

Paris Congress
ALAI 2023
Artificial intelligence, copyright and related rights
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Answers to the Questionnaire

The questionnaire is answered by the following members of the Korean national group:

- Q. 1.1.~3.4. Kyungsuk Kim (Professor at Sangmyung University)*
- Q. 3.5.~4.10. Yunsoo Kim (Researcher at Kim & Chang Law Firm)*
- Q. 4.11.~5.11. Il Ho Lee (Research Professor at Yonsei University)*
- Q. 5.12.~7.3. Gibong Kang (Adjunct Professor at Sogang University)*

If you find any unclear answers, please feel free to ask questions.

1. Understanding

1.1 - Has your national or regional law adopted a legal definition of AI?

"The Act on the Promotion of the Artificial Intelligence Industry and the Establishment of a Trustworthy Foundation (commonly referred to as 'The AI Act') "is currently pending in the Korean National Assembly. The purpose of this act is to promote the development of the artificial intelligence industry while establishing ethical principles that humans must adhere to in the development, provision, and use of AI tool.

According to Article 2, Section 1 of the proposed Act, 'Artificial Intelligence' is defined as the implementation of human intellectual abilities, such as learning, inference, perception, judgment, and understanding of natural language, through electronic means.

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1.2 - Can you provide some examples of current uses of AI and its productions in the cultural sector of your country?

In South Korea, AI tools have been increasingly used in the cultural sector, contributing to the development and innovation of various creative and artistic projects. Here are some examples:

- ① **Art creation:** AI tools such as DALL-E2, Midjourney, Amonglive, and Novel Ai have been employed to create "collaborative" art, where the AI and human artists worked together to produce a piece. For example, Pulse9, a South Korean graphic AI company, has produced a collaborative artwork called "**Commune with...**". "Commune with..." is a collaborative piece between the hyperrealist painter "Dumin" and Pulse9's graphic AI technology.
- ② **Literature:** In South Korea, hyperscale Korean-language AI models such as '**HyperCLOVA**' and '**wrtn**' have been developed and made available to users." In 2021, South Korea saw the release of its first AI-written novel titled 'The World from Now On.' Recently, ChatGPT has gained significant popularity in South Korea, leading to the production of numerous novels using this AI tool.
- ③ **Music:** South Korean musicians have employed AI tools to compose new music in various genres, including K-pop. In 2022, an AI music startup named 'CreativeMind' developed an AI Music tool called 'Musia(<https://musia.ai/ko/>).' With Musia, users can create the backbone of a song, including melodies and accompaniments, based on user inputs or AI-recommended codes. Afterward, users can easily add their preferred instrument and sound touches to the generated melody and accompaniment, allowing anyone without musical knowledge to produce a complete song in just about 5 minutes. The singer Soul utilized this tool to create and release a song titled 'Stranger.'

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④ **Films:** AI Deepfake technology has already been used to digitally de-age currently living actors or to bring dead ones back to life on the screen in Korea film industry.
 In the drama "Casino," 61-year-old actor Choi Min-sik's appearance and voice were de-aged using AI technology, enabling him to portray a character in his 30s. Similarly, 75-year-old Yoon Yeo-jung was able to appear in an advertisement as her 20-year-old self, thanks to deepfake technology.
 In January 2023, Korean broadcaster tvN drew significant attention by airing a show titled 'Chairman's People', which featured scenes of a deceased actor being brought back to life and conversing with their fellow actors from their time on television.

1.3 - (Optional) What are the issues that have been exposed in your country on this subject: stakes, difficulties, orientations, proposals...?

1.4 - Are there any initiatives in your country or region aimed at regulating the use of AI in the cultural sectors?

In South Korea, various unprecedented issues are arising within the traditional copyright law framework, such as the legitimacy of using human works without the copyright holder's permission for AI training, whether AI-generated content like text, images, and music should be protected as human-created works, and if AI-generated content is protected, to whom the rights should be granted.

The Ministry of Culture, Sports, and Tourism has established an "AI-Copyright Law System Improvement Working Group" (hereinafter referred to as the Working Group) to find new copyright solutions in response to the development of artificial intelligence (AI) technology. This Working Group plans to discuss various issues, such as facilitating the use of copyrighted materials for AI training data, the legal status of AI-generated content and whether it should be recognized under copyright law, and addressing liability regulations for copyright infringements that occur during the application of AI technology. They intend to develop a "Guide on the Utilization of AI-generated Content from a Copyright Perspective (draft)."

2. Understanding the upstream

2.1 - Are the AI system or its components likely to be protected by intellectual property rights (copyright and/or industrial property – patents, trade secrets . . .) ?

Yes. On June 17, 2020, the Korea Intellectual Property Committee launched the 'Special Expert Committee on Artificial Intelligence (AI) Intellectual Property' to establish a comprehensive government AI intellectual property policy in response to the AI era. This committee is discussing various issues, such as whether to recognize AI as an inventor or author, whether to protect AI-generated inventions and works at the same level as humans, and who owns the inventions and works created by AI. Based on these discussions, they are currently working on establishing fundamental principles for AI-related issues and drafting the 'Special AI Intellectual Property Law'.

2.2 - Can rights under copyright be enforced against the use of protected contents by AI training?

Does the insertion of a pre-existing work into the computer system implicate rights under copyright?

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Under the current Korean copyright law, inserting a pre-existing work into a computer system implicates the reproduction rights, the public transmission rights, and the rights to create derivative works

If so, in order to avoid a finding of infringement, are the copying or storage covered by an exception?

Currently, there are no specific exemptions in South Korea's copyright law solely for TDM (Text and Data Mining). The most likely applicable provision under the existing Korean copyright law is the 'fair use' clause. However, in South Korea, the source must be attributed for fair use to apply. Since rights management information may be lost during the TDM process, it is questionable whether the fair use clause can be applied in such cases.

