

A Study on the Social Media Communication of Fu Tea Culture from the Perspective of Integrating AI-Assisted Foreign Language Translation and Short Videos

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Abstract: In the era of digital media, the cross-cultural dissemination of intangible cultural heritage in China encounters two major problems due to language barriers and the difficulty of rewriting stories with traditional themes into new narrative forms. This paper takes Fuzhou tea culture, a national intangible cultural heritage project, as the research object to explore the effects of applying AI-aided translation of short videos and social network communication modes to this intangible cultural heritage project. The study finds that using artificial intelligence for multilingual translation can overcome language barriers to a certain extent, enabling people to understand relevant cultural content relatively easily, while short videos can enhance people's sense of affinity for the culture through a combination of pictures and texts. The communication mode that combines the two can be regarded as an attempt at integrated media. Both can provide foreign audiences with a low-cost and highly efficient way to understand and spread Chinese Fu Tea culture. Based on the experience of making short videos and conducting Weibo promotions by myself and others in the past, this paper proposes a workflow of "AI Preliminary Translation + Human Polishing + Weibo Promotion", and puts forward opinions on aspects such as content format, technical ethics, and communication effects.

Keywords: AI translation; Short videos; Fu tea culture; Cross-cultural communication; Social media

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1. Introduction

Fu tea craftsmanship, as a national intangible cultural heritage, has rich Silk Road cultural connotations after six hundred years of inheritance and is known as a "living fossil" on the Silk Road. However, how to realize the international dissemination of its craftsmanship and also have a good cultural connotation and precise transmission is hindered by the language conversion barrier, and the traditional graphics are not what

the younger generation looks for in terms of aesthetics and content. Fortunately, with the development of generative artificial intelligence technology, there is a low-cost way to realize cross-linguistic communication: using this technology to produce subtitling in many languages, dubbing, and mouth-syncing for short videos. At the same time, short videos have also become one of the ways of international dissemination. The Internet is the primary medium through which young people obtain information, and although intangible cultural heritage has been transformed into the short video format, it still faces the problem of narrative reconstruction^[1]. This article takes Fu tea culture as the research object, uses the practice of producing short videos and communicating through social media to analyze how to apply AI-assisted foreign language translation in the cross-cultural communication of intangible cultural heritage short videos, and systematically expounds the feasibility and optimization directions of the “AI+Short Video” integrated communication model.

2. Theoretical foundation and analytical framework

This paper involves three theories: first, cross-cultural communication, which refers to the recoding and interpretation of cultural information; second, human-machine collaboration, that is, treating artificial intelligence as an “assistant”, with humans taking on the responsibilities of creation and cultural control^[2]; third, digital content production, which means seeking a balance of cultural connotations in the narrative logic of short videos^[1]. Based on the above research methods, a three-layer analytical framework composed of “AI-assisted translation + integrated short video communication” is constructed (Figure 1).

