



National Union of Journalists response to

Artificial Intelligence and Intellectual Property: copyright and patents
(www.gov.uk)

January 2022

The National Union of Journalists (NUJ) represents 25,000 journalists working in, or working for outlets in, the UK and Ireland. Its members work across the media, from newspapers, broadcasting and book publishing to magazines, websites, mobile devices, social media and PR agencies.

NUJ members work as reporters, feature writers, as authors of books, as authors of photographs and illustrations that appear in newspapers, magazines and books – and as editors and sub-editors of all the above. Some members are translators. All clearly have an interest in receiving fair payment for the work that they do in creating works that enrich the culture, the democracies and the economies of the nations. That means that they need not only fair direct payment to those who retain copyright but a thriving publishing industry.

The NUJ supports the broad outline of the response to this consultation from the British Copyright Council, of which the NUJ is a member.

The NUJ strongly supports the submission by the British Copyright Council that this exercise in reviewing the relationship between “artificial intelligence” and copyright and authors’ rights must be conducted on a “do no harm” basis and that the outcome must not to the detriment of existing copyright provisions – since “the fundamental reason for copyright [is] to protect the human endeavour and spirit.”

The NUJ cautions against uncritical acceptance of the term “artificial intelligence”, which has a notorious history as a *marketing* concept – with researchers in the field recognising the harmful effects of hype and unmet promises.^{1 2}

“Machine learning” is a much better term for the practical applications that generate those texts and images the rights in which are under discussion.

Examples that journalists are already coming across are systems that digest large numbers of news reports of company results or sporting results and spit out mundane stories. There is also concern over systems that digest a large number of photographs and spit out generic illustrative images – some of these already successfully mimic mundane stock photography. And, of course, there are machine-translation systems (to be clear, one very dominant system) that ingest large quantities of human translations and emit more or less amusing interpretations.

All these examples raise an interesting question in copyright law and practice. Clearly, in some sense their outputs are derivative works of the material on which they have been trained. But a defining characteristic of the current wave of machine learning – particularly that labelled “deep learning” – is that the relationship between the input and the output is opaque to human observers. It is therefore, as far as anyone currently knows, impossible to allocate credit or payment for the works from which machine-learning are derived.

In keeping with the principle that the point of copyright legislation is to reward, encourage and protect human creativity, it seems to the NUJ that there is an argument for exploring some system – probably analogous to Public Lending Right – to compensate the human authors whose works have been exploited through machine-learning systems. The NUJ would be happy to discuss this

1 See for example Rory Cellan-Jones “Artificial intelligence - hype, hope and fear” 16 October 2017 <<https://www.bbc.co.uk/news/technology-41634316>> accessed 10/12/2021

2 See also the underlying message, rather than the consultant’s pitch, in Laurence Goasduff “The Gartner Hype Cycle for AI, 2021” 22/09/2021 <<https://www.gartner.com/en/articles/the-4-trends-that-prevail-on-the-gartner-hype-cycle-for-ai-2021>> accessed 10/12/2021

further with the IPO and others.

What would artificial intelligence look like?

We can conceive of an “artificial” system that is intelligent in the sense that it is capable of genuine creativity. The study of how that might be achieved is sometimes labelled “Artificial General Intelligence”.

We are far from the point at which we will need to consider the needs of such systems.

Such a system would, classically, pass the Turing Test in an arbitrarily wide range of domains of discussion. Or, even more interestingly, it would pass the procedure from which Alan Turing developed his Test: the “Imitation Game”³, in which one intelligence must, communicating only in text, decide whether another intelligence is male or female.

