



## Dilemma of Authorship in Artificial Intelligence – From the Perspective of Music Copyright

Jithin Saji Isaac<sup>†</sup> and Asha Sundaram

Saveetha School of Law, Saveetha Institute of Medical and Technical Sciences (SIMATS), Chennai — 600 077, India

*Received: 23<sup>rd</sup> March 2024; revised: 9<sup>th</sup> December 2024*

The rapid advancement in technology and the advent of artificial intelligence has opened a Pandora box of copyright issues. The primary concern is the authorship of AI generated works. While AI generated work does not have any human contribution, the development of AI technology necessitates some form of protection. The impact of AI technology will be felt more on music, which has its own limitations. The limited sets of notes and chord progressions coupled with the rules of music make it difficult for creativity in music. These limitations when juxtaposed with the peculiarities of artificial intelligence make it difficult to draw line between human intervention and technology. While the article calls for a re-definition of copyright law with reference to AI technology, human creativity should not be compromised for technological advancement. The work emphasizes on a separate sui generis legislation as an ideal solution for the ambiguity and discussions surrounding the newly emerged technology.

**Keywords:** Artificial intelligence, Authorship, Human creativity, Originality, Music

The world is buzzing with the term Artificial Intelligence (AI). In every field of human activity AI is leaving an indelible print. The development in AI has been at a fast pace and is extended to creative process also. AI banks on the machines capacity to act intelligently. The potential of AI is also used in music writing. Music generation is now made possible using AI technology. AI has created a new playground for music generation. The moot question is whether AI technology will replace human creativity or amplify creativity.

Google Deep Mind has developed Lyria, an AI music generation model. The sound track will be created using the AI with the AI generated voice and musical style of artists. According to Google Deep Mind, “Dream Track users can simply enter a topic and choose an artist from the carousel to generate a 30 second soundtrack for their Short. Using our Lyria model, Dream Track simultaneously generates the lyrics, backing track, and AI-generated voice in the style of the participating artist selected.”<sup>1</sup> AI technology has developed to such an extent as to empower creative process. The input needs only to be keywords that specify the nature and mood which the music has to be. The AI tool will generate music that suits the input and gives different output to choose from.<sup>2</sup>

Google’s AI test kitchen has different applications and the latest released is the Music FX. It lets users enter a text prompt to describe the song, and with a prompt you get music. The user has to mention the text, vibe and mood and the AI generates music.<sup>3</sup> AI generated tracks are red flagged by music labels citing violation of intellectual property rights. Artists have filed copyright infringement claims alleging use of their copyrighted material for training AI.<sup>4</sup> Based on the speech pattern of various celebrities, AI video was created which gave short speech or text. Roc Nation LLC, gave a strike down notice to You Tube to remove two deep faked audio of Jay-Z reciting the “To Be or Not To Be” soliloquy from Hamlet and Billy Joel’s “We Didn’t Start the Fire. According to Roc Nation, the AI unlawfully impersonated their client’s voice.<sup>5</sup> Though the video was taken down, later the videos were restored.

With the development of artificial intelligence, music has also started exploring its vast possibility. The question that is posed while considering copyrightability of music created using AI is the extent of creativity involved. Data driven voices and sounds are now created using AI. Beatles used AI by isolating John Lennon’s voice.<sup>6</sup> There has also been use of AI driven virtual instruments. Universal Music has launched Music AI Incubator which focuses on the principle of new age of creative expression.<sup>7</sup>

<sup>†</sup>Corresponding author: Email:jsajiisaac@gmail.com

The advancement in AI technology has also raised many questions surrounding intellectual property rights especially concerns about authorship. The traditional system of protection is not suitable for AI generated works as the copyright law was evolved at a time when technological revolution was in the womb. The rationale and requirements for protection was rolled out so as to be in consonance with the traditional forms of works entitled to protection.

