

## The influence of modern dubbing technology on the performance of dubbing actors and its countermeasures

Liyuan Zhang

Liaoning Communication University, Shenyang, 110000, Liaoning, China

735787930@qq.com

**Keywords:** countermeasures; dubbing actors; performance; modern dubbing technology

**Abstract:** The purpose of this paper is to explore the influence of modern dubbing technology on the performance of dubbing actors and the coping strategies. Firstly, the article introduces the development trend of modern dubbing technology, including digital recording technology, sound special effects and speech synthesis technology. Then, it analyzes the influencing factors of these new technologies on the performance mode of voice actors, including technical limitations, changes in creative space and so on. Subsequently, the strategies for voice actors to meet the challenges of modern technology are put forward, including improving sound processing skills and adapting to the use of new technologies. Finally, through the prospect of the future development trend of the industry, it is pointed out that voice actors need to constantly improve their skills and performance level in order to cope with the increasingly fierce competition and meet the individual needs of the audience. The research in this paper helps voice actors to understand the influence of modern voice-over technology on their performances, and provides corresponding coping strategies to guide them to achieve better development in the voice-over industry.

### 1. Introduction

In today's digital age, dubbing technology in the film and television industry is undergoing revolutionary changes. With the continuous progress of technology, the traditional dubbing method has been replaced or improved by new digital technology. This technological change not only changed the dubbing workflow, but also put forward new requirements and challenges for the dubbing actors' performance. Therefore, it is of great significance to discuss the influence of modern dubbing technology on the performance of dubbing actors and effective coping strategies.

In the past, dubbing actors mainly relied on their own voice expression skills and emotional expression to interpret the role, and completed the dubbing work through real-time performance in the recording studio [1]. However, with the increasing popularity of digital technology, modern dubbing is no longer limited to the traditional recording studio environment. Emerging technologies, such as AI synthetic voice and advanced sound processing software, bring more possibilities and challenges to dubbing [2].

This paper aims to explore the influence of modern dubbing technology on the performance of dubbing actors and its coping strategies, and will analyze the characteristics and challenges of traditional dubbing actors' performances, as well as the changes brought by modern technology to their performance methods. Then, it discusses the concrete influence of modern dubbing technology on the performance of dubbing actors, including the performance mode changed by technology and the factors affecting the performance of actors. Finally, it puts forward the coping strategies and suggestions for the development of the industry, as well as the direction of future research. Through the in-depth study of modern dubbing technology and its influence on the performance of dubbing actors, we are expected to provide useful insights and suggestions for the development of dubbing industry and promote further innovation and development in this field.

## 2. Development of modern dubbing technology

As an indispensable part of the film and television industry, dubbing technology has been developing and evolving since its birth [3]. The traditional dubbing work mainly depends on the recording studio and professional sound processing equipment. With the rapid development of digital technology, modern dubbing technology has achieved unprecedented innovation and breakthrough.

The traditional dubbing recording is usually completed in a special recording studio. The dubbing actor interprets the role through instant performance and uses professional sound processing equipment to post-process the recording. However, with the progress of digital technology, modern dubbing is no longer limited to the traditional recording studio environment [4]. The popularity of digital recording equipment and the development of network technology make it possible to dub remotely. Dubbing actors can record at any place and complete their homework through network transmission. In addition, the application of VR technology has also brought a new experience to dubbing, and the dubbing actors can simulate different scenes to perform in the virtual environment.

In recent years, emerging technologies, such as AI synthesized voice, intelligent speech recognition and voice synthesis software, are gradually being applied to the dubbing field [5-6]. AI synthetic sound technology can generate high-quality synthetic audio, which greatly reduces the time and cost of manual recording. Intelligent speech recognition technology can realize the automatic conversion from speech to text, which provides a more efficient tool for post-production. In addition, with the development of sound synthesis software, the dubbing artist can easily achieve sound special effects and sound change effects, which provides more possibilities for role-building.

