformantBM2)

Respondent GM1 from Malaysia argued that the use of DVFx such as CGI in a movie production gave a 'wow' factor to the audience. According to her, the excitement of the 'wow' factor makes her feel the movie is creative even though she recognized that the visuals were computer-generated images. She explained:

For me, it will look more creative when the movie uses the CGI because of the wow factor. I give an example on Pirates of the Caribbean when they manage to create a fighting scene at the bottom of the sea, and suddenly the sea was divided into two. I knew that is a CGI, but it is wow! That scene looks real and creative. (InformantGM1)

However, some respondents disagreed with the notion that movies using DVFx are creative movies. This difference clearly shows that there is a difference in tastes among the interviewed respondents. A respondent, INDB3, from India described many other things that could be done without using DVFx technology in film production. According to him:

I think I disagree upon that. Firstly we can do a few things without CGI as well. Just the matter of how much of the knowledge about the geography, of this planet. For example, take the movie The Hobbit. How do you like the scenery? It is magnificent. Do you know there is no CGI used for that? Only CGI used for the sword fights and the minimal. (InformantINDB3)

Respondent INDB3 also believes that audiences will be more attracted to the storyline rather than 'cosmetic' elements such as CGI. He did not deny that the use of DVFx can at least increase the creative impact of a film, but the creativity value should be placed on the story and narrative. He added:

You can do a lot of movies if you know the geography well, at the same time you put a good storyline, and the audience is attracted to it. Too much CGI is too much, it should not be too much. So let's put in the minimal. It is there. It is good. It is in the creative element, I strongly agree on that but not on the element of being very creative, because too creative in the CGI, you miss out the story. (InformantINDB3)

Respondent INDG3 argued that most Indian movies lack DVFx technology and only a handful of directors in India tend to use it as a trademark. INDG3 said:

Indian movies, they do not use a lot of CGI, right? It's based on the director and also budget, as one of the directors, the only director that uses a lot of CGI is Shankar. He's the one always like any film that he takes should have the CGI elements. Like Indirand 1 & 2. Part 2 is still in process. So the other directors they do not focus on using the CGI in their films. (InformantINDG3)

Consequently, the findings in this section show that the factor of modernity and DVFx technology has led to changes in the audience's taste, especially in terms of media platform changes that focus more on interactivity and entertainment satisfaction. DVFx have indirectly developed the author-text-audience relationship as it provides the power of 'control' to the audience (Cover, 2006).

## CONCLUSION

In general, the findings show that taste among movie audiences is a typical representation of the middle class of society. Gans (1966) described this situation as 'taste culture'. According to Gans, taste culture is the diversity of information, art and entertainment that have been chosen by the community. Every taste culture serves a public taste where the community describes the content of the culture that is desirable. Gans's standpoint (1966) is parallel to Bourdieu's position that public tastes are influenced by the class and the educational background of an audience. Bourdieu (1984) also believes that audiences' tastes also depend on the system offering film products to the public. Any changes in the supply system will also affect the transformation of the taste.

Based on the findings of this study, it is clear that the supply of film products using DVFx technology by filmmakers and industry players has indirectly contributed to a new audience taste. Besides, there is clear interaction between the three elements discussed, namely social class and cultural proximity, modernity and DVFx technology in shaping and transforming the tastes of the audience. However, there is still ambiguity about how to determine good taste and bad taste, especially regarding using DVFx technology in film production. The people who have the power to determine 'good taste', consisting of experts in the field and the industry, such as critics, editors, academics, curators and directors, may define audiences' changing tastes. All of them are also known as gatekeepers. The development of media technology also shapes the media system in different countries, so there are practical advantages of cross-nation analysis (Bolin & Skogerbo, 2013).

Evolving technology has clearly affected the transformation of taste especially among youngsters, which in turn leads to a tendency to be interested in specific genres such as action and sci-fi. Hence, the changing tastes of the audience depend heavily on the magical display on the screen through the creative touches of the production team. The use of technology such as DVFx indirectly opens the opportunity for filmmakers to attract audiences to the cinema, in addition to other attractions such as narrative and storyline.

