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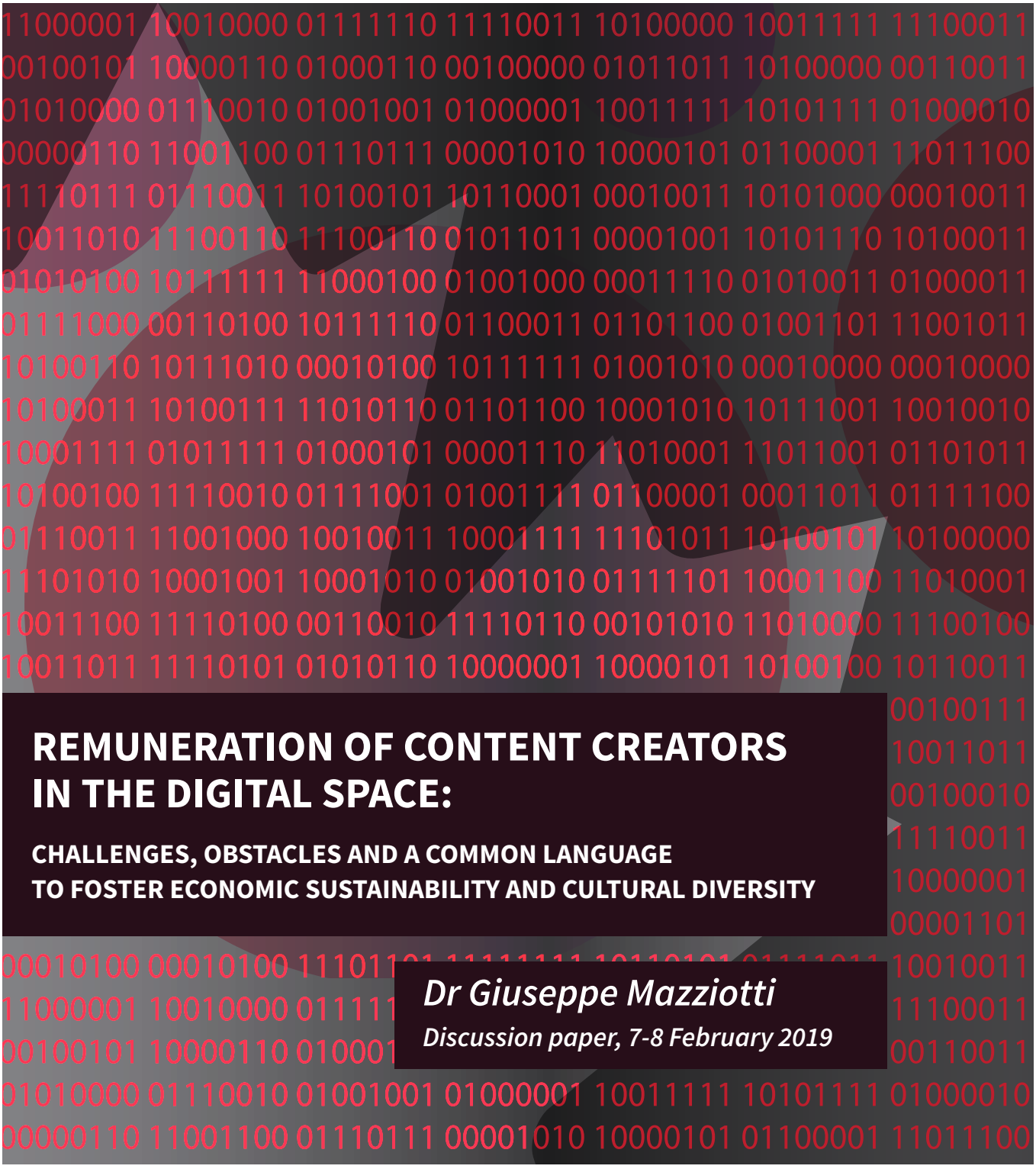

REMUNERATION OF CONTENT CREATORS IN THE DIGITAL SPACE:

CHALLENGES, OBSTACLES AND A COMMON LANGUAGE TO FOSTER ECONOMIC SUSTAINABILITY AND CULTURAL DIVERSITY

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Executive Summary

The Internet has subverted the traditional business models of content industries and has allowed online intermediaries to dominate the dissemination and commercial exploitation of knowledge, culture and entertainment. In supporting the creation and dissemination of French-language cultural content, the Joint Declaration on Cultural Diversity and the Digital Space, signed by the Canadian and French governments in April 2018, raises a number of questions on the future of technology, cultural and copyright policies. In particular: What is the role of copyright and remuneration in preserving and promoting diverse cultural creation at a time when digital markets exacerbate pre-existing "winner-takes-all" dynamics with respect to success and distribution of different types of creative works? What is the place of creators and what is the role of digital platforms in online dissemination of cultural expressions? What conception of content "creators" will ensure economic sustainability and diversity of cultural creation in the long term? This paper seeks to answer these questions.

Web-based communications have rapidly changed the context and the conditions under which creative works have been produced and disseminated. In the Internet's infancy, peer-to-peer dissemination of music files through file-sharing networks raised the issue of how intellectual works could be remunerated in the absence of new models for non-physical transactions. At that time, one idea was that cultural content would be disseminated in a disintermediated way, without the possibility of remunerating content creators for online exploitations of their works. Very few services, starting with Apple's iTunes in 2001, offered copyright content legitimately. The emergence of content-sharing services, such as social networks and user-generated content platforms, as well as download and streaming services, gave rise to a process of re-intermediation in content distribution. The quick rise of digital platforms that make available works uploaded by their users inevitably raised policy issues concerning online intermediary liability for copyright infringement. All of the legal systems this paper takes into consideration — Canadian, US and EU — protect online platforms' neutrality by exempting platforms from copyright liability insofar as they remove (or record) infringements in response to copyright holders' notifications (so-called "notice-and-takedown" or, in Canada, "notice-and-notice" mechanisms).

An environment where online piracy remains rampant (although its impact on sales is uncertain) and online platforms give access to copyright works either for free (via content-sharing platforms) or through subscription fees to access vast collections (via streaming services) inevitably triggers economic challenges to remuneration of content creators. For creators, these challenges are essentially those of not being remunerated at all or being compensated very little, because of the uncertain or very low commercial value of the vast majority of creative works on digital platforms. Even though the analysis relies on a broad notion of content "creators," which encompasses all copyright holders and the creative sector as a whole, the paper takes into special consideration individual authors and performers and their position vis-à-vis content-sharing platforms and content producers. The economic situation of individual creators is particularly important for the purpose of this paper since diversity of cultural expressions depends essentially on artistic and intellectual labour of individuals (or groups of individuals) rather than on investments and businesses of enterprises and cultural industries. With the significant exception of Google and its "Content ID" technology used across the YouTube platform, most social media platforms do not facilitate copyright enforcement and do not give individuals the possibility of monetizing online exploitations of their works. Notice-and-takedown systems work much better for wealthier rights-holders than for individuals or small-size content producers, who do not have time or resources to monitor what Internet users upload on social media. Moreover, licensed content platforms give rise to scalable and very unequal environments where a very few superstars have a disproportionately high share of the market (and even the stars earn next to nothing per stream).

Governments have attempted to tackle these issues and ensure some fairness in remuneration of creators, as well as

transparency in the ways creative works are exploited. Regulatory interventions have targeted crucial aspects such as the intersection of copyright and contract law and the establishment of limitations to authors' and performers' contractual freedom to sell all of their rights to publishers and other content producers without benefiting effectively from the revenues generated by their works. To this end, in jurisdictions such as the EU member states individual creators are increasingly placed in a position to exercise, under different conditions, rights to termination of their copyright transfers and rights to obtain information on the different exploitations of their works and the related revenues. In Europe, for instance, authors and performers can also rely on an improved functioning of collecting societies for the licensing of digital uses and on freedom to choose a rights manager of their choice, independently of their place of residence or country of origin.

Governments have also sought to improve the effectiveness of copyright enforcement through multilateral and national initiatives targeted at both structurally infringing websites (such as sites implementing sophisticated peer-to-peer technologies such as *The Pirate Bay*) and the largest online platforms. In this regard, the EU and the US seem to have different approaches to the problem of remuneration of creative works exploited across online platforms. The US still relies on its liability exemptions (or "safe harbours") to give digital platforms such as YouTube, Facebook and Twitter the shield of immunity following notice-and-takedown procedures. The EU, instead, is currently reconsidering the principle of platforms' neutrality and seeking to oblige the platforms — in light of their active role in optimising presentation of the uploaded works or promoting them — to obtain a license and pay for the contents their users upload. Platforms and civil society organizations have not remained inactive on the copyright enforcement front. YouTube, Facebook and other platforms have become increasingly compliant with copyright through content identification technologies and rights management software that allow them to filter unauthorised works and let content creators decide whether the works should be removed from the platforms or monetised. Civil society organizations such as Creative Commons have contributed to the development and adoption of technologies and licensing standards that help content creators, online intermediaries and Internet users understand whether a copyright work is made available to the public for profit or for free, for the purpose to be shared with others.

The complex scenarios the paper describes reveal the existence of major obstacles for better remuneration of content creators: *(i)* secrecy and lack of data on how the largest online platforms extract value from content-related interactions with their users and from imposition of unfair conditions to content creators; *(ii)* absence of standards of rights management information in each creative sector, which would facilitate licences with (and payments from) digital content exploiters; *(iii)* the bargaining power and size of the largest online platforms, that has been described as a threat to democracy and a natural target of antitrust enforcement; and *(iv)* the risks and social costs triggered by online enforcement measures with regard to freedom of expression and communication, net neutrality and freedom to do business online. A multi-stakeholder dialogue in the context of an international policy initiative could help develop a common language on remuneration, long-term sustainability of content creation and cultural diversity. What is indispensable is a reconciliation of the copyright aspects related to trade with other cultural and media policies that are expressly contemplated in the 2005 UNESCO Convention on cultural diversity. This reconciliation is essential if copyright is to regain its centrality and credibility in the Internet-related political debates.

