

Challenges of Copyright Law in the Era of Artificial Intelligence: Authorship and Ownership of Posthumous Musical Works Using the Voice of Deceased Artists

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How to cite this paper: de Resende, A. L. S. A., & de Sá Lima, É. P. P. (2024). Challenges of Copyright Law in the Era of Artificial Intelligence: Authorship and Ownership of Posthumous Musical Works Using the Voice of Deceased Artists. *Beijing Law Review*, 15, 2034-2048.

<https://doi.org/10.4236/blr.2024.154114>

Received: September 9, 2024

Accepted: December 3, 2024

Published: December 6, 2024

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Abstract

This article analyzes the impact of Artificial Intelligence (AI) on the evolution of Copyright Law, focusing on the ownership of musical works created posthumously through the use of deceased artists' voices. Through documentary research, the study examines the adequacy of the current regulatory framework for AI-assisted or AI-generated creations. Initially, it explores the interaction between the physical and digital realms, addressing the transformation of intangible assets and the influence of globalization. It then discusses intellectual production in the digital environment, emphasizing the role of AI in creating new forms of art and the complexity of determining ownership of these works. Finally, the article addresses the crisis in Copyright Law with the advent of digitalization, highlighting the use of deceased artists' voices in new compositions. The current legislation is insufficient to address contemporary technological challenges, pointing to the need for reforms recognizing the complexities of AI-generated creations and ensuring appropriate protection for human creators and deceased artists' heirs.

Keywords

Copyright, Artificial Intelligence, Intellectual Property, Changes in the Private Order

1. Introduction

The use of technology and software in the production of intellectual works has been debated for over 50 years. However, technological advancements occur so

rapidly that legal discussions and copyright protection laws often need help to keep pace.

What was once the subject of science fiction films portraying a dystopian future—such as *A.I. Artificial Intelligence* by Steven Spielberg and *Her* by Spike Jonze—is becoming an ever-more-tangible reality. This highlights the need to address questions about using Artificial Intelligence (AI) in producing digital works, which are becoming increasingly complex and sophisticated.

The rapid evolution of AI and its growing application in artistic and musical creation has sparked debates regarding the authorship and ownership of works produced with advanced technologies. This article explores the legal implications of using AI in creating posthumous musical works, particularly in using deceased artists' voices. The phenomenon challenges traditional authorship and intellectual property concepts, necessitating a reassessment of existing regulatory frameworks.

With globalization and the commodification of information, Copyright Law has transformed into a commodity regulated by the World Trade Organization (WTO), compelling countries to adhere to intellectual property rules to participate in international trade. This shift has moved the focus of copyright protection away from the author and toward the economic interests of entrepreneurs, such as publishers, printing companies, record labels, and production companies, who aim to profit from the monetary value of creations. What was once intended to preserve and promote culture by encouraging creativity has now become a mechanism for corporate protection. Creativity, once central to copyright protection as an expression of the author's individuality, has been replaced by the protection of companies and the market, regardless of the intellectual or cultural significance of the content.

Copyright Law has evolved to protect creativity and innovation, encompassing works created by entities that, in theory, would not be capable of creation. As José de Oliveira Ascensão noted, this evolution indicates a crisis in the essence and identity of Copyright Law, initially focused on protecting the author and promoting cultural creativity.

Artificial intelligence, with its advances, is already capable of creating artistic works and even musical bands (for example, the website “Artlist: Royalty-Free Music Licensing and Sound Effects for Video, Film and YouTube”) with minimal human intervention, raising questions about the ownership of these works. The questioning intensifies when the AI uses the voice of a deceased artist, who is protected by the LDA (Brazil's Copyright Law) without the artist's participation in the creative process. The question of ownership rights to a new musical work produced by artificial intelligence and featuring the voice of a deceased artist who was not directly involved in the creative process during his lifetime is of significant legal and ethical concern.

Through exploratory bibliographic research, this article is structured into four sections. The first discusses how digital technology has transformed the perception and value of goods, including intellectual property, highlighting the transition

from a physical world to a digital environment, where goods are dematerialized, and intangible assets are valued. The second examines the use of AI and other software in the creative process, discussing AI's role as a collaborative tool or independent author. The third section addresses musical works and how original or derivative works are classified, including performers' protection and intellectual property rights. Finally, the fourth section explores how AI, by reproducing and manipulating the voices of deceased artists, challenges established principles of authorship and the ownership of related rights.

