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Extraterritorial application of copyright regulations in Ecuador due to cloud computing services: terms of service of Twitter and YouTube

Aplicación extraterritorial de la normativa de derechos de autor en Ecuador por servicios de computación en la nube: Términos de servicio de Twitter y YouTube

Aplicação extraterritorial de regulamentos de direitos autorais no Equador por serviços de computação em nuvem: Termos de Serviço do Twitter e do YouTube

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Abstract: The internet is transforming society on a global level, especially due to the increasing popularity of social media services such as Twitter, Facebook and YouTube. Because cloud computing characteristics have tangible effects on enterprises and economics growth globally, it is necessary to create an understanding of cloud computing's cross-border nature and the effects of and such paradigm for social media artists located in Ecuador. Therefore, this paper seeks the following objectives: firstly, to establish how Ecuadorian artists can be bound by extraterritorial copyright laws by posting their works in YouTube or Twitter. Secondly, to define the benefits and drawbacks of the relation of Ecuadorian artists with YouTube and Twitter. Lastly, this article shows how U.S. copyright laws bind Ecuadorian users of YouTube and Twitter transnationally.

Keywords: copyright; artistic work; cloud computing; Twitter; YouTube.

Resumen: Internet está transformando la sociedad a nivel mundial, especialmente debido a la creciente popularidad de las redes sociales tales como Twitter, Facebook y YouTube. Debido a que las características del *cloud computing* (computación en la nube) tienen efectos tangibles en las empresas y el crecimiento económico a nivel mundial, es necesario crear una comprensión de la naturaleza transfronteriza de este y los efectos de dicho paradigma para los artistas de redes sociales ubicados en Ecuador. Este articulo busca en primer lugar establecer cómo los artistas ecuatorianos pueden estar sujetos a las leyes de derechos de autor extraterritoriales al publicar sus obras en YouTube o Twitter; definir cuáles pueden ser los beneficios y los inconvenientes de la relación extraterritorial entre artistas ecuatorianos con YouTube y Twitter; y explicar cómo las leyes de derechos de autor de los Estados Unidos obligan a usuarios ecuatorianos de YouTube y Twitter a nivel trasnacional.

Palabras clave: derechos de autor; trabajo artístico; computación en la nube; Twitter; YouTube.

Resumo: A Internet está transformando a sociedade em todo o mundo, especialmente devido à crescente popularidade das redes sociais como Twitter, Facebook e YouTube. Por conta das características da computação em nuvem terem efeitos tangíveis nos negócios e no crescimento econômico globalmente, é necessário criar uma compreensão da natureza transfronteiriça da computação em nuvem e os efeitos de tal paradigma para os artistas das redes sociais localizados no Equador. Este artigo busca primeiro estabelecer como os artistas equatorianos podem estar sujeitos às leis de direitos autorais extraterritoriais ao postar seus trabalhos no YouTube ou no Twitter; definir quais podem ser as vantagens e desvantagens da relação extraterritorial dos artistas equatorianos com o YouTube e o Twitter; e explicar como as leis de direitos autorais dos EUA vinculam os usuários equatorianos do YouTube e do Twitter transnacionalmente.

Palavras-chave: direitos autorais; trabalho artístico; computação em nuvem; Twitter; YouTube.

Introduction

The popularity of social media is steeply rising and as a result so are international artist who can get fame out of it. Websites like YouTube, Instagram, Twitter, or Spotify are great opportunities for artist to promote their artwork worldwide. Yet, uncertainty of legal issues concerning copyright protection might deter artist within and without United States from promoting their stunning works. It is then necessary to simply elucidate certain legal issues pertaining the cloud computing services involved behind these social media networks.

The internet is transforming society on a global level, especially due to the increasing popularity of social media services, such as Twitter, Facebook and YouTube. Because cloud computing characteristics have tangible effects on enterprises and economics growth globally, we want to support artist from different countries by encouraging them to use of social media and make their works famous in an international level. Indeed, it is in the interest of the author to create a reader's understanding of cloud computing's cross-border nature and the effects of and such paradigm for social media artists located in Ecuador. How Ecuadorian artists can be bound by extraterritorial copyright laws by posting their works in YouTube or Twitter? What can be the benefits and drawbacks of this?

This article explains such questions in three sections. The first describes the characteristics of cloud computing and its linkage with social media networks. The second, focus on how copyrights are protected under the terms of service of two popular social media platforms, Twitter and YouTube. Finally, the third, shows how copyright laws of the U.S. bind Ecuadorian users of YouTube and Twitter.

To ease the discussion of this topic, in this article word *artist* will allude as well to authors and copyright holders.

Cloud computing as a global phenomenon

The famous *cloud* emerges as a metaphor of the network diagrams used to illustrate the internet (Tellez, 2013). Moreover, this term refers specifically to "the way of seeing a network of computers as a provider of software services and data" (Cruz, 2012, p. 51). In fact, understanding the reasoning behind this term's existence is substantial, because even though we imagine our information saved in the idea of a cloud, it will always need a physical storage support (hardware).

In reality there is no such a concept for broadly defining *cloud computing*; however, one of the most extensive definitions and globally accepted is given by the National Institute of Standards and Technology (NIST):

> Model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction (Mell & Grance, 2011).