1. Introduction

In April of 2018 the Canadian and French governments signed the Joint Declaration on Cultural Diversity in the Digital Space, in accordance with the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions. The declaration recalls that cultural diversity is inseparable from human rights and fundamental freedoms such as freedom of expression, communication and the possibility for individuals to choose their cultural and linguistic expressions. In emphasizing their common will to support creation and dissemination of French-language cultural content, the two gov-

ernments agree that States, digital platforms and civil society should contribute to the economic sustainability of content creators and to respect for copyright. It has become evident that the Internet has subverted the traditional business models of content industries and has allowed online intermediaries such as digital platforms to dominate the market. From an economic point of view, digital markets and online platforms exacerbate pre-existing characteristics of inequality of success and distribution of works and disparities of income among different authors, works and repertoires. While supporting Internet neutrality as well as sustainability of content creation through fair remuneration and copyright enforcement, the joint declaration raises a number of questions:

What is the place of creators in today's digital world? What concept of content "creators" should policy makers take into consideration to ensure economic sustainability of cultural creation and diversity of cultural expressions? What is the role of remuneration in preserving and promoting creation at a time when access to knowledge, culture and entertainment occurs increasingly online? And what is the role of copyright?

This paper seeks to address these questions. Section 2 describes the context in which creative works have been disseminated following the advent of web-based communications: from disintermediated forms of content sharing enabled by peer-to-peer software to the emergence of social media, user-generated content platforms and streaming services. Section 3 identifies emerging economic challenges for remuneration of content creators at a time when online piracy remains very relevant and web-based platforms give access to repertoires and vast collections of works for free (via content-sharing platforms) or on the grounds of a subscription and payment of a monthly fee (via download and streaming services). Section 4 considers how governments have addressed the issue of copyright protection and exercise of a plurality of rights that, even in the digital space, should ensure remuneration of cultural creation and content distribution. Regulatory interventions have targeted aspects of these issues such as individual and collective management of copyright, contractual agreements and transfers of rights from authors and performers to content producers and other attempts to ensure transparency and fairness across value chains of content production. Section 5 shows how online platforms and civil society have responded to the radical changes digital creation and online content dissemination have entailed by adopting technologies and licensing standards that help content creators, intermediaries and Internet users understand the conditions under which works are made available to the public. Section 6 focuses on major obstacles towards the achievement of conditions under which remuneration of creative works might regain centrality: for instance, secrecy and lack of data on how dominant (if not monopolistic) online platforms extract value from content-related interactions with their users and the imposition of unfair conditions to content creators; and, as a result, a low or very uncertain commercial value of average digital works. Finally, Section 7 provides a reflection and policy suggestions on whether and how a shared understanding and a common language on remuneration and long-term sustainability of content creation can be developed at international level. In particular, this section considers (i) whether a reconciliation of the aspects of copyright related to trade and culture is possible and (ii) whether a multi-stakeholder dialogue can help develop an interface between international copyright agreements and instruments such as the 2005 UNESCO Convention on the protection and promotion of the diversity of cultural expressions.

2. Context: online content dissemination and the place of creators

Digitisation of information and the advent of the Internet — as an unprecedented, borderless and decentralised medium of expression and communication — revolutionised the way individuals and cultural industries produce and disseminate ideas and creative works. In the mid-1990s, digitisation of information exchanged on the Internet and the end-to-end design of this new medium triggered a debate on whether or not copyright could survive. Some writers predicted that, in the absence of successful new models for non-physical transactions, there would have been no way to assure reli-

able payment for intellectual works (Barlow, 1994). Other scholars, to the contrary, were convinced that the new digital environment would give authors greater opportunities to trace consumption of their works and to gain remuneration through micropayments, as if the Internet could become a "celestial jukebox" (Goldstein, 1994).

2.1. Unauthorised file-sharing and peer-to-peer software

In the Internet's infancy, due to limited bandwidth and slow data processing, this new medium did not allow transmissions of large amounts of information. However, new technologies such as audio compression formats and peer-to-peer software started allowing Internet users to share sound recordings with each other for free, bypassing intermediation of record producers, skipping payment of remuneration and challenging the enforcement of copyright. For a number of years file-sharing threatened the survival of the recording industry since music files shared for free had the potential to replace CDs and other physical formats, which were the core business of that industry. To escape liability and ensure better performances, new platforms and file-sharing protocols relying on sophisticated technologies (for instance Napster, Grokster, eMule and BitTorrent) facilitated direct exchanges between users without storing copyright-protected works on their servers.[2] As soon as bandwidth enabled faster and larger content transmissions, such technologies and protocols started targeting films, TV series and video games (Quintais, 2018).

The practice of sharing copyright works without intermediation rose to such prominence in the Napster and Grokster era that influential academics, in slightly different ways, proposed legalization of file-sharing. Their main idea was that permitting non-commercial sharing of online works by requiring payments to content creators via Internet access providers would ensure remuneration for creators without hindering web-based communication (Netanel, 2003; Fisher, 2004). To measure user demand and ensure remuneration proportionate to effective use of these works, their solutions presupposed either registration of the works with a government agency (and a subsequent incorporation of fingerprints into the content files) and/or periodic surveys and inquiries aimed at metering uses of registered works. The strongest objection to this idea was that such a broad statutory licensing scheme would discourage formation of new markets and the emergence of innovative services based on property rights and customised licenses (Merges 2004).

2.2. Content-sharing services: social media and user-generated content platforms

Until the launch of Apple's iTunes music store in 2001, file-sharing was the most popular way to access copyright works on the Internet. Following, the rise of on-demand content stores and streaming services, together with the emergence and large-scale diffusion of social networks and Web 2.0 technologies, triggered a process of re-intermediation in digital content distribution (Renda et al., 2015).

2.2.1. Re-intermediation in content distribution

The rise to prominence of video-sharing platforms such as YouTube and Vimeo, social networks like Facebook and Twitter and other interactive services or dedicated platforms for photos (for instance Instagram, Flickr and Pinterest) and sound recordings (for example Soundcloud) has significantly expanded the opportunities for Internet users to access creative works. An essential feature of these platforms, from the perspective of cultural creation and remuneration, is that they are not designed to allow or to facilitate a distinction between original creations of the platform user and works created by someone else which are uploaded by the user without the right-holder's authorisation. From a legal perspective, access to and use of such platforms is conditional upon the acceptance of terms and conditions that oblige subscribers not to share and publish works created by third parties without their authorisation. However, from the outset, providers of content-sharing platforms have been reluctant to enforce this contractual condition and to monitor the contents their subscribers upload.

2.2.2. Protection of online platforms' neutrality

It would be impossible to understand the conduct and policies of content-sharing service providers without considering the special treatment and immunity that laws such as the 1998 Digital Millennium Copyright[3] Act in the US, the 2000 e-Commerce Directive[4] in the European Union and, at a later stage, the 2012 Copyright Modernization Act[5] in Canada granted to Internet service providers, in particular to suppliers of "hosting" services. US and EU laws created, from the late 1990s onwards, liability exemptions (or "safe harbours") that made hosting service providers not liable for activities carried out by their users if, after gaining knowledge of unlawful conduct, the service providers promptly removed illegal materials. Before adopting *ad hoc* legislation on online intermediary liability for copyright infringement in 2012, Canada had achieved an equivalent result through a 2000 agreement by the Canadian Association of Internet Providers (CAIP) and the music and cable industry, which successfully dealt with copyright infringement claims. The agreement sought to put into practice a solution enshrined in a judgment of the Canadian Supreme Court holding that Internet service providers might have incurred secondary liability if they had notice of a potential copyright infringement carried out by its customers and did not take remedial action.[6] The 2012 legislation is basically a codification of the rules suggested by the Supreme Court.

The main idea, justified also by the need to defend the neutral design of the Internet, was that Internet service providers should not be expected to monitor the traffic end-users delivered or received through their networks. Content sharing services have taken advantage of these exemptions to skip liability and to remove unauthorised copyright works uploaded by their subscribers only after having been informed and requested to do so (through a 'notice'). The consequence of this exemption, in Europe and in the US, has been a broad implementation of so-called "notice-and-takedown" mechanisms to social media and user-generated content platforms. In Canada, instead, the liability exemption led to the application of a lighter "notice and notice" regime, with no removal of the infringing materials: copyright holders send a detailed notice to report and locate an infringement of their copyright and then the service provider forwards it to the accused subscriber, keeping a record of it.

Copyright enforcement across content-sharing platforms became largely dependent on whether or not rights-holders had the resources and the possibility of monitoring uploads and requesting the takedown of their works. More recently, enforcement has started depending on whether a given platform implements forms of content identification to remove copyright-infringing materials and other harmful content (such as hate speech). Nonetheless, it is evident that, at least at the beginning, this trend inevitably transformed content-sharing platforms into *de facto* media companies whose unrestricted communication of large amounts of unlicensed copyright works to the public can be stopped or monetized only via ex post initiatives of rights-holders.

2.3. On-demand content platforms

From the perspective of content creators, on-demand download and streaming services are definitely a better option than content-sharing platforms since all works are licensed ex ante and their use is remunerated through fees that content producers and/or authors' collecting societies negotiate with each service provider. On-demand content platforms act as intermediaries between traditional creative industries and consumers. Apple's iTunes was the first service of this kind. These services have very different features and business models. Some of the biggest content platforms function as large retailers who sell permanent digital copies (downloads) of copyright works. These platforms often combine online catalogues with the sale of dedicated devices (for instance, Amazon's Kindle or Apple's portable hardware) enabling consumers to access and enjoy the works they buy. Other platforms, such as Spotify, Netflix and Amazon, work as subscription-based radio and television services, giving access to music repertoires or collection of films, TV programs and other audiovisual works.

One of the distinctive features of online platforms is their ability to know and exploit user or consumer preferences and attention. Through their websites and interfaces, these service providers collect and store personal data whenever a consumer buys a product or a subscriber uses one of their

service features. Such an extensive knowledge of their subscribers' preferences places online platforms not only in a position to sell and earn revenues from online advertisers, as occurs in the case of content sharing services, but also to target commercial offerings at the single consumer. User profiling allows on-demand content suppliers to take advantage of known consumer preferences in a way that reflects the consumer's behaviour on the platform.

3. Observed economic challenges

The digital space has raised challenges to remuneration of content creators in multiple ways. This section identifies the main economic challenges triggered by different distribution models developed in the last two decades. Going from the worst to best case scenarios for content creators, this section considers the evolution of file-sharing and the still significant rates of online piracy (§3.1); the making available of copyright works on content-sharing platforms (§3.2); and online distribution via on-demand content services (§3.3).

