Automated Copyright Enforcement Online: From Blocking to Monetization of User-Generated Content

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AUTOMATED COPYRIGHT ENFORCEMENT ONLINE: FROM BLOCKING TO MONETIZATION OF USER-GENERATED CONTENT

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ABSTRACT

Global platforms such as YouTube, Facebook, Instagram or TikTok live on users ‘freely’ sharing content, in exchange for the data generated in the process. Many of these digital market actors nowadays employ automated copyright enforcement tools, allowing those who claim ownership to identify matching content uploaded by users. While most debates on state-sanctioned platform liability and automated private ordering by platforms has focused on the implications of user generated content being blocked, this paper places a spotlight on monetization. Using YouTube’s Content ID as principal example, I show how monetizing user content is by far the norm, and blocking the rare exception. This is not surprising, since both platforms and copyright owners significantly profit from monetization. However, contrasting complex automated enforcement tools such as Content ID against basic principles of copyright law, this paper shows how users loose out when their content is exploited. As aggravating factors, the paper points to far-reaching powers that platforms as ‘functional sovereigns’ wield within their respective domains; and to the fundamentally distinct nature of norms set by these sovereigns. The platform’s application and enforcement of its own rules is hard-coded, immediate and automated: embedded in its infrastructure and code, implemented through automation, and adjudicated in its own courts, platform rules constitute brute facts, directly shaping our reality – hence transforming the nature of law as institutional (that is, socially constructed) facts. The paper concludes by critically reviewing mechanisms to protect users, including those set out in Article 17 of the EU’s Digital Single Market Directive.

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I. INTRODUCTION: TOWARDS AUTOMATED COPYRIGHT ENFORCEMENT ONLINE

Technological change that affects society and/or our environment necessarily has an impact on law as one of the principal tools for regulating human interaction and our relations with the wider world. In that regard, technology has, over and over again, transformed human society and, by the need to respond to and accommodate new technologies, the laws made by man. Intellectual property (IP) law in particular is in constant transition through the dynamic development of technology. Changes in technology have always had a specifically profound effect on IP law because (1) the subject matter protected by IP is often technology-based or at least technology-related; (2) the production, dissemination, consumption and (commercial) exploitation of IP-protected subject matter is often based on technology; (3) and – as I want to argue here – nowadays, technology increasingly shapes the norm-setting, implementation and adjudication of IP law, at least in digital networks which are at the centre of this paper.

The starting point for this argument concern well understood features of the digital network environment and their effects, in particular, on copyright law. First, the digital aspect: against the background of fairly low thresholds for copyright eligibility, and the fact that any access or use of content which
can be represented in electronic form in the digital environment necessarily involves copying (which in principle implicates exclusive rights), copyright is essentially always involved when digital content is used. Second, the network aspect: the internet as a decentralized, global network of interconnected electronic devices has exponentially amplified opportunities for citizens across the world to access, share and consume content. The decentralized nature of networks like the internet requires entities that mediate communications and other interactions between users – in other words: intermediaries. It is the use of automated content protection technologies by some of these intermediaries, namely platforms that bring together internet users in order to create, copy and share content online, that serves as the object of this analysis on how technology effectuates change in social and legal norms linked to IP.

Digital market actors like Facebook, YouTube, Instagram or TikTok live on users ‘freely’ sharing content via their platforms in exchange for the data that users generate in the process (which can be sold on to others, including those running targeted adds on the platform that the targeted user then has to watch). The content users create and share is frequently based on, or at least involves elements of, appropriation of existing (copyright-protected) content. User creativity and ‘user-generated-content’ – for example in form of memes, mash-ups, play-alongs, or supercuts – tends to be expressed through repurposing, transforming or otherwise modifying or adding on existing content: a form of ‘remix culture’ that somewhat resembles sampling in nineteen-nineties’ Hip Hop.

These types of remixes can become quite popular, occasionally bringing fame to their user-creators when shared widely on a platform. From a copyright perspective, some of that remixed content is likely to be infringing under applicable domestic laws – although much will still depend on the respective quantitative or qualitative thresholds for infringement and on any defenses or exceptions, such as fair use concepts or specific exceptions for the purpose of parody, pastiche, satire, quotation, news reporting, education, research, and so on. Hence, platforms that allow such content to be shared run the risk of meeting traditional accessory liability tests, or of otherwise being held liable for infringing acts of their users – unless of course they can rely on so called ‘safe harbors’ that exempt liability for intermediaries under certain conditions. While details differ and not all major jurisdictions offer specific safe harbors, these safeguards from liability converge around a ‘notice and take-down’ model whereby intermediaries have to act expeditiously when they become (or should be) aware of infringing acts of their users (often via a notification). In order to avoid liability, platforms are

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taking steps to respond to infringement notifications, by removing or blocking access to allegedly infringing content.  

Increasingly, platforms however also rely on filtering systems and other automated content protection tools that check, usually in real-time, any content uploaded or otherwise shared by users against reference files in huge databases for content submitted by those claiming rights in that content. As the specific mechanisms and technical tools used by platforms such as Google, YouTube, Facebook or Instagram differ, this discussion focuses on one of the most sophisticated and arguably most profitable filtering systems: YouTube’s ‘Content ID’. As discussed further below, once Content ID’s automated content recognition tool detects a match, the entity (or entities) claiming rights over that content is notified. That entity can then decide (case-by-case or in form of setting general rules) over the further fate of the user content uploaded or shared. It can of course be blocked – but, given the popularity of user generated content which often gets thousands (and occasionally millions) of views, those claiming rights in that content may find it much more economically interesting to monetize the user content, for example by running ads against it. In other words, anyone able to rely on automated matching tools claiming can profit from user uploads that...
incorporate anything matching with the content they claim. This is not only the default and most relied on option on YouTube’s Content ID, but equally available on Facebook and Instagram; while TikTok does not offer automated copyright enforcement tools to right holders and instead tries to ensure all of its user generated content is fully licensed.

