

AI work, An IP from IP, Protected.

Abstract

In this response to the public consultation process, I try to answer why and how to protect, the work autonomously generated by AI, referred as AI work in this work. Mainly dealing with the copyright protected work. To be precise, issue 6 of the draft issue paper, dealing with authorship and ownership of AI works.

Introduction

Reading the issue, the heart of the questions is centred around, what is the purpose of the copyright? Is it, to encourage human creativity? Or, to increase the number of original creations irrespective of its origin of creation? If, the answer to the first question is yes, then the autonomously generated AI work will not be protected. If, the answer to the second question is affirmative, then the work by AI will be protected. Once, AI is trained enough, the human input to the system becomes very minimal. The system does not depend on those input to create output, as it learns from the Data by itself. Hence, the output produced by the autonomous system has, lesser to no human creativity in it.

It is interesting to observe that, AI is not the first instance to bring the question of human creativity requirement for copyright, or Intellectual property rights at large. Animals, a non-human entity, has already brought this question to the court. The latest being, popularly known as, the “Monkey selfie” case¹ in USA. The court held that, the monkey cannot be author under copyrights act and dismissed the case, which was affirmed by the higher court. This is mainly due the judicial interpretations of, author in the copyrights act of United States, which is not defined.

The issue of human creativity never became a topic of international discussions with respect to animals. The reason may be because, the notion of authorship was always conceived to referred to a physical person. Animals are considered as property of individual or state. Hence, animals could not be author and copyrights could not be assigned to the work by animals. If, that is the reason, then the work created by AI also will not be protected, as AI is also a property, to be specific intellectual property, programs are copyright protected. Work created by AI differ from animal, in the sense that, animals are physical property of human, which creates intellectual property, whereas, AI is an intellectual property, which produces intellectual work. This difference is important, as it leads as to idea of properties arising from properties of same kind.

Coming back to the issue of AI work, countries like UK, India, New Zealand, South Africa and other places², have already started including work generated by the autonomous AI work as computer-generated-work, by having changes to the definition of author in their statutes.³ This may be because they are more inclined toward increase the work available for public irrespective of its origin. But, why protect them with copyright? If not protected it will be easily available to public, as it will enter the public domain straight and public will get access to it immediately when it is produced and do not have to pay for it. In this article I try to address the question of why AI work should be protected? How it could be protected under copyright regime? And the issue of human creativity and copyright.

¹ *Naruto v. Slater*, 2016 WL 362231.

² Annemarie Bridy, 'The Evolution of Authorship: Work Made by Code' (2016) 39 Colum JL & Arts 395, 400; Robert C Denicola, 'Ex Machina: Copyright Protection for Computer Generated Works' (2016) 69 Rutgers UL Rev 251, 281.

³ *Ibid.*

Human creativity and copyright

For a work to be protected by copyright the work must be original.⁴ The originality requirement is, a very minimal, in most of the countries, which makes it easier for AI work to qualify for protection.

The copyright exists in expression of ideas or thoughts not to thoughts and idea itself,⁵ which is one of the reasons for the requirement to fix the expression in a tangible medium. The issue in both the case of animal and AI is that, Is there a thought or idea behind the expression? The courts, like they do in criminal law to attribute mens rea in a crime, are happy to attribute the thought and idea, from expression, which is evident in the case of copyright. So, in a practical case on court, there would be no trouble in protecting the work generated by the AI as from the expression, we could attribute an idea to it.

The issue is the belief that the copyright exclusive to creativity from human. This goes more towards the justifying theories of copyright, which depending upon the jurisdiction changes. Most of the common law countries started with the Labour theory and civil law countries from personality theory, both depends heavily on humans. But, the innovation in technology has disrupted these justifications constantly.⁶ A change in approach toward the established system of copyright, i.e. justification theory, can also be observed in the shift of originality in many countries, both civil and common law.⁷ This creates the sense that the copyright system has evolved and adapted, throughout the times, based on the need. Hence, it could be argued, that the notion of human creativity in copyright, is an older conceptualization and need to be abandoned as the it is time to evolve. But it is important to say why it is now, the time to adapt?

Time to adapt

There are many papers discussing inclusion of AI work in the existing justification theory like incentive theory⁸ and vehicle theory⁹. I am not going to repeat those reasons as they have been dealt at large by those authors. I am trying to give a necessity argument for protection of AI works i.e. there exists a need to protect the work, with an example scenario.