2.3 - In your country, are there any proposals to change the law and in which direction?

For example, by deeming that the incorporation of preexisting works into AI systems does not create an actionable "reproduction" of the works? Or by creating a new exception? Or by implementing a compulsory licensing system? Other solutions?

An amendment bill to the Copyright Act for a copyright exception on TDM is currently pending in the Korean National Assembly. The amendment bill addresses limitations on TDM in its Article 43.

Article 43 (Reproduction and Transmission for Analysis of Information)

(1) Reproduction or transmission of works is allowed to the necessary extent for the creation of additional information or additional value (extraction of information such as rules, structure, tendency, and correlation, etc.) from a large volume of information including a number of works by applying automated analysis technology of computers if such creation is possible without enjoying ideas or feelings expressed in such works. Provided, that this shall only be allowed if lawful access to the works is available.

(2) Reproductions made in accordance with Paragraph (1) may be kept to the necessary extent required for analysis of information.

According to the amendment bill, data mining is permitted if the work is not used for enjoyment and only to the necessary extent when lawful access is available. Thus, the requirements for using works for TDM are 'no enjoyment', 'the necessary extent', and 'lawful access'.

2.4 - Do the "terms of service" of the platforms available in your country authorize the copying and storage for the purpose of constituting "training data" and the creation of "AI outputs" of the works posted by the users of the platform? If so, give examples of the relevant Terms of Service.

A Korean-language AI model 'wrtn' has the following "terms of service" regarding copyright:

1. Copyright and usage rights belong to the user, allowing for both personal and commercial applications. Users are also responsible for any issues that may arise from the use of the generated content.

2. 'wrtn' generates new sentences based on the user's input each time. It is unlikely to produce the exact same content as its training data or yield identical results to those found in search engines.

3. 'wrtn' consistently generates new sentences based on the user's input. It is unlikely to reproduce the learned data verbatim or produce text that matches search engine results.

2.5 - Are you aware of the conclusion of individual or collective licenses on this point? If yes, in which fields of creation? Under what conditions? If so, give examples.

The Korean Publishers Association, recognizing the high risk of authors' and publishers' rights being disregarded through data mining and unauthorized use of published content in the AI industry, has been working diligently to manage publications. As a result, in February 2023, the Association received a mandate from publishers to prevent the indiscriminate use of publication data, enabling them to swiftly respond to copyright infringement caused by AI tools.

3. Using AI as a tool for rights management and administration

3.1 - To what extent is AI used to locate or identify protected content, to moderate it, or even to fight against infringement?

Currently, automated copyright infringement responses require pre-existing information (e.g., lists of contracted companies, metadata of copyrighted works, image/video recognition data, etc.), and based on this information, the crawler operates. There may be difficulties in using AI due to challenges in determining the ownership rights of certain content, but webtoon(web comics) service providers such as **Naver Webtoon** and **Lezhin Comics** are applying AI technology to combat illegal copying and distribution.

A prime example of this is Naver Webtoon's '**Toon Radar**' embeds a code in webtoons that allows for the identification of those who captured the content, enabling the tracking of individuals involved in illegal reproduction and distribution. When webtoons are posted on over 100 unauthorized websites, the technology can identify the source of the leak and block further access within an average of 20 minutes.

3.2 - If computer tools are used for this identification, are there rules to allow the evaluation of the tools used in order to verify the relevance of the results produced by the AI system? (For example, in the framework of the European Digital Services Act, platforms have an obligation of transparency, notably on the tools used and the results they produce - art. 15).

None.

3.3 - To what extent is AI used as a tool to recommend protected content? For example, the proposal of "playlists" by Pandora or any other online communication service making recommendations of works.

AI algorithms are widely used in the fields of content recommendation. Content recommendation covers platforms like YouTube, Netflix, Watcha, webtoons, news articles, music, dramas, and movies. When searching for news articles, tailored news optimized for an

individual's preferences is suggested, and when purchasing products, items that the user is likely to enjoy are recommended.

For instance, if a user searches for "romantic restaurants for a date," the AI algorithm recommends suitable restaurants based on the user's age, preferences, and budget. Similarly, when searching for "music to listen to in spring," the AI recommends genres like pop, classical, or jazz according to the user's taste. The primary goal of using such recommendation algorithms is to maximize customer engagement and increase revenue by boosting the activation of content services and sales businesses.

From a business perspective, offering content tailored to users' preferences and interests greatly contributes to the activation of their operations. Users also benefit from the convenience of discovering desired information or finding appealing content they might not have considered otherwise. As a result, these recommendation algorithms provide significant advantages to both companies and users alike.

3.4 - Should we fear, through this recommendation, a risk of dilution of contents and revenues due to a possible opacity of the system?

The dilemma of AI recommendation algorithms: Companies tend to focus on promoting content and products with high preference among the majority in order to maximize their content services or product sales. This bias can result in a phenomenon where many users become trapped in a cycle of consuming content that aligns with their existing interests or preferences, as well as what they are familiar with or is popular. Recommendation algorithms use user experience data and user evaluation information; however, the value of the recommendation system decreases for new products or content due to the lack of accumulated user experience data.

This approach encourages users' behavior towards content preferred by the majority rather than embracing diversity, further widening the gap between highly preferred and less preferred items. Although people's preferences and interests vary, recommendation algorithms tend to steer users' tastes towards what the majority prefers, rather than respecting individual preferences. As a result, undervalued content, such as new content or content favored by a minority, may not get the attention it deserves, and opportunities for a wider audience to enjoy such content become limited.

3.5 - Does your national or regional law contain transparency obligations on the use of an AI system for rights management in your national or regional law (e.g. the European Digital Services Act)? What are they?

