Heritage Science

RESEARCH

Development of Chinese ethnic minorities animation films from the perspective of globalisation

Qinggang Sun[*]

Abstract

Globalisation has caused inevitable social and cultural changes around the world. New social reality creates new challenges for society, and one of the ways to attract the attention of a large global audience is to produce high-quality animations. This study sought to determine what effect Chinese animation films about ethnic minorities have on international viewers. In order to achieve this goal, ten Chinese animations about ethnic minorities were selected and asked to be watched and evaluated by two groups of respondents from all over the world: Group 1 (ethnocultural experts, n = 24 and graduates of cultural specialties (undergraduates and masters), n = 102) and Group 2 (preschool, primary, and secondary school teachers, n = 112). Participants' interest and engagement in watching the animations were assessed by the number of likes, comments, and willingness to share them. In sum, it was noted that only four of all the proposed animation films elicited a reaction from the majority of respondents, indicating low engagement and interest in the selected samples. Pedagogical, social, and developmental perspectives of promoting critical media literacy in international viewers through viewing the selected animations were rated on a four-point scale, 4 being very influential, 3—somewhat influential, 2—slightly influential, and 1—not influential at all. On this basis, the pedagogical perspective was evaluated by most respondents as slightly influential, social perspective as very influential (teachers) and slightly influential (experts), developmental perspective as slightly influential (teachers) and somewhat influential (experts), and cultural perspective as slightly influential. These findings imply no broad prospects for critical media literacy development after watching the selected Chinese animations about ethnic nationalities among international viewers. Against this background, this paper proposes a strategy to promote national values through animations. The implementation strategy consists of four steps: creating attractive animation, introducing fashion for cultural values, improving quality and adding special video effects, and borrowing best practices from other industries. The research results can be useful for animation developers, travel agencies, politicians, and the legislative and executive branches.

Keywords: Animation, Cultural heritage, International viewer, Social media, YouTube

Introduction

Scientific discoveries, computer and information technologies, innovative production strategies and business environment create fair conditions for further integration of culture into other areas of human life. Moreover, they facilitate effective cultural interaction between different individuals and countries [1]. Belonging to one or another ethnic group defines the origin of an individual, culture, beliefs, language, traditions, and behaviour patterns [2]. Preservation, research and popularisation of historical heritage, transmission of cultural values and traditions from generation to generation is one of the state priorities in countries with rich historical past. Popularisation of culture, art, literature and history supports an international image of the country in the era of globalisation at the state level [1].

*Correspondence: Sunqg1226@163.com

Harbin University of Science and Technology, Rongcheng Campus, Weihai 264300, Shandong, China

The weight of Chinese animation (Fig. 1) in shaping cultural features of society is increasing day by day. The global transformation that began in the mid-20th century has affected the entire world and could not but pass the development of cultural attitudes [1, 2]. As a result, the environment for creating animated films has also changed [3]. Chinese ethnic groups' animation has acquired plenty of opportunities for development and popularisation but, in many ways, could not compete with the animated works of the West. As a result, it began to lose its popularity even in China itself [4].

As is evidenced by international survey data, the increased use of online social media platforms has notably affected thinking, decision-making, and time management skills at both individual and group levels [5]. The main advantage of social media is seen in that they attract a large number of users and allow communicating, sharing information, and solving joint problems remotely [6]. And this is while the access to them is entirely free or provided at a minimal price due to the possibility of placing advertising [7].

The research literature suggests that the motivation to use social media is driven by a need to find information and the users' desire for entertainment [8–11]. The Uses and Gratifications Theory is one of the most objective approaches that help to understand why and how individuals use and choose media channels to satisfy their needs [11–14]. Its main focus is set on how the audience uses and interprets the information as well as the initial purposes of the search for it. According to the theory, consumers take advantage of social media to satisfy specific demands. This process can be described as an *Escape from the Real World*, in which human needs are determined by communication patterns and consumers' preferences [15]. The main advantage of social media platforms is that they can provide companies with data on the consumers' opinions concerning brands, products and the company image [7]

and thus allow one to effectively respond to the market needs and demands.

Given that contemporary animated films and animations are directed at the education of the future generation, they are among the most important content types provided online. That is why animated films occupy top places among YouTube searches [15]. The role of YouTube as a prominent online video-sharing platform promoting cultural dissemination is examined quite extensively. Available academic works addressing the extent to which social media facilitate the exchange of information among users argue that YouTube is an influential resource for attracting tourists' attention to travel products [16–18]. Nevertheless, what is notable in this respect is that the existing studies are focused on specific tourist destinations and fail to consider promotion of Chinese ethnic groups' traditions in general. The search for works on ethnic culture dissemination through videos and animation was not distinguished by success. In view of this, the current research intends to fill this knowledge gap by analysing the popular YouTube animations (Fig. 2).

Digital technologies have made the film and television industry the key player on the market of cultural and creative products. The state of its development in China evidences that the integration of traditional Chinese cultural elements into cinema and animation is the main industry trend these days [19]. More and more people advocate for opening China to the world and familiarising other countries with the potential it holds, such as technological innovation, economic growth and the richest centuries-old culture in world history [20].

