Study on the Acceptance of Heroine Images in Chinese and American Animated Films

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ABSTRACT

With the development of our society, new waves of feminist movements emerged continuously. At the same time, feminism had a profound impact in the field of film creating, inspiring generations of film and television creations around the world, and gradually integrating feminist theories into the connotation of their own film and television works. The animation also showed up in innovative forms, providing spiritual nourishment and cultural edification. This paper selected two feminist animated films "Frozen 2" and "Verta 2" as representatives, focusing on the expression and acceptance of feminism in animated films. This paper used quantitative methods to explore heroines' charm and their cultural connotations, and describe the communication between the film connotations and the respondents. The effect and its social significance were also explored to establish connections between animated films feminist connotation and the feminist social and cultural conditions. After a quantitative investigation and analysis process, using research methods such as literature analysis, case analysis, and data processing methods such as regression analysis, the relationship between the film's feminist ideas and the audience's acceptance is concluded.

Keywords: Feminism, Animated films, China, the United States

1. INTRODUCTION

Feminism, since it first appeared on the historical stage, has maintained its vitality. From the 1930s, feminism in the United States began to take off. During this period, the female image was still regarded as the vassal of the male, staying home to raise their children. By the 1950s, there was a series of anti-bias campaigns against race, feminism, homosexuals, and other marginalized groups in society. By the 1980s and early 1990s, after decades of feminist activism, the US had become more aware of feminism and the public had gradually changed its stereotypical view of women, with women gaining equal rights to work and education. Until today, the feminist movement in the United States has been quite effective, gradually breaking the public's stereotype of women, and outstanding women can be seen in various fields. The feminist movement has shifted from the actual struggle for social rights to more ideological liberation.

As a cultural and social trendsetter, the film will inevitably bear the brand of the times. The creation of characters in films is a product of the psychological requirements of adults for that type of character, in line with the cultural identity of contemporary society. Since Disney's first animated princess film *Snow White and the Seven Dwarfs* in 1937, the definition of the female figure has been dominated by masculinity, rescued by the male figure, who "gazes" at the female, and the female figure in the film caters to the male and is mentally dependent on him [1][2]. With the continuous advancement of feminism, the image of Disney Princess is also changing. In the 1970s and 1990s, the emergence of ecofeminism promoted the development of feminism. Ecofeminism combined ecologicalism and Feminism combined the concepts of devaluing women and nature in society, emphasizing the close connection between women and nature, and believes that only women who actively participate in saving nature can truly solve natural ecological problems. At the same time, Virginia Woolf, a pioneer of 20th-century modernism and

feminism, called on women to become themselves. Frozen 1, released in 2014, broke away from the decades-old Disney formula of a prince saving a princess and instead embodied the two heroines Elsa and Anna. By the end of 2019, the release of Frozen 2 focuses more on reinforcing Elsa and Anna's respective self-growth to independence and awakening, allowing female strength to shine through and showcasing the power and beauty of women themselves. The film is inspired by the awakening of women's independence in the West, and the same feminist trend in China has contributed to the emancipation of Chinese women's minds. The traditional notion of 'women being the head of the family and men being the head of the family has gradually faded and the social phenomenon of men being superior to women is slowly disappearing. In 2012, the youth feminist advocacy group BCome was founded in Beijing, and its most representative campaign was the "Occupy Men's Toilets Campaign", which aimed to draw public attention to the unreasonable number of male and female toilets in public places. In 2017, the Metoo movement, a globally influential anti-sexual harassment movement that has spread through the internet, has influenced Chinese women and has positively contributed to the promotion of women's self-awareness, the reconstruction of the gender rights structure, and the protection of the gender rights of professional women, becoming an important opportunity for the development of feminism in China in the new era. On 23 July 2021, China's first national comic book heroine film, White Snake 2: The Green Snake, was released in theatres in China, taking women as its first point of view, focusing on their growth and showing their independence and strength.

