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## Twenty Years of US Digital Copyright: Adapting from Analogue

Jane C. Ginsburg  
*Columbia Law School*, [jane.ginsburg@law.columbia.edu](mailto:jane.ginsburg@law.columbia.edu)

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# Twenty Years of US Digital Copyright: Adapting from Analogue

Jane C Ginsburg\*

## Introduction

A survey of the period 2001–21 in US copyright law reveals several developments, all related to the impact of the internet on the exploitation of works of authorship. Digital storage and communications have called into question the scope of the exclusive rights set out in the US Copyright Act, and they have considerably expanded the reach of the fair use exemption. They have strained statutory and common law regimes of secondary liability and prompted the development of a ‘volition’ predicate to primary liability. While case law concerning non-digital subject matter or scope of protection has also abounded—including the Supreme Court’s rejection of constitutional challenges to Congress’s power to extend the copyright terms of existing works<sup>1</sup> and to restore copyright to certain foreign works that had fallen into the public domain in order to comply with international obligations;<sup>2</sup> the court’s failure to clarify the impenetrable statutory standard for the protection of applied art;<sup>3</sup> and the court’s interpretation of the first sale doctrine to establish a rule of international exhaustion<sup>4</sup>—space constraints compel the choice to confine this overview to the digital domain.

\* Morton L. Janklow Professor of Literary and Artistic Property Law, Columbia University School of Law. Email: \_\_\_, Many thanks to Rameez Anwar and Ian Bennett, both Columbia Law School class of 2022, for excellent research and editorial assistance.

<sup>1</sup> *Eldred v Ashcroft*, 537 US 186 (2003).

<sup>2</sup> *Golan v Holder*, 565 US 302 (2012).

<sup>3</sup> *Star Athletica v Varsity Brands*, 137 S Ct 1002 (2017). See generally Jane C Ginsburg, ‘Essay: The Sum is More Public Domain Than Its Parts? Copyright Protection for Applied Art After *Star Athletica*’ (2017) 166 University of Pennsylvania Law Review Online 83 <[www.pennlawreview.com/2017/10/25/the-sum-is-more-public-domain-than-its-parts-us-copyright-protection-for-works-of-applied-art-under-star-athletica-cas-imagination-test/](http://www.pennlawreview.com/2017/10/25/the-sum-is-more-public-domain-than-its-parts-us-copyright-protection-for-works-of-applied-art-under-star-athletica-cas-imagination-test/)>.

<sup>4</sup> *Kirtsaeng v John Wiley & Sons, Inc*, 568 US 519 (2013). The court’s decision permitted the exploitation in the US of a market for imported second-hand books lawfully printed and initially sold abroad. In the wake of that decision, US courts have endeavoured to assess whether the foreign-produced copies were ‘lawfully made under this title’, including whether to determine lawfulness under US law or under the law of the country of production. See eg *Geophysical Servs, Inc v TGS-NOPEC Geophysical Co*, 850 F3d 785, 795 (5th Cir 2017); *Geophysical Servs, Inc v TGS-NOPEC Geophysical Servs*, No CV 14-1368, 2017 WL 5598593, at \*10 (SD Tex 21 Nov 2017) (on remand, applying US law to assess lawfulness of copying abroad); *Noland v Janssen*, No 17-CV-5452 (JPO), 2020 WL 2836464, at \*4–5 (SDNY 1 June 2020) (applying US law to copy made in Germany). But see *Capitol Records, LLC v ReDigi*, 910 F3d 649 (2d Cir 2018). In light of *ReDigi*, *Kirtsaeng*’s expansive interpretation of the scope of the first sale doctrine may ultimately prove less significant than first appears. The doctrine applies only to physical copies and does not entitle the owner of a ‘particular copy’ to make more copies. As a result, the doctrine does not constrain the copyright owner’s control over works made available in digital formats, given that the dissemination of a digital copy entails the making of additional copies. Thus, while the Supreme Court in *Kirtsaeng* declined to circumscribe

This review will summarize digital-dominated developments concerning the scope of exclusive rights and exceptions and liability regimes. It will close with some speculations about a new convergence of the digital and hardcopy worlds.

## 1. Digital Challenges to the Scope of Exclusive Rights and Their Enforcement

The US Copyright Act sets out six exclusive rights: to reproduce the work in copies; to create derivative works based on the copyrighted work; to distribute copies of the work; and to publicly perform or display the work (and, with respect to sound recordings, a right limited to public performance by digital transmission).<sup>5</sup> Over the last twenty years, courts have adapted these rights, some more successfully than others, to the digital environment.

### 1.1 Reproduction right

Reproductions over digital networks have confronted courts with two questions: what is an actionable ‘copy,’ and who makes it? The Copyright Act defines copies as:

material objects, ... in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.

A work is ‘fixed’ in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.<sup>6</sup>

At first blush, the definition encompasses all media (‘fixed by any method now known or later developed’), and therefore should apply effortlessly to reproductions made by computers. But the duration criterion for a ‘fixation’ may distinguish temporary copies that reside in RAM from transient, ephemeral copies made in the course of communication over a digital network. In *Cartoon Network v CSC Holdings*,<sup>7</sup> the Second Circuit, focusing on the duration of the transient copies, held that reproductions made in a computer’s ‘buffer’ and lasting 1.2 seconds, were insufficiently ‘fixed’ to be ‘copies.’<sup>8</sup> While ruling that 1.2 seconds were not ‘more than transitory,’ the court did not indicate what period of embodiment would suffice, although it did imply that ‘at

§ 109(a) geographically, the Copyright Act likely confines *Kirtsaeng*’s application to physical copies. See Section 1.2.3 for a further discussion of *ReDigi*.

<sup>5</sup> 17 USC § 106.

<sup>6</sup> 17 USC § 101.

<sup>7</sup> 536 F3d 121 (2d Cir 2008); see also Section 1(C) for further discussion of *Cartoon Network*.

<sup>8</sup> *ibid* 129–30.

least several minutes' would meet the duration requirement.<sup>9</sup> Nor did the court suggest how to characterize durations falling between those two limits. Subsequent case law has provided no further guidance regarding the requisite duration for a reproduction to count as an actionable 'copy'.<sup>10</sup>

With regard to 'who makes' the copy (assuming the copy satisfies the unspecified duration requirement), the Second Circuit ruled that the entrepreneur of an automated system that copies, stores, and plays back television programming to subscribers at the subscribers' demand, lacked the 'volition' to 'make' those copies because the system simply responded to the end user's choice of programming to copy.<sup>11</sup> Rather, the copies were 'made' by the end users who selected the programs to be copied. What 'volition' means, and whether the US copyright law makes it a prerequisite to infringement liability, has provoked considerable controversy.<sup>12</sup> If all that were required to escape liability for unauthorized copying (or other acts coming within copyright's exclusive rights) were to make available an automated system for downloading or streaming protected works, then technological work-arounds could effectively nullify those rights.

In his *ABC v Aereo* dissent,<sup>13</sup> Justice Scalia contended that the volition requirement existed and 'comes right to the fore when a direct-infringement claim is lodged against a defendant who does nothing more than operate an automated, user-controlled system'.<sup>14</sup> But, lest this analysis lead to immunizing the providers of video-on-demand services, Justice Scalia cautioned that those services:

differ in one crucial respect: They choose the content. When a user signs in to Netflix, for example, 'thousands of ... movies [and] TV episodes' carefully curated by Netflix are 'available to watch instantly.' That selection and arrangement by the service provider constitutes a volitional act directed to specific copyrighted works and thus serves as a basis for direct liability.<sup>15</sup>

On the other hand, for Justice Scalia, a service that at the user's request merely retransmits third-party programming that the service has not selected lacks the 'volition' to be directly liable for infringing the user-chosen content. Although the majority in *Aereo* rejected the contention that rote retransmission of third-party communications did not subject the retransmitting entity to liability,<sup>16</sup> some lower courts have concluded that *Aereo* leaves a volition requirement intact and have accordingly held that a provider of peer-to-peer network connections that enabled users to send and receive

<sup>9</sup> *ibid* 128; see also *MAISys Corp v Peak Computer, Inc*, 991 F2d 511 (9th Cir 1993) (copy existed for a few minutes during transfer from permanent storage device to a computer's RAM).

<sup>10</sup> For a critique of *Cartoon Network's* duration requirement as both unworkable and inconsistent with the US' international obligations, see Megan Carpenter and Steven Hetcher, 'Function over Form: Bringing the Fixation Requirement into the Modern Era' (2014) 82 *Fordham Law Review* 2221.

<sup>11</sup> See *Cartoon Network*, 536 F3d at 131–32.

<sup>12</sup> David Nimmer, 'Volition in Violation of Copyright' (2019) 43 *Columbia J. L. & the Arts* 1 (32nd Annual Manges Lecture).

<sup>13</sup> *Am Broad Companies, Inc v Aereo, Inc*, 573 US 431 (2014) discussed in the text accompanying nn 43–59.

<sup>14</sup> *ibid* 454 (Scalia J dissenting).

<sup>15</sup> *ibid* 455 (citation omitted) (emphasis omitted) (Scalia J dissenting).

<sup>16</sup> See *ibid* 443–44.

third-party content played too passive a role to be directly liable for the unauthorized communications and copying.<sup>17</sup> If the poles of ‘volition’ analysis are ‘curation’ (volitional) versus mere provision of equipment allowing end users to copy or stream, it remains unclear where to situate other acts of retransmission along the spectrum.

## 1.2 Distribution right

Digital communications have required courts to assess both whether the delivery or making available of digital copies comes within the statutory right, and whether digital copies are subject to the ‘first sale’ (or exhaustion) exception to the scope of the distribution right.

### 1.2.1 Does sending a digital file ‘transfer’ ownership of a copy of the work?

Section 106(3) sets out the exclusive right to distribute copies of the work ‘to the public by sale or other transfer of ownership, or by rental, lease or lending’. Does ‘by sale or other transfer of ownership’ limit the kinds of distribution that come within the scope of the right, so that the right covers only transfer of physical copies? A ‘transfer of ownership’ of an analogue copy implicitly involves the transferor’s divestiture of her copy so that the transferee may take possession; by contrast, one who sends a digital file retains ownership of her source copy. A book sold by a bookstore leaves the store with the customer; there is one fewer copy in the store’s inventory. With digital copies, one typically ‘sends’ a copy, but retains one’s ‘original’ or ‘own’ copy in one’s computer memory. There is no divestiture; rather at least two people now own copies where before there was only one owner. Under these circumstances, is there a ‘transfer of ownership’? If ‘transfer of ownership’ implies divestiture, then the Act covers the transfer only of hardcopy formats.

In *London-Sire Records, Inc v Doe*,<sup>18</sup> the District Court rejected a divestiture requirement, focusing instead on the creation of a new copy in the computer of the recipient, a copy which the recipient now owns: ‘What matters in the marketplace is not whether a material object “changes hands,” but whether, when the transaction is completed, the distributee has a material object.’<sup>19</sup> The concept of ‘transfer’ in the digital world does not imply the disappearance of the transferor’s copy. Subsequent decisions agree that ‘transfer of ownership’ applies to digital copies and does not require divestiture of the sender’s copy. As the Copyright Office summed up in a 2016 study, ‘In light of this unbroken line of authority, the Office readily concludes that Section 106(3) extends to the digital transfer of copies or phonorecords in electronic formats and is not limited to the conveyance of tangible objects.’<sup>20</sup>

<sup>17</sup> *Perfect 10, Inc v Giganews, Inc*, 847 F3d 657, 663–64 (9th Cir 2017); see also *BWP Media USA, Inc v T & S Software Assocs, Inc*, 852 F3d 436, 442 (5th Cir 2017); *BWP Media USA Inc v Polyvore, Inc*, 922 F3d 42, 49, 67 (2d Cir 2019) (Walker J, Newman J, concurring).