Given that the modern animation market proposes many different products, it is critical for the creators to focus on the animation's ability to attract and retain the viewer's attention [16]. The problem is that such commercials are currently ineffective, especially for the popularisation of ethnic culture. This study sought to determine what effect Chinese animated films about

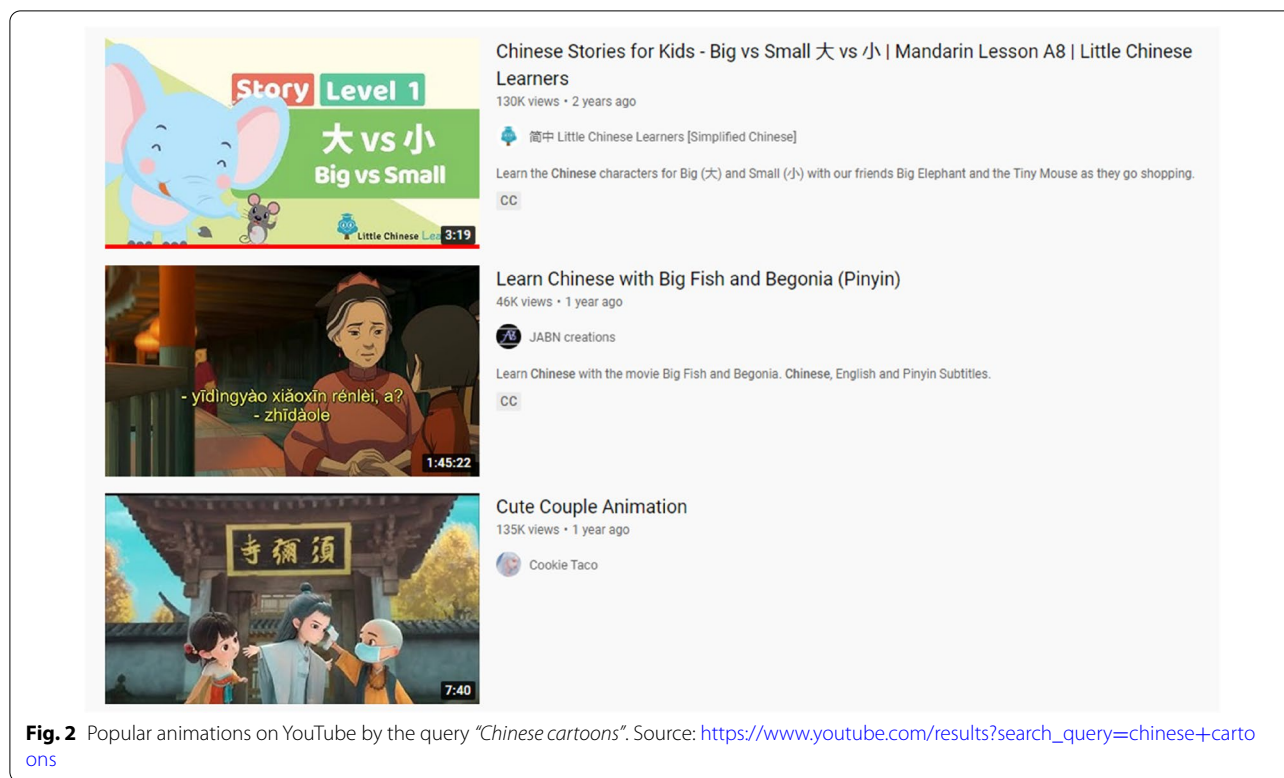**Fig. 1** Modern Chinese animations: **a** *Wish Dragon*; **b** *Crystal Sky of Yesterday*. Source: https://www.youtube.com/watch?v=UWaQ4CF6IiE

Fig. 2 Popular animations on YouTube by the query *"Chinese cartoons"*. Source: https://www.youtube.com/results?search_query=chinese+carto ons

ethnic minorities have on international viewers. For this, answers to two research questions were to be found:

Q1: Does Chinese ethnic groups' animation attract interest and engage international viewers?

Q2: Does Chinese ethnic groups' animation develop international viewers' critical media literacy?

For this, the current paper turned to the quantitative methodology of results analysis. It engaged experts possessing sound knowledge in ethnography and history and preschool, primary, and secondary school teachers to evaluate and analyse ten animations. All this knowledge became the foundation for developing a strategy for the promotion and dissemination of Chinese culture using animation.

Materials and methods
Research materials
The material for the analysis was selected among the "Chinese cartoons" YouTube query results. The criterion for selection was to be related to Chinese ethnic groups' matters. Three Chinese cultural experts confirmed the choice made with evaluations ranging from "good" to "very good".

All research participants confirmed that they had shown the selected videos to their children or even watched them themselves. In the predominance of cases, these animations were produced by Shanghai Animation Film Studio, Sichuan Fine Arts Institute, Guangxi TV Station, Guangxi Millennium Legend Film and Television Co. LTD, or the Communication University of China. More precisely, the current paper focused on the following video animations:

- *Heroic Little Sisters of the Grassland (1965)*—a legendary story about two girls who save a flock of sheep from a natural disaster, a snowstorm. Risking their lives, the heroines led the sheep to the pasture and managed to save them from hunger.
- *The Story of Afanti (1980)*—an animation created by Shanghai Animation Film Studio telling about Afanti, a famous figure of Xinjiang's Uyghur people. This animation became popular not only in China but also beyond its borders.
- *The Three Monks (1981)*—traditional animation about the changes in Chinese society after the Cultural Revolution. It has become the first in the new Renaissance period of Chinese culture, and therefore, it carries not only cultural but also historical value.
- *The Peacock Princess (1982)* – a 40-min animation telling the story of a young prince and his beloved peacock princess, whom a wizard enchants. The prince goes off to fight, and in the meantime, his wife is tried to be killed. The ending of the story is posi-

tive. The heroes defeat the evil wizard and live happily ever after.