There aren't similar obligations or management of rights in Korean legislation yet. However, The Ministry of Culture, Sports and Tourism of Korea has organized an AI-Copyright Law System Improvement Working Group (hereinafter, Working Group) on Feb 24, 2023. The Working Group will discuss the developed issues from the agenda of the previous council run by the Ministry since July 2021. The Working group will discuss the following issues; of harmonizing the using copyrighted works for AI data learning, legal Issues of AI outputs including the copyright law, and copyright infringement of using AI technology and its responsibilities, etc.

3.6 - In general, do these tools have to comply with rules in terms of product safety or conformity?
Are there procedures for certification of these tools by an authority or by professional associations?
Are suppliers subject to specific due diligence obligations?

It is hard to find such provisions in Korean legislation or official unified guidelines published by the governmental branches. If these tools evolve into matters of product safety, they might fall into the violation of Product Liability Act in Korea. Or if the tools cause copyright infringement on the internet, the online service provider(OSP) offering the tools to the users could take responsibility as an OSP regulated in the Copyright Act, from Art.102 to Art.104.

Artificial intelligence and literary and artistic property

The contours of protection

The status of AI Outputs

1. Access to protection

- Characterization of the AI output as a "Work" of authorship

Note: If an AI output has all the external aspects of a work of authorship, is it possible to consider it as a work of authorship protected by copyright?

4.1 - Does a "Work" always imply the presence of a physical person?

Yes, the Copyright Act of Korea clearly states that "The term "work" means a creative production that expresses human thoughts and emotions" in Article 2. 1. And Article. 2. 2. defines that "The term "author" means a person who creates a work".

4.2 - From what threshold is it possible to consider that there is a human intervention giving rise to an original work in the realization of an AI output? What types of intervention would allow to know if this threshold has been crossed?

If the author generated an AI production as a mere draft or reference sample for one's work and put one's creativity by substantially modifying the draft or by getting the idea from the reference, such work could be copyrightable.

4.3 - How can we distinguish between AI-assisted outputs and outputs generated by an AI?

It is hard to for common users to distinguish between AI-assisted outputs and outputs generated by an AI just by comparing the outputs. However, checking the common errors or mistakes of inconsistency could be some help to distinguish the AI generated outputs. Inspecting the details of the images/videos and checking the consistency of the content or style of the writing works/lengthy works could be the hypothetical examples.

4.4 - In some countries, it is asserted that there can only be a work of authorship if the form obtained is the result of creative work by the author in the sense that the latter is aware of the result (work) he wants to achieve even if this result is a little different from his hope/expectations. This requirement, for example, would exclude the quality of author of a person deprived of discernment (for example, an insane person, a very young child, a somnambulist...) or would entail the refusal of protection of a production which would be only the fruit of random forces.

Does this condition exist in your country?

If so, is it a statutory or administrative requirement? Does it derive from caselaw? From secondary authorities (e.g. academic writings)?

The Copyright Act of Korea doesn't provide such condition above. The definition of "The term "work" means a creative production that expresses human thoughts and emotions(Art. 2. 1.)" and "The term "author" means a person who creates a work(Art. 2. 1)" is all statement that Copyright Act provides.

One of the common examples cited in many books explaining Korean Copyright law and cases is that a picture drawn by a young child can also be a copyrighted work. And it is hard to find a Korean Court case that denied the copyrightability of the work due to the mental illness of the author or inspecting the severity of the mental disorder of the author when the work was made.

4.5 - Are the criteria traditionally considered to be irrelevant (such as merit, or purpose) taken into account in the framework of protecting an AI output?

Some discussions or policy suggestions to claim the protection of AI outputs might consider the inferred criteria above. However, since such incidents or in-depth research are difficult to find and not ripe enough to be covered now.

- Characterization of a performer's performance

4.6 - In order to be vested with a neighboring right, does the performer necessarily have to be a natural person?

In other words, is an "interpretation" from an artificial intelligence protectable under neighbouring rights?

Article 2. 4. of the Copyright Act in Korea states that "The term "performer" means a person who gives a stage performance by expressing works through acting, dancing, musical playing, singing, narrating, reciting or other artistic means or by expressing things other than works in a similar way, including a person who conducts, directs or supervises a stage performance".

Compared to other neighbouring right owners (i.e. phonogram producer, broadcasting organization), the performer has inalienable moral rights, that are, the right of paternity and right of integrity along with the performer's economic rights. Phonogram producers and broadcasting organizations only have economic rights.

Same as the author, it is clear that only a natural person could be a performer and thus, the AI's interpretation couldn't be protected by neighboring rights in Korea.

4.7 - In order to be vested with a neighbouring right, must the performer necessarily interpret a work created by a natural person?

In other words, is the interpretation, by a human being, of a production of artificial intelligence protectable under neighboring rights? (Suppose an AI-generated musical composition: if performed by a human being, would the performance be protectable?)

Article 2.4. of the Copyright Act states that the performer expresses “works” through various artistic means. And the work is defined as a creative production of human thoughts and expressions in Art. 2. 2. Thus, if the performer just samely express and delivers the AI-generated work to the public, the performance would just be the reproduction of the uncopyrightable AI-generated work.

On the other hand, if the performer significantly transforms the AI-generated work, adds creativity to the work, and as a result, the performed output could be determined as a new creative work, the performer could be the copyright owner of the new creative work.

- If the AI output does not qualify for copyright protection

4.8 - Are the productions generated by AI, that are not covered by copyright, in the public domain?

Though the AI-generated productions might not be covered by copyright, such productions still could be the commercial product or at least, the outcome of using another’s work or database. Thus, the other IP laws might still protect them. If such work contains the trademark or refers to the trademark’s name, it might infringe the trademark owner’s right. For example, some short form UCC creators generated videos that continuously repeats the lines saying the luxury fashion brand’s name(e.g. Balenciaga) and shows the celebrities wearing the fashion items of the brand by using the AI generator and video editing program. If these kinds of videos or images could cause confusion among the consumer and fall to other elements of trademark infringement, it might establish the trademark infringement or could be a violation of the Unfair Competition Prevention and Trade Secret Protection Act(hereinafter, the Unfair Competition Prevention Law).