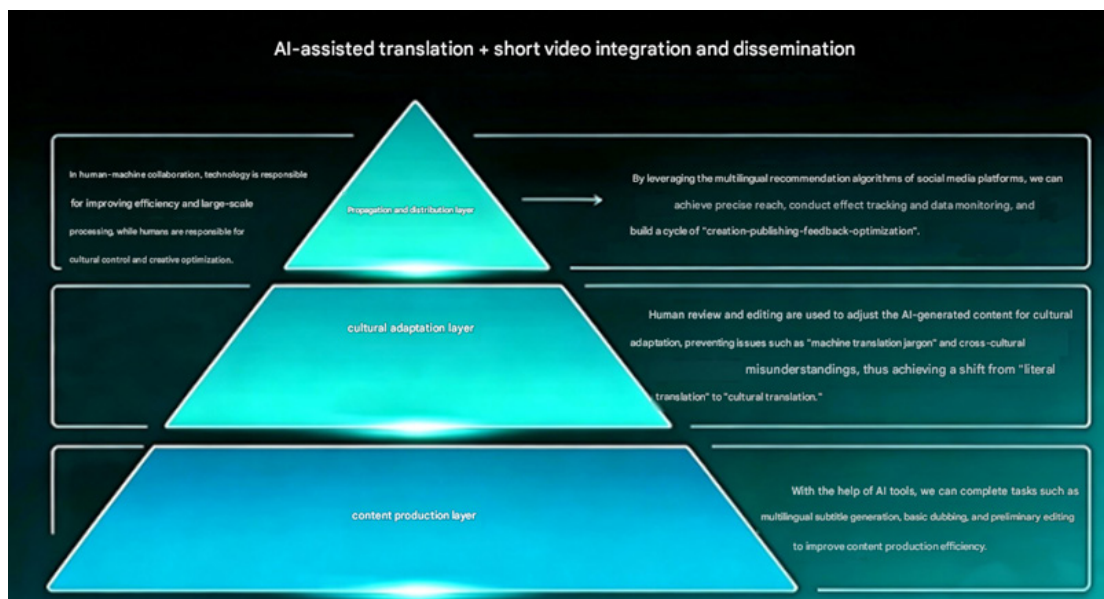


Figure 1. Three-layer analytical framework diagram

In the process of content production, using AI technology to carry out many-language subtitles making, basic dubbing, and so on, so as to improve the efficiency of content production^[3]. In cultural adaptation, people manually review and edit to change the AI-generated content, avoid “machine translationese” and other mistakes caused by different cultures, so as to effectively make the content change from “translation as literal meaning” to “translation with culture.” In the dissemination and distribution stage, fully use the multi-

language recommendation algorithms of social media platforms to achieve precise targeting, continuously track the communication effect and related data, and build a system of “creation, publication, feedback, and optimization” closed loop. The key of this framework lies in the “human-computer cooperation”, in which the technology is responsible for efficient and mass production, while human beings control cultural quality and creative orientation, and thus provide a systematic theoretical basis for the subsequent practice analysis and effect evaluation in the following text ^[2]. A similar human-machine cooperation model has also been used in the exploration and joint creation of classical dance inheritance, further verifying the applicability of this model in cultural heritage dissemination ^[4].

3. Creation and communication practice of Fu tea culture short videos

3.1. Content creation: from intangible cultural heritage craft to visual narrative

Based on the theories mentioned above, the author has produced a series of short films themed on Shaanxi Fu tea culture. The shots in the videos focus on the handcrafting process of making Fu tea by hand, such as the “kanhua” (referred to as “fahua” by connoisseurs of Fu tea) procedures, including tea selection, tea sorting, tea steaming, rolling, and blank making. The entire production process is displayed slowly, allowing the audience to personally feel the exquisiteness and wonder of Fu tea handcrafts, and also answering what Fu tea is. Drawing on the expression form of “intangible cultural heritage inheritance + youth inspiration” from the cultural and recreational micro-drama “Teahouse in the City”, this series of short films, with Fu tea culture as the theme, showcases Shaanxi Fu tea culture, turns the handicraft production process into short videos, and inherits Fu culture in another form. The video takes the role of the inheritor of Fu tea as the main thread to tell a story of inheriting Fu tea stories by following in the footsteps of the ancients and innovating communication methods, so that the young audience can get close to the intangible cultural heritage through real characters and stories. The series of short videos uses “inheritor’s first-person narration+situational demonstration” to increase emotional bonds. The videos show scenes like ancient streets, tea workshops, and tea-tasting in Fu Tea Town of Shaanxi Province, depicting a tranquil picture of “flowing water winding through the streets, and tea fragrance permeating the courtyards.” It aims to make viewers long for the experience, realizing behavioral change from “watching the video” to “having experienced it.” As for the narrative strategy, according to the “narrative reframing” concept of ReelFramer system, each short video narratives are restructured: The video duration is kept between 30 and 60 seconds, with a “Golden 3 Seconds” rule: the beginning is used to capture attention, the middle focuses on the core content, and the end features an interactive prompt, like “Would you like to taste Fu tea?”

3.2. AI-assisted foreign translation: Multilingual subtitle generation and cultural adaptation

In order to reach a wider international audience, this study attempted to create multilingual subtitles for this short video using an AI translation tool. First, the Chinese script of the short video was input into the AI translation tool to generate subtitle texts in languages such as English, Japanese, and German. The advantages of AI tools are high speed and support for multiple languages, which allows them to quickly complete some basic translation tasks. Then, experts who specialize in cross-cultural communication were invited to read through and revise the translations to address problems inherent in AI machine translations, such as inappropriate or unnatural expressions. Some researchers have already translated certain Chinese