II. INCENTIVES FOR MONETIZING USER GENERATED CONTENT

Given that safe harbors don’t require upload filters and actually can discourage proactive monitoring, why would platforms invest up to 100 million USD in the development, maintenance and further improvement of these sophisticated content protection tools? It may in part be that they prefer to cooperate with content owners in order to avoid risky litigation, and to

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8 YouTube for example explains that since January 2014, Content ID claims have ‘outnumbered copyright takedowns by more than 50 to 1’ (see https://support.google.com/youtube/answer/7002106?hl=en-GB). In 2017, 90% of Content ID claims imposed automated monetization by running adds against an upload which matches with claimed content – which overall has resulted in YouTube paying out more than 6 billion USD in total (and over 1.8 billion from 10/2017-09/2018) to right holders who have monetised the use of their content on the platform – see ‘How Google Fights Piracy’, as note 5, p.23.

9 On copyright owner’s options to earn from ads through Facebook’s and Instagram’s automated enforcement system, see https://www.facebook.com/help/publisher/2276498512619396 and generally https://www.facebook.com/help/publisher/1548693938521733..

10 TikTok, an increasingly popular App which in 2019 had been installed more than 738 million times, allows users to upload short videos (usually between 15-60 seconds) which they can produce, using a range of tools offered by the App, including music, films and sound effects users can select from large databases of licensed content. While TikTok does not offer users a share in the revenue generated through adds, this popularity allows TikTok users to reach an ever-increasing audience where users with a large following (‘influencers’) can earn significant amounts via tips received during live streams or, more importantly, sponsor deals where they promote products to their fan base (see for example https://www.distractify.com/p/can-you-make-money-on-tik-tok). On TikTok’s potential liability for copyright infringement, see ‘TikTok App Navigating Copyright Laws’, Klemchuck LLP (20 12 2018), https://www.klemchuk.com/ip-law-trends/tiktok-app-navigating-copyright-laws; and Divij Joshi, Is the Clock Ticking for TikTok’s Intermediary Liability Exemptions?, Spicy IP Blog, 2 September 2019 – online at https://spicyip.com/2019/09/is-the-clock-ticking-for-tiktoks-intermediary-liability-exemptions.html

11 Active monitoring may not only breach data protection or privacy rules and cannot be demanded from service providers under Art.15 of the E-Commerce Directive – it also may lead to liability for inaction once a platform becomes aware (or should have been aware on the basis of its monitoring) of infringing content.

12 Based on Google’s own 2018 report, it has invested more than 100 million USD into building Content ID, the automated enforcement tool used by YouTube (which belongs to Google) – see ‘How Google Fights Piracy’, as note 5.

13 The experience of operators like Napster or Grokster (see the US Supreme Court decision in MGM Studios, Inc. v. Grokster, Ltd., 545 U.S. 913 (2005)) will have told platform operators that a full collision course with content owners is not helpful in guaranteeing the survival of their own business model. That can be better achieved by avoiding too much confrontation with right holders.
appear as trustworthy partner for content owners – or that they aim to anticipate legislative\textsuperscript{14} (or jurisprudential)\textsuperscript{15} change which requires them to be more proactive. As a result and in order to rather ‘err on the side of caution’, there is likely to be a tendency to over-enforce copyright claims. Most importantly however: employing content protection tools that allow to monetize user-generated content also creates quite a lucrative market for platforms, as they usually will be able to claim a (significant) share in the advertising revenue (or other form of monetization) generated by sharing the user’s content.\textsuperscript{16} In addition, large-scale availability of user content attracts more users and keeps existing users on the platform – generating even more revenues, including via shares in monetization activities by those claiming rights in user content.

In other words: the remix culture of users is turned into a profit enterprise for platforms and content owners\textsuperscript{17} which collude to exploit the user’s ‘digital labour’\textsuperscript{18} involved in creating and sharing content. Since platforms generally ask all their users for a world-wide, royalty-free and transferable license to use any element of the content a user might own,\textsuperscript{19} one might say that from a technical-legal perspective, everyone should be happy. But apart from the colluded exploitation of user content and user data in which platforms and content owners engage (of which most users are most likely unaware), one might wonder about the type of copyright (or rather, “content protection”) norms that are imposed and automatically enforced through the platform.

How does this form of private ordering align with our domestic copyright regimes, and the normativity embedded therein? In particular, is the widespread monetization of user generated content supported by copyright principles as we know them? One might think that exploiting user’s content through monetization has no legal basis if the use of content falls under a copyright exception, or is otherwise non-infringing. But even if user


\textsuperscript{15} See e.g., the ‘Pirate Bay’ judgment of the CJEU, \textit{Stichting Brein v Ziggo BV and XS4All Internet BV} - Case C-610/15 (14 June 2017), extending primary liability for copyright infringement to certain hosting platforms.

\textsuperscript{16} In the case of YouTube, that appears to be around 40-50\% of the money generated through monetising content claimed by those eligible for Content ID, see Soha & McDowell, as note 6 above.

\textsuperscript{17} Consider the telling examples provided by Stephen Witt, When your YouTube video becomes a corporate profit center, Los Angeles Times, Jun 27, 2015 – online at https://www.latimes.com/opinion/op-ed/la-oe-0628-witt-youtube-copyright-20150628-story.html; as well as the ‘Harlem Shake’ meme discussed by Soha & McDowell, as note 6 above.

\textsuperscript{18} See the discussion in Soha & McDowell, as note 6 above, p.6.

\textsuperscript{19} See e.g. the ‘Licence to YouTube’ and ‘Licence to Others’ conditions in YouTube’s Terms of Service – at https://www.youtube.com/static?gl=GB&template=terms (as updated on 22 July 2019).
generated content does involve a bit of copyright infringing content (e.g. a one minute extract of a recorded song that serves as background in a 15 minute video), it is not immediately clear that the user content as a whole (the whole 15 minute video that otherwise does not infringe) should be monetized exclusively by the platform and the copyright owner. From a restitutionsal perspective, one might rather suggest that allocating all revenues from monetization to the content ID claimant (or anyone else relying on automated enforcement tools) and hence de-monitising users and creators subject to such claims constitutes unjust enrichment.

