

# Symbiosis of Art and Technology: An Analysis of the New Trends in Chinese Music Driven by AI

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## Abstract

**In the wave of the digital age, artificial intelligence (AI) technology is rapidly developing at an astonishing speed and infiltrating various fields of society with unprecedented momentum, including the music industry. From the initial simple music recommendation algorithm to the ability to independently create, perform, and implement complex audio processing, every breakthrough in AI technology is profoundly changing the face of the music industry and the creation and dissemination mode of music art.**

## Keywords

**Chinese music; AI; Music Creation; Music industry.**

## 1. Introduction: Music Transformation under the Wave of Technology

In the wave of the digital age, artificial intelligence (AI) technology is rapidly developing at an astonishing speed and infiltrating various fields of society with unprecedented momentum, and the music industry is naturally no exception. From the initial simple music recommendation algorithm to the ability to independently create, perform, and implement complex audio processing, every breakthrough in AI technology is profoundly changing the face of the music industry and the creation and dissemination mode of music art.

Looking back, music creation mainly relied on musicians' profound professional competence, unique inspiration, and long-term accumulated creative experience. The traditional music production process is not only time-consuming and labor-intensive, but also requires a significant investment of manpower and material resources. However, with the rise of AI technology, this situation is undergoing earth shattering changes. Nowadays, AI music creation platforms are emerging like mushrooms after rain. These platforms use machine learning and deep learning algorithms to analyze and learn massive amounts of music data, and can quickly generate various styles of music works. From pop to classical, from rock to folk, AI seems to be omnipotent, bringing new possibilities to music creation.<sup>[1]</sup>

In China, the impact of AI technology on the music industry is particularly significant. China has a huge music market and abundant music cultural resources. With the continuous development and application of AI technology, the Chinese music industry is facing unprecedented development opportunities. Many domestic music companies and technology enterprises have increased their research and development investment in the field of AI music, launching a series of innovative products and services. At the same time, more and more Chinese musicians are trying to use AI technology for music creation, exploring new music styles and forms of expression, thus giving rise to a unique AI driven new trend in Chinese music.

## 2. AI and Music Creation: Reshaping the Source of Inspiration

### 2.1. The Rise of AI Music Creation Tools

In today's digital age, AI music creation tools are emerging like mushrooms after rain, gradually changing the traditional pattern of music creation. These tools, with the help of advanced artificial intelligence technology, provide music creators with new creative ideas and methods, among which Mureka O1 is a leader. As the world's first AI music generation platform with open APIs and model fine-tuning capabilities, Mureka O1 has attracted much attention since its inception. It is equipped with independently developed ICL (in context learning) technology, which uses innovative sound field expansion technology to make the vocal texture more delicate and full, and the mixing design more professional, bringing users an unprecedented auditory feast.

In addition to Mureka O1, there are many other excellent AI music creation tools. For example, Google's MusicLM is an AI based text to music model that transforms the conditional music generation process into a hierarchical sequence to sequence modeling task and generates music in 24 kHz format that maintains consistent quality within minutes. It can also transform the melody of whistling and humming according to the style described in the text description, bringing more possibilities to music creation. Suno.ai is a generative AI music creation program designed to create authentic songs that seamlessly blend vocals and instrumental sounds. It completely changes the field of music creation by transforming ideas or hints into captivating songs, allowing creators to quickly transform their inspirations into actual musical works. [2]

The emergence of these AI music creation tools has had a huge impact and innovation on traditional music creation. They break the time and space limitations of traditional creative methods, making creation more efficient and convenient. In the past, music creators may have had to spend a lot of time and energy brainstorming melodies, writing lyrics, arranging music, and other tasks. Now, with the help of AI music creation tools, creators can generate a large amount of music materials in a short period of time, providing more inspiration and choices for creation. At the same time, AI music creation tools have lowered the threshold for music creation, allowing more people without professional music backgrounds to participate in music creation, further promoting the popularization and diversified development of music creation.

### 2.2. A New Paradigm of Human Computer Collaboration in Creation

With the continuous development of AI music creation tools, the human-machine collaborative creation mode has gradually become a new paradigm, bringing unprecedented vitality and innovation to music creation. In this mode, the creativity of human creators is combined with the powerful data processing capabilities and algorithmic advantages of AI to jointly promote the development of music creation.

