Where is the art in artificial intelligence? – a never-ending story

The current burst of interest in artificial intelligence and its technical, political, legal, economic, and societal impact is somewhat surprising but is long in the making. Everything seems to have been said already; but obviously not by everybody. Maybe it's time to move on to other excitements on the horizon such as the metaverse, web 3.0, and augmented/virtual reality to use just a few buzzwords. But, in the words of the philosopher Lenny Kravitz: "it ain't over till it's over". New impetus follows the release of GPT-4 on 14 March 2023 updating the "engine" for AI applications. Equally, at policy level, new announcements were made in the United Kingdom on 15th March 2023, in particular re acquiring a £900m supercomputer and addressing the relation of Intellectual Property and Artificial Intelligence. Similarly, the US Copyright Office has announced new initiatives on artificial intelligence on 16 March 2023. The artists' community has issued core principles for Ai applications in their human artistry campaign on 16 March 2023. And on and on it goes.

While much has been covered in the past decade, mainly by academic research on artificial intelligence, authoritative decisions on the impact of AI on the creative industries are still lacking. The two main areas which require further work are the availability of exceptions covering the reproductions occurring during the machine learning process; and assessment of the copyright status of purely AI generated works.

There is a disconnect between the practical application of artificial intelligence and its intellectual evaluation at the political and legal level. We live in parallel (not meta!) universes. Legislating without understanding the artificial world in practice is a difficult and thankless endeavour; and it is becoming clear that nobody possesses a full understanding of what artificial intelligence can achieve in the creative world, or of how evolved it currently is.

Services such as Dall-E, AIVA, and ChatGPT already provide outputs based on "learned" input data. They can produce "paintings", "photographs", music (mainly library music), and essays adequate to secure a "pass" – provided they have some human editing.

Technology is moving quickly from beta version "sandpit" activities to generating works that directly compete with human creativity and talent. While certain areas of music already constitute a new field for AI – such as library music for social media – algorithms still struggle with human fallibility and often dubious creative motivation. The completion by artificial intelligence of the scherzo of Beethoven's 10th Symphony is an interesting project: a pastiche of Beethoven's oeuvre, which is fascinating but evidently missing the ingenuity of the original creator, namely his creative human touch.

Creators, musicians, writers, artists have been working successfully with artificial intelligence applications for decades: for inspiration, or as tools to help express their

creativity. Creators are innovators, at the cutting edge of creativity and technology; this includes artificial intelligence applications.

Three facets of copyright apply to artificial intelligence applications based on the simplified definition of AI as algorithms use existing datasets (input) to make predictions and inferences (output).

(I) Input of data (machine learning)

The input process involves an indefinite number of reproductions of copyright works. These reproductions allow the (I) machine-learning system to identify patterns within the copied works – and thus to make predictions and inferences applied to new circumstances. These reproductions, at least in the UK and the EU, are sufficiently permanent to necessitate permissions from right-holders, unless exceptions apply.

Exceptions to copyright are still subject to discussions at policy level (for example text and data mining in the UK) and at legal level (for example in recent pending lawsuits involving Getty Images and Stability AI).

(II) AI application (algorithm)

The machine-learning system software is protected by copyright as a literary work. Other Intellectual Property rights such as patents and trademarks may also apply.

(III) Output (AI-generated or AI-assisted works)

A work created by a human with the assistance of artificial intelligence is generally owned by its author. AI is a tool through which a work is created, as opposed to being the independent creator of said work. But the delineation between AI as a tool or as generator without human input will not always be straightforward.

Many creators across different mediums already rely on AI tools to produce creative works. For example, many industry-standard software programmes used for working on digital images have AI tools that are used by artists to enhance visual aspects of their original creations. In this case, the AI tool supports manifestation of ideas of a human creator-leading to the development of a copyrightable work.

On the other hand, a work produced by an artificial intelligence application absent any human input, is currently not protected by copyright; to our knowledge this is currently the case globally, though in India an AI application has been – probably wrongly – registered as joint author.

Copyright rewards the expression of human creativity and talent, which evidently cannot exist without human creativity. AI-generated and assisted works, however, whatever their copyright status, are already competing, and will continue to compete, with human-created works.

This leads us to a parallel question about transparency. Where does the content we consume and interact with come from? And- if AI-generated- how transparent and traceable is their development? We must take careful care as we navigate these questions as a society that measures are taken to preserve trust in what the public views, reads, and listens to. Mandating that works that are AI generated are labelled as such would be a welcome start.

So discussions on artificial intelligence and its impact on creative industries will continue, hopefully in the spirit of cooperation in the mutual interest. AI will be a part of the music industry, for example – so let's ensure that the original creators of the works used to train the machine benefit as well from their creativity and talent. *Marchons*!

At the British Copyright Council, we have explored those questions over the past few years. While many questions remain, we remain unequivocal that any evolution of current laws and policies must take place through a "no harm" basis and avoid undermining copyright provisions which have underpinned the economic growth of the creative sector over the past few centuries in order to ensure that rights holders are suitably recompensated for the use of the works themselves and the development of licensing systems needed to support innovation.