In addition, the issue of publicity rights infringement might also be raised. Article 2.1. (l) of the Unfair Competition Prevention And Trade Secret Protection Act(hereinafter, the Unfair Competition Prevention Law) defines that “an act of infringing on another person's economic interests by using a mark that can distinguish the individual's identity, such as name, portrait, voice, or signature, which is widely recognized in the Republic of Korea and has economic value, for one's own business without permission, in a manner contrary to fair commercial practices or competition order” is one of the unfair competition activities. There was also a recent proposal to amend the Civil Code. On December 26, 2022, the Ministry of Justice announced a proposal that codifies ‘the right of publicity’ covering the rights to commercially exploit another’s name, portrait, voice, and other identities of the individual in the Civil Code Article 3-3.

The violation of Article.2.1.(m) of the Unfair Competition Prevention Act could also be claimed. Article.2.1.(m) defines that “any other acts of infringing on other persons’ economic interests by using the outcomes, etc. achieved by them through substantial investment or efforts, for one’s own business without permission, in a manner contrary to fair commercial practices or competition order” as an unfair competition. On Aug 25, 2022, the Seoul High Court (Seoul High Court case 2021Na2034740) ruled that the crawling of the commonly known or opened

information data of the travel accommodations' reservation sales does not infringe copyright but an unauthorized collection of the data from the competitor's database and using it to earn one's economic right is a violation of the Article.2.1.(m).

If the information or the content revealing the ongoing projects of the company were input to the AI generator and the AI collected the above inputs as its deep learning data, this could establish a trade secret infringement. Recently, some employees of a big tech company in Korea input some of their testing program's source codes while using the Chat GPT to catch the errors in the coding, and they were disciplined by the company by leaking the trade secret of the company.

Application of terms of use of the AI generator program could also be counted in. AI generator service providers post terms of use whether the service provider or the customer has the right to the AI-generated work and what types of right or free use could be allowed to the parties. Interpretation and application of the terms above, regarding the contract law and equity of the parties, still be the hurdle before yielding the AI-generated work to the public domain.

4.9 - In your country, could the productions generated by AI be qualified as "commons" (it being understood that, in some countries, the notion of "commons" has a different meaning than "public domain")? Under what conditions or according to what criteria?

Thinking of some hypothetical cases, if the AI-generated production is hard to be separated from the whole work or hard to independently CCL noted from the other part of the works, it might be qualified as commons. The copyright law determines the creativity of the work regarding the whole character of the work. One example could be the explanatory image generated by AI in the CCL noted news article is substantial to deliver the content of the news.

For the government or the public agency-created work, the 'Korea Open Government License' allows the users to freely use the works following the combination of the 3 conditions (Attribution, Noncommercial, No Derivative Works) of the government or agency noted. The base of the license above is established in Art. 24-2 (Free Use of Public Works) of the Copyright Act.

4.10 - How can we be sure that the creation presented as realized by an author is not an artificial production?

It would be hard to distinguish human creation from the artificial production by merely comparing the outputs. So instead of comparing and inspecting the results only, checking the process of the creation would be more important to authenticate the creation of the human work.

AI just follows the incident request that is ordered to the AI. So it doesn't check the consistency of the whole process or harmonization of the other parts that are not given at once to the AI. If the creation is commissioned by the commissioner/employer and the author/employee is making the work for them, the close communication and feedback response would be the criteria to determine the consistency and integrity suggested above. And between the consumer and the author/seller/publisher, the seller/publisher could post a certifying note that the author's creative process was fully checked by the seller/publisher and thus the seller/publisher guarantees the essential works and creative core inspiration are all delivered by the author.

Explaining some incidents or criteria of the checking process to the consumers would also be more reliable notice.

4.11 - Usually, a collective management organization (CMO) manages a catalog attached to an author without making distinctions between "works" / "productions". How to manage the case of an author whose usual works belong to his repertoire but who would also use an AI system to generate other "productions"?

In Korea, CMOs operate only when the government permits them (Art. 105(1)). Although two CMOs are active in the field of musical works, only one CMO has been permitted to work in other fields.

In principle, CMOs are not permitted to collectively manage subject matters other than works or subject matters of neighboring rights; Art. 105(2) No. 2 of the Copyright Act provides that a CMO shall consist of authors or other rightsholders of a category for which each CMO is responsible. The CMOs shall refuse the request to manage subject matters other than the works and subject matters of neighboring rights. Therefore, they may not manage AI-generated productions, and the Korean government assumes that they are not entitled to or obliged to collect and distribute royalties from using such productions.

CMOs can manage AI-assisted works by assimilating these with derivative works that are created based on a pre-existing work that has fallen into the public domain. If an AI-generated production is modified by a human author and demonstrates sufficient originality, CMOs shall manage such a work according to their prescribed standards.

This conventional approach can be modified in the future. As AI technologies advance, people will become increasingly dependent on them. Maybe this will be similar to creating original works. It will be difficult to distinguish whether a creation in question is human- or machine-made. If someone deceives a machine creation as her or his own, it will be difficult to find the truth. In an actual case in Korea, some employees of an AI development company tried to join the Korea Music Copyright Association (KOMCA), a Korean CMO for musical works, and asked it to manage AI-generated productions that they had not authored. The organization stopped paying royalties after news reports revealed that they were not the authors of those productions. However, whether similar cases can be prevented if a user falsely claims authorship is questionable.

2. The rights regime

- The choice of the right (nature, ownership, regime, limitations)

** As your legislation currently stands:*

5.1 - Is the output generated by an artificial intelligence system likely to be protected by copyright in your country?