### **Rationale for Copyright Protection**

The traditional form of encouragement for creations is the limited form of monopoly.<sup>8</sup> The balancing act of copyright has been aptly described by Lord Mansfield in *Sayre v Moore* as “We must take care to guard against two extremes equally prejudicial; the one, that men of ability, who have employed their time for the service of the community, may not be deprived of their just merits, and the reward of their ingenuity and labour; the other, that the world may not be deprived of improvements, nor the progress of the arts be retarded.”<sup>9</sup> Copyright grants authors limited term of protection for their works during which period others are prevented from copying the work. The protection can be viewed from the perspective of the rights of the creator of the work and on the reciprocal obligation cast on the society. The author having taken from the common pool of knowledge to build his creation has a reciprocal obligation to the society. The temporary monopoly granted to the author fulfills the obligation of the society and the lapse of the work to the public domain after the period of protection satisfies the public right.

### **Requirement of Originality**

Copyright protection is granted to original works, of which music is a category of work entitled to copyright. Copyright protection is statutory and hence it is necessary to consider the relevant statutory requirements for the standard of originality. The word ‘original’, which is the yardstick for copyright protection is not defined in copyright legislations. The legislations only lay down that a work in order to command copyright protection needs to satisfy the conditions of originality, fixation on tangible medium and copyrightable subject matter.

The United States Copyright Act provides that "copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived,

reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”<sup>10</sup> The Copyright Act of India specifically lays down that copyright subsists only in original literary, dramatic, musical and artistic works.<sup>11</sup>

Originality of a work in copyright terms is assessed with reference to the creativity of the author of the work. A bare perusal of the copyright concepts shows that an author is essential for a copyrightable work and the protection is granted for the creativity of the author. The protection is granted for the time, money and effort expended by the author in the work. The debate surrounds around whether an AI generated music can be considered as original so as to be entitled to copyright protection.

### **Author as the Center in Copyright Historicity**

Tracking the history of copyright law, we find that copyright principles were inextricably linked to a human author. Originality in copyright is assessed with reference to ‘author’s own creativity’. The original author of the work is entitled to the fruits of his labour. It is this justification that links intellectual property rights to the Lockean theory. Though Lockean theory centers around the physical labour of man, the physical part in relation to intellectual property rights relates to the mental work.<sup>12</sup> Everyone has a natural right over his property. Hegelian personality theory<sup>13</sup> clearly links intellectual property to human author. The principle of moral rights stems from the extension of personality theory. The French Act states “The author shall enjoy the right to the respect for his name, his authorship and his work. This right shall be attached to his person. It shall be perpetual, inalienable and imprescriptable.”<sup>14</sup> Personality theory stresses on the author’s reputation rather than on the economic benefits.

The legislations in United States and United Kingdom, earliest of the countries that granted copyright protection emphasize on the author as the center of any creation.

### **United States**

The United States Constitution reserves power in the Congress, “...To promote the Progress of Science and useful Arts, by securing for limited times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”<sup>15</sup> The Federal Court of United States also emphasized the human author requirement when stating “ "author" contributed something more than a "merely trivial"

variation, something recognizably "his own."<sup>16</sup> The author requirement is further emphasized by stating "No matter how poor artistically the "author's" addition, it is enough if it be his own."<sup>17</sup>

The United States Supreme Court in *Feist Publications, Inc v Rural Telephone Service Co*<sup>18</sup> laid down the requirement of 'innovativeness' as opposed to 'mechanical application'. The *Feist Court* was considering the copyrightability of white pages of telephone directory. The *Feist* case<sup>18</sup> was the earliest attempt by United States to lay down a tighter approach to the requirement of contribution of the author. The Court in *Feist* brought in the creativity requirement of the author. The Court held that there can be no copyright in the compilation of an alphabetical telephone directory unless there is some element of creativity in the arrangement and compilation.<sup>18</sup> Facts are in public domain and does not originate from the author. The *Feist* Court held that one who discovers a fact is not the originator. The United States Supreme Court held that a creation representing the independent creation of the author is copyrightable.<sup>19</sup> Copyright protection can extend only to those elements of the work which are original to the author.<sup>18</sup> Though the modicum of creativity requirement is grounded on the natural right theory, the creativity standard ensures that only expression of an idea is entitled to copyright protection and facts are not copyrighted.