In terms of domestic literature research, in recent years, there have been many studies on female character modeling in animated films. Some scholars have conducted systematic research on female characters, and some scholars have systematically summarized the development of feminism. These data show that female images research is valuable. The following research status is the current research results. In the article "A Study of the Genre Evolution of Disney Princess Animated Films" by Wu, the genre evolution characteristics of each stage are summarized and summarized, and the genre program of Disney Princess animated film creation is interpreted [3]. Zhang analyzed that the image of princesses in Disney animated films gradually got rid of the single narrative formula and gave the female images new connotations of the times, making the character settings more three-dimensional and raising the social status of women [4]. Yang analyses the female self-images of Elsa and Anna and reconstructs the female subjectivity through the analysis of their intrinsic qualities [5]. Chen explores the link between traditional Chinese folklore stories and the gender and identity anxieties faced by contemporary

women, in order to reflect on and express some of the dilemmas and maternal themes of women in the present [6]. There are also some international studies of Disney animated films, such as Madeline and Lauren analyse how Elsa, as a powerful heroine independent of men, finds a balance between gender and power [2]. Lauren Dundes, Madeline Streiff, and Zachary Streiff illustrate the redefinition of female fertility and gender identity in modern society through the conflict between Elsa's powerful abilities and traditional gender hierarchies [7].

In general, there is a paucity of literature in both domestic and international literature that focuses on women and feminism as a research direction in animated film creation studies. Although the portrayal of women is in the direction of most of the current literature, there is a lack of attention in the theoretical research community, and research on theories and images of animated films from a female perspective is not comprehensive enough. Therefore, this paper mainly analyzes the acceptance of heroine images in Chinese and American animated films from the perspective of feminism. We will select two Chinese and American animated films with the highest box office rankings of feminism as examples. China selects "White Snake 2: The Green Snake" America selects "Frozen 2" for text analysis and audience analysis. In our opinion, the contribution of this paper lies in the study of feminist animation, which is still a field that has not been studied in depth. Our project can provide important possibilities for media activism and at the same time build a healthy concept of gender equality among young people.

2. METHOD

This study used data analysis methods, such as quantitative survey and regression analysis. And two representative films, "Frozen 2" from the United States and "Verta 2" from China, were selected to investigate the respondents' acceptance of the film connotion transmitted by the female heroines. We took the Chinese young people as the research object. The two films "Frozen 2" and "Verta 2" were selected from the high score list of Douban, a Chinese review platform, that is, the highest-scoring films with the female protagonists in the list of the United States and China, respectively.

This survey sent out questionnaires through the network. The respondents of the survey come from all over China and have a wide geographical coverage. A total of 359 valid questionnaires were obtained, including 140 males (39%) and 219 females (61%). 45 under the age of 18 (12.5%), 169 aged 18-25 (47.1%), 90 aged 25-35 (25.1%), 55 over the age of 35 (15.3%); 57 are with high school education or below (15.9%), 60 are higher vocational colleges (16.7%), Undergraduate 193 (53.8%), 49 master's degree and above (13.6%). Among them, there are 306 people watched "Frozen 2", 287 people watched "Verta".

Table 1 Basic information of respondents

	Items	Number	Rate
gender	male	140	39%
	female	219	61%
age	under the age of 18	45	12.5%
	aged 18-25	169	47.1%
	aged 25-35	90	25.1%
	over the age of 35	55	15.3%
education	high school education or below	57	15.9%
	higher vocational colleges	60	16.7%
	Undergraduate	193	53.8%
	master's degree and above	49	13.6%

The 5-point Likert scale was used in this survey. Taking respondents' cognition of the heroine image and the original understanding of feminism as independent variables, this paper probes into the influencing factors of the acceptance of the films' feminist connotation. The respondents' answers are transformed into specific numbers, and the scores of each question are calculated, and finally the respondents' views and approval degree on a particular question are reflected.

This questionnaire is designed with two independent variables: heroine image, feminist awareness. To test the respondents' film connotation, the statements in the scale were used to reflect the characters of "Elsa" or "Verta". There are five questions on this topic: "I think Elsa/Verta shows the quality of bravery", "I think Elsa/Verta shows the independent quality", "I think Elsa/Verta shows the strong quality ", "I think Elsa/Verta shows the quality of wisdom", "I think Elsa/Verta is affectionate and righteous". To test the respondents' feminist awareness, the scale including three dimention (cognition, attitude and behavior) were used for respondents to evaluate the consistency of each statement with themselves. The scale includes four statements: "I understand the meaning of feminist", "I understand feminist movements such as 'me too'", "I will think of feminism and feminist movements when I see some incidents of gender inequality.", "I'm often involved in discussions about feminism or feminist movements on social media".