- *Riyuetan Pool (1996)*—animation about the Gaoshan nationality.
- *Fire Festival (1998)*—animation based upon a traditional festival, the motifs of which have become the basis for many art forms. It is dedicated to the legendary wrestler Atilabia and his feat of saving people from an invasion of locusts using a torch made of pine.
- *The Touching (2008)*—animation about the Li nationality.
- *Long Hair Girl (2015)*—animation dedicated to the problems of the Dong ethnic group.
- *White Bird (2017)*—animation of the joint Chinese-Kazakh production.
- *Tounggu Legend (2018)*—animation about the Zhuang nationality produced by Guangxi Millennium Legend Film and Television Co. LTD.

Research procedure

As research participants, this study involved two groups of experts. Group 1 was composed of ethnocultural experts (n = 24) and graduates of cultural specialties (undergraduates and masters), n = 102. Group 2 involved preschool, primary, and secondary school teachers, n = 112.

Ethnocultural experts were exclusively from China (n = 24) and were invited by the researcher in person. The rest of the Group 1 sample were graduates of cultural specialities (undergraduates and masters) (n = 102) living both in China and other world countries. All of them were fluent in English and worked in fields united by cultural studies − World Culture, History of Culture, Sociocultural Communication, Cultural Relics and Museology, Sociocultural Management, and History of Art. They were sent an invitation letter outlining research aim and objectives and specifying their fields of expertise.

Apart from the specialization, the selection criterion for both groups was to have their own children aged from 2 to 15, as these children were the main target audience of the animation. According to [21], virtual communities functioned as a space for people interested in ethnic culture issues with different degrees of professional competence and desiring to exchange impressions.

In total, about 850 invitations to participate in the study were sent out. Of this number, only 214 positive responses were received. Precisely these people, as well as 24 ethnocultural experts invited by the author personally, made up the overall research sample. The survey was conducted by filling out a Google Form in English.

Respondents' age, gender, and nationality were not taken into account.

Research tools
Engagement and interest scale
The theoretical basis for evaluating viewers' engagement and interest was an article on the analysis of YouTube videos [22]. The methodology used is quite simple and familiar to almost every YouTube user as it is based on the quantification of three parameters:

- Like/Dislike (rating)—a direct form of feedback; it expresses a non-verbal approval or rejection.
- Share with your contacts—the content is so interesting that the user wants to tell their friends about it; the natural way of sharing content on YouTube.
- Comment—the content provoked a desire to say something; it testifies to the highest level of participation because it takes time and effort.

In addition to these three, researchers also used the Subscribe parameter [22]. However, they were studying specific YouTube channels, and in the context of animated videos about Chinese ethnicities, it seems inappropriate, as the animations were not tied to specific animation channels, and the rest of the content was dedicated to other topics. Respondents were asked to choose which animations from a list of ten they liked, which they wanted to share, and which they commented on.

Their engagement and interest (EI) levels were determined in accordance with the following formula:

$$EI = Num.\ likes + Num.\ Share + Num.\ comments \tag{1}$$

Critical media literacy skills scale
The theoretical foundation for evaluating critical media literacy was the model of Social Emotional and Media skills development through Imaginative pedagogies (SEMI) [23]. Its modified version includes four perspectives:

- Pedagogical—role-playing, animated stories, moral imagination.
- Developmental—empathy, emotions.
- Social—self-awareness, affective and cognitive empathy.
- Cultural—understanding of history and culture.

The original SEMI model [23] includes the same four perspectives except for the cultural one—it is substituted by the theoretical perspective, which contains popular pedagogical theories, which, however, do not meet the

goals of this study. For the sake of evaluation, respondents were asked to rate each animation on a four-point scale (4—"very influential", 3—"somewhat influential", 2—"slightly influential", and 1—"not influential at all").

On the recommendation of the experts, additional explanations were made for the respondents in the questionnaire in order to eliminate ambiguity in the understanding of the terms. Hence, it was clarified that the pedagogical perspective sought to unveil whether the animation has a certain moral context, instructive example, or a way of behaviour worth imitation. Developmental perspective was concentrated on whether the animation evokes emotional reactions and empathy. Social perspective was focused on whether the animation implies social functioning and describes real social interactions and relationships. The last, cultural perspective, intended to unveil whether the story provides information about the cultural and historical characteristics of the ethnic group in question.

Statistical analysis

The research put forward the null (H0) and alternative (H1) hypotheses about the similarities and differences between Group 1 and Group 2. While H0 assumed no statistically significant similarities between the groups, H1 conjectured statistically significant differences between them. Checking these assumptions' truth was carried out by means of chi-squared testing (significance level 0.05). The χ^2_1 (engagement and interest) and χ^2_2 (critical media literacy) criteria were used to test these hypotheses. It is important to note that if the calculated values for the criteria were less or the same as the critical ones, then Group 1 and Group 2 characteristics were related. Otherwise, their difference was statistically significant. As a characteristic of the group, the research accepted the average (for ten videos) rating for each parameter.