Generally, there is a consensus in defining cloud computing as a model which enables shared use of resources at lower prices (Aalbers, 2013). In the same line, it can be defined as and innovative model composed of hardware, software and interfaces which gives access to computing services on a big scale and under on demand, and provides providing social and economic benefits.

Aalbers (2013) makes an interesting reflection defining cloud computing as the result of a significant amount of research focused on the most efficient way to manage informatics resources. For example, this author points out the resemblance between the relevance of line production for the car industry's growth in the 20th Century, and the cloud computing's foreseen influence for informatics industries nowadays. This analogy not only predicts cloud computing's future, but also gives a glimpse of how technologies are intertwined with word's economic near future. This is especially important to international artists, who by the usage of cloud computing services, through social media platforms, can promote their artworks worldwide. Is important to clarify that while cloud computing services are not synonym to social media platforms, every social media

platform nowadays uses cloud computing services to store their data and have a global reach.

Characteristics of cloud computing

Cloud computing characteristics are regarded as the hallmark that distinguishes one networking computing system from other (Mell & Grance, 2011). There is no consensus regarding the classification of its characteristics. Even so, experts mostly agree with the following proposed by NIST (Mell & Grance, 2011; Millard, 2013).

On-demand self-service

Even though many experts use different denominations referring to this concept (auto-service, pay for use, etc.), the precept is the same. Henceforth, users can automatically provide themselves with computing services (no physical interaction with the provider) according to their needs. Thus, as needs grow, the amount billed will be increased per each user demand (Millard, 2013). Hence, artist can get cloud computing services according to their needs at any time, only by accessing to their social media account (either YouTube or Twitter).

Broad network access

Ubiquitous refers to the user's accessibility to data at anytime and anywhere. Clearly, to enjoy the broad scope of cloud computing services an internet connection is a must-have (Instituto Nacional de Tecnologías de la Comunicación [Inteco], 2011).

The mechanisms of access to the network are heterogeneous, meaning that no specific applications or programs are needed to get computing services (Tellez, 2013), thus any internet-capable device like a smartphone or a computer is enough. All social media platforms use cloud computing services to store their data, therefore, any artist' electronic device with internet access can be used to log in a social media account (either YouTube or Twitter) and enjoy cloud computing services unbeknownst, because social media platforms operate through cloud services.

Resource pooling

This characteristic is the most innovative among the others, as the infrastructure used for processing and storing data will be shared among all the users of the cloud (Barnitzke, 2011, p. 18).

The usage of virtualization technologies is the key element of this model availing resource pooling (Martin & Cendrowsky, 2014, p. 4). Depending on the consumer's demand, virtualization allows physical resources to be assigned and re-assigned dynamically (Joyanes, 2012). Cloud computing providers use virtualization technologies to offer their services and make them affordable. However, due to this characteristic it is also impossible for a provider to locate their user's information in a specific data base (Inteco, 2011, p. 15).

Some legal issues related to cloud computing emerge particularly from this. The dynamism of data-flow makes it too complicated to determine the exact location of information. Due to the difficulties in determining who has access to the data, cloud computing services lead to uncertainty in the compliance with privacy and security standards.

This characteristic for an artist means that every artwork posted on social media platforms (photos, songs, poems, etc.) will be stored in different cloud computing servers located all around the world with another people documents.

Rapid elasticity

Cloud computing services are provided to its users swiftly (most of the times automatically) and elastically, due to its adaptability and ease of implementation. Take as an example the unpredictability of customer needs' coming from the demand for more storage or more music, videos in the cloud; the customer only makes an online payment, and additional storage will be provided automatically. This distinguishing characteristic makes cloud computing services look unlimited (Joyanes, 2012, p. 95). In a nutshell, any artist can use cloud computing services in a quick and easy way.

Measured service

Cloud computing providers constantly control the usage of its resources to optimize them automatically according to their clients' needs (Mell & Grance, 2011). Likewise, various scholars consider this characteristic as a way of giving transparency to the services. Due to this control, the use of computing services can be followed on a step by step basis, which notifies s the user continually (Hurwitz et al., 2012; Melaños, 2013).

In the same line, due to its continuity, some refer to cloud services as "computing as a utility". This can be compared with other utilities such as electricity or water, so that in the future people will pay on a monthly basis for cloud computing services (National

Board of Trade, 2012). Nowadays, when an artist uploads artistic work in social media networks (either YouTube or Twitter) makes use of cloud computing services. Is important to clarify, while cloud computing services are not synonym to social media platforms, every social media platform uses cloud computing services to store their data and have a global reach. When a social media platform stores data in the cloud, such information is being taken care by cloud computing providers owners of data farms, whom, day by day, try to improve the services to give better facilities.

Cloud computing modes of service

Infrastructure-as-a-Service (IaaS)

This service offers an infrastructure which allows users to have their own computing services accessible through the cloud (Salas-Zárate & Colombo-Mendoza, 2012). By contracting IaaS services the consumer does not have to buy or maintain servers and other hardware equipment. This is a basic level of service such as Amazon Web Services, GoGrid, or Vmware. Generally, artists promoting their work though social media are provided with cloud storage automatically by social media platforms, therefore, they do not contract these kinds of cloud computing services directly. The social media platforms, such as YouTube or Twitter, probably have special IaaS contracts to storage all the data handled in their platforms.