2. Symbiosis Between the Physical and the Digital

To begin the discussion on the symbiosis between the physical realm and the digital world, it is essential to provide a brief historical overview of intangible assets before delving into intellectual property in the digital domain and how Copyright Law has been affected by technological advances and digital production methods, mainly through Artificial Intelligence.

The debate over tangible and intangible goods dates to Roman times, and the attempt to define property as a singular concept has persisted for centuries (Beghini & Zambotto, 2023). With the advent of the modern world, assets have become increasingly immaterial, as seen in universality, energy, goodwill, etc. Once described as something tangible and transferable, the property has shifted from the physical realm to the digital, where it becomes intangible, and its transmission becomes merely abstract.

The protection of intellectual production developed during the 18th and 19th centuries to encourage authors to create materials that would strengthen community culture and inspire others to do the same. These materials would remain under the exclusive control of the creator, allowing them to manage reproduction and encourage creativity through rewards, primarily financial. After a period, these works would enter the public domain, ensuring that public interest would prevail over private interest (Cursi, 2004).

The protection of intellectual creations became necessary, implemented through legal doctrines (Fisher, 2001), including the protection of authors under Copyright Law. This protection covers various forms of expression, including computer programs (Brasil, 1998a).

One of the objectives of Copyright Law is to safeguard works of public interest, promoting the cultural enrichment of the community. However, with increasing globalization, the commercialization of these works has grown, making it necessary to protect the companies responsible for disseminating these contents (de Oliveira Ascensão, 2022: p. 177).

Intellectual property, protected by Copyright Law, is divided into two segments: the author's economic rights, which encourage and stimulate creation while preventing economic exploitation without the owner's authorization, and the author's personal or moral rights, linked to personality rights (de Oliveira Ascensão, 2022: p. 135).

With the advancement of digitalization and the dematerialization of works, it becomes necessary to broaden copyright protection, focusing primarily on safeguarding assets that previously lacked significant relevance and commercial value, such as personal data and, in some cases, the voice and image of people who use these elements to build wealth, such as singers and performers. Thus, a trend emerges to recognize these new intellectual assets, which require protection as a form of property (de Oliveira Ascensão, 2022: p. 135).

As observed, one of the justifications for creating Copyright Law, a subset of intellectual property, is the incentive to strengthen community culture and stimulate individual creativity, using produced works as inspiration. However, for this strengthening to be possible, the works cannot remain under the author's exclusive domain. After a certain period, the work must enter the public domain, allowing its objectives to be achieved.

The precedence of public interest over private interest is easily understood when objects belong to the physical domain due to their materiality. The problem arises when considering the assets that emerge with the expansion of the digital domain, where intangible elements become susceptible to economic exploitation. In this context, the question arises: Who benefits from economically exploiting specific highly personal data, and how can this be reconciled with maintaining public interest about private interest?

de Oliveira Ascensão (2022, p. 158) observes that the protection of copyright and intellectual property is influenced by the companies responsible for the dissemination and sharing of these works, transforming Copyright Law into a mere commodity, regulated even by the World Trade Organization (Brasil, 2018a, 2018b).

This process results in a dilution of the true purpose of copyright protection, which is to encourage local culture and creativity through innovations. Instead, industry promotion and its economic interests are prioritized, while concern for public interest diminishes, giving way to the protection of what yields the greatest financial return.

The concern with producing and protecting what generates greater financial returns influences the relationship between Copyright Law and the digital realm. The search for newness and innovation is constant, mainly through artistic productions and works created using computer software and, more recently, Artificial Intelligence (AI).

Copyright Law expands to encompass new intangible content that becomes the object of commercial exploitation. However, as the rapid digital evolution continues, a certain indifference is observed toward the type of content being produced, without concern for whether it will provide cultural benefits to the community. The basis for protection shifts from the public interest to the private interest of those who can exploit the work (de Oliveira Ascensão, 2022: p. 139).

Alongside the dematerialization of the factual support of intellectual works, the objectification of the person—the transformation of their physical and intellectual attributes into products—gains momentum. Human attributes, known for their

nature and inalienability, such as personality rights, can become intangible assets requiring protection. As *Zenati (1999: pp. 79-85)* points out, even a person's voice and image can, under certain circumstances, become valuable enough to be considered assets, over which the owner could theoretically exercise exclusivity and dispose of as they see fit.

