

# Application, Enforcement and Balance of UK Copyright Law in the Digital World: Moving Towards and Working with Private Ordering Mechanisms

Solomon Chann\*

© Copyright; Digital technology; Enforcement; Technological protection measures

## Abstract

*This article evaluates whether UK copyright law can deal with a digital world with respect to three distinct but related questions. (1) With respect to application, it argues that notwithstanding some legal uncertainty, the application of UK copyright law to digital technologies poses no existential threat. (2) With respect to enforcement, it observes that the digital world has changed the nature of enforcement and the relationships under copyright law, which has shifted regulation towards private ordering mechanisms. (3) With respect to balance, it argues that this movement towards private enforcement is concerning for copyright law. Ensuring an appropriate balance in UK copyright law in the digital world requires building copyright principles into private online architecture, and some plausible suggestions are outlined.*

## Part 1: Introduction

*“Judging from the headlines, it appears that copyright law is in an existential crisis.”<sup>1</sup>*

The above statement was made in 2009, against a backdrop of widespread online piracy, illegal file sharing, and the difficulties in applying a copyright law regime designed for a pre-digital world.

Looking at the headlines today, it seems not too much has changed. At the time of writing, the “MAKE IT FAIR” campaign<sup>2</sup> has recently been launched by several of the UK’s creative industries, in response to the UK Government’s indication that an opt-out exception for

text and data mining would be their preferred way forward.<sup>3</sup> Once again, the question of how copyright law will adapt to new technology has become this period’s new “existential crisis”.

Indeed, as new digital technologies emerge, UK copyright law must answer questions not in contemplation when the law was enacted. Questions of how copyright law applies, how it is enforced, and how the balance is struck between rights holders and the public interest are once again entering the conversation.

This essay evaluates whether UK copyright law can “deal with a digital world” with respect to three distinct but related questions. First, can UK copyright law apply to the digital world in a clear way? (the “Application question”). Second, can UK copyright law effectively enforce these laws? (the “Enforcement question”). Third, has UK copyright law struck an appropriate balance in the digital world? (the “Balance question”).

It will be submitted that, notwithstanding some legal uncertainty in how UK copyright law applies in the digital world, the application question is answered satisfactorily (Pt 2). However, with respect to enforcement, the scale at which infringement takes place in the digital world renders traditional legal enforcement mechanisms largely ineffective. Instead, copyright in the digital world is more accurately described as being regulated by private ordering (Pt 3). This reality diminishes the weight of substantive copyright law in the digital world, and places regulation in the design choices of private actors, who lack both the incentive and the competence to balance the legitimate interests of rights holders and the public good. Effective reform to UK copyright law must take this reality into account, and plausible strategies for regulating the digital world by building principles of transparency and accountability into digital architecture are outlined (Pt 4).

### Part 1.1: What makes the “Digital World” different?

Given the broad scope of the question posed, it is worth briefly setting out some significant features of the “digital world” in relation to copyright law. The “digital world” can be understood as the virtual space created by digital technology. This includes a broad range of technologies, such as peer-to-peer file sharing, social media, and generative AI. Different technologies within the digital world interact with copyright in diverse ways, but some common threads can nonetheless be drawn. These features are expounded on in the substantive parts of the essay, but as a headline description:

\* The author holds a BA from the University of Oxford and is currently a Trainee Solicitor with Bristows LLP. An earlier draft of this article was awarded the 2025 Golding Essay Prize by the Competition Law Association.

<sup>1</sup> Ben Depoorter, “Technology and Uncertainty: The Shaping Effect on Copyright Law” (2009) 157 U Pa L Rev 1831.

<sup>2</sup> News Media Association, “UK Creative Industries Launch “Make it Fair” Campaign” (25 February 2025), <https://newsmediauk.org/blog/2025/02/25/uk-creative-industries-launch-make-it-fair-campaign/> (Accessed 26 March 2025).

<sup>3</sup> Department for Science, Innovation & Technology (2024) Copyright and AI: Consultation (CP 1205), Available at: <https://www.gov.uk/government/consultations/copyright-and-artificial-intelligence/copyright-and-artificial-intelligence#bcopyright-and-artificial-intelligence> (Accessed 26 March 2025).