III. PLATFORMS AS FUNCTIONAL SOVEREIGNS

In the remainder of this paper, I want to sketch a ‘brave new world’ of automated content protection based on the example of YouTube’s Content ID system – although this is just one (albeit a quite sophisticated and complex) case of a broader trend towards parallel legal universes that occasionally reflect state-made IP laws, but often diverge from them in significant ways. My focus is on the transition towards an increasingly comprehensive and transnational private ordering we are facing as globally operating online platforms set their own rules (or ‘community guidelines’), implement them through their codes and user interfaces, and enforce them through algorithms. In constitutional terms, platforms (partially in concert with those who claim rights in the content users upload or share) set norms, apply and enforce them, and also act as quasi-adjudicators over disputes. Confirmed by announcements such as Facebook declaring it will set up its own ‘supreme court’, platforms increasingly act like states within their operational domain – or, as it has been aptly put, as ‘functional sovereigns’.

However, it is not only about a concentration of legislative, executive and judicative power is in the hands of those which have an evident self interest in how this power is exercised. There is an additional, transnational dimension as most platforms operate across borders, and often on an

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20 This however appears to be the current practice on YouTube – i.e. a tiny amount of copyrighted content if claimed under Content ID generally prevents the user to monetise her/his videos – regardless how irrelevant that copyrighted material is for the success of the user’s video as a whole – see the discussion in Section IV 3. below.

21 According to its Charter (https://fbnewsroomus.files.wordpress.com/2019/09/oversight_board_charter.pdf), the ‘court’ (which Facebook refers to as oversight board) is meant to be independent of Facebook’s executive branch (Article 5), able to bind the executive with its decisions (Articles 1 Section 4 & Article 4), and will base those decisions on Facebook’s ‘values’ which ‘guide its content policies and decisions’ (Article 2 section 2), rather than local or otherwise applicable laws made by states (Article 7). See generally K Cox, Facebook plans launch of its own ‘Supreme Court’ for handling takedown appeals, 18 September 2019 - online at https://arstechnica.com/tech-policy/2019/09/facebook-plans-launch-of-its-own-supreme-court-for-handling-takedown-appeals/ (with further links to the Charter of the court, and other founding documents by Facebook).

22 I owe this term to John Naughton, making this observation during a discussion at Wolfson College, Cambridge, November 2019.
international scale. In contrast to states where sovereignty is primarily limited through territory, the functional sovereignty of online platforms frequently has global reach, and in any case transcends national borders. And perhaps most importantly, the efficacy of automated private ordering and its impact by prescribing how we experience audio-visual content easily surpasses international and national IP norm-setting. Even the most detailed rules in comprehensive IP chapters in free trade agreement (FTAs) require transposition into domestic IP laws and, crucially, enforcement ‘on the ground’ through domestic offices and courts. In the world of automated content protection tools however, everyone only gets to access, experience and use what passes through filters and other algorithmic gatekeepers, implementing the normative decisions they embed and execute.\(^{23}\)

In philosophical terms, the norms set and enforced in that way do not represent institutional facts (that is, facts dependent on human construction and agreement) anymore – they become brute (physical) facts.\(^{24}\) Or, in socio-technological terms, norms set, enforced and adjudicated by functional sovereigns transcend Lessig’s conception of ‘code as code’: norms are not only embedded and enforced through technology – the physical ‘remoteness’ and global spread of platforms allows these actors to expand their autonomy in creating, implementing and adjudicating them without the need of state-sanctioned infrastructures. These fundamental effects not only concern blocking of content, but also affect monetization. While the content remains available for the user and others to view and share, once it is ‘claimed’ only the claimant profits from it in economic terms. In light of the absence of effective complaint and dispute resolution tools discussed below, the norm so imposed is that users cannot commercially benefit from their content when claimed by others. In essence, users are deprived of any copyright in works they create and upload as soon as they include material matching with content that others claim. Section IV below offers further, more detailed examples of platform rules operating as brute facts with global reach.

One may counter that the reach of platform normativity is at best inter-parties and voluntary – and hence cannot be compared with the inter-omnes effects of binding legal rules, set out in domestic (IP) statutes and their

\(^{23}\) As Niva Elkin-Koren has aptly put this: ‘Algorithmic copyright enforcement (…) has changed copyright default: if copyrighted materials were once available unless proven to be infringing, today materials that are detected by algorithms are removed from public circulation unless explicitly authorized by the right holder.’ See N Elkin-Koren, Fair Use By Design, UCLA Law Review, Vol. 64 (2017), 1082, 1093. In addition, the norms and potential biases embedded in automated enforcement tools are likely to frame user experiences and gradually change user behavior. See generally D Burk, Algorithmic Fair Use, U. Chi. L. Rev., Vol. 86 (2019) 283.

\(^{24}\) On the philosophical distinction between institutional or social facts (which generally include socially constructed things such as money and legal norms) and brute (physical) facts, see the works of G.E.M. Anscombe and J Searle. On an application of this approach to IP law, see Alexander Peukert, Kritik der Ontologie des Immaterialgüterrechts, Mohr-Siebeck (2018).
international treaty counterparts. Surely, no-one is forced to use a platform like YouTube, Facebook or Instagram – and we are also not compelled to do online searches via Google. As private individuals choosing to use the services offered to us by private market actors, we are in well-known domain of private party relations where (with some occasional limits) party autonomy and freedom of contract reign.

However, even it can be shown that users have validly agreed to the rules of the platform, it appears doubtful that notions of party autonomy and freedom of contract were designed to serve as foundations for creating private content protection regimes with global reach, pared with immediate and automated enforcement. Furthermore, the argument that users are free not to use the platform neglects the fact that many of these platforms nowadays function as essential facilities in accessing and communicating content online. Their role as facilitating freedom of speech and information has been recognized by courts which take this function into account when determining platform liability, for example for direct and indirect copyright infringements. If platforms are privileged based on their public interest function, why should they not also have to be held responsible to actually fulfil this function? I will come back to this key issue of accountability and responsibility below – after setting out in some more detail how systems such as Content ID operate.