According to Art. 2 No. 1 of the Copyright Act, a work shall be an expression of "human thoughts or emotions." Korean copyright lawyers have interpreted this in the direction that a work is created by a human, namely a natural person. Consequently, production made by a machine may not qualify as copyrightable work as a matter of principle. While there is no case law regarding the existence of non-human work, almost all lawyers in our jurisdiction seem to agree

with this position. However, a relatively new (alternative) view has been gradually gaining attention, according to which the expression of “human thoughts or emotions” can be interpreted as the expression that contains or conveys “human thoughts or emotions.” However, this remains a minority opinion in the literature.

It is unlikely to recognize a creation produced completely by AI as a copyrightable work. However, it is expectable that a machine-generated production can be altered and arranged by an author. Alternatively, a user can let an AI system generate a series of productions by entering diverse words/images and combining them; the outcome, including such human elements, may be regarded as copyrightable work depending on its degree of originality.

5.2 - If applicable, does the production generated by an artificial intelligence system benefit from a full copyright, in particular as regards the duration and scope of the rights, or from a modified or special right?

Korea has no specialized regime for the protection of AI-generated production in copyright law or other areas of law. In addition, the Korean government does not seem to have prepared a policy for the protection of such subject matter. However, as mentioned above, subject matter generated by AI but altered under human influence may be protected like usual copyrighted works, and the principles for copyright protection apply equally to those works.

It is worth noting that copyright protection involves individual parts added by a natural person but not machine-made parts. Therefore, copyright infringement does not occur when the latter parts are used without using the former.

5.3 - If there is a protection by an adapted or special copyright (as it exists sometimes for certain works, as for example, in Europe, concerning computer programs), what are the modifications or adaptations?

In principle, originality is equally required in all work categories. Computer programs have some special provisions; for example, reverse engineering is permissible for receiving information necessary to maintain its interoperability (Art. 101-4(1)). However, the core content of protection is almost the same as other types of works: the same rights are conferred on the rightsholder, and the term of protection expires equally at 70 years *p.m.a* (Art. 39). It seems unnecessary to discuss neighboring rights that only protect performances, phonograms, and broadcasts (Art. 64(1) Nos. 1-3).

The Supreme Court of Korea maintains that typography itself may not qualify as copyrightable work (see decisions of the Supreme Court, rendered on August 23, 1996, case No. 94Nu5632; rendered on February 23, case No. 94Do3266). Nevertheless, it assumes that a font file that makes a specific typography run on a computer system may be dealt with as a computer program, namely, a subject matter of copyright (see decision of the Supreme Court, rendered on February 11, 2017, case No. 96Do1935). The same logic can be applied to some types of AI-generated productions whose outcomes can be characterized as computer programs. However, the requirement that a work shall be authored by a human does not change; thus, to be protected by copyright law, such a computer program should be partly influenced by a human and be original.

Under Korean copyright law, databases that do not satisfy the originality requirement are also

subject matter that enjoy protection *sui generis*. However, this right may not extend to the protection of AI-generated content, which cannot be seen as structured data that have been collected and are available based on the investment of its provider (Art. 2 No. 19).

5.4 - Who is the author? Who would be the owner of the rights? Could the output be considered a joint work? If so, between whom and in what cases?

In principle, an author is someone who creates a work as defined in Art. 2, No. 1 of the Copyright Act. As a work originates from human thoughts or emotions, the author must also express her or his thoughts or emotions.

However, under Korean copyright law, there is a special rule on works made for hire, according to which an employer or legal person (e.g., a corporation) may be the initial owner of economic and moral rights under certain requirements (Art. 9). Nevertheless, it constitutes a severe exception to the fundamental principle of copyright law in that only an author owns the copyright, especially moral rights. Accordingly, this rule has been interpreted and applied strictly. Thus, such an exception is not expected to expand to the relationship between AI-generated productions and their developers.

5.5 - Is there a special ownership rule (presumption, or even fiction, as it exists in some countries for computer-generated creations; see for example, art. 9 (3) Copyright, Designs and Patents Act (CDPA) in England)?

The Copyright Act of Korea does not specifically mention “computer-generated” productions/works. While there can be controversies about what the expression “computer-generated” means, layouts or user interfaces which appear as a result of operating a certain computer program can be dealt with as integral parts of that program; thus, its author is entitled to exploit the “computer-generated” materials exclusively. If a production is made either independently or almost entirely by a machine (e.g., after receiving a few keywords), it is not a subject matter of the copyright law of the current state.

Other than the legal fiction for works made for hire, there are some presumptions for situations in which the rightsholders of the work in question cannot be identified. According to Art. 8 of the Copyright Act, the following persons are presumed to be authors:

- Someone whose real name or well-known pseudonym is mentioned in a usual manner on the original or copies of a work in question (Art. 8(1) No. 1); or
- Someone whose real name or well-known pseudonym is indicated in a public performance or other kinds of transmission in question (Art. 8(1) No. 2).

If, despite the presumptions mentioned above, the authors cannot be identified, the person (including the legal person) who is indicated as a publisher, public performer, or person making the work available to the public is presumed to have copyright (Art. 8(2)).

Accordingly, if AI-assisted work is made available to the public under the name of a corporation without mentioning the authors’ names, it is presumed that the corporation is the holder of the economic rights. However, it does not mean that it may be presumed as an author of that work who enjoys copyright in entirety.

5.6 - What would be the criteria to be retained to allow access to copyright protection for AI outputs?

AI has become the main theme in every sector of society, and copyright lawyers are interested in questions arising from the relationship between AI and copyrights. In addition, there is a call for protective mechanisms for AI-generated productions to promote AI-related industries and to prevent free-riders from using large-scale AI-generated outcomes for commercial purposes (e.g., for the development of their own AI systems).