First, the digital world forces lawmakers and judges to determine how copyright law should apply to new technologies. As will be seen, this is true of most significant technological developments and does not in itself pose an existential threat to copyright law. Second, and arguably more significantly, the digital world alters the relationships which copyright law regulates and its surrounding social norms. The digital world has greatly enabled access to infringing behaviour, be it through downloading copyrighted files (e.g. file-sharing sites), or uploading infringing content (e.g. memorised AI-generated outputs,<sup>4</sup> or derivative works<sup>5</sup> like TikTok trends). Copyright law no longer just governs relationships between rightsholders and the select few with access to a printing press, but also with anyone with an internet connection.

## Part 2: The “Application Question”

Is UK copyright law able to apply to the digital world in a clear way? For the avoidance of ambiguity, this question is not concerned with whether the application of UK copyright law to the digital world results in normatively desirable outcomes (considered in Pt 4). Rather, this Part looks at UK copyright law from the perspective of legal certainty—in other words, whether the application of UK copyright law to the digital world is sufficiently certain to guide behaviour.

Legal certainty can be understood as the predictability of how courts will apply laws to new circumstances, or how changes in the law may take place.<sup>6</sup> This is a desirable trait for laws generally speaking<sup>7</sup>, but is highly relevant for evaluating copyright law as a field regularly dealing with emerging technologies. Given the time it takes legislators and courts to react to novel situations, copyright legislation should be flexible enough to deal with new technologies with a sufficient degree of legal certainty.

It will be argued that notwithstanding the fact that applying the UK’s existing copyright regime to new technologies tends to involve some initial difficulty and uncertainty (Pt 2.1), this is not a strong reason for concern over the ability of UK copyright law to deal with the digital world—some uncertainty is inevitable and can be desirable (Pt 2.2).

## Part 2.1: Applying UK copyright law to the Digital World creates Legal Uncertainty

Difficulties in applying copyright laws to new technologies are well-documented. In the 1960s, there was concern over how the “archaism of old law” could determine when photocopying infringed on the original work.<sup>8</sup> In the 1970s, courts had to determine whether sellers of tape-recording machines could be liable for “authorising” infringements.<sup>9</sup> More recently with respect to television broadcasts, questions arose as to whether copies in satellite decoders were “temporary copies”.<sup>10</sup>

It should thus be unsurprising that as new digital technologies emerge, accompanying questions as to their status under UK copyright law have followed. As an example, the growth of generative artificial intelligence models (e.g. GPT-4, DeepSeek) has generated a very substantial amount of commentary regarding the legal position of the model, its outputs, and its training processes under UK copyright law.<sup>11</sup>

A full discussion of these issues is not within the scope of this essay, but to take the example of training generative AI models on copyright content, legal uncertainty arises surrounding questions of whether such training involves making “copies”,<sup>12</sup> whether such training constitutes an “expressive use”,<sup>13</sup> or the applicability of exceptions (e.g. temporary copying exception).<sup>14</sup> These are not new legal concepts, but the emergence of novel technology means these questions must once again be answered, albeit in a different context.

The upshot of this for AI developers, or rights holders looking to license or protect their works, is legal uncertainty. While complete legal certainty is impossible (all laws need to adapt to novel situations to some degree<sup>15</sup>), it is undesirable to the extent that it inhibits the law’s ability to guide behaviour in a socially optimal way. In the context of copyright law, legal uncertainties can result in a chilling effect on creative output and technological innovation for more risk-averse actors, and can encourage overaggressive litigation or negotiation practices for more risk-tolerant parties.<sup>16</sup>

## Part 2.2: Legal Uncertainty does not pose an Existential Threat to UK Copyright Law

This legal uncertainty does not, however, necessitate that UK copyright law is too far removed from clarity and certainty to “deal” with a digital world.

<sup>4</sup> Matthew Sag, “Copyright Safety for Generative AI” (2023) 61(2) *Houston LR* 113.

<sup>5</sup> Andrew Murray, *Information Technology Law: The Law and Society* (2023) ch.10.