<sup>18</sup> 542 F Supp 2d 153 (D Mass 2008).

<sup>19</sup> *ibid* 175.

<sup>20</sup> See Maria A Pallante, US Copyright Office, ‘The Making Available Right in the United States: A Report of the Register of Copyrights’ 20 fn 83, 22 (2016). <[www.copyright.gov/docs/making\\_available/making-available-right.pdf](http://www.copyright.gov/docs/making_available/making-available-right.pdf)> (hereinafter ‘The Making Available Right’).

### 1.2.2 Does 'making [copies] available' without actual transfer of a copy infringe the distribution right?

The 1996 WIPO Treaties oblige member states to protect the 'exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them'.<sup>21</sup> When the US ratified these instruments in 1999,<sup>22</sup> it did not provide explicitly for a 'making available' right because it took the position that US law already covered the substance of the right through a combination of the distribution and public performance rights.<sup>23</sup> A Copyright Office study published in 2016 elaborated on the meaning of 'making available', concluding:

Consistent with the plain language of the Treaties, which defines the making available right in terms of whether members of the public 'may access' a copyrighted work, U.S. law should be read to include the offer of public access, including through on-demand services, without regard to whether a copy has been disseminated or received.<sup>24</sup>

But US district courts seem less convinced. Some have held that merely offering a file via a website or filesharing network does not 'distribute' the work because 'distribution' requires actual receipt, while others require a showing of actual receipt, but disagree whether the court may presume receipt if the making available has set in motion all the other elements of distribution.<sup>25</sup> At least one other court, emphasizing the definition of 'publication', which covers both distribution of copies and the offering to distribute copies, has concluded that making copies available for download is akin to offering to distribute, which constitutes a 'publication', which, in turn, is synonymous with distribution.<sup>26</sup> No appellate court has yet resolved the issue. As a result, the US' uncertain implementation of the making available right with respect to the dissemination of digital copies may render it out of compliance with WIPO Treaty norms.

### 1.2.3 Exceptions to the distribution right: the first sale doctrine and digital exhaustion

While section 106(3) of the 1976 Copyright Act confers the exclusive right to distribute copies of a work, section 109(a) limits that right to the first lawful distribution of copies. That text provides that:

<sup>21</sup> WIPO Copyright Treaty, art 8, 20 December 1996, S Treaty Doc No 105-17 (1997); 2186 UNTS 121; 36 ILM 65 (1997); WIPO Performances and Phonograms Treaty, arts 10, 14, 20 December 1996, S Treaty Doc No 105-17 (1997); 2186 UNTS 203; 36 ILM 76 (1997).

<sup>22</sup> See *WIPO-Administered Treaties*, WIPO IP Portal, <[https://wipolex.wipo.int/en/treaties/ShowResuIsts?search\\_what=C&treaty\\_id=16](https://wipolex.wipo.int/en/treaties/ShowResuIsts?search_what=C&treaty_id=16)> (last updated 2022).

<sup>23</sup> See generally 'The Making Available Right' (n 20) 15-16 and sources cited therein.

<sup>24</sup> *ibid* 4; see also *ibid* 14 (surveying foreign authorities); 22-36 (analysing US authorities).

<sup>25</sup> *cf* *London-Sire Records, Inc v Doe*, 542 F Supp 2d 153, 169 (D Mass 2008) (holding that 'a reasonable fact-finder may infer that the distribution actually took place') with *Capitol Records, Inc v Thomas*, 579 F Supp 2d 1210, 1218-19 (D Minn 2008) (holding that 'actual dissemination' is required).

<sup>26</sup> *Elektra Entm't Grp v Barker*, 551 F Supp 2d 234, 241-42 (SDNY 2008) (equating distribution with publication and holding that an offer is sufficient). On the case law in general, see 'The Making Available Right' (n 20) 22-24 and sources cited therein.

Notwithstanding the provisions of section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.<sup>27</sup>

In *Capitol Records, LLC v ReDigi, Inc.*,<sup>28</sup> the Second Circuit declined to extend the first sale doctrine to the resale of digital files of recorded performances. Judge Leval underscored that section 109(a) applied to the exclusive right of distribution and did not authorize reproduction. ReDigi had endeavoured to create the online equivalent of the used record market by creating a database to which sellers would upload files they had purchased from iTunes, and from which buyers could download the files. ReDigi's software deleted the seller's copy from her hard drive upon upload, and from its own server upon download. As a result, at the end of the operation, there would be only one subsisting copy, even though additional, temporary, copies would have been made in the course of the transaction.

Those additional copies, however, doomed the enterprise. Judge Leval noted that the copy that finally arrived on the buyer's hard disk was not the same as the copy that existed on the seller's hard disk. Judge Leval referred to the text of section 109(a), along with reports from the Register of Copyrights from 2001 and 2016 to support his holding that the first sale doctrine applies only to a 'particular copy or phonorecord'.<sup>29</sup> Because of the proliferation of copies generated by the process of digital communications, the copy ultimately received will not be 'that copy' that resided on the seller's computer. Digital transfers entail the creation of new copies whether the parent copies are destroyed or not.

### 1.3 Right of public performance

17 USC section 106(4) grants the copyright owner the exclusive right to publicly perform literary, dramatic, musical, and audiovisual works.<sup>30</sup> The Copyright Act defines 'perform' as 'to recite, render, play, dance, or act [the work], either directly or by means of any device or process, or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible'.<sup>31</sup> Performances must be 'simultaneously perceptible', which distinguishes delivery of a download from the delivery of a stream.<sup>32</sup> In the latter instance, users see and/or hear the work as it is being communicated to them; in the former, they will not experience

<sup>27</sup> 17 USC § 109(a).

<sup>28</sup> 910 F3d 649 (2d Cir 2018).

<sup>29</sup> *ibid* 655.

<sup>30</sup> A separate provision, § 106(6), covers the digital audio transmission of performances of sound recordings.

<sup>31</sup> 17 USC § 101.

<sup>32</sup> *US v Am Soc of Composers, Authors, Publishers*, 627 F3d 64 (2d Cir 2010). The Supreme Court in *Aereo* assumed *arguendo* a requirement that the work be contemporaneously visible or audible at the time of its transmission, see *Am Broad Companies, Inc v Aereo, Inc*, 573 US 431, 445 (2014).



the work's contents unless they subsequently summon the work from their computer's memory.

The Act also defines '[t]o perform or display a work "publicly"' in relevant part as:

to transmit or otherwise communicate a performance or display of the work ... to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.<sup>33</sup>

This provision, known as the 'transmit clause', generally applies to electronic transmissions. To 'transmit' a performance or display of the work is defined as meaning 'to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent'.<sup>34</sup> 'Devices' and 'processes' expressly include those that were developed after the law came into effect.<sup>35</sup> The most significant decision concerning the right of public performance by transmission during the period surveyed in this chapter is *ABC v Aereo*,<sup>36</sup> in which the Supreme Court overturned Second Circuit case law that had ruled that the transmit clause did not reach cloud-storage video-on-demand retransmission services engineered so that only one viewer could receive a particular live broadcast transmission at a time. To appreciate the technological avoidance scheme, it is necessary to go back to the Second Circuit's *Cartoon Network* decision.<sup>37</sup>

*Cartoon Network* addressed the legality of a cable retransmission service's 'Remote Storage DVR System' (RS-DVR). RS-DVR worked in the same way as a regular DVR, except that, instead of recording the programming onto the hard disk of a device in the consumer's home, Cablevision's service would record it onto a customer's allotted storage space on one of its central servers.<sup>38</sup> Separate recordings would be made for each subscriber who requested one.<sup>39</sup> There was no dispute that performances were occurring as part of the Cablevision process, but the parties disagreed about *who* performed them, and whether or not the performances were public. As discussed earlier,<sup>40</sup> the Second Circuit determined that the customers 'made' the copies using Cablevision's instrumentalities. The Second Circuit then considered whether a transmission of a performance from the customer's individual source copy could be a 'public' performance. It identified the 'performance' referred to by the transmit clause not as the performance of the work, but as 'the performance created by the act of transmission'.<sup>41</sup> Accordingly, the Second Circuit concluded that, since each RS-DVR transmission is made from a unique copy to a single subscriber, those performances could not be 'to the public'.<sup>42</sup>

<sup>33</sup> 17 USC § 101.

<sup>34</sup> *ibid.*

<sup>35</sup> *ibid.*

<sup>36</sup> 573 US 431 (2014).

<sup>37</sup> *Cartoon Network LP v CSC Holdings, Inc.*, 536 F3d 121 (2d Cir 2008).

<sup>38</sup> Detailed descriptions of the Cablevision RS-DVR are set out at *Twentieth Century Fox Film Corp. v Cablevision Sys Corp.*, 478 F Supp 2d 607, 612 (SDNY 2007); see also *Cartoon Network*, 536 F3d at 124–25.

<sup>39</sup> *Cablevision Sys Corp.*, 478 F Supp 2d at 615.

<sup>40</sup> See nn 11–12 and accompanying text.

<sup>41</sup> *Cartoon Network*, 536 F3d at 136.

<sup>42</sup> *ibid* 138.



Cablevision's 'avision'<sup>43</sup> technique inspired kindred business models based on the breaking up of transmission signals into individualized communications which, thus splintered, would elude the public performance right, no matter how many members of the public were offered or received transmissions of the same work. The scheme that made it to the Supreme Court was devised by Aereo, Inc, an internet television retransmission service. Aereo's technology worked by combining thousands of thumbnail-sized, independently functioning antennas with cloud-based recording and storage functionality.<sup>44</sup> The system was based around copies, which were made regardless of whether a subscriber requested to 'watch' a broadcast (for near-live viewing) or 'record' it (for future consumption). When a subscriber launched a request for either service, Aereo's servers would allocate a personal antenna and transcoder to the requesting user.<sup>45</sup> The servers would then instruct the antenna to tune in to the relevant broadcast frequency and create a new directory in which to store the recording.<sup>46</sup> No two users were ever assigned the same antenna simultaneously, and recordings made while an antenna was assigned to a particular user were never available to any other subscriber.<sup>47</sup>

The lower courts acknowledged that Aereo's system was functionally equivalent to Cablevision's; bound by precedent, the Second Circuit ruled that Aereo did not publicly perform the television programming that it retransmitted to its subscribers.<sup>48</sup> The Supreme Court reversed. Relying on Congress's rejection in the 1976 Act of prior Supreme Court case law that had held that cable retransmission services did not 'perform' when they routed broadcast programming to subscribers, the six-justice majority first held that Aereo 'performed' the works even though the subscribers selected which over-the-air programming Aereo would relay to them.<sup>49</sup> The difference in delivery systems between cable services and Aereo, the court emphasized, 'means nothing to the subscriber. It means nothing to the broadcaster. We do not see how this single difference, invisible to subscriber and broadcaster alike' could recast Aereo out of its role as a 'performer' of the programming it retransmitted.<sup>50</sup>

<sup>43</sup> See Jane C Ginsburg and Rebecca Giblin, 'We (Still) Need to Talk About *Aereo*: New Controversies and Unresolved Questions After the Supreme Court's Decision' (2015) 38 *Columbia Journal of Law & the Arts* 109, 140 ('[A]vision'—conduct, combining aspects of law "evasion" and "avoidance," that exploits "the differences between a law's goals and its self-defined limits"' (quoting Tim Wu, 'When Code Isn't Law' (2003) 89 *Virginia Law Review* 679, 692)).

<sup>44</sup> *Am Broad Cos, Inc v Aereo, Inc*, 874 F Supp 2d 373, 381 (SDNY 2012) (finding that each antenna functioned independently). This finding was not appealed. See *WNET, Thirteen v Aereo, Inc*, 712 F3d 676, 680 (2d Cir 2013).