3.1.Evolution of online piracy

Since the infancy of web-based communications, disintermediated forms of online content communication, beginning with the file-sharing of sound recordings in the late 1990s, have raised unprecedented threats to remuneration of content creators. Due to the Internet's architecture and the technology that enables massive copying of digital files without degradation in quality, copyright owners lost control over large-scale use and exponential distribution of their works (Renda, 2011).

3.1.1. Piracy and growth of legal and illegal streaming services

Available studies and data (Kantar Media, 2016) on user conduct in the digital environment provide evidence that unauthorised file-sharing and other forms of uncompensated access to copyright works have progressively lost appeal due to the significant growth of lawful content platforms. Distribution models enabling users to access creative works in a smooth, cheap and secure way, without requiring them to download and store permanent copies, appear the main reason users are abandoning illegal sites and services. However, the proliferation of new file-sharing services based on increasingly elusive technologies such as cyberlockers and torrents (Renda, 2011) has constantly enabled a significant portion of Internet users to escape the control of the creative industries and to access copyright works paying no remuneration whatsoever. Online piracy has remained significant because of the evolution of technologies that, taking advantage of cloud-based services, have made large amounts of unauthorised copyright works accessible to the public. For instance, one of the most significant mechanisms enabling large-scale distribution of unauthorised works is that of cyberlockers, used by popular services such as Megaupload (available until 2012) and Rapidshare to store and access content through servers located in jurisdictions where online copyright enforcement is out of reach (so-called "copyright havens"). These services, together with other platforms offering illegal streaming services, work exactly as licensed platforms such as iTunes, Spotify and Netflix. Some of these services also provide devices facilitating copyright infringement, such as decoders or set-top boxes that can be plugged into TVs, with add-ons containing links to websites enabling access to free and unauthorised streams of copyright-protected movies, TV programs and series, music and games. Other services such as "torrent" sites (The Pirate Bay is the most famous example) use peer-to-peer technology to enable site-based downloads of copyright works in dispersed segments of data which are later reassembled after having been indexed and categorized. Interestingly, in recent cases the Court of Justice of the European Union found that activities helping users access unauthorised copyright works can be viewed as acts of communication of the works to the public, which directly infringe upon the related rights of film producers.[7]

3.1.2. Uncertainties about the economic impact of piracy on remuneration of creators

File-sharing and online piracy have not only raised questions about the effect on sales and economic harm suffered by content creators in sectors (music, films, TV programs, video games) targeted by peer-to-peer communications and

copyright-infringing services. The phenomenon has also triggered a debate on whether unauthorised dissemination of copyright works might have also positive effects for creators. Statistically, it is undisputed that, in the music sector, which was hit first and directly by piracy, global revenues from physical and digital music sales declined by 42% between 1999 and 2014 (from $25.2 to 14.6 billion) (IFPI, 2018). It was only in 2015 that music sales started growing again. In 2017, which was the third consecutive year of growth, global revenues amounted to $17.3 billion (IFPI, 2018). However, it still contested whether unauthorised copyright works have become substitutes for purchased contents, fared access to online services or cinema visits. For instance, recent studies have found no evidence of digital music sales displacement, reaching the conclusion that Internet users do not view illegal downloading as a substitute for legal access to digital music (Aguiar and Martens, 2013; Frosio, 2016).

From a broader economic perspective, economists have observed different interactions between piracy and sales. It has been observed that, by exposing consumers to music, film, books and games (and to artists, authors and genres), piracy has had a sampling effect that created new demand (Fijk, Poort and Rutten, 2010). This demand has also enhanced consumer willingness to pay for complementary products, such as concerts and merchandise, that have benefited the music industry as a whole. It is evident that these effects vary significantly depending on the type of works: for instance, the sampling effect is stronger with regard to works, such as sound recordings, that consumers tend to enjoy many times; it is much weaker for works, such as films and books, that are viewed and read once or twice. Also when it comes to complementary products, it is evident that musicians who gain popularity and exposure from unauthorised, free access to their recordings and videos have more to gain from piracy than non-performing artists, such as film directors and visual artists, who cannot earn money from their live performances. It is also relevant to consider that the positive effects of piracy in terms of online exposure gained by the artists can be greatly reduced if Internet users have access to copies of their works (for instance sound recordings or videos) whose quality is bad or compromised (for instance a badly compressed audio file or a bootleg video file) and/or whose formats come with no mention of their names. In both cases, unauthorised online dissemination is not only a violation of creators' economic rights but, in those jurisdictions that protect moral rights, an infringement of creators' rights to integrity and paternity.

3.2. Content-sharing platforms

In an October 2013 Guardian piece, the former leader of the Talking Heads, David Byrne, was very pessimistic about how the Internet would impact the commercial value of copyright (Byrne, 2013): "The Internet will suck all creative content out of the world."

3.2.1. Platforms' value and revenue generating strategy

Byrne's voice has not been isolated in emphasizing a situation that is due not only to the notoriously weak bargaining power of the average authors and performers vis-à-vis content producers (e.g. record labels, film studios, etc) but also to the widely uncompensated dissemination of copyright works on content-sharing platforms. For instance, in a letter addressed to the European Commission's President, Jean-Claude Juncker, signed in July 2016 by almost 1300 artists and songwriters from across Europe or who regularly perform in Europe, the artists claimed that the future of music was jeopardized by a substantial "value gap" caused by user-upload services, like Google's YouTube, that were taking value away from the music community and from its artists and songwriters (IFPI & IMPALA, 2016).

The value and number of users of services such as YouTube ($70 billion in 2015), Pinterest ($12 billion) and Soundcloud ($700 million) easily evidence the central role and size of content-sharing services in online distribution of creative works (European Commission, 2016). As of October 2015, YouTube has 1.3 billion users (one third of all Internet users) who collectively upload 400 hours of video content every minute; Daily Motion has 300 million users watching 3.5 billion views every month; Vimeo has a monthly audience of approximately 170 million users and 35 million registered users; and Soundcloud's user community has grown exponentially, going from 11 million users in 2011, to 150

million in 2015 and 250 million in 2016. More than ten years after the first publication of a YouTube video (2006), however, there is still uncertainty about the conditions under which content-sharing platforms are legally obliged to remove or filter unauthorized transmissions of copyright works and when they become liable for copyright infringement. First, this situation of uncertainty has not encouraged the development of licensing agreements between rights-holders and the enterprises owning the platforms. Second, as pointed out above, enforcement opportunities end up being reserved for the initiative of those rights-holders who are in a position to monitor user uploads on online platforms and to promptly notify online intermediaries.

What is the core business of large content-sharing platforms? YouTube, for example, helps demonstrate how platforms work, at least when it comes to revenue generating strategy. After having started as a free platform for user-generated content, and after its acquisition by Google in 2006, YouTube became a platform to share copyright works and also where copyright has been enforced to a significant extent (Renda et al 2015; *see infra* section 4). YouTube is not an online store or a commercial service where consumers pay a fee to access content. Rather, its business model (much like Facebook's) looks like that of traditional broadcasters, where money comes from advertisers willing to pay for consumer attention. However, unlike free-to-air broadcasters, platforms such as YouTube or Facebook have neither editorial responsibility nor an institutional mission to inform, educate and entertain. The fact that users create or choose to upload all contents makes it simply impossible for platforms to guarantee diversity of accessible works.

3.2.2. Position of content creators on content-sharing platforms

From a legal and commercial point of view, the vast majority of user-generated content platforms (with the remarkable exception of YouTube in the last few years) and social networks do not easily ensure compliance with copyright. These platforms have given rise to a 'lose-lose' situation for content creators, in particular for individual authors and performers and small-size content producers:

- First, copyright holders have not been able to enforce their rights when a third party makes available their works without permission. If an author or a copyright holder has no resources to monitor user uploads and to send notices to take unauthorised contents down, their copyright will remain ineffective unless the platform deviser acts spontaneously (relying on content identification technology such as Google's Content ID) and removes the unauthorised work. The above-mentioned "notice-and-takedown" procedures are mostly used, in the realm of content-sharing platforms, by major players in the music and film and by their respective anti-piracy bodies, in which these industries have invested significant amounts of money. As pointed out above, in the absence of active cooperation from the platform devisers, these procedures are not effective for individual content creators (such as photographers, writers, composers and film or video makers) and small content producers who do not have time and resources to dedicate to online enforcement. Thus, the current enforcement system discriminates against average content creators and favors wealthy ones.
- Second, the standard 'Terms and Conditions' that users of content-sharing services are normally required to accept at the time their accounts are created give the service provider (for instance Facebook or Instagram) a global, free and perpetual licence for the provider to use and exploit all user-authored contents across the platform, on a territorially unrestricted basis. This means that content-sharing services impose a condition of gratuity of use on the authors of available content. This means also that acceptance of the platform's (non-negotiable) terms and conditions make content creators instantaneously lose their opportunities to be remunerated across the platforms, unless the service provider allows the account holder to monetize their successful content. Moreover, one must consider that the condition of gratuity in publishing creative works across platforms is not necessarily justified and made easier to accept by the remarkable exposure opportunities offered by the largest services. As argued above with regards to the sampling effect of music piracy, the only content creators who can view uncompensated uses or viewings of their works as a way to boost their live performance businesses are performing artists. This is

clearly not a publicity mechanism that works for non-performing artists, such as authors of films, videos and other audiovisual works, photos and journalistic content, for which unpaid dissemination via social media does not necessarily boost their chances to be remunerated.

3.3. On-demand content services

From the perspective of diversity of content made available to the public, the functioning of licensed content platforms exacerbates pre-existing inequality of success and distribution of copyright works as well as disparities in income among different authors, works and repertoires. Nonetheless, for works such as films and TV shows, a predominantly territorial model of online deliveries, for both download and streaming services, facilitates access to culturally and linguistically diverse content.

3.3.1 Inequality of success and income in digital markets

As observed in relevant literature (Taleb 2007; Renda et al 2015) authors and performers work in a scalable and very unequal environment where very few superstars have a disproportionately high share of the market, while the majority earns below average income (Towse, 2018). In larger and larger digital markets for creative works, scalability is induced by the "winner-takes-all" nature of success, combined with self-reinforcing trends. Moreover, even though the remuneration these services paid to a given licensor and to a group of right-holders can be identified, it is hard to assess how much creators gain concretely. This is because copyright licences normally contain non-disclosure clauses that allow service suppliers to keep such information secret.

