CONSULTATION ON

COPYRIGHT IN THE

AGE OF GENERATIVE

ARTIFICIAL INTELLIGENCE



This publication is available online at <a href="https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/consultation-paper-consultation-copyright-age-generative-artificial-intelligence">https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/consultation-paper-consultation-copyright-age-generative-artificial-intelligence</a>.

To obtain a copy of this publication, or to receive it in an alternate format (Braille, large print, etc.), please fill out the Publication Request Form at <a href="https://www.ic.gc.ca/publication-request">www.ic.gc.ca/publication-request</a> or contact:

ISED Citizen Services Centre Innovation, Science and Economic Development Canada C.D. Howe Building 235 Queen Street Ottawa, ON K1A 0H5 Canada

Telephone (toll-free in Canada): 1-800-328-6189 Telephone (international): 613-954-5031 TTY (for hearing impaired): 1-866-694-8389

Business hours: 8:30 a.m. to 5:00 p.m. (Eastern Time)

Email: ISED@canada.ca

#### **Permission to Reproduce**

Except as otherwise specifically noted, the information in this publication may be reproduced, in part or in whole and by any means, without charge or further permission from the Department of Industry, provided that due diligence is exercised in ensuring the accuracy of the information reproduced; that the Department of Industry is identified as the source institution; and that the reproduction is not represented as an official version of the information reproduced or as having been made in affiliation with, or with the endorsement of, the Department of Industry.

For permission to reproduce the information in this publication for commercial purposes, please fill out the Application for Crown Copyright Clearance at <a href="www.ic.gc.ca/copyright-request">www.ic.gc.ca/copyright-request</a> or contact the ISED Citizen Services Centre mentioned above.

© His Majesty the King in Right of Canada, as represented by the Minister of Industry, 2023.

Cat. No. lu173-41/2023E-PDF ISBN 978-0-660-68249-5

Aussi offert en français sous le titre Consultation sur le droit d'auteur à l'ère de l'intelligence artificielle générative

## Table des matières

1. Introduction: A Shifting Marketplace	4
1.1 Goal of this consultation	6
2. Discussion	ε
2.1 Text and data mining (TDM)	8
2.1.1 Previous stakeholder engagement	10
2.1.2 Approaches in other jurisdictions	10
2.1.3 Call for evidence and possible way forward for Canada	11
2.2 Authorship and ownership of works generated by AI	12
2.2.1 Previous stakeholder engagement	13
2.2.2 Approaches in other jurisdictions	14
2.2.3 Call for evidence and possible approaches in Canada	14
2.3 Infringement and liability regarding AI	15
2.3.1 Previous stakeholder engagement	16
2.3.2 Call for evidence regarding liability	17
3. Conclusion	18

## 1. Introduction: A Shifting Marketplace

Recently, a major shift occurred in the digital marketplace with the proliferation and massive public use of generative artificial intelligence (AI) systems. These systems can generate novel creative content in a wide variety of forms and even of quality comparable to works created by talented human artists. This includes the generation of text (e.g., ChatGPT), images (e.g., DALL-E), and music (e.g., MusicGen), often prompted by short instructions from users. Generative AI systems operate using models trained on vast datasets of text, images, or other data. These models build a representation of patterns identified in the training data using various machine-learning techniques.

In the wake of the widespread use of generative AI tools, an increasing number of stakeholders in the creative industries have expressed concerns about the impact of this technology on the copyright framework. For a number of stakeholders, they see AI undermining rights holders' ability to consent to the use of their creative works and to receive due credit and compensation.<sup>3</sup> Particularly, they are concerned about the uncompensated use of copyright-protected works in the development of AI systems, the potential for AI-generated outputs to infringe existing copyright-protected works, and the lack of practical enforcement remedies for rights holders.<sup>4</sup> The evolution of AI technologies arises in a context where the digital shift was already challenging the creative industries, a sector that contributed around \$60 billion to the Canadian economy in 2022.<sup>5</sup>

For its part, much of the AI industry continues to express concerns about the uncertainty surrounding the application of the copyright framework in the context of AI. According to some stakeholders in the AI industry and some scholars, this uncertainty may chill domestic investment and impact opportunities for Canada, notably as a destination for AI model development and training.<sup>6</sup> With the Pan-Canadian Artificial Intelligence Strategy and a number of successive investments, the Government has positioned Canada as a world leader in AI. The strategy was launched in 2017 with an initial investment of \$125 million, to which the Government is adding more investments over the years, including \$443.8 million announced in 2021.<sup>7</sup> These investments support organizations such as Scale AI, a business-

<sup>&</sup>lt;sup>1</sup> "Introducing ChatGPT" (November 30, 2022), online: OpenAl <a href="https://openai.com/blog/chatgpt">https://openai.com/blog/chatgpt</a>; "DALL-E now available without waitlist" (September 28, 2022), online: OpenAl <a href="https://openai.com/blog/dall-e-now-available-without-waitlist">https://openai.com/blog/dall-e-now-available-without-waitlist</a>; "Introducing AudioCraft: A Generative Al Tool For Audio and Music" (August 2, 2023), online: Meta <a href="https://about.fb.com/news/2023/08/audiocraft-generative-ai-for-music-and-audio/">https://about.fb.com/news/2023/08/audiocraft-generative-ai-for-music-and-audio/</a>.

<sup>&</sup>lt;sup>2</sup> For more information, "What is generative AI?", online: IBM https://research.ibm.com/blog/what-is-generative-AI.

<sup>&</sup>lt;sup>3</sup> See for example, "More than 10,000 Authors Sign Authors Guild Letter Calling on Al Industry Leaders to Protect Writers" (July 18, 2023), online: Authors Guild <a href="https://authorsguild.org/news/thousands-sign-authors-guild-letter-calling-on-ai-industry-leaders-to-protect-writers/">https://authorsguild.org/news/thousands-sign-authors-guild-letter-calling-on-ai-industry-leaders-to-protect-writers/</a>; 'Human Artistry Campaign", online: <a href="https://www.humanartistrycampaign.com/">https://www.humanartistrycampaign.com/</a>.

<sup>&</sup>lt;sup>4</sup> *Ibid.* See also, "This Sudbury, Ont., illustrator learned AI used his art without his consent" (January 23, 2023), online: CBC <a href="https://www.cbc.ca/news/canada/sudbury/ai-generated-art-consent-1.6722981">https://www.cbc.ca/news/canada/sudbury/ai-generated-art-consent-1.6722981</a>; "Whose art is this, really? Inside Canadian artists' fight against AI" (February 2, 2023), online: Toronto Star <a href="https://www.thestar.com/news/canada/whose-art-is-this-really-inside-canadian-artists-fight-against-ai/article-54b0cb5c-7d67-5663-a46a-650b462da1ad.html">https://www.thestar.com/news/canada/whose-art-is-this-really-inside-canadian-artists-fight-against-ai/article-54b0cb5c-7d67-5663-a46a-650b462da1ad.html</a>.