The dependent variable is film connotation. To test the respondents' acceptance of feminist ideas in movies, the scale includes the following questions: "I think movies embody the idea of fighting for women's rights", "I think movies embody the idea of striving for the women's awaking self-awareness".

At last, the data analysis of this survey were carried out in SPSS26. By importing the collected information, the options in the scale and their corresponding meanings were coded, confidence tests were carried out, these hypothesises were tested by regression analysis and finally obtain linear regression equations.

3. RESULTS

The research hypotheses are as follows: (1) the heroine images "Frozen 2" and "Verta 2" play positive roles in the acceptance of films' feminist connotation; (2) respondents' initially understandings of feminism plays a positive role in the acceptance of films' feminist connotation.

However, after data analysis, the results of this study confirmed the first hypothesis and negated the second hypothesis. The overall average value of character images in "Frozen 2" is 3.99, including bravery 4.00, independence 3.92, strong 4.09, wisdom 3.99, affectionateness 3.98. The overall average value of feminist awareness in Frozen 2 is 3.87, including "I understand feminist thought" 3.84, "I understand feminist movements such as 'me too'" 3.80, "I pay attention to the status of women, and I will think of when I see some incidents of gender inequality. Feminism and its Movements" 3.98, "I'm often involved in discussions about feminist ideas on social media" 3.84.

The overall average value of character images in Verta 2 is 3.87, including bravery 4.00, independence 3.92, strong 4.00, wisdom 3.97, affectionateness 3.97. The overall average value of feminist awareness in Verta 2 is 3.87, including "I understand feminist thought" 3.85, "I understand feminist movements such as 'me too'" 3.78, "I pay attention to the status of women, and I will think of when I see some incidents of gender inequality. Feminism and its Movements" 3.98, "I'm

often involved in discussions about feminist ideas on social media" 3.84.

3.1. Confidence analysis

3.1.1. Feminist awareness

In "Frozen 2", the reliability statistics of respondents' fminist awareness, the Cronbach Alpha, is 0.937, with a high reliability. In "Verta 2", the reliability statistics of respondents' fminist awareness,

the Cronbach Alpha, is 0.887, which is highly reliable too.

3.1.2. Movie-related

In the reliability statistics of "Frozen 2", the Cronbach Alpha of the heroine image is 0.928, and the Cronbach Alpha of the film connotation is 0.856; In the reliability statistics of "Verta 2", the Cronbach Alpha of the heroine image is 0.919, and the Cronbach Alpha of the film connotation is 0.844. Both films showed high reliability in heroine image and film connotation.

Table 2 Reliability statistics information

	the Cronbach Alpha	Number of items
Frozen 2: heroine image	0.928	5
Frozen 2: film connotation	0.856	2
Verta 2: heroine image	0.919	5
Verta 2: film connotation	0.844	2

3.2. Linear regression analysis

The results of correlation analysis only show the interaction between each factor, and whether it is a positive or negative correlation. Therefore, to understand the effects of each factor on the dependent variable, it is necessary to use regression analysis to conclude a linear regression equation and quantitatively investigate the relationship between the independent variable and the dependent variable.

Table 3 Linear regression analysis on *Frozen 2*

	Unstandardized coefficient	Coefficient Standardized coefficient	t	Sig	Collinearity statistics	
	B	Beta			Tolerance	VIF
constant	-.027			.907		
Feminist awareness	.068	.059		.109		
Heroine image	.875	.765		.000		

A.dependent variable:film connotation

From the perspective of cognition, there is a significant positive correlation between the respondents' perception of heroine image and the acceptance of film connotation; while the correlation between respondents' feminist awareness and film connotation is not significant.

Validation: The independent variable X is heroine image and feminist awareness, and the dependent variable Y is film connotation.

As can be seen from the table, the Adjusted R-square is 0.59, which indicates that 59% of the performance of film connotation comes from heroine image and feminist awareness, and the overall degree of explanation is high. However, the significance of heroine image is below 0.05 (sig=0.000), the significance of the feminist awareness is 0.109>0.05, so there is no significant significance.

The linear regression equation of Frozen 2 is as follows: Film connotation= -0.027 + 0.875 * heroine image. Or, film connotation= 0.765 * heroine image.