IV. CONTRASTING YOUTUBE’S CONTENT ID AGAINST BASIC COPYRIGHT PRINCIPLES

A. Eligibility

First of all, Content ID is not for everyone. Without giving away any


27 See CJEU judgments in Case C-360/10, SABAM v Netlog (16 February 2012), para.48-50 and Case C-314/12, UPC Telekabel Wien v Constantin Film Verleih (27 March 2014), para.55-57; and in particular the decision of German Federal Supreme Court (BGH) in Vorschaubilder III (I ZR 11/16 – 21 September 2017), para.60-62.
specific thresholds, YouTube indicates that ‘to be approved, you must own exclusive rights to a substantial body of original material that is frequently uploaded by the YouTube user community.’\textsuperscript{28} The platform makes clear that it reserves to itself the final say on what enforcement tool it decides to provide to whom\textsuperscript{29} – pointing also to more basic (i.e. less automated and scalable) options such as its ‘Content Verification Programme’\textsuperscript{30}, a ‘Copyright Match Tool’\textsuperscript{31} and a simple copyright notification web form.\textsuperscript{32} YouTube apparently tries to offer the right type of tool to copyright owners with different needs, mainly based on the amount of their content shared on YouTube. A more cynical view would point out that (copy)rights and effective protection is provided only to major players – not individual creators with a handful of self-made videos or a few songs that others include in their YouTube uploads.

In any case, leaving it to the platform to decide who gets efficient and automated filters and who needs to engage in individual searches is quite problematic. The more these automated tools develop into the key mechanisms for enforcing copyright online, the more important is a non-discriminatory approach to eligibility. The most powerful tools will offer the most favorable protection, while not being eligible may at some point in the future mean that there is no effective protection available. Of course, in the ‘real’ world, a large-scale copyright owner will usually be better off than an individual author in terms of enforcing rights based on IP laws and through the judicial system – but at least the same rights and remedies are available to all. Offering differentially effective enforcement tools means to administer selective justice – in this case with no convincing reason for such a discriminatory approach. Such an approach is even more problematic where less powerful and economically weaker parties are likely the ones that are stuck with inefficient enforcement tools – while scalable and automated systems that invite to be abused (as shown below) are given in the hands of major copyright holders only. Even if smaller copyright owners have the option to sign up with a third-party service provider that administers Content ID for smaller players, that creates additional costs and will not usually be a

\textsuperscript{28} See ‘How Content ID Works’ - \url{https://support.google.com/youtube/answer/2797370}.
\textsuperscript{29} See ‘Qualifying for Content ID’ - \url{https://support.google.com/youtube/answer/1311402}.
\textsuperscript{30} See ‘Content Verification Programme’ (CVP) – which YouTube describes as ‘designed especially for copyright-holding companies to issue multiple removal requests’ and hence equally not accessible for everyone, and again subject to an application to be accepted by YouTube; See \url{https://support.google.com/youtube/answer/6005923}. A key difference to Content ID appears to be that CVP relies essentially on active searches by content owners, whereas Content ID filters any upload against content submitted to its reference databases, and conducts a legacy scan of all existing content on YouTube, searching for matches.
\textsuperscript{31} The Copyright Match Tool (CMT) can be used to individually search for full re-uploads (rather than just partial matches) of one’s own videos on other YouTube channels, and operates on a ‘first to file’ basis where only (near to) full matches with subsequent video uploads can be claimed. As of t is currently only available as a pilot for a limited number of YouTube channels – see \url{https://support.google.com/youtube/answer/7648743}.
\textsuperscript{32} See generally ‘Copyright management tools’ - \url{https://support.google.com/youtube/answer/9245819}.
realistic option for an individual creator.

B. Subject Matter

Secondly, not all content is meant to be protected under Content ID. But there is no mechanism to check whether the (presumably low) thresholds for copyright protection of the respective lex loci protectionis (or in fact those of any domestic law) are in fact met. Seemingly operating under the premise that all video and sound recordings – however short – are protected under neighboring rights and that any use not covered by an exception necessarily infringes, there is no attempt to check submitted content for subject matter- or threshold eligibility. Nor does Content ID verify whether the amount used in a claimed video would constitute infringement under the law of the country where protection is claimed. Instead, YouTube emphasizes that eligible Content ID users should only claim content for which they actually hold exclusive rights in the territories claimed. Its webpages explain, for example, that content licensed under a Creative Commons (CC) license, ‘public domain footage’ or material ‘used under fair use principles’ is ‘ineligible for use in or as a reference [file]’. But who is going to check that ineligible content is not claimed?

While it warns not to abuse the system and threatens to act if it becomes aware of such abuse, YouTube eventually leaves it to the content claimant to ensure that no wrongful claiming occurs; and to resolve ownership and

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33 A normatively flawed proposition in light of the original intent of such neighbouring rights to protect (significant) investment into activities that mediate and disseminate copyrighted works – but one which has been supported by the Opinion of the Advocate General to the CJEU in Moses Pelham GmbH vs Ralf Hütter (Case C-476/17), 12 December 2018. The subsequent CJEU judgment of 29 July 2019, para.26-39 & 66-74, held that even the inclusion of very short samples (2 seconds in the case at hand) implicates the exclusive right of reproduction of the producer of the sound recording from which the sample has been taken – unless the sample has been modified to an extent that it is unrecognizable. If the sample does remain recognizable, its use may fall under the quotation defence if it is used in a way that it ‘enters into a dialogue’ with the work (here phonogram) quoted. One has to assume that the approach adopted for audio recordings will equally apply to video recordings (films), so that any use of short, recognisable snippets amounts to an infringement in the EU – unless it can be justified under an exception. In the US, the Court of Appeals for the 2nd Circuit held a 37 second sample (used in a 7 minute song) to be fair use – primarily because of its transformative nature, the reasonable relation between amount and purpose of use, and since the use did not serve as market substitute for the original work; see Estate of James Oscar Smith v. Cash Money Records, Inc., Summary Order, 3 February 2020.