Platform-as-a-Service (PaaS)

This is considered an intermediate level of service as it essentially allows the management and deployment of applications in a cloud-based platform whereas the infrastructure behind it is managed by the provider (Tellez, 2013, p. 7). Hence, the user can control the applications in the platform, but does not have access to manage the infrastructure of computing services immersed behind the platform. Some examples of this service are Facebook, Salesforce and Google App Engine. Is necessary to establish that artists trying to socialize their artworks by social media platforms, do not contract PaaS services.

Software-as-a Service (SaaS)

This service allows the client access to different online software and therefore it eliminates the need for investing in additional hardware. It also eliminates the need to

manage a platform or infrastructure, so the user can use the software directly. This model of service is used by a lot of social networks, such as Picasa, Spotify, YouTube, Twitter, LinkedIn, Snap Chat, and so forth.

The following sections will present specific cases of artists who end up being users of cloud computing services by posting their artworks on networks, such as YouTube and Twitter. These networks can be classified under the SaaS mode of cloud computing service and therefore they fall under all the particularities of the internet paradigm socially known as *the cloud*.

Cloud computing operative system

To understand the architecture of cloud computing, we must be aware that there is not a rule that generalizes one definition applicable for all the immense dynamic techniques within the mentioned system. Therefore, understanding the performance of cloud computing will only be possible if it is related to the technologies which give life to this model.

Similarly, it will be useless if we take stock describing all the technologies and systems that make up the immense cloud computing services. For the purposes of this paper, it is enough to set the parameters implied by Jonatan Strickland in his article "How Cloud Computing Works" which directly divides this system in two sections: front end and back end (Strickland, 2008).

The front end refers to the final user, the person who will access the services through different devices which allow internet navigation. That is the reason why the internet is a must-have in order to use cloud computing services. Conversely, the back end is built by all the immerse architecture behind cloud computing.

So far, this architecture is a combination of networks, servers, and data bases, which rely on systems of virtualization to be controlled in one specific PC. Subsequently, the orders which are sent by the front end are processed and automatically attended without the need of human interaction whatsoever. This process is possible due to the node of control of the back end visualized systems.

It is significant to emphasize cloud computing's immeasurable dimension around the world. In fact, certain companies which provide cloud computing services, such as Yahoo or Google, own numerous back end infrastructures, popularly acknowledged as *computer farms*. These computer farms are located indistinctively around the world, but can be

centrally managed due to virtualization. Nonetheless, other companies like Snap Chat could only have agreements for IaaS with other providers.

Cloud computing arose from the idea of replacing the physical with the virtual. Regarding its operative system, it is important to be aware that all software needs hardware to exist, even when it is imperceptible by cloud users. So, the back end definition raised by Strickland represents all the hardware architecture that cloud computing providers handle to offer their services in the market (Novoa, 2015). Also, some SaaS providers, in some cases social media platforms, may not owe an infrastructure for the back end, therefore their services would depend on contracting another's IaaS services. In such cases a chain of cloud computing agreements would be behind the terms and conditions signed by an artist who uploads copyrightable content to a social media network. To clarify, social media platforms will already have IaaS agreements before offering SaaS services to artists by using their platforms such as YouTube or Twitter.

Social media and the cross-border nature of cloud computing

As noted, the characteristics and peculiarities of cloud computing services are a consequence of technological advances, as high-speed broadband and programs with open-source code (Mell & Grance, 2011, p. 10). Yet, cloud computing is not new technology itself, but in a way technology progress is the reason for its existence, also the internet has become a powerful network since computing services were innovated (Novoa, 2015, p. 10). Indeed, one of the most remarkable technological developments owing its existence to the cloud are social media networks (Facebook, Instagram, WhatsApp, Twitter, Spotify, YouTube, etc.).

Cloud computing services related to social media are majorly known in a Business to Consumer (B2C) context, meaning an e-commerce business model in which the service is offered directly to the end-user (Acuña Navas & Cordero Esquivel, 2014, p. 102). This is due to the popularity of software offered on-line like Twitter, YouTube, or even Snap Chat. Besides, cloud computing providers also give facilities to artists worldwide, who can post their works on internet without having to pay expensive costs of Infrastructure and Technology (IT) resources and its administration (Acuña Navas & Cordero Esquivel, 2014, p. 102).

The cross-border nature of cloud computing services can be highly beneficial for international artists who want to have fans all around the world. In the new technology era, whenever an internet connection is involved, cloud services will be available to store

data in immense hardware systems located all around the globe, thus easing internet usage (Mell & Grance, 2011). Normally data stored in the cloud may be more secure, since it is stored separately from the device and is administrated by a third party specializing in the field (Mell & Grance, 2011). Either companies or end-users with cloud computing services don't have to be aware of its information anymore if the hardware (PC or USB) is lost, stolen, or faulty, because the data remain secured by a cloud provider in a data center located somewhere in the world (Novoa, 2015, p. 11). For purposes of this article, the analysis focuses exclusively in the cloud computing services offered to artists as end-users of social media networks.