intangible cultural heritage corpora using the method of neural network-aided machine translation, and manual proofreading can significantly improve the accuracy and cultural adaptability of the translated texts ^[5]. For example, the AI translated “Jinhua” (the small golden dots floating on brewed oolong tea, which are plaques formed by tea mycelia under the action of lactic acid bacteria) as “golden flower.” Such a literal translation would cause misunderstanding, so it was revised manually. Revise the original sentence “The beneficial bacterial flora appears yellow-orange” to “Golden probiotic flora” and attach a brief explanation. Finally, embed the rewritten multilingual subtitles into the video. When publishing it on social media, cross-language hashtags (e.g., Fu Tea, Chinese Tea Culture) are also added to help international users discover the video. This “Human + AI” collaboration mode ensures efficiency, accuracy, and quality. It should be noted that current AI is still inferior to humans in terms of the naturalness of imitating human speech and the removal of accent; therefore, this research mainly applies this mode to subtitle translation and does not widely use AI voice-over.

3.3. Social media communication: Distribution strategies and effect tracking

Regarding the dissemination of social media content, this paper mainly explores how to publish content and understand its effects. On the one hand, the content is published on selected media platforms. The main platforms used in this study are China’s Douyin and Xiaohongshu, while overseas dissemination is also carried out on YouTube Shorts and TikTok. On the other hand, in addition to uploading long videos, different types of content, such as 15-second highlight clips, photo-articles, and behind-the-scenes footage, are created as opportunities to attract user engagement multiple times. Furthermore, two-way interaction is conducted by answering questions left in audience comments (e.g., Have you tried Fu tea? Which step of the production process would you like to learn more about?). Meanwhile, browsing data such as view counts is also collected. So far, they have also collected related data. Metrics such as completion rate, number of likes, number of comments, and number of shares are used to evaluate the communication effect of these videos. Some scholars have pointed out that by analyzing the transmission pathways within short video networks, it is possible to more accurately predict the diffusion trends and audience reception of cultural content ^[6]. Preliminary dissemination data shows that the organic reach rate of short videos about Wuyi fu tea culture with AI multilingual subtitles has been significantly improved on overseas platforms; users from Japan, Germany, and other places have also gradually left their comments in the comment section. This conclusion is basically consistent with existing research results, which points out: “The ‘AI Multilingual Video Communication Mode’ can effectively expand the domestic and overseas audience groups” ^[7].

4. Collaborative mechanisms and challenges

Based on the author’s experience, the “AI + Micro-video” communication model can be summarized into the following three parts: (1) Man-machine collaboration (AI undertakes a large amount of work, while humans are responsible for creation and cultural mastery); (2) Transforming “cultural conversion” into “cultural transformation”; (3) Data circulation (guiding content production and AI improvement based on communication data).

But when conducting the practice, there also emerged three relatively thorny problems: From the technical aspect, AI translation is not fluent, often does poorly in the handling of words with cultural connotations, and voice synthesis is often mechanical. From the content aspect, there is a certain conflict

between the profound connotations of intangible cultural heritage and the fragmented expression of short videos; from the communication aspect, overseas algorithms provide insufficient traffic support for cultural content, making it difficult to achieve effective dissemination by relying on organic reach alone.

To solve these problems, it is necessary to standardize the workflow of AI translation plus manual proofreading and build a Fu tea culture vocabulary database. Officials can make use of the story structure of short dramas to create a short drama series IP, cultivate a group of fans, and enable users to get closer to Fu tea culture^[8]. It has been proven that artificial intelligence technology effectively promotes the overseas dissemination of Chinese micro-short dramas and provides a reference for the internationalization of China's micro-short dramas^[9]. Cooperate with tourism agencies to establish a closed-loop business of “carrying out visits (or participating in) garden fairs through platforms such as Douyin” to allow old users to experience Fu tea culture up close, and enable distribution across various platforms to increase its own exposure and chances of being viewed^[10].

5. Conclusion

Taking the promotion of Wuyi Mountain tea culture through “socialized communication” as an example, this paper adopts a three-level analysis model of “content production—cultural grafting, communication and distribution, and effect verification” to explore the feasibility of the model of “AI pre-translation + human polishing + socialized communication.” The study finds that AI can effectively reduce language barriers and production costs in international communication, and short videos help narrow the distance to the audience. The organic combination of the two explores a new path for Wuyi Mountain's traditional tea culture to go global. However, this study still has many limitations. AI cannot completely replace human cultural judgment and labor, and human-machine collaboration remains the direction for further development. Future AI translation should move in this direction. This article should carry out a quantitative evaluation to compare various AI tools and translation methods, so as to provide a more universally meaningful reference for the digital communication of intangible cultural heritage.

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