The concept of authorship in humans existed from the early Copyright Act. The US Copyright Act, 1909 had specifically conferred authorship only in 'person'.<sup>20</sup> The 1909 Act limited copyright protection to human creators.

Authorship always centers on human beings. The issue in *Urantia Foundation v Kristen Maaherra*,<sup>21</sup> is regarding the ownership of copyright in the *Urantia Book*. It is believed by all that the recitals in the *Book* were authored by celestial beings. The spiritual entities delivered the teachings which were later published by the Foundation as the *Urantia Book*. The defendant Maaherra started distributing the *Book* on compact disc. The threshold issue was whether the *Urantia Book* is entitled to copyright protection as the recitals were from the Divine, celestial beings. Copyright law protects works of original authorship. The Court found that the selection and arrangement of the recitals in the *Book* was done by the Foundation, though there was a divine origin to it. Since there was a human intervention, it was held that copyright

subsisted in the *Book* and vested with the Foundation.

Another interesting case of non human source is *Penguin Books U.S.A., Inc. v New Christian Church of Full Endeavor*.<sup>22</sup> A woman started hearing a voice which gave her courses in miracles and she took notes of it. The woman thought of herself as a scribe taking down the notes dictated by the voice which she considered as Jesus. The notes were later edited and published as a *Book*. The Court found that the human intervention for editing the notes is sufficient for copyright protection. This case also illustrates the need for humanness in the work for copyright protection.

The Copyright Office of the United States issued Copyright Registration Guidance in relation to Works Containing Material Generated by Artificial Intelligence. The Copyright Office denied protection to a visual work that the applicant described as "autonomously created by a computer algorithm running on a machine" as the work was "without any creative contribution from a human actor."<sup>23</sup> The Copyright Office of the United States has in its guidance specifically excluded non humans from the purview of 'author'. If the traditional elements of authorship is produced by the machine, the Office considered the work as lacking human authorship and not entitled to protection.

*Thaler v Perlmutter*<sup>24</sup> is the first case concerning copyright protection for AI generated work. Thaler had developed an artificial intelligence program, Creativity Machine, which developed a visual work of art titled 'A recent entrance to Paradise'. The copyright application filed by Thaler for AI generated artwork was rejected by the US Copyright Office as there was no human involvement. In the letter of rejection, the Copyright Office found that copyright law is limited to 'original intellectual conceptions of the author', against which Thaler approached the District Court. The U.S. District Court for the District of Columbia held that a work generated entirely by an artificial system without human involvement is not eligible for copyright.<sup>24</sup> The ratio of the decision was that human creativity is the sine qua non for copyright protection. Though channeled through new technologies, there should be an underlying human creativity to command copyright protection. The District Court reasoned that copyright protection is intended to incentivize creation and a non human author does not require financial incentives. Taking the reasoning of the judgment in *Burrow-Giles*

*Lithographic Co. V Sarony*,<sup>19</sup> the Court emphasized the requirement of human author as the Burrow Giles Court had found the human behind the photograph as the author of the work and not the camera.

### **United Kingdom**

England is the birth place of copyright and it was in England that copyright for music also evolved. During the sixteenth century, authors obtained protection for their works as a right to print a particular book.<sup>25</sup> The Printing Act conferred rights on the Company of Stationers to print a book. With the lapse of the Printing Act in 1694, the stationers mobilized for legislative protection against unauthorized reproduction and the first copyright law, the Statute of Anne was enacted,<sup>26</sup> which applied to books. It was the literary authors who made best use of the Statute of Anne. There was no protection for creator's rights.

