

1. Abstract

Artificial intelligence (AI) machines capable of producing creative output vary significantly. The processes in each differ to the extent that it becomes difficult to determine copyright ownership in the final output. Moreover, recent years have witnessed a shift towards more autonomous algorithms, involving cognition-imitating processes. Different to traditional digital editing programs, these machines fed with large amounts of data off the Internet develop complex decision-making, bringing about unforeseen creative outcomes.

This research critically analyses the problem of allocating ownership in the final creative output. Since most copyright traditions inevitably link ownership to a human-being there is a gap in the current law. Turning to traditional rationales for copyright protection one legitimately questions who should be incentivised by granting IPRs in these works. Different answers emerge - the programmer of the algorithm, the user of the AI, the device itself, joint ownership, neighbouring rights-type of protection or even rejecting any claims of ownership in such creative output.

However, before delving into the ownership conundrum the process in each creation needs to be thoroughly comprehended. At times, parts of the initial raw material might be stored or modified or alternatively, abstract illustrations of these might be retained. Additionally, a degree of human interference during the process could appear. These peculiarities disguised as complex technical language have repercussions on the allocation of ownership in the final output.

It is important to study these issues as the near future will introduce more creative works with significantly less human involvement. The expected policy contribution of this research is to avoid a situation of discontinuity in copyright law and to adequately safeguard the author's role in the creative industries. Thus, it is preferable if the law is, if not one step ahead of innovation, at least better prepared to face the challenges caused by technology.

2. Key question to be discussed at the colloquium

- The literature has looked at the issues from a purely copyright perspective. What kind of policy concerns external or tangent to copyright law impact the allocation of ownership in the creative output of AI machines?
 - o Does competition law have an impact?
 - o Are there further data-related issues that may be relevant, in particular in the context of the Internet? - On the one hand, the EU has discussed the possibility of introducing a “data ownership right” (a right in non-personal / anonymised machine-generated data), while on the other hand in its Communication setting out its the AI strategy it has stressed the necessity to make more data publicly available as AI and machine learning thrive on huge amounts of data. How do we reconcile these two and should they be reflected in the ownership discussion?
- In the Commission's words, “AI is easily tradeable across borders, so only global solutions will be sustainable in this domain” - how do we overcome the territoriality barrier imposed by private international law?
- What is the most appropriate methodology in researching law and technology?