<sup>45</sup> *Aereo*, 874 F Supp 2d at 377.

<sup>46</sup> *ibid* 378.

<sup>47</sup> *ibid*.

<sup>48</sup> See decisions cited at n 44. Judge Chin dissented, labelling the scheme a 'sham':

The system employs thousands of individual dime-sized antennas, but there is no technologically sound reason to use a multitude of tiny individual antennas rather than one central antenna; indeed, the system is a Rube Goldberg-like contrivance, over-engineered in an attempt to avoid the reach of the Copyright Act and to take advantage of a perceived loophole in the law. 712 F3d at 697 (Chin J dissenting).

<sup>49</sup> *Aereo*, 573 US at 444.

<sup>50</sup> *ibid*.

The court next ruled that Aereo's performances were 'public'. The transmit clause covers transmissions *to* 'members of the public', but does not specify what makes one a 'member of the public'. The Supreme Court borrowed from another clause of the public performance right addressing performances *in* public; these occur in 'any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered'.<sup>51</sup> Reading one clause in light of the other, the court determined that a transmission is made 'to the public' if the 'members of the public capable of receiving the performance' form 'a substantial number of persons outside of a normal circle of a family and its social acquaintances'.<sup>52</sup> This does not mean that a substantial number of the members of that group must in fact receive the performance; the statute requires only that the members be *capable* of receiving it.

The court provided an important correction to the Second Circuit's statutory construction. In ruling that a 'public' performance could not result unless a substantial number of persons were capable of receiving the *same* transmission, the lower court effectively read on-demand delivery out of the Copyright Act. When viewers are separated in time as well as space—as the Copyright Act clearly contemplates—transmissions to different recipients necessarily will entail multiple viewers and therefore multiple transmissions.

But if, as the *Aereo* court held, an entity's multiple, time-and-space-separated transmissions to the public of the same work give rise to copyright-triggering public performances, then what of bona fide cloud-storage services to which multiple users may independently have uploaded the same works, which they subsequently request to view or hear? When subscribers stream back 'their' copies from Aereo, and Aereo is held to have publicly performed the work; why should the result differ when subscribers stream back 'their' Dropbox-stored copies if other Dropbox users have stored and requested transmissions of the same work?

The Supreme Court, without squarely answering that question,<sup>53</sup> distinguished *Aereo*, which it viewed as akin to a traditional cable television retransmission service, from 'an entity that transmits a performance to individuals in their capacities as owners or possessors'; such a service 'does not perform to "the public," whereas an entity like Aereo that transmits to large numbers of paying subscribers who lack any prior relationship to the works does so perform'.<sup>54</sup> The court's reference to 'owners or possessors' is, however, very imprecise; the service's customer is unlikely to be an owner of 'the work' because 'the work' is the incorporeal object whose 'owner' is the author or other copyright owner. Presumably, based on the submissions by the *amicus curiae* briefs, including those of the US,<sup>55</sup> the court was positing the request by a customer of a remote storage service to play back a digital copy that they were entitled, by express or implied licence, or under the fair use doctrine, to deposit in a digital storage locker. In that event, even if multiple customers separately stored the same content with the service, the latter's subsequent on-demand playback of performances of the

<sup>51</sup> 17 USC § 101.

<sup>52</sup> *Aereo*, 573 US at 448.

<sup>53</sup> *ibid* 450–51.

<sup>54</sup> *ibid* 449.

<sup>55</sup> Brief for the United States as *Amicus Curiae* Supporting Petitioners, *Am Broad Cos, Inc*, 134 S Ct 2498 (2014) (No 13-461), 2014 WL 828079.

same work to those customers would not be a transmission to ‘the public’ by the service or the customer: ‘[T]he term “the public” ... does not extend to those who act as owners or possessors of the relevant product.’<sup>56</sup> ‘Product’ in this context apparently includes a licence to access the stored content. When a digital storage service plays content acquired and stored by customers back to those customers, then, there is no public performance.

In addition to the customer’s entitlement of access to the customer-stored content, the court introduced a further consideration: ‘[W]e have not considered whether the public performance right is infringed when the user of a service pays primarily for something other than the transmission of copyrighted works ...’<sup>57</sup> The court appeared to be focusing on the nature of the commercial relationship between the customer and the service. Remote storage services are transmitting content to members of the public (their subscribers) when they play back the files requested by the users.<sup>58</sup> Unlike pay (or listen)-on-demand, however, the service for which the members of the public are paying is not the opportunity to receive transmissions of performances of particular works offered by the service, but rather to store whatever content the users post, whatever its source, and make it accessible remotely. The customers pay the same subscription fees whatever the content they store and access. Thus, while there is a public that pays in dollars or in subjection to advertising<sup>59</sup> (or other costs of ‘free’ commercial services), the public is not specifically paying for transmissions of performances of any given copyrighted works).

## 1.4 Public display

Finally, section 106(5) of the 1976 Copyright Act provides an exclusive right of public display. This right concerns static images (moving images are ‘audiovisual works’ and are ‘performed’ under section 106(4)). Section 109(c) circumscribes the right by authorizing the following: ‘the owner of a particular copy lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to display that copy publicly, either directly or by the projection of no more than one image at a time, to viewers present at the place where the copy is located.’<sup>60</sup> Thus, owners of artworks could publicly display them in museums and galleries and restaurants and shops and any other venue, without permission from or

<sup>56</sup> *Aereo*, 573 US at 449.

<sup>57</sup> *ibid* 450.

<sup>58</sup> Arguably, if the customer is requesting playback of content she selected and stored in ‘her’ cloud locker, the service’s role in the communication might be too passive, limited to the technical relay of the content, to be deemed the party who ‘performs’ the content. See *ibid* 433 (‘In other cases involving different kinds of service or technology providers, a user’s involvement in the operation of the provider’s equipment and selection of the content transmitted may well bear on whether the provider performs within the meaning of the Act’).

<sup>59</sup> The analysis would be different, however, if the service targeted advertising to the played-back content. At that point, the ‘commercial relationship’ between the service and the consumer would focus on particular works; the service would have foregone the content-neutrality that justifies a conclusion that the service is not publicly performing the played-back works.

<sup>60</sup> 17 USC § 109(c).

payment to the artist or photographer. As a result, the right had little economic significance until the internet enabled the mass communication of static images of text and photographs on webpages. When text and photographs become visible on a third-party website, the engagement of the display right means that the website operator who placed the content on the website must obtain permission to show the works (or contend successfully that the displays are fair use). A functioning display right can be an important source of income for photographers and graphic artists.<sup>61</sup> But a significant 2007 decision from the Ninth Circuit, *Perfect 10 v Amazon*,<sup>62</sup> substantially crippled the display right's application on the internet.

In *Perfect 10 v Amazon*, a publisher of 'adult' images sued Google for, inter alia, violating the public display right by presenting Google Image Search users with full-size versions of the images when those users clicked on a thumbnail image presented in the search results.<sup>63</sup> Unlike the thumbnail images, the full-sized images were *not* stored on Google servers but were instead served up to users through 'framed' or 'in-line' links which directed the users' browsers to the server on which the images originally appeared, albeit while in-lining the destination site with information from the linking site.<sup>64</sup> The Ninth Circuit announced the 'server rule', under which 'the owner of a computer that does not store and serve . . . electronic information to a user is not displaying [or distributing] that information, even if such owner in-line links to or frames the electronic information.'<sup>65</sup> Therefore, a defendant who provides a hyperlink of any kind (through simple linking, deep linking, framing, or in-line linking or embedding) cannot incur direct copyright liability unless that defendant also 'store[s] and serve[s]' the copyrighted material to which the link points.<sup>66</sup>

*Perfect 10* essentially precluded the argument that the provision of a link could constitute an act of direct infringement, even if a website's act of linking is done in a way that might 'cause some computer users to believe they are viewing a single . . . webpage' rather than a link to a source website.<sup>67</sup> For the next ten years, US courts held that the 'server rule' bars any finding of direct copyright liability for any kind of linking, including embedding.<sup>68</sup> By exempting a large portion of online activity—specifically, the practice of 'sharing' or redisplaying copyrighted content previously uploaded to and stored on publicly available websites without

<sup>61</sup> See Jane C Ginsburg and Luke Ali Budiardjo, 'Embedding Content or Interring Copyright: Does the Internet Need the "Server Rule"?' (2019) 42 Columbia Journal of Law & Arts 417, 432 fn 68 (comments of the American Society of Media Photographers).

<sup>62</sup> 508 F3d 1146 (9th Cir 2007).

<sup>63</sup> *ibid* 1155–56.

<sup>64</sup> *ibid* 1161 (noting that when displaying the full-sized images, Google simply 'provides HTML instructions that direct a user's browser to a website publisher's computer that stores the full-size photographic image').

<sup>65</sup> *ibid* 1159 (citing *Perfect 10 v Google*, 416 F Supp 2d 828, 843–45 (CD Cal 2006)).

<sup>66</sup> *ibid* 1161.

<sup>67</sup> *ibid*. See also 'The Making Available Right' (n 20) 49 ('The Ninth Circuit's reasoning in *Perfect 10* has been relied on to bar direct infringement claims for instances of inline linking and framing'). In addition, § 512(d) insulates persons who link to *unauthorized* content, so long as they are unaware that the source is infringing, and upon notification expeditiously remove the link.

<sup>68</sup> See eg *Pearson Educ, Inc v Ishayev*, 963 F Supp 2d 239, 250–51 (SDNY 2013) (simple linking); *Ticketmaster Corp v Tickets.com, Inc*, No CV 99–7654 HLH(BQRX), 2000 WL 525390, at \*2 (CD Cal, Mar 27, 2000) (deep linking); *Perfect 10*, 508 F3d at 1159; *MyPlayCity, Inc v Conduit Ltd*, No 10 Civ 1615(CM), 2012 WL 1107648, at \*12–14 (SDNY 30 Mar 2012) (embedding).

the permission of the copyright holder—the server rule (along with section 512 of the Digital Millennium Copyright Act) facilitated the internet’s development into a social and commercial sphere effectively shielded from portions of the Copyright Act. Under the server rule, an embed or ‘in-line’ link<sup>69</sup> which draws content from an authorized source—for example, from a photographer’s blog or a news publication which has licensed a photograph for display in connection with an article—and shows that content seamlessly within a new page can *never* form the basis of a direct or secondary infringement claim.<sup>70</sup> And an embed link which draws content from an unauthorized source—for example, from an image uploaded to Twitter without the authorization of the original photographer<sup>71</sup>—incurs copyright liability only through the doctrine of contributory infringement.<sup>72</sup>

The server rule also endorsed a technological determinism at odds with Congress’s overall approach in the 1976 Copyright Act. There is no doubt that copying an image from a source website and pasting it into another is a *prima facie* infringement of the reproduction right.<sup>73</sup> But achieving the same visible result by embedding the photo does not infringe the display right, even though the embedding site shows the image to the public. Yet Congress drafted copyright’s exclusive rights in broad terms intended to evolve with technological progress,<sup>74</sup> and it anticipated that the primacy of the reproduction right might wane with the rising economic significance of the exclusive rights of public performance and display.<sup>75</sup> Today, direct access to public performances and

<sup>69</sup> See eg *Perfect 10*, 508 F3d at 1159 (defining an ‘in-line’ or ‘embed’ link as a ‘hyperlink used as a web design element that causes a piece of content, often an image or a video, stored on a server other than the server that hosts the webpage that uses the in-line link, to appear on the webpage that utilizes the in-line link’).

<sup>70</sup> William F Patry, *Patry on Copyright* § 15:7 (rev edn 2018) (hereafter *Patry on Copyright*) ([‘T]here cannot be contributory infringement without direct infringement, and so in the case of a hyperlink to an authorized site, there is no direct infringement’).

