Legal Certainty of Limitations on the Use of Artificial Intelligence (AI) Voice Cloning in Songs and Music as A Form of Protection of Musicians' Copyrights

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Abstract. The existence of artificial intelligence (AI) voice cloning is growing in various industries, one of which is the music industry in Indonesia. However, the regulation of AI voice cloning has not been clearly regulated in positive law in Indonesia. This causes legal uncertainty in the use of AI voice cloning, and the potential for misuse of AI voice cloning in the creation of music and songs. Music and songs themselves are regulated in the Copyright Law, where there are moral and economic rights that must be protected in making songs and music. This research uses a normative juridical method with a statutory and analytical approach. The results show that there are no regulations related to the limits of the use of voice cloning using artificial intelligence, the authenticity of a musical work is based on originality, but there are no definite limits in the principle of originality. In this case, a legal framework is needed that regulates the use of AI voice cloning in music making.

Keywords: Voice Cloning, Copyright, Law, Music

1   Introduction

The development of technology in the era of disruption 5.0 is something that cannot be avoided by everyone, both in carrying out daily activities, to help in work. Today's technological advances have made a shift to a more modern way of working. One technology that is currently widely used by the community at large is artificial intelligence technology. Various conveniences that can be utilized from the use of AI can be felt by the community, ranging from being a virtual assistant, writing, creating works of art, even in doing human work. [1]

The widespread use of artificial intelligence technology not only brings innovation, but also raises serious security concerns. Threats to artificial intelligence systems from cyber-attacks and manipulation can have devastating effects and require serious legal attention. The existence of increasingly sophisticated artificial intelligence technology creates complex potential risks. One form of artificial intelligence that is currently widely used is AI voice cloning, this voice cloning is a full imitation, of the original voice, and usually imitates the voice of a famous figure, both in the national aspect, such as the president, the entertainment aspect, such as famous artists and singers who are very similar.[2] In addition, in terms of copyright law, there are threats related to the use of voice cloning using artificial intelligence (AI) in creating, producing and disseminating music and songs. This is based on the exclusive rights contained in copyright that are potentially violated, namely the economic rights and moral rights of a work of music or

song.

Economic rights are the right to benefit economically, for example in the art of music along with the development and modernization of music, artists use their minds and efforts to create music and songs in accordance with developments, with the aim of getting a positive response from the people who listen to it. And in the end will get economic benefits for his work that is listened to by many people. While moral rights are rights attached to the creator to appreciate the work that has been created, to honor the hard work of the creator in making a work produced by his own thoughts and hard work. It is different from creating works with the help of artificial intelligence (AI). [3] Voice cloning using artificial intelligence (AI) is one example of the application of technology that combines the fields of artificial intelligence and sound signal processing. This technology makes it possible to replicate human or other voices with a high degree of accuracy, making it difficult to distinguish between the original voice and the voice created by AI.

The process of voice cloning involves several complex stages. First of all, a sizable amount of a person's voice data is collected. This data can be in the form of live voice recordings, text-to-voice transcriptions, or even recorded conversations. Then, machine learning algorithms are used to analyze the patterns of the voice, identify unique features such as pitch, intonation, and rhythm, and understand the context and emotions contained in the voice. After analysis, a machine learning model is built based on the collected voice data. This model produces a mathematical representation of a person's voice, which can be used to replicate the voice. This process involves techniques such as neural networks, deep learning, and digital signal processing to improve the accuracy and quality of the final result. The main advantage of AI voice cloning is its ability to create highly realistic and lifelike voices, even in complex or different situations. This opens the door to a wide range of applications, from personalization of voice assistants to more efficient production of audio content in the entertainment industry.

Regarding voice cloning (Artificial intelligence), regulations governing the use of this are not yet available. When using copyrighted material to create AI-generated voices, there are moral rights and economic rights involved, so permission or license from the copyright holder is required to use and utilize it. [4] However, along with these advantages, AI voice cloning technology also raises some concerns and challenges. One of them is the potential for abuse, such as voice fraud or unethical audio manipulation. This calls for the adoption of strict regulations and ethical standards to ensure responsible and safe use of this technology. While the voice is unique to an individual and is a key aspect of one's personality, it is not an entity under copyright protection, as copyright protects only original works of authorship that are fixed in any tangible form; the voice is not sufficiently "fixed" and, therefore, cannot be owned by an individual. The unavailability of a copyright legal framework to prevent the use of other people's voices allows users of voice cloning to use it at will without thinking about the legal implications that follow, as there is no clear legal framework in regulating the limits of using voice cloning in song and music making.