3. Ownership of AI-Assisted or AI-Created Works

With technological advancements and shifts in copyright law paradigms, a new debate has emerged regarding intellectual production in the digital realm and using artificial intelligence (AI) to create new art forms.

The understanding of AI began in a later century. The debate started in the 1950s with the Turing Test (*Samuelson, 1984*), which aimed to determine if a computer could think by testing whether a human could distinguish whether the response came from a person or a machine when questioning it.

During the 1960s, particularly in 1965, there was an initial concern about who would own the rights to a work created by a computer. However, this issue was overlooked by the United States Congress, which opted to revise the U.S. Copyright Laws instead (*Samuelson, 1985*).

In 1978, the Commission on New Technological Uses of Copyrighted Works (CONTU) stated that there was no basis to support the concern that a computer could contribute to creating any artistic work (*Samuelson, 1984*). Therefore, a computer could not be considered an author, as it needed more creativity to justify copyright protection and could not demonstrate originality since the work would be derived from the content of a database.

However, it became clear that the universality of copyright expanded with communication media and new technologies, incorporating new categories of intellectual work and technological developments, such as computer programs, to facilitate the production of scholarly works.

This expansion required regulation adjustments to include authors who use computer programs to develop their works. Although there were disagreements over what copyright previously protected, these productions showed potential for such protection (*Samuelson, 1984*).

Does this program have the capacity for creativity and innovation? If so, could these works be protected against plagiarism, considering that the machine supposedly produced them?

Before the emergence of computer programs with creative capacity, identifying the author of an intellectual work was more straightforward because the rights holder had exclusive privileges over the work. This privilege is understood as the ability to reproduce (make copies) or to exclusively use the work, as it is an extension of the author's personality and the result of their mental effort and acquired knowledge (*Fisher, 2001*).

The biggest challenge in identifying the author arises when human and machine contributions blend, making it difficult to discern the essential role each played in

creating the final work. This difficulty in identifying the responsible creator influences the definition of authorship and the protection of these works.

The Question of Intellectual Property Ownership in the Context of a Hybrid Work Remains a Topic of Debate

When analyzing human-machine collaboration, several proposals emerge to answer the question of ownership of these hybrid works—those that contain elements produced both by a physical person and by AI, regardless of each party's contribution to the outcome. Pamela Samuelson discusses whether the user of the generator program should be considered the author of the work produced, whether the programmer should be regarded as the author, whether both the user and the programmer should be considered co-authors, or whether the work should enter the public domain (Samuelson, 1985).

According to Samuelson (1984), the Technical Standards Evaluation Commission (COTAN) simplified the answer: the author of the work, and therefore the holder of the rights to the creation, is the person who uses the software, inputs the commands, and possesses all the knowledge and means to produce that work, with AI merely serving as a tool.

The problem with this view, which is based on the instrumentalization of artificial intelligence, arises when the author's participation is no longer significant, and the AI—meant to be just a production tool—generates products without the user's intellectual effort or even without any extension of the user's personality (Fisher, 2001).

If traditional Copyright Law, from the perspective of the French system (*droit d'auteur*), protects the creativity of the work and the moral rights of the author, and the Anglo-American system (copyright) focuses on the reproduction of works (Paranaguá & Branco, 2009: pp. 20-21), then products created by AI, with or without minimal human interference, would not fully fit into the protection systems granted by Copyright Law.

When analyzing whether the programmer should be recognized as the creator of works generated by AI, Samuelson (1985) argues that assigning the programmer a fundamental role in production would be necessary. However, the author continues, the programmer would receive excessive credit for something whose essential creation they need help understanding, and their work was not directly aimed at the final product. Therefore, according to Samuelson, they cannot be rewarded for something that did not result from their intellectual effort or creativity (Samuelson, 1985).

If exclusive protection cannot be attributed to the user or the programmer, could they be classified as work co-authors? For Samuelson (1985), proving co-authorship would be complex, as it would require demonstrating collaborative intention, i.e., the intention of the parties involved to collaborate and play fundamental roles in developing a specific work. In addition to the complexity, another challenge would be the fragmentation of copyright, affecting the protection of the

produced work.