Imagine, AI work are not protected, giving priority to human creativity, and there exists a software market which sell AI which would generate literary work. Students are already using software, like article rewriter and spinner, to create literary work to avoid plagiarism detection and taking credits for another person's work. Once AI are available in market students will use it for all their academic purpose. If they start using AI then whole value of academic work goes down, as we won't be able to differentiate a work generated by AI and one authored by student. This whole scenario assumes that even without incentive to create AI which generate works, companies has created them in large amount and trying to sell them. Hence, to sell a product whose output will not be use full to the buyer, companies

⁴ William W III Fisher, 'Recalibrating Originality' (2016) 54 Hous L Rev 437, 438.

⁵ Timothy L Butler, 'Can a Computer be an Author - Copyright Aspects of Artificial Intelligence' (1981) 4 Comm/Ent LS 707, 726.

⁶Ibid, 735.

⁷ William W III Fisher, 'Recalibrating Originality' (2016) 54 Hous L Rev 437, 447, 450.

⁸ Robert C Denicola, 'Ex Machina: Copyright Protection for Computer Generated Works' (2016) 69 Rutgers UL Rev 251; Bruce E Boyden, 'Emergent Works' (2016) 39 Colum JL & Arts 377; Shlomit Yanisky-Ravid, 'Generating Rembrandt: Artificial Intelligence, Copyright, and Accountability in the 3A Era: The Human-like Authors Are Already Here: A New Model' (2017) 2017 Mich St L Rev 659; Margot E Kaminski, 'Authorship, Disrupted: AI Authors in Copyright and First Amendment Law' (2017) 51 UCD L Rev 589; Amir H Khoury, 'Intellectual Property Rights for Hubots: On the Legal Implications of Human-like Robots as Innovators and Creators' (2017) 35 Cardozo Arts & Ent LJ 635; Kalin Hristov, 'Artificial Intelligence and the Copyright Dilemma' (2017) 57 IDEA 431; Russ Pearlman, 'Recognizing Artificial Intelligence (AI) as Authors and Investors under U.S. Intellectual Property Law' (2018) 24 Rich JL & Tech I; Nina I Brown, 'Artificial Authors: A Case for Copyright in Computer-Generated Works' (2018) 20 Colum Sci & Tech L Rev 1.

⁹ Takashi Yamamoto, 'AI created work and copyrights' (2018) Patent and Licensing, Vol, 48, No, 1.

must provide some usefulness to the product. It is reasonable to assume that the companies will not provide an easier way to identify AI generated work.

This scenario is paradoxical in a sense that, giving importance to human creativity and not protecting AI work, in practice contradicts the objective it trying to achieve. As, differentiation between human creation and computer creation harder to distinguish. The way to find out the difference is, for every instance, either through court or other dispute resolution methods (internal and external). This scenario is the need or necessity to protect the AI. If the AI works are not protected and the use of them cannot be stopped, then what is considered as the sacrosanct of the copyright, an importance of human creativity, will be disrupted and will only lead to a chaos, which is not useful for any system.

If AI work are protected automatically a market for AI is created, where the output of a product is valuable. This make the AI producers to provide an easier way to identify the work generated by AI, as the companies will not have to create a usefulness to the product, as it exists already. If the issue of AI is not tackled now, in the future where Hubots¹⁰ and AI companions are possible, it would be much harder to deal with the issues at that time, in many broader and different facets of law and legal system. So, the next question is how to protect it.

An IP from an IP

Traditionally, in property law, if, something of value arises from a property, the owner of the property, own it. we can see this position predominantly in land, whatever valuable, even if it is not of his labour, arising from the land, the owner of the land owns it. This position did not change even with respect to animals. But, the interesting thing to note with respect to animals is that, even the offspring of the animals are owned by the owner of the animal, for example, owner of the cow is the owner of the calf. Even the problem, where the bull, which impregnates the cow, is owned another person, it is settled that the person who own the cow, owns the calf under the doctrine, *Partus sequitur ventrem*.¹¹ The doctrine is also used for children born to slaves, who were also considered property.¹² Owner of the female slave who gave birth to a child, owns the child. So, it was not only labour and marketable product from living creature who are considered as property, is owned by the owner, even if their offspring are, as of the very nature that they are also property, not a legal person. The important observation is that, when a property give rise to a property, both of same kind, the owner owns both.