<sup>71</sup> See eg *Goldman v Breitbart News Network, LLC*, 302 F Supp 3d 585, 586–87 (SDNY 2018) (regarding a claim of copyright infringement against several news sites which embedded a Tweet containing an image uploaded to Twitter without authorization from the content owner).

<sup>72</sup> See *Pearson Educ, Inc v Ishayev*, 9 F Supp 3d 328, 339 (SDNY 2014) ([‘S]ending hyperlinks that permit others to download protected materials would plainly amount to conduct that encourages or assists in copyright infringement’). But see *Flava Works, Inc v Gunter*, 689 F3d 754, 757–60 (7th Cir 2012) (no contributory infringement claim against a video-sharing website because the website ‘isn’t increasing the amount of infringement’).

<sup>73</sup> See eg *Bell v Wilmott Storage Servs, LLC*, 12 F4th 1065 (9th Cir 2021); *Otto v Hearst Communications, Inc*, 345 F Supp 3d 412 (SDNY 2018); *FameFlynet, Inc v Jasmine Enterprises, Inc*, 344 F Supp 3d 906 (ND Ill 2018).

<sup>74</sup> 17 USC § 101 (defining right of public performance by transmission ‘by any device or process’); *ibid* § 106; HR Rep No 94-1476, at 64 (1976), reprinted in 1976 USCCAN 5659:

The definition of ‘transmit’—to communicate a performance or display ‘by any device or process whereby images or sounds are received beyond the place from which they are sent’—is broad enough to include all conceivable forms and combinations of . . . communications media, including but by no means limited to radio and television broadcasting as we know them.

Similarly, the 1976 Copyright Act expressly brings within the subject matter of copyright media of expression ‘now known or later developed’; 17 USC § 102(a).

<sup>75</sup> 17 USC § 106(5); HR Rep No 94-1476, at 63 ([‘P]erformances and displays are continuing to supplant markets for printed copies’). By the same token, cautious not to ‘freeze the doctrine in the statute, especially during a period of rapid technological change’, Congress set out open-ended criteria for copyright’s principal exception, fair use. See *ibid* 66; 17 USC § 107.

displays of cloud-stored content has largely displaced accumulation of hard copies or downloads.<sup>76</sup> The Supreme Court in *Aereo* also declined to endorse technological line-drawings that make no difference to the end user's perception of the work.<sup>77</sup> The server rule disserves Congress's goal to ensure that authors' rights keep pace with new modes of exploitation.

Starting in 2017, several courts, especially in the copyright-influential Southern District of New York, confronted and rejected the server rule. Building on Judge Forrest's decision in *Goldman v Breitbart*,<sup>78</sup> Judge Rakoff in *Nicklen v Sinclair Broadcast Group*<sup>79</sup> offered the most pointed rebuttal to date:

The server rule is contrary to the text and legislative history of the Copyright Act. The Act defines to display as 'to show a copy of' a work, 17 U.S.C. § 101, not 'to make and then show a copy of the copyrighted work.' The Ninth Circuit's approach, under which no display is possible unless the alleged infringer has also stored a copy of the work on the infringer's computer, makes the display right merely a subset of the reproduction right.

....

Under the server rule, a photographer who promotes his work on Instagram or a filmmaker who posts her short film on YouTube surrenders control over how, when, and by whom their work is subsequently shown. The Sinclair Defendants argue that an author wishing to maintain control over how a work is shown could abstain from sharing the work on social media, pointing out that if Nicklen removed his work from Instagram, the Video would disappear from the Sinclair Defendants' websites as well. But it cannot be that the Copyright Act grants authors an exclusive right to display their work publicly only if that public is not online.<sup>80</sup>

A 'server rule' controversy has yet to reach the Second Circuit. Should that court affirm lower courts' rejection of the rule, it will provoke a 'circuit split' with the Ninth Circuit (unless that court revisits its case law), and the Supreme Court may step in to resolve the meaning of 'to display publicly' on the internet.

<sup>76</sup> See eg Jonathan Bailey, 'The Long, Slow Decline of BitTorrent' *Plagiarism Today* (1 June 2017) <<https://perma.cc/Y55G-SCTJ>> (noting that pirate streaming services 'offer greater convenience and security than BitTorrent', a once prevalent peer-to-peer file-sharing protocol); see also Jane C Ginsburg, 'From Having Copies to Experiencing Works: The Development of an Access Right in U.S. Copyright Law' (2003) 50 *Journal of the Copyright Society USA* 113, 116. But see Karl Bode, 'The Rise of Netflix Competitors Has Pushed Consumers Back Toward Piracy' *Vice: Motherboard* (2 October 2018) <[www.vice.com/en/article/d3q45v/bittorrent-usage-increases-netflix-streaming-sites](http://www.vice.com/en/article/d3q45v/bittorrent-usage-increases-netflix-streaming-sites)>.

<sup>77</sup> *Am Broad Companies, Inc v Aereo, Inc*, 573 US 431, 444 (2014); see also *Goldman v Breitbart News Network, LLC*, 302 F Supp 3d 585, 594–95 (SDNY 2018). (*Aereo* 'strongly support[s] [the] argument that liability should not hinge on invisible, technical processes imperceptible to the viewer,' and thus conflicted with the premise of the server rule (that is, that the server location of an image, and not the user's perception of the context of that image, should determine direct infringement liability).)

<sup>78</sup> 302 F Supp 3d 585; accord, *Leader's Inst, LLC v Jackson*, No 3:14-CV-3572-B, 2017 WL 5629514 (ND Tex 22 Nov 2017).

<sup>79</sup> No 20-CV-10300 (JSR), 2021 WL 3239510 (SDNY 30 July 2021).

<sup>80</sup> *ibid* \*4 (citations omitted).



## 2. Exceptions and Limitations

### 2.1 Fair use

US copyright law's principal, and all-encompassing, exception is the fair use doctrine, which Congress codified in 1976,<sup>81</sup> while simultaneously declaring 'there is no disposition to freeze the doctrine in the statute, especially during a period of rapid technological change.'<sup>82</sup> While courts have endorsed the concept of technological fair use at least since the Supreme Court's 1984 decision in *Sony Corp of Am v ABC*,<sup>83</sup> the notion has flowered especially in the last twenty years—particularly with the rise of 'transformative use' analysis—reaching its apex in the Second Circuit's 2015 decision in *Authors Guild v Google Inc (Google Books)*.<sup>84</sup>

In an influential article written in 1990, Judge Pierre Leval of the US Court of Appeals for the Second Circuit—who also authored the *Google Books* opinion—coined the term 'transformative use'.<sup>85</sup> Four years later, in *Campbell v Acuff-Rose Music, Inc*, the Supreme Court adopted the label.<sup>86</sup> The Supreme Court inquired whether the defendants' musical parody had made a 'transformative' use of plaintiff's song, '[adding] something new, with a further purpose or different character, altering the first with new expression, meaning, or message'.<sup>87</sup> In the context of the Supreme Court's *Campbell* decision, the Two Live Crew rap parody 'transformed' Roy Orbison's 'Pretty Woman' by creating a new (and rather raunchy) work. But courts came to interpret *Campbell*'s reference to 'something new, with a further purpose'<sup>88</sup> to encompass copying that does not add 'new expression', so long as the copying gives the prior work 'new meaning'.<sup>89</sup> Fair use cases began to drift from 'transformative work' to 'transformative purpose'; in the latter instance, copying of an entire work without creating a new work could be excused, particularly if the court perceived a sufficient public benefit in the appropriation. Moreover, once a court held the use to be 'transformative',

<sup>81</sup> 17 USC § 107 sets out four factors courts 'shall' take into account in assessing the fairness of a use:

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

<sup>82</sup> HR Rep No 94-1476, 94th Cong 2d sess at 66 (1976).

<sup>83</sup> 464 US 417 (1984).

<sup>84</sup> 804 F3d 202 (2d Cir 2015).

<sup>85</sup> Pierre N Leval, 'Toward a Fair Use Standard' (1990) 103 Harvard Law Review 1105, 1111 ('Transformative uses may include criticizing the quoted work, exposing the character of the original author, proving a fact, or summarizing an idea argued in the original in order to defend or rebut it. They also may include parody, symbolism, aesthetic declarations, and innumerable other uses').

<sup>86</sup> *Campbell v Acuff-Rose Music, Inc*, 510 US 569, 579 (1994).

<sup>87</sup> *ibid*.

<sup>88</sup> *ibid* 579.

<sup>89</sup> See eg *Kelly v Arriba Soft Corp*, 336 F3d 811, 819 (9th Cir 2002) ('By putting a copy of the photograph in the newspaper, the work was transformed into news, creating a new meaning or purpose for the work').



that determination tended to ‘stampede’ analysis of the other statutory factors into an ultimate conclusion of fair use.<sup>90</sup>

In the initial shift from ‘transformative work’ to ‘transformative purpose’, the defendant had, in fact, created an independent work of authorship, even though that work did not significantly alter the copied work. Thus, in *Bill Graham Archives v Dorling Kindersley Ltd* (which did not concern digital technologies), the Second Circuit held that a biography of The Grateful Dead that incorporated reduced-sized, complete images of concert posters of the legendary rock band was ‘transformative’ because the book used the images of the posters as ‘historical artifacts’ to document the Dead’s concerts, rather than for the posters’ original aesthetic purpose.<sup>91</sup> But the documentary/aesthetic distinction also significantly expanded the application of the fair use exception to new technological uses that did not yield new works. The search engine practice of permanent storage of works for the purpose of ‘indexing’ was an early digital beneficiary of the ‘documentary’ or ‘new purpose’ brand of transformativeness.<sup>92</sup>

Other applications of the aesthetic/documentary distinction—more broadly characterized as a distinction between expression and information—to the inputting of copyrighted works into databases then emerged. In *AV ex rel Vanderhye v iParadigms, LLC*, the Fourth Circuit ruled the constitution of a commercial database of student papers by the ‘Turn It In’ plagiarism detection service a ‘fair use’: ‘the archiving of plaintiffs’ papers was transformative and favoured a finding of “fair use.” iParadigms’ use of these works was completely unrelated to expressive content and was instead aimed at detecting and discouraging plagiarism.’<sup>93</sup> In a decision that in many ways presaged *Google Books*, the Second Circuit in *Authors Guild, Inc v HathiTrust*—concerning library uses of their holdings, as digitized by Google—found the scanning and permanent storage of full copies of in-copyright books to further the ‘transformative use’ of allowing ‘data mining’ of the contents of the books.<sup>94</sup> Such uses are non-expressive in two senses: they produce no new expression by the copying and storage entities, and the ‘mining’ of the scanned book seeks not to expose its expression, but rather to extract information.<sup>95</sup>

In *Authors Guild v Google, Inc (Google Books)*,<sup>96</sup> Google scanned millions of books—many still in copyright—housed in the University of Michigan library. The

<sup>90</sup> See generally Barton Beebe, ‘An Empirical Study of U.S. Copyright Fair Use Opinions, 1978–2005’ (2008) 156 University of Pennsylvania Law Review 549. For a subsequent empirical study, see Jairui Liu, ‘An Empirical Study of Transformative Use in Copyright Law’ (2019) 22 Stanford Technology Law Review 163. The de facto formula, if ‘transformative’, then fair use has applied to analog as well as digital copying of protected works, see eg *Cariou v Prince*, 714 F3d 694 (2d Cir 2013) (appropriation art); *Blanch v Koons*, 467 F3d 244 (2d Cir 2006) (same); *Authors Guild, Inc v HathiTrust*, 755 F3d 87 (2d Cir 2014) (storing full-text copies of books for searching and enabling print-disabled reader access); *Authors Guild v Google, Inc*, 804 F3d 202 (2d Cir 2015) (searching and displaying snippets of full-text copies of books); *AV ex rel Vanderhye v iParadigms, LLC*, 562 F3d 630 (4th Cir 2009) (plagiarism checker).