As such, voice cloning using artificial intelligence is one example of a promising technological innovation, but it also requires careful thought and close scrutiny to ensure its positive impact on society.

Therefore, the author wants to examine the limitations on the use of artificial intelligence voice cloning, in its use to imitate voices, make music and songs, this research uses normative

juridical research, by examining existing laws and analyzing them.

2   Discussion

2.1   Voices, Music, and Songs Under the Copyright Law

Artificial intelligence (AI) has been widely used in the music industry, but has been limited to music and beat production and music distribution through streaming services. AI voice cloning has recently infiltrated the recording industry. A simple Google search using the keywords "voice cloning" yields many results for voice cloning such as, generate.ai, which is basically an innovation in generating a realistic replica of the original speaker's voice. In Indonesia alone, especially in the Tiktok application, there are many examples of using voice cloning using AI and getting Views of up to 1 million viewers. The issue of whether or not artificial intelligence is considered a legal subject has developed along with the rapid advancement of technology. This development must be accompanied by the addition of a legal framework that can accommodate all possibilities that will occur in the future. In Indonesian Copyright Law is an effort to provide legal certainty for those involved in the use of AI. [5]

According to Hans Kelsen, law is a system of norms. Norms are statements that emphasize the "should" or *das sollen* aspect by including some rules about what to do. Norms are products and deliberative human action. Laws that contain general rules become guidelines for individuals to behave in society, both in relationships with fellow individuals and in relationships with society. These rules are a limitation for society in burdening or taking action against individuals. The existence of these rules and the implementation of these rules give rise to legal certainty. [6]

AI voice cloning technology has several diverse applications:

1. Voice Assistant Development
   With voice cloning, voice assistants such as Siri, Google Assistant, or Amazon Alexa can be customized to the voice of their users. This provides a more personalized experience and allows the voice assistant to respond to commands in a voice that is familiar to the user.
2. Entertainment Industry
   Voice cloning can be used in the entertainment industry to create voice dubbing in movies, TV shows, or video games with natural-looking sounds.
3. Audiobooks and Podcasts
   The use of voice cloning in audio books and podcasts can improve audio content production at a lower cost and in less time, as there is no need to record live human readers.
4. Live Performance
   In the field of live performance, voice cloning can be used to produce a voice similar to an artist or public figure who cannot be present in person.
5. Automated Phone Recording
   In customer service or marketing, voice cloning can be used in automated phone recordings to provide more personalized responses to customers.
6. Song and Music Making

In the creation of songs and music, it is not uncommon to simply use the voice of a famous singer or artist in its creation. [7]

The importance of understanding the legal implications of using AI Voice Cloning technology becomes clearer when we realize that the voice used as the base material in this process is actually a work protected by copyright. Although the human voice is not a direct object of copyright protection, the dominant musical work or song in the voice processed by AI Voice Cloning is usually the copyrighted work of the singer or creator protected by copyright law.

Basically, the ownership of songs and music is regulated in Indonesian Copyright Law, precisely Article 40 paragraph (1) letter d of Indonesian Copyright Law, songs and music are included in the category of works protected by copyright. In this context, the use of songs as a sound source for AI Voice Cloning is considered the use of works protected by copyright. Furthermore, Article 9 paragraph (3) of the Copyright Law states that everyone is prohibited from commercially copying a work without the permission of the creator or copyright holder. This means that the commercial use of other people's songs through AI Voice Cloning must obtain prior permission from the creator or copyright holder. In addition, there is an opportunity for infringement of the original creator's right to be recognized as the creator of a work that has been modified by someone. Furthermore, moral rights are regulated in Article 5 of Indonesian Copyright Law, which states that:

"The moral right as referred to in Article 4 shall be the right inherent in perpetuity in the Creator to:[8]

a. continue to include or not include his/her name on copies in connection with the public use of his/her Work;
b. using his alias or cover name;
c. change its Creation in accordance with the propriety of society;
d. changing the title and subtitle of the Creation; and
e. defend his/her rights in the event of distortion of the Creation, mutilation of the Creation, modification of the Creation, or anything that is detrimental to his/her personal honor or reputation."