The characteristic of the cross-border nature of cloud computing services is the pillar of social media networks as it allows the massive storage and broad access to data generated minute by minute globally. Social media platforms use different levels services of cloud computing services (SaaS, PaaS, IaaS), and sometimes they as well provide certain cloud services to their end-users (normally SaaS). Every time an artist posts photos, tracks or any kind of information on social media networks (Spotify, Twitter or Facebook) his or her information inevitably will be in the cloud. In other words, the ease of access to others' posts in social media is a particularity developed, due to the new model of cloud computing services, social media platforms benefit from the cloud. Without cloud computing advances no social media as presently known would be possible, and the ease to become popular worldwide would not as well.

Copyright protection under terms of service for social media networks

Terms of service: click wrap contracts

The popular terms of service which are seldom read by users (in this case artists) of social networks are in legal terms a contract. With this contract, the provider (social media platform) not only gives access to their platform, but as well provides to each user with storage to upload and store their content. This storage provided to end users operates as cloud computing, and as explained before, can be considered a SaaS. Therefore, the social media platform performs as a SaaS cloud computing provider setting the conditions for the usage of its software and the user agrees to it. Once the terms are agreed by the artist, the services can be provided. This kind of licensing contract, mostly known as End User Licensing Agreement (EULA), sets off a B2C relationship between the parties, by which providers are licensors, and the consumers or artists are the licensees (Reul Lab, 2016).

Besides the terms of service of the majority of social media networks are commonly known as *click wrap*, the enforceability of these agreements has been upheld by different U.S. courts as detailed below.

i.Lan Sys., Inc. vs. Netscout Serv. Level Corp. In this case, Plaintiff, a computer network support provider, filed action against a software distributor alleging breach of contract and violation of Massachusetts law. The court enforced the click wrap contracts holding that: first, that "i.LAN explicitly accepted the click wrap license agreement when it clicked on the box stating 'I agree'" (*i.Lan Sys., Inc. vs. Netscout Serv. Level Corp*, 2002). Secondly, there was no "unreasonable surprise or hardship to i.LAN from enforcing the limitation of liability" (*i.Lan Sys., Inc. vs. Netscout Serv. Level Corp*, 2002).

Hancock vs. Am. Tel. & Tel. Co. (*i.Lan Sys., Inc. vs. Netscout Serv. Level Corp*, 2002). This is a class action suit brought against providers of bundled television, internet, and voice over internet protocol services. Regarding enforcement of click and wrap agreements, defendants alleged that forum selection and arbitration clauses did not bind them as the click wrap agreements "did not give customers a meaningful opportunity to assent to the U-verse terms of service" (*i.Lan Sys., Inc. vs. Netscout Serv. Level Corp*, 2002). The court held that the defendant's click wrap agreements were the type routinely upheld under Florida and Oklahoma law as the customer can review the terms in a scrolling text box and must click an "I Agree" button to manifest assent to the terms and to use the service.

Berkson vs. Gogo LLC. Class action against the in-flight wireless internet service provider alleging common law breach of the implied covenant of good faith and fair dealing, common law unjust enrichment, and violation of various consumer protection statutes. This case is relevant as it goes through all the doctrines and case law involved in e-commerce contracts, electronic acceptance and enforcement of wrap contracts. Court provides general guidance and principles to enforce terms and services or electronic adhesion (*Berkson vs. Gogo LLC*, 2015).

The cases stated above illustrate only an example of the vast case law of different states which upholds the trend towards enforcing click warp contracts. Even though, the Supreme Court has not pronounced in this respect, various states follow this ruling and click wrap terms and conditions are generally considered the strongest way to obtain legal agreement online (Hamilton, 2022).

Besides, it is important to bear in mind that other types of wrap contracts exist, such as browse wrap or shrink wrap agreements, and the holding of the courts vary according

to each case. As already mentioned, in *Berkson vs. Gogo LLC* the Eastern District of New York provided a recent history of court regarding enforceability of EULA's. In the same token, the American Bar Association listed some best practices to ensure enforceability of these agreements (Brehn, A., & Lee, C. 2015 pp. 6-7).

All in all, for the purposes of this paper is important simply to address the relevance of EULA's for allowing the usage of cloud computing services. In this specific case the Terms and Conditions agreed upon the usage of YouTube and Twitter are click wrap as artists click a box saying "I Agree" as held in *i.Lan Sys., Inc. vs. Netscout Serv. Level Corp.* and *Hancock vs. Am. Tel. & Tel. Co.*

Overview of copyright protection in social media

Ecuadorian framework

The regulation of copyrights in Ecuador has two core spheres: on the one hand the national regulations are mainly defined in different regulations respecting intellectual property, control of market power, telecommunications, e-commerce and consumer rights. As well, Ecuador is a member of the Andean Community which has certain regulations binding directly to its members which are deemed as national laws[1] (Andean Community, 1993). On the other hand, in the international system, Ecuador is a member of the World Intellectual Property Organization (WIPO) plus World Trade Organization (WTO) and United Nations (WIPO, 2017).

For purposes of the present study this focus is on exposing national regulations for copyright in Ecuador to have a clear understanding of how artist's copyrightable work is protected in this country. Nonetheless, the content of these laws has to be compatible with international agreements otherwise contrary dispositions will be deemed illegal[2] (Ecuador, 2008, art. 425).