This situation of opacity is even more complicated for works, such as musical compositions, for which online services negotiate fees and conclude agreements with collecting societies that manage the rights of thousands of composers and lyricists. The fact that, so far, these bodies have not (or not always) guaranteed an efficient and transparent use of the detailed information they need to identify their repertoire and monitor its effective use has not allowed a fine-grained (and, eventually, fair) allocation of revenues. Even though opacity and lack of a nuanced and technologically advanced management of all authors' rights penalise mostly authors and/or owners of niche and small repertoires, music stars do not seem to earn so much from streaming services either. In the above-mentioned article Byrne mentioned the example of the 2013 summer hit "Get Lucky" by Daft Punk, where the two authors of the song (and members of the band) earned approximately 13,000 USD each as a result of the 104.760.000 Spotify streams this track reached by the end of August 2013. Byrne asked, "what happens to the bands who don't have international summer hits?".

3.3.2. Diversity of works made available

Due to the technically borderless dimension of the Internet, in online markets the role of physical distance between consumers and the place where digital content is made available to the public has sharply diminished. However, due to geographical restrictions implemented by platforms such as Apple's iTunes, a 2015 study showed that less than a half of all songs and music albums were simultaneously available across the EU via Apple's national music stores (Gomez and Martens, 2015). The study also found that – because of commercial strategies that draw on drivers of content demand such as language and home market bias – music availability was somewhere between 73 and 82% of what it could have been in a unified, unrestricted market. The situation was even worse for digital movies, whose simultaneous availability was estimated at 40% of the whole amount of content made available by iTunes in the whole EU.

In spite of potentially global audiences, on-demand content suppliers such as Apple, Amazon, Netflix and Hulu still deliver films, TV shows and other audiovisual works produced by third parties as well as major sporting events on a strictly territorial basis. In the same way as free-to-air and pay-per-view TV broadcasters, these online platforms are bound by licensing agreements that establish areas of absolute territorial exclusivity, with a subsequent obligation

for the service providers to geo-block their signals and online transmissions (Mazziotti, 2019). Interestingly, given their potential to partially replace television broadcasting and compete for the same audiences, in certain jurisdictions these web-based services have started being subjected to some of the traditional duties of licensed broadcasters. In a culturally and linguistically diverse environment such as the European Union, for instance, video-on-demand (VoD) service providers are obliged under a recently amended media law directive to promote production of, and access to, European audiovisual works.[8] This means that enterprises such as Amazon and Netflix will have to provide financial contributions to European content production (as determined by each EU member state), include a minimum share (30%) of European works in their catalogues and ensure prominence of those works in their offerings.

4. What has been done so far? Responses from governments

This section considers how governments have responded to challenges triggered by digitization of cultural content, unauthorised sharing of copyright works and the goal to preserve cultural diversity in an environment where economic characteristics of the digital market exacerbate inequality in content distribution.

4.1. International treaties and their broadly protective approach to copyright

At international level, multilateral instruments such as the 1994 TRIPS Agreement,[9] the 1996 WIPO "Internet" treaties on copyright and the related rights of music performers and record producers[10] as well as the more recent 2012 Beijing Treaty on audiovisual performances[11] built up or consolidated a broadly protective system of intellectual property rights. In particular, the incorporation of the most important and comprehensive agreement protection of literary and artistic property — the 1886 Berne Convention (last revised in Paris in 1971)[12] — into the TRIPS Agreement and, as a result, into the law of the World Trade Organization (WTO), strengthened reliance of the global economy on copyright.[13] From an historical and legal perspective, the Berne Convention created a bridge between different copyright law traditions and aimed to establish international minimum standards, obliging its contracting parties to protect authors' economic and moral rights on condition of reciprocity. The extension of the binding effects of the Berne Convention to all the members of the World Trade Organisation (WTO) not only introduced a relevant author-centric approach in an eminently corporate-related framework; it also made the obligations of the Berne Convention more easily and effectively enforceable against states through the arbitration-based dispute resolution system of WTO law.

Today's international copyright system is the result of agreements that, from the Berne Convention onwards, created a multi-layer protection of individuals authors, performers and cultural industries (such as film and record producers and TV broadcasters). Most of these agreements are administered by the World Intellectual Property Organization (WIPO, which is a United Nations agency) and require the contracting parties to protect the work and investments of the most significant contributors to value chains of content creations through exclusive or remuneration rights. Since the mid-1990s, all the aforementioned individuals and entities have held broad exploitation rights whose scope covers, in addition to offline uses, all the economically relevant forms of copying and interactive distribution of content via the Internet and other digital means.

4.2. Copyright's territoriality

In spite of the international origin and character of a vast array of today's copyright norms, these rules do not automatically apply to copyright-related activities occurring on the Internet. These provisions need to be transposed, enforced and complemented at a national level by single states or regional lawmakers, such as Canada, the United States or the European Union, each of which has a legislative history, a copyright tradition and business and contractual practices that might vary from each other, even significantly. This means that creators' rights are enforced on a country-by-country basis and the above-mentioned international norms are reflected in the laws of each single jurisdiction. The fact that the copyright system follows a principle of territoriality, even in a technically borderless digital environment, means

that national governments (and courts) are expected to fill the gaps left by the international conventions and to develop their own cultural, industrial and technology policies and laws, each of which can give the exercise and enforcement of copyright a different connotation. For instance, international conventions do not define what a copyright "work" is and when a work is "original"; convention rules do not indicate who should be considered to be the author (or coauthor) of a film and how the related rights should be allocated; and national law makers are also free to determine how the rights codified at international levels should be transferred from original right-holders to third parties (copyright contract law, see infra 4.3.1) and how such rights can be enforced in offline and online settings.

4.3. Copyright and freedom of contract

The copyright system is based, to a large extent, on a principle of free transferability of rights. Especially in the Anglo-American copyright tradition, freedom of contract is crucial in the creative industries. Such freedom is so broad that the US Copyright Act contemplates a category of works "made for hire." Under US law, a work is made for hire when it is created by an employee within the scope of his or her employment or is specially ordered or commissioned for certain uses.[14] In these cases, an employer or a client is considered the author even though the work is created by someone else. In legal systems following the French tradition of droit d'auteur ("author's right"), instead, parties do not have such freedom. The notion of authorship under continental-European copyright systems entails also the acquisition, at the time of creation, of non-waivable moral rights to paternity and integrity that exist together with the author's rights of commercial exploitations. In those systems, a work "made for hire" agreement would be contrary to the concept of authorship as a personality right and would be inevitably null or void.

4.3.1. Copyright contract law and revocation (or termination) rights

In jurisdictions which do not follow the Anglo-American "market knows best" model, the intersection of copyright and contract reveals a "paternalistic" approach aimed at protecting individual authors or performers in markets (for instance, book and music publishing) which are very risky and volatile. The policy goal of these measures is that of not allowing excessively lengthy or imbalanced transfers of rights in order to mitigate conflicts between individual creators and publishers. This is a clear attempt to remedy under national laws a situation in which copyright is concentrated, for the most part, in the hands of the cultural industries. Good examples of limitations of freedom of contract can be found in countries where the law seeks to help individual authors benefit from the economic value of their works at a time when their commercial success is very uncertain or impossible to estimate. For instance, in countries such as Germany, the Netherlands, France and Spain there is a principle of fair or adequate remuneration whose concrete determination is achieved also via collective bargaining (Germany) or through a government intervention (for instance, the minister of education, culture and science in the Netherlands), or on a sector-by-sector basis (Dusollier et al., 2014; Senftleben, 2018). This principle restricts parties from stipulating a transfer of the author's rights in exchange for a lump sum and oblige parties to share market risks. In civil law jurisdictions such as Italy, France, Belgium, Germany and Spain parties are not free to transfer rights in future works of an author or in future modes of commercial exploitation. Moreover, in most of the above-mentioned countries specific types of transfers are regulated in depth. Publishing contracts, in particular, can be rigidly regulated in terms of formalities, duration and non-waivable rights of writers to have access to information concerning the revenues generated from the exploitation of the work, the quantity sold and the rights transferred for each exploitation of the work (see for instance Belgian and Italian law) (Dusollier et al., 2014). Publishers are also obliged by law to ensure distribution of the work to the public and, if they do not do so and let a book go out-of-print, they can lose their rights because of termination of the contract by law (see French law, for instance). All the aforementioned rights place authors and artists in a position to take advantage of the commercial success and diffusion of their works and can be particularly relevant in the digital environment.

A creator's right that is more common across a variety of jurisdictions is the right to revocation (or termination) of contractual transfers. US law has conferred this right to authors following the 1976 reform of the US Copyright Act. As explained in the literature (Ginsburg, 2018) the US non-waivable author's right to termination of the grant of their rights replaced a previous system (of "reversion") where rights were automatically reassigned to the author after expiration of the first term of copyright protection (this right was based on a two-term copyright system). Given that the 1976 reform introduced a unitary copyright term — in order to make US law comply with the minimum term of protection required by the Berne Convention (life of the author plus fifty years) — the Copyright Act replaced the reversion right with a termination right. The main difference is that the new right is not automatic and requires the author, after thirty-five years from the grant, to properly notify the grantee and to record the notification in the copyright office within the statutory deadlines. Another relevant difference is that the termination right restricts freedom of contract because the right is enforceable "notwithstanding any agreement to the contrary," whereas the previous right to reversion upon renewal could be overridden through contract by publishers (Ginsburg, 2018). Canadian law also creates a contractually non-waivable reversion right, even though it is provided in favour of the author's heirs for them to regain and enjoy the author's rights upon his or her death. To a more limited extent, termination rights are also applied in European countries, where they are granted in the context of regulated types of agreements. In France and Spain, for instance, the law applicable to publishing contracts grants authors a termination right should the publishers fail to fulfil their obligations. In the UK, instead, although the law no longer provides reversion rights (it used to do so until the creation of the 1956 Copyright Act), an automatic reversion of rights can be agreed contractually while transferring copyright.

4.3.2. Non-waivable remuneration rights for authors and performers

In the digital environment, EU law provides authors and performers with non-waivable rights to remuneration applicable to private copying of phonograms, audiovisual works and exploitation of music performances embodied in sound recordings. These measures guarantee a given income to individual creators with the intent to support their artistic career and/or to protect their financial interests. The impossibility of contractually relinquishing the remuneration rights listed below is important, from a policy perspective, since it aims to directly support copyright holders — the creative individuals — who are expected to guarantee diversity of cultural creations more than content producers and/or other commercial agents.