<sup>5</sup> See Q1 2022 to Q4 2022 on Statistics Canada's online tool: "National culture and sport indicators by domain and sub-domain",

<sup>&</sup>lt;sup>5</sup> See Q1 2022 to Q4 2022 on Statistics Canada's online tool: "National culture and sport indicators by domain and sub-domain", online: Statistics Canada <a href="https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610065201">https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610065201</a>.

<sup>&</sup>lt;sup>6</sup> See for example, "Microsoft and GitHub (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)" (September 17, 2021), online: Government of Canada <a href="https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/microsoft-and-github; "Vector Institute, Alberta Machine Intelligence Institute and Mila – Quebec Artificial Intelligence Institute (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)" (September 2021), online: Government of Canada <a href="https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/vector-institute-alberta-machine-intelligence-institute-and-mila-quebec-artificial; "IBM (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" (October 6, 2021), online: Government of Canada <a href="https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/ibm-canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/ibm-canada.

policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/ibm-canada.

7 "Pan-Canadian Artificial Intelligence Strategy" (July 20, 2022), online: Government of Canada <a href="https://ised-isde.canada.ca/site/ai-strategy/en;">https://ised-isde.canada.ca/site/ai-strategy/en;</a> "Budget 2017" at 103-04, online: Government of Canada <a href="https://www.budget.canada.ca/2017/docs/plan/budget-2017-en.pdf">https://www.budget.canada.ca/2017/docs/plan/budget-2017-en.pdf</a> "Budget 2021" at 148, online: Government of Canada <a href="https://www.budget.canada.ca/2021/pdf/budget-2021-en.pdf">https://www.budget.canada.ca/2017/docs/plan/budget-2017-en.pdf</a>.

led consortium working on Al-powered supply chains in Canada. Scale Al has the potential to contribute more than \$16.5 billion to the Canadian economy by 2028, while creating 16,000 new highskill jobs.8

As creative industries begin to be directly confronted with the impacts of generative AI, driven by the release of ever more sophisticated AI systems in the marketplace by developers and deployers, the Government is looking to engage further with stakeholders and Canadians on copyright policy issues related to Al. In the past years, the intersection of Al technologies and copyright has been the focus of consultations<sup>9</sup>, legislative developments<sup>10</sup>, as well as a number of lawsuits in several jurisdictions<sup>11</sup>, and continues to fuel lively discussions globally. In 2021, the Government of Canada conducted A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things, in which it asked for stakeholder feedback on three copyright policy areas related to Al<sup>12</sup>:

- (1) Text and data mining i.e., whether any clarification is needed on how the copyright framework applies to the use of copyright-protected works and other subject matter (e.g., a performance or sound recording) in the training of AI systems;
- (2) Authorship and ownership of works generated by AI i.e., how the copyright framework should apply to Al-assisted and Al-generated works; and
- (3) Infringement and liability regarding AI e.g., who are the persons liable when AI-generated works infringes copyright-protected works.

The Government received 38 submissions addressing at least one of these areas.<sup>13</sup> Stakeholders widely commented on the use of copyright-protected works in the training of AI systems. Stakeholders from the technology sector, scholars, and user groups generally argued for an exception making clear that the use of works in text and data mining activities (TDM) does not require additional authorization from rights holders. 14 Creative industries were of the view that a new exception is not desirable, as it

<sup>11</sup>See for example, "Sarah Silverman sues OpenAl and Meta claiming Al training infringed copyright" (July 10, 2023), online: The Guardian https://www.theguardian.com/technology/2023/jul/10/sarah-silverman-sues-openai-meta-copyright-infringement; "More

<sup>&</sup>lt;sup>8</sup> "Canada's Al-Powered Supply Chains Cluster (Scale AI)" (May 29, 2023), online: Government of Canada https://isedisde.canada.ca/site/global-innovation-clusters/en/canadas-ai-powered-supply-chains-cluster-scale-ai; "Who we are", online: Scale Al https://www.scaleai.ca/about-us/.

<sup>&</sup>lt;sup>9</sup> See for example, "Copyright Office Issues Notice of Inquiry on Copyright and Artificial Intelligence" (August 30, 2023), online: U.S. Copyright Office https://www.copyright.gov/newsnet/2023/1017.html; "Artificial Intelligence and Intellectual Property: copyright and patents: Government response to Consultation" (June 28, 2022), online: UK Intellectual Property Office https://www.gov.uk/government/consultations/artificial-intelligence-and-ip-copyright-and-patents/outcome/artificial-intelligence-and-ip-copyrightintellectual-property-copyright-and-patents-government-response-to-consultation.

<sup>&</sup>lt;sup>10</sup> See subsections 2.1.2 and 2.2.2.

writers sue OpenAl for copyright infringement over Al training" (September 11, 2023), online: Reuters https://www.reuters.com/technology/more-writers-sue-openai-copyright-infringement-over-ai-training-2023-09-11/; To our knowledge, in Canada, there is no lawsuit of a similar nature to the ones in the United States and the United Kingdom. 12 "A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things" (July 16, 2021), online: Government of Canada https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright- $\underline{policy/consultation-modern-copyright-framework-artificial-intelligence-and-internet-things-0}.$ 

<sup>13 &</sup>quot;Submissions: Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things" (February 11, 2022), online: Government of Canada https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-frameworkpolicy/copyright-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/.

<sup>&</sup>lt;sup>14</sup> See for example, "Microsoft and GitHub (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)", supra note 6; "IP Scholars (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" (September 26, 2021), online: Government of Canada https://isedisde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-moderncopyright-framework-artificial-intelligence-and-internet-things/ip-scholars, "Canadian Federation of Library Associations and Canadian Association of Research Libraries (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" (September 2021), online: Government of Canada https://ised-isde.canada.ca/site/strategicpolicy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-modern-copyright-framework-artificialintelligence-and-internet-things/canadian-federation-library-associations-and-canadian-association-research-libraries.

would preclude rights holders from receiving fair compensation for the use of their works in TDM activities. 15 As for the two other policy areas, many stakeholders expressed the view it was premature to take a position on authorship and ownership of AI content, and very few submissions addressed questions regarding copyright infringement and liability raised by AI.