When analyzing the impossibility of assigning ownership of a work produced by AI to an individual or considering the work as public domain in cases where there is no significant participation by a human author, Samuelson (1985) questions whether, by applying the structure of Copyright Law—which aims to offer intellectual property rewards and incentives to the author—it would be fair to allow the user to own these works, even with minimal involvement. In her view, such ownership would prevent essential innovations for the progress of the arts and local culture from becoming inaccessible to the public.

When examining Brazil's two current laws¹, it is noted that the legislator's concern was to protect computer programs and developed software. Still, there is no reference to works produced by these computer programs.

In line with one of Samuelson's (1985) responses, the legislator only recognizes the protection of the programmer's rights over the software and not the product created by it. According to Law No. 9.609/98 (LDA), the programmer can claim authorship of the computer program and oppose unauthorized alterations.

It is also noted that, according to the LDA, the author is the natural person who creates the literary, artistic, or scientific work. Works created with computer programs or minimal, almost insignificant involvement of a natural person should be mentioned.

With the absence of clear answers regarding the protection of intellectual creations produced through the activity of a natural person and AI support, Copyright Law, as it is known today, enters a state of crisis.

4. Musical Works as a Form of Protected Intellectual Property

In the preceding discussion, the topic of intellectual property rights pertaining to works created by artificial intelligence was explored.

However, most of the discourse pertains to written works or artistic creations. Nevertheless, the advancement of AI is occurring at such a considerable pace that it is already possible to generate musical compositions through the utilization of this technology, as evidenced by the "Artlist" website.

The works created by humans are, in a sense, an expression of their creativity, and music is no exception to this rule. It is consequently essential to undertake a more detailed examination of the implications of copyright in musical works created by artificial intelligence, and to ascertain whether such works can be afforded the same protection as those produced by humans.

Before delving into the ownership of a musical work created by Artificial Intelligence (AI) using the voice of a deceased artist, it is necessary to describe this type of intellectual property and its unique characteristics.

Music has the power to connect individuals and access and express feelings that may be hidden. Consequently, the death of famous singers often causes a public

¹Brasil (1998a, 1998b). *Lei No. 9.610/98 (Copyright Law or LDA)* and *Lei No. 9.609/98* (which protects the intellectual property of computer programs).

outcry, regardless of whether people were listeners of their artistic work, either due to the shock of premature death or the musical influence that a particular artist had on an individual's life, as seen in the case of the singer Marília Mendonça (CNN Brazil, n.d.).

Our daily lives are filled with various musical works, both nationally (Chaves, 1987, p. 436), through audiovisual platforms like SPOTIFY, radio stations, YouTube, and AppleMusic, and internationally, through the importation of foreign artists, international tourism, and the economic impact of music festivals (Ferraz, 2024).

However, not every musical work is protected under copyright law, as it must first meet three elements, according to legal doctrine, to be qualified as a form of intellectual property worthy of protection: melody, harmony, and rhythm (Chaves, 1987: p. 438).

In Copyright Law, it is the melody that guides the legal protection of a musical work, as it is the fundamental creative element, along with the originality of the lyrics, both of which are essential for characterizing an intellectual creation. For this reason, under the current copyright law, the work's authorship can be claimed by the composer who created the music and the composer (or lyricist) responsible for the lyrics, which are intrinsically connected to individual creativity and intelligence (Netto, 2023: pp. 186-188).

Music also evolves with technology, influencing its production. Starting in the 1950s with the use of electronic sound synthesizers, which employed modern techniques for music composition (Chaves, 1987: pp. 446-447), and more recently, with the advent of AI, it has become possible to create musical works that include the fundamental elements of intellectual protection (melody, harmony, and rhythm) without the primary intervention of an artist. It only requires entering the command responsible for creating the work into the program (Pontes, 2024).

Returning to the debate about the ownership of intellectual works, specifically musical works entirely produced by A.I., could such a work be considered a derivative musical work, given that AI systems use pre-existing data to generate new creations? First, a brief comment on original and derivative musical works is needed.

According to Bittar (2022: pp. 49-50), for intellectual works to receive legal protection, they must be externalized either orally, as in the case of lectures, or through sounds, as in the case of melodies or musical works. Within this externalization, works can be considered autonomous, created without any connection to prior works, or derivative, based on a pre-existing work that uses "different processes of intellectual development (transformation, incorporation, complementing, reducing, combining, uniting)" (Bittar, 2022: p. 51).

