

CANADIAN COPYRIGHT CONSULTATION ON ARTIFICIAL INTELLIGENCE — THE PRECIPICE OF A NEW COPYRIGHT ERA

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In July 2021, the Government of Canada launched a *Consultation on Modern Copyright Framework for Artificial Intelligence and the Internet of Things*. The goal of this public consultation is to gather additional information to help the Government re-evaluate Canadian copyright policy in light of new challenges posed by artificial intelligence (AI) and the Internet of Things (IoT). The consultation represents the latest phase in the Government's review of the *Copyright Act* (the "**Act**"), following a 2018-19 parliamentary review of the Act. The Government invites stakeholders to submit technical evidence and views on potential policy amendments that are described in detail in its [consultation paper](#).

This bulletin will focus solely on the consultation paper as it deals with the topic of AI. The consultation paper's examination of IoT issues will be discussed in a [separate bulletin](#).

We will take a close look at certain subjects that may benefit from the modernization of the Act, namely text and data mining, authorship and ownership of works generated by AI, and infringement and liability regarding AI. For the sake of brevity, we will not discuss approaches taken by other jurisdictions; for such discussion, please refer to the consultation paper.

Text and data mining

Text and data mining ("**TDM**") refers to the process of analyzing large amounts of machine-readable information for the purposes of identifying trends, patterns, and relationships, and to make related predictions. The knowledge gained through text and data mining allows advances in science and the arts and enables companies to solve problems, innovate, and create more value. This topic is particularly important for AI technologies that rely heavily on text and data mining for the development and training of AI systems.

The main concern, as it pertains to copyright law, arises from the need to reproduce large quantities of data, including potentially copyrighted works, to feed AI systems. The vast number of authorizations from rights holders that need to be obtained under existing copyright law can represent a significant burden on the AI developer.

There is uncertainty regarding the extent to which existing exceptions to copyright infringement may apply to TDM activity, including the fair dealing exception and the exception for temporary reproductions for technological processes. There have been recommendations to broaden these exceptions to allow for text and data mining. However, relying upon existing exceptions may not be the answer. For instance, amendments to existing exceptions may have implications beyond the intended scope. Further, they may not fully address the requirements of TDM activities, including the need to maintain copies of mined works for verification and validation purposes. An alternative approach would be to create a new exception specifically for text and data mining.

Broadening the scope of exceptions under the Act could be a double-edged sword: potentially increasing Canada's international competitiveness and fostering investment, but also decreasing economic return on copyrighted works by discouraging licensing activities. Accordingly, the Government welcomes input on the nature of existing TDM activities, including challenges faced by rights holders in licensing their works for TDM activity, barriers posed by technological protection measures on TDM activity, and concerns as to whether TDM outputs might infringe copyright. The Government also welcomes input on the scope, safeguards, and limitations of any new TDM-specific exception to copyright infringement.

Authorship and Ownership of AI Generated Works

The varying degrees of human contribution required to produce works using AI technologies raise complex questions as to how to assess authorship and ownership of AI-generated works (i.e., without any human intervention) and AI-assisted works (i.e., with some element of human intervention).

The concept of authorship is not readily applicable to AI-generated works, as the existing copyright regime assumes an author to be a natural person and ties the term of copyright protection to a certain period beyond the author's lifetime. Even with AI-assisted works, the required threshold for human contribution and who may be considered a material contributor is unclear.

For example, consider the scenario of an AI application developed with the capacity to create original works. Now consider the various ways a user may use the AI application to generate a work: (i) the AI application may be used to generate the work without additional user input, (ii) the user may provide additional input prior to generation of the work, (iii) the user may curate and select one of multiple AI-generated works based on his or her desired criteria, (iv) the user may modify an AI-generated work, post-creation, or (v) the user may modify the AI application itself to produce the desired work instead of the user having to curate or modify the work post-creation. One manifestation of this phenomenon is the current trend toward low-code and no-code software applications (e.g., GitHub Copilot), where the software generates the bulk of the software code, and the human input is less directly related to the output. The varying degrees of human intervention involved in

the creation of an AI-assisted work create uncertainty as to the threshold at which such human contribution would render the work “original”, which is a requirement for Canadian copyright protection.

The consultation paper proposes three approaches to determining authorship and ownership: (i) attribute authorship of an AI-generated work to the person who arranged for the work to be created, including establishing factors to determine whether an AI-assisted work meets a human authorship threshold; (ii) explicitly require human participation in the generation of a work for copyright to subsist in the work; or (iii) create a *sui generis* set of rights specifically for AI-generated works, including rights for participants not directly related to the creation of the work, a distinct period of protection, remedies for infringement, and a separate contribution requirement for AI-generated works to determine the first owner of these new rights.

The Government invites input from stakeholders on their views of the above approaches and their use of artificial intelligence in the creation of works, including the level of human involvement in such creation, the impact of uncertainty of the authorship or ownership of AI-generated or AI-assisted works, how businesses are mitigating against risks associated with such uncertainty, and the types of licenses employed for AI-generated or AI-assisted works.

Infringement and Liability Regarding AI

As AI technologies progress in their ability to independently create a work, and the level of human involvement in such creation decreases, identifying the person(s) responsible for copyright infringement and establishing liability becomes difficult.

Under current copyright law, infringement requires establishing that the infringing party had access to the original copyrighted work, that the original was indeed the source of the copy, and that at least a substantial amount of the work was reproduced. Further, substantiality is assessed on a qualitative basis, rather than simply quantitative. Establishing infringement by an AI-generated, AI-assisted work, or the AI application itself under such a framework would require transparency of the AI application, including the source(s) of training data sets, and potentially an inordinate amount of verification and analysis. These hurdles are compounded by the fact that many AI applications and systems are proprietary “black boxes”, the inner-workings of which are closed off from public inspection.

Further, it is unclear as to whether the use of copyrighted works in the training of AI systems results in an infringing reproduction of the works, whether the operation of the AI systems and further updating of AI models would result in infringing reproductions, who would be responsible for such infringement, and whether parties would be responsible for primary or secondary infringement (i.e., knowingly dealing with an infringing copy). Similarly, there may be a need to establish a threshold of human involvement (e.g., development, sale, or licensing of the AI application) at which point a person can be said to have authorized

copyright infringement and be held liable.

The Government welcomes input on measures currently adopted by businesses to mitigate risks of liability for copyright infringement (whether by an AI system or an AI-generated or AI-assisted work), challenges faced by rights holders in licensing and enforcing their rights in the context of AI, difficulties in determining whether an AI system infringed a copyrighted work in the process of generating a new work, and the extent to which AI systems maintain reproductions of copyrighted content used in training data once the system has been trained and commercialised.

The deadline for submitting comments is rapidly approaching. All comments must be submitted by no later than September 17, 2021. All organisations that wish to do so can forward their submissions (in Word document format) by e-mail to the following address: copyright-consultation-droitdauteur@canada.ca. Should you require any further clarifications or assistance in the preparation of your submission, we remain available for consultation.

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A Cautionary Note

The foregoing provides only an overview and does not constitute legal advice. Readers are cautioned against making any decisions based on this material alone. Rather, specific legal advice should be obtained.

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