After having the lyrics, the creative team operates on the AI music creation platform during the music production stage. They tried various styles such as pop music, folk music, rap, etc., listened to 40 to 50 song samples, and finally determined the style combination of "Chinese style, rap, electronic music, fast-paced", accompanied by a synthesized vocals of male and female voices singing against each other. In this process, the AI music creation platform provides them with rich music materials and diverse style choices, greatly saving their creative time and energy. At the same time, human creators use their own aesthetics and understanding of music to screen and adjust AI generated music, ensuring that the final music works are both innovative and meet the theme and artistic requirements. [3]

Through the creative example of the Parallel World Project, it can be seen that the human-machine collaboration creative model has many advantages. It greatly improves creative efficiency, as AI can quickly generate a large amount of creative materials. Human creators can filter and optimize these materials, saving a lot of creative time. Human robot collaboration can

inspire more creative inspiration. The algorithm and data analysis capabilities of AI can uncover music elements and creative combinations that human creators may overlook, bringing new ideas and directions to creativity. The emotions, aesthetics, and creativity of human creators endow music works with soul and depth, making them more touching to the heart. Human robot collaboration can also achieve optimized resource allocation. Human creators can invest more time and energy into creative ideas and artistic expression, while AI is responsible for handling some tedious technical work, such as generating music materials and producing images, thereby improving the quality and efficiency of the entire creative process.

### **3. The role and impact of AI in the music industry**

#### **3.1. The transformation of music production process**

In the field of music production, AI technology is triggering a profound transformation, reshaping the traditional music production process from multiple key aspects.

AI technology has demonstrated outstanding advantages in the audio editing process. Traditional audio editing work requires audio engineers to manually operate professional software to edit, stitch, and adjust audio frame by frame. This process is not only time-consuming and labor-intensive, but also requires high technical skills and patience from engineers. Even a small mistake may require rework, greatly affecting production efficiency. Nowadays, with the help of AI technology, audio editing has become more efficient and accurate. Some advanced AI audio editing software can automatically identify key elements in audio, such as rhythm, melody, harmony, etc., through intelligent algorithms, and quickly complete audio editing and splicing work according to user set rules and requirements. When it is necessary to play the chorus part of a piece of music repeatedly, AI editing software only requires simple instructions from the user to quickly locate the chorus part and copy and paste it according to requirements, completing the operation in seconds, while traditional methods may take several minutes or even longer.<sup>[4]</sup>

The changes brought by AI technology to the music production industry are multifaceted. From a cost perspective, the application of AI technology has significantly reduced the labor and time costs of music production. Traditional music production requires the employment of professional audio engineers, mixers, and other personnel, who often receive higher salaries and longer production cycles. Now, with the help of AI music production tools, some simple music production tasks can be completed by creators themselves without hiring too many professionals, thus saving a lot of labor costs.

In the traditional mode, the dissemination of music is often limited by platform recommended resources, and only a few popular songs and singers can obtain a large number of exposure opportunities, while many niche and high-quality music works are easily buried. The emergence of AI algorithm recommendation systems has given every piece of music the opportunity to be accurately pushed to users who truly like it, providing more display platforms and dissemination opportunities for niche and independent musicians. The works of some niche musicians have gained a large number of users' attention and love in a short period of time through the precise push of algorithm recommendation systems, thus achieving a transformation from obscurity to widespread recognition.<sup>[5]</sup>

AI technology has also changed the consumption pattern of music. With the support of AI technology, users' music consumption has become more personalized and diversified. Users are no longer limited to listening to popular songs and works by pop singers, but can freely explore various styles and types of music according to their interests and preferences. They can discover more niche music, independent music, and music works from different cultural backgrounds that meet their diverse music needs through algorithmic recommendation systems. Some users are interested in world music and can easily discover unique music from

Africa, Latin America, Asia, and other regions through algorithm recommendations on streaming platforms, broadening their music horizons.