The critical value χ^2_1 at a significance level of 0.05 for 3 degrees of freedom was 7.815. The calculated values (Table 1) were 5.16 for the *Like*, 6.12 for the *Share* and 4.24 for the *Comment* indicators, which means the absence of statistically significant differences in evaluations.

The critical χ^2_2 value at a significance level of 0.05 for 4 degrees of freedom was 9.49. The calculated values

(Table 2) were 10.05 for the pedagogical and 13.16 for social perspectives. This suggests statistically significant differences between Group 1 and Group 2 evaluations. The calculated value of no more than 7.13 for the developmental and cultural perspectives testified to the absence of statistically significant differences in the results collected.

All the calculations, as well as results presentation, were done using the Statistical Package for Social Sciences (SPSS 24) and the Microsoft Excel spreadsheet.

Research limitations

Unfortunately, it is plausible that several limitations and biases might have influenced the results obtained. First, there is no reliable evidence that study participants watched all of the animations from beginning to end and thus gave serious consideration to their participation and were able to provide an objective evaluation. Second, the research procedure did not include verification of the authenticity of the respondents' ethnographic or pedagogical education or availability of children—these points were taken at their word. Third, Chinese animations about ethnic nationalities are quite scarce, they are less popular among international viewers, and it was difficult to find at least ten available on YouTube to use as examples. Fourth, the promotion of Chinese culture through YouTube, whether video or animation, inevitably faces a number of problems: small target audience, educational centration, and different views of the goals of animation by Chinese and Western viewers (for Chinese, it is important for the animation to show traditional virtues and have a pedagogical effect, while for the Western audience, it is primarily entertainment for children and adults). Statistical data shows the popularity of Chinese animation in neighbouring Asian countries, primarily Japan, but not in Europe and America. Therefore, the strategy of promoting Chinese culture through animation on YouTube proposed within the current study is exemplary and should be more flexible depending on the market it is aimed at.

Table 1 χ^2_1 values for Group 1 and Group 2

Criterion	χ^2_1
Like	5.16
Share	6.12
Comment	4.24

Table 2 χ^2_2 values for Group 1 and Group 2

Criterion	χ^2_2
Pedagogical perspective	10.05*
Social perspective	13.16*
Developmental perspective	7.13
Cultural perspective	4.25

Table 3 Engagement and interest scale results, %

Animation	EI for Group 2	EI for Group 1	Mean
Heroic Little Sisters of the Grassland	39.78	65.94	52.86
The Story of Afanti	23.55	14.21	18.88
The Three Monks	51.87	36.19	44.03
The Peacock Princess	60.32	54.73	57.53
Riyuetan Pool	6.18	7.04	6.61
Fire Festival	13.42	12.12	12.77
The Touching	30.61	37.92	34.27
Long Hair Girl	42.85	35.44	39.15
White Bird	36.52	64.02	50.27
Tounggu Legend	6.36	5.16	5.76

Table 4 Engagement and interest and animation ranking data according to respondents' and YouTube users' evaluations

Animation	Respondents		YouTube users	
	EI	Rank	EI	Rank
Heroic Little Sisters of the Grassland	125	2	17	7
The Story of Afanti	45	7	2	9
The Three Monks	106	4	685	1
The Peacock Princess	136	1	265	2
Riyuetan Pool	16	9	1	10
Fire Festival	30	8	5	8
The Touching	82	6	18	6
Long Hair Girl	93	5	27	5
White Bird	120	3	259	3
Tounggu Legend	14	10	31	4

Research results

The results of the respondents' engagement and interest (EI) scale using Formula (1) expressed in the percentage of those who liked, shared, and commented are shown in Table 3.

In Table 4, next to the EI calculation and animation's rank according to the respondents' evaluations, the same calculation according to the Formula (1) is given for YouTube users. Table 4, unlike Table 3, contains quantitative values, not percentages, because the data on the number of views cannot be taken into comparison (as 100% of the participants). While all study participants were to watch and somehow react to animations, YouTube users were not obliged to give any feedback, so the comparison here is very general and approximate rather than quantitative.

It should be noted that the YouTube users' and research participants' rankings, although different, have three leaders: "The Three Monks" (#1 in the YouTube sample and #4 in the research sample), "The Peacock Princess" (#2 in the YouTube sample, #1 in the research sample) and "White Bird" (#3 in both samples). In general, we can talk about the poor involvement and interest of respondents in the studied animations; only four of them received more than 100 reactions. Most YouTube users also showed no interest in Chinese animation about ethnic minorities; some samples had only 1–2 reactions.

The results of educators' and experts' evaluations on the critical media literacy skills scale differed significantly in terms of pedagogical and social perspectives. Hence, in Group 1, 33.05% (the majority) rated the pedagogical perspective as slightly influential, while the highest evaluation (very influential) was given by only 21.5% of educators. The social perspective, in turn, was addressed by most teachers (31.3%) as very influential (Fig. 3).