Constitution of the Republic of Ecuador

Since 2008 Ecuador's constitutional structure has changed dramatically. Therefore, a wide range of laws have been reformed to harmonize the legal system with the new Constitution. The Ecuadorian constitution introduces a top-notch bill of rights which takes into account human dignity in different levels; one of them is the socio-economic

[1] The direct regulation binding Ecuador as to copyrights is the "Decisión 351 Régimen Común sobre Derecho de Autor y Derechos Conexos" enacted by the Andean Community in 1993.
[2] Article 425 of Ecuadorian Constitution states the preemption of international agreements to local laws. However, the Constitution dispositions prevail over the content of such agreements according to art. 417.

development of its citizens which includes artists (Ecuador, 2008, preamble). Intellectual property rights are mentioned in this basic law in different articles linked with property rights of citizens and economic policy, among which highlight the following:

> Intellectual property is recognized pursuant to the conditions provided for by law. Any form of appropriation of collective knowledge, in the fields of science, technology and ancestral wisdom, is forbidden. The appropriation of genetic resources contained in biological diversity and agricultural biodiversity is likewise forbidden (Ecuador, 2008, art. 322).

By the same token articles 283 and 284 set out the principles for the economic system of Ecuador, particularly article 284 enumerates the State's economic objectives:

> The economic policy shall have the following objectives: […] 2. To encourage national production, systemic productivity and competitiveness, the accumulation of scientific and technological knowledge, strategic insertion into the world economy, and complementary productive activities within regional integration. […] 8. To foster the fair and complementary exchange of goods and services on transparent, efficient markets (Ecuador, 2008, art. 2).

Thus, the economic system of Ecuador must seek the accumulation of knowledge, and this includes protection of copyrights and promotion of artistic works. Nonetheless, intellectual property protection must be protected pursuant of the conditions provided by law. Hence, the recognition of such rights is restricted to other laws that define the economic policies of the Ecuadorian state.

Código Orgánico de la Economía Social de los Conocimientos, Creatividad e Innovación

The national regulation for Intellectual Property Rights in Ecuador is called Código Orgánico de la Economía Social de los Conocimientos, Creatividad e Innovación (Organic Code of Social Economy of Knowledge and Innovation, Coesci), such legislation was passed in 2016. This is the main normative body for regulating copyrights in Ecuador and its content is the outcome of a number of international treaties ratified by Ecuador. This normative body covers intellectual property rights relating to (1) copyright, (2) industrial property, which includes any right related to inventions plus trademarks, and (3) plant varieties (Coesci, 2016, art. 85). This analysis focuses precisely on Book

III, Tittle I, Chapter III, regarding copyrights regulation. In brief, the articles which regulate copyrights relevant for this paper are the following:

> Copyright shall derive from and be protected on account of the sole fact that the work is created. The protection is given regardless of its gender, merit, purpose or mode of expression.
> Exclusively the way in which the author's ideas are described, explained, illustrated or incorporated into the works are protected. However, if an idea only has a unique form of expression, that form will not remain subject to protection.
> The ideas contained in the literary and artistic works, ideological content or technician of scientific works, nor their use industrial or commercial, are not object of protection. They are also not subject to protection the procedures, methods of operation or concepts mathematicians themselves (Coesci, 2016, art. 102).

Article 102 presents a general definition of copyright protection in the Ecuadorean framework. Moreover, copyright protection shall apply to all artistic works, article 104 enumerates in detail the types of works which fall into this classification. The enjoyment of these rights is not subject to a registration requirement or the fulfillment of any other formality, it arises with the artistic creation (Coesci, 2016, arts. 47, 101).

According to Ecuadorian legislation, an author (artists fall into such denomination) can enjoy economic and moral rights (Coesci, 2016, arts. 47, 118-120). Economic rights are transferrable (Coesci, 2016, arts. 162), whereas moral rights are deemed "unrenounceable, inalienable, unattachable and imprescriptible" (Coesci, 2016, arts. 118). Likewise, economic rights last through the author's lifetime and for 70 years after (Coesci, 2016, arts. 47, 201). Under Ecuadorian regulations only natural persons can be authors, hence companies can only be copyright holders (Coesci, 2016, arts. 47, 108). This means that even if the artist creates artworks for a company, he or she keeps the moral rights over the creation.

Furthermore, certain reproductions of the artistic work can be lawful even without authorization or remuneration to the author. Only when fair use is respected and the reproduction does not cause injuries to the right holder, exceptions to copyrights listed in article 83 are permissible.

Lastly, Ecuador has no regulations or cases whatsoever which directly address concerns pertaining copyrights protection when artistic works are posted on social media.

Therefore, to fill this gap, scholars' opinions and international cooperation turn into a key point to understand issues as the one described in this paper.

United States framework

Copyright protection in the United States is the outcome of a wide range of challenges and especially technological advances for more than two hundred years (The Department of Commerce Internet Policy Task Force, 2013).

The evolution of copyright law in the United States has four principal milestones. Initially the 1909 Act, which due to technology advances (TV or radio) lead to enactment of the U.S. Copyright Act in 1976. This law continues to be the national framework for copyright, and since then Federal Copyright law practically preempted State common law under §301. In 1989 the Berne Convention Accession expanded copyright protection. Lastly, the international economic system and following digital technology advances led to the enactment of diverse regulations, among which stand the Digital Millennium Copyright Act in 1998 (Menell et al., 2016).