<sup>91</sup> 448 F3d 605, 609–10 (2d Cir 2006).

<sup>92</sup> See eg *Perfect 10, Inc v Amazon.com, Inc*, 508 F3d 1146, 1174–75 (9th Cir 2007); *Kelly*, 336 F3d at 819–20.

<sup>93</sup> 562 F3d 630, 640 (4th Cir 2009).

<sup>94</sup> 755 F3d 87 (2d Cir 2014).

<sup>95</sup> See generally Brief of Digital Humanities and Law Scholars as *Amici Curiae* in Partial Support of Defendants’ Motion for Summary Judgment, *HathiTrust*, 2012 WL 4808939 (No 11 CV 6351 (HB)), 2012 WL 3966152.

<sup>96</sup> 804 F3d 202 (2d Cir 2015).

Google Books program digitized the books and made them searchable for purposes of data mining and for delivery of ‘snippets’. The data mining service returned information about the digitized books—for example, the frequency with which specified words appeared across the corpus of digitized books or the year in which the searched term began to appear in published books—but did not provide direct quotations.<sup>97</sup> The ‘snippet view’ offered three lines of text surrounding the highlighted search term, in order to set the term in context and assist users’ determination whether the referenced book was relevant to their inquiries.<sup>98</sup> Google designed ‘snippet view’ to prevent users from reconstructing entire pages through repeated searches, and it also excluded works, such as dictionaries, for which a ‘snippet’ might substitute for consultation of the book.<sup>99</sup> Google did not run advertisements alongside the ‘snippet’ views.<sup>100</sup>

Authors and five publishers initiated a copyright infringement action, but Google settled with the publishers on undisclosed terms. The authors persisted in their suit, but the District Court held Google’s use fair.<sup>101</sup> The Second Circuit affirmed, holding that:

Google’s unauthorized digitizing of copyright-protected works, creation of a search functionality, and display of snippets from those works are non-infringing fair uses. The purpose of the copying is highly transformative [factor 1], the public display of text is limited [factor 3], and the revelations do not provide a significant market substitute for the protected aspects of the originals [factor 4].<sup>102</sup>

Regarding the first fair use factor, the court accorded scant weight to the commercial nature of Google’s enterprise, stressing that the Second Circuit has ‘repeatedly rejected the contention that commercial motivation should outweigh a convincing transformative purpose and absence of significant substitutive competition with the original.’<sup>103</sup> Distinguishing between outputs that convey information *about* the scanned book from outputs that convey its *expression*, the court ruled that neither the data mining uses nor the snippet views exploited the copied works for their expressive value.<sup>104</sup> Hence ‘the creation of complete digital copies of copyrighted works [results in] transformative fair uses when the copies “serve[] a different function from the original.”’<sup>105</sup> Those different functions:

make available significant information *about those books*, permitting a searcher to identify those that contain a word or term of interest, as well as those that do not include reference to it. In addition ... Google allows readers to learn the frequency of usage of selected words in the aggregate corpus of published books in different

<sup>97</sup> *ibid.*

<sup>98</sup> *ibid* 209–10.

<sup>99</sup> *ibid* 210.

<sup>100</sup> *ibid* 209.

<sup>101</sup> *Authors Guild, Inc v Google Inc*, 954 F Supp 2d 282, 294 (SDNY 2013).

<sup>102</sup> *Google Books*, 804 F3d at 239.

<sup>103</sup> *ibid* 219.

<sup>104</sup> *ibid* 217.

<sup>105</sup> *ibid* (quoting *Authors Guild*, 755 F3d at 97).

historical periods. We have no doubt that the purpose of this copying is the sort of transformative purpose described in *Campbell* as strongly favoring satisfaction of the first factor.<sup>106</sup>

With respect to the data mining uses, there is an argument that exploiting a work for its non-expressive information (bibliographic or bean-counting, eg how many times and in what works a given word or phrase appears) is not even *prima facie* infringing, and that the digitization of lawfully possessed copies to create a database that enables non-expressive, but progress-of-knowledge-enhancing outputs might therefore be equally free (especially if one overlooks the copying of the entire work for commercial purposes). By contrast, the snippet views did convey limited amounts of expression, but the court repeatedly emphasized the ‘fragmentary and scattered’ and ‘cumbersome, disjointed, and incomplete nature of the aggregation of snippets’ provided by snippet view.<sup>107</sup> As a result, ‘at least as presently structured by Google, the snippet view does not reveal matter that offers the marketplace a significantly competing substitute for the copyrighted work.’<sup>108</sup> The court appeared to be endeavouring to avoid slippery-slope expansion of the content or presentation of fair-use-permissible snippets.

Similarly, in response to the authors’ concern that the database might be vulnerable to hacking, the court responded that ‘Google has documented that Google Books’ digital scans are stored on computers walled off from public Internet access and protected by the same impressive security measures used by Google to guard its own confidential information.’<sup>109</sup> Less ‘impressive security’ might doom a fair use defence, given the devastating consequences of unfettered access to reproduce and further communicate the full text of digitized works. Thus, while the court found that Google’s program did not present a sufficiently credible risk of harm, it is not clear who else’s programs could clear the decision’s high security bar.

Thus, the court’s cautious circumscription suggests that the *Google Books* decision might not herald a new extension of an already expanded fair use defence (at least until a competitor with equivalent resources appears). And indeed, subsequent new technological use cases in the Circuit courts demonstrate careful and critical examination of the transformative character of allegedly repurposed copying of protected works. In *VHT, Inc v Zillow Group, Inc*,<sup>110</sup> the VHT photo service claimed that the Zillow real estate database had incorporated VHT’s photographers’ images of home interiors into Zillow’s ‘Digs’ database to show the interiors of the houses that are on the Zillow database. Zillow acquired copies of the plaintiff’s images, without the photographers’ authorization, and indexed them to allow them to appear on the search for Digs.<sup>111</sup> Zillow defended the ensuing infringement action on the ground that it was a search engine, and under Ninth Circuit precedent, copying by search engines was transformative and therefore fair use.<sup>112</sup>

<sup>106</sup> *ibid* (emphasis in original).

<sup>107</sup> *ibid* 223–24.

<sup>108</sup> *ibid* 222 (emphasis supplied).

<sup>109</sup> *ibid* 228.

<sup>110</sup> 918 F3d 723 (9th Cir 2019).

<sup>111</sup> *ibid* 730.

<sup>112</sup> *ibid* 740.

The District Court disagreed, and the Ninth Circuit affirmed.<sup>113</sup> It emphasized that ‘the label “search engine” is not a talismanic term that serves as an on-off switch as to fair use.’<sup>114</sup> It distinguished prior search engine cases in which the output was a non-substitutional thumbnail photo; or, as in *Google Books*, where the output either contained no expression at all or merely non-substitutional ‘snippets’ which could not be cumulated into a full page or other quantity that might in some way be substitutional.<sup>115</sup> The court thus recognized that a transformativeness inquiry does not stop at observing that the defendant’s use involves a search function; rather, the court must examine what the search program delivers once it has identified the targeted content. In the earlier cases, what the program delivered did not substitute for the copied content. By contrast, Zillow delivered high-resolution, full-quality photographs which competed with the plaintiff’s licensing of those photographs for uses that included exactly the kinds of uses Zillow was making: to display the interiors of homes listed in the database.

The Ninth Circuit’s analysis offers a variation on the relationship of transformativeness and competition. Many of the cases involving digital as well as analogue uses have derived a finding of non-substitution from the initial characterization of the use as transformative: transformative use = transformative (ie non-competing) market.<sup>116</sup> For the Ninth Circuit, the capacity of Zillow’s use to usurp a market for the photographs confirmed non-transformative character of that use.

*Fox News Network, LLC v TVEyes, Inc* represents a further step along the path of transformative use: it acknowledges that a use may be ‘transformative’ yet harm the actual or potential markets for the copied work and, therefore, not be ‘fair.’<sup>117</sup> The defendant, TVEyes, was a commercial ‘media monitoring’ service which copied and stored digitized radio and television news broadcasts in their entirety to enable its subscribers to retrieve portions of broadcasts by keyword searches of TVEyes’ database.<sup>118</sup> This service was analogous to the old ‘clipping services’, where employees read newspapers to extract all the articles in which their clients’ names appeared. Except, in this case, the client not only chose the search themes but also did the extracting.<sup>119</sup> The video clips provided by the service in response to search queries generally lasted from two to ten minutes—a duration that equalled or exceeded the totality of each extracted news story.<sup>120</sup>

The District Court held that the service transformed the purpose of the broadcasts and therefore was a fair use.<sup>121</sup> In the District Court’s view, the video clips were transformative because their purpose was to let the researcher know ‘what was said’ in the television reports, rather than telling viewers ‘this is what you should [know].’<sup>122</sup>

<sup>113</sup> *ibid* 750.

<sup>114</sup> *ibid* 742.

<sup>115</sup> *ibid* 741–43.

<sup>116</sup> See eg *Cariou v Prince*, 714 F3d 694 (2d Cir 2013); *Blanch v Koons*, 467 F3d 244 (2d Cir 2006); *Authors Guild, Inc v HathiTrust*, 755 F3d 87 (2d Cir 2014); *Authors Guild v Google, Inc*, 804 F3d 202 (2d Cir 2015); *AV ex rel Vanderhye v iParadigms, LLC*, 562 F3d 630 (4th Cir 2009).

<sup>117</sup> 43 F Supp 3d 379 (SDNY 2014), *revd*, 883 F3d 169 (2d Cir 2018).

<sup>118</sup> *ibid* 383–86.

<sup>119</sup> *ibid*.

<sup>120</sup> *ibid* 385.

<sup>121</sup> *ibid* 397–98.

<sup>122</sup> *ibid* 393.

This approach could convert any work's expression into a piece of information, which would justify its copying as 'documentary' fair use.<sup>123</sup>

The Second Circuit reversed, but still found the use 'somewhat transformative', not as a documentary use, but because TVEyes 'utilizes technology to achieve the transformative purpose of improving the efficiency of delivering content'.<sup>124</sup> The majority's liberal perception of transformativeness provoked a caustic concurrence from SDNY Judge Kaplan. If the use was 'somewhat transformative' simply because it enhanced user convenience in viewing the desired extracts, he charged, then transformative use will inevitably conflict with copyright owners' exploitation of their works as '[n]ew efficiency-enhancing content delivery technologies' emerge.<sup>125</sup>

While the majority's 'somewhat transformative' designation strains the concept of transformativeness, it is significant that the court rejected the fair use defence notwithstanding its finding of (mildly) transformative use. The majority held that TVEyes' service plainly 'usurped a function for which Fox is entitled to demand compensation under a licensing agreement'.<sup>126</sup> Transformativeness did not sweep all before it, and the court trained renewed attention on the third, and particularly, fourth fair use factors.

Finally, and most recently, in April 2021, the Supreme Court announced its ruling in *Google LLC v Oracle Am, Inc.*,<sup>127</sup> holding that Google's copying of 11,500 lines of code from Sun Microsystems' Application Programming Interface (API) in the development of Google's Android cell phone operating system was fair use. Oracle's standard software licensing terms required licensees to 'share alike', that is, to make the code they develop from Oracle's code equally available to future downstream licensees. However, Google preferred its code to be proprietary. Oracle also licensed its code without the 'share alike' constraint, but charged a higher fee that Google was unwilling to pay.<sup>128</sup> After failing to agree on a licence from Oracle, Google copied the declaring code for thirty-seven of Oracle's Java API packages and incorporated it into its own Android development platform.<sup>129</sup> Google appropriated the code, hoping that this would entice software developers familiar with Oracle's API to use Google's Android platform,<sup>130</sup> which in turn would increase sales of Android phones.<sup>131</sup>

The court assumed 'for argument's sake' that the APIs were copyrightable, but then devoted its fair use analysis to emphasizing its doubts about whether copyright should cover

<sup>123</sup> cf *Brammer v Violent Hues Prods, LLC*, 922 F3d 255, 264 (4th Cir 2019):

Violent Hues' sole claim to transformation is that its secondary use of the Photo provided film festival attendees with 'information' regarding Adams Morgan. But such a use does not necessarily create a new function or meaning that expands human thought; if this were so, virtually all illustrative uses of photography would qualify as transformative.