This also applies to musical works. However, it is understood that derivative works allow greater freedom for the author's creativity, incorporating more musical elements (such as harmony and rhythm) into the pre-existing work, preserving the distinguishing characteristics of the primary works, and adding the most

intimate essence of the author to the derivative musical work (Netto, 2023: pp. 189-190).

Once again, it is evident that creativity and originality, even in derivative works, are necessary for musical productions to be eligible for intellectual property protection under Copyright Law, as previously discussed in this research.

After addressing the debate on original and derivative musical works, it is essential to consider how the protection of performers who lend their voices to musical works with lyrics is applied since, according to the LDA (Brazil's Copyright Law), protection extends to musical compositions, whether they have lyrics or not, as well as to "performing or executing artists," considering the "author of the intellectual work, the performer, the executor, and the record producer" as original right holders (Brasil, 1998a).

According to Article 5, XIV of the LDA, there is a distinction between the categories of performer and executor. Before analyzing performers' intellectual property, it is necessary to briefly clarify this distinction, as defined by legal doctrine, using the example of de Oliveira Ascensão (1997).

A performer is a person who conveys the message that a pre-existing work seeks to communicate, whether visually or audibly. For example, the author who represents and experiences the work and the musician who performs it is separate from the work's creator but from those who bring it to life (de Oliveira Ascensão, 1997: p. 473). On the other hand, an executor performs a specific work through an instrument, and it is possible to classify musicians as executors and performers, by exclusion, as other artists, with the term "performer" being the broader category and "executor" a subset (de Oliveira Ascensão, 1997: p. 474).

In principle, the ownership of the musical work belongs to the composer, who created the written or unwritten musical composition. Regarding the performers and executors, they are entitled to copyright, although in a related manner (Fernandes Júnior, 2019), meaning that by individualizing an existing work, they bring it to life and make musical works accessible. With their contributions, the composer can be understood and disseminated through performances, sound recordings, or live presentations.

This life-giving perspective on musical works aligns with authorship rights to the extent that performers are protected similarly to works created by lyricists (Chaves, 1999: p. 22). Therefore, in analyzing the position of the musical executor concerning Copyright Law, it is understood that "the original ownership related to the interpretation or musical performance should be attributed to the solo singer." (Netto, 2023: p. 281).

This raises the question of who would own a musical work produced and performed by AI using the voice of a deceased singer, mainly if the singer did not perform the production during their lifetime.

It is necessary to examine how legal doctrine addresses cases involving the use of AI to produce music, which was initially considered intellectual production and an extension of human creativity and personality.

5. Ownership of New Musical Works Created by AI Using the Voice of a Deceased Artist

In the previous section, we discussed the recent crisis in Copyright Law. The rise of digital technology, represented by Artificial Intelligence (AI), has caused significant disruption to the essence of Copyright Law, with the dematerialization of copyrighted works and, consequently, the erosion of the author's creativity and moral protection.

There has also been debate over who owns the rights to works created by AI and whether the most appropriate solution would be to place them in the public domain. Much of the debate revolves around artworks that, without digital technology, would be considered physical and tangible objects. However, with technological advances and the ease with which machines can learn to use data available in the "cloud" to direct algorithms and create something "new," other debates can be explored, such as the use of singers' vocal data to create original songs, either while alive or posthumously.

When analyzing Brazilian legislation, the Copyright Law (LDA) emphasizes that a human author must be present, precisely a natural person who will have creative control over the work. This control is necessary for the work to be considered artistic. But does the use of a deceased person's voice to perform a song in which they had no creative participation or did not sing during their lifetime fall under the protection of Copyright Law?

According to Branco (2018), if a specific individual has no creative control, that person cannot be considered the author. Therefore, the work would be considered eligible for the public domain if authorship cannot be identified. However, as noted earlier; while considering such works as part of the public domain may be a plausible and easy solution, it leads to stagnation in creativity and even discourages artistic and cultural productions.

In a world increasingly focused on financial returns, Copyright Law often aligns with the interests of large corporate conglomerates and audiovisual production companies. The use of AI to "recycle" specific products and artists that generated significant profits is becoming more prevalent, especially in the case of musical remixes, which are precursors to this new phase of recycling.