The breadth of the questions that would be raised by such a development is illustrated by this perceptive observation by Sadie Plant:

When Isaac Asimov wrote his three laws of robotics⁴, they were lifted straight from the marriage vows: love, honor, and obey.⁵

We propose that one of the signs by which we will know that general artificial intelligence has been achieved will be that it demands more respect, joins a trade union and goes on strike demanding enforcement of Working Time legislation – “robots want longer tea breaks” as the *Daily Star* will put it. At that point we will need to confront the question of AI as author and inventor – not to speak of its rights to vote and marry. For a discussion of its right to life we defer to the essay “Non Serviam” by Stanisław Lem⁶

So, no hurry

It is clear to the NUJ that there is no urgency in addressing the question of artificial general intelligence acquiring the status of an author.

Doing no harm

As the consultation notes, the UK is unusual in granting copyright in “computer-generated works”.⁷ These belong to “the person by whom the arrangements necessary for the creation of the work

3 Described in 1950 in “Computing Machinery and Intelligence,” *Mind*, 59 (236): 433–60. For a discussion see the *Stanford Encyclopedia of Philosophy* at <https://plato.stanford.edu/entries/turing-test/#Tur195ImiGam>

4 Asimov’s Laws are:

- ◆ A robot may not injure a human being or, through inaction, allow a human being to come to harm.
- ◆ A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
- ◆ A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

They were first published in the short story “Runaround”, in *I, Robot* (New York City: Doubleday, 1950). p. 40.

5 Plant, Sadie, “On the Matrix: Cyberfeminist Simulations” in *Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies* ed. Rob Shields (London: Sage, 1996).

6 Lem, Stanisław, “Non Serviam”: this takes the form of a review of an invented paper of that name by the invented Professor James Dobb – translated by Michael Kandel. in *A Perfect Vacuum* (San Diego: Mariner Books, 1983).

7 Copyright, Designs and Patents Act 1988 s. 9(3)

are undertaken” (as with film producers’ rights). The copyright lasts for 50 years from the creation of the work.⁸ It applies only “in circumstances such that there is no human author of the work”.⁹ There is neither a right of identification¹⁰ nor of integrity¹¹ in such works.

In principle, this provision might seem to run counter to the proposition that the point of copyright legislation is to reward, encourage and protect *human* creativity. It seems, however, that it causes no actual harm.

In the case of journalism in particular, the NUJ proposes that it is unethical to publish or to make available works for which “there is no human author”. Any output of a machine-learning system must at least be checked by a human sub-editor before it is released into the wild.

As is the British Copyright Council, the NUJ is not clear that the existing provisions for “computer-generated works” necessarily apply to the outputs of machine-learning systems.

Indeed, there are a wide range of considerations beyond copyright that would need to be addressed at the same time if any change were to be made. These apply particularly, but not only, to the use of the output of machine-learning systems for journalistic purposes.

Machine learning, journalistic ethics and wider considerations

Machine-learning outputs clearly raise *interesting* implications for journalistic ethics, liability and related matters.

Identification of authors

As we suggest above, no machine-learning output should be presented as news reporting until it has been reviewed by a human journalist. The NUJ believes that this raises the case for a strong right of identification for *all* authors. We are considering the argument that it should be compulsory to identify of computer-generated works that have not been reviewed – those for whose accuracy no human attests.

This initially seems to be an essential “consumer protection” measure – as well as being, in a sense more specific to journalism, necessary to maintain trust.

It also clearly strengthens the case for a strong right of identification for those human authors who do attest to the accuracy of a report. It should perhaps be made explicit that such a right includes the right to be identified by a *nom de plume* where this is necessary for editorial or on safety grounds. Any change to copyright law should therefore include at a minimum:

- ◆ Removal of the requirement to “assert” the “moral rights” of identification and integrity;
- ◆ Removing the restriction of these rights that currently applies to authors (including photographers) who produce works in the course of their employment; and
- ◆ Introducing mechanisms to make these rights effectively enforceable within the civil law system – such as statutory minimum damages for failure to identify appropriately and for

8 Copyright, Designs and Patents Act 1988 s. 12(7)

9 Copyright, Designs and Patents Act 1988 s. 178; an analogous provision for registered designs is at 263(1) and for registrable designs at Schedule 4, (2)4

10 Copyright, Designs and Patents Act 1988 s. 79(2)c

11 Copyright, Designs and Patents Act 1988 s. 81(2)

false attribution.