The application of these new technologies not only enriches the form and content of dubbing, but also brings new opportunities and challenges to the development of dubbing industry. However, it is followed by higher requirements for the performance ability and technical level of voice actors, as well as rethinking and innovation of traditional voice-over methods.

## 3. Characteristics and challenges of voice actors' performance

Dubbing actors are the voice spokespersons of the characters in film and television works. Their performances not only need to have voice expression skills, but also need to be able to accurately grasp the emotions and personalities of the characters. However, with the development of modern dubbing technology, the performance of dubbing actors is facing new challenges and changes [7]. Table 1 below summarizes the characteristics and challenges of voice actors' performances.

Table 1 Characteristics and challenges of voice actors' performance

Characteristics and challenges	describe
Traditional performance elements	Relying on voice expression skills and emotional control ability. Show the emotional changes of the role through the change of voice and rhythm. Good voice control and acting skills are needed.
Challenges brought by technology	Digital recording technology enables voice actors to record in different environments, but it may lead to a lack of authenticity and emotional resonance. The application of new technology may reduce the opportunities for dubbing, reduce the requirements for sound processing skills, and make the performance lack personality and characteristics.

Traditionally, voice actors mainly rely on voice expression skills and emotional control ability to interpret roles. They need to show the emotional changes and inner world of the role through the change of voice and rhythm, so that the audience can resonate and connect emotionally. In addition, the voice actor also needs to have good voice control and acting skills to ensure that the

performance of the role can fit the picture and atmosphere of the original film.

However, with the continuous progress of modern dubbing technology, the performance of dubbing actors is facing new challenges. First of all, the popularity of digital recording technology allows voice actors to record in different environments, but at the same time it also makes them lose the opportunity to interact and resonate with other actors in real time. This may lead to the lack of authenticity and emotional resonance in dubbing performance, thus affecting the audience's viewing experience. Secondly, the application of new technology has also brought challenges to the voice actors in performance [8]. For example, the emergence of AI synthetic sound technology may reduce the job opportunities of voice actors, because some voice-over work may be replaced by automatically generated synthetic audio. In addition, the popularity of sound processing software may also reduce the requirements for voice processing skills of voice actors, thus making voice performance lack of personality and characteristics.

These challenges make the dubbing actors have to rethink and adjust their performance methods to adapt to the development trend of modern dubbing technology. They need to constantly improve their technical level, and at the same time, they should pay attention to the traditional performance elements to ensure that their performances can keep pace with the times and resonate with the audience.

#### **4. The influence of modern dubbing technology on the performance of dubbing actors**

##### **4.1. Technology has changed the way of performance**

The development of modern dubbing technology not only changes the dubbing workflow, but also profoundly affects the performance mode of dubbing actors. With the increasingly important audio-visual effects of film and television works, the demand for sound special effects is also increasing. Modern dubbing work is no longer limited to simple dialogue recording, but more needs dubbing actors to enhance the role image and scene atmosphere through sound special effects [9]. For example, in science fiction films or fantasy films, voice actors may be needed to simulate the sound effects in special environments, such as the roar of the engine of a spaceship or the magical sound in a fantasy world. This demand for sound special effects requires voice actors not only to have excellent sound imitation ability, but also to master sound processing software and special effects technology skillfully to ensure the fit and realism of sound effects.

On the other hand, with the continuous progress of AI technology, speech synthesis technology has become an important part of modern dubbing. Speech synthesis software can automatically generate natural and smooth synthetic speech according to the text, which greatly reduces the time and cost of dubbing. However, this also makes the voice actor rely on the automatic speech synthesis technology to some extent, rather than relying on his own voice performance skills. Although the application of speech synthesis technology improves the dubbing efficiency, it may also reduce the personalization and professionalism of dubbing actors, resulting in the lack of authenticity and emotional resonance in dubbing performance.