- Under EU law, private copying is a copyright exception whose legitimacy depends on fair compensation the right-holders receive for the economic harm they suffer from unauthorised copying. Technically, such fair compensation comes from "taxes" ("levies" in legislative jargon) the EU member states charge on the sale of copying devices such as printers and blank media or storage devices (including digital equipment like music and video game players, tablet computers, mobile phones, etc.). As an alternative to levies, this remuneration may come from state funds, like in Norway. This source of income — which is managed by authors' and performers' collecting societies — has been very important in Europe, especially for performers, since in most EU jurisdictions law provides that this revenue cannot be validly relinquished or transferred through contract to other right-holders like book and music publishers, film producers and TV broadcasters (Mazziotti, 2013).
- A 2011 EU directive extended the term of protection for sound recordings from 50 to 70 years from the time of publication or communication to the public (whichever is earlier). The measure was intended to provide additional revenues and economic support to both record producers and music performers. Considering that performers usually transfer or assign their rights to record producers, there would have been a risk of performers also contractually relinquishing this additional income. To solve this issue, the directive grants performers a non-waivable right consisting of a supplementary remuneration of 20% of the net annual revenues the record producer derives from exploitation of a recording in the extended term. For performers remunerated through lump sums, EU law obliges

record producers to create a fund through which they distribute royalties on an annual basis via the administration of collecting societies. For performers remunerated through royalties, instead, the directive extends the right to receive such recurring payments, unencumbered by advance payments or contractually agreed deductions, during the extended period of protection. The directive also grants music performers a termination right when the record producer does not effectively market a sound recording during the period of extended protection.

4.3.3. Specificity of the labour market in the arts sector

All these rights reveal a protective approach of the individual creator whose goal can be compared to that of labour laws. However, as economists have shown, the labour market in the arts sector differs from other labour markets because of an excess supply, due to too many artists being trained in colleges and academies and ending up not finding the type of job they hoped to do (Towse, 2018). Studies have shown that only a portion of performers' income is due to "arts" work, whereas the rest of their income comes from arts-related (for instance teaching) or unrelated occupations (Baumol and Bowen, 1966). This means that measures aimed at achieving fair remuneration of performers relate only to the artistic portion of their work. For instance, available data shows that the revenues generated by levies, in Europe, amount to 31% (2017) of the annual remuneration performers receive from their respective collective rights management organizations (which administer also the performer rights to equitable remuneration for broadcasting and communication to the public: AEPO-ARTIS, 2018).

4.4. Empowering creators through transparency of information

Policy makers have been trying to strengthen authors' and performers' bargaining power to help them increase their remuneration, especially from online exploitations of their works. A relevant attempt that is being made by the European Union in adopting a new copyright directive for its "Digital Single Market" is that of targeting the above-mentioned opacity of conditions under which creative works are accessed and licensed on social media, user-generated content platforms and on-demand services such as streaming platforms and online stores.[15] The draft directive creates a right for authors and performers to receive, on a regular basis, timely, accurate, relevant and comprehensive information on modes of exploitation of their works, direct and indirect revenues generated, and remuneration due. This right to transparency will be actionable, via voluntary dispute resolution procedures, not only against content producers — which are contractual partners of authors and performers — but also against further licensees or assignees, including the owners of online platforms which buy online exploitation rights from collecting societies (in the music sector), and record and film producers and broadcasters (with regard to TV content). In the architecture of the upcoming copyright directive, transparency is functional to the enforcement of newly codified authors' and performers' rights, each of which will trigger a significant reform of national copyright and contract laws (see supra 4.3.1). The first is a right to contract adjustments when an author or performer's remuneration is disproportionately low when compared to the subsequent relevant direct or indirect revenues deriving from exploitation. The second is a right to revocation of licences or transfers of copyright where there is an absence of exploitation of the work or there is a continuous lack of reporting of information on revenues and the remuneration due. As shown above (supra 4.3.1), both rights already exist in several EU member states. The upcoming directive aims at making them mandatory on a EU-wide basis.

4.5. Collective management of authors' rights in the music sector

Governments have sought to empower content creators by improving the governance and functioning of collecting societies, in order to ensure a more efficient, transparent and quick response to the challenge of newly emerged web-based uses of music repertoires.

4.5.1. Collecting societies as composers' unions

Traditionally, collective rights management organizations are associations that work as unions, helping authors solve conflicts arising with music publishers (Mazziotti, 2011). One of the historically most significant achievements of collecting societies in the music sector has been to allow authors, through collective bargaining, to keep and co-own with publishers, on a fifty-fifty per cent basis, the rights these societies administer. This means that — unlike music performers — music authors (composers and lyricists), because of their membership in collective organizations that manage their rights on the grounds of a mandate, have never transferred their rights to music publishers in their entirety. This deal has clearly protected their right to fair remuneration and allowed composers to earn more, sharing commercial risks with their publishers.

4.5.2. Types of rights managed collectively

The rights these bodies traditionally manage are — according to a pre-digital subdivision of trade in two separate sectors — mechanical rights and performing rights. Mechanical (or reproduction) rights cover production and distribution of physical formats embodying musical compositions (for instance compact discs). Performing rights are much broader and target concerts and other public performances of a copyright work as well as transmissions via TV and radio broadcasting. In spite of the blurred distinction between copying and transmission of works over the Internet, collecting societies have maintained and relied upon this distinction in their online licensing activities. Mechanical and public performance rights have been transposed and applied to online uses to cover, to a different extent, both download and streaming services. Having said this, it is important to recall that authors' societies in Anglo-American systems — unlike their continental-European sister societies — emerged and historically developed for the sole management of performing rights. In the UK, for instance, music publishers have historically been the sole proprietors of mechanical rights through their own trade organisations, after having acquired them from the authors. In continental Europe, instead, authors and music publishers usually co-own the same rights under the shield of their respective collecting societies (Mazziotti 2011). These bodies have operated on a strictly national basis and, in the vast majority of countries, they are de facto or legal monopolies which cooperate with each other, covering the entire global music repertoire, through mutual representation agreements.

4.5.3. Examples of remedies to inefficiencies and opacity

Unfortunately for authors and the entire creative sector, collecting societies were widely unprepared and slow to launch licensing schemes for online uses at a time when file-sharing and piracy dramatically affected the music industry and lawful content services struggled ito emerge. In 2005, the European Commission set out best practices with a goal of enhancing efficiency and transparency of these bodies and encouraging them to provide better services to their members and to potential exploiters.[16] These practices concerned crucial aspects such as equitable royalty collection and distribution without discrimination on the grounds of residence, nationality or category of the right-holders; increased collective rights managers' accountability; fair right-holders' representation in the organization's internal decision-making; and effective dispute resolution procedures. After years of reluctance to intervene through mandatory provisions in a sector where national governments wanted to preserve their autonomy and cultural policies, these best practices were implemented in a 2014 directive that established a common legal framework for collecting societies in Europe.[17] This directive allows authors (composers and lyricists) to entrust their rights to a society of their choice, irrespective of their country of residence, and to split the assignment of their rights between different societies (Article 5). At the same time, the directive (Title II) harmonised the criteria of governance and the main obligations of collecting societies, imposing high standards of transparency and fairness towards right-holders and commercial users of copyright works. With specific regard to online licensing of music rights, the directive is relevant because of the high standards of service and the technical requirements (for instance, use of time-sensitive and authoritative databases, processing usage reports and invoicing) it imposes on societies wishing to issue licences for cross-border online uses.

4.6. Online copyright enforcement

Facing exponential growth in uncompensated access to online copyright works, governments have attempted (often unsuccessfully) to reduce piracy to an acceptable level by undertaking initiatives at both international and national level.

4.6.1 International anti-piracy policy initiatives: failure of the Anti-Counterfeiting Trade Agreement (ACTA)

The most remarkable attempt to develop a coordinated response to the problem of piracy through a multilateral instrument was the negotiation and conclusion of the November 2010 Anti-Counterfeiting Trade Agreement (better known with its acronym 'ACTA').[18] The treaty was an attempt to establish international standards and common rules to tackle large-scale infringements of all intellectual property rights (copyrights, trademarks, patents, designs and geographical indications). According to its supporters, ACTA would place intellectual property right-holders in a position to benefit from improved access to justice, customs, and police to enforce their rights against counterfeiters or infringers in all the countries where the agreement was entered into force.

Unsurprisingly, the treaty had a provision (Article 27.2) targeted at large-scale copyright infringements. ACTA sought to make civil and criminal enforcement measures contemplated in the agreement available also in the digital environment. This provision encompassed precautionary measures (such as injunctions) aimed at preventing and discouraging infringement. In particular, the provision targeted "the unlawful use of means of widespread distribution for infringing purposes." In its final version, Article 27.2 provided that copyright enforcement measures should be implemented in a way that does not conflict with legitimate activities, including electronic commerce, and preserved fundamental principles such as freedom of expression, fair process and Internet user privacy. In spite of amendments that sought to explicitly strike a balance between copyright enforcement and competing fundamental rights, the agreement could not be formalised after its unexpected rejection by one of the most relevant Contracting Parties, the EU. Even though the EU and twenty-two governments of its member states signed ACTA in January 2012 (one month after the other parties) the European Parliament rejected the treaty ratification in its consent procedure, in July 2012, after an unprecedented and politically harsh debate and widespread protests across Europe. In 2010 the European Parliament had already openly contested, through a formal resolution, ACTA's lack of transparency in the negotiations, asking the European Commission (which acted as the EU negotiating body) for an assessment of the potential impact of the new treaty on freedom of expression and the user right to privacy.

4.6.2. Examples of national anti-piracy policies: HADOPI and SOPA

One of the main reasons for the conflict between the European Parliament and the European Commission during the ACTA negotiations was the inclusion in the original text of the treaty of a provision that encouraged the adoption of a so-called "graduated response" (or "three-strikes") law. This enforcement model was followed in the 'Creation and Internet' Act adopted in France in 2009.[19] This act established the HADOPI (Haute Autorité pour la Diffusion des Oeuvres et la Protection des droits sur Internet), an administrative agency with the institutional mission of sanctioning Internet users accused of illegal file-sharing. Under the original version of the "three-strikes" law Internet service providers were requested to monitor infringing conduct by their subscribers and, after three warnings, to place them in a blacklist and to block their account for up to one year (with the "three-strikers" continuing to pay while being disconnected: Renda et al., 2015). As argued in the literature (Renda et al., 2015), this piece of legislation violated the principle of net neutrality by requesting the Internet service providers to monitor online traffic and to detect copyright infringement. What made the French model law very controversial and unacceptable for the majority of the European Parliament members was also the fact that an administrative body such as HADOPI — and not a judicial authority — could sanction users and order disconnection of their accounts

from the Internet. These concerns were fully reflected in a 2009 judgment of the French Constitutional Council which censored the new law because of its inconsistency with the presumption of innocence and the right to a fair trial. This judgment forced the French parliament to amend the act and to confer the power of cutting off Internet access of repeat copyright infringers to courts.