Since the 2021 consultation, the Government has remained active and engaged on Al policy issues. In June 2022, it introduced in Parliament the Artificial Intelligence and Data Act (AIDA) through Bill C-27, which includes a number of obligations for the responsible development and deployment of AI in Canada.<sup>16</sup> In response to rapid advancements in generative AI, Canada launched a consultation in August 2023 and recently released a code of conduct for the development and management of generative AI systems.<sup>17</sup> While AIDA would establish general cross-sectoral standards for the development, deployment, and use of AI in Canada, its scope is designed to complement existing legal frameworks, such as copyright, and is thus not the vehicle to address many concerns about the impact of AI on creative content.

#### 1.1 Goal of this consultation

The purpose of this consultation is to continue the important fact-finding work to inform copyright policy in an era where content, including content that seems creative and original, can be routinely generated by an AI system. Canadians are invited to review the copyright policy considerations in light of their more recent experience with generative AI. This consultation paper revisits Section 2 of the 2021 consultation<sup>18</sup>, with some revisions to reflect events in the intervening period. Although the marketplace and technologies have evolved since then, the copyright policy issues essentially remain the same. While this consultation focuses on these copyright issues, the Government acknowledges that some stakeholders have raised concerns about the impacts of AI on creators and creative industries going beyond copyright per se as well.

The Government invites stakeholders to share views on potential copyright policy directions described in this paper, as well as evidence of a technical nature. The types of technical evidence sought in this consultation include information about how copyright-protected content is accessed, collected and encoded in training datasets; how training datasets are used in the development of AI systems; whether training datasets form part of AI systems after they are trained; the involvement of humans in the development and deployment of AI systems; and how businesses and consumers use AI systems as well as AI-assisted and AI-generated works. The Government also invites comments on legislative and jurisprudential developments related to AI and copyright in other jurisdictions, as Canada remains

<sup>&</sup>lt;sup>15</sup> See for example, "Association acadienne des artistes professionnel.le.s du Nouveau-Brunswick (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" (September 17, 2021), online: Government of Canada (in French only) https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyrightpolicy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/association-acadienne-desartistes-professionnelles-du-nouveau-brunswick, "Coalition for the Diversity of Cultural Expressions (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)", online: Government of Canada https://isedisde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-moderncopyright-framework-artificial-intelligence-and-internet-things/coalition-diversity-cultural-expressions-cdce-00530; "Music Canada (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" (September 17, 2021), online: Government of Canada https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-frameworkpolicy/copyright-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/music-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/music-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/music-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/music-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/music-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/music-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/music-policy/submission-graduate-gradua canada-00555.

16 Bill C-27, An Act to enact the Consumer Privacy Protection Act, the Personal Information and Data Protection Tribunal Act and

the Artificial Intelligence and Data Act and to make consequential and related amendments to other Acts, 1st Sess, 44th Parliament,

<sup>17 &</sup>quot;Voluntary Code of Conduct on the Responsible Development and Management of Advanced Generative AI Systems" (September 2023), online: Government of Canada https://ised-isde.canada.ca/site/ised/en/voluntary-code-conduct-responsibledevelopment-and-management-advanced-generative-ai-systems.

18 "A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things", supra note 12.

mindful of approaches taken by its international partners that could serve the needs of a functioning copyright marketplace.

In considering possible copyright policy options relating to AI, the Government will aim to balance two main objectives:

- a) To support innovation and investment in AI and other digital and emerging technologies in all sectors in Canada. AI has tremendous potential for society if used ethically and responsibly, and could also drive productivity growth across the economy.
- b) To support Canada's creative industries and preserve the incentive to create and invest provided by the rights set out in the Canadian *Copyright Act* (the Act), including to be adequately remunerated for the use of their works or other copyright subject matter.

### 2. Discussion

Developments in AI are raising a broad range of copyright policy questions that have a bearing on innovation, investment, and remuneration for copyright owners in Canada. Given that the rise of generative AI is the driver behind this consultation, this paper focuses on AI systems that use machine learning<sup>19</sup> models.

The major questions for copyright policy can be grouped into three categories. The first category relates to text and data mining (TDM) and the training of machine learning models, which involves the reproduction of large quantities of data, including those extracted from copyright-protected content (section 2.1). This includes questions about the impact on rights holders' rights under the Act, including when and how rights holders could or should be compensated for the use of copyright-protected content as inputs in the development of Al. The second category relates to the increasing capacity of Al systems to generate or assist in the production of creative outputs, including text, images, and music (section 2.2). This includes questions about how to attribute and determine copyright protection on Al-generated content and Al-assisted content. The third category relates to the use and commercialisation of Al systems and the liability for any infringement that occurs (section 2.3). This includes questions regarding the determination of the persons liable when Al-generated outputs infringe copyright-protected works.

### 2.1 Text and data mining (TDM)

Text and data mining (TDM) consists of the reproduction and analysis of large quantities of data and information, including those extracted from copyright-protected content, to identify patterns and make predictions.<sup>20</sup> TDM is an essential step in the training of machine learning models.<sup>21</sup> This technique enables the model to 'learn' to recognize and reproduce patterns that will enable it to accomplish certain tasks, including generating poetry, music, or artwork. Beyond generative AI, TDM can also advance science, and help businesses solve problems, innovate, and create more value.

Following the rise of generative AI tools such as ChatGPT and DALL-E, some rights holders have expressed growing concerns about the use of copyright-protected content by developers in training machine learning models, without the rights holders consenting or receiving due credit and compensation. For them to enforce their rights and seek remuneration for the use of copyright-protected content in TDM activities. On the other hand, the AI industry points to economic opportunities for Canada and argues that the copyright framework should enable the use of copyright-protected content for the training of machine learning models. Because of the large quantity of data often involved in training

\_

<sup>&</sup>lt;sup>19</sup> The ISO/IEC defines machine learning model as: "a mathematical construct that generates an inference or prediction based on input data." See , ISO/IEC DIS 22989:2022, Information technology – Artificial intelligence – Artificial intelligence concepts and terminology (2022), online: ISO/IEC <a href="https://www.iso.org/obp/ui/#iso:std:iso-iec:22989:dis:ed-1:v1:en">https://www.iso.org/obp/ui/#iso:std:iso-iec:22989:dis:ed-1:v1:en</a>.

<sup>&</sup>lt;sup>20</sup> The 2019 EU Directive on Copyright and Related Rights in the Digital Single Market defines TDM as: "any automated analytical technique aimed at analysing text and data in digital form in order to generate information which includes but is not limited to patterns, trends and correlations." See European Union, Directive on Copyright and Related Rights in the Digital Single Market [EU Directive] (2019), online: European Union <a href="https://eur-lex.europa.eu/eli/dir/2019/790/oj">https://eur-lex.europa.eu/eli/dir/2019/790/oj</a>.