Table 4 Linear regression analysis on *Verta 2*

	Unstandardized coefficient	Coefficient Standardized coefficient	t	Sig	Collinearity statistics	
	B	Beta			Tolerance	VIF
constant	.022			.917		
Feminist awareness	.042	.038		.280		
Heroine image	.906	.806		.000		

A dependent variable: film connotation

From the perspective of cognition, there is a significant positive correlation between the respondents' perception of heroine image and the acceptance of film connotation; while the correlation between respondents' feminist awareness and film connotation is not significant.

Validation: The independent variable X is heroine image and feminist awareness, and the dependent variable Y is film connotation.

As can be seen from the table, the Adjusted R-square is 0.59, which indicates that 59% of the performance of film connotation comes from heroine image and feminist awareness, and the overall degree of explanation is high. However, the significance of heroine image is below 0.05 (sig=0.000), the significance of the feminist awareness is 0.109>0.05, so there is no significant significance.

The linear regression equation of Verta 2 is as follows: Film connotation= 0.022+ 0.906 * heroine image. Or, Film connotation= 0.806 * heroine image.

4. DISCUSSION

The current study shows that the audience of both films revealed a high level of acceptance of movies. The findings demonstrate that there is a significant positive correlation between recognition of heroines' character and the gist of feminism. At the same time, former understanding of feminism in the audience mind had little influence on their comments of movies. Considering that, people could approve feminist thoughts in the movie, the ethos of society represented in the film, and the implication of research for animated movies in which women play an essential role is discussed below.

4.1. Portrait of the characters

In Frozen 2 and White Snake 2: Green Snake, heroines show a powerful characteristic of independence while braveness, wisdom, determination and being affectionate are also well owned. Having a heroine image meeting public expectations is certainly the foundation of a feminist movie.

As former research mentioned that Frozen 2 emphasized the subjectivity of females, there is a similar circumstance in Green Snake [5]. Female subjectivity refers to the consciousness that women are capable of fulfilling their historical purpose, social responsibility and life obligation, as well as knowing their own identity with participating in the transformation of nature and society in a unique way. On the hand of Frozen 2, the voice Elsa heard is an external symbol of establishing character subjectivity. With the voice repeating, Elsa gradually realized that she needs to explore the origin of it which lead her to discover the truth that she is the fifth spirit, and finally completes the realization and establishment of self-worth. On the other hand, in Green Snake, the symbol appears as a scene that elder sister Blanca was separated from Verta by Fahai which is also called preoccupation and recurs. It is worth mentioning that there is a huge difference between the two films shaping female images. For Elsa, what drives her to grow is from the inner word which means self-discovery. Frozen 2 is intend to build a heroine who could save the country. Instead, outer interaction with the male pushes Verta forwards, which is achieved the salvation of herself. From this angle, the depth and pattern of Green Snake have a certain gap from Frozen 2.

In the meanwhile, males as supporting characters in films also influence the audience in a way. The feminist theory holds that woman is "the others" constructed by man discourse. As mentioned in the research of Chen Kehong [6], males in Green Snake are instead presented as the marginalized "other". Fahai is hypocritical, Xu Xian is cowardly who causes that Blanca is suppressed by Fahai, Bull Demon is bullying in Shura City and Sima abandons Verta in a time of crisis. There is a similar but much milder situation in Frozen 2. As the only major male character, Kristoff is shaped as an

indecisive and sensual figure. Compared with capable heroines, he is thinking about how to propose to Anna, Elsa's sister, most of the time. It can therefore be assumed that the absence of a powerful male position serves to better portray the female characters [8].

4.2. Movie and the social ethos

Slogans of the Feminism campaign include: consciousness awakening and sisterhood being made of power. Both of them are well represented in the two films. It could be argued that the movie shows inherent fit with social ethos.

Elsa's awakening of consciousness occurs when she hears a voice from nature, which is specifically designed to push the plot forward but is also a reflection of Elsa's struggle between maintaining her current life and pursuing internal demand. The awakening of Verta comes through her experience in Shura City when she realizes the necessity of "self-improvement" after facing desertion, betrayal and deception.

Coincidentally, sisters appear in both films. The distinction is sister Anna is depicted in greater detail of her growth while sister Blanca exists more of a recollection. In reviewing the former research [9], that referred to a reinvention of true love relationships in feminist anime films where sisterhood replaces traditional marriage. The result of this study indeed indicates that the majority of viewers regarded sisterly love between heroines to be more touching than affection belonging to one particular sister.