<sup>6</sup> Depoorter, “Technology and Uncertainty: The Shaping Effect on Copyright Law” (2009) 157 *U Pa L Rev* 1831.

<sup>7</sup> Joseph Raz, *The Authority of Law* (1979 [2nd ed 2011]) ch.11.

<sup>8</sup> Louise Weinberg, “The Photocopying Revolution and the Copyright Crisis” (1975) 38 *The Public Interest* 99.

<sup>9</sup> *CBS Songs Ltd v Amstrad Consumer Electronics Plc* [1988] 2 *W.L.R.* 1191.

<sup>10</sup> *FAPL v QC Leisure* Case C-403/08 *EU:C:2011:43*.

<sup>11</sup> These are three common allegations of infringement in copyright claims surrounding generative AI training—e.g. *Getty Images v Stability AI* [2025] *EWHC* 38 (Ch) [9].

<sup>12</sup> Benjamin Sobel, “Artificial Intelligence’s Fair Use Crisis” (2017) 41 *Colum JL & Arts* 45.

<sup>13</sup> European Copyright Society, “General Opinion on the EU Copyright Reform Package” (24 Jan 2017), <https://europeancopyrightsociety.org/files.wordpress.com/2015/12/ecs-opinion-on-eu-copyright-reform-def.pdf>. (Accessed 25 Mar 2025).

<sup>14</sup> Department for Science, Innovation & Technology (2024) *Copyright and AI: Consultation* (CP 1205), Available at: <https://www.gov.uk/government/consultations/copyright-and-artificial-intelligence/copyright-and-artificial-intelligence#copyright-and-artificial-intelligence> (Accessed 26 March 2025).

<sup>15</sup> Anthony D’Amato, *Legal Uncertainty* (1983) 71 *Cal L Rev* 1.

<sup>16</sup> Uri Weiss, “The Regressive Effect of Legal Uncertainty” (2019) *J Disp Resol* 149.

Legislators and judges walk a fine line in interpreting or reforming law: Delays in providing resolutions exacerbate the legal uncertainty problem, while hasty rule-making increases the likelihood that the technology is not properly understood, causing the rules reached to be inappropriate.<sup>17</sup> This point is well-articulated by Judge Thomas in *Grokster*, who notes that in the digital age, courts can be “ill-suited to fix the flow of internet innovation”, and that it is thus “prudent for courts to exercise caution before restructuring liability theories ... despite their apparent present magnitude”.<sup>18</sup>

Looking back at how copyright law dealt with developing technologies, we do not observe that copyright law has been brought to its knees from the invention of the photocopier, or that it is now “dead” following the growth of the internet.<sup>19</sup> Granted, reform can take time<sup>20</sup> and create uncertainty in the interim, but this is true of all legal fields dealing with novel cases; this is not a unique concern for copyright law. Indeed, it is precisely in situations where the technology has the greatest unknown impact that proper assessments must happen before reform is made. Legal uncertainty is thus expected, and to some extent, desirable with respect to the digital world.

Even in the absence of legal clarity, private parties can (and do) mitigate the effects of uncertainty by coming to private arrangements. For example, notwithstanding the lack of clarity surrounding the ownership of AI-generated works,<sup>21</sup> individual companies have taken their own approaches as to who has ownership, and the extent of that ownership. In Midjourney’s terms of service for example, free users have exclusive ownership of the outputs, but must give up an irrevocable license to “reproduce, prepare derivative works, publicly display, publicly perform, sublicense, and distribute” the users’ input prompts and output works.<sup>22</sup> By contrast, the terms of service for Adobe Firefly (targeted towards professional artists) do not involve automatically granting a license over the users’ outputs,<sup>23</sup> allowing artists to retain a greater degree of control over the works.

It is thus important not to overstate the impact of the digital world on UK copyright law in terms of application. Indeed, notwithstanding legal uncertainty in relation to generative AI training in the UK, the AI market remains relatively buoyant, with the estimated revenue from AI companies having increased by over £4 billion in 2023.<sup>24</sup> While the mediums and technologies may have changed,

copyright law is still ultimately involved in the same balancing act between creators’ rights and the public interest.<sup>25</sup> As such, even though the digital world has created some legal uncertainty in applying existing copyright laws, this is no existential challenge for UK copyright law.