<sup>124</sup> *TVEyes*, 883 F3d at 177–78.

<sup>125</sup> *ibid* 183 (Kaplan J concurring).

<sup>126</sup> *ibid* 180–81.

<sup>127</sup> 141 S Ct 1183 (2021).

<sup>128</sup> See *ibid* 1211–12 (Thomas J dissenting); *Oracle Am, Inc v Google LLC*, 886 F3d 1179, 1187–88 (Fed Cir 2018), *revd*, 141 S Ct 1183 (2021).

<sup>129</sup> *Google*, 141 S Ct at 1193.

<sup>130</sup> *ibid* 1194 (noting that '[w]ithout that copying, programmers would need to learn an entirely new system').

<sup>131</sup> *ibid* 1190.

the APIs. In effect, the fair use determination achieved the same result as ruling the APIs uncopyrightable, but attained that objective through the back end of a copyright exception rather than the front end of applying the idea/expression distinction to ascertain the scope of protectable expression: '[F]air use can play an important role in determining the lawful scope of a computer program copyright.'<sup>132</sup>

Atypically for fair use analysis, but consistent with its back-door assessment of copyrightability, the majority began its discussion with a lengthy analysis of the second fair use factor ('the nature of the copyrighted work'), a factor that the last two and a half decades of fair use case law tended to recite and then ignore. The court noted that while Oracle's declaring code exhibited some creativity, 'its use is inherently bound together with uncopyrightable ideas ... and new creative expression.'<sup>133</sup> The court, moreover, appeared especially concerned that the value of Oracle's declaring code derived substantially from the efforts of third-party developers to learn Oracle's system and create their own software products.<sup>134</sup> The majority's treatment of the second factor stressed that 'the declaring code is, if copyrightable at all, further than are most computer programs (such as the implementing code) from the core of copyright.'<sup>135</sup> The particularity of the nature of the copied code set it apart from other works and, some would contend, spawned a *sui generis* fair use analysis.<sup>136</sup>

The majority next turned to the first fair use factor and inquired into the transformativeness of Google's copying of Sun's declaring code. The functional character of the declaring code informed the majority's analysis of the purpose and character of Google's use:

To the extent that Google used parts of the Sun Java API to create a new platform that could be readily used by programmers, its use was consistent with that creative 'progress' that is the basic constitutional objective of copyright itself.<sup>137</sup>

Google's use of the code was 'transformative' because 'reimplementing an interface can further the development of computer programs.'<sup>138</sup> Google copied Oracle's APIs only to the extent necessary to afford third-party programmers a familiar development environment on Google's platform.<sup>139</sup> To that end, it had repurposed an API originally developed for use with legacy computers for use in smartphones.<sup>140</sup> Altogether, the court viewed Google's reimplementation of the API as the sort of

<sup>132</sup> *ibid* 1198.

<sup>133</sup> *ibid* 1202.

<sup>134</sup> See *ibid*. User investment in learning the program largely motivated the First Circuit's determination in *Lotus Dev Corp v Borland Int'l, Inc* that the Lotus spreadsheet's menu command sequence was not copyrightable, 49 F3d 807, 815–19 (1st Cir 1995). The Supreme Court granted *certiorari* in that case, but, with one justice recused, split 4–4, thus failing to render a precedential decision in the case. See *Lotus Dev Corp v Borland Int'l, Inc*, 516 US 233 (1996).

<sup>135</sup> *Google*, 141 S Ct at 1202. One may infer, *a fortiori*, that declaring code is even further than are more traditionally expressive works from the core of copyright.

<sup>136</sup> *ibid* 1219 fn 11 (Thomas J dissenting) ('Because the majority's reasoning would undermine copyright protection for so many products long understood to be protected, I understand the majority's holding as a good-for-declaring-code-only precedent').

<sup>137</sup> *ibid* 1203 (majority opinion).

<sup>138</sup> *ibid*.

<sup>139</sup> *ibid*.

<sup>140</sup> *ibid*.



reasonable use of a functional industry standard that is necessary to foster innovation and competition.<sup>141</sup> In assessing the transformativeness of Google's use of Oracle's declaring code, the court kept evoking that code's diminished entitlement to copyright in the first place.

With respect to the third fair use factor, the court found that the amount and substantiality of the appropriated declaring code also favoured fair use.<sup>142</sup> The court declined to view 'in isolation' the 11,500 lines of declaring code that Google copied, instead underscoring the 2.86 million lines of API code that Google *did not* copy.<sup>143</sup> The 11,500 lines 'should be viewed ... as one part of the considerably greater whole'<sup>144</sup> because of the peculiar nature of the copyrighted work, and the concomitant, transformative, purpose of the defendant's work. In other words:

Google copied those lines not because of their creativity, their beauty, or even (in a sense) because of their purpose. It copied them because programmers had already learned to work with the Sun Java API's system, and it would have been difficult, perhaps prohibitively so, to attract programmers to build its Android smartphone system without them.<sup>145</sup>

As with the first two fair use factors, the dubious copyrightability of functional declaring code permeated the court's analysis of the third factor (substantiality of the appropriation); and, as we shall next see, this consideration would also influence the court's analysis of the fourth factor (impact of the use on the market for the copyrighted work).

Turning to the 'market effects' of Google's copying, the court stressed that certain types of market losses, such as those resulting from a 'lethal parody' that 'kill[s] demand in a work,' have never been 'cognizable under the Copyright Act.'<sup>146</sup> Additionally, the court emphasized that any lost revenue must be weighed against any 'public benefits the copying will likely produce.'<sup>147</sup>

Analysing the causation prong, the court began by calling into question the relationship between Google's copying and harm to Oracle, noting that the latter 'was poorly positioned to succeed in the mobile phone market ... whether Google did, or did not, copy a part of its API'.<sup>148</sup> Similarly, the court asserted that the evidence adduced at trial indicated 'that Android was not a market substitute for Java's software,' observing that while devices running Oracle's licensed technology tended to be 'simpler products,' more advanced devices tended to build on Google's Android

<sup>141</sup> *ibid* 1203–04 (collecting briefs by *Amici Curiae* in support of Google).

<sup>142</sup> *ibid* 1206.

<sup>143</sup> *ibid* 1204–05. This approach is in some tension with traditional copyright doctrine. See eg *Sheldon v Metro-Goldwyn Pictures Corp*, 81 F2d 49, 56 (2d Cir 1936) ('[N]o plagiarist can excuse the wrong by showing how much of his work he did not pirate').

<sup>144</sup> *Google*, 141 S Ct at 1205.

<sup>145</sup> *ibid*.

<sup>146</sup> *ibid* (quoting *Campbell v Acuff-Rose Music, Inc*, 510 US 569, 591–92 (1994)).

<sup>147</sup> *ibid* 1206.

<sup>148</sup> *ibid*.



platform.<sup>149</sup> Consequently, '[Oracle's] mobile phone business was declining, while the market increasingly demanded a new form of smartphone technology that [Oracle] was never able to offer.' Lastly, the court seized on Oracle's apparent belief that it would benefit from the expansion of the network of Java-trained programmers that resulted from Google's repurposing of Oracle's APIs.

The court also dismissed Oracle's claims of lost licensing revenue on the ground that the licence it offered Google covered more than the code Google actually copied.<sup>150</sup> Moreover, while Google may have made a great deal of money from its unlicensed use of the API, the court again stressed that the API became 'valuable [to Google] ... because users, including programmers, are just used to it ... We have no reason to believe that the Copyright Act seeks to protect third parties' investment in learning how to operate a created work.'<sup>151</sup>

With respect to the second prong, addressing the public interest at stake in the case, the court opined that 'given programmers' investment in learning the Sun Java API, to allow enforcement of Oracle's copyright here would risk harm to the public.'<sup>152</sup> In other words, because Oracle's API had become an industry standard to which software developers had grown accustomed, the court feared that permitting Oracle a monopoly on its largely functional API might well stifle 'creative improvements, new applications, and new uses developed by users who have learned to work with that interface.'<sup>153</sup> In that case, a finding against fair use 'would interfere with, not further, copyright's basic creativity objectives.'<sup>154</sup>

This characterization of the public interest, however, arguably fails to take due account of the impact of Google's use on Oracle's 'share alike' model. Recall that under this licensing scheme, Google would have been free to use Oracle's API packages so long as Google made any software incorporating Oracle's code compatible with other Java programs.<sup>155</sup> This model thus promotes device and software interoperability, broadening the public's access to useful technology. But because Google wanted its platform to remain proprietary, it refused to accept this licence and instead opted to appropriate Oracle's code anyway, thereby potentially limiting the availability of its software to the public for off-platform uses. As a result, it is not entirely clear that it was Oracle—and not Google—who threatened the public interest in this case. This wrinkle notwithstanding, the court concluded that the market effects factor also

<sup>149</sup> *ibid* 1206–07 ('[R]ather than just repurposing [Oracle's] code from larger computers to smaller computers, Google's Android platform was part of a distinct (and more advanced) market than Java software') (internal quotation marks and citation omitted).

<sup>150</sup> *ibid*.

<sup>151</sup> *ibid* 1207–08 (citing *Lotus Dev Corp v Borland Int'l, Inc*, 49 F3d 807, 821 (1st Cir 1995) (Boudin J concurring)).

<sup>152</sup> *ibid* 1208.

<sup>153</sup> *ibid*.

<sup>154</sup> *ibid*.

<sup>155</sup> See *ibid* 1212 (Thomas J dissenting); *Oracle Am, Inc v Google Inc*, 750 F3d 1339, 1350 (Fed Cir 2014):

The point of contention between the parties was Google's refusal to make the implementation of its programs compatible with the Java virtual machine or interoperable with other Java programs. Because Sun/Oracle found that position to be anathema to the 'write once, run anywhere' philosophy, it did not grant Google a license to use the Java API packages.

favoured fair use.<sup>156</sup> As a result, with all four statutory factors favouring fair use, the court found in favour of Google.<sup>157</sup>

Is *Google v Oracle* an outlier, or does it herald a newly expanded fair use analysis? Although the court issued a variety of broadly phrased pronouncements about fair use, the decision is probably best understood in the context of software interoperability. In many respects, *Google* reprises in fair use guise the debates the court failed to resolve twenty-five years earlier, in *Lotus v Borland*, concerning the copyrightability of certain functional aspects of a user interface.<sup>158</sup> In that case, the market dominance of the Lotus spreadsheet led to its menu commands becoming the industry standard. The First Circuit ruled the commands an uncopyrightable ‘method of operation.’<sup>159</sup> Judge Boudin’s concurrence, thrice cited in Justice Breyer’s majority opinion in *Google*, explicitly justified the outcome on the ground that Lotus had become a de facto standard.<sup>160</sup> Judge Boudin also suggested that devising an exception for Borland’s value-added copying might be preferable to holding the menu commands uncopyrightable, but, uncertain that Borland’s commercial purpose would qualify as fair use, agreed with the determination to deny copyright protection altogether.<sup>161</sup> The *Google* court’s constant references to the API’s location far from the ‘core’ of copyright prompts speculation that the fair use analysis masked a ruling on copyrightability for which a more forthright determination lacked a fifth justice.