*Donaldson v Beckett*<sup>27</sup> was the first of the cases which granted copyright protection to authors and not to the publisher of the book. Thus the Beckett decision conferred copyright protection on authors and composers of works. It was during the eighteenth century that the composers became aware of their intellectual property rights over their work. George Frederic Handel played a key role in the struggle for composer's copyright.<sup>28</sup> He pursued freelance composition and also took interest in publication. During 1710 to 1770, composer's chose to obtain printing privileges instead of registering the compositions in the Stationer's Hall. At least sixteen privileges were granted during the time.<sup>25</sup> Music publishers were mostly responsible for the denial of copyright for composers. It was the need for economic independence that forced composers to seek a share of revenue from the publishers. The conflict with the music sellers also initiated the struggle of the composers for a copyright. The earliest of the cases which was fought by a music composer was by John Gay who composed a sequel The Beggars Opera titled Polly.<sup>29</sup> Gay self published his music in a book Polly. The book generated revenue, but unauthorized copies soon found its way to the market. Gay filed a law suit and obtained injunction.<sup>30</sup>

The Statute of Anne, which is the earliest legislation granting copyright protection was intended for protecting the authors of works. The Statute for the first time took away monopoly from the Stationer's Company and granted protection to

authors. The Statute of Anne is intended for the encouragement of learned men to compose and write useful books.<sup>31</sup> The earliest of copyright protection for music can be found in Britain in 1777 when sheet music was considered as protectable subject matter.

C.F Abel and J.C Bach, famous composers of the time were the first to establish copyright for music. The composers petitioned House of Commons stating that there is doubt as to the status of protection for music under the Act of Anne.<sup>32</sup> Eventually Lord Justice Mansfield held that there is no colour for saying that music is not within the Act.<sup>33</sup> Thus in United Kingdom, music enjoyed the privileges under the Statute of Anne until 1842 and the Talfourd's Act.<sup>25</sup>

Things started changing rapidly with the advent of copyright protection for music. In his letter to Count Franz Von Oppersdorf, Beethoven wrote, "The aim and endeavor of every true artist must be to acquire a position in which he can occupy himself exclusively with the accomplishment of great works, undisturbed by other avocations or by considerations of economy."<sup>34</sup> The need for copyright protection as an incentive for creativity in music is evident from the letters of Beethoven which illustrates the security of a permanent salary for life. Beethoven was offered a permanent salary of 600 gold ducats for life, and 150 ducats for travelling expenses by the King of Westphalia, in return for which he had to play before His Majesty, and to conduct his chamber concerts.<sup>34</sup> In short, copyright protection is the means for providing financial reward to creators.<sup>25</sup>

It was the decision in *Bach v Longman*<sup>35</sup> that paved way for music to be included within the copyright fold in United Kingdom. During the pendency of the lawsuit, with the judgment in Donaldson, Bach found his common law claims effectively denied. Bach and Abel petitioned along with London Book sellers, seeking clarification that musical compositions were within the ambit of Statute of Anne. In the law suit, Bach claimed under the Statute of Anne and the court found that musical composition is writing within the Statute of Anne.<sup>35</sup> Thus the Bach case became a landmark in the history of copyright for music.

The United Kingdom has in its Copyright Act, recognized works created by computers and defines author in the case of a computer generated work, as the person by whom the arrangements necessary for the creation of the work are undertaken.<sup>36</sup> The Act of United Kingdom is the first of its kind in defining

computer generated work as work *generated by a computer in circumstances that there is no human author of the work*. Though the Act recognizes computer generated works, the authorship is vested in a human author. But copyright does not vest in all cases with the human. In *Nova Productions v Mazooma Games*,<sup>37</sup> the Court of Appeal found that copyright in a game software does not vest in the player as there is no contribution of the player.