On how TDM is used to train AI, see Eleonora Rosati, "Copyright as an Obstacle or an Enabler? A European Perspective on Text and Data Mining and its Role in the Development of AI Creativity" (2019) Asia Pacific Law Review, online: Elsevier <a href="https://papers.srn.com/sol3/papers.cfm?abstract\_id=3452376.">https://papers.srn.com/sol3/papers.cfm?abstract\_id=3452376.</a>
 See for example, "This Sudbury, Ont., illustrator learned AI used his art without his consent" and "Whose art is this, really? Inside

<sup>&</sup>lt;sup>22</sup> See for example, "This Sudbury, Ont., illustrator learned Al used his art without his consent" and "Whose art is this, really? Inside Canadian artists' fight against Al", supra note 4.

<sup>&</sup>lt;sup>23</sup> On TDM licensing of text-based works see for example, "Access Copyright (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" (September 17, 2021), online: Government of Canada <a href="https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/access-copyright-00510.

such models, in particular when sourced from the Internet, obtaining any necessary authorisation from rights holders to make reproductions of the works or other subject matter in the course of these activities could be a significant burden. 24

As the Government aims to balance innovation and incentives to creativity, the main copyright policy question arising in this section is whether amendments should be introduced in the Act to clarify how the copyright framework applies to TDM activities and, if so, what those amendments should be. Specifically, the Government seeks to better understand how the Act could or should address concerns raised by creators, while ensuring it does not represent a significant hurdle for AI innovation. The Act exists to promote the creation and distribution of content, to foster investment and job creation, promote just rewards for creators, and to create a thriving marketplace that offers consumers choice and access to diverse content.<sup>25</sup> The Act generally achieves this balance by providing exclusive rights to authors on their works, which prevents others from reproducing all or a substantial part of the works, while limiting these rights through certain exceptions.<sup>26</sup>

Two existing exceptions to copyright infringement could potentially apply in the context of TDM activities: 1) the fair dealing exception for research in section 29; and, 2) the exception for temporary reproductions for technological processes in section 30.71.27 Fair dealing allows for the use of copyright-protected content that might otherwise amount to copyright infringement under certain conditions.<sup>28</sup> A Canadian court applied this framework in the context of a "web-crawler" TDM activity. In that case, the crawler gathered text and photos from websites to populate the defendant's own website.<sup>29</sup> The court found the activities infringing but uncertainty remains as to whether the same analysis would apply to other types of TDM activities conducted for different purposes.

As for the exception for technological processes, the Copyright Board of Canada interpreted this provision as "intended to capture copies that happen automatically, or without the direct control of the user", and that are automatically deleted once the technological process is completed.<sup>30</sup> Like in the case of fair dealing, there is uncertainty as to whether and to what extent this exception would apply to various TDM activities. For example, while some TDM activities may require making ephemeral copies, other TDM may require copies of works to be stored indefinitely, which would make this provision inapplicable.

In addition to economic rights, the Act also grants authors certain moral rights in their works, including, where reasonable in the circumstances, a right to be attributed as the author where one's work is

<sup>&</sup>lt;sup>24</sup> "Microsoft and GitHub (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)", supra note 6; "IP Scholars (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" and "Canadian Federation of Library Associations and Canadian Association of Research Libraries (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)", supra note

<sup>&</sup>lt;sup>25</sup> In Théberge v Galerie d'Art du Petit Champlain Inc., the Supreme Court of Canada described the purpose of copyright as a "a balance between promoting the public interest in the encouragement and dissemination of works of the arts and intellect and obtaining a just reward for the creator (or, more accurately, to prevent someone other than the creator from appropriating whatever benefits may be generated)." See Théberge v Galerie d'Art du Petit Champlain Inc., 2002 SCC 34, at para. 30, online: CanLII https://www.canlii.org/en/ca/scc/doc/2002/2002scc34/2002scc34.html#par30.

<sup>&</sup>lt;sup>26</sup> See generally, Copyright Act, RSC 1985, c C-42, s. 3(1), ss. 29-32.3.

<sup>&</sup>lt;sup>27</sup> There are other exceptions in the Act that could apply to TDM, but they would likely apply in more limited situations and to a

csc.lexum.com/scc-csc/scc-csc/en/item/2125/index.do.

29 See Century 21 Canada Limited Partnership v Rogers Communications Inc., 2011 BCSC 1196, online: CanLII https://www.canlii.org/en/bc/bcsc/doc/2011/2011bcsc1196/2011bcsc1196.pdf. Another case that examined fair dealing in the context of reproductions of images on public websites is Trader v CarGurus, 2017 ONSC 1841, online: CanLII https://www.canlii.org/en/on/onsc/doc/2017/2017onsc1841/2017onsc1841.html.

30 See SOCAN, Re: Sound, CSI, Connect/SOPROQ, Artisti - Tariff for Commercial Radio, 2011-2017 (2016), at para. 175-186,

online: Copyright Board https://decisions.cb-cda.gc.ca/cb-cda/decisions/en/366778/1/document.do.

reproduced or used in other enumerated ways. The use of copyright-protected works to train Al systems may thus raise questions about the need to provide an obligation to disclose what content is used in Al training processes. However, the task of distinguishing protected content from unprotected content may be challenging and raise questions about what would be reasonable in the circumstances.

### 2.1.1 Previous stakeholder engagement

In response to the 2021 consultation, stakeholders widely commented on the use of copyright-protected works in the training of AI systems. Stakeholders from the technology sector, scholars, and user groups generally argued for clarifying that the use of works in TDM should not require additional authorization from rights holders, either as a result of expansion of the fair dealing exception or through the creation of a new exception. They asserted that TDM falls outside the scope of copyright protection, as the process does not rely on the creative expression underlying the copyright-protected content, nor exploit it. They also argue that access to a greater variety of more recent copyright-protected content in the development of AI technology will help foster innovation and reduce bias in AI algorithms that would occur if the training was limited to public domain content that may not reflect evolving cultural awareness and diversity of voices.<sup>31</sup>

On the other hand, creative industries argued that an explicit exception to copyright infringement for TDM is not desirable, as it would preclude rights holders from receiving fair compensation for the use of works. In any event, they were of the view that any amendment to the Act in this regard would be premature since it could undermine the development of market licensing solutions in the nascent Al industry.<sup>32</sup>

The views stakeholders shared in the 2021 consultation were very similar to those they expressed before the Standing Committee on Industry and Technology (INDU) during the 2018-19 parliamentary review of the *Copyright Act*. Technology sector businesses and researchers perceived existing exceptions in the Act as not well suited to the needs of TDM.<sup>33</sup> For their part, the rights holder community made few remarks about TDM during the review, but expressed the general view that there are too many exceptions in the Act and that additional exceptions could deprive them of revenues or harm their ability to exploit their works.<sup>34</sup>

#### 2.1.2 Approaches in other jurisdictions

In recent years, some of Canada's international partners have increased clarity in their jurisdiction that the use of copyright-protected content for certain TDM activities does not infringe copyright. Some

<sup>&</sup>lt;sup>31</sup> "Microsoft and GitHub (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)", *supra* note 6; "IP Scholars (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" and "Canadian Federation of Library Associations and Canadian Association of Research Libraries (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)", *supra* note 14.