Article 5 of Indonesian Copyright Law explains that moral rights are automatically inherent rights to be recognized as the creator of a work and is the right to maintain ownership in the event of mutilation, distortion, or modification of the work that has a detrimental impact on his/her honor. Moral rights are rights that must be defended over a work and against modification of the work. It can be seen that point e of Article 4 Indonesian Copyright Law includes the word "modification of creation", which can be said that modification of creation also holds a strong concern for the protection of moral rights itself.

In addition to moral rights, there are also economic rights attached to the owner of a copyright. As the right holder of an original work, economic rights basically have the aim of obtaining rights and benefits in the economic field of a work of creation. Furthermore, economic rights are regulated in Article 9 of Indonesian Copyright Law which states that:

"The Creator or Copyright Holder as referred to in Article 8 has the economic right to do:

a. publishing of Creation;
b. reproduction of the Creation in all its forms;

c. translation of Creation;
d. adaptation, arrangement, transformation of the Creation; or
e. distribution of the Creation or copies thereof;
f. performance of Creation;
g. announcement of Creation;
h. communication of Creation; and
i. rental of the Creation."

"Any Person exercising economic rights as referred to in paragraph (1) shall obtain the permission of the Creator or Copyright Holder. Any person who without the permission of the Creator or Copyright Holder is prohibited from reproducing and/or commercially using the work."

Article 9 of Indonesian Copyright Law explains that economic rights are born and attached to the copyright holder or creator of a work of creation, especially in the economic field. If someone wants to do an arrangement, application, or modification of a work of creation must have permission from the creator of a work that wants to be modified, and on the use or duplication of copyrighted works is prohibited if with the aim to benefit (commercial). Item d of Article 8 of Indonesian Copyright Law includes the words "adapting, arranging, transforming" where the meaning is the scope of the modification of a work that is related and holds a strong concern in the protection of economic rights itself. [8]

As far as one's voice is concerned, the legal protection of an artist's voice is a complex area. While in general, intellectual property laws do not protect an artist's voice directly, there are certain exceptions that need to be noted. One of them is if the artist's voice has been identified as a trademark, signifying the voice as a unique characteristic. Additionally, sound recordings of performances or musical works can also be protected through copyright, providing legal protection against unauthorized use. However, in many cases, an artist's voice tends to depend more on personality and publicity rights than intellectual property rights. Personality rights protect the unauthorized or unauthorized use of an individual's identity and image, including their voice. Meanwhile, the right of publicity provides protection against commercial use of an artist's identity without their permission.

Understanding this distinction is particularly important when discussing the legal implications of voice cloning using artificial intelligence (AI). The ethical and legal questions of who owns the rights to AI-created voices, as well as how those rights are enforced, require an in-depth analysis of the existing legal framework of personality, publicity and intellectual property rights. In particular, whether AI-created voices can be considered a new trademark or a form of unauthorized exploitation of identity that can be protected by personality rights, are some of the questions that need to be addressed in this context. As such, the legal protection of an artist's voice is a complex issue that requires careful consideration of the various relevant aspects of the law.

As such, the use of songs to be altered by AI Voice Cloning may carry the risk of copyright infringement if the appropriate permissions are not obtained. This highlights the importance for users to understand and comply with copyright laws when using AI Voice Cloning technology in a commercial or public context. It also emphasizes the need for the development of clear guidelines and procedures in the use of AI technology to ensure that

copyright and the rights of music creators are appropriately respected and protected.

2.2 Legal Certainty for the Use of AI Voice Cloning in Music and Songs

Protecting artists from having their music or voice recordings used for the use or counterfeiting of their voices without their consent is not the only issue at hand. Even if an imitation is made with the artist's permission, the next question is about the ownership of the song that was created later. Basically, copyright protection is based on originality and tangibility. For a work to be original, it must be created independently by the creator without the contribution of others and there must be creativity in it. An original work does not have to be innovative, but it must be more than a mere modification without requiring any creative contribution in its creation. In the case of the AI-generated music discussed here, only the vocals are mechanically generated, and the user must perform all other necessary steps such as audio editing, lyric writing, mixing, and mastering. Most AI-generated musical works can easily fulfill these requirements. But in terms of the "feeling" and expression generated in a song by AI, this is a drawback and will not be easily established by AI voice cloning. [9]