The evolution of copyright protection shows that the logic behind requiring for protection is to compensate the human effort and so the Copyright Law is intended to protect original works of human authorship.

### International Scenario

The protection provided under intellectual property laws are national. Though, legal protection is provided as a national law, the ramifications of intellectual property rights will be felt on an international platform. The international dimension of intellectual property rights require a certain minimum level of protection to be guaranteed for contracting states.

### Berne Convention

Human intellectual effort and creativity as a *sine qua non* of originality is projected by the requirement of the Berne Convention. Copyright protection “shall operate for the benefit of the author and his successors in title”.<sup>38</sup> Though, the term author is not defined in the Convention, the *droit d’auteur* principle on which the Convention is based suggests that the authorship should be that of a human author.<sup>39</sup> While the term author is not defined, the Convention states that author could be a natural or legal person, whose name appears on the work.<sup>40</sup> The moral rights provision in the Convention undergirds the principle that ‘author’ as used in the Convention is with regard to human author.<sup>41</sup> Further, the Convention grants protection for the life of the author plus certain years. These requirements of the Berne Convention can apply only to works of human authorship.

With the development of AI generated works, the contribution of humans has become meaningless. In AI generated works, human intervention is minimal to the extent of requesting the AI tool to generate the work.<sup>42</sup>

### TRIPS Agreement

Though the TRIPS Agreement by reference incorporates provisions of the Berne Convention, due

to the exclusion of moral rights provisions in the TRIPS Agreement,<sup>43</sup> there is little guidance to the concept of ‘author’ in the international conventions. The absence of a clear sign post to human authorship in copyright law within the fold of the international conventions has left open the possibility of an algorithmic author, which is left free for nation States.<sup>44</sup>

### EU Law

The preamble to the Council Directive harmonising the term of protection of copyright and certain related rights states: “... in order to achieve a sufficient harmonisation of the term of protection of photographic works, in particular of those which, due to their artistic or professional character, are of importance within the internal market, it is necessary to define the level of originality required in this Directive; ... a photographic work within the meaning of the Berne Convention is to be considered original if it is the author’s own intellectual creation reflecting his personality, no other criteria such as merit or purpose being taken into account; ... the protection of other photographs should be left to national law.”<sup>45</sup>

The human intervention requirement in EU Law developed through case laws. The reflection of author’s personality as illustrated in the various decisions of the Court of Justice of the European Union shows the importance of author.

In *Eva-Maria Painer v Standard Verlags GmbH*<sup>46</sup> Painer in the course of her work as a freelance photographer took photographs of a 10 year old, Natascha and labeled her photographs with her name. Natascha was later abducted and newspaper publishers published her photograph after her escape and before her public appearance. The Court of Justice of the European Union while deciding the case held “an intellectual creation is an author’s own if it reflects the author’s personality. That is the case if the author was able to express his creative abilities in the production of the work by making free and creative choices”.<sup>46</sup>

The use of the words ‘personality’ and ‘free and creative choices’ is a pointer to the requirement of a human intervention for originality in copyright protection.

The requirement of “author’s own intellectual creation” is emphasized by the Court of Justice in *Infopaq International v Danske Dagblades Forening*.<sup>47</sup> The Court of Justice of the European Union used the words “free and creative choices”<sup>48</sup>

and “personal touch”<sup>49</sup>, to delineate the human author requirement for an original work of authorship. Those works which does not involve any human intervention is not protected by the Court of Justice of the European Union. Thus, the key requirement is the human element and not that of a machine. Even a minimal level of human creativity is necessary for copyright protection.

The catena of decisions of the Court of Justice necessitates author’s personal choice for satisfying the originality requirement.