<sup>&</sup>lt;sup>32</sup> "Association acadienne des artistes professionnel.le.s du Nouveau-Brunswick (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)", "Coalition for the Diversity of Cultural Expressions (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)" and "Music Canada (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)", supra note 15.

<sup>&</sup>lt;sup>33</sup> See for example, *Promoting Artificial Intelligence in Canada: A Proposal for Copyright Reform,* Element Al Inc. (brief) (3 October 2018), online: House of Commons, INDU <a href="https://www.ourcommons.ca/Content/Committee/421/INDU/Brief/BR10078507/brexternal/ElementAl-e.pdf">https://www.ourcommons.ca/Content/Committee/421/INDU/Brief/BR10078507/brexternal/ElementAl-e.pdf</a>.

<sup>&</sup>lt;sup>34</sup> See for example, *Untitled*, Brush Education (brief) (15 August 2018), online: House of Commons, INDU <a href="https://www.ourcommons.ca/Content/Committee/421/INDU/Brief/BR10008276/br-external/BrushEducationInc-e.pdf">https://www.ourcommons.ca/Content/Committee/421/INDU/Brief/BR10008276/br-external/BrushEducationInc-e.pdf</a>; or, *Untitled*, I'Association acadienne des artistes professionnels du Nouveau-Brunswick (brief) (10 December 2018), online: House of Commons, INDU <a href="https://www.ourcommons.ca/Content/Committee/421/INDU/Brief/BR10268365/br-external/AssociationAcadienneDesArtistesProfessionnel-le-sDuNouveauBrunswick-9959774-e.pdf</a>.

elected to introduce specific TDM exceptions to copyright infringement in their legislation. For instance, Japan and Singapore both implemented broad exceptions covering TDM activities, while Switzerland and the United Kingdom (UK) have implemented narrower exceptions limited to TDM activities conducted for scientific research and non-commercial research respectively.<sup>35</sup> As of June 2023, the UK is also working with users and rights holders to produce a code of practice on copyright and AI, with the aim of making licences for data mining more available.<sup>36</sup>

Moreover, the European Union (EU) adopted a directive in 2019 requiring its member states to provide two mandatory TDM exceptions: one applying to research organizations and cultural heritage institutions for the purposes of scientific research (Article 3), and another applying to anyone and for any purposes (Article 4). Rights holders can exclude their content from the application of the broader exception set out in Article 4, including through contractual terms and the use of machine-readable means for online content.<sup>37</sup>

The United States (US) does not have an explicit exception for TDM in its copyright legislation. However, certain appellate-level courts have provided guidance about the extent to which copies made as part of TDM activities would constitute fair use.<sup>38</sup> Lawsuits recently initiated in the US by creators for the use of their works in the training of AI may provide more guidance on the application of fair use in this context.<sup>39</sup> Additional clarity could also arise following the consultation on copyright and AI launched by the US Copyright Office in August 2023, which notably seeks stakeholder feedback on TDM.<sup>40</sup>

Finally, it is worth noting that in December 2022, Israel's Ministry of Justice issued an opinion concluding that apart from certain circumstances (e.g. training a system on the works of a single author), the use of copyright-protected materials for TDM is permitted in most circumstances under its existing copyright doctrines and will typically be covered by its fair use doctrine.<sup>41</sup>

### 2.1.3 Call for evidence and possible way forward for Canada

In light of the recent marketplace shift in the use of AI systems, the Government is seeking more information on the nature of TDM activities in Canada and the views of stakeholders on whether and how to clarify TDM activities under the copyright framework. For that purpose, this consultation paper asks the following questions that arise in the development of possible copyright policy measures regarding TDM:

<sup>38</sup> See *Authors Guild v Google, Inc.*, 804 F (3d) 202 (2d Cir 2015), online: Google Scholar <a href="https://scholar.google.ca/scholar\_case?case=2220742578695593916&hl=en&as\_sdt=6&as\_vis=1&oi=scholar\_and Authors Guild v HathiTrust, 755 F (3d) 87 (2d Cir 2014), online Google Scholar <a href="https://scholar.google.ca/scholar.google.c

<sup>&</sup>lt;sup>35</sup> Copyright Act 2021, Singapore, ss. 243-44, online: Singapore Statutes Online <a href="https://sso.agc.gov.sg/Acts-Supp/22-2021/Published/?ProvIds=pr243-.pr244-">https://sso.agc.gov.sg/Acts-Supp/22-2021/Published/?ProvIds=pr243-.pr244-</a>; Federal Act on Copyright and Related Rights, Switzerland, AS 1993 1798, s.24d, online: Fedlex <a href="https://www.fedlex.admin.ch/eli/cc/1993/1798">https://www.fedlex.admin.ch/eli/cc/1993/1798</a> 1798 1798/en#art 24 d; Copyright, Designs and Patents Act 1988, United Kingdom, 1988 c. 48, s. 29A, online: National Archives <a href="https://www.legislation.gov.uk/ukpga/1988/48/section/29A">https://www.legislation.gov.uk/ukpga/1988/48/section/29A</a>; see for Japan, Tatsuhiro Ueno, "The Flexible Copyright Exception for 'Non-Enjoyment' Purposes – Recent Amendment in Japan and Its Implication" (2021) 70:2 GRUR International 145.

<sup>&</sup>lt;sup>36</sup> "The government's code of practice on copyright and AI" (June 29, 2023), online: online: UK Intellectual Property Office <a href="https://www.gov.uk/guidance/the-governments-code-of-practice-on-copyright-and-ai">https://www.gov.uk/guidance/the-governments-code-of-practice-on-copyright-and-ai</a>.

<sup>&</sup>lt;sup>37</sup> EU Directive, supra note 20.

https://scholar.google.ca/scholar case?case=4571528653505160061&hl=en&as\_sdt=6&as\_vis=1&oi=scholarr.

39 For more information, see "Sarah Silverman sues OpenAl and Meta claiming Al training infringed copyright" and "More writers sue OpenAl for copyright infringement over Al training", *supra* note 11; Pamela Samuelson, "Generative Al meets copyright" (2023) Science 381 158.

<sup>&</sup>lt;sup>40</sup> "Copyright Office Issues Notice of Inquiry on Copyright and Artificial Intelligence", *supra* note 9.