34 See ‘Content eligible for Content ID’ – online at: https://support.google.com/youtube/answer/2605065.

35 YouTube explains that as it automatically generates claims against those upload matching content, the Content ID user is ‘responsible for avoiding incorrect results’, such as ‘claims that interfere with authorised uses of content. It however also warns that ‘YouTube takes action to address cases of abuse and error’, including disabling specific reference files (…) and releasing all associated claims, disabling Content ID or even terminating YouTube partnership. See ‘Content Eligible for Content ID’ as note 32.
other disputes over any claims made. In its further explanations on eligible content, YouTube simply stresses that the reference content provided must be ‘sufficiently distinct’ (hence excluding remasters, soundbeds or production loops), and individualized (i.e. excluding compilations, DJ mixes or mash-ups). Anecdotal evidence of all kinds of false positives in claiming content not copyright-protected, not owned by the entity claiming it, or clearly within the ambit of copyright exceptions (in particular fair use) shows that leaving it to content owners to ‘self-regulate’ and simply warn them not to over-claim has, at least from a normative perspective, not worked well in the past.

C. Scope of Protection

Third, the scope of protection and ‘remedies’ offered by the platform vis-à-vis user uploads that match claimed content focus on common options (called ‘policies’ in the case of Content ID) such as:

(1) monetising (allowing the matching upload to be viewed and display advertisements with it);
(2) tracking (merely collecting statistics about views); or
(3) blocking (i.e. not allowing the matching upload to be viewed).

Content owners can distinguish between how their own content and matching uploads are treated, customise policies for individual countries, or simply rely on YouTube’s default policy which is to monetise throughout the world. As this also pays out for the platform, the system is unsurprisingly geared towards monetization and towards the use of automated tools like Content ID more generally – which according to YouTube ‘has outnumbered copyright takedowns by more than 50 to 1’. To incentivise content owners to use this system, YouTube provides them with sophisticated tools to tailor algorithmic enforcement to their individual needs. Enforcement means that in principle any match with content claimed

36 See ‘How to avoid and resolve improper claims’ - https://support.google.com/youtube/answer/4352063.
37 See ‘Content eligible for Content ID’, as note 33.
38 See M Sag, as note 1, at 544-554.
39 For a comprehensive database on policies set for audio content on YouTube, see the ‘Music Policy Directory’ at https://www.youtube.com/music_policies.
41 See ‘Usage policies and match policies’ - https://support.google.com/youtube/answer/107129.
42 See ‘Create a custom policy’ - https://support.google.com/youtube/answer/106964.
43 See ‘Set default policies’ - https://support.google.com/youtube/answer/3369992.
44 See ‘The difference between copyright takedowns and Content ID claims’ - https://support.google.com/youtube/answer/7002106.
45 For example, to customise a policy in a way that it allows short uploads from fans (which of course may function as promotional tools, and facilitate goodwill – see https://support.google.com/youtube/answer/107129), or to ‘whitelist’ (i.e. exempt) certain
by an owner will trigger a Content ID claim,\(^{46}\) without a \textit{de minimis} threshold for finding ‘infringement’.\(^{47}\) YouTube however does ask Content ID users not to ‘overclaim’ and to ‘clean up mistaken claims’.\(^{48}\) It also requires them to ‘\[v\]alidate potentially invalid reference content’ – suggesting that it employs further checks reviewing in particular whether content claimed is actually eligible for Content ID, including whether it incorporates public domain footage.\(^{49}\) The extent to which these checks occur, and whether they are based on automated or human review, nevertheless remains unclear.

As the discussion in Section II has suggested, exploiting user uploads through monetization has no basis in copyright law if the use of content falls under a copyright exception, or is otherwise non-infringing. As also observed above, even if user generated content does involve a fraction of copyright infringing content, it is not immediately clear that the user content as a whole should be monetized exclusively by the platform and the copyright owner; hence per se excluding those who incorporate claimed material. This however appears to be the current practice on YouTube: a tiny amount of copyrighted content if claimed under Content ID generally prevents the user to monetise her/his videos – regardless how irrelevant that copyrighted material is for the success of the user’s video as a whole.\(^{50}\) In sum then, any upload claimed as allegedly infringing by Content ID can only be monetized by the entity making the Content ID claim, preventing users faced with such a claim from earning any shares in the revenues generated from ads run against their works on YouTube.\(^{51}\)

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\(^{46}\) See ‘Choose effective references’ - https://support.google.com/youtube/answer/3013321.

\(^{47}\) While YouTube does seem to set a minimum length for matches at around 30 seconds, that can be manually set at a lower threshold by those eligible for Content ID.

\(^{48}\) See ‘Clean up incorrect claims’ - https://support.google.com/youtube/answer/4352063. For example, one has to exclude content one does not own from a reference file submitted for identifying matching uploads (https://support.google.com/youtube/answer/4389910).

\(^{49}\) See https://support.google.com/youtube/answer/6013183.

\(^{50}\) See ‘What kind of content can I monetise?’ https://support.google.com/youtube/answer/2490020?hl=en-GB and the blog discussion at https://support.google.com/youtube/thread/1281991 where YouTube admits that it is ‘clearly not ideal’ that a copyright owner is ‘getting all of the creator’s revenue for a few seconds of a video’. An exception exists for certain eligible cover videos – see https://support.google.com/youtube/answer/3301938.