However, the Korean IP lawyer community appears to be cautious; there are no sufficiently detailed proposals to create a new regime for the protection of AI-generated productions. Rather, the focus is on promoting the production of resources to be used for machine learning. One measure to realize this goal is the introduction of Text and Data Mining (TDM) exceptions in the Copyright Act; the bill for this is pending in the Korean National Assembly, the Korean central legislature (see 2.3 above). Approaches from other directions have yet to be initiated in Korea. See, however, 5.12 below for an overview of the bill to amend the current Copyright Act whose passage is being questioned due to its ambiguity.

Considering the *status quo*, it is difficult to say that AI-generated productions may be protected if it fulfills some of the criteria required for the protection of copyrighted works. However, if the creation of a work is assisted by an AI system but represents originality under human influence, it may be protected as a 'normal' copyrighted work; when determining originality, it should consider parts influenced by a human author, not parts generated by a machine.

It is also worth noting that AI-generated productions will be protected outside of copyright law in the future. Recently, the Korean Unfair Competition Prevention and Trade Secret Protection Act was amended and now sees any act of unfair use of technical or business information/data as an act of unfair competition (Art. 2 No. 1 (k) of the Act). Although it is unclear how this provision should be interpreted, this amendment can be applied to protect AI-generated creations, and new legislations may emerge in relation to it.

5.7 - Should a specific copyright be created for these productions?

Except for the above-mentioned bill, there are no bills pending in the National Assembly that grant specialized protection to AI-generated productions. The Ministry of Culture, Sports, and Tourism has considerable interest in the relationship between AI and copyright (see 1.4 and 3.5 above). However, government experts appear to be more interested in facilitating the use of data for machine learning. For example, copyright exceptions/limitations for TDM may be introduced in a relatively short period, as mentioned above.

It remains to be seen whether lawyers and government officials consider the protection of AI-generated productions necessary.

5.8 - With what particularities (e.g., duration and content of the rights) ?

According to Art. 11 *et seq.* of the Copyright Act, there are three types of moral rights, that is, the right to disclose one's works, right to be recognized as an author, and right to integrity. Authors of an original work may enjoy these rights, and the author of an AI-assisted work under human influence is entitled to claim such moral rights. However, a production that is entirely an outcome of machine generation does not have access to moral rights. It is natural in

consideration of the characteristics of moral rights that protect only the personality interests of natural persons who are entitled to enjoy such rights. However, the rightsholder of a work made for hire is deemed the initial owner of moral rights with respect to the work in question; this does not apply to AI-generated productions. Consequently, the results generated by AI do not confer moral rights on its developer or operator.

5.9 - Can there still be a moral right ?

The Copyright Act does not provide special treatment for AI-generated productions. A new and homogenous regime for the protection of AI-generated/assisted creations is expected in the future when the Copyright Act will be amended, or other legislations prepared by legislators. However, it is unrealistic that such a new protection *sui generis* will be recognized soon, although relevant industries ask that AI-generated productions be protected to extend the development of relevant technologies. Lawyers and creators are reluctant to support this position for various reasons. For example, AI technologies are assumed to remain in the early stages of development. If strong protection for AI is introduced without serious consideration, unexpected side effects may arise.

5.10 - Should there be a special ownership rule (presumption, or even fiction, as it exists in some countries for computer-generated creations)?

In cases where a creation is performed solely by a machine, there are no special rules regarding its' ownership.

While it is possible to create a work by means of a computer system, or it can help an author make a work more convenient, the originality requirement shall be fulfilled by the author, but not by a computer. Ownership over works made for hire belong to the employer; however, it is rare for the ownership of someone else other than a genuine author to be recognized. Therefore, if an employer lets an employee create computer-assisted work that is original, the employer may be qualified or entitled to initial ownership. The AI system which assists the creation of such a work is not her or his employee.

Economic rights may be partially or completely transferred (Art. 45(1)) and exclusive/non-exclusive licenses possible without formal requirements (Art. 46(1)).

5.11 - Should a deposit be required? / A declaration of "origin"?

Under Korean copyright law, a work may be registered (Art. 53(1)), but registration is not mandatory to enjoy copyright protection. However, when a work has been registered, its author may benefit from some presumptions. For example, it is presumed that the author of the registered work is the genuine author of the work in question (Art. 53(3)). To register a work, it is deposited (in either physical or digital form). It is also necessary to declare that the information submitted for registration has been prepared as *bona fide*, and to the best of the person's knowledge. If someone has registered a work with false information, they may be penalized (Art. 136(2) No. 2).

There is no special registration regime for AI-assisted works, and AI-generated productions may not be registered at all. While the copyrightability requirement is not examined in detail, it is

always required that only copyrightable works be registered. It is not necessary to declare that the production in question originated from someone who tried to register because it is not possible to register such a production. If someone registers an AI-generated production as an original work, the Korea Copyright Commission, which is responsible for copyright registration, will remove the registration.

However, it is helpful to introduce the mandatory declaration of whether a subject matter to register originated entirely from an author, was assisted by an AI system, or generated by an AI. In the third case, the Commission does not accept the registration request.

5.12 - Should a kind of neighbouring right or a sui generis right be created?

In any industry that offers human-interacted goods or services, the entrepreneurs are investing their financial resources in anticipation that AI (artificial intelligence) will play a significant role. And AI is creating various types of creations. Korea's copyright act does not require fixation on a physical medium as a requirement for the establishment of a work. Therefore, if there is no requirement that the creator be human, what AI says and writes can be copyrighted. However, currently most creations created by artificial intelligence depend on programmers' algorithms, and in some cases, human intervention is required to complete creations, so artificial intelligence will not be the subject of creation in a pure sense.