The development of modern dubbing technology has changed the performance mode of dubbing actors, including the demand for sound special effects and the dependence on speech synthesis. Voice actors need to constantly improve their technical level, and at the same time, they should also pay attention to traditional performance elements to ensure that their performances can keep pace with the times and resonate with the audience.

##### **4.2. Factors affecting actors' performance**

Although modern technology has brought many conveniences and innovations to dubbing, it has also brought certain technical limitations. For example, in the digital recording environment, the voice actor may not be able to interact with other actors in real time as in the traditional recording studio, thus affecting the authenticity and emotional resonance of the voice performance. In addition, some sound special effects and speech synthesis techniques may also have certain limitations, which leads to the voice actor's inability to fully realize his performance intention. Table

2 summarizes the contents of the factors that affect the performance of voice actors.

Table 2 The content of the factors that affect the performance of voice actors

influencing factor	describe
Technical limitation	The lack of real-time interaction in digital recording environment may affect the authenticity and emotional resonance of the performance. The limitations of sound special effects and speech synthesis technology may lead to the failure to fully realize the performance intention.
The change of creative space	With the development of modern technology, voice actors can record in different environments, but it may lead to a lack of opportunities to interact and resonate with other actors in real time. May affect the quality and authenticity of the performance.

With the application of digital technology, the creative space of voice actors has also changed. Traditionally, dubbing actors perform in real time in the recording studio, but with the development of modern technology, dubbing actors can record in different environments and even complete dubbing tasks through remote recording [10]. This change in creative space has brought greater flexibility and convenience to dubbing, but it may also lead to the lack of opportunities for dubbing actors to interact and resonate with other actors in real time, thus affecting the quality and authenticity of the performance.

## 5. Coping strategies and development suggestions

### 5.1. Technical improvement of dubbing actors

In modern dubbing, voice processing skills are one of the important skills that a dubbing actor must have. Dubbing actors need to master sound special effects, speech synthesis software and other sound processing tools to ensure the fit and realism of sound effects. Therefore, dubbing actors can continuously improve their sound processing ability by attending sound processing skills training courses and self-learning related technical books and tutorials.

With the emergence of new technologies, voice actors need to know and adapt to the use of these new technologies in time. For example, the application of AI synthetic voice technology is gradually increasing, and voice actors can improve the efficiency and quality of dubbing by learning and mastering this technology. In addition, voice actors can also use innovative technologies such as VR technology to expand their performance space and enhance their role expression.

In addition to improving sound processing skills and adapting to the use of new technologies, voice actors should also keep the attitude of continuous learning and practice. They can take part in professional dubbing training courses and workshops to accumulate more performance experience and skills. At the same time, voice actors can also improve their performance level and professionalism by participating in project practice and cooperating with other professionals.

### 5.2. Innovative performance mode

In order to adapt to the development of modern dubbing technology, dubbing actors can expand their performance space and enhance their role expression through innovative performance methods. VR technology can provide a new performance experience and creative space for voice actors. Through VR equipment, voice actors can simulate different scenes and environments in an immersive way, so as to better understand the situation and emotional state of the role. Voice actors can improve their performance skills and role expression by interacting with virtual characters or performing in virtual environments. In addition, voice actors can also use VR technology for role modeling and motion capture, making the role image more vivid and concrete.

AR technology can superimpose virtual information into the real world, providing a richer and

more diverse performance experience for voice actors. Through AR equipment, voice actors can add virtual characters and props to the real environment, so as to better integrate into the scenes and situations where the characters are located. This performance mode of AR can make the voice actors' performances more vivid and three-dimensional, and also provide them with more creative space and imagination.

By using innovative performance methods such as VR technology and AR technology, voice actors can better adapt to the development of modern voice-over technology and improve their performance level and role expression. This innovative performance not only enriches the expression forms of dubbing works, but also brings new opportunities and challenges to the development of dubbing industry.

### **5.3. Industry trends**

With the continuous development of AI technology, the future dubbing technology is expected to be more intelligent and automated. AI synthetic voice technology will further improve the quality and accuracy of speech synthesis, thus reducing the need for manual recording. This means that voice actors need to have higher performance skills and creative ability to distinguish and highlight their own performance characteristics.