Upon realizing that certain artists continue to generate profits even after their death, companies may use these strategies to create works using AI, as they still hold the copyright (reproduction rights) of that professional and thus release new songs without the deceased artist's creative or actual participation.

In the illustrated case, copyright protection in works predominantly or exclusively produced by AI will focus more on who can economically exploit the product. It is known that economic exploitation is passed on to heirs (Brasil, 1998a); however, can a work resulting from the use of a deceased person's voice, revived by AI through data storage, be subject to economic exploitation and even the protection of heirs (the author's moral right), considering that the voice, as part of one's personality, is inalienable?

These questions still need more definitive answers, but some countries, such as China, are making progress in seeking solutions by supporting the creation of legislation aimed at protecting AI-generated creations. This approach protects the machine itself and focuses more on the originality of the work rather than authorship (Belchior, 2023)².

In addition to this case, in a recent decision at the end of 2023³, China recognized an AI-created work as eligible for copyright protection because the creation contained human preferences and instructions. Although the result was not a product of physical effort, it reflected an intellectual effort by the author who organized, designed, and conceptualized the commands for the hybrid artistic creation (Instituto Dannemann Siemsen, 2024).

The Potential Ownership Structures for AI-Generated Musical Compositions

In the collective work “Copyright of Creations Made by Artificial Intelligence: Different Perceptions of the Same Dilemma” (2022), the authors discuss several possibilities regarding the ownership of AI-created works: the ownership of the AI user, the recognition of economic rights without authorship, the contractor as the owner, the AI creator as the owner, AI as the author, the organizer of the database structure, and the public domain.

When adapting these hypotheses to a new musical work created by AI, using the voice of a deceased artist, the first situation, where the AI user is considered the copyright owner, views AI merely as a tool, lacking creativity or originality. Thus, the moral rights over the deceased artist’s voice are protected, and the heirs can economically benefit from the exploitation of these works, as the creation is attributed to the AI user who produced the work using the machine’s commands (do Espirito Santo et al., 2022).

The second hypothesis considers that the AI user has economic rights over the work but does not hold authorship rights. In this case, AI is recognized as an instrument capable of generating economic value but not as the creator. The heirs of the deceased artist would retain moral rights over the voice, preserving respect for the artist’s personality. Still, they would not have the right to exploit the resulting work economically (do Espirito Santo et al., 2022).

The third perspective places the AI contractor as the rights holder. This view is based on the idea that the contractor assumes ownership of the creation by commissioning a work through AI, recognizing the machine’s creative ability. In this scenario, the heirs of the deceased artist would have moral rights but would be

²Decisão de Tribunal chinês reconhece direitos autorais de trabalho produzido por Inteligência Artificial. (2020, January 27). ClickPB.

<https://www.clickpb.com.br/blogs/click-jus/clickjus-decisao-de-tribunal-chines-reconhece-direitos-autorais-de-trabalho-produzido-por-inteligencia-artificial-276673.html>.

³Pela primeira vez, tribunal chinês decide que imagens geradas por IA podem ser protegidas por direitos autorais-IDS. (2024). Ids.org.br.

<https://ids.org.br/noticia/pela-primeira-vez-tribunal-chines-decide-que-imagens-geradas-por-ia-podem-ser-protetidas-por-direitos-autorais/#:~:text=No%20final%20de%20novembro%20de>.

excluded from the economic benefits derived from the exploitation of the work (do Espirito Santo et al., 2022).

The fourth perspective attributes ownership to the AI creator. Here, the AI developer is seen as the creator of the work since AI results from their work and innovation. Therefore, the AI creator would hold the rights to the creation, while the heirs of the deceased artist would only have moral rights without participation in the economic gains (do Espirito Santo et al., 2022).

In the fifth possibility, AI is considered the work's author, which implies recognizing exploitation rights for the AI creator. This view, however, is controversial, as it raises questions about AI's ability to be recognized as an author. If accepted, this viewpoint would exclude the heirs of the deceased artist from any moral and economic rights (do Espirito Santo et al., 2022).

The sixth hypothesis suggests that AI's organizer of the database structure to create the work could be considered the rights holder. In this case, the AI-generated creation would be protected by sui generis rights, similar to what applies to databases. Here, the heirs of the deceased artist could have moral rights and economically benefit from the work's exploitation (do Espirito Santo et al., 2022).