<sup>&</sup>lt;sup>41</sup> Ministry of Justice (Israel), "Opinion: Uses of Copyrighted Materials for Machine Learning" (December 18, 2022), online: Israeli Government <a href="https://www.gov.il/BlobFolder/legalinfo/machine-learning/he/18-12-2022.pdf">https://www.gov.il/BlobFolder/legalinfo/machine-learning/he/18-12-2022.pdf</a>.

- i. What would more clarity around copyright and TDM in Canada mean for the Al industry and the creative industry?
- ii. Are TDM activities being conducted in Canada? Why is it the case or not?
- iii. Are rights holders facing challenges in licensing their works for TDM activities? If so, what is the nature and extent of those challenges?
- iv. What kind of copyright licenses for TDM activities are available, and do these licenses meet the needs of those conducting TDM activities?
- v. If the Government were to amend the Act to clarify the scope of permissible TDM activities, what should be its scope and safeguards? What would be the expected impact of such an exception on your industry and activities?
- vi. Should there be any obligations on AI developers to keep records of or disclose what copyright-protected content was used in the training of AI systems?
- vii. What level of remuneration would be appropriate for the use of a given work in TDM activities?
- viii. Are there TDM approaches in other jurisdictions that could inform a Canadian consideration of this issue?

All comments on whether and how to clarify TDM activities under the copyright framework are welcome, including additional ideas, legal analysis, and supporting evidence and data.

### 2.2 Authorship and ownership of works generated by Al

Aided by increasingly more sophisticated TDM, machine learning, and other technological advancements, AI can now create content that is difficult to distinguish from content created by human persons. The creation of a work or other subject matter by AI may involve some degree of human input, either by programmers or users instructing an AI application to perform its task. For instance, generative AI systems often produce creative content prompted by short instructions from users. Over the years, AI systems' capacity to independently generate works or other subject matter has increased and that is only expected to continue. There are now a number of AI applications that can write movie scripts, software, and music with little human input beyond the development of the AI itself.

Although the Act does not explicitly define the term "author", Canadian copyright jurisprudence suggests that 'authorship' must be attributed to a natural person who exercises skill and judgment in creating the work, reflective of the fact that the Act ties the term of protection to the life and death of an author. A human may contribute sufficient skill and judgment in a work produced with the assistance of Al technologies to be considered the author of the work. However, it is far less probable that this criterion would be met for works produced by generative Al systems, such as ChatGPT and DALL-E, based solely on short instructions by human users.

Rapid developments in AI technology, combined with its burgeoning application across various sectors of the economy, lead the Government to consider whether the Act is suited to address questions of authorship and ownership of AI-generated works or AI-assisted works. Moreover, the Government is considering whether, even if the Act is suited to address these issues, additional clarity regarding the authorship and ownership of such works could be provided to create more certainty in the marketplace. In considering these questions, the Government aims to ensure the Act supports creators and the creative industries in Canada, while also fostering Canada's competitiveness in AI, innovation and access to creative content.

<sup>&</sup>lt;sup>42</sup> CCH Canadian Ltd. v Law Society of Upper Canada, supra note 28; Setana Sport Limited v 2049630 Ontario Inc. (Verde Minho Tapas & Lounge), 2007 FC 899, at para. 4, Online: CanLII https://www.canlii.org/fr/ca/cfpi/doc/2007/2007cf899/2007cf899.html.

As discussed in more detail below, there could be ways of clarifying first ownership of Al-generated or Al-assisted works by reconsidering how to define an author, or even without relying on authorship.<sup>43</sup> For certain works (e.g. works by employees) and other copyright subject matter (i.e. a performance or sound recording), the Act already provides for a first owner of copyright other than an author.<sup>44</sup> However, considering the varying degrees of human contribution in the development and use of Al technologies, the persons who could be the appropriate authors and first owners of Al-generated or Al-assisted works (e.g., Al developer, deployer, or user) remains an open question.<sup>45</sup>

### 2.2.1 Previous stakeholder engagement

In response to the 2021 consultation, stakeholders from a wide spectrum argued that granting protection to Al-generated works would be a shift from promoting human creativity, which is central to the Canadian copyright framework.<sup>46</sup> In any case, many stakeholders found it was premature for Canada to take a position on authorship and ownership of Al-generated works. They were of the view that this question should be addressed once Al is further developed and implemented, as rapid intervention could result in unforeseen consequences.<sup>47</sup> Some of these stakeholders, including from the creatives industries, were, however, open to exploring the possibility of providing 'thin' copyright protection on Al-generated works (e.g., inspired by the protection regimes for other copyright subject matter) when the circumstances would warrant.<sup>48</sup> Only four submissions genuinely supported a form of copyright protection for Al-generated works. The range of views stakeholders shared in the 2021 consultation was similar to those expressed during the 2018-19 parliamentary review of the *Copyright Act.*<sup>49</sup>

It is also worth noting that since the 2021 consultation, some academics and commentators expressed concerns about the registration by the Canadian Intellectual Property Office (CIPO) of AI-generated works.<sup>50</sup> Canadian registration provides refutable evidence, which can be challenged in court, that copyright exists in a work and that the person registered is the owner of the copyright.<sup>51</sup> In

<sup>&</sup>lt;sup>43</sup> See Rex Shoyama, "Intelligent Agents: Authors, Makers and Owners of Computer Generated Works in Canadian Copyright Law" (2005) 4:2 Canadian Journal of Law and Technology, online: Dalhousie University <a href="https://digitalcommons.schulichlaw.dal.ca/cgi/viewcontent.cgi?article=1063&context=cilt.">https://digitalcommons.schulichlaw.dal.ca/cgi/viewcontent.cgi?article=1063&context=cilt.</a>

<sup>&</sup>lt;sup>44</sup> Copyright Act, s. 24, supra note 26. With regard to a performer's performance, a sound recording, and a communication signal, the first owner of the copyright is the performer, maker, and broadcaster that broadcasts it, respectively.

<sup>&</sup>lt;sup>45</sup> See generally Mark Perry & Thomas Margoni, "From Music Tracks to Google Maps: Who Owns Computer-Generated Works?" 11-2010 Western University Scholarship@Western Law Publications, online: The University of Western Ontario <a href="https://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1026&context=lawpub">https://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1026&context=lawpub</a>.

<sup>&</sup>lt;sup>46</sup> See for example, "Canadian Federation of Library Associations and Canadian Association of Research Libraries (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)" and "IP Scholars (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" *supra* note 14; "Coalition for the Diversity of Cultural Expressions (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)", *supra* note 15.