### Part 3: The “Enforcement question”

When it comes to enforcement however, the digital world presents unique challenges. This Part will discuss how the digital world has affected UK copyright law enforcement both in terms of practicality and changing social norms, and argue that traditional enforcement methods are of limited effectiveness (Pt 3.1). Because of these difficulties, regulation of behaviour online has moved away from traditional enforcement mechanisms, and towards private ordering mechanisms (Pt 3.2).

#### Part 3.1: Challenges with Traditional Enforcement in the Digital World

It is helpful to illustrate the issues facing UK copyright enforcement in the digital world with reference to a specific example. From the late 1990s, the growth of peer-to-peer file sharing networks allowed internet users to illegally obtain copyrighted files with relative ease. In response, the Digital Economy Act 2010 (“DEA 2010”) was introduced, which had the ambitious goal of reducing the amount of unlawful file sharing in the UK by 70–80%.<sup>26</sup>

The DEA 2010 sets out various procedures for the enforcement of online copyright infringement, mostly creating obligations for internet service providers (ISPs). Much critique has been written about the effectiveness of these provisions in reducing online piracy.<sup>27</sup> However, it is worth observing that from an enforcement strategy perspective, the DEA 2010 looks to provide rights holders recourse by imposing duties on ISPs (the intermediaries of infringing behaviour) rather than users who directly infringe. Other similar regulatory legislation for the digital world has similarly sought to impose duties on intermediaries and platforms rather than individual users.<sup>28</sup> There are several strong reasons for doing so, which shed light on the difficulties of enforcing copyright in a digital world.

<sup>17</sup> Francesco Parisi and Nita Ghei, “Legislate Today or Wait Until Tomorrow? An Investment Approach to Law Making” (2006) 23 *J Pub Fin & Pub Choice* 19.

<sup>18</sup> *Metro-Goldwyn-Mayer v Grokster*, 380 F.3d 1154 (9th Cir. 2004).

<sup>19</sup> Glynn Lunney, “The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act” (2001) 87 *Va L Rev* 813.

<sup>20</sup> An average of seven years and two months (Depoorter, “Technology and Uncertainty: The Shaping Effect on Copyright Law” (2009) 157 *U Pa L Rev* 1831, 1842).

<sup>21</sup> With respect to the application of s.9(3) CDPA 1988, see e.g. Neville Cordell, “Who owns UK Copyright in AI-generated content?” (2024) 46(7) *E.I.P.R.* 470.

<sup>22</sup> Midjourney Terms of Service, <https://docs.midjourney.com/hc/en-us/articles/32083055291277-Terms-of-Service> (Accessed 26 Mar 2025).

<sup>23</sup> Adobe Firefly Terms of Service, [https://www.images2.adobe.com/content/dam/cc/en/legal/servicetou/Adobe-Generative-AI-Additional-Terms\\_en\\_US\\_20240604.pdf](https://www.images2.adobe.com/content/dam/cc/en/legal/servicetou/Adobe-Generative-AI-Additional-Terms_en_US_20240604.pdf) (Accessed 26 Mar 2025).

<sup>24</sup> Department for Science, Innovation & Technology, (2024) Artificial Intelligence sector study 2023, <https://www.gov.uk/government/publications/artificial-intelligence-sector-study-2023/artificial-intelligence-sector-study-2023>, (Accessed 26 Mar 2025).

<sup>25</sup> Andrea Radonjanin, “Regulating IP aspects of generative AI: any lessons to be drawn from the past?” (2024) 46(6) *EIPR* 326, 335.

<sup>26</sup> Department for Business, Innovation and Skills (2009) Digital Britain—Final Report (CM 7650), Available at: <https://assets.publishing.service.gov.uk/media/5a7c70d9e5274a5590059e1c/7650.pdf> (Accessed 26 March 2025), p.110.

