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COPYRIGHT ISSUES IN THE ARTIFICIAL INTELLIGENCE ERA

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With the increasing use and adoption of generative artificial intelligence ("**AI**") technologies, copyright issues require careful consideration by the creators and users of these applications. The premise of sophisticated AI technologies is that they ingest and analyse (also known as "training" of the AI system) potentially immense quantities of pre-existing content and works to generate new works or content, which may include text, artistic works or other forms of output. Such new works can be AI-assisted, which incorporates some level of human contribution, or may be solely generated by an AI system, with no human contribution. The U.S. Copyright Office has indicated that providing text prompts (instructions from a human user) to AI systems is insufficient as a means of creative control by the user, to constitute human authorship and attract copyright protection in the United States[1].

Various class action lawsuits have been initiated in various U.S. courts[2], alleging, *inter alia*, copyright infringement due to the unauthorized use of copyrighted works (such as artwork, photos or source code) as training data in order to build and operate each AI platform, without the consent of, or any compensation to, the copyright holders of such copyrighted works. Prevalent use of AI technologies such as ChatGPT can also result in the inadvertent disclosure of confidential business information and trade secrets by individual users to these AI systems, as recently experienced by businesses. The nature of AI-powered systems raises some very interesting legal issues and risks to consider, such as:

- Can text and data mining, which is the backbone of AI technologies for training purposes, be performed without infringing copyrights in the original source materials?
- Do AI systems continue to store copies of copyrighted materials, during training and after the system is trained and commercialized?
- How can copyright rights-holders continue to license, enforce and monitor unauthorized use of their copyrighted works, with the increasing popularity of AI technologies?
- Even if AI-generated works may not necessarily infringe existing copyrights, do they directly compete with the market for the original copyrighted works and cause detrimental effects on such works and their copyright holders?

In 2021, the Government of Canada conducted a public consultation to consider the modernization of

Canada's copyright framework, considering potential ways to support innovation via AI and other emerging technologies, while continuing to respect rights holders of copyrighted works. To date, there have been no current proposed statutory amendments to the Copyright Act, R.S.C., 1985, c. C-42 (the "***Copyright Act***") dealing specifically with copyright ownership of AI-generated works, or creating any AI-specific statutory exceptions to copyright infringement.

On June 16, 2022, Bill C-27[3], was introduced, which includes a proposed *Artificial Intelligence and Data Act ("**AIDA**").* *AIDA* regulates persons within Canada that are responsible for the design, development or making available for use of, or manage the operation of, AI systems, by requiring the adoption of measures to anonymize data, assess harm to individuals, report actual or potential material harm and maintain business records. Under *AIDA,* an artificial intelligence system is defined as a "technological system that, autonomously or partly autonomously, processes data related to human activities through the use of a genetic algorithm, a neural network, machine learning or another technique in order to generate content or make decisions, recommendations or predictions.[4]"

Copyright Protection for AI-Generated Works

On December 1, 2021, the Canadian Intellectual Property Office ("**CIPO**") accepted a copyright registration for a painting entitled "SURYAST" published in India, owned and co-authored by Ankit Sahni, where the co-author is an AI program called RAGHAV Artificial Intelligence Painting App. This is not a definitive or precedential position however, since CIPO does not typically examine copyright applications to the same extent as trademark applications that are examined by CIPO prior to registration, or in the same analytical manner as the U.S. Copyright Office, as discussed below. It is also unclear whether CIPO would accept a copyright registration that was created solely by AI, as opposed to being co-authored with a person.

The *Copyright Act* does not currently contemplate or show parliamentary intent for potential authorship by a machine, and the current legislation implies that an author needs to be a natural person. For example, copyright subsists in a work, in accordance with section 5 of the *Copyright Act*, where the author was, at the date of making of the work, a citizen or subject of, or ordinary resident in, a treaty country. The statutory term of copyright protection was recently expanded to endure for the lifetime of an author, plus 70 years following the end of the calendar year of death of the author. Given these inherently human elements of the legislation, it is unclear whether copyright protection would be afforded within Canada to works generated or contributed to by AI. There would also be challenges with determining who would be the first author (and/or copyright owner, as the case may be) of an AI-generated or AI-assisted work. In the case of an AI-assisted work, what level of human contribution would be required to qualify as joint authorship, and also to satisfy the "originality" requirement of copyright protection?