Another interesting example of national anti-piracy law initiative that failed in January 2012 because of fierce opposition coming from Internet companies and civic society organizations was the Stop Online Piracy Act (SOPA).[20] As its title suggested, this act aimed to expand the ability of the US law enforcement authorities to fight online piracy. The US legislative initiative contained specific provisions enabling courts to issue site-blocking orders targeted at Internet service providers and other judicial remedies that could have restricted advertising networks and payment services from conducting business with infringing websites and prohibited search engines from linking to such websites. Interestingly, EU law already contemplates site-blocking measures, to such an extent that member states such as Ireland and the UK have made them particularly effective against entire websites and services engaging in large-scale copyright infringement. Given the evolution of piracy and its significant shift to the Cloud and to websites implementing sophisticated peer-to-peer technologies, major film producers and audiovisual content coalitions such as FairPlay Canada have lobbied governments and communications authorities to access these measures and impair or reduce access to structurally infringing sites (for instance, *The Pirate Bay*).

4.6.3. Online platforms' liability exemptions

From the late 1990s onwards, governments enacted regulations to shield providers of certain web-based services (including content hosting) from liability for activities carried out by their users (see *supra* 2.2.2). The widely shared policy goal pursued by these measures was to foster the development of a solid digital communication infrastructure, encouraging innovation and maintaining a principle of network neutrality. However, there have been significant differences in the ways these liability exemptions have been applied to content-sharing platforms in the European Union and the US.

In Europe, the EU Court of Justice (L'Oréal v. eBay, 2011) stressed and clarified that a liability exemption is applicable to online platforms in so far as a platform confines itself to providing a hosting service neutrally, by a merely technical and automatic processing of the (potentially infringing) contents uploaded by its customers.[21] This means that the exemption should not apply when an online intermediary plays an active role that entails knowledge of (or control over) such content. For instance, the CJEU found that this was eBay's role in supplying assistance and optimising presentations of the customers' sale offers or promotion of these offers. In the domain of content-sharing platforms, this means that the service provider cannot escape copyright liability if it optimises the presentation of the uploaded works or promotes them. This is the conclusion that might soon be codified in an EU directive on copyright in the "Digital Single Market." The draft directive contains a provision (Article 13) that explicitly considers user uploads on content-sharing platforms as acts of making works available to the public. The same provision obliges providers of such services to seek and obtain licenses for copyright works that platform users, acting for noncommercial purposes, share online.

In the US, instead, the 1998 Digital Millennium Copyright Act and its safe harbour provisions have a broader application that encompasses and covers almost any Internet entities (Ginsburg and Budiardjo, 2018).[22] US courts have recently held that video-sharing platforms such as YouTube and Vimeo can seek safe harbour when they prove absence of knowledge or awareness of facts or circumstances from which infringing activity is apparent (so-called "red flag" knowledge). This approach is motivated by the intent to protect Internet service providers from the expense of monitoring user uploads, which was a specific concern of the US Congress when designing the safe harbour provisions.[23]

5. Responses from online platforms and civil society

Proliferation of user-generated content (or "content-sharing") platforms and social media has empowered Internet users' creativity and has allowed creators to make their works available to the public. However, as emphasized above, for several reasons, these platforms have facilitated copyright infringement by letting users copy, transmit and modify unauthorised works. This section briefly explains how the platform owners and civic society organizations have reacted to the challenge of copyright enforcement.

5.1. Online platforms

The broad implementation of liability exemptions and notice-and-takedown mechanisms (especially in the US) has been beneficial to online platforms because it has allowed them to not enforce — de facto — clauses under their terms and conditions that would restrict users from publishing unauthorised copyright materials. Since their emergence in the online world, platforms have given access to user-generated texts, photos, music, videos and other content without paying remuneration to copyright holders whose works were uploaded without their permission (or without letting them monetize those unlicensed exploitations, at least initially). However, not all platforms have behaved in the same way. Considering the narrower scope of liability exemptions in the EU and the constant pressure content industries exert judicially, especially in the US, most platforms have started enforcing copyright. This is happening through implementation of technologies which enable platforms to detect and remove copyright-infringing materials and give content creators opportunities to monetize use of their works.

The first platform which developed a content identification and rights management technology was YouTube. Having transformed its platform into a formidable advertising machine, Google sought to shield YouTube from copyright liability claims by investing dozens of millions of dollars to launch "Content ID" in 2007. This technology enables right-holders to effectively monitor and manage their works on YouTube by automatically notifying the platform of user-uploaded videos containing their creative works. The functioning of this system is based on cooperation with right-holders, who deliver to YouTube reference files of works they own, metadata describing the content and the option to choose in advance what they want YouTube to do when Content ID finds an appropriate match. As Google explains in a November 2018 document, " the library of reference material in the system includes more than 80 million files of audio and visual content. YouTube then compares videos uploaded to the site against those reference files and automatically identifies the work and applies the rightsholder's preferred action for that content" (Google, 2018).

At a much later stage, Facebook started following the same path by implementing a "Rights Manager" technology that helps all platform users managing a Facebook page prevent their unauthorised videos from being spread across the social network.[24] The tool allows content creators to easily upload and maintain a reference library of video content to monitor, protect and specify permitted uses of each video. This technology gives account holders the possibility of earning and claiming a part (or the whole) of the advertising revenues generated by their videos and embodies a function ("Audience Network") helping users develop the most profitable publishing strategies. The main difference between YouTube's Content ID is that Facebook's technology is not its own product. The solution is licensed by Audible Magic, a company maintaining content identification databases for multiple types of content, including music, live and past TV programs and movies.[25] Audible Magic's solutions are also implemented by other content-sharing services such as Daily Motion, Vimeo, Soundcloud and Tumblr.

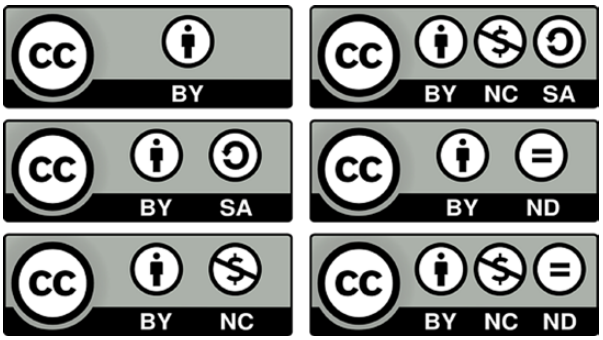
The recent takeoff and advancement of content identification technologies and databases for music, film and TV content is good news for content creators since these tools increase their ability to monitor and boost their remuneration opportunities. This is also a significant improvement for platforms since they can more easily handle obligations descending from liability regimes and help creators monetize their works under conditions negotiated ex ante. These solutions are also likely to foster cultural diversity by enabling creators of all kinds — from the least to the best

known, from the smallest producers to the majors — to publish their works and repertoires and to measure their diffusion and appreciation across platforms. However, it has yet to be seen how effective these technologies are, especially in relation to types of works — for instance, photographs on photo-sharing sites such as Instagram or Pinterest — whose recognition and classification is, at least for now, very difficult or impossible.

5.2 Civil society

As noted above, civil society organizations have been active in Europe and the US in opposing and lobbying against legislative reforms in the field of copyright that would have tightened online enforcement and established usage restrictions with the cooperation of Internet service providers and online content platforms. The political rejection of ACTA in 2012 showed how influential and decisive unprecedented waves of protest and lobbying by individual users, civil society organisations and associations representing the computer and communications industries can be. Coincidentally, the protest against ACTA followed, by a few months, a political battle that took place when the US sought to pass the Stop Online Piracy Act in January 2012. At the time the SOPA was discussed in the US Congress, a mobilisation of Internet users, online intermediaries and providers of content-sharing platforms culminated in a "strike" (i.e., a switching off of approximately 7,000 websites, including top websites like Wikipedia and Reddit) that effectively raised awareness about the risks of the new law (for instance, tension with the basic functioning of the Internet and risks of online censorship).

From a completely different angle, civil society organizations have contributed to a general improvement of the copyright ecosystem by developing standard mechanisms of rights management which aim at facilitating dissemination of creative works in the digital space. One such example was in the open source movement (and in particular the Free Software Foundation), which since the early 1980s promoted a new way to create, improve and disseminate free software as an alternative to the marketing of commercial programs. The most prominent and influential example of such a contribution in the Internet age is Creative Commons, a non-profit founded in California in 2002.[26] Creative Commons has conceived, made available and constantly upgraded a system of standard licenses addressed to all content creators who intend to make their works free to access and share on the Internet under a set of easy-to-understand, flexible and predetermined conditions that address all kinds of digital works.[27] From a policy perspective, Creative Commons pursues the goal of opposing the far-reaching scope of copyright from the inside of the system, promoting dissemination of culture, entertainment and knowledge on public interest grounds. From a legal perspective, the organization encourages content creators to replace the traditional "all rights reserved" approach to copyright with a "some rights reserved" rationale. This model is particularly useful for nonprofessional (amateur-like) creators and other authors who, for various reasons, do not seek remuneration from dissemination and use of their works. For instance, certain authors who are already remunerated for their work via an employment contract (e.g. university professors or researchers) or performers who receive an artist grant (such as fellowships given to artists in residence in concert seasons or festivals) might find it more useful to freely publish their scientific articles, research papers or classical music recordings than monetising their work. The standard licences proposed by Creative Commons aim at helping authors and artists relinquish some of their rights in order to make their works easier to access, share and — in certain cases — reuse by follow-on creators. Creative Commons ('CC') gives content creators the possibility of choosing among several clauses, each of which is expressed graphically through a simple icon. Each of the clause combinations allows an individual creator to concretely determine how "open" their creative work is to users. As shown in the image below, the minimum common denominator of these licences is an 'Attribution' ('BY') clause, which protects the creator's right to be credited when their work is copied, shared and re-used in the online environment. Other clauses specify whether the work is made available just for 'noncommercial' purposes ('NC') and/or for 'non-derivative' uses ('ND') and whether a modified version of the work (in those cases where the 'non-derivative' clause is not applied) should be shared under the same conditions chosen by the original creator (share-alike: 'SA')



From the perspective of professional content creators and cultural industries seeking remuneration from online exploitations of their works, initiatives such as Creative Commons' are important because their standardised licences help individual and commercial users distinguish free-to-use materials (comparable, in this regard, to works fallen in the public domain) from copyright works whose unauthorised sharing constitutes copyright infringement. These licenses pursue this goal not only from a legal and contractual perspective, but also encourage the incorporation of a machine-readable version of each licence into the files embodying creative works (through metadata and forms of content tagging). This means that the Creative Commons' attempt to "de-activate" the default protection afforded by copyright is a message targeted at both humans and computers that can significantly improve copyright enforcement and, in particular, the ability of platforms to filter or monetise unauthorised materials without impairing dissemination of unprotected materials and freedom of speech.