<sup>27</sup> E.g. Anne Barron, “Graduated Response” a l’Anglaise: Online Copyright Infringement and the Digital Economy Act 2010” (2011) 3(2) *Journal of Media Law* 305; Krzysztof Garstka, “The amended Digital Economy Act 2010 as an unsuccessful attempt to solve the stand-alone complex of online piracy” (2012) *IIC* 159.

<sup>28</sup> E.g. Part II of the Digital Millennium Copyright Act, Art.17 of the Directive on Copyright in the Digital Single Market.

## Practicality

Traditionally, enforcing copyright involved rights holders bringing claims against primary infringers of their copyright (usually large entities, for whom infringing activities were commercially viable). This has changed in the digital world—as Lord Mendelsohn (who proposed the DEA 2010) notes, “it is simply not practical or economic for copyright owners to undertake a mass programme of infringement identification ... given that the majority of individual cases will only represent a single low value judgment”.<sup>29</sup> This position is also complicated by technological methods of evasion such as VPNs (virtual private networks) which make enforcement difficult.<sup>30</sup>

Even when enforced, individual-level lawsuits empirically speaking do not have a deterrent effect on users’ behaviour in the online space, and are thus of limited use.<sup>31</sup> Penalties targeted at individuals are also ineffective—it has been observed that the tenfold increase in penalties in the DEA 2010<sup>32</sup> have made little difference in online infringing activity,<sup>33</sup> and can even encourage infringing behaviour via a backlash effect.<sup>34</sup>

## Social Norms

The digital world has also changed the social norms surrounding copyright. As Jensen notes, copyright law has historically managed relationships between “a relatively small number of people and institutions” (e.g. authors and publishers, musicians and record labels), and the “copyright culture” or social norms that existed were determined by the dynamics within this small group.<sup>35</sup> In this past world, the social norms of copyright were outside the view of the general public, and not substantially determined by them. In the digital world however, the “democratisation”<sup>36</sup> of information and reproduction technology means that the public has gained a larger seat at the table. Accordingly, the dynamics of copyright law have become more sensitive to the social norms as determined by the views and beliefs of the general public.

If then, as Depoorter observes, there is a growth in “anticopyright sentiment” in the public with respect to online infringement,<sup>37</sup> the influence of UK copyright law in guiding action is reduced. The fact that new technologies give rise to legal uncertainty<sup>38</sup> also further enables this, as the uncertain period between access to

the technology and the determination of its legal status allows individuals to become accustomed to (and thus self-justify) their possibly infringing behaviour.<sup>39</sup>

Taken in totality, the digital world has changed the way in which copyright is enforced—the impracticality of enforcement against individuals, combined with changing social norms surrounding copyright, suggests that seeking to enforce copyright law on the individual in the digital world is an ineffective endeavour.

## Part 3.2: Enforcing Copyright in the Digital World via Private Ordering Mechanisms

The above reasons explain why legislation aimed at regulating copyright in the digital world has largely been aimed at intermediaries rather than individuals. Indeed, since the DEA 2010, the conversation surrounding online regulation has moved beyond duties in enforcement procedures to notions of “enhanced responsibility” and increasing pressure on intermediaries to play a more active role in enforcing copyright.<sup>40</sup> Online intermediaries, concerned about the potential liability they face, have also proactively taken steps to protect themselves by contributing to online enforcement.<sup>41</sup>

One such enforcement mechanism worth considering is automated copyright-filtering systems. Well-known examples include Google Content ID or Facebook Rights Manager, which use algorithmic content matching to prevent users from uploading infringing content and help rights holders protect their copyright. Although not always explicitly named, these private safeguards exist in other aspects of the digital world. For instance, Figure 1 below shows GPT-4’s responses to attempts to generate a well-known character protected by copyright.

<sup>29</sup> Joint Committee on Human Rights, *Legislative Scrutiny: Digital Economy Bill (2009–10, HL 44, HC 327)*.

<sup>30</sup> Christophe Geiger, “Challenges for the enforcement of copyright in the online world: Time for a new approach” in P Torremans (ed) *Research Handbook on the Cross-Border Enforcement of Intellectual Property* (Edward Elgar 2014).

<sup>31</sup> Christian Peukert and Margaritha Windisch, “The economics of copyright in the digital age” (2024) *Journal of Economic Surveys* 1.