The regulation of copyright is confined to Statues codified under title 17 of the United States Code, whereas Federal Regulations are located in title 37 of the Code of Federal Regulations. The common-law regime plays a main role in the development of copyrights regulation. Additionally, it is worth highlighting that the United States is a member of the WIPO, the WTO, and the UN.

Copyrightable subject matter is protected under §102 and encompasses "original works of authorship fixed in any tangible medium of expression, known now or later developed, from which they can be perceived, reproduced, or otherwise communicated" (17 U.S.C.A. § 102 (West)), such works are listed in eight categories which set out a general area of copyrightable subject matter (Copyright Law Revision, 1976).

The Supreme Court in *Baker vs. Selden* held that copyright does not give the author of a book the exclusive property of an entire system of bookkeeping by means of being explained in his manuscript only right to exclude reproduction of the book is acquired under copyright (*Baker vs. Selden*, 1879). If the author wants to claim the rights over the idea of bookkeeping the Patent Office has to grant it. This distinction made by the court is essential to define the scope of protection by copyright expression and an unprotectable idea.

An author of an original work acquires copyright upon the work's creation (17 U.S.C.A. § 201 (West)) and these rights have limited duration so, after a determined

period of time, the expression of art protected passes to the public domain, therefore can copied by anyone (Menell et al., 2016, p. 92). The duration of copyright protection is defined under §302 which establishes "a term consisting of the life of the author and 70 years after the author's death" (17 U.S.C.A. § 302 (West)), these rules would vary in cases of collective works or joint authors. In the same way, it is crucial to distinguish between ownership of a material object and copyright interest, for instance, when a painter sells his artwork his copyright stays intact albeit that the ownership of the painting shifts (17 U.S.C.A. § 202 (West)).

The copyright law grants the owners' the right to exploit their works while also protecting non-economic interests (Menell et al., 2016, p. 132). These rights can be infringed directly and indirectly. For direct infringement the following copyrights can be distinguished: traditional copyrights which give economic control over the artwork are listed under §106 (Menell et al., 2016, p. 106); and moral rights that protect the personality of the author and was transported to U.S. system with the Berne Convention in 1988 (Menell et al., 2016, pp. 224-225).

In regards to indirect infringement, it arises when someone contributes, induces or profits from the infringement acts of others (Menell et al., 2016, p. 236), the digital media age has led to an increasing amount of infringement cases (a leading case in this regard is *MGM Studios Inc. vs. Grokster, Ltd*.) A good example of indirect infringement can be adding links to other's content in order to promote the infringement of such work.

Probably one of the most fascinating parts of United States copyright law is defense of the fair use doctrine and safe harbors enacted by the Digital Millennium Copy Right Act (DMCA). In the following paragraphs we briefly refer to the fair use doctrine, whereas the DMCA take down notice is presented in a more detailed way, as it accounts for the main topic of this paper.

Fair use doctrine accounts for two main objectives: balancing social interest by promoting cumulative creativity and freedom of expression (Menell et al., 2016, p. 267). This doctrine is codified under § 107 of U.S.C.A. A leading case under this doctrine is *Sony Corp. of America vs. Universal City Studios, Inc.,* in which the Supreme Court held that the significant likelihood that substantial number of copyright holders who licensed their works for broadcast would not object to having them time shifted by private viewers, and this would cause nonminimal harm to the potential market (*Sony Corp. of Am. vs. Universal City Studios, Inc.*, 1984).

In 1990, *Religious Tech. Ctr. vs. Netcom On-Line Commc'n Servs.* introduced some concerns of Online Service Provider's (OSP) liability by means of hosting other's websites that are infringing on copyright laws. These controversies lead to international negotiations and consecutive enactment of the DMCA in 1998 by implementing the World Intellectual Property Organization Copyright Treaty (Hayes, 1998, p. 81). Title II of the DMCA established four safe harbors which allow service providers to limit their liability in copyright claims to the extent established by §512 of U.S.C.A.

Copyright in the United States provides for injunctive relief under §502(a) to restrain copyright infringement. Likewise, courts can order seizures or impoundment under §509(a) and §503(3) in criminal and civil cases respectively (Menell et al., 2016, p. 346). Courts can also award monetary remedies through §504 and attorney fees under §505, but the particular rules for awarding such remedies are encompassed in case law. Damages tend to be incredibly high, deterring others from infringing on copyright laws, nonetheless money damages can only be awarded to copyright holders who registered their work in the Copyright Office. Such restriction can be tricky for exterritorial application of United States law when an artist posts his or her artwork on social media.

A social media platform, that as well operates through cloud computing their services, is referred as an OSP for purposes of notice to take down. OSP's, upon receiving a notification from a content owner that his site misuses copyrighted material, are required to remove or disable access to such material (Menell et al., 2016, p. 346). Then they would have to provide the content owner and Copyright Office the contact information for an agent, who will be in charge of such case. If OSP does not promptly comply with this obligation, vicarious liability for copyrights infringement will be extended to them (17 U.S.C.A. § 512(c)(2)).