The specificity of the context of *Google*—functional subject matter of borderline copyrightability that was an industry standard—raises questions about the likely impact of the Supreme Court’s decision on the general development of the fair use doctrine. As we have seen, the court’s decision in *Google*’s favour on the second statutory fair use factor (the nature of the copyrighted work) permeated, if not controlled, its analysis of the other three factors. One should keep in mind the centrality of the second fair use factor to *Google*’s analysis when contemplating that decision’s potential impact on other fair use controversies.

For example, in its discussion of the first factor, the court endorsed *Google*’s use of the APIs ‘to create new products.’ Were the court’s statements taken out of context—so that verbatim copying ‘to create new products’ were deemed ‘transformative’ in general—it would be difficult to imagine what kind of copying, short of outright piracy of the entire work, would *not* be transformative. Similarly, the court’s discounting Oracle’s cognizable harm on the ground that it was unlikely itself to develop a cell phone platform, would be very problematic were it extended to works ‘closer to the core of copyright.’ At least until now, for example, a film producer who is unwilling to purchase film rights from a novelist and who makes the movie nonetheless would not likely succeed in contending that an author who is unable to sell

<sup>156</sup> *Google*, 141 S Ct at 1208.

<sup>157</sup> *ibid* 1208–09.

<sup>158</sup> *Lotus Dev Corp v Borland Int’l, Inc*, 49 F3d 807 (1st Cir 1995), *aff’d* by an evenly divided court, 516 US 233 (1996).

<sup>159</sup> *ibid* 815–19.

<sup>160</sup> *ibid* 821–22 (Boudin J concurring)

<sup>161</sup> *ibid*.

motion picture rights has no cognizable economic harm under the fourth fair use factor.<sup>162</sup>

If lower courts attend to *Google v Oracle*'s specificity, the Supreme Court's fair use analysis should not overflow its context of borderline-copyrightable, functional software that had become an industry standard.<sup>163</sup> Moreover, the Supreme Court itself cautioned that it 'ha[d] not changed the nature of ... [traditional copyright] concepts',<sup>164</sup> and that 'copyright's protection may be stronger where the copyrighted material ... serves an artistic rather than a utilitarian function'.<sup>165</sup>

## 2.2 Digital Millennium Copyright Act section 512 limitation on liability of host service providers

Enacted in 1998, section 512 of the Digital Millennium Copyright Act sought to foster the development of online commerce by substantially insulating host service providers from liability for copyright infringements committed by users who posted content to host servers or sites. Section 512 replaced the normal copyright default, which requires authorization to exploit works, with an exemption from liability in damages for service providers who complied with statutory prerequisites. The exemption applies to both direct and contributory infringement liability. Section 512 thus effectively codified 'Seek forgiveness, not permission'. Over twenty years later, section 512 and its judicial interpretation had so successfully insulated internet platforms, and so hobbled copyright enforcement, that the US Copyright Office, in a Report commissioned by Congress, declared: 'The Copyright Office concludes that the balance Congress intended when it established the section 512 safe harbor system is askew'.<sup>166</sup> Because most of the cases construing section 512 were decided during the last twenty years, this review will provide a rapid overview of the case law that led the Copyright Office to its dire conclusion.<sup>167</sup>

The statute sets forth cumulative prerequisites to a host service provider's qualification for exemption from direct or vicarious liability for copyright infringement.<sup>168</sup>

<sup>162</sup> See *Google LLC v Oracle Am, Inc*, 141 S Ct 1183, 1217 (2021) (Thomas J dissenting) (noting that '[a] book author need not be able to personally convert a book into a film so long as he can license someone else to do so').

<sup>163</sup> See eg *Andy Warhol Foundation v Goldsmith*, 11 F4th 26, 51–52 (2d Cir 2021) (*Google v Oracle* represents an 'unusual context' involving primarily functional computer programs that '[made] it difficult to apply traditional copyright concepts')

<sup>164</sup> *Google*, 141 S Ct at 1208.

<sup>165</sup> *ibid* 1197.

<sup>166</sup> Maria Strong, US Copyright Office, 'Section 512 of Title 17: A Report of the Register of Copyrights 197' (2020) <[www.copyright.gov/policy/section512/section-512-full-report.pdf](http://www.copyright.gov/policy/section512/section-512-full-report.pdf)> (hereafter Register's Section 512 Report).

<sup>167</sup> The Senate Judiciary Committee has held hearings on the possible reform of § 512, see Senate Committee on the Judiciary, Subcommittee on Intellectual Property, *The Digital Millennium Copyright Act at 22: What Is It, Why Was It Enacted, and Where are We Now Before the Subcomm. on Intellectual Prop. of the S. Judiciary Comm.*, 116th Cong (2020) <[www.judiciary.senate.gov/meetings/copyright-law-in-foreign-jurisdictions-how-are-other-countries-handling-digital-piracy](http://www.judiciary.senate.gov/meetings/copyright-law-in-foreign-jurisdictions-how-are-other-countries-handling-digital-piracy)>.

<sup>168</sup> In addition, § 512(i)(1)(A) requires all service providers (access providers and search engines, as well as hosts), to adopt and implement a policy for terminating 'repeat infringers'. This requirement has been construed, regarding access providers, in *BMG Rights Mgmt (US) LLC v Cox Commc'ns, Inc*, 881 F3d 293 (4th Cir 2018); and regarding host providers in *EMI Christian Music Group v MP3Tunes*, 844 F3d 79 (2d Cir

The host must ‘not have actual knowledge that the material or an activity using the material on the system or network is infringing’; and it must not be ‘aware of facts or circumstances from which infringing activity is apparent’; moreover, if the host has the ‘right and ability to control’ the originator’s activity, the host must not ‘receive a financial benefit directly attributable to the infringing activity.’<sup>169</sup> Once the host becomes ‘aware’ of infringing activity, it must act ‘expeditiously to remove, or disable access to, the material.’<sup>170</sup>

With regard to the knowledge standard, US courts have interpreted the no awareness, or ‘red flag,’ standard to impose a ‘high bar.’<sup>171</sup> Notably, ‘general knowledge that infringement is “ubiquitous” does not impose a duty on the service provider to monitor or search its service for infringements.’<sup>172</sup> Even a showing that the host was not only ‘generally aware of, but welcomed, copyright-infringing material being placed on their website,’ does not suffice to overcome its immunity without a further demonstration ‘as to whether [the host] actually knew, or was aware of facts or circumstances that would indicate, the existence of particular instances of infringement.’<sup>173</sup> The requirement that specific infringements be ‘obvious’<sup>174</sup> before the ‘red flag’ will wave, has allowed hosts to remain profitably ignorant of the content of their users’ postings.

That said, courts have acknowledged limits to the extent of service provider passive aggression that section 512(c) permits. While the host may remain blissfully unaware of particular infringements, it may not be ‘willfully blind’ to them.<sup>175</sup> A service provider will be willfully blind if it ‘made a “deliberate effort to avoid guilty knowledge.”’<sup>176</sup>

2016) (both finding the policies to be ineffective) and in *Ventura Content, Ltd v Motherless, Inc*, 885 F3d 597 (9th Cir 2018) (finding the policy to be sufficiently applied, albeit inadequately stated).

<sup>169</sup> 17 USC § 512(c)(1)(A), (B); see also *Ventura Content, Ltd v Motherless, Inc*, 885 F3d 597, 613 (9th Cir 2018); *Sid Avery & Assocs, Inc v Pixels.com, LLC*, No CV1810232CJCJEMX, 2020 WL 6114918 (CD Cal Aug. 18, 2020); *Feingold v RageOn, Inc*, 472 F Supp 3d 94, 102 (SDNY 2020); *Downs v Oath Inc*, 385 F Supp 3d 298, 307–08 (SDNY 2019).

<sup>170</sup> USC § 512(c)(1)(A)(iii). In addition, § 512(c)(2) requires that a service provider, in order to benefit from the reduction in liability, designate and provide contact information concerning an agent to receive notification of claimed infringements. Under § 512(j), the service must also state and reasonably implement a policy for terminating repeat infringers. Under § 512(m)(1), the service provider incurs no duty to ‘monitor ... its service or affirmatively seek ... facts indicating infringing activity’.

<sup>171</sup> See eg *UMG Recordings, Inc v Veoh Networks Inc*, 665 F Supp 2d 1099, 1111 (CD Cal 2009), quoted in *Mavrix Photographs, LLC v LiveJournal, Inc*, 873 F3d 1045, 1058 (9th Cir 2017).

<sup>172</sup> *Viacom Int’l Inc v YouTube, Inc*, 718 F Supp 2d 514, 525 (SDNY 2010), aff’d 676 F3d 19, 31, 35 (2d Cir 2012) (affirming that general awareness of possible infringement does not impose a duty to monitor and that red flag knowledge refers to awareness of specific instances of infringement).

<sup>173</sup> *Viacom Int’l Inc v YouTube, Inc*, 676 F3d 19, 33 (2d Cir 2012).

<sup>174</sup> *Capitol Records, Inc v Vimeo, LLC*, 826 F3d 78, 93 (2d Cir 2016); *Viacom Int’l Inc*, 676 F3d at 31 (‘[T]he red flag provision turns on whether the provider was subjectively aware of facts that would have made the specific infringement “objectively” obvious to a reasonable person’). While the courts have equated the statutory term ‘apparent’ with ‘obvious,’ it is not obvious that the two are synonymous.

<sup>175</sup> *Viacom Int’l Inc*, 676 F3d at 35. On remand, however, the district court did not find facts establishing that YouTube was blind to ‘specific and identifiable instances of infringement.’ *Viacom International, Inc v YouTube, Inc*, 940 F Supp 2d 110, 116–17 (SDNY 2013).

<sup>176</sup> *Viacom Int’l Inc*, 676 F3d at 35 (quoting *In re Aimster*, 334 F3d 643, 650 (7th Cir 2003)). Instances in which courts have found ‘willful blindness’ in § 512(c) cases seem to be exceedingly rare, however. See *EMI Christian Music Grp v MP3Tunes*, 844 F3d 79, 92–94 (2d Cir 2016) (restoring a jury verdict that found red-flag knowledge and wilful blindness where an online storage locker website allowed users to copy and store files of recordings which the website operator knew had not been authorized for digital release); 4

But even if a particular posting might raise some suspicions, the host is not ‘willfully blind’ if it fails to investigate, because another provision of section 512 exonerates hosts from ‘affirmatively seeking facts indicating infringing activity’<sup>177</sup> According to the Second Circuit, requiring investigation short of an ‘obvious’ infringement would undermine the balance Congress struck in section 512 reflecting a policy that would foster the development of service providers: ‘[W]e can see no reason to construe the statute as vitiating the protection of § 512(m) and requiring investigation merely because the service provider learns facts raising a suspicion of infringement (as opposed to facts making infringement obvious).’<sup>178</sup>

As a result, courts have released service providers from any duty to investigate, and thus have effectively collapsed the actual and red flag knowledge standards.<sup>179</sup>

By contrast, while the statutory dispensation from a duty to monitor may limit the scope of a ‘willful blindness’ challenge to the safe harbour, a host who ‘induces’ users to post infringing content is not likely to qualify for the safe harbour.<sup>180</sup> Indeed, where the host assists users in uploading files, it is likely to have actual or red flag knowledge of the files’ infringing content.<sup>181</sup>

Recent decisions suggest ways in which a rightowner might satisfy even an exigent interpretation of the ‘red flag’ standard. Even though ‘[t]he infringement must be immediately apparent to a non-expert,’<sup>182</sup> the work itself may supply evidence that its uploading was unauthorized. For example, in *Mavrix Photographs, LLC v LiveJournal, Inc.*, ‘[s]ome of the [plaintiff’s] photographs at issue ... contained either a generic watermark or a watermark containing Mavrix’s website, “Mavrixonline.com.”’<sup>183</sup> The watermark could have alerted the host that the work, authorized for one site, was not available for posting to another. Similarly, in *Venus Fashions, Inc v ContextLogic, Inc.*, the defendant’s ‘fingerprint’ technology made infringing uploads of photographs

*Nimmer on Copyright* § 12B.04[A][1][b][vi] (no cases other than *EMI Christian Music* have successfully shown willful blindness; *Viacom* ‘essentially empties any significance from the willful blindness inquiry’).