### AI Music and Creative Choice

AI creates a work through many steps, the first of which is the writing of the Code, which is done by programmers. In the next phase the AI is made familiar with hundreds and thousands of data, which is the machine learning process.<sup>50</sup> The human element involved in the AI generated music is only in the selection and training data. There can be no creativity in the selection and training data, as it involves only use of pre-existing genres of music. The learning process is far removed from human intervention. The last phase is the output is generated by the machine and the creativity element is limited to the training data and the selection given as input. The space available for human intervention in a machine operated setting is less.<sup>51</sup> The output generated by the AI will likely fall within the subject matter eligible for copyright protection. But the extent of human contribution in the output is less or to be more precise nil. The AI just executes the code which is written by the programmer.

The difficulty arises in the context of wholly AI generated works in which there is no human intervention. Such works cannot be considered as ‘authored’ for the purpose of copyright law. The creativity requirement for copyright protection will be absent in AI generated work. The shift from the sweat of the brow doctrine to modicum of creativity is a signpost to the principle that creativity is a normative requirement for copyright.

The requirement of authorship of a work raises one’s brow when music is created using AI. The role played by the traditional music composers fades into darkness and the role of the AI technologist comes to the forefront in an AI created music. AI is a great tool in creating music and allows to correct and to mix and match music without the help of a music composer. AI generated music does not normally have a human author and it is technology that creates music. There

are situations when AI assists in filling missing movements. Huawei’s AI tool has filled in the missing movements in Schubert’s Unfinished Symphony No. 8.<sup>52</sup> It was AI mixed with the human expertise of Emmy award winner Lucas Cantor, who arranged the orchestral score that made the work possible. The moot question is, can AI assisted work be considered as original and who owns copyright in the work.

### Indian Scenario

Indian Copyright Act grants protection to original works of authorship.<sup>53</sup> In India, the copyright law as it stands deny authorship to creators of machines. In a first, Raghav Artificial Intelligence Painting App and Ankit Sahni were considered as joint authors while registering the work, Suryast painting. Though Raghav was initially registered as a co-author of the work, later the Indian Copyright Office issued a withdrawal notice<sup>54</sup> asking for further clarifications from the human co-author. Sahni responded stating that the office having registered the work in the name of Raghav and Sahni cannot review its decision. The work still stands registered in the copyright office.<sup>55</sup>

India equates originality to a human author and is akin to the legislation in United States emphasises on human authorship for a work. The sweat of the brow doctrine which was earlier prevalent in India is replaced by the modicum of creativity standard. The shift which draws a thin line between the two standards now necessitates human creativity as a standard for copyright. This requirement will be a hurdle in the way for copyright protection to AI tools. The rights conferred on authors of the work also limit the scope of widening authorship to AI tools.

AI generated music is in the developing stages in India. The legal framework in India is not yet adapted to the newly evolving technology. Intellectual property ownership over the AI generated content and the issues of authorship remain unsettled. Deepfake videos of prominent personalities including Narendra Modi singing songs are now widely available for download.

AI generated works can by a broad interpretation be considered as computer generated work. The Copyright Act of India was amended in 1994 defining author of a computer generated work as the person who cause the work to be created.<sup>56</sup> Copyright Act of India is still within the confines of tradition. The Delhi High Court in *Navigators Logistics Ltd. v Kashif Qureshi*<sup>57</sup> denied copyright protection for a

list compiled by a computer on the ground of lack of human intervention. Extending this logic, AI generated work also will fail the test of human intervention and cannot be granted protection under the Indian system.

Indian Copyright Act defines musical work as “a work consisting of music and includes any graphical notation of such work but does not include any words or any action intended to be sung, spoken or performed with the music.”<sup>58</sup> Composer of a musical work is considered as the author of the musical work.<sup>59</sup> Indian music has its own peculiarities and the iconic aspect of their performance of great instrumentalists is not just the tone that they generate, but it's how they're able to manipulate the spaces between notes. Indian system of music is monophonic unlike the Western, in which four notes make up a chord. The space between two notes is important in Indian system. Human creativity and intervention is thus inseparable in Indian music.