In the same way, a takedown notice has to be filed according to certain requirements specified in §512, artists will have to fill this notice in each social media website, where the instructions tend to be user friendly. Once the OSP receives the notice, it has to act promptly and remove or block the infringed material in order to get the safe harbor (See 17 U.S.C.A. § 512(f)). Moreover, the copyright holder could compel the OSP with a subpoena to disclose the alleged infringer's information (See 17 U.S.C.A. § 512(h)). However, if the OPS remove or disables the information to the detriment of others, these people can sue an OSP so its only defense will be good faith (See 17 U.S.C.A. § 512(g)).

A broad range of circumstances could reduce the chances of an OSP by way of benefiting from a safe harbor. In *Scan, Inc. vs. RemarQ Communities, Inc.*, the court

found for the OSP (defendant) by way of benefiting from safe harbor, even when the take down notice was incomplete. The court held that the user provided enough information to substantially satisfy the notice requirements of the DMCA as such are not meant to burden copyright holders to identify every single infringing work, when multiple copyrights are involved. Instead, the requirements' aim is to reduce the burden of multiple copyrights holders as to extensive infringement of their works. Therefore, when a letter provides notice equivalent to a list of representative works that can be easily identified by the service provider, the notice substantially complies with the notification requirements (*Scan, Inc. vs. RemarQ Communities, Inc.*, 2001).

In certain cases, the distinction of other defenses and take down notices can be more difficult to determine, as in *Lenz vs. Universal Music Corp.* In this case Stephanie Lenz posted a home-video on social media which had in the background an unclearly audible copyright-protected song. Universal Music Corp. sent a DMCA take-down notice to the OSP for copyright infringement and the OPS promptly removed the video and notified Lenz. Lenz then filed a counter-notice for the video to be reposted. After so, filed a 512(f) action against Universal alleging that her video constituted fair use of the song. Universal moved to dismiss the complaint on the grounds that the DMCA's take down notice did not require consideration of possible fair use, because such defense would be accounted for only after a counter-notice is filed. In the court's reasoning the statutory standard requiring a take-down notice was discussed: "[a] statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law" (U.S.C.A § 512(c)(3)(A)(v)) included consideration of fair use. Finally, the court denied the defendant's motion to dismiss as lawful fair use (*Lenz vs. Universal Music Corp*, 2008).

One of the main purposes behind section 512 was discharging the OSP from paying an extensive amount of money for liability for damages, court costs, and attorneys' fees relating to claims of copyright infringement that may arise under covered activities of the DMCA (31 No. 1 Corp Couns Quarterly art. 5). Nonetheless, §512 also covers certain types of injunctive relief to copyright holders, and in a certain way promotes freedom in social media to post artwork, as OPS can feel free to invest in developing new technologies instead of losing great amounts of time and money in trials. In other words, while the DMCA limits liability of social media providers, as Twitter or Spotify, it also gives confidence to social media networks to develop technologies which ease artist's promotion of their artworks online.

Extraterritorial application of copyright regulations in Ecuador: Terms of service of Twitter and YouTube

Copyright protection for social networks: YouTube and Twitter

Through click wrap agreement the artist clicks the "I Agree" box, and certain terms and conditions apply to his or her license for using social networks such as YouTube or Twitter. In the following lines, we show EULA's click wrap agreements of two social networks pertaining to copyright protection. For purposes of this paper the terms and conditions presented are the ones binding Ecuadorean artists who post their artworks on YouTube and Twitter.

YouTube

Imagine how many artists all around the world posts their works on YouTube and get a lot of fans out of this social media network, it is enormous. The terms and conditions of this provider may differ from one country to another. However, as it pertains of copyright protection, these are the same for the U.S. and South American countries. The following citations are the sections included in the terms of service of YouTube for copyright protection:

> Copyright Protection. We provide information to help copyright holders manage their intellectual property online in our YouTube Copyright Center. If you believe your copyright has been infringed on the Service, please send us a notice.
>
> We respond to notices of alleged copyright infringement according to the process in our YouTube Copyright Center, where you can also find information about how to resolve a copyright strike. YouTube's policies provide for the termination, in appropriate circumstances, of repeat infringers' access to the Service (YouTube, 2022).

The YouTube terms and conditions establish a clear procedure of "take down notice" required by the DMCA. It provides the users an agent, and follows the procedures established under 17 U.S.C 512(c)(3), therefore complies with this regulation.

Moreover, the webpage even redirects to a special user-friendly portal which provides detailed information of copyright infringement complaints, allowing their submission. The YouTube system for take down notice works well undoubtedly. Indeed, it allows

international artist to deter copyright infringement directly using YouTube's platform as a channel to avoid artist's the high costs of unnecessary litigation.

Besides, in cases when the take down notice system is not enough, the controversies will be solved following the choice of law agreed upon by the parties:

> Governing Law. All claims arising out of or relating to these terms or the Service will be governed by California law, except California's conflict of laws rules, and will be litigated exclusively in the federal or state courts of Santa Clara County, California, USA. You and YouTube consent to personal jurisdiction in those courts (YouTube, 2022).