4.3. Implication for female animated movies

Another important finding was that there was no significant correlation between the respondents' original perception of feminism (Feminist Awareness) and acceptance of film (Film Acceptance). A possible explanation for this might be that those who did not know much about feminist ideas or related campaigns, such as "me too", or who did not pay much attention to those topics were also able to empathise with characters, accept the female-centric narrative of films and identify with relevant feminist connotation, including self-reliant women, their self-awareness and so forth.

In an era of rapid development of digital media, animated films have great potential. It might help us to draw new connections between psychology and sociology, art and economics, technology and culture [10]. As a genre that covers a range of whole ages, it can thus be assumed that animation could be an ideal medium for spreading feminist ideologies. In this form, pre-existing biological inequalities between men and women, such as the gap in strength, can be artificially minimized by animation, while excellence and independence on women will be magnified.

The circumstance mentioned above is educational for children and youngsters in a patriarchal society and community. Junior girls may access space of possible independent actions by pretending characters in films [11], while senior girls can think outside the box and complete their awakening to self-consciousness.

5. CONCLUSION

In this investigation, the aim was to assess the acceptance of the image of heroines in Chinese and American animated movies and analyzed the reasons for the results. Based on the box office of the Chinese and American markets, as well as the ratings of IMBD, Douban and other movie-related websites, we obtained Green Snake and Frozen 2 to represent China and the U.S. respectively. The study surveyed the Chinese young audience with a specifically designed questionnaire and used data analysis methods including quantitative survey and regression analysis.

Ultimately, the hypothesis that heroine images play positive roles in the acceptance of films' feminist connotation was confirmed while the other that respondents' initially understandings of feminism plays a positive role in the acceptance of films' feminist connotation was not. In the meantime, linear regression equations of two movies between films heroine image and film connotation were figured out.

The insights gained from this study may be of assistance to seek reasons influencing audience acceptance, one of which is portraits of the characters: emphasis on the subjectivity of females and absence of a powerful male position. On the other hand, movies have shown an inherent fit social ethos and reflect the development of feminism. This is demonstrated by the focus of consciousness awakening and sisterhood in films. Moreover, the study also illustrates that animation can be an important medium for spreading feminist thoughts.

Due to the limitation of geographical restriction and loss of resources, it is regrettable that the study could only be based on Chinese youngsters. We believe that a supplementary survey of Americans would have made the findings more objective and credible. Besides, the industry of feminist-related animated films is in its infancy. It is convinced that with more excellent productions in the future, it will be possible to conduct a more in-depth study of audiences' ideas, behaviours and impact of movies.

REFERENCES

[1] Y. Chi, Y. Zhao, The transmutation of Disney princesses from Frozen, Film Literature, 2016(23), pp.117-119.

[2] M. Streiff, L. Dundes, Frozen in time: How Disney gender-stereotypes its most powerful princess, Social Sciences, 2017, 6(2), pp.38.

[3] J. Wu, Research on the type evolution of Disney Princess animated films, Southwest University, 2015.

[4] S. Zhang, An analysis of female stereotypes and social prejudice in animated films: Taking the evolution of Princess image in Disney films as an example, News research guide, 2019, 10 (15), pp.29-30.

[5] M. Yang, Frozen 2: The Reconstruction of Female Subjectivity, Film literature, 2020 (06), pp.105-107.

[6] K. Chen, White Snake 2: The Green Snake's Robbery: Feminism, gender conflict and identity anxiety, Film Art, 2021(05), pp.65-68.

[7] L. Dundes, M. Streiff, Z. Streiff, Storm Power, an Icy Tower and Elsa's Bower: The Winds of Change in Disney's Frozen, Social Sciences, 2018 7(6), pp.86.

[8] J. Pan, White Snake 2: The Tribulation of the Green Snake: Rewriting, Construction and Breakthrough, Contemporary Movies, 2021(09), pp.16-19.

[9] K. Schiele, L. Louie, S. Chen, Marketing feminism in youth media: A study of Disney and Pixar animation, Business Horizons, 2020, 63(5), pp.659-669.

[10] T. Silvio, Animation: The new performance, Journal of Linguistic Anthropology, 2010, 20(2), pp.422-438.

[11] F. Francis, A. Stephanie, Evolution's Pedagogy: An Adaptationist Model of Pretense and Entertainment. Journal of Cognition and Culture, 2001, 1(4)，pp.289-321.