According to the sample of experts (Fig. 4), the pedagogical perspective was evaluated as slightly influential
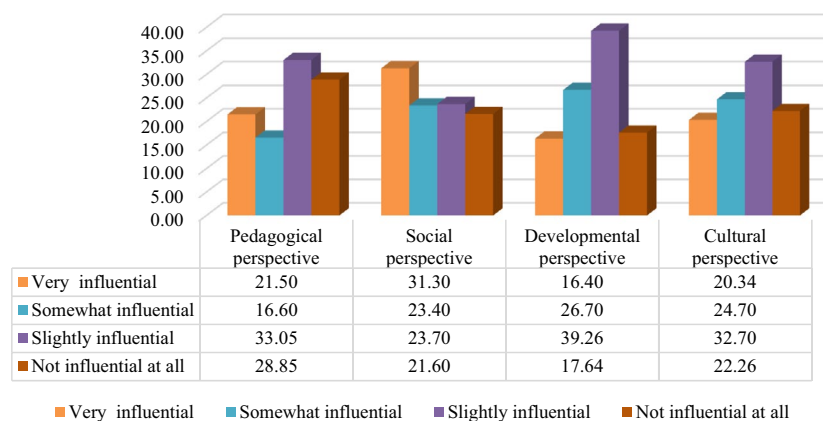

	Pedagogical perspective	Social perspective	Developmental perspective	Cultural perspective
■ Very influential	21.50	31.30	16.40	20.34
■ Somewhat influential	16.60	23.40	26.70	24.70
■ Slightly influential	33.05	23.70	39.26	32.70
■ Not influential at all	28.85	21.60	17.64	22.26

■ Very influential ■ Somewhat influential ■ Slightly influential ■ Not influential at all

Fig. 3 Critical media literacy skills: TG evaluations
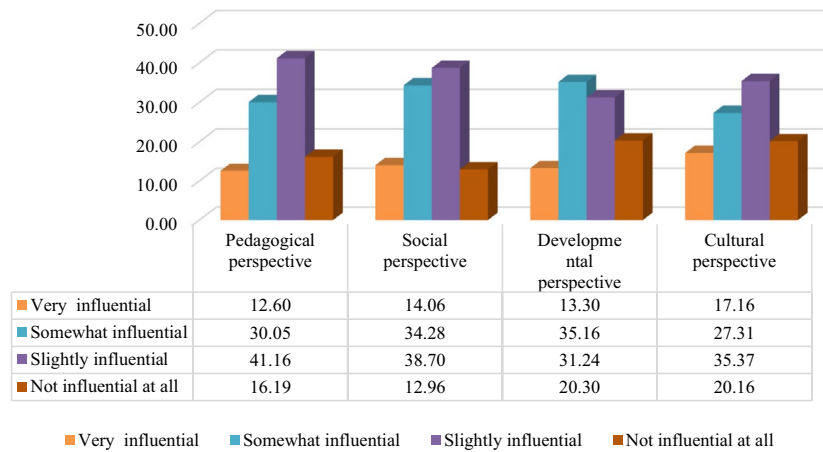
Fig. 4 Critical media literacy skills: Group 1 evaluations

by 41.16% of the surveyed, somewhat influential—by 30.05%, and very influential—by only 12.6%. As concerns the social perspective, it was regarded as slightly influential by the Group 1 majority (38.7%).

In sum, the conclusion can be made that the developmental perspective for the studied animations was referred to as slightly influential (Group 2) and somewhat influential (Group 1), while the cultural perspective was evaluated as slightly influential by most respondents in both samples. The first three criteria (pedagogical, social, and developmental perspectives) are equally important for any educational content on YouTube. However, the cultural one is defining for the Chinese cultural content, so shallow estimates of the surveyed indicate the inability of the existing animations to meet the tasks of Chinese culture popularization. Respondents could not gain a clear idea of the cultural and historical background of animations as it was not conveyed to the extent that it would be adequately deposited in world viewers' minds.

With reference to the above, this research proposes a strategy for improving animation about Chinese culture that includes the following steps (Fig. 5).

Step 1. Create an attractive animation about the cultural heritage of ethnic groups. The content should be adapted to the needs of the different age groups and individuals with different education levels. In other words, it should be diverse and meet the interests of children, young individuals and adults. Children develop their tastes and preferences from an early age and should get information about the cultural uniqueness of a specific ethnic group. Such an approach may inspire their interest and disposition towards this topic in the future. Therefore, current research proposes focusing on developing attractive animations about Chinese ethnic groups where Chinese traditions and worldviews would be presented in an accessible way and therefore easily understood by different Eastern and Western audiences, arousing their interest and serving as a role model for them.
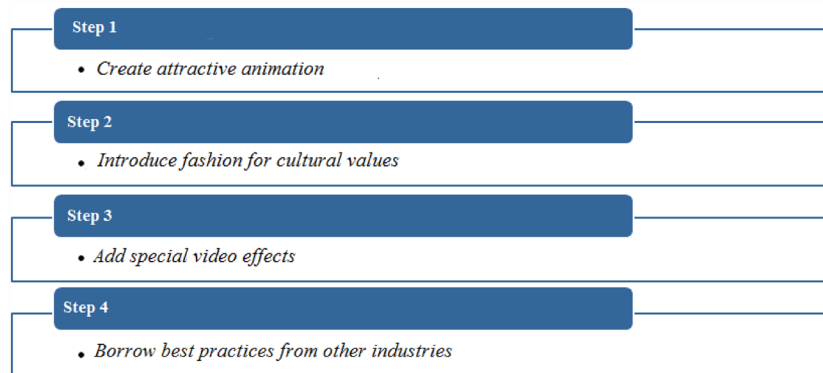

Fig. 5 Strategy for improving Chinese culture-centred animation

Step 2. Introduce fashion for cultural values. In the modern world, social media is one of the channels that allow users to popularise their content. Thus, it is not enough to create and upload interesting animations about the Miao people, Li people, or any other ethnic minority group on YouTube. The ethnic culture of China needs an effective strategy to promote ethnic cultures. China's intangible cultural heritage can be a brand, but for this, it must raise interest in the animation content proposed to users and fit into modern fashion. Animations should reflect the values and tastes of consumers from the East and West.