<sup>32</sup> Section 42 DEA 2010.

<sup>33</sup> Kantar Media, “Online Copyright Infringement Tracker Wave 4. Overview and key findings: Prepared for OFCOM” [http://stakeholders.ofcom.gov.uk/binaries/research/telecoms\\_research/online-copyright/w4/OCI\\_MAIN\\_REPORT\\_W4\\_FINAL.pdf](http://stakeholders.ofcom.gov.uk/binaries/research/telecoms_research/online-copyright/w4/OCI_MAIN_REPORT_W4_FINAL.pdf) (Accessed 28 March 2025).

<sup>34</sup> Ben Depoorter et al, “Copyright Backlash” (2011) 84 S Cal L Rev 1251.

<sup>35</sup> Christopher Jensen, “The More Things Change, the More They Stay The Same: Copyright, Digital Technology, and Social Norms” (2003) 56 Stan L Rev 531, 543.

<sup>36</sup> Christopher Jensen, “The More Things Change, the More They Stay The Same: Copyright, Digital Technology, and Social Norms” (2003) 56 Stan L Rev 550.

<sup>37</sup> Depoorter et al, “Copyright Backlash” (2011) 84 S Cal L Rev 1251.

<sup>38</sup> Part 2.1.

<sup>39</sup> Depoorter, “Technology and Uncertainty: The Shaping Effect on Copyright Law” (2009) 157 U Pa L Rev 1831.

<sup>40</sup> Giancarlo Frosio, “Algorithmic Enforcement Tools: Governing Opacity with Due Process” in Simona Francese and Roberto King (eds), *Crossing the valley of death: Driving forensic innovation in the 21st Century* (Springer 2024), p.6.

<sup>41</sup> Matthew Sag, “Internet Safe Harbours and the Transformation of Copyright Law” (2018) 93 Notre Dame L Rev 499.



**Figure 1: GPT-4's responses to prompts attempting to generate an image of Snoopy the Dog**

As shown, even when further prompted for an image with a 'similar aesthetic', the model does not generate an image bearing substantial similarity to Snoopy. This can be attributed to design choices within GPT-4's algorithm—compare the above result with Figure 2, showing a different result to a similar prompt on Grok AI.



**Figure 2: Grok AI's response to the prompt "Generate an image of Snoopy the Dog"**

Contrasting the two results from Figures 1 and 2, the images generated in Grok AI bear much closer similarity to Snoopy—and as Sag would likely note, is probably "enough to make the generated images infringing".<sup>42</sup> Here, GPT-4's algorithmic safeguards help prevent users from engaging in possibly infringing behaviour, also reducing risk of liability for the platform.

This reflects the significance of, and a shift towards, private ordering in copyright enforcement in the digital world.<sup>43</sup> Lessig's theory of regulation is helpful in

characterising this change: For Lessig, regulation of the individual (or "pathetic dot") can be understood in terms of four interdependent "regulatory modalities" which influence the behaviour of individuals: the law, social norms, the market, and architecture (or "code").<sup>44</sup>

Of particular interest to this essay is the regulatory modality of "architecture" (or "code"): Lessig defines "code" as the instructions embedded within software or hardware which makes the digital world what it is<sup>45</sup>, and as Pinheiro notes, code is an important modality of regulation because the way cyberspace is designed will inevitably favour certain values over others<sup>46</sup> (for example, a digital rights management software which makes it harder to copy files acts to regulate by building copyright laws into the code of cyberspace).

Applying the analysis from Pt 3.1, the extent of influence that the four regulatory modalities have over the individual has shifted in the digital world, in the following way: In terms of the law, practical difficulties in enforcing copyright against individuals reduce the extent to which it has influence over them. In terms of social norms, anticopyright sentiments have grown—actions like online piracy are not deemed as highly immoral by the general public. In terms of the market, the marginal cost of infringing on rights holders' works has reduced to effectively zero.

In terms of architecture however, the ability of individuals to conduct infringing behaviour online is highly linked to the privately-ordered safeguards and systems put in place by intermediaries. This becomes the dominant means of regulating the individual in the digital world, and the role that substantive copyright law plays becomes secondary to private ordering mechanisms. The normative implications of this shift on the balance of copyright law are considered next in Pt 4.