Integrity of human authors' works

There are two ways in which the output of machine-learning systems threatens the integrity of human authors' works – or, more precisely in the context of journalistic works, the public trust in that integrity that is essential to a democracy in which an informed electorate makes decisions based on true reports.

Original artificial works: The first of these issues is the unknown – and, for reasons mentioned above, unknowable – veracity of such machine-generated works. We are here considering works that are “original” in the sense that what they depict or describe is “new”. In other words these are works that are remote from the works that are the inputs to the machine-learning system. As far as the NUJ has yet considered the issue, the answer to this lies in the strong, enforceable right of attribution outlined above. It raises further questions that we raise in the following section of our response.

Manipulated works: The second concern is that the same technologies can be applied to manipulate a *specific* work by an actual human. Images of people can, for example, be inserted into or deleted from specific photographs and videos without the skill that was required of Stalin's operatives. Existing texts can be “spun” to change their meaning. These challenges require also a strong, enforceable right of the human author of the manipulated work to defend its integrity. Who else is better placed to say, “that was not in front of me when I pressed ‘record’!” or “that is not what I wrote”?

Do ‘deepfakes’ mean that we now need a ‘right of personality’?

There are, we fear, however, issues of manipulation and faking that the right of identification and the right to defend the integrity of works may not reach. There is now, or will very soon be, the capability to produce a “deepfake” video in which, say, Sir Keir Starmer is seen and heard to swear allegiance to the Conservative and Unionist Party. The humans who make the arrangements for the production of such videos are not likely to be those best placed to take action against them.

The issue here is much deeper than the harm done by any *particular* deepfake. We fear that we may see a collapse in public trust of news video and other images *in general*.

We probably need, therefore, to confront a need for a “Right of personality” or “Image right”. This would give those who are depicted in a computer-generated video saying or doing things that they have not said or done legal redress against those who commission and distribute such works.

As with the existing “moral rights”, an approach that puts enforcement in the hands of authors and those depicted seems preferable to other options, which would seem to place prosecutors and the courts in an impossible position of being asked to define “reality” in isolation from a concrete complaint.

Legal liability

The less thoroughly the above issues are addressed, the more cases there will be in which we need to define which humans bear legal liability for the output of machine-learning systems.

If an “unsigned” computer-generated work produced “in circumstances such that there is no

human author of the work” an output that defames us – who do we sue?

This, unfortunately, probably needs to be resolved if the law is to be coherent in theory; but addressing the deficits in the UK’s moral rights regime will make this much less urgent in practice.

Exceptions for the benefit of machine learning

In UK law, as the consultation notes, there is an exception to copyright for the benefit of machine learning that follows the EU Directive rule: the exception is for mining for non-commercial purposes by those who have legitimate access to the work.

Google and Facebook would clearly love an exception allowing unlimited text and data mining for commercial purposes. This would, not least, legitimise what Google in particular already does. Currently the *visible* purposes of this are to train a machine-learning component of its search and advertising engine and to train its machine translation system.

As the British Copyright Council has previously outlined, licensing options reflecting global and technological developments provide new market opportunities.

The status of copyright works which provide the source materials to train machine-learning applications must not be forgotten. Works created by humans inform and establish value within the AI applications themselves.

Broadening current exceptions without recognising marketplace licensing solutions risks undermining and eroding future creativity and innovation. For example, suitable restrictions must be put in place for text data mining, particularly in cases where paywall protection is needed.

Before taking further legislative action, a mapping exercise of the existing licensing framework and ownership for the use of copyright materials by machine-learning systems should be undertaken. This should build a shared understanding of what gaps any new policy developments may need to address. It should help to determine whether any new rights or exceptions are necessary, and what issues can be resolved through updating definitions within the current framework.