A similar kind of trend is seen in IP also. For example, in the case of derivative works, where a license is required from the original author or owner of copyright, to create a work based on it. This is same as above, the license from the original owner is needed, since he owns it and anything arising from it should be also his. This may be a far connection or theorisation.

Also, based on the contractual relationships, determination of author and owner of the IP, could be changed, to give an example work-for-hire doctrine¹³ in US, which is also worth noting.

In context to the AI, since it is an IP which could create an IP. This s a classic case of property arising from property, to be specific, an IP from an IP.

¹⁰ Amir H Khoury, 'Intellectual Property Rights for Hubots: On the Legal Implications of Human-like Robots as Innovators and Creators' (2017) 35 Cardozo Arts & Ent LJ 635.

¹¹ William McCarty Noall, 'Animal Law in California' (1984) 12 Pepp L Rev 567, 576.

¹² Eric W Springer, 'The Unconquerable Prejudice of Caste - Civil Rights in Early Pennsylvania' (1966) 5 Duq U L Rev 31, 37.

¹³ 17 U.S.C. § 101.

IP-Derived-work

Many have argued different solutions on, how to protect the AI created work. One of which is the argument of Fictional Human author¹⁴, FHA, i.e. to presume a human author behind the AI work, and award copyrights. This concept was a legal fiction, to avoid this, a new solution was advocated in relation to animal-created-work, as doctrine called biological-work-for-hire¹⁵, where the notion of animals, an property, is replaced in place of employee and employer relationship, to protect animal created work¹⁶. To explain it clearly, as in work-for-hire, due to a contractual relationship between the employer and employee, the employer become the author and the owner of the property. In the same way, there being a relationship between the AI and the user (property and owner), based on the licensing agreement, it would be easy to determine who is the owner and author of the AI work from the licensing agreement.

To reiterate, the since a relationship exists between the AI and the User, based on the licensing agreement, the work created by the AI is determined by the agreement. This is like, the traditional way of properties, i.e. calf from cow, or child of the slave, where the existing relationship of, property and owner, determines the ownership of the new creation which is also a property in nature, as already said similar to the work-for-hire in one sense. In other sense like derivative work, where the position is whatever arise out of a property is also owned by the original owner of the property.

Hence, to protect AI work, AI being property, the owner of the AI work should be decided by the licensing agreement. Since it determines the nature of ownership of the AI and work generated by it. The doctrine advised here is called, IP-derived-work, in which the licensing agreement determines the owner of AI work. The name is, chosen such that, it embodies the idea of both the derivative work, i.e. a work derived (as of now based on) from existing work, and the work-for-hire-doctrine, i.e. existing relationship, between the AI and the User, changes the author of the work.

Conclusion

Since in international level, there is a distinction between both the author and owner of the work¹⁷. But when it came to cinematography work, owner of the work was given same rights as the author. That solution could not be used, as AI is a property and could not be named as author. Hence, a special provision for computer generated work should be created, where the owner of the AI could be awarded the ownership, and countries should be free to decide who is the owner. This article argues for use of licensing agreement to determine the ownership of the AI work.

¹⁴ Timothy L Butler, 'Can a Computer be an Author - Copyright Aspects of Artificial Intelligence' (1981) 4 Comm/Ent LS 707, 744; Andrew J Wu, 'From Video Games to Artificial Intelligence: Assigning Copyright Ownership to Works Generated by Increasingly Sophisticated Computer Programs' (1997) 25 AIPLA Q J 131, 159.

¹⁵ Dane E Johnson, 'Statute of Anne-Imals: Should Copyright Protect Sentient Non-Human Creators' (2008) 15 Animal L 15, 43.

¹⁶ *Ibid*, 44.

¹⁷ Elizabeth f. Judge and Daniel Gervais, 'OF SILOS AND CONSTELLATIONS: comparing notions of originality in copyright law, 27 Cardozo Arts & Ent. L.J. 375 (2009-2010); Daniel Gervais, 'FEIST GOES GLOBAL: a comparative analysis of the notion of originality in copyright law' 49 J. Copyright Soc'y U.S.A. 949 (2001-2002)