\(^{51}\) See the discussion here: https://support.google.com/youtube/thread/1281991 and here: https://youtube-creators.googleblog.com/2019/08/updates-to-manual-claiming-policies.html (indicating that despite some changes to improve the system for creators, any inclusion of someone else’s content will continue to afford the exclusive monetization options to the Content ID claimant).
D. Defences and Dispute Settlement

Fourth, while platforms generally offer mechanisms for users to dispute a claim by a content owner, dispute resolution is often without any involvement of independent third parties. From the outset, the onus is on the user whose uploaded content has been automatically blocked. YouTube, for example, explains to its users how to dispute a Content ID claim, in particular if they can argue for ‘fair use’ and/or their content being in ‘the public domain’. An interesting side-note is that YouTube appears to apply the US concept of fair use throughout its platform – rather than distinguishing based on the applicable exceptions and other limits in the country for which Content ID protection is sought. If it was to serve as a meaningful defense on the platform (akin to how sec.106 USCA has been applied by US Courts), this arguably would lead to a more effective ‘globalisation’ of fair use than any of the advocates for rolling the concept out internationally could have hoped for. The problem, however, is that on Content ID, users can’t rely on fair use (or any other defenses) effectively. If the user disputes a claim, it is then entirely up to the content owner whether it ‘releases’ or ‘upholds’ the claim. In the latter case, the user normally will have a right to appeal – which is in principle no more than another plea to the content owner to reconsider its claim over the upload.

An appeal to the content owner however does require the latter to request a copyright takedown, based (again regardless of the country for which protection is claimed) on the DMCA, if it wishes continue to uphold its claim. That in turn not only leads to a copyright strike (by YouTube) for the user, but also sets the DMCA machinery in motion. Again, it is interesting to note that Content ID indirectly globalises the notice and counter-notification system under the DMCA (a specific piece of US legislation), regardless of where the user resides. The user then has to submit a counter-notification under sec.512(g) DMCA if (s)he insists on the content to be released. In order to keep the disputed content offline, under

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52 See ‘Dispute a Content ID claim’ - https://support.google.com/youtube/answer/2797454. In a November 2018 report, YouTube indicates that less than 1% of all Content ID claims are disputed – see ‘How Google fights Piracy, as note 5, at p.28.
53 See for example the YouTube page targeting a German audience and explaining fair use: “Was ist “Fair Use” (angemessene Verwendung)” - https://www.youtube.com/yt/about/copyright/fair-use/#yt-copyright-protection.
54 See ‘Dispute a Content ID claim’, as note 51.
55 Ibid.
56 Ibid.
57 For the user, receiving just one ‘copyright strike’ serves as a warning and affects the user’s ability to monetise her/his own content. A user that has received three strikes will have her/his account terminated, all uploaded videos removed, and will not be able to create new channels on YouTube – see https://support.google.com/youtube/answer/2814000. Users therefore put their YouTube presence on the line if they appeal, and then have to issue a counter-notification (thereby risking a lawsuit in the US, see below) in order to counter the strike.
sec. 512(g)(2)(C) DMCA, the content owner would in principle have to initiate court proceedings against the user. But ‘to save time for right holders’, YouTube conducts an initial screening whether counter-notices ‘provide a sound rationale for reinstatement’. For a significant majority of counter-notices, which apparently fail this test, the disputed claim will be finally resolved in favour of the content owner – without the user ever having been given the opportunity for independent, let alone judicial, review.

One might argue that at least for those cases which have passed YouTube’s initial screening, eventually the matter will be decided by judicial authorities and that the onus is on content owners to initiate such proceedings. This probably is true for US-based users (assuming that they are willing to submit a counter-notification and later risk a lawsuit) – but will not work as well or as easily for users outside the US, who apparently are still subject to the DMCA-based process if they wish to retain their uploads on YouTube. Under Section 512(g)(3)(D) of the US Copyright Act, the contents of any counter-notification must include a statement whereby the user consents to the jurisdiction of US Federal District Court of her/his permanent residence; or – if the user’s address is outside the US – to the jurisdiction of ‘any judicial district in which the service provider may be found’. In the case of YouTube, this arguably entails consent to be sued in California, where YouTube has its headquarters. Submitting a counter-notification hence means for a user from outside the US that (s)he consents to the jurisdiction of a US court, and arguably risks being sued as well as receiving a default judgment. It is apparent that this will prevent most non-US based users from filing counter-notices – which are necessary to overcome the content owner’s rejection of an appeal against any Content ID claim. The fact that YouTube occasionally will support fair use litigation in favor of users does little to correct the bias inherent in the Content ID system, which runs on simply accepting a content owner’s claim.

E. No In-built Enforcement of ‘User Rights’ and the Public Domain

In summary then, YouTube is affording content owners a powerful automated and scalable tool to act against any upload which matches with content they claim to own. As a private market actor who benefits significantly from monetization of its user’s content, YouTube has strong

59 YouTube rejects more than 2/3 of counter-notifications at this level, see ibid.
60 Empirical evidence however suggests that counter-notifications are ‘a dead letter – impractical and rarely used’ – see Urban et al., as note 3 (2016), at 44.
62 See Section 512(g)(3)(D) DMCA – whereby the user will also ‘accept service of process from the person who provided notification under subsection (c)(1)(C) [of the DMCA] or an agent of such person.’
economic interest in its Content ID system being widely used — and little incentive to ensure that the system reflects the traditional limits of copyright protection in terms of subject matter, thresholds for protection and infringement, and exceptions. It is then not surprising that YouTube leaves it essentially to content owners to stick to the limits of copyright law when operationalizing Content ID against its users. Whether or not these limits are actually adhered to, enforcement of content owner’s policies is automatic and built into the platform. This usually means that a user has to take legal action arguing that, under the applicable national law, for example: (1) the claimed content is not copyright protected; (2) the amount utilized does not amount to an infringement; or (3) an exception or other defense applies. So, the burden is on users to take matters into their hands to enforce their ‘rights’ or other mandatory copyright rules that work in their favor.

The problem of course is that by and large, copyright laws do not conceptualize the various limits to copyright protection as ‘user’s rights’, and they are not necessarily contract- (or TPM) proof either. Arguably, in the world prior to automated enforcement, there was no need for this since the user would normally just use content and then copyright owners need to take action to enforce their rights. Automated content protection through the platform turns this on its head – which requires us to rethink ways to properly conceptualize limits to copyright in this context. In an environment where those who assert ownership over content determine what is protected and the platform defines how, and where these determinations are directly enforced through algorithms, society may wish to consider new and effective tools that re-enforce the public domain and other basic parameters within copyright law.