### Conclusion

A run through the international attempts and the national legislations in major jurisdictions show that human authorship as a requirement for copyright protection is not unambiguously laid down. Since there is no definition of author in the copyright laws of any jurisdiction, case laws serve as a guidepost, which interprets author as a human author. Since there is no laid down definition, there is flexibility for defining ‘author’ so as to include algorithmic author. Granting protection for all kinds of AI created music, without any creativity would be granting copyright protection to the machine for executing the Code which is written by a human programmer. The programmer is adequately compensated by copyright protection for the software.

AI generated works takes recourse to the vast training data and creates the output based on the prompt utilizing the training data. There can normally be no creativity in the AI generated work so as to entail copyright protection. The central requirement for copyright protection is originality and creativity which in the period when copyright law was in its infancy and during its development, could be achieved only by a human author. It was in this context that the terms originality and creativity in copyright language were linked to human authors. Copyright laws were enacted when the possibility of generation of music using AI was still emerging. AI generated music raises potential concerns about

ownership and originality. The present copyright law does not address the peculiar issues surrounding AI music. The limitation of music coupled with the peculiar feature of AI necessitates a redefining of copyright laws in the context of AI generated music. When AI assisted work is included within the framework of a musical composition, the outcome of which is a human generated work there can be no issues involved. The work as a whole should be entitled to copyright protection subject to the assessment of work as a whole being original. A sui generis legislation taking into account all the facets of artificial intelligence should set at rest all the ambiguities surrounding the newly emerged technology. The law should also ensure that human effort is not undermined and a balance is achieved so that human creativity is preserved.

### References

- 1 <https://deepmind.google/discover/blog/transforming-the-future-of-music-creation/> (accessed on 15 February 2024).
- 2 <https://blog.google/technology/ai/musiclm-google-ai-test-kitchen/> (accessed on 12 March 2024)
- 3 <https://blog.google/technology/ai/google-labs-imagefx-textfx-generative-ai/> (accessed on 18 March 2024).
- 4 <https://itsartlaw.org/2024/02/26/artificial-intelligence-and-artists-intellectual-property-unpacking-copyright-infringement-allegations-in-andersen-v-stability-ai-ltd/> (accessed on 20 March 2024).
- 5 <https://waxy.org/2020/04/jay-z-orders-deepfake-audio-parodies-off-youtube/> (accessed on 22 March 2024).
- 6 <https://thewire.in/culture/how-the-new-beatles-song-now-and-then-uses-ai> (accessed on 22 March 2024).
- 7 <https://blog.youtube/inside-youtube/partnering-with-the-music-industry-on-ai/> (accessed on 20 March 2024).
- 8 Hurt R M & Schuchman R M, The economic rationale of copyright, *The American Economic Review*, 56 (1/2) (1966) 421.
- 9 Statement of Lord Mansfield in *Sayre v Moore*, quoted in a footnote to *Cary v Longman*, 102 *English Report*, 138, 140.
- 10 17 U.S.C. § 102.
- 11 Indian Copyright Act, Section 13.
- 12 Hughes J, The Philosophy of intellectual property, *Georgetown Law Journal*, 77 (2) (1988) 287.
- 13 Priya K, Intellectual property and Hegelian Justification, *NUJS Law Review*, 1 (2008) 359.
- 14 French Act, 1957, Article 6.
- 15 United States Constitution, Article 1, Section 8.
- 16 *Chamberlin v Uris Sales Corp.*, 150 F.2d 512.
- 17 *Bleistein v Donaldson Lithographing Co.*, 188 U.S. 239, 250
- 18 499 US 340 (1991) 340.
- 19 *Burrow-Giles Lithographic Co. v Sarony*, 111 US 53 (1884).
- 20 Act of Mar. 4, 1909, ch. 320, §§ 9, 10, 35 Stat. 1075, 1077.
- 21 114 F.3d 955 (9th Cir. 1997).
- 22 262 F. Supp. 2d 251 (2003).
- 23 U.S. Copyright Office Review Board, *Decision Affirming Refusal of Registration of a Recent Entrance to Paradise* (accessed on 14 February 2022), <https://www.copyright.gov/>