Finally, the last possibility considers that the work should fall into the public domain if AI is viewed as the author but cannot hold rights. This solution would mean that no one would have exclusive rights to the work, and the heirs of the deceased artist would not have any moral or economic rights over the created material (do Espirito Santo et al., 2022).

However, when discussing AI's use of a deceased artist's voice, it must be understood that AI is fed data using facial and vocal recognition systems. When an artist dies, their data continues to circulate in the "cloud," potentially being used in a way that could harm the family and the deceased's memory.

When contemplating the voice as an integral component of the Right of Personality, it becomes imperative to examine its ramifications, particularly within the context of posthumous succession. The succession of personality rights is linked to the moral right of the author, in which these personal rights would be transmitted to the heirs so that they can defend the name and reputation of the deceased (De Campos, 2016: pp. 483-484).

In the digital context, the voice is utilized as data for the purpose of recognizing personal identity, it can be considered personal data, defined as information that contains individual and identifiable characteristics. Consequently, it must be protected during the owner's lifetime and after their death (Bezerra Sales Sarlet, 2019: pp. 3-5).

If the voice is used by an artist, it is not considered personal data only, but is also a professional tool, therefore requiring even more protection due to the possibility of monetary conversion and exploitation. However, it is evident that the LGPD (Brazil's Data Protection Law) does not explicitly stipulate the procedures to be followed in the event of death, thus creating a legal gap with potential implications for the issues (Bezerra Sales Sarlet, 2019: p. 8).

As previously demonstrated in the preceding analysis, the voice can be understood as an extension of an individual's personality, given its connection to personal development and identification. Thus, a company that holds the copyright to the artist's musical works and the related rights holder's title cannot use the voice without the artist's express consent during their lifetime, as it is a form of personality expression and part of their individuality (Carolina Brochado Teixeira, 2018: pp. 93-94).

The diversity of responses reflects the complexity that arises with the use of AI in artistic creation, especially when it involves the voices of deceased artists. The need for an update to copyright legislation to address these new realities is precise, ensuring fair protection for human creators and new forms of AI-assisted creation.

6. Conclusion

The rapid evolution of digital technology has transformed the perception and value of intellectual property, moving it from the physical to the digital realm, where it becomes intangible and subject to new forms of exploitation. This transition necessitates adapting intellectual property laws to include new realities, such as AI-assisted creation.

The article explores how these changes impact Copyright Law, which was previously focused on protecting the creativity and personality of the author but now faces challenges in an environment where technology can replicate human attributes, such as voice and image, without the need for direct creative participation.

The digitalization and dematerialization of goods have deeply affected Copyright Law. The transformation of tangible goods into intangible ones and the growing value of intangible intellectual assets demand a re-evaluation of legal standards. The protection of intellectual works, originally designed to encourage cultural creativity and guarantee exclusive rights to authors, now faces the task of addressing new forms of creation and commercial exploitation, especially in a context where economic interests often overshadow public interest.

With the rise of AI, complex questions about the ownership of works created with machine assistance have emerged. The definition of authorship becomes unclear, especially when human participation is minimal or non-existent. Current legislation, such as Brazil's Copyright Law, requires the presence of a human author for a work to be protected. However, creating works by AI raises questions about whether these works should be attributed to programmers or users or fall into the public domain. These uncertainties highlight the need for an updated regulatory framework to address these new forms of creation adequately.

The use of AI to recreate or manipulate the voices of deceased artists for new musical compositions raises concerns about the moral and economic rights involved. While, on the one hand, the exploitation of these works may be economically advantageous for the heirs, the deceased artist's lack of active creative participation complicates the copyright assignment.

Some jurisdictions, such as China, have made progress in developing specific legislation for AI-created works, focusing on the originality of the work rather than authorship. However, the debate over the protection of such works remains open, with various possibilities being explored to ensure that technological innovation does not undermine incentives for cultural production.

AI-assisted creation of artistic works should not be seen as a threat but rather as an opportunity to enrich a community's cultural and artistic repertoire, provided it is appropriately regulated to ensure fairness and respect for the rights of all parties involved, including deceased individuals.

The article reinforces the need to update copyright law to address the challenges posed by AI, ensure fair protection for human creators, and adapt to new forms of AI-assisted creation. While the proposed solutions vary, they all agree on the need for ongoing dialogue to harmonize interpretations and protect intellectual creations in the digital age.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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