However, recently AI such as Midjourney (<https://www.midjourney.com/>), Deep Dream Generator (<https://deepdreamgenerator.com/>), and 'DALL E2 (Dali 2)' of 'Open AI' creates images by learning existing materials. And Dr. Stephen L. Thaler's 'Creativity Machine' also makes creations of art. Another AI creates novels based on data learning. Accordingly, the entrepreneurs which invest or will invest in the development of AI related technologies and the provision of related services are claiming legal protection for their creations. However, like in other countries, Korea in like manner does not grant non-human artificial intelligence the right corresponding to the intellectual property for its creations. However, as entrepreneurs and governments are investing astronomically in AI and related technologies, entrepreneurs continue to insist on the need for legal protection for AI creations. And in response to these demands, there are opinions that legally protect AI creations similarly to the protection of database creators within the copyright act, and opinions that AI creations should be protected as an sui generis right by an independent law.

Meanwhile, a revised bill to protect AI creations in the Copyright Act has been proposed and held pending in the National Assembly of Korea. This bill does not grant direct rights to AI for AI creations. However, this bill recognizes "a person who creates a work using or artificial intelligence creators, artificial intelligence service providers, etc. who has made a creative contribution to the production of artificial intelligence works" as the author.

5.13 - What would be its characteristics?

The copyright act protects the databases created by database creators for 5 years, and so those seeking protection of AI creations within the copyright act claim to protect them for five years. On the other hand, it is difficult to find a specific discussion on the enactment of an independent protection law for AI creations. However, since it is difficult for non-human AI to be the subject of rights, the individual law is expected to be the law aimed at promoting related technologies or industries, and this law is expected to be enacted based on the logics discussed so far in

Korea. So, this law seems to clarify the rights relationship by granting legal personality to AI or granting rights to AI developers to AI creations.

5.14 - The rights covered?

Discussions about the rights for creations of artificial intelligence correspond mainly to property rights. The entrepreneurs or developers are demanding protection for AI creations primarily because it is to make a profit from them. Things that are considered to be publicity of AI are also judged as property rights of companies and are likely to belong to companies. Of course, there is a possibility that personal rights may be applied in the case of actually setting the subject of creation as a human being. But if AI is recognized by law as a subject of rights to creations or an independent subject of publicity rights, the rights corresponding to personal rights may be granted to AI.

5.15 - Generally speaking, what would be the limitations on or exceptions to this new right?

If the Copyright Act stipulates the rights to creations of AI, basically the provisions of the Copyright Act for restrictions of author's property rights or fair use will also be applied to new rights to follow. Of course, new limitations or exceptions for AI-generated content may be made in consideration of the unique problems related to the creation of AI.

5.16 - How should this protection be articulated with other existing protections?

All of the views to protect AI-generated content within the copyright law system are to protect it independently in accordance with copyright works or similar to databases. And even if it is legislated like this, the possibility of indirect protection by other laws remains as it stands. As a result, if the above views are legislated in the Copyright Act, AI developers can be protected in many ways by laws related to patents, copyrights, and unfair competition in relation to AI, and AI-generated content can be directly or indirectly protected by the Copyright Act and other laws.

5.17 - In the absence of protection by a property right, are there any compromise solutions?

For example, a kind of paying public domain for them: collection of royalties paid to a collective management organization for distribution among authors continuing to create works in the traditional way? What else?

AI services can be provided in a variety of ways, and the number of users of the service is increasing exponentially. First of all, charging the fees can be made for the use of AI creations or services. It may be difficult to legally protect AI creations themselves, but it is possible to sell them as a product. Materials such as sound effects and photos that are not protected by the copyright law are also distributed on cost basis. As in the case of ChatGPT with AI applied, charging for services or creations is still in progress.

Providers of AI services can generate advertising revenue by basically forcing those who use AI services to view or watch advertisements in the process of using the service. In addition, direct and indirect advertising is possible for AI creations. In particular, in the case of videos, advertising revenue can be generated on platforms such as YouTube. In addition, even if AI-

generated content is protected as property rights, it is necessary to set the price or protection for the creation differently from human creation, considering the following characteristics. First of all, AI creations are largely the result of learning from numerous digital materials provided free of charge, and the creation process is very simple and fast, so there is no need to compare to the human creation process. In this regard, it is necessary to consider that the Copyright Act is based on providing incentives to creators for the development of culture. Of course, the process of developing AI and providing learning materials to AI is driven by corporate investment. In other words, there is no reason to provide incentives for creation to AI, but finding a way to appropriately compensate the developer is the fundamental reason for the protection of AI creations. However, even if AI-generated content is sold cheaper than human works, it can be created very easily after the development and learning of AI, and it can be mass-produced because it was created by applying proven and famous creative techniques. In addition, since AI-generated content utilizes existing creative techniques, there are few elements that can directly develop human culture. Therefore, it is thought that this has factors that can greatly hinder the desire for human creativity, and may indirectly hinder human cultural development. In this regard, it is necessary to think together about how the protection of AI-generated content by the Copyright Act will affect human creation and the formation of culture.

- AI and violation of rights: the choice of remedy

6.1 - Can an AI output infringe, and to what extent? Who would be liable?

AI will inevitably learn by the existing works and therefrom reflect some or all of them in its output. If a part of it is a very trivial or small, direct copyright infringement will not occur, but if it is a significant part or amount, it is an unauthorized use of someone else's work. Therefore, in this case, it may be a copyright infringement. In addition, in the case of stealing the idea of a work, ethical problems may arise even if it is not a direct copyright infringement. However, since AI cannot be the subject of legal action, it cannot be the subject of direct copyright infringement and cannot raise ethical issues applicable to humans. However, as these are the matters of great importance to creators, we cannot help but question as to whether the providers of AI services cannot be held accountable for such problems at all. In the above case, only the content or method is different from obtaining profits by stealing copyrighted works, and the result is not so different. This is because, in reality, the owner of AI condones infringements of rights by AI infringes and obtains the benefits resulting from the result of neglecting the use of copyrighted works stolen by it. And if the above situation is tolerated for the reason that AI-generated content is a creation of AI, humans may lose the incentive to create. Even now, we can see situations in which creators of art works lose their will to create considerably while witnessing that creations similar to their own creations are very easily created by AI services. Also, considering what AI creates based on, it is ironic to promote the creation of AI in this situation. Therefore, in order for human creators to properly maintain incentives for creation, it is necessary to impose certain legal obligations on those who provide AI services to protect the rights of copyright holders.