<sup>177</sup> 17 USC § 512(m)(1).

<sup>178</sup> *Vimeo*, 826 F3d at 98–99:

Protecting service providers from the expense of monitoring was an important part of the compromise embodied in the safe harbor. Congress’s objective was to serve the public interest by encouraging Internet service providers to make expensive investments in the expansion of the speed and capacity of the Internet by relieving them of burdensome expenses and liabilities to copyright owners, while granting to the latter compensating protections in the service providers’ takedown obligations. If service providers were compelled constantly to take stock of all information their employees may have acquired that might suggest the presence of infringements in user postings, and to undertake monitoring investigations whenever some level of suspicion was surpassed, these obligations would largely undo the value of § 512(m).

<sup>179</sup> Register’s Section 512 Report (n 167) (noting that at a stakeholder roundtable hosted by the Copyright Office, participants were unable to articulate a scenario that would qualify as red flag knowledge but not also as actual knowledge under existing judicial interpretations).

<sup>180</sup> See eg *EMI Christian Music Group v MP3Tunes*, 844 F3d 79, 93 (2d Cir 2016); *Columbia Pictures Industries, Inc v Fung*, 710 F3d 1020, 1039–40 (9th Cir 2013) (declining, however, to rule that § 512 categorically excludes inducers from the safe harbour).

<sup>181</sup> *ibid.*

<sup>182</sup> *Mavrix Photographs, LLC v LiveJournal, Inc.*, 873 F3d 1045, 1058 (9th Cir 2017) (quoting *UMG Recordings, Inc v Veoh Networks Inc*, 665 F Supp 2d 1099, 1108 (CD Cal 2009)) (citing HR Rep 105–551, pt 2, at 58 (1998)) (explaining that infringements must be ‘apparent from even a brief and casual viewing’).

<sup>183</sup> *ibid.*

easily identifiable.<sup>184</sup> And in *EMI Christian Music Group v MP3Tunes*,<sup>185</sup> the court observed that the host knew that at the time of the infringing files' upload, the musical recordings at issue had not been licensed for dissemination in mp3 format. Accordingly, 'the jury reasonably could have concluded that MP3tunes and Robertson were aware of "facts and circumstances that make infringement obvious"'.<sup>186</sup> *EMI Christian* is particularly significant for its embrace of a takedown/stay down remedy. The court distinguished prior decisions that had ruled *ex-ante* blocking remedies incompatible with the services' absence of a duty to monitor their sites. Proof of the host's red flag knowledge justified an obligation to block content of whose infringing character the host was already aware.<sup>187</sup>

Even accounting for a possible cautious evolution towards remedies imposing some pro-active obligations on host service providers, this case law illustrates the difficulties arising from a regime in which the default has shifted from requiring rights clearance before exploiting a work, to absolving the exploiting UGC platform or website from infringement liability unless the rightholder can demonstrate that the exploiter should objectively have known precisely which works it was hosting, and where they could be found on the service. The resulting allocation of benefits and burdens has tipped so far from the equilibrium envisioned in 1998, that the telecoms and infant entrepreneurs whose internet ventures Congress sought to encourage have become market forces often more dominant than the copyright industries Congress once feared would stifle the new entrants.<sup>188</sup> It remains to be seen whether, to right the current imbalance, Congress will go beyond holding hearings to enacting real reforms to section 512.

## Concluding Speculations

In 2000, just before the outset of the period surveyed, I posited that

[T]he moment of the material copy may be passing ... In the impending era of digital access, ... we will no longer need hard copies to enjoy the work; indeed, in a world of access conditioned on non retention of digital of copies, we will be able to summon up the work at any time, but we may not be able to have our own copy [physical or digital]. Does that mean we will no longer want copies? ... Until now, a great deal of the enjoyment of works of authorship was possessive and tactile. Many of us liked acquiring works (including unauthorized private copies); we liked having them; and we liked touching them, even if we rarely, if ever, in fact read, viewed, or listened to them. None of this matters when we apprehend a work through digital access. The

<sup>184</sup> 2017 US Dist LEXIS 155748 (MD Fl 17 Jan 2017) at \*77–79.

<sup>185</sup> 844 F3d 79.

<sup>186</sup> *ibid* 92.

<sup>187</sup> *ibid* 93.

<sup>188</sup> Forbes' 'Global 2000' list documents the largest companies in the world in 2021, for instance, where the top 100 companies include the following American corporations: Amazon (#10), Alphabet [Google] (#13), Facebook (#33). By contrast, Disney—ranked #70 in 2019—is no longer in the top 100; it has fallen to #352. Andrea Murphy and others, 'Global 2000: How the World's Biggest Public Companies Endured the Pandemic' *Forbes* (13 May 2021) <[www.forbes.com/global2000/list/#country:United%20States](http://www.forbes.com/global2000/list/#country:United%20States)>.



only reason to access a work, when one can't retain a copy, is to read, look at, or listen to it immediately.

....

In a world of instant access, the hard copy of the future is likely to look very much like the hard copy of a relatively distant past. That is, deluxe editions will persist as attractive objects. Inexpensive mass market versions may eventually disappear, because their primary value is to convey content, not to cherish as an object. Online access may ultimately replace hard copies for content conveyance, but may also, perhaps paradoxically, enhance the appeal of physical originals and fine multiples. The ubiquity of the content makes its physical container all the more prized when the tangible medium is attractive in its own right.<sup>189</sup>

That prediction has in many respects been borne out, particularly as streaming has replaced downloading as the principal form of access to works of authorship.<sup>190</sup> I did not, however, anticipate the arrival of NFTs, which, by creating unique digital copies, in some respects emulate the value-conferring aspects of physical originals. We prize artworks existing in a single physical copy precisely because they bear the impress of the hands of the artists,<sup>191</sup> and there can be only one such copy, even if the image depicted can be duplicated in physical or digital media. NFTs guarantee the exclusivity of the digital copy (which may or may not have been created under the artist's supervision). One may debate whether NFTs will be an enduring entrant into the art market,<sup>192</sup> but their development suggests a persistent desire for unique ownership even in an era of ubiquitous access to the intellectual content of works.<sup>193</sup>

Like chattel ownership generally, NFTs' relationship to copyright is tangential,<sup>194</sup> so long as the digital object lawfully reproduced the work. But NFTs are relevant to copyright because they present the reverse of the questions explored throughout

<sup>189</sup> Jane C Ginsburg, 'From Having Copies to Experiencing Works: The Development of an Access Right in U.S. Copyright Law' (2002) 50 *Journal of the Copyright Society of the USA* 113.

<sup>190</sup> 'About 6 in 10 Young Adults in U.S. Primarily Use Online Streaming to Watch TV' PEW Research Center (13 September 2017) <[www.pewresearch.org/fact-tank/2017/09/13/about-6-in-10-young-adults-in-u-s-primarily-use-online-streaming-to-watch-tv/](http://www.pewresearch.org/fact-tank/2017/09/13/about-6-in-10-young-adults-in-u-s-primarily-use-online-streaming-to-watch-tv/)>; Joshua P. Friedlander, Mid-Year 2021 RIAA Revenue Statistics 1 (2021) <[www.riaa.com/wp-content/uploads/2021/09/Mid-Year-2021-RIAA-Music-Revenue-Report.pdf](http://www.riaa.com/wp-content/uploads/2021/09/Mid-Year-2021-RIAA-Music-Revenue-Report.pdf)> (Total recorded music revenue in the US for the first half of 2021 was USD 7.1 billion, with streaming comprising 84% of that figure. Digital downloads and physical album sales combined accounted for 15% of total revenue for the same period.); see also Pamela McClintock, 'Fueled by Streaming, Global Entertainment Market Hit Record \$100 Billion in 2019' *The Hollywood Reporter* (11 March 2020) <[www.hollywoodreporter.com/business/business-news/fueled-by-streaming-global-entertainment-market-hit-record-100-billion-2019-1283800/](http://www.hollywoodreporter.com/business/business-news/fueled-by-streaming-global-entertainment-market-hit-record-100-billion-2019-1283800/)> ('Home entertainment revenue fueled the growth, recording a 14 percent uptick globally over 2019, while traditional box office remained unchanged').

<sup>191</sup> Or at least were prepared under their personal supervision.

<sup>192</sup> See eg Symposium, *NFTs: Future or Fad*, Kernochan Center for Law, Media, & the Arts (19 November 2021) <<https://web.law.columbia.edu/kernochan/events/kernochan-center-symposium-2021>>.

<sup>193</sup> See eg Sebastian Smee, 'Will NFTs Transform the Art World? Are They Even Art?' *Washington Post* (18 December 2021) <[www.washingtonpost.com/arts-entertainment/2021/12/18/nft-art-faq/](http://www.washingtonpost.com/arts-entertainment/2021/12/18/nft-art-faq/)>.

Creating an NFT does two things: It provides proof of ownership and it guarantees scarcity. The scarcity is really the key part. If you want to sell something that exists only digitally, the problem is that all things digital can be infinitely copied. NFTs don't stop the copying. But they allow you to distinguish the copies from this one, notional 'original.' And they prove, through the ledger, that you own it.

<sup>194</sup> See 17 USC § 202 (copyright distinct from physical object).



this chapter. We have addressed the adaptation of copyright rights and limitations to the digital environment, particularly as forms of exploitation based in experiencing works, rather than in having copies of them, underpin many current business models. That adaptation has brought with it the acknowledgement that rationales rooted in copies can distort analysis and produce troubling outcomes. When courts reject the server rule, they at least implicitly recognize that it makes no sense for results to differ based on whether the defendant cut and pasted the plaintiff's photograph into the defendant's website, or whether the defendant merely 'embedded' the image into its website. When the Supreme Court declines to validate *Aereo*'s end-running the public performance right by creating individual source copies for retransmissions of broadcast works, the court understands that it makes no difference to the user whether the performance proceeds directly from the upstream source, or routes through multiple avoision-purposed copies.

Copyright initially struggled with digital copies precisely because they weren't tangible (recall the claims that the distribution right could not apply to copies simultaneously communicated and retained), and it still excludes digital copies from the first sale doctrine. Many of those difficulties have receded as copyright has become ever more incorporeal. We can therefore venture that over the last twenty years, copies have lost their primacy. NFTs nuance that story not only because they respond to an evident public demand for exclusive ownership, but also because they replicate in the digital world many of the qualities that make single original physical copies objects of acquisition. NFTs do not incorporate the tactile pleasures of physical copies, but they do share their exclusivity (even if the copy is a multiple, it is individuable, eg by inscribing it with the owner's name).<sup>195</sup> And their 'bragging rights', that is, the right to proclaim one's sole ownership of the object.<sup>196</sup> And, to bring it back to copyright, the object often is a digital copy of a physical or digital-original work of authorship.

<sup>195</sup> Will Oremus, 'Why Are Twitter and Facebook Embracing NFTs? Because We Love Status Symbols' *Washington Post* (22 January 2022) <<https://www.washingtonpost.com/technology/2022/01/22/facebook-twitter-nft-profile-pics/>>.

<sup>196</sup> See Brian L Frye, 'After Copyright: Pwning NFTs in a Clout Economy' (2022) 45 *Columbia Journal of Law & Arts* 341, 347–49 <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3971240](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3971240)>.