Legal certainty is also needed to realize the principles of equality before the law without discrimination. From the word certainty, it has a close meaning with the principle of truth. This means that the word certainty in legal certainty is something that can be strictly syllogized in a formal legal way. With legal certainty, it will ensure that a person can carry out a behavior that is in accordance with the provisions in the applicable law and vice versa. Without legal certainty, an individual cannot have a standard provision to carry out a behavior. In line with this goal, Gustav Radbruch also explained that legal certainty is one of the goals of the law itself. Gustav Radbruch explained that in his theory of legal certainty, there are four fundamental things that have a close relationship with the meaning of legal certainty itself, which are as follows:

1) Law is a positive thing which means that positive law is legislation.
2) The law is based on a fact, meaning that it is made based on reality.
3) The facts contained or listed in the law must be formulated in a clear way, so that it will avoid confusion in terms of meaning or interpretation and can be easily implemented.
4) Positive laws should not be easily changed. [6]

Gustav Radbruch's opinion on legal certainty is based on his view of legal certainty, which means legal certainty itself. Gustav Radbruch argued that legal certainty is one of the products of law or more specifically a product of legislation.

In the Indonesian regulatory framework, AI's characteristic of automating information processing provides a strong basis for identifying AI as an "Electronic Agent". This concept is specifically recognized in Article 1 of the Law on Electronic Information and Transactions (ITE Law), where an "Electronic Agent" is defined as "a device of an electronic system created to perform an action on certain Electronic Information automatically organized by a person." [10] The importance of the word "automated" in this definition provides a strong foothold for juxtaposing AI with the concept of "Electronic Agents". Conceptually, AI can be considered a more sophisticated manifestation of an "Electronic Agent", given its ability to process information, make decisions, and act automatically based on a set of pre-defined algorithms and programming. As such, the legal construction referring to "Electronic Agents" as stipulated in

the ITE Law implicitly also applies to AIs. This places AI under the same regulatory scope as "Electronic Agents", with all the legal implications and responsibilities associated with their use and operationalization. Therefore, the application of ethical principles and adequate policies in the development and use of AI is becoming increasingly important in this evolving regulatory context. [11]

Currently, the question is whether using people's voices in making songs or music is legal or illegal, if viewed from copyright, the artist's voice cannot be protected, because it is not a form of work that can be protected. Music copyright protection in the digital age is one of the major challenges in the modern music industry. Along with technological advancements, especially the internet and digital platforms, the music paradigm has fundamentally changed. The digital age not only provides easier and faster access to music, but also opens the door to new copyright-related issues that need to be addressed.

Using deepfake, machine algorithms and neural networks the development of AI-created voices is now a reality through voice cloning technology, this process involves training AI speech models with human speech samples to mimic real speech sounds and accurately reflect what a person would say. First of all, music production in the digital age has become more affordable and accessible for artists and music producers. Digital technology allows anyone with the right equipment to record, edit and produce music of professional quality, even from the comfort of their own home. However, it also means that such musical works can be easily copied, distributed or modified without the permission of the copyright owner. The current laws do not provide adequate protection against the potential future problems of creating audio content using artificial intelligence, making it difficult to implement new laws. As AI technology and voice services evolve, continuous monitoring of legal issues such as copyright or intellectual property rights infringement is necessary to ensure responsible use. Keep in mind, AI technology can do anything, from creating songs, to writing and so on.

3 Conclusion

In the Indonesian Copyright Law, there are economic rights and moral rights that must be protected in the creation of a work. When viewed from the Indonesian Copyright Law, the use of the artist's voice with the help of AI, cannot be included in copyright infringement, because the voice itself does not include objects protected in copyright, while in the creation of music and songs, can be an offense, because of the substantial similarity. The limits of the use of AI voice cloning in making songs and music have not been clearly regulated in positive law in Indonesia, this causes a legal vacuum and uncertainty, in terms of Copyright, music production in the digital era has become more affordable and accessible for artists and music producers. Digital technology allows anyone with the right equipment to record, edit and produce music with professional quality, even from the comfort of their own home. As AI technology and voice services evolve, continuous monitoring of legal issues such as copyright or intellectual property rights infringement is necessary to ensure responsible use. Keep in mind, AI technology can do anything, from composing songs, to writing and so on. The current laws do not provide adequate protection against potential future problems related to the creation of audio content using artificial intelligence, so there is a need for more comprehensive regulation of the limitations on the use of AI in the creation of music and songs.

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