#### Part 4: The "Balance question"

In terms of balance, the paradigm explained in Pt 3 is concerning for copyright law's ability to deal with a digital world, as it places influence in the hands of privately-interested parties who lack both the incentive and competence to shape copyright law towards a socially optimal position (Pt 4.1).

Given this reality, this essay observes that for UK copyright law to deal with a digital world, regulation must build principles of transparency and accountability into private ordering mechanisms in digital architecture. Some plausible strategies for implementation are outlined (Pt 4.2).

<sup>42</sup> Sag, "Copyright Safety for Generative AI" (2023) 61(2) Houston LR 113, 331.

<sup>43</sup> Frosio, "Algorithmic Enforcement Tools: Governing Opacity with Due Process" in Simona Francese and Roberto King (eds), *Crossing the valley of death: Driving forensic innovation in the 21st Century* (Springer 2024), p.6.

<sup>44</sup> Lawrence Lessig, *Code v2.0* (2006 Perseus Books) ch.7, p.123.

<sup>45</sup> Lawrence Lessig, *Code v2.0* (2006 Perseus Books) ch.7, p.121.

<sup>46</sup> Folakunmi Pinheiro, "Revisiting the "Code": Building Privacy Competition into the Architecture of the Internet" [2021] E.C.L.R. 453.

### Part 4.1: Private Ordering is Not Well-Placed to Balance Copyright Law

The growth of private ordering mechanisms in the digital world as a means of regulation is concerning, as the design of such mechanisms is largely left to the control of private parties who lack both incentive and competence to balance copyright law fairly.

In terms of incentive, for profit-driven private actors, regulating the digital space is not about ensuring an appropriate balance between rights holders and the public interest, but rather about minimising liability costs for infringement on their platforms. Given these private interests, automated copyright-filtering systems, in effect, tend to overcompensate towards appeasing rights holders. Sag, for example, observes that design choices with respect to YouTube's automated notice and takedown system, like transferring revenue from online content automatically into escrow when disputes arise, or the limited number of appeals a user could have active, lean towards a rightsholder-centric system for dealing with copyright infringement online.<sup>47</sup> What results is an architecture in which "false positives" (claims of infringement directed at non-infringing material) are enabled, creating a shift in the balance of the scope of copyright enforcement towards rights holders and away from users who may have perfectly valid defences.<sup>48</sup>

In terms of competence, applying copyright law is often a question of qualitative doctrines, which automated algorithms and private actors are not best placed to deal with. For example, the question of whether a "substantial part" of a work has been taken is not a quantitative matter of whether X% of a work has been taken. Instead, this is a value judgment involving an overall "qualitative" assessment or "impression" of the work,<sup>49</sup> or in the EU for example, whether a sound is "recognisable ... to the ear" (*Pelham*<sup>50</sup>). This is an issue that is exacerbated by the 'black box effect', which refers to the sometimes opaque decision-making processes of algorithms,<sup>51</sup> as this prevents privately ordered enforcement mechanisms from being scrutinised or their designers held accountable.

More broadly speaking, private ordering mechanisms are also not well-placed or competent to deal with questions of rights-balancing or public policy decisions. In contrast with traditional law enforcement, which separates duties like detection, prosecution, and adjudication into different functions, Perel and Elkin-Koren observe that regulation by private bodies compresses these roles into a single entity, which emphasises mainly detection and prevention.<sup>52</sup> In terms of democracy and accountability, concentrating these

regulatory choices in the hands of a few privately-interested parties can "undermine due process" and erode trust in established legal systems.<sup>53</sup>

### Part 4.2: Reform for Balancing Copyright in the Digital World

A dilemma thus emerges: On one hand, the use of automated enforcement mechanisms appears to be the only effective way of managing online copyright infringement at the scale at which it takes place in the digital world.<sup>54</sup> However, the private entities that design and order these enforcement mechanisms are not well-suited for ensuring a right balance is struck between rights holders and the public interest in copyright law.<sup>55</sup>

Legislating reform for ensuring copyright law is balanced is thus tricky, as the necessary components for copyright law to "deal" with a digital world straddle the public-private divide. Private parties have the power and influence to determine the state of architecture in the online world, whereas publicly elected governments are better suited to balance the interests of stakeholders in copyright law.