Step 3. Add special animation effects. A modern viewer, especially a Western one, will not watch a poor-quality animation with a bad sound. Thus, the present research admits that unusual sounds and musical effects, and atypical arrangements of the animation content can attract the attention of viewers and make them keep watching further. Unfortunately, most animations proposed were not marked with high image quality.

Step 4. Borrow best practices from other industries. Traditional clothing, toys, musical instruments, and household products that promote Chinese brand awareness will support ethnic culture-centred animations and the development of theme parks. Such locations have been developed in China following the way of Disneyland, which has proven to be effective [24–26].

Discussion

Comprehensive review of the recent works on the topic contributed to a clear understanding of exactly what techniques and creation goals exist in modern animation, as well as how it spreads and affects society. First of all, animation dissemination was noted to be in direct relationship with the effectiveness of advertising campaigns and marketing strategies. Researchers claim that among the most successful in this respect are advertisements integrating popular music and pop culture and focusing on the needs and desires of consumers. At the same time, it is noted that animations, for which a significant promotion budget is allocated, receive more popularity, cinema visits, and higher ratings on various platforms [26–28]. As animated films often turn to folklore, it is not infrequent for them to touch upon classic social themes. In the West, for example, the most common is animation telling everyday stories with comedic overtones. Along with this, scholars note the development of multi-series animation, whose plot develops in the course of several series and requires more attention, as well as the increased use of a "mask-character," which has distinctive features but can be easily supplemented, altered, or decorated [26]. Ongoing research shows that the use of various folklore themes, traditional images, and deep connection with the meanings of ethnicity and culture raises the interest and awareness of the younger generation of their roots. The proposed strategy for Chinese ethnic groups' knowledge promotion is intended for people from all continents and countries. There is no need to contrast Western and Eastern cultures because this provokes confrontation and can lead to conflicts of interest. Therefore, it is proposed to focus on the commonalities and national originality of Chinese ethnic minorities. Harmony with the difference is the right way for an international audience to understand Chinese culture [29].

It has been multiply demonstrated that watching videos related to Chinese ethnic groups helps children develop their social self-identity, understand their position in society and culture as well as become more aware of the traditions of their people [15–17]. The study comparing two groups of students, the first of which (experimental) watched Chinese ethnic groups' animations for a year, and the second (control)—ordinary cartoons, proved that dedicated animations provide a better understanding of ethnic groups culture, traditions, and features. Traditional ethnic groups' animation helped learn more about respondents' roots in a simple, engaging, and entertaining way. In concurrence with this, it was confirmed to significantly benefit social adaptation abilities [15].

Of great importance in the promotion of animation are its quality and production level. The animation can become popular if the channels participating in its creation and promotion have good ways and possibilities for broadcasting and distribution. Nevertheless, according to researchers, it is not enough to distribute ethnic groups' animation via cinema and television [30]. Success in this endeavour requires using Internet platforms, social media, and social network promotion solutions.

Available findings on the matter [16–18] evidence that YouTube is a powerful tool for the development of the cultural and tourism industries because travellers can choose a travel destination after watching an animation. In addition, YouTube is an essential channel of animation marketing for any modern company actively used mainly by business organisations [16].

While also turning to the quantitative analysis based on the frequency of views, likes, dislikes, and the number of subscribers who watch the places of interest, Romanian researchers [17] inferred that the most popular online content is represented by vlogs as well as animation with the least interactivity. Another research analysing content attractiveness and emotional value but on the example of the Spanish audience [18] found that the most popular are videos with many comments. In the predominance of cases, they are informative and have no emotional impact on viewers. In the long run, scholars concluded that to promote a tourism product, it is not enough to create an

interesting video but necessary to stand out from competitors with an effective brand strategy appealing emotionally to the audience. The unique brand image would help bloggers communicate with each other and attract a large target audience [18].

Many researchers hold the view that animated stories are excellent communicative skills development facilitators acting through non-verbal aspects, such as gestures, facial expressions, and body language. Hence, the digital narrative having bright emotional colouring will also have bright educational benefits [23]. According to the majority of respondents of this study, the animations considered failed to have the maximum educational effect. Therefore, in developing animation, its creators are recommended to pay attention to ways to communicate different dispositions and gradients of emotions, including through special effects. Given that existing research confirms the stimulation of brain activity through emotional reward [31], expressive and vivid emotional frames are an ideal medium for teaching emotions. Integration of emotions and creative aspects into the educational process would thus develop students' critical media literacy skills [32].

Videos and animations help convey a message and portray any ethnic practice with the maximum variety of forms, aesthetics and content [33–35]. On the one hand, they support the popularisation of cultural values; on the other, assist in developing an aesthetic perception among the youngest target audience [33]. The famous Western animated films *Mulan* and *Kung Fu Panda* contain Chinese national motifs but demonstrate not Chinese but American values, worldview and culture. The Chinese animations *The Monkey King* and *The Legend of the Rabbit* have become very popular among international cinema-goers, but they do not portray ethnic diversity. The problem is that Chinese animators do not have ownership information or brand awareness and thus lose the opportunity to make a financial profit and be a significant player in the international animation market [35].

