EVA
EUROPEAN
VISUAL
ARTISTS

EVA Reflection Paper on Artificial Intelligence

Brussels, 5th June 2020

Table of Contents

This paper aims at exploring some copyright implications of the use of Artificial Intelligence systems in visual arts. It doesn't provide final answers, but tries to highlight what copyright challenges AI carries in the visual sector.

1. Examples of Artificial Intelligence applied to arts

- https://www.nextrembrandt.com/
- https://aimade.art/
- https://www.deeparteffects.com/
- https://deepart.io/
- https://scribit.design/
- https://www.thispersondoesnotexist.com/
- And many others : https://alternativeto.net/software/deep-art-effects/

2. Visual works as AI-input

Many AI technologies (see above) use existing real-person-created visual works or photography, such as portraits from existing people to produce new ones, which have different degrees of similarity from the original ones. In case of AI generated portrait photos the sellers point out the advantage of portraits that can be used for any purpose without the need of the persons consent. It is probably not possible to describe all possible AI applications to visual works, especially because this kind of technology is in full development and innovation happens quite fast. However, for the purpose of problem-setting we can concentrate onto four AI models using visual works as input (excluding AI-based recognition tools, addressed below):

Model A
Visual works of any kind are fed into an AI which generates similar works based on the style of the input works. Example: https://www.nextrembrandt.com/

Model B
Visual works are fed into an AI to learn an artistic style and then a user uploads to the AI another distinct picture (like a selfie) and the AI applies the learned style to that picture, creating a new work. Example: https://www.deeparteffects.com/
Of this model B, two sub-models may be identified, depending on who feeds the pictures the AI is supposed to learn the style of. Input pictures can be either provided by the AI-developer (**model B.1** – example: https://deepart.io/) or by the user of the AI-powered app/website (**model B.2** – example: https://www.deeparteffects.com/).

Model C
The user of an AI-powered app or website uploads one picture and the AI reproduces it on a given surface with real (offline) materials https://scribit.design/.

Model D
The user crops parts of a pre-existing copyrighted picture and applies it to different contexts or user-uploaded content which thus creates new not-entirely-original visual works. For instance, portrait photographs of real persons are fed into the app that creates

from cropped elements of the input new portraits of artificial persons. The product is sold as royalty free and without personal rights of the portrayed persons.

For each model there are copyright implications. An author should always be able to refuse use of its works as AI-input. Model C and D looks similar to the more standard "reproduction" use, even though it involves AI. However, it should be clarified whose economic and moral copyrights are concerned. Those liable for copyrights may be the uploader of the original work content that is fed into the application, the deployer of the service and the user.

However, it should be clarified which author's right should be protected when, in models A and B, the AI deep-learns the authors' style. Relevant protected rights may be reproduction and adaptation rights as well as "transformative use".

To be reflected on:

- does AI-learned style need to be protected by a new type of right?
- Since the AI use of these rights would be best managed collectively (i.e. by Collective Management Organisations), should CMOs update their membership mandates with regard to AI use?

In any case, in relation to online service providers using AI the reporting of uses will show challenges similar to those CMOs will be having with OCSSPs for Art. 17 contracts: how do AI owners report uses of copyrighted material when it's their users uploading most of the content (especially model B.2)? For GDPR reasons, in their Terms and Conditions AI-powered apps may give up any monitoring of users' upload because it may (or may not) remain private.

Some may argue that AI use of images as input for deep-learning is covered by data-mining exception (Art. 3 DSM 790/2019), but Art. 2 of the directive restricts the definition of data mining for the purposes of the copyright in the digital single market to techniques that "generate information", which is radically different from generating new pictures for commercial purposes.

3. Visual works as AI-output (AI-generated works)

Reflection points:

1) Does copyright apply to AI? Are AI works enough original to have copyright attached? Current EU law says copyright is attached to personal originality. Can AI have such personal originality? See case of the monkey photographer: the copyright office stated it could not register a copyright on the work because an animal could not submit a request for that. The court then stated: an animal cannot enforce its own copyright nor own it.

2) If AI can't own copyright, who holds the copyright of AI-generated works?

   2.1) Users (especially for the models B described above).

2.2) Developers. This would be very different from current copyright approach to software developers. If an artist uses Adobe to create visual works from scratch, their copyright doesn't belong to Adobe (developer of the software), but to the artist.

2.3) App owners. Like aimade.art

2.4) All of them to some extent (collaborative ownership)?

2.5) In case of AI creating works from pre-existing artworks (Models A, B, D above), should the copyright of the AI-created work belong to the author of the input-pictures?

4. AI as tool for visual works (AI-assisted works)

This seems to be the least controversial AI application, at least as long as the AI used by artists does not involve use of pre-existing works of other artists. For example, some tools of the Adobe Suite are AI-powered and that doesn't seem to pose any copyright problem.

5. AI for automated recognition tools

The proliferation of AI-generated works based on previously-existing works may increase false positives resulted from automated matching systems because the same styles may induce them to confuse original and AI-generated works. However, this is difficult to quantify or assess precisely at this stage.

About EVA

European Visual Artists (EVA) represents the interests of authors' collective management societies for the visual arts. **28 European societies** are gathered under this roof as members or observers. They manage collectively authors' rights of close to **130 000 creators** of works of fine art, illustration, photography, design architecture and other visual works.

Rue du Prince Royal 87 – 1050 Brussels
+32 2 290 92 48 - info@evartists.org
www.evartists.org