The U.S. Copyright Office released a policy statement[5] on March 16, 2023 to provide guidance for whether works containing material generated by AI would be eligible for copyright protection. The U.S. Copyright Office denied an application for a visual work created solely by AI, on the basis that the work lacked the traditional human authorship necessary to support a successful copyright claim, and was made "without any creative contribution from a human actor". This decision is currently being challenged by Stephen Thaler, who has filed various lawsuits in the U.S., U.K. [6] and around the world to dispute his entitlement to receive intellectual property protection for various works and inventions generated by DABUS, an AI neural system developed by Thaler.

With regard to AI-assisted works, the U.S. Copyright Office determined that a graphic novel that included AI-generated images could receive copyright protection, but only to the extent of the human-authored portions, i.e. the original text and the compilation of the end product. The Office refused copyright protection for the images since they were solely generated by AI, and has clearly stated that "authors" exclude non-humans. The Office also indicated that if an AI-assisted work was the subject of a copyright application, non-copyrightable components (created solely by AI) should be disclaimed, and there is a duty on applicant to disclose AI-generated materials and provide details about human contribution to works that are the subject of any copyright application. Concurrently with the publication of its policy statement, the U.S. Copyright Office also launched a new AI public consultation initiative to further examine copyright law and policy issues raised by AI, including the use of copyrighted materials in AI training.

Conclusion

Without further legislative changes or judicial consideration, copyright ownership over AI-generated works still remains unclear in Canada. Though consideration and monitoring of other jurisdictions provides useful insight, businesses need to be aware of the differences in copyright laws across jurisdictions. HathiTrust and Google, Inc. were successful in the U.S. courts[7] against the Authors Guild with regard to their respective use and digitization of books, and online display of excerpts from such books, complying with fair use under U.S. copyright laws. However, the U.S. fair use doctrine is generally broader than the existing fair dealing exception from copyright infringement under Canadian copyright laws.

As the demand for AI technologies increases, businesses that harness AI systems can mitigate their intellectual property infringement risks by AI training via text and data mining licenses that only use authorized databases of content, and conducting internal audit(s) to consider whether their evolving AI business processes and AI-generated works infringe third party intellectual property rights. Canadian businesses will also need to comply with applicable regulatory obligations under *AIDA*, if such legislation is

enacted. Use of any open source software or tools within AI systems should also be subject to compliance with their respective license terms and conditions, such as proper attribution where contractually required.

Copyright holders will need to be more proactive in monitoring the Internet for potential infringement of their copyrighted works. If your business is licensing use of an AI-powered technology, seek legal advice to ensure that your agreements with AI technology providers contain fulsome representations and warranties that include all legal rights to use any training data or other source materials, and strong indemnification to protect against potential third party intellectual property infringement claims.

To learn more, contact the author of this article, Sze-Mei Yeung, at syeung@rbs.ca.

[1] U.S. Copyright Office, Statement of Policy, "Works Containing Material Generated by Artificial Intelligence" (March 16, 2023)

[2] *Anderson et al. v. Stability AI Ltd., Stability AI Inc., Midjourney Inc. and Deviantart, Inc.,* No. 23-cv-00201 (N.D. Cal.), *Getty Images (US) Inc. v. Stability AI Inc., No. 23-cv-135) (D. Del.) and DOE 1 et al v. GitHub Inc. et al, No. 3:22-cv-06823 (N.D. Cal.)*

[3] https://www.parl.ca/legisinfo/en/bill/44-1/c-27

[4] https://www.parl.ca/legisinfo/en/bill/44-1/c-27, Section 2 (Definitions)

[5] U.S. Copyright Office, Statement of Policy, "Works Containing Material Generated by Artificial Intelligence" (March 26, 2023)

[6] https://www.bailii.org/ew/cases/EWHC/Patents/2020/2412.html, *Stephen Thaler* v. *Shira Perlmutter, in her official capacity as Register of Copyrights and Director of the United States Copyright Office; and The United States Copyright Office, No. 1:22-cv-01564 (Washington D.C.)*

[7] *Authors Guild, Inc. v. Google, Inc.,* 804 F.3d 202 (2d Cir. 2015) *and Authors Guild, Inc. v. HathiTrust,* 755 F.3d 87 (2d Cir. 2014)