<sup>&</sup>lt;sup>47</sup> See for example, "Coalition for the Diversity of Cultural Expressions (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)" and "Music Canada (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)", supra note 15; "SACD-Canada et SCAM-Canada (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)" (September 2021), online: Government of Canada <a href="https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-modern-copyright-framework-artificial-intelligence-and-internet-things/societe-des-auteurs-et-compositeurs-dramatiques-sacd-canada-et-societe-civile-des." (\*\*B. It.: a) \*\*Things\*\* (\*\*Internet\*)\*\* (\*\*Internet

<sup>&</sup>lt;sup>49</sup> Canada, Parliament, House of Commons, Standing Committee on Industry, Science and Technology, *Statutory Review of the Copyright Act: Report of the Standing Committee on Industry, Science and Technology,* 16th report, 42nd Parliament, 1st session (June 2019), online: Government of Canada <a href="https://publications.gc.ca/collections/collection\_2019/parl/xc39-1/XC39-1-1-421-16-eng.pdf">https://publications.gc.ca/collections/collection\_2019/parl/xc39-1/XC39-1-1-421-16-eng.pdf</a> at 50-51.

eng.pdf at 50-51.

50 See for example, "Canadian Copyright Registration for my 100 Percent Al-Generated Work" (April 19, 2023), online: Hugh Stephens Blog https://hughstephensblog.net/2023/04/19/canadian-copyright-registration-for-my-100-percent-ai-generated-work/; Carys Craig (@CarysCraig) (February 8, 2022), online: Twitter <a href="https://twitter.com/CraigCarys/status/1491152228077686784">https://twitter.com/CraigCarys/status/1491152228077686784</a>.

51 Copyright Act, s. 53(2), supra note 26.

administering the Copyright Registry, CIPO does not examine the claims made in applications for copyright registration.

### 2.2.2 Approaches in other jurisdictions

Notable approaches in other jurisdictions to address authorship issues around Al-generated works are those of the UK, Ireland, and New Zealand, which attribute authorship of computer-generated works to the person who arranged for the created work. The UK Copyright Designs and Patents Act states that "in the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken." Recently, the UK Intellectual Property Office consulted on Al and intellectual property, notably asking for views on copyright protection for computer-generated works without a human author. In its response to the consultation, the UK government announced its decision to not change the existing law as there was no evidence at that time that protection for computer-generated works is harmful, and the use of Al to generate creative content was still in its early stages. In the US, works made without any creative contribution from a human actor cannot be protected by copyright but works containing human-authored elements combined with Al-generated images can be, so long as the Al contributions are the result of an author's own original mental conception.

### 2.2.3 Call for evidence and possible approaches in Canada

Al capabilities to generate creative content continue to evolve, with uncertain ramifications for creators, rights holders, innovators and content users. In light of the recent marketplace shift in the use of Al systems, the Government invites stakeholders to share their views and present evidence in response to the following questions:

- i. Is the uncertainty surrounding authorship or ownership of AI-assisted and AI-generated works and other subject matter impacting the development and adoption of AI technologies? If so, how?
- ii. Should the Government propose any clarification or modification of the copyright ownership and authorship regimes in light of Al-assisted or Al-generated works? If so, how?
- iii. Are there approaches in other jurisdictions that could inform a Canadian consideration of this issue?

The Government is seeking the views of stakeholders on three approaches that could be considered in Canada to address uncertainties surrounding the authorship and ownership of works generated by AI or created with the assistance of AI. Each of these approaches would have fundamentally different consequences for the marketplace, and introduce unique ancillary policy issues to resolve. These three approaches are presented for discussion purposes and do not foreclose other possible approaches that could come to light as a result of further analysis and stakeholder responses to the above questions.

A. <u>Clarify that copyright protection apply only to works created by humans.</u> As a result of this approach, it would be clear that any works generated by AI without a minimum creative contribution from a human author would immediately fall into the public domain for others to

53 "Artificial Intelligence and Intellectual Property: copyright and patents: Government response to Consultation", *supra* note 9.
 54 See Copyright Office, "Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence" (16 March 2023), online: Federal Register <a href="https://www.federalregister.gov/documents/2023/03/16/2023-05321/copyright-registration-guidance-works-containing-material-generated-by-artificial-intelligence.">https://www.federalregister.gov/documents/2023/03/16/2023-05321/copyright-registration-guidance-works-containing-material-generated-by-artificial-intelligence.</a>

<sup>&</sup>lt;sup>52</sup> Copyright, Designs and Patents Act 1988 (UK), s. 9, supra note 35.

use without permission.<sup>55</sup> However, when a human author uses an AI to generate a work and in the process contributes skill and judgment to the work, that human would be the author and first owner, and the work would not immediately fall into the public domain. While this approach could add some clarity for market participants and the courts, the difficulty in differentiating human from non-human contributions to AI-assisted works would remain a challenge.

- B. Attribute authorship on Al-generated works to the person who arranged for the work to be created. This approach would be similar to the UK's copyright framework. This could require establishing factors to distinguish between AI-assisted works that meet the human authorship threshold from those that do not. This approach could mean that Al-generated works receive similar copyright protection as works created by humans.
- C. Create a new and unique set of rights for Al-generated works. Such an approach would grant economic rights on Al-generated works to a person who did not provide any original contribution to such works (e.g., Al developer, deployer, or user), without deeming that person an author.<sup>56</sup> Additional evidence would be required to establish which new and different rights would subsist in such works,<sup>57</sup> and to guide a number of policy choices, including the appropriate term of protection and the remedies in case of infringement. There are precedents in the Act of granting rights to non-authors. For instance, the Act grants rights to the maker of a sound recording, who is the person by whom the arrangements necessary for the first fixation of the sounds are undertaken.<sup>58</sup>

All comments on whether and how to clarify authorship and ownership of Al-assisted or Al-generated works under the copyright framework are welcome, including additional ideas and other possible approaches, <sup>59</sup> legal analysis, and supporting evidence and data.

# 2.3 Infringement and liability regarding Al

Infringement and liability surrounding AI-generated works is the third policy area that raises questions of copyright law. Given the novelty of AI technologies, Canadian courts have not yet rendered decisions regarding liability for infringement that may result from the use of AI, either through the inputs used to train an AI or through the outputs generated by an AI system in the form of works. This section focuses on the potential for AI to generate works that infringe the copyright in other works, or for an AI application itself to be found to infringe copyright.

First, it could be difficult for a copyright owner who is alleging infringement in the AI application or AIgenerated work to identify the person, or persons, responsible and to establish liability in a court. Determining liability and infringement may become increasingly complex as the level of human

<sup>&</sup>lt;sup>55</sup> This is the approach recommended in Daniel J. Gervais, "The Machine as Author" (2020) 105:5 Iowa Law Review 2053, online: University of Iowa https://ilr.law.uiowa.edu/print/volume-105-issue-5/the-machine-as-author/ and in Carys Craig, "Al and Copyright Law" in Florian Martin-Bariteau & Teresa Scassa (eds), Artificial Intelligence and Law in Canada (2021), Ottawa: LexisNexis. <sup>56</sup> An example of such an approach was proposed by Pierre-Luc Racine, "Fostering Expressive Knowledge: The Copyrightability of Computer-Generated Works in Canada" (2020) 60:3 Law Review of the Franklin Pierce Center for Intellectual Property, online: UNH https://ipmall.law.unh.edu/sites/default/files/hosted\_resources/IDEA/60/fostering\_expressive\_knowledge\_-\_pierreluc racine 60 3.pdf.