V. PROTECTING USERS AGAINST DE-MONETIZATION

Coming back to the theme of platforms as functional sovereigns and automated content protection, the tools to reinforce the basic parameters of copyright discussed above would ideally be directly built into the infrastructure and automated tools that platforms employ – ‘fair use by design’, as Niva Elkin Koren has called it. Others however, such as Dan

64 There are, of course, exceptions: on a proactive approach to copyright exceptions as user’s rights, see the Canadian Supreme Court judgment in CCH Canadian Ltd. v. Law Society of Upper Canada, [2004] 1 S.C.R. 339, 2004 SCC 13. Mandatory exceptions which cannot be overridden by contract can be found in sec.29, 29A, 30, 30A&32 of the UK CDPA and in for example the EU Software and Database Directives. As discussed below, also Art.17(7) of the Digital Single Market Directive aims to ensure the applicability of certain exceptions in the context of content removal and blocking online. For a general discussion on user rights, see Pascale Chapdelaine, Copyright User Rights, Oxford University Press, 2017 as well as Graham Greenleaf and David Lindsay, Public Rights: Copyright’s Public Domains, Cambridge University Press, 2018.

65 With the exception of situations where technological protection mechanisms (TPMs) are deployed.

66 N Elkin-Koren, as note 22, at 1193.
Burk, have been rather critical of that approach, warning that ‘the design values embedded in algorithms will inevitably become embedded in public behavior and consciousness’, so that ‘algorithmic fair use’ exports and disseminates programmer’s (un)conscious biases or predisposed (training) datasets to all users, thereby ‘progressively altering the fair use standard it attempts to embody’. 67

Without addressing these concerns, Art.17(7) of the Digital Single Market Directive requires EU Member States to ensure that non-infringing user content remains ‘available’ on the platform. In particular, users must ‘be able to rely on’ the quotation, criticism and review, as well as the caricature, parody and pastiche exception. 68 While a lot will depend how exactly EU Members implement Art.17(7) DSM, it seems to focus on preventing that non-infringing content is blocked or removed. That alone however is not enough. As the Content ID example shows, nowadays blocking or removing content is the rare exception and monetization the rule. EU Members should consider this when implementing the DSM. Since the ability to rely on the listed copyright exceptions arguably implies an option to invoke them also against attempts to monetize user content that amounts to a parody, quotation, criticism or review, one would hope that Art.17:7 will be implemented to cover monetization.

It has also been argued that (at least by US standards, under sec.512(f)) after Universal vs Lenz,69 ‘consideration of fair use requires human review’ – even if the Ninth Circuit did not explicitly say so. 70 Outside the notice and takedown system, US law however does not impose such requirement on privately ordered content protection tools.71 Art.17(9) DSM on the other hand does require in such cases that ‘decisions to disable access to or remove uploaded content shall be subject to human review’ – but could be read narrowly not to apply disputes over monetization. Extrapolating from the debates about incorporating fair use into machine-learning, a key question will be whether future automated copyright tools can be trained to understand and apply the boundaries and limits of our copyright laws, or at least the core normative principles? What machine-comprehensible proxies can we feed these tools to recognise works of authorship, originality, to distinguish between idea and expression, to apply other thresholds for infringements

67 See D Burk, as note 22, p.2, 9-17, see also the examples in M Sag, as note 1, at 562-563.
68 In full, Art.17(7) states: ‘The cooperation between online content-sharing service providers and rightholders shall not result in the prevention of the availability of works or other subject matter uploaded by users, which do not infringe copyright and related rights, including where such works or other subject matter are covered by an exception or limitation. Member States shall ensure that users in each Member State are able to rely on any of the following existing exceptions or limitations when uploading and making available content generated by users on online content-sharing services: (a) quotation, criticism, review; (b) use for the purpose of caricature, parody or pastiche.’ (emphasis added).
69 *Lenz v. Universal Music Corp.*, 815 F.3d 1145, 1154 (9th Cir. 2016).
70 M Sag, as note 1, p.533.
71 Ibid, at p.544.
(such as a substantiability test), or to filter out other non-infringing uses, for example based on the more specific, enumerated exceptions in Europe?

Without digging deep into the literature on machine-learning here,72 one will have little difficulty imagining that the outcomes of such an exercise are very likely to change our copyright norms, perhaps modifying the underlying value-judgments and eventually how copyright protection is socially constructed and experienced along the way. Counter-norms designed to implement these exceptions and other limits to (or constraints within) copyright via code, technical infrastructure and online complaint mechanisms are not just institutional (that is, constructed) facts – they are brute facts, directly shaping our reality. While we usually employ layers of discretion (appropriately exercised by enforcement agencies and judges) between a legal rule and its enforcement, hard-coded, in-built and automated rules are always enforced in full, on all occasions. That also means that checks and balances usually available to act against a perceived unfair or otherwise ‘unjust’ enforcement need to be transposed into technology and infrastructure. This is a momentous task, and it is not clear how that can be achieved. But it is clear that this should not be left to private orders set by functional sovereigns like online platforms: even assuming the best of intentions to cater for all their customers and uphold ‘community values’ such as freedom of expression, private actors remain primarily committed to furthering their own interests, in particular profit maximisation.73

The key then is not whether copyright by design is possible (it’s already here), or whether it will change copyright protection (it will), but what kind of change we – as an individual society or even ‘global community’ – consider desirable, or at least acceptable. That in turn essentially depends on who designs automated copyright protection, and whether there is oversight and accountability within that process. The example of YouTube’s Content ID perhaps primarily shows an overall drive away from blocking towards monetization of user content as default embedded in and facilitated by the system. At best, monetization can be seen as automated licensing of the copyrighted material users integrate into their videos and other created content. In that way, monetizing appears more user-friendly than large-scale take-downs when it comes to user content that infringes. But remember that no-one actually checks whether the content claimed is actually copyrighted, and whether its use is actually infringing. Unless a valid licensing agreement exists, such monetization of user-generated content arguably amounts to copyright infringement by the platform – as the user’s content will almost always contain a recording which qualifies for protection under neighbouring rights. Questions about the validity of the licensing aspects in the terms of