## BIODATA

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#### REFERENCES

- Baudry, J-L., & Williams, A. (1975). Ideological effects of the basic cinematographic apparatus. *Film Quarterly*, 28(2), 39–47.
- Barker, M. (2012). Crossing out the audience. In I. Christie (Ed.), *Audiences: Defining and researching screen entertainment reception* (pp. 187–205). Amsterdam: Amsterdam University Press.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste.* Cambridge, MA: Harvard University Press.
- Bolin, G., & Skogerbo, E. (2013). Age, generation and the media. Northern Lights, 11, 3–14.
- Christie, I. (Ed.). (2012). *Audiences: Defining and researching screen entertainment reception.* Amsterdam: Amsterdam University Press.
- Cover, R. (2006). Audience inter/active: Interactive media, narrative control and reconceiving audience history. *New Media & Society*, 8(1), 139–158.
- Debenedetti, S., & Larceneux, F. (2011). 'The taste of others': Divergences in tastes between professional experts and ordinary consumers of movies in France. *Recherche et Applications en Marketing*, 26, 71–88.
- Dinur, E. (2017). The filmmaker's guide to visual effects: The arts and techniques of VFX for directors, producers, editors and cinematographers. New York: Routledge.
- Dixon, W. W., & Foster, G. A. (2011). 21<sup>st</sup>-century Hollywood: Movies in the era of transformation. New Brunswick, NJ: Rutgers University Press.
- Fleming, M. (2010). *Arts in education and creativity: A literature review* (2nd ed.). London: Creativity, Culture and Education
- Felschow, L. (2015). Book review: Spectacular digital effects: CGI and contemporary cinema by Kristen Whissel. *The Velvet Light Trap*, 75, 114–115. Retrieved from https://muse.jhu.edu/article/567656
- Fink, M., & Morie, J. F. (2014). Introduction. In J. A. Okun & S. Zwerman (Eds.), The VES handbook of visual effects: Industry standard VFX practices and procedures (pp. 1–15). New York: Routledge.
- Fu, W. W. (2012). National audience tastes in Hollywood film genres: Cultural distance and linguistic affinity. *Communication Research*, 40(6), 789–817.
- Fu, W. W., & Gorindaraju, A. (2010). Explaining global box-office tastes in Hollywood films: Homogenization of national audience movie selections. *Communication Research*, 37(2), 215–238.
- Gans, H. (1966). Popular culture in America: Social problem in a mass society or social asset in a pluralist society? In H. Becker, (Ed.), *Social problems: A modern approach* (pp. 549–620). New York: John Wiley.
- Gumpert, G., & Cathcart, R. (1985). Media grammars, generations and media gaps. *Critical Studies in Mass Communication*, 2(1), 23–53.
- Halverson, E. R., Gibbons, D., Copeland, S., Andrews, A., Llorens, B. H., & Bass, M. B. (2014).
  What makes a youth-produced film good? The youth audience perspective. *Learning Media and Technology*, 39(3), 386–403.

- Kredell, B. (2018). 'Complicated negotiations': Reception and audience studies into the digital age. In H. Vaughan & T. Conley (Eds.), *The anthem handbook of screen theory* (pp. 71–84). London: Anthem Press.
- Lugg, A. (2011). Chinese online fiction: Taste publics, entertainment, and Candle in the Tomb. *Chinese Journal of Communication*, 4(2), 121–136.
- Mannheim, K. (1923). *Essays on the sociology of knowledge*. London: Routledge & Kegan Paul.
- Osorio, M. F. (2014). Movie audiences, modernity, and urban identities in Cali, Colombia, 1945– 1980 (PhD dissertation). Retrieved from PQDTOpen. Proquest (3641826).
- Rakhe, S. (2012). *Techno creativity in advertising* (PhD dissertation). Retrieved from ProQuest Dissertations Publishing (3736032).
- Rohlf, B. M. (2017). Audience reactions to computer-generated imagery in video (PhD dissertation). Retrieved from ProQuest Dissertations Publishing (10603590).
- Sefton-Green, J. (2000). *Evaluating creativity: Making and learning by young people.* New York: Routledge.
- Srinivas, L. (1998). Active viewing: An ethnography of the Indian film audience. *Visual* Anthropology, 11, 323–353
- Sumner, W. G. (1906). Folkways. Boston: Ginn
- Sundet, V. S. (2016). Still 'Desperately seeking the audience'? Audience making in the age of media convergence. *Northern Lights: Film & Media Studies Yearbook,* 14(1), 11-27.
- Warde, A. (2008). Dimensions of a social theory of taste. *Journal of Cultural Economy*, 1(3), 321–336.
- Wanderer, J. J. (1970). In defence of popular taste: Film ratings among professional and lay audiences. *American Journal of Sociology*, 76(2), 262–272.
- Woodman, D., & Wyn, J. (2015). Class, gender and generation matter: Using the concept of social generation to study inequality and social change. *Journal of Youth Studies*, 18(10), 1402-1423