6.2 - Are there other legal means (e.g. unfair competition, parasitism) to engage the liability of the person responsible for the AI output? (Who would that person be?)

Basically, a person who engages AI services as his or her business can be held accountable for the acts of unfair competition by applying the law of unfair competition. And in certain cases, it seems that they may be held liable for torts under civil law. On the other hand, an AI service provider that conducts a service that can share the result through a medium such as a bulletin board of a related site while providing AI service corresponds to an online service provider. In addition, if a user posts a creation by AI service on a shared media such as a bulletin board provided by an AI service site while knowing that the work of another person is used, the user may be regarded as infringing copyright. So, in this case, the AI service provider may have legal responsibilities and obligations corresponding to the online service provider.

6.3 - Beyond copyright, can personality rights prevent the realization by an AI of a production using the voice or physical aspect of another person?

Korea protects the information that identifies a particular individual by his or her full name, resident registration number, image, etc. as personal information in accordance with the Personal Information Protection Act. Therefore, even if it is a production using another person's voice or physical aspect, if it uses information that can identify a specific person, it can be legally liable. In other words, in order to be protected by the Personal Information Protection Act, the requirements as personal information must be met. In addition, stealing a person's face or figure can be treated as an infringement of portrait rights or publicity rights. And if anyone takes pictures of the physical aspects of a person without their permission, they may be subject to criminal penalties. In addition, these cases may constitute torts under the civil law for psychological damage as a violation of personal rights.

- Question of transparency and remuneration

7.1 - In your country, is there a requirement (legal, administrative, jurisprudential, arising from practice) that AI-generated content in general be declared as such (see for example in Europe, the AI Act of April 21, 2021¹ and the more nuanced position of the Council of the European Union of November 2022²)?

(Optional) If not, do you think that such a solution should be adopted?

Currently, there exist no regulations for AI-generated content in the Korean copyright protection system. However, a revised bill to protect AI creations in the Copyright Act has been proposed and pending in the Korean National Assembly. This bill defines artificial intelligence works as creations produced by a mechanical device or software (hereinafter referred to as "artificial intelligence") that autonomously recognizes the external environment, judges the situation, and operates autonomously. And this bill does not grant direct rights to artificial

¹ <https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=CELEX%3A52021PC0206>

² <https://www.consilium.europa.eu/fr/press/press-releases/2022/12/06/artificial-intelligence-act-council-calls-for-promoting-safe-ai-that-respects-fundamental-rights/>

intelligence or its developers for AI creations, but “a person who creates a work using artificial intelligence services or an artificial intelligence producers, service providers, etc. that has made a creative contribution to the production of artificial intelligence works” are recognized as authors, and the authors of AI works are determined as prescribed by the Presidential Decree, taking into account the level of contribution to creation. In addition to this, to be protected, the authors of an AI works must register a copyright, and the protection period is limited to 5 years. However, it is not known when this amendment will be passed in the National Assembly and enacted in the Copyright Act.

7.2 - If applicable, how is the sharing and payment of remuneration carried out when AI is involved in the creative process?

(Optional) If there is no existing solution, what solution do you think should be adopted?

In the current copyright law system, even if AI participates in the creative process, if humans use it as a tool and human creativity is included in the result, it can be recognized as a work and humans become the author of the work. However, related industries have continuously raised the issues on the grounds that AI cannot be recognized as the author even for AI-generated content, in which AI played a major role in the actual creative process. However, according to the above revised bill, this problem is solved to some extent by recognizing “a person who creates a work using artificial intelligence services or an artificial intelligence producers, service providers, etc. who has made a creative contribution to the production of an artificial intelligence work” as an author. This is because the sharing and payment of compensation at this time can only be done to these authors. However, there is a problem of how to define and interpret 'a person who creates a work using artificial intelligence services' or 'creative contribution'. This is based on the premise that AI cannot perform all processes of creation purely independently, and it is acknowledged that AI has actually been used as a tool for human creation. However, in cases where AI converts text into images or writes key words or topic sentences into novels, even if basic content production algorithms are given to AI by developers, the actual creation seems to be done by AI. Therefore, it is questionable whether it is reasonable to grant copyright to humans at this time.

7.3 - If applicable, how is the sum linked to the AI allocated (cultural action? payment to other rights holders...)

(Optional) If there is no existing solution, what solution do you think should be adopted?

Currently, all profits generated in the process of creating AI-generated content are allocated to the person or company that developed the AI. However, it is evaluated that there is no adequate method to legally protect this content in case it is stolen by others. So, the related industry is trying to protect this content separately. If the above amendment bill is introduced into the Copyright Act, after AI-generated content is created, the profits from its use will be distributed to those recognized as the authors of artificial intelligence works. On the other hand, contents without copyright are freely circulating according to the terms and conditions, and no special problem has been raised about this. In addition, regardless of how AI-generated content is distributed, the person who develops AI can be guaranteed a significant profit, and since AI

itself does not require money to exist in society like humans, money does not provide an incentive for it. Moreover, unlike databases, which are only part of a computer system, AI-generated content directly or indirectly affects human culture. In this respect, it is doubtful whether all AI-generated content should be protected under the same system or level as copyrighted works by humans. Rather, it is considered that a more important issue for AI-generated content is how to prevent cultural distortion by distinguishing AI-generated content from human creations rather than its compensation system.