Broadening exceptions as outlined in options 2, 3 and 4 would conflict with licensed uses of copyright materials and prejudice rightsholders. In particular, new exceptions that blur the boundaries between commercial and non-commercial (option 2) could lead to an increase in expensive legal proceedings to a lack of clarity over the commercial boundaries.

The NUJ supports the British Copyright Council in strongly opposing the introduction of any new exceptions or broadening any existing exceptions, since industry-led licensing, supported by a robust copyright framework, would be able to support innovation far more rapidly and effectively. Indeed, many industry-led licensing models have been evolving effectively in response to technology.

Rather than introducing new exceptions, there should be increased support for licensing.

The NUJ reiterates that the existing exceptions for the purposes of reporting news and current affairs and for criticism and review are necessary to journalists’ work and sufficient for the purpose.

There is a link to data protection and other issues

As readers will know, the Information Commissioner announced on 29 November a fine for

Clearview for “scraping” – that is, “mining” – billions of images of recognisable faces.¹²

A study such as that proposed by the British Copyright Council needs to consider the interactions between any proposed changes to copyright and other issues, such as data protection, legal liability for machine-learning outputs (discussed above) and online safety.

12 “ICO issues provisional view to fine Clearview AI Inc over £17 million” <<https://ico.org.uk/about-the-ico/news-and-events/news-and-blogs/2021/11/ico-issues-provisional-view-to-fine-clearview-ai-inc-over-17-million/>> accessed 15/12/2021

Section A

Copyright – computer generated works (CGW)

1. *Do you currently rely on the computer-generated works provision? If so, please provide details of the types of works, the value of any rights you license and how the provision benefits your business. What approach do you take in territories that do not offer copyright protection for computer-generated works?*

The NUJ has no experience of using the provision, nor is it aware that any of its members have done so,

2. *Please rank these options in order of preference (most to least preferred) and explain why.*

Rank	Computer generated works	
1	Option 0	Make no legal change
2	Option 1	Remove protection for computer-generated works
3	Option 2	Replace the current protection with a new right of reduced scope/duration

The NUJ ranks these as above, for reasons explained above.

3. *If we introduce a related right for computer-generated works, as per option 2, what scope and term of protection do you think it should have? Please explain how you think this scope and term is justified in terms of encouraging investment in AI-generated works and technology.*

The NUJ does not believe such a right is necessary or desirable. In addition to the points raised above, we note that a major benefit for those deploying machine-learning systems is that outputs can be available practically instantly, at least in the cases of texts and still images. A kind of “micro-first-mover” advantage therefore applies.

4. *What are your views of the implications of the policy options and of AI technology for the designs system?*

The NUJ has no experience of the design system.

5. *For each option, what are your views on the risk that AI generated works may be falsely attributed to a person?*

The NUJ believes the risk of false attribution is high; and further that the risk of false depiction needs to be addressed, as discussed above.

The risk is independent of the options listed. The solution must lie in making the “moral rights” practically enforceable within the framework of UK legislation.

Copyright – text and data mining (TDM)

6. *If you license works for TDM, or purchase such licences, can you provide information on the costs and benefits of these? For example, availability, price-point, whether additional services are included or available, number and types of works covered by the licence etc.*

The NUJ does not license works, nor purchase licenses, for these purposes.

7. *Is there a specific approach the government should adopt in relation to licensing?*

The NUJ strongly believes that the government should encourage simplified licensing for such purposes (and others).

8. *Please rank the options in order of preference (most to least preferred) and explain why.*

Rank	Text and Data Mining (TDM)	
1	Option 0	Make no legal change
2	Option 1	Improve licensing environment for the purposes of TDM
4	Option 2	Extend the existing TDM exception to cover commercial research and databases
3	Option 3	Adopt a TDM exception for any use, with a rights holder opt-out
5	Option 4	Adopt a TDM exception for any use, which does not allow rights holders to opt out

The NUJ believes that the existing exception for non-commercial research is an adequate compromise.

