

**Subject:** My comments to “Copyright and Artificial Intelligence”

**To:**

**From:**

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Founder, TadReamk Limited

To whom this may concern,

I have three comments and suggestions regarding the copyright issues for (generative) artificial intelligence.

**Suggestion one:**

The first suggestion is to establish a set of reliable metrics for adopting automated computer systems (also in the form of AI technology) that can measure the similarities and differences between various forms of media AI has generated.

With the proliferation of generative AI products and the rapid pace at which new media is created, the speed of generation has become almost instantaneous. This makes it challenging for humans to detect and determine similarities of new media from the existing ones manually. Additionally, human perception of similarity is highly subjective, varying greatly from person to person. Therefore, it is crucial to adopt a tool that can objectively determine the similarities from media generated by AI.

Moreover, comparing media for similarity is a complex task. For instance, two images might differ in color, texture, size, shape and resolution, yet people might still agree that they convey a similar message or narrative, or reliably conclude that one infringes upon the other. Therefore, a tool that can assess similarity in a way that aligns with majority human perception is extremely valuable. Additionally, the perception of similarity is influenced by cultural and local contexts. It is crucial to understand that what is seen as dissimilar in one region might be perceived differently in another. Hence, having a tool capable of such nuanced assessment is essential in this regard.

It is also important to recognize that design similarity can sometimes result from the coincidence of similar good ideas. Such a tool should not be used to penalize creativity by merely flagging any new media that is potentially similar to existing works. Instead, a tool that transparently indicates how similar a newly created piece of media is to existing ones, even before it is officially launched or registered, can be highly beneficial to the author. This allows creators the opportunity to adjust their designs to avoid potential complaints from existing rights holders.

**Comment two:**

The second comment concerns the traceability of the so called “prompts” for GenAI. Most generative AI products create media based on prompts, where the operator inputs a set of multimodal inputs (text, images and other media) to generate a new example. By analyzing the prompts used, it is possible to infer the operator's intentions regarding potential infringement. For instance, if an genAI operator uses an existing logo as part of the input and accompanied with a specific text prompt to read:

*“Please make slight modifications to the uploaded logo to create a new version.”,*

This type of prompt clearly reveals the operator's blatant intention of infringement. In theory, such information can be traced from the generative AI developer's system, as they should log all prompts and generated media. However, obtaining this information during a dispute can be challenging. Nonetheless, new integrity mechanisms could be explored to enhance traceability. For instance, by hashing the prompt and using digital image watermarking on the final product, it would provide non-repudiation capabilities, ensuring that the origin and creator's intention of the media can be verified to certain extent.

**Comment three:**

The final point I would like to make is that generative AI's continually updated model relies on sourcing vast amounts of new training data from the public domain. Therefore, I foresee a future where many original contributors explicitly state that their new work should not be used in training certain large language models. They may achieve this by making their original creative work private or clearly expressing their desire not to participate in such model training. While we haven't seen widespread evidence of this yet, I personally believe this could become a reality as a way for individuals to protect their intellectual property. Although this approach might not be ideal for fostering openness in creativity, we should be prepared for the possibility that data could become divided in this manner, resulting in multiple large language models each trained and updated with different datasets.

**Declaration**

I would also like to disclose that, in addition to being a Professor in the Mathematics Department at Hong Kong Baptist University, I am the founder of TadReamk Limited, a startup specializing in using AI to detect infringement and create new trademarks. Therefore, I declare that my position may constitute a potential bias in the comments submitted.