As mentioned earlier, weak popularity of Chinese animation in the world is explained by the fact that the Chinese manufacturers do not consider the demands of the western market and do not try to convey Chinese traditions, transfer emotions of characters, and explain the moral of a plot in a way understandable for the western viewer [30]. The low scores from the respondents of this study on pedagogical (slightly influential from both groups) and developmental perspectives (slightly influential from Group 1, somewhat influential from Group 2) confirm the statement of our colleagues [30] about inadequate conveying of emotions and plot disclosure. In addition, the findings of this study indicate that international viewers are not interested in learning about Chinese ethnic animation. Such content cannot be called attractive by them (only four out of ten animations received more than 100 responses from respondents). Therefore, the strategy to improve animation about Chinese ethnic groups in the first step proposes creating exactly attractive animation that would be diversified and understandable to viewers from different parts of the world.

The "slightly influential" assessment given to the cultural perspective by respondents of both groups suggests that contemporary Chinese animations about ethnic groups cannot contribute to a significant promotion of Chinese culture in the world. Therefore, Step 2 of the animation improvement strategy proposes setting a fashion for Chinese ethnic culture. Hence, on the one hand, Chinese animation should adjust to the world viewer (Step 1), and, on the other, the viewer should also be disposed to perceive Chinese animation and Chinese culture as such (Step 2). Step 3 and Step 4 will help in the practical realisation of Step 1 and Step 2 as by improving the sound and image (Step 3) and facilitating the perception of the story, it is possible to attract and retain international viewers' attention [36, 37], and by teaming with other industries (Step 4), it is easier to achieve popularity and recognition of Chinese culture [38].

Conclusions

The purpose of this study was to determine the effect of existing Chinese animation about ethnic minorities on international viewers. With this in view, research objectives sought to quantify the engagement and interest in Chinese animation and the critical media literacy of the global viewer. The participant sample consisted of ethnocultural experts and graduates of cultural specialties (undergraduates and masters, n = 126) as well as educators from around the world (n = 112). They were asked to watch ten Chinese animations about ethnic nationalities and evaluate them according to a number of criteria. In summary, it was noted that only four animations received more than 100 responses; the rest were not marked with respondents' feedback, which testifies to a generally low level of engagement and interest in watching Chinese animations. Therefore, the first step in improving Chinese culture-centred animation is to create an ethnocultural product that is attractive, interesting and comprehensible to a global audience. According to the critical media literacy skills scale, most respondents rated the pedagogical perspective as slightly influential, social perspective as very influential (teachers) and slightly influential (experts), developmental perspective as slightly influential (teachers) and somewhat influential (experts), and cultural perspective as slightly influential (both groups). Thus, only the social perspective of animations received the maximum estimate (from one

of the samples), whereas other criteria were predominantly referred to as "slightly influential", which implies poor prospects of the selected Chinese animated videos in terms of critical media literacy development among international viewers. Rather low assessments given to the cultural perspective by both groups suggest the inadequacy of existing animation films for the task of Chinese culture promotion. Hence, Step 2 of the Chinese ethnic groups' animation improvement strategy is to make Chinese culture on-trend. This can be done through the betterment of the image, sound and comprehensibility of animation films (Step 3) as well as through interaction with other domains to promote Chinese culture as a brand, e.g., consumer goods manufacturing, architecture, music, literature, tourism (Step 4).

The collected results can be of interest to producers and creators of animation films, commercials and videos, vloggers, and tourism destination professionals. The state authorities, local governments and communities can also use recommendations for video content provided. Future works on the matter should focus on available animations describing other ethnic cultures and analyse the approaches from the international practice used by animation makers.

Declarations

Competing interests
This research has no conflict of interests.