6. Going forward: major obstacles

There are major obstacles to the achievement of conditions that might spur fairer remuneration of content creators in the digital space and a broader dissemination of diverse cultural expressions. This section draws on the scenarios that have been described so far in order to identify the main issues policy makers and participants in a multi-stakeholders dialogue should consider.

6.1 Secrecy, lack of transparency and scant data on content value chains

Estimating the commercial value of digital works is difficult or impossible. Dematerialization and disintermediation of content and the subsequent advent and exponential growth of content-sharing platforms has dramatically weakened Internet users' appreciation of professionally created works. Business models that have emerged in the last decade via social networks, user-generated content platforms and licensed on-demand services have cut off or reduced the power of previous retailers and commercial intermediaries and changed the value chains of content distribution. A quick transition from markets where consumers purchased physical copies of creative works to services where subscribers pay to access collections of works (or to freely access large amounts of user-uploaded content) has placed online platforms in a unique position to exploit digital content. Considering their market power, large platforms can determine and impose the conditions and price of the works they make available in environments where a significant portion (or all, in some cases) of their profits come from advertising and exploitation of their users' personal data. As noted above, secrecy and confidentiality cover all the information on revenues generated by copyright works and the levels of remuneration paid to creators or to their collecting societies. It is impossible to estimate fairness of remuneration and diversity of content online without data showing what the preferences of Internet users are. As we have seen, in a recent legislative proposal the EU intends to ensure transparency along the value chains of digital content by obliging assignees and licensees of copyright works — including online platforms — to disclose allocation of earnings and to inform authors and performers about the revenues generated by their works, on a sector by sector basis. However, it has yet to be seen how realistic disclosure and processing of such a vast array of data is, especially in jurisdictions where authors and performers are represented by inefficient or technologically poorly equipped collecting societies and where national lawmakers might not be determined to place such a heavy administrative burden on Internet companies.

6.2. Absence of rights management information standards

Obliging online exploiters to disclose relevant data on revenues generated by copyright works, on a sector by sector basis, would not be enough to ensure fair remuneration of the generality of content creators. Effective monitoring and measurement of access to digital works presupposes the implementation of content identification technologies and repertoire databases containing all necessary information about the relevant rights as well as who owns and/or controls them. Unfortunately, at the moment there are no fully interoperable standards giving content licensors and licensees access to rights management information. Availability of such data would greatly facilitate the operative elements of licensing agreements and would promote the creation of a level playing field for all contributors to the content value chains in different sectors. An attempt of this kind was done in the music sector with the so-called "Global Repertoire Database" (GRD). This ambitious project aimed at creating a comprehensive database of the global ownership and control of musical works, openly available to composers, publishers, collecting societies, and commercial users of the global repertoires. The GRD would have enabled cost savings — by eliminating duplication in activities of data management and processing — and would have allowed a more efficient management of online works by lowering administrative barriers for companies wishing to distribute music online. Such an open, reliable and fully interoperable database would also have ensured a quicker and more efficient compensation to content creators. Unfortunately, despite the support and involvement of all the big music publishers and some of the digital players (including Google) who would have needed access to the data, the project failed in 2014 because of lack of financial support from collecting societies that would have ended up benefiting from the initiative without having contributed to it.[28] PRS For Music (UK) and Swedish collecting society STIM, which formed a joint venture to work as technology provider, were the only societies involved in this project. This unsuccessful attempt shows that a proprietary approach to the development of a standard database might not be the right solution. An alternative might be obliging the music publishers and collecting societies to put their databases into the public domain in order to enable third parties to develop a database and then let the market decide what solution is the best

6.3. Bargaining power, size and origin of the largest online platforms

Today's largest online platforms are all owned by dominant and very resourceful tech companies headquartered in the United States. These four companies are often referred to as "GAFA" (Google, Amazon, Facebook and Apple) or "over-the-top" digital content suppliers. Each has a different business model and their online platforms are under increasing scrutiny all over the world. A major concern is that Amazon, Facebook and Google have and exert too much economic power to the detriment of consumers, suppliers or competitors. An influential legal scholar has recently argued that Google, Facebook and Amazon are a threat to democracy as they become bigger and bigger and — for this reason — they could be broken up under antitrust law (Wu, 2018). However, antitrust does not seem an effective remedy against the excess of corporate power of the tech giants in the US, even if they are regarded as monopolists. In a leading antitrust case, the US Supreme Court held that monopoly is an important element of a free-market system and is desirable because it induces risk taking that produces innovation and economic growth.[29] Moreover, when it comes to merger control, courts have consistently applied a "consumer welfare standard" under which the US government is entitled to block a merger — such as Facebook's acquisition of Instagram and WhatsApp — only if it can prove that the merger results in increasing prices for consumers. As pointed out in the literature (Wu, 2018), applying this standard in markets where large companies offer web-based services for free makes antitrust scrutiny impossible. A positive phenomenon that helps preserve competition is that the largest online platforms, despite of their different business models, compete with each other in a disruptive way, starting to offer services and products that are at the core of their competitors' business. For instance, Google started operating an ultimately unsuccessful social network, Google+ in response to Facebook; Apple and

Facebook are both investing heavily in technologies which improve online search, etc. This cross-market competition has the potential to reduce the power and influence these companies have on the market. In the European Union, instead, the fact that antitrust law can be used to sanction abuses of dominant position enables the European Commission, acting as the EU antitrust authority, to target anticompetitive practices with the aim to protect competitors and not only consumers. This approach is evidenced by the Euro 2.4 billion fine the Commission issued in 2015 against Google for having suppressed search rivals by denying equal access to its platform in the context of shopping offerings.

A different approach to antitrust and to potential restriction of anticompetitive conduct in the US and Europe shows why it would be difficult to develop a shared understanding of the need to regulate online platforms at international level. The European Commission has clearly shown its intent to establish a legal framework where the largest content-sharing platforms will have enhanced responsibilities and decisive roles in preventing, removing and keeping offline a broad variety of illegal content, including copyright-infringing materials.[30] In the US, instead, a broad implementation of the DMCA safe harbour provisions and persisting reliance on platform neutrality shows a radically different policy. Needless to say, this also has implications for how online platforms remunerate content creators and support cultural diversity. The US is not only the GAFA's country of origin but is also home to the most successful creative industries in the world, including the biggest (mono-language) movie industry. This explains why US policy makers have traditionally shown no interest in fostering cultural or linguistic diversity and embracing a regulatory model such as the EU's or Canada's in the field of media law. From a US perspective, the fact that some of the online platforms might encourage large-scale use of unauthorised works, with a subsequent decrease of value for copyright, is more than compensated for by the continuous growth of the technology sector and development of industry-led solutions which allow the creative sector to control and/or monetize its productions.

6.4. Risks and costs entailed by online copyright enforcement

Fair remuneration for content creators and stronger support for dissemination of diverse cultural expressions would require a more efficient system of copyright management and enforcement, made easily accessible to individual right-holders and small content producers. However, as the previous sections have argued, enforcement measures in the online environment have to be handled carefully in order to avoid impairing freedom of expression and communication, net neutrality and freedom to do business online. Site-blocking measures disabling access to copyright-infringing sites and content filters aimed at removing unauthorised works from content-sharing platforms entail the risk of "overblocking." Such measures can easily end up suppressing speech and free communications by also targeting works and other materials that are in the public domain or made available under licenses such as Creative Commons'. This is why online platforms should continue to monitor the implementation of content identification technologies (such as Google's Content ID or Audible Magic's solutions) and provide redress mechanisms to users whose works and materials have been erroneously removed.

Making enforcement measures comply with protection of fundamental rights and civil liberties will be the main challenge for policy makers in the close future. This is particularly important not only when enforcement is "delegated" to platforms but also when the power to take site-blocking measures is exercised by administrative authorities. For instance, this is the case in Italy since 2014, when the Italian Communications Authority (AGCOM) started handling site-blocking requests to speed up and simplify enforcement procedures and to supplement slow and ineffective civil proceedings. Obviously — given the principle of copyright territoriality — courts still grant different types of enforcement measures and evaluate conflicts between copyright and human rights in different ways and according to distinct exceptions and defences. Even in legal systems which are highly integrated, such as those of the EU member states, copyright holders have no pan-European copyright enforcement measures at their disposal, in spite of the

attempt to develop a "Digital Single Market." This means that, even in the EU, content creators still have to enforce their rights on a country-by-country basis, facing costs and difficulties that only major content producers can handle.

Last but not least, the strong reactions and lobbying of civil society organizations and the largest Internet companies against policy initiatives aimed at improving copyright enforcement show how difficult it will be, from a political point of view, to gather sufficient consensus on new and future-proof reforms, at both international and national level.

7. "Remuneration" and content "creators": towards a shared understanding and a common language at international level

What is the role of remuneration in ensuring sustainability of content creation in the long term and who is a "creator" in the online environment?