72 Instead, see the extensive discussion in D Burk, as note 22.
73 For an illustrative example that shows the impact (and unintended consequences) of changes made by platforms to maximise the amount of time users spent on a platform see Kevin Roose, The Making of a YouTube Radical, New York Times 8 June 2019 – online at https://www.nytimes.com/interactive/2019/06/08/technology/youtube-radical.html.
service agreements aside, excluding the user from any revenues generated through monetizing seems grossly unfair and exploitive. Even where user generated content involves copyright infringing material, that may well have minor significance for the popularity of that content, and in any case will usually not be the sole element that drives monetization. Exploiting the users ‘digital labour’\(^{74}\) without compensation in this way effectively allows the platform and content owners to cash in on any original or public domain elements of the content uploaded by the user. Such outcomes should not be surprising when system design is by private market actors primarily driven by profit motives.

If we think it is important that automated systems also reflect other interests, the stakeholders representing them must have a say and hence get to participate in the ‘quasi-legislative’ process of system design. Of course, this brings us back to the initial question of the role of intermediaries. Do we consider platforms like YouTube and others as private parties, as public utilities, as essential facilities, human right duty bearers or facilitators (or even guarantors) of freedom of expression online? If they are essentially private entities, then party autonomy, freedom of choice and contract should govern the extent to which users get to influence automated content protection tools – perhaps with a bit of mandatory contract law protections in favour of the weaker party.\(^{75}\) Taking account of the transnational (often global) and (close to) inter omnes effects of norm-setting by platforms described above, one may be inclined to categorise them in a way which takes these effects and their functions into account as well. These (and other) perspectives will determine follow-on questions of accountability and legal responsibility of platforms.\(^{76}\)

In my view, a more proactive approach is in principle justified by the effects and functions described above. Legislation should require automated content protection to be more transparent and comprehensible, for example by demanding that a machine-generated outcome is accompanied by explanations showing to those affected in an easy-to-understand way that (and how) copyright eligibility, infringing use, and exceptions and limitations have been considered.\(^{77}\) Platform regulation could also adopt a more rigid

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\(^{74}\) See the discussion in Soha & McDowell, as note 6, p.6.

\(^{75}\) This can be in form of mandatory (contract-proof) exceptions as for example in sec.29 (4B), 29A(5), 30(1ZA), 30A(2) CDPA.

\(^{76}\) See also Maayan Perel & Niva Elkin-Koren, Accountability in Algorithmic Copyright Enforcement, 19 Stan. Tech. L. Rev. 473, 481 (2016).

\(^{77}\) This could be linked to a good faith belief requirement that the claimed user content is actually infringing – akin to the approach in the Lenz judgment (note 68) – which should offer, as a minimum, an explanation to the user why her/his upload is claimed to be infringing, and what can be done to challenge this effectively in front of an impartial and independent third party, such as an ombudsman for platform users. In terms of additional transparency and fairness for (business) users of platforms, see also the Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services – which, as per
standard whereby the platform and those who use its tools to enforce their copyrights show that they have undertaken a due diligence analysis of whether the use of their content as claimed actually amounts to an infringement, under the law of the country where protection is claimed. The platform as principal designer of the system could also be asked to show what exactly it does to prevent abuse (or more specifically, avoid protection beyond the core normative limits of applicable copyright laws) by those claiming rights in user content. Perhaps most importantly, we should search for more effective and fair remedies. Users must be able to contest these matters in meaningful dispute settlement proceedings offered by the platform which (1) must involve an independent and impartial review – for example by an ombudsperson for platform users; and (2) allow users to challenge claims – importantly also those involving monetization – in front of courts with jurisdiction over the protection claimed by a content owner.

In case a user contests a claim, the onus should be on content owner to show a prima facie case of copyright or neighbouring right infringement – away from the current default where the ‘process accepts the rightsholder’s claim of infringement as correct until proven otherwise’. If automated enforcement allows allegedly infringing use to be stopped just on the basis of a claim, the decision to automatically enforce must be taken with care, and be reasoned and comprehensible to users – which for the time being might well mean that there needs to be a ‘human in the loop’. Art.17(9) DSM addresses some of these demands, but focuses on blocking and removing content – hence to a large extent disregarding exploitation of user content through monetization. Finally, akin to a duty to indemnify for damages suffered because of a request for preliminary (injunctive) relief or related court orders, one might even consider strict liability of those who decide to automatically enforce, should a court or other independent third party later find that no infringement existed. Overall, the idea is to adopt measures that account for, and re-balance, the fundamental shift which is inherent in Art.2(1), however does not apply to consumers and other non-commercial end users.

Discussions (ongoing, at the time of writing) in the UK about a ‘duty of care’ for platforms to take steps to prevent certain harms go in this direction.

While a full discussion of Art.17(9) is not possible here, this provision calls for a ‘effective and expeditious complaint and redress mechanism’ available to users in cases of disputes over ‘disabling access to, or removal of’ their content. It asks right holders to ‘duly justify the reasons’ for their blocking and/or removal requests, and demands that ‘decisions to disable access or to remove uploaded content shall be subject to human review’.

In its last sentence, Art.17(9) however does impose an obligation on EU Members to ‘ensure that users have access to a court or another relevant judicial authority to assert the use of an exception or limitation to copyright and related rights.’ (Emphasis added). Assertion of an exception in this sense would arguably cover cases where the user complains about being subjected to monetization of her/his content that benefits from a copyright exception. One hopes that EU Members will implement this provision in such a way that not only disputes over blocking or removing content where users invoke copyright exceptions must end up in front of courts – but also those about monetization of content that falls under copyright exceptions.
algorithmic enforcement where our ability to experience content online is pre-determined by what automation allows us to see and hear.