VR technology will become one of the important tools for the creation and performance of dubbing works in the future. Voice actors can use VR equipment to perform in a virtual environment, thus achieving more vivid and realistic role performance. In addition, VR technology can provide viewers with a more immersive viewing experience and enhance their sense of participation and emotional resonance.

With the increasing demand of the audience for personalized film and television works, the personalized performance of voice actors will become an important trend in the future industry development. Voice actors need to constantly innovate and break through the traditional performance methods to show a more individual and unique performance style in order to attract and retain the attention of the audience. With the acceleration of global information exchange, the future dubbing industry will face more intense international competition. Voice actors need to have the ability of cross-cultural communication and performance to meet the needs of different cultural backgrounds and audience groups. This also provides a broader development space and opportunities for voice actors to participate in more international film and television works creation and cooperation.

The future development trend of dubbing technology includes technical intelligence, VR application, personalized performance demand and global competition. Voice actors need to constantly improve their skills and performance level to adapt to the changes in the development of the industry, seize the opportunity, and achieve personal and industry development.

## **6. Conclusion**

The development of modern dubbing technology has brought unprecedented opportunities and challenges to dubbing actors. The application of new technologies such as digital recording technology, sound special effects and speech synthesis technology makes dubbing works more convenient and efficient, but it also puts forward higher requirements for dubbing actors' performance methods. Dubbing actors need to constantly improve their technical level to adapt to the development of modern dubbing technology. They should strengthen their sound processing skills, master the software of speech synthesis and sound special effects skillfully, and at the same time pay attention to personalized performance and exploration of innovative ways, so as to distinguish themselves from automatic synthesis of sound and show more real and vivid role images. Voice actors should also actively adapt to the use of new technologies, and continue to learn and practice in order to maintain their competitive advantage. They can use VR technology, AR technology and other innovative ways to expand their performance space and enhance the role expression, so as to better meet the growing personalized needs of the audience. With the continuous development of modern dubbing technology, dubbing actors are facing new challenges

and opportunities. Only by constantly improving their own technical level, actively adapting to the use of new technologies, and constantly exploring innovative performance methods, can voice actors stand out from the fierce competition and present more high-quality and real voice-over works for the audience.

## References

- [1] Li Miao. (2017). Shaping roles with sound-On the role dubbing of actors. *Sichuan Drama*, 2017(5), 4.
- [2] Wang Yi,&Liu K. (2018). Study on the Influence of Voice Actor's Voice on Advertising Effect-Interpretation of Unstructured Audio Data. *Journal of Central University of Finance and Economics*, 2018(12), 9.
- [3] Zhao Meiling. (2019). Application of English film dubbing in junior high school English teaching. *English teaching and research in primary and secondary schools* 2019(3), 4.
- [4] Gao Shan. (2015). Cross-cultural aesthetic value of dubbing art of translated films. *Media*, 2015(1), 2.
- [5] Li Xiao 'ai. (2022). Shaping the role with sound-On the important role of dubbing in film and television works. *TV Research*, 2022(11), 118-120.
- [6] Li Xinhui. (2010). Language Adaptation in Film Dubbing Translation. *Film Literature*, 2010(3), 2.
- [7] Ji Xiaoting. (2013). Present situation of animation dubbing industry in China. *China TV (Animation)*, 08(47), 34-36.
- [8] Li Lihong. (2010). Dubbing creation in translated films. *Contemporary films*, 2010(5), 3.
- [9] Deng Ping. (2016). China film "going out": strategies of dubbing and subtitle translation-based on the reflection on the practice of English film we're no angels dubbing and subtitle translation. *Film Review*, 2016(22), 7.
- [10] Cheng Xuanlin. (2011). The development course and development countermeasures of China film dubbing. *Film Literature*, 2011(5), 2.