The rights set out in s. 3(1) of the Copyright Act were designed to serve human authors. Therefore, some of these rights might not be appropriate for works generated by Al.

<sup>&</sup>lt;sup>58</sup> Copyright Act, s. 18, supra note 26.

<sup>&</sup>lt;sup>59</sup> See for example, Tom Lebrun, "L'apprentissage machine est une appropriation" (2018) 30:3 Les cahiers de la propriété intellectuelle, online: CPI https://cpi.openum.ca/articles/v30/n3/lapprentissage-machine-est-une-appropriation/. Lebrun suggests that works generated by AI should be considered "reproductions".

involvement in Al-generated works decreases and Al's capacity to independently create works increases. These uncertainties pertain both to primary infringement, as well as secondary infringement, which occurs when a person knows or should have known that a copy is infringing copyright and undertakes a secondary act in relation to that infringing copy that contravenes the Act. 60 In the context of AI, secondary infringement might arise when users distribute content they asked an Al system to generate and that content infringes copyright.

Another consideration in this regard relates to establishing infringement by reproduction. A plaintiff must establish that the infringing party had access to the original copyrighted work, that the original work was the source of the copy, and that all or a substantial portion of the work was reproduced.<sup>61</sup> Al presents many challenges to establishing these facts, as it may be difficult to determine whether a programmer, user, some other party, or the AI itself accessed the plaintiff's work in the process of generating or contributing to an infringing work, and whether access by one of those parties can be imputed to the others. It may be even more difficult to establish that a substantial part of a work was reproduced during this process.

In this context, the Government is calling for additional evidence from stakeholders to help guide consideration of whether and how to amend the Act to provide more clarity in the marketplace. Removing ambiguity in these policy areas could have a positive impact on the marketplace, facilitate more efficient enforcement of copyright, and further support innovation and investment in Al. While international discussions regarding liability for infringement by an Al-generated work are taking place in various countries and at WIPO,62 no country appears to have introduced amendments to their copyright law to provide greater clarity with respect to infringement and liability regarding AI.

### 2.3.1 Previous stakeholder engagement

The Government particularly invites stakeholder views on copyright liability regarding Al since during the 2021 consultation, a mere 12 submissions discussed this question and did so only very briefly. Some stakeholders were of the view that existing liability rules in the Act are sufficient, while others noted that more evidence of how AI technology is used is needed before reviewing copyright infringement and liability regimes.<sup>63</sup> A few stakeholders, however, provided more detailed views. A stakeholder from the music industry suggested implementing record-keeping requirements for those involved in the development and deployment of Al.<sup>64</sup> Moreover, library associations recommended that in the event there is no protection for Al-generated works, control mechanisms should be

<sup>60</sup> Copyright Act, s. 27, supra note 26.

<sup>&</sup>lt;sup>61</sup> See for example Société des lotteries du Québec v Club Lotto International C.L.I. Inc., [2001] FCJ 94 at para. 124, 204 FTR 21, online: Federal Court

https://decisions.fct-cf.gc.ca/fc-cf/decisions/en/item/38201/index.do?q=fair+dealing&alternatelocale=en\_and

U & R Tax Services Ltd v H & R Block Canada Inc, [1995] F.C.J. No. 962 at para. 35, 62 C.P.R. (3d) 257.

<sup>62</sup> World Intellectual Property Organization, Revised Issues Paper on Intellectual Property Policy and Artificial Intelligence (May 29, 2020), online: WIPO https://www.wipo.int/meetings/en/doc\_details.jsp?doc\_id=499504 at issue 8.

<sup>63</sup> See for example, "Microsoft and GitHub (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)", supra note 6; "Intellectual Property Institute of Canada (IPIC) (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things)" (September 17, 2021), online: Government of Canada https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissionsconsultation-modern-copyright-framework-artificial-intelligence-and-internet-things/intellectual-property-institute-canada-ipic-00548; "Association of Canadian Publishers (ACP) (Submission to A Consultation on a Modern Copyright Framework for Artificial

Intelligence and the Internet of Things)" (September 17, 2021), online: Government of Canada https://ised-

isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/copyright-policy/submissions-consultation-moderncopyright-framework-artificial-intelligence-and-internet-things/association-canadian-publishers-acp.

64 "Music Canada (Submission to A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of

Things)", supra note 15.

implemented to ensure that AI-generated content infringing copyright-protected works is removed from circulation by the owner of the AI system that produced such content.<sup>65</sup>

### 2.3.2 Call for evidence regarding liability

The Government welcomes receiving both additional evidence and recommendations on possible measures before considering whether and how Canada's copyright framework should be clarified with respect to infringement and liability by AI applications, AI-generated works, and AI-assisted works. To advance policy discussions, the Government welcomes responses to the following questions:

- i. Are there concerns about existing legal tests for demonstrating that an Al-generated work infringes copyright (e.g. Al-generated works including complete reproductions or a substantial part of the works that were used in TDM, licensed or otherwise)?
- ii. What are the barriers to determining whether an AI system accessed or copied a specific copyright-protected content when generating an infringing output?
- iii. When commercialising AI applications, what measures are businesses taking to mitigate risks of liability for infringing AI-generated works?
- iv. Should there be greater clarity on where liability lies when AI-generated works infringe existing copyright-protected works?
- v. Are there approaches in other jurisdictions that could inform a Canadian consideration of this issue?

All comments on whether and how to clarify infringement and liability regarding Al are welcome, including additional ideas, legal analysis, and supporting evidence and data.

<sup>&</sup>lt;sup>65</sup> "Canadian Federation of Library Associations and Canadian Association of Research Libraries (Submission to *A Consultation on a Modern Copyright Framework for Artificial Intelligence and the Internet of Things*)", supra note 14.

### 3. Conclusion

The Government welcomes all comments providing additional perspectives or evidence concerning these issues and other copyright policy questions related to Al. Input could include reactions to possible approaches discussed, suggestions of other options and further supporting evidence and data. To participate, submit your feedback in our online consultation form no later than January 15, 2024. The use of this form is critical to facilitate the accessibility of content in a timely manner. Comments received through the online form will be made publicly available following the close of the consultation. If you have any questions, please contact us by email at copyrightconsultations-consultationsdroitdauteur@ised-isde.gc.ca.