## **4. Challenges and controversies under the new ideological trend**

### **4.1. Copyright ownership and legal dilemma**

Behind the flourishing development of AI driven music creation, the issue of copyright ownership of AI generated music has become a focus of attention, sparking widespread controversy and discussion. From the perspective of the creative subject, traditional copyright law follows "anthropocentrism", which holds that only humans are the creators of works and enjoy copyright. However, the intervention of AI has made the creative chain more complex, forming a four party ownership model of "developer designed models → user input instructions → algorithm generated content → training data copyright holders to make hidden claims". This poses a systematic challenge to the binary structure of "author work" in the original legal framework, and the creative subject becomes blurred.

In practical situations, developers often advocate that the algorithm is the author, believing that AI system design reflects originality and should enjoy copyright. The Google Magenta team has put forward such a viewpoint. However, the Beijing Internet Court explicitly rejected this view in the (2021) J0491 Early Republic 1121 judgment, pointing out that the originality of algorithm logic is not equal to the originality of works, and developers only enjoy software copyright. In the 2024 case of Universal Music v. Ai Corporation, this position was once again reinforced. If the AI model is trained using copyrighted music, the data provider may claim "basic training rights", leading to a "triple rights division" dilemma among developers (software rights), users (content generation rights), and data providers (training rights).

### **4.2. Impact and Reflection on the Cultivation of Music Talents**

The rapid development of AI technology has brought tremendous impact to the cultivation of music talents, and has had a profound impact on the demand and training direction of music talents.

From the changing demand for music talents, with the widespread application of AI in music creation, production and other fields, some repetitive and regular music job positions are gradually being threatened. In the past, the tedious arrangement and mixing work in music production required a large number of professional music production personnel to complete, but now with the help of AI music production tools, these tasks can be efficiently completed in a short period of time, which reduces the demand for music talents who only engage in these basic jobs in the market. Those who are proficient in operating traditional music production software for simple arrangement and mixing may face the risk of being replaced by AI.

AI technology has also generated a demand for new types of music talents. Nowadays, compound talents who understand both music and AI technology have become a hot commodity in the market. These talents are proficient in using AI music creation tools, combining their music creativity with AI technology to create more innovative and unique music works. They not only need to have a solid foundation in music theory, sharp music perception ability, and rich creative inspiration, but also need to master the basic principles, algorithms, and programming knowledge of artificial intelligence, and be able to flexibly apply AI technology to solve problems in music creation and production. Some music companies explicitly require applicants to have AI music creation experience and be proficient in using advanced AI music generation platforms such as Mureka O1 when recruiting.

## 5. Outlook: AI and the Future of Chinese Music

The impact of AI technology on Chinese music presents comprehensive and profound characteristics, triggering significant changes in creative modes, style evolution, and industrial ecology. Looking ahead to the future, the deep integration of artificial intelligence and Chinese music will present a broader development prospect, giving rise to more remarkable innovative breakthroughs.

In the field of creativity, AI technology will continue to play a crucial role and gradually become an indispensable creative assistant for musicians. With the iterative upgrading of AI technology, intelligent music creation tools will become increasingly intelligent and efficient, providing creators with more accurate and personalized creative advice and material support. This type of tool can quickly generate music clips that are suitable for diverse styles and scenes based on the creative direction and actual needs of musicians, in order to stimulate creative inspiration, help break through creative bottlenecks, and achieve more efficient and innovative music production. In addition, AI may make a name for itself in music theory research - by analyzing and mining massive music data, it can discover new music patterns and creative techniques, providing innovative theoretical support for music creation.

However, we should also be aware that AI technology faces some challenges and issues in promoting the development of Chinese music, such as copyright protection, music talent cultivation, and music aesthetic guidance. Therefore, we need to actively embrace AI technology, strengthen the formulation and improvement of relevant laws and regulations, enhance the protection of music copyright, and safeguard the legitimate rights and interests of musicians; Optimize the music education system and cultivate composite music talents that meet the needs of the AI era; Strengthen the guidance on music aesthetics and cultural connotations, ensuring that AI music does not lose its artistic value and humanistic care in the development process.

The future of AI and Chinese music is full of infinite possibilities and opportunities. We have reason to believe that with the promotion of AI technology, Chinese music will usher in a new era of prosperity and development, creating more excellent music works and making greater contributions to the development of global music culture.

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