References
1. Ergashev I, Farxodjonova N. Integration of national culture in the process of globalization. J Crit Rev. 2020;7(2):477–9.
2. Segal UA. Globalization, migration, and ethnicity. Public Health. 2019;172:135–42.
3. Saputra DIS, Manongga D, Hendry H. Animation as a Creative Industry: State of The Art. In: 2021 IEEE 5th International Conference on Information Technology, Information Systems and Electrical Engineering (ICITI-SEE). IEEE; 2021. p. 6–11.
4. Zhai C. Cultural diversity in the world and socialist culture with Chinese characteristics—Review of the Second World Cultural Forum. Int Crit Thought. 2018;8(2):326–38.
5. Li L, Pan S, Zheng J. Incorporating ethnic and folk culture into artistic education a case study of the embroidery of the Miao ethnic community. In: Chinese Elementary Education System Reform in Rural, Pastoral, Ethnic, and Private Schools. Springer, Singapore; 2017. p. 43–74.
6. Chatzina K. Social media activism on cultural tourism: a proposal for paleochora in Aegina, Greece. In: Strategic innovative marketing and tourism. Springer, Cham; 2020. p. 511–20.
7. Papademetriou C, Masouras A, Ioannou A. Social networking sites: the new era of effective online marketing and advertising. In: Strategic innovative marketing and tourism. Springer, Cham; 2020. p. 443–8.
8. Elhadidi MF, City Z. Beyond access to social media: a comparison of gratifications, interactivity, and content usage among Egyptian adults. Glob Med J. 2018;16(30):108.
9. James TL, Lowry PB, Wallace L, Warkentin M. The effect of belongingness on obsessive-compulsive disorder in the use of online social networks. J Manag Inf Syst. 2017;34(2):560–96.
10. Newman MW, Lauterbach D, Munson SA, Resnick P, Morris ME. It's not that I don't have problems, I'm just not putting them on Facebook: challenges and opportunities in using online social networks for health. In: Proceedings of the ACM 2011 conference on Computer supported cooperative work. ACM; 2011. p. 341–50.
11. Tanrikulu I, Erdur-Baker Ö. Motives behind cyberbullying perpetration: a test of uses and gratifications theory. J Interpers Violence. 2021;36(13–4):6699–724.
12. Huang J, Zhou L. Timing of web personalization in mobile shopping: a perspective from uses and gratifications theory. Comput Hum Behav. 2018;88:103–13.
13. Masouras A, Papademetriou C. Digital consumer behaviour in Cyprus: from uses and gratifications theory to 4c's online shopping approach. J Advert Public Relat. 2018;1(1):32–43.
14. Siakalli M, Masouras A, Papademetriou C. Understanding online news: uses and gratifications of mainstream news sites and social media. Int J Strategic Innovative Mark. 2015;2(3):1–13.
15. De Mooij M. Global marketing and advertising: understanding cultural paradoxes. Thousand Oaks: Sage; 2021.
16. Roy SK, Fatema MR, Islam MJ, Huda MN. Reviewing YouTube as a compelling tool for the promotion of tourism. International Journal of Managing Account. 2020;2(5):96–104.
17. Briciu A, Briciu VA. Participatory culture and tourist experience: promoting destinations through YouTube. In: Strategic innovative marketing and tourism. Springer, Cham; 2020. p. 425–33.
18. Huertas A, Míguez-González MI, Lozano-Monterrubio N. YouTube usage by Spanish tourist destinations as a tool to communicate their identities and brands. J Brand Manag. 2017;24(3):211–29.
19. Li H. Analysis of "National Animation" driven by big data technology. In: International conference on Big Data Analytics for Cyber-Physical-Systems. Springer, Singapore; 2021. p. 753–60.
20. Ke Z, Maharam ME, Yahaya WAW. The Chinese film industry's cross-cultural communication strategy in the context of the" One Belt, One Road" initiative. AJACT. 2021;3(4):24–8.
21. Sambhanthan A, Thelijjagoda S, Tan J. Implications for utilizing YouTube based community interactions for destination marketing: Investigation of a typology approach. In: 2013 8th International Conference on Computer Science & Education. IEEE; 2013. p. 365–70.
22. Tur-Viñes V, González-Río MJ. Is YouTube being used to its full potential? Proposal for an indicator of interactivity for the top youtuber content in Spanish. Communications. 2021;46(4):469–91.
23. Tsortanidou X, Daradoumis T, Barberá-Gregori E. Convergence among imagination, social-emotional learning and media literacy: an integrative literature review. Early Child Dev Care. 2022;192(2):173–86.
24. Massing K. Safeguarding intangible cultural heritage in an ethnic theme park setting–the case of Binglanggu in Hainan Province, China. Int J Herit Stud. 2018;24(1):66–82.
25. Yang L. Minorities, tourism and ethnic theme parks: employees' perspectives from Yunnan, China. J Cult Geogr. 2011;28(2):311–38.
26. Zhang T, Li B, Hua N. Chinese cultural theme parks: text mining and sentiment analysis. J Tour Cult Change. 2022;20(1–2):37–57.
27. Djafarova E, Kramer K. Is YouTube advertising effective: context of travel industry? Athens J Tour. 2020;7(2):117–32.

28. Gkarane S, Vassiliadis C. Setting the ground for successful film tourism practices in Greece: a SWOT analysis. In: Strategic innovative marketing and tourism. Springer, Cham; 2020. p. 235–45.
29. Li S, Li H, Song H, Lundberg C, Shen S. The economic impact of on-screen tourism: the case of the Lord of the Rings and the Hobbit. Tour Manag. 2017;60:177–87.
30. Zhou T. Strategies on optimizing the development of China's animation industry. In: 2018 8th International Conference on Education, Management, Computer and Society. Francis Academic Press; 2018. p. 11 – 3.
31. Mills KA, Unsworth L. iPad animations: powerful multimodal practices for adolescent literacy and emotional language. J Adolesc Adult Lit. 2018;61(6):609–620.
32. Rudoviq M. YouTube as a promotional tool: Vlogger versus tourist board generated videos. Doctoral dissertation, RIT Croatia; 2019.
33. Callus P. Reading animation through the eyes of anthropology: a case study of sub-Saharan African animation. Animation. 2012;7(2):113–30.
34. Ribes X. Is the YouTube Animation algorithm-friendly? How YouTube's algorithm influences the evolution of animation production on the internet. Animation. 2020;15(3):229–45.
35. Wu W. The ambivalent image factory: the genealogy and visual history of Chinese independent animation. Animation. 2018;13(3):221–37.
36. Lindholm J, Carlson T, Högväg J. See me, like me! Exploring viewers' visual attention to and trait perceptions of party leaders on Instagram. Int J Press Polit. 2021;26(1):167–87.
37. Hui H. Analysis on Tik Tok's development in China. In: 2020 3rd International Conference on Humanities Education and Social Sciences (ICHESS 2020). Atlantis Press; 2020. p. 105-8.
38. Ren F, Zhang Y, Liu G. Introduction to the science popularization industry. Berlin: Springer; 2021.

Publisher's Note