7.1. Notion of "creation" and different kinds of contributors to content value chains

This paper has adopted a broad notion of "creation," which includes the work of individuals or groups of individuals, performers, small and medium-size enterprises and major producers such as big record companies, Hollywood studios and TV broadcasters. Under this definition, even Netflix can be viewed as a content creator after having started producing and distributing across its global platform an increasingly broad variety of originally produced movies and TV shows. Even though remuneration is not necessarily the main goal of content creation, especially for individual authors and performers, all of these different categories of creators expect to be compensated when the result of their work is disseminated and exploited commercially. The creative sector, as a whole and as a network of distinct industries, would not be able to produce new works on an ongoing basis without adequate economic incentives and rewards. Even though the value chains of content creation vary significantly from sector to sector, each production system, from the simplest to the most sophisticated, is based on the idea that the final output of content creation will be remunerated in one way or another.

7.2. Function (and limits) of copyright law

Copyright is the area of law and policy where the need to ensure remuneration of creative labour has traditionally been addressed, with the progressive establishment — partially through international agreements — of distinct rights in favour of authors, performers, content producers and broadcasters. However, as illustrated in the previous sections, copyright protection is not, as such, sufficient to guarantee an adequate level of remuneration across value chains of content production. This statement holds true even more so at a time when allocation of copyright revenues depends on arbitrary and secret decisions taken by a handful of technology companies that impose prices and conditions of access to their platforms, for both content creators and their users/subscribers. Copyright systems are generally neutral when it comes to levels of remuneration of right-holders and do not guarantee a given income, especially to right-holders with a weak bargaining power. This is the case for average authors and performers or owners of works and repertoires with limited international appeal — in the music, film and TV sectors — who can easily go unnoticed in scalable markets where the "winner-takes-all" nature of success means that a very few works and authors have a disproportionately high share of the market. Moreover, freedom of contract for large content producers holding market power, such as the film and music majors or large book publishers, tend to better protect corporate interests than individual creators' expectation to gain fair remuneration. This means that cultural industries gather as many interests as possible — often for the whole life of the copyright — whereas authors and performers transfer their rights in exchange for a lump sum or royalties. Finally, as the sections on online piracy and enforcement have noted, the rights granted under copyright law — in spite of their broad scope at international and national level — have become difficult to enforce and monetize in web-based settings where fully decentralised forms of content distribution or content-sharing platforms make it difficult or impossible for copyright owners to negotiate and earn a fee from commercial and non-commercial users of their works.

7.3. Suggested elements of a multilateral dialogue

Given the aforementioned conditions, what are the responsibilities of governments, stakeholders and civil society? How can a shared understanding and a common language on remuneration and long-term sustainability of cultural creation be developed, from a multilateral and multi-stakeholder perspective?

- First, a fruitful discussion could start from considering whether a reconciliation of the corporate and cultural aspects of copyright is a realistic scenario. International copyright treaties, and in particular the incorporation of the author-centric Berne Convention into the domain of international trade and of WTO law (i.e., the TRIPS Agreement), show the existence of a shared understanding and a common language on trade-related aspects of copyright and the need to protect economic rights and interests of copyright owners, who are normally business entities and not original creators.
- Instead, there is no common language on how to protect the single elements of each content value chain and, in particular, intellectual labour and its potentially very broad diversity, which is ultimately conferred to creative output more by individuals than by enterprises. At present there is no cultural exception under the TRIPS agreement and WTO law that preserves sovereign states' autonomy and freedom, in the long term, to derogate from liberalization and free market rules in order to provide financial support and to reserve a preferential treatment to local productions, especially in the audiovisual sector. This is a sector where the EU and Canada, at least for now, fund — directly or indirectly — their domestic film and TV content industries by imposing quotas and other content requirements to licensed broadcasters in their own territories. These measures (that the EU has extended to online film and TV services such as Netflix) ultimately protect local works and repertoires from the US audiovisual industries' competition, in a genuinely protectionist fashion.
- It is still unclear how a predominantly trade-related approach to copyright enshrined in the most important and effective treaty on intellectual property — the TRIPS Agreement — can coexist with freedoms and rights that the 2005 UNESCO Convention on diversity of cultural expressions grants to its parties in pursuing their cultural policies (Macmillan, 2014). Unsurprisingly, the contracting parties of this Convention do not include the US. The Convention, which does not mention or take copyright into consideration, expressly provides contracting parties with the right to adopt measures aimed at protecting and promoting diversity of cultural expressions within their own territory. States are therefore free to give their own cultural industries opportunities, means and financial aid for creation, dissemination, distribution and enjoyment of domestic works and repertoires, also on the grounds of the language used for such activities.
- What will happen to content creators when much greater amounts of their copyright works will circulate digitally and revenues that authors, artists and producers still gain from physical markets and uses will shrink? In order to strengthen the bargaining power of individual creators, governments might consider obliging rights transferees and their licensees to disclose data that would give individuals the possibility of verifying levels of effective content remuneration in various creative sectors. A similar duty of data disclosure could be placed on authors' collecting societies and other rights licensors or agents holding rights ownership information that third parties need in order to build up standard repertoire databases on a sector-by-sector basis. As this paper advocates, greater transparency is and will be a key factor in balancing contractual relations between authors, producers at platforms at a time when globalization and web-based content markets are exacerbating inequalities among works, repertoires and authors.
- To develop a shared understanding and a common language on remuneration of creators, governments and stakeholders might consider going back to the original purpose of the Berne Convention on literary and artistic property: protecting individual authors and their relationship with the fruit of their intellectual work. A multilateral discussion might start from considering that the Berne Convention has a genuinely author-centric approach and protects also non-economic ("moral") rights of authors to paternity and integrity of their works. As we have seen in the Creative Commons' examples, such non-economic rights matter also for non-professional or non-profit-seeking creators because of their function to protect personal identity and reputation in increasingly

complex digital settings. At a time when remuneration for average authors is endangered, it would be promising for a multilateral body or working group to seek a stronger and more intense protection of individual creators' rights that might reflect also the rationale and values of the UNESCO Convention. To this end, this multilateral discussion might focus on successful models of copyright contract law and harmonisation of criteria and conditions of exercise of authors' rights to contractual adjustments and/or to revocation or termination of their rights transfers.

- In reconsidering the importance and function of the Berne Convention and its centrality in the architecture of the TRIPS Agreement, it would be useful for the overall multilateral discussion to clarify what room for manoeuvre the Convention leaves to contracting parties in testing or implementing reforms, such the introduction of certain formalities. A manifestation of interest coming from authors in having their works effectively protected in the online environment might help to improve searches and enhance clarity on rights ownership. Moreover, such input from authors could make it easier to protect professionally created works by keeping them distinct from the endless amounts of non-professional and user-generated works made available on content-sharing platforms every day. However, the Berne Convention restricts its parties from making the coming-into-being and the enforcement of the author's right conditional on formalities such as registration of the work (Ginsburg, 2010). What the Convention does not restrict, however, and seems a promising policy option is the introduction of a requirement under national laws which could make copyright transfers valid and enforceable as long as these contracts were recorded in a public register or database. As observed in the literature (Van Gompel 2014), if governments followed this route, they would greatly encourage and simplify creation and free accessibility of rights management information. Interestingly, for the purpose of this discussion, accessibility of public records of rights transfers would show who the authors are, who effectively exercise their copyright in a professional way and what are the economic conditions under which a right has been assigned and for how long.
- Finally, a dialogue with the largest online platforms — in particular Google and Facebook, which control the content-sharing services with the highest number of users — would help a multilateral group of policy makers identify best practices on content identification and takedowns (or "notice-and-notice" regimes), redress mechanisms to the benefit of Internet users and licensing and monetization criteria. Given that these huge content gatekeepers operate their services on a territorially unrestricted basis, this soft law, as well as industry-led solutions developed under the supervision of national governments, could easily be tested and spread out, potentially, beyond national borders and reach a global scale. This dialogue could also help develop a model law for creation of new safe harbours targeted specifically at content-sharing platforms.

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[3] *US Digital Millennium Copyright Act (DMCA) signed into law by President Clinton on 28 October 1998, which amended the U.S. Copyright Act (see US Code, Title 17).*

[4] Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market, OJ L 178, 17.07.2000, 1.

[5] *Copyright Modernization Act (S.C. 2012, c. 20).*

[6] *Society of Composers, Authors and Music Publishers of Canada (SOCAN) v Canadian Association of Internet Providers (CAIP),* [2004] 2 S.C.R. 427, 2004 SCC 45.

[7] See C-527/15 *Stichting Brein* v *Jack Frederik Wullems* (2017), where the defendant was distributing a device ('Filmspeler'), to be plugged into TVs, with add-ons containing links to websites that enabled access to free and unauthorised streams of copyright-protected movies; and C-610/15 *Stichting Brein* v *Ziggo BV and XS4All Internet BV* (2017), where the infringing activities consisted of creating, maintaining and supplying a system based on peer-to-peer software, operation of a website dedicated to the downloading of files (*The Pirate Bay*) and acts of indexing and categorizing dispersed segments of data that, after having been re-assembled, gave access to copyright works. In both cases the CJEU found that the defendants had infringed the right of communication to the public.

[8] Directive (EU) 2018/1808 of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities, OJ L 303, 28.11.2018, 69.

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[10] WIPO (World Intellectual Property Organization) Copyright Treaty and WIPO Performances and Phonograms Treaty, adopted in Geneva in December 20, 1996, available at: http://wipo.int/treaties.

[11] Beijing Treaty on Audiovisual Performances (not yet in force), adopted on 24 June 2012, available at http//:wipo.int/treaties (Canada is not a signatory of this treaty).

[12] Berne Convention for the Protection of Literary and Artistic Works of September 9, 1886, available at: http://wipo.int/treaties.

[13] See the TRIPS Agreement, Article 9 *(Relation to the Berne Convention)*.

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[18] The parties of the agreement were Australia, Canada, the European Union, Japan, Mexico, Morocco, New Zealand, Singapore, South Korea and the United States. The treaty was negotiated and concluded outside the institutional and legal framework established by the World Trade Organisation (WTO). Considering that all parties are WTO members and, as a result, are bound by the TRIPS Agreement (whose Part III includes provisions on enforcement of intellectual property rights), ACTA would have been a 'TRIPS-plus' instrument (an agreement providing more stringent rules and obligations on enforcement among the contracting parties).

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[20] See H.R. 3261, the "Stop Online Piracy Act".

[21] See C-324/09, *L'Oreal and Others v eBay International AG and Others* (2011), par. 116-124.

[22] *Viacom v. YouTube,* 676 F.3d 19, 39 (2d Cir. 2012).

[23] *Capitol Records v. Vimeo,* 826 F.3d 78 (2d Cir. 2016).

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