It is because of this tension, that existing legislation in the UK like the DEA 2010 which allows rights holders to seek recourse from ISPs, or legislation in other jurisdictions like the CDSM which oblige online service providers to implement private algorithmic enforcement for monitoring content,<sup>56</sup> fall short of adequately dealing with the digital world. Increasing liability and duties for the designers of online architecture is valuable in that it recognises the extent of influence these parties have in guiding the decisions of individuals in the digital world, but liability alone is not sufficient to deal with the fact that private parties are not, in the same way that democratically-elected governments are, interested or competent to strike an appropriate balance between interests in UK copyright law.

As such, this movement of placing liability or "enhanced responsibility" onto intermediaries cannot occur in a vacuum. For copyright law to adequately deal with the digital world, the burden of enforcement measures by private actors needs to be accompanied by means which enable governments to monitor and ensure that the balance is properly struck. The recent Digital Services Act<sup>57</sup> in the EU, although not focused on copyright law, provides a good example of this type of legislation, as it mandates provisions like "comprehensive risk assessments for platforms, rigorous transparency reports, and independent audits". These requirements not only compel private actors to act more in line with

<sup>47</sup> Sag, "Copyright Safety for Generative AI" (2023) 61(2) Houston LR 113, 331, 545.

<sup>48</sup> Sag, "Copyright Safety for Generative AI" (2023) 61(2) Houston LR 113, 331, 545.

<sup>49</sup> *Designers Guild v Russell Williams* [2000] 1 W.L.R. 2416, 2422.

<sup>50</sup> *Pelham GmbH v Ralf Hutter and Florian Schneider-Esleben*, Case C-476/17, EU:C:2019:624, p.31.

<sup>51</sup> Frank Pasquale, *The Black Box Society: The Secret Algorithms that Control Money and Information* (Harvard University Press 2015).

<sup>52</sup> Maayan Perel and Niva Elkin-Koren, "Accountability in Algorithmic Copyright Enforcement" (2016) 19 Stan Tech L Rev 473, 481.

<sup>53</sup> Maayan Perel and Niva Elkin-Koren, "Accountability in Algorithmic Copyright Enforcement" (2016) 19 Stan Tech L Rev 473.

<sup>54</sup> Part 3.1.

<sup>55</sup> Part 4.1.

<sup>56</sup> Article 17, Directive (EU) 2019/790.

<sup>57</sup> Regulation (EU) 2022/2065.

interests determined by public bodies, but can also allow for more transparency in its decision-making, helping to build fundamental principles of accountability and due process into systems otherwise designed by private interests.<sup>58</sup>

## Part 5: Conclusion

As access to infringing behaviour grows with technological developments, the growth of the digital world has not only challenged UK copyright laws in terms of novel applications, but more significantly in the relationships and social norms it governs. While digital technologies pose no existential threat in terms of application and legal uncertainty, UK copyright law faces some significant challenges in dealing with the digital world, most notably in terms of enforcement and diminishing influence over individuals' behaviour online.

As observed, this shift towards privately-ordered mechanisms determining the limits and balance of copyright online is concerning, and an adequate copyright system must face this reality. Plausible suggestions as to how lawmakers can hold private ordering mechanisms accountable, such as through transparency or accountability requirements, have been suggested.

Going back to today's headlines, the policy debates surrounding some of today's copyright law reform questions remain undetermined. Whatever decision is reached, UK copyright law must work with private ordering mechanisms to ensure that the digital world is enforced and balanced in line with the government's copyright objectives. To this end, the UK government's proposal to underpin regulation with transparency requirements and technical standards is at least a positive step towards this working relationship.

<sup>58</sup> Frosio, "Algorithmic Enforcement Tools: Governing Opacity with Due Process" in Simona Francese and Roberto King (eds), *Crossing the valley of death: Driving forensic innovation in the 21st Century* (Springer 2024), p.9.