- rulings-filings/review-board/docs/a-recent-entrance-to-paradise.pdf. (accessed on 22 March 2024).
- 24 *Thaler v Perlmutter*, U.S. District Court for the District of Columbia, No. 1:22-cv-01564.
- 25 Hunter D, Music copyright in Britain to 1800, *Music & Letters*, 67 (3) (1986) 269.
- 26 Statute of Anne was effective on 10 April 1710.
- 27 *Donaldson v Becket (1774) 4 Burr. 2408*.
- 28 Carroll M W, The struggle for music copyright, *Florida Law Review*, 57 (2005) 907.
- 29 *Gay v Read*.
- 30 Sutherland J R, Polly the pirates, *Modern Language Review*, 37 (1942) 291.
- 31 Preamble, Statute of Anne.
- 32 Journal of the House of Commons, xxxiv, 562.
- 33 *Bach v Longman (1777) 2 Cowp. 623*.
- 34 Translated by Lady Wallace, Beethoven's Letters, from the collection of Dr. Ludwig Nohl., 1 of 2 (1790-1826).
- 35 *Bach v Longman, English Report*, 98 1274, 1275 (K.B. 1777).
- 36 Copyright, Designs and Patents Act, 1988, C 48, § 9(3) (UK).
- 37 [2007] EWCACiv 219.
- 38 Berne Convention, Article 2 (6).
- 39 Ricketson S, The Berne Convention for the Protection of Literary and Artistic Works: 1886-1986 (Kluwer 1987) 158.
- 40 Berne Convention, Article 15(1) & (2).
- 41 Berne Convention, Article 6 bis.
- 42 Ginsburg J C, People not machines: Authorship and what it means in the Berne Convention, *International Review of Intellectual Property and Competition Law*, (2018) 49 IIC – 13.
- 43 Article 9.1 TRIPS provides that “Members shall not have rights or obligations under this Agreement in respect of the rights conferred under Article 6bis of the Berne Convention or of the rights derived therefrom”.
- 44 Yang X, Decoding authorship: Is there really no place for an algorithmic author under copyright law? *International Review of Intellectual Property and Competition Law*, 54 (5) (2023) 25.
- 45 Preamble, Council Directive 93/98/EEC, Recital 17, OJ 1993 L 290, 9.
- 46 Case No. C- 145/10, ECLI:EU:C:2011:239.
- 47 Case C-05/08, ECLI:EU:C:2009:465.
- 48 *Football Dataco Ltd and Ors v Yahoo! UK Ltd*, Case C-604/10, ECLI:EU:C:2012:115.
- 49 *Eva-Maria Painerv StandarddVerlagsGmbH*, Case C-145/10, ECLI:EU:C:2011:239.
- 50 Gervais D J, The machine as author, *Iowa Law Review*, 105 (2020) 2053.
- 51 Bulayenko O, Quintais J P, Gervais D & Poort J, AI music outputs: Challenges to the copyright legal framework, Recreating Europe Report (accessed on February 2022).
- 52 <https://www.siliconrepublic.com/machines/unfinished-symphony-no-8-ai-huawei> (accessed on 22 March 2024).
- 53 Indian Copyright Act, Section 11.
- 54 <https://www.managingip.com/article/2a5d0jj2zjo7fajsjwwlc/exclusive-indian-copyright-office-issues-withdrawal-notice-to-ai-co-author> (accessed on 12 December 2024).
- 55 Diary No. 13646/2020-CO/A, Indian Copyright Office.
- 56 Indian Copyright Act, Section 2(d)(v).
- 57 2018 SCCOnLine Del 11321.
- 58 Indian Copyright Act, Section 2(p).
- 59 Indian Copyright Act, Section 2(d)(ii).