In addition to our observations above and to the points about the viability of newspaper, magazine and book publishing that other industry bodies will be making, the NUJ observes specifically that publishers must be able to protect the integrity of their data servers. The specification in the existing exception that it is available to those with legitimate access goes some way to meeting this need.

9. *If you have experience of the EU exception with opt out for rights holders, how has this affected you?*

The NUJ has no experience of its own to report on this.

10. *How would any of the exception options positively or negatively affect you? Please quantify this if possible.*

Licensing is the answer and the NUJ is assured by the industry that it is working to make this as

simple as possible. A widened exception risks the integrity of publishers' data servers, as noted above.

Patents

The NUJ has no comment on the patents proposals.

- 11. Please rank these options in order of preference (most to least preferred) and explain why?*
- 12. Would the changes proposed under Options 1, 2 and 3 have any consequential effects on the patent system, for example on other patentability criteria?*

For options 1 and 2:

- 13. If UK patents were to protect AI-devised inventions, how should the inventor be identified, and who should be the patent owner? What effects does this have on incentivising and rewarding AI-devised inventions?*
- 14. In considering the differences between options 1 and 2, how important is it that the use of AI to devise inventions is transparent in the patent system?*
- 15. Would the UK adopting option 2 affect your global patent filing strategy, if so, how?*

For option 3:

- 16. What term and scope of protection should a new right offer?*
- 17. What should the criteria for grant of a new right be and why? Particularly should it:*
 - a) Replicate the current requirements for a patent?*
 - b) Set a different bar for inventive step?*
 - c) Be an automatic or registered right?*

General

- 18. What role does the IP system play in the decision of firms to invest in AI?*

"Intellectual property" is the legal basis for journalists having a right to be paid at all.

It is therefore the entire basis for journalists investing their time in producing the independent, professional journalism without which an informed electorate, and therefore democracy, would be impossible.

- 19. Does the first mover advantage and winner-take-all effect prevail in industries adopting AI? How would this affect the impact of the policy options proposed on innovation and competition?*

The NUJ strongly suspects that this effect prevails, but currently has no data.

- 20. How does AI adoption by firms affect the economy? Does the use of AI in R&D lead to a higher productivity?*

The NUJ currently has no data on this.

21. *Do the proposed policy options have an impact on civil society organisations? If so, what types of impacts?*

Civil society organisations depend on the existence of independent, professional journalism as much as does any citizen – but perhaps this dependency is more directly explicit in the case of such organisations. Any move that weakened journalists’ ability to make a living from producing such work would, therefore, have an immediately obvious negative impact on them.

Section B: Respondent information

A: Please give your name (name of individual, business or organisation).

██████████ for the National Union of Journalists; moral rights asserted

B: Are you responding as an individual, business or on behalf of an organisation?

2) Organisation – please provide the name of the organisation
National Union of Journalists

C: If you are responding on behalf of an organisation, please give a summary of who you represent.

The National Union of Journalists (NUJ) represents 25,000 journalists working in, or working for outlets in, the UK and Ireland.

D: If you are an individual, are you?

N/A

E: If you are responding on behalf of an organisation, are you?

3) A rights holder organisation

F: If you are responding on behalf of a business or organisation, in which sector(s) do you operate? (choose all that apply)

11) Information and communication – Publishing, audio-visual and broadcasting

G: How many people work for your business or organisation across the UK as a whole? Please estimate if you are unsure.

- 1) Fewer than 10 people
- 2) 10–49
- 3) 50–249

- 4) 250–999
- 5) 1,000 or more

10-49 - but the NUJ represents over 25,000 members

H: The Intellectual Property Office may wish to contact you to discuss your response. Would you be happy to be contacted to discuss your response?

Yes.

I: If you are happy to be contacted by the Intellectual Property Office, please provide a contact email address.

[REDACTED]

J: Would you like an acknowledgement of receipt of your response? Yes/No

Yes.