This choice of law clause implies three things: firstly, even if the artist is from outside the United States, in order to sue YouTube, the service process must be done in California. Secondly, the artist relinquishes personal jurisdiction that might arise out of the agreement, therefore only California can be the forum for starting an action. Thirdly, the substantial law to be regarded by the court in solving any dispute is the laws of the State of California. Hence, the procedural and substantial law agreed under these terms and conditions can lead to a number of complications, but also benefits to Ecuadorian artists.

Twitter

Tweets are now part of everyone's life, the news and trendy ideas are continually posted on Twitter, for an artist posting in this network can be truly beneficial, as his or her work can easily become viral. Twitter's make a clear differentiation in its terms of service between people who live in the United States and outside the country. This terms and conditions lead to different jurisdictional rules and choice of law agreement. However, the procedure for the take down notice under the DMCA is identical in both terms and conditions. The following is an extract of such:

> Content on the services. We reserve the right to remove content that violates the User Agreement, including for example, copyright or trademark violations or other intellectual property misappropriation, impersonation, unlawful conduct, or harassment. Information regarding specific policies and the process for reporting or appealing violations can be found in our Help Center (https://help.twitter.com/en/rules-and-policies/twitter-report-violation#specific-violations and https://help.twitter.com/en/managing-your-account/suspended-twitter-accounts).

> If you believe that your content has been copied in a way that constitutes copyright infringement, please report this by visiting our Copyright reporting form (https://help.twitter.com/forms/dmca) or contacting our designated copyright agent at: Twitter, Inc. Attn: Copyright Agent. 1355 Market Street, Suite 900. San Francisco, CA 94103. Reports: https://help.twitter.com/forms/dmca. Email: copyright@twitter.com (for content on Twitter). Twitter, Inc. Attn: Copyright Agent – Periscope. 1355 Market Street, Suite 900. San Francisco, CA 94103. Reports: https://help.twitter.com/forms/dmca. Email: copyright@pscp.tv (for content on Periscope) (Twitter, 2022)

Even though the Twitter clause for copyrights is not as specific contrasted to YouTube's terms of service, this social network also redirects to a user-friendly portal which provides comprehensive information of the system's take down notice and the steps to make a complaint. Indeed, this portal is even more graphical and provides a detailed guidance to the artists who needs such information.

Regarding choice of law, the terms and conditions are broad. The following lines of the terms and conditions define rules for international litigation:

> General. The laws of the State of California, excluding its choice of law provisions, will govern these Terms and any dispute that arises between you and Twitter. All disputes related to these Terms or the Services will be brought solely in the federal or state courts located in San Francisco County, California, United States, and you consent to personal jurisdiction and waive any objection as to inconvenient forum. […]
>
> In the event that any provision of these Terms is held to be invalid or unenforceable, then that provision will be limited or eliminated to the minimum extent necessary, and the remaining provisions of these Terms will remain in full force and effect. Twitter's failure to enforce any right or provision of these Terms will not be deemed a waiver of such right or provision (Twitter, 2022).

This clause establishes a choice of law to US and Latin American countries (including Ecuador), similar to the one established by YouTube, meaning the laws and forum of California. However, for the purpose of studying and comparing the different scenarios pertaining transnational litigation, the following is the choice of law clause established by Twitter to countries of the European Union:

> In the event that any provision of these Terms is held to be invalid or unenforceable, then that provision will be limited or eliminated to the minimum extent necessary, and the remaining provisions of these Terms will remain in full force and effect. Twitter's failure to enforce any right or provision of these Terms will not be deemed a waiver of such right or provision.
>
> These Terms are an agreement between you and Twitter International Company (Co. number 503351, VAT number IE9803175Q), an Irish company with its registered office at One Cumberland Place, Fenian Street Dublin 2, D02 AX07 Ireland (Twitter, 2022)

This clause does not seem like a choice of law provision contrasted with the one established by YouTube. The way in which the choice of law section for European countries was written leads to the following upshots: first, if one provision of the contract is deemed invalid, the remaining will remain valid. Second, failure to enforce a provision does not constitute a waiver of the obligation. Third, no choice of forum nor substantive or procedural law, thus any artist can sue Twitter in any country. The vast implications of a clause of this kind for Ecuadorians will be discussed in the following lines.

Terms of service for copyright protection: extraterritorial disputes over Copyright Law

The present section loops all the information discussed above determining how complex the law can be for Ecuadorian creative artists to claim copyright infringement in social media. We analyze how terms and conditions of Twitter and YouTube can lead to difficult litigations for artists located in Ecuador.

According to the terms and conditions established for Ecuadorian artists by YouTube and Twitter the substantive law observed in case of discrepancies is the one of California. However, if Twitter's terms and conditions for European countries would be binding on Ecuadorian artist, such choice of law might lead to a high level of uncertainty.

In the following lines we will address first, the effects of the extraterritorial application of U.S. laws in YouTube case, and second, an overview of the advantages and disadvantages of facing terms and conditions clauses, like Twitter's for European countries.

To start, it is important to account for the extraterritorial application of United States law brought by YouTube terms and conditions. Binding Ecuadorian artists to laws and

forum of California can lead to some benefits and drawbacks, however due to the specific conditions the benefits might outweigh the drawbacks as explained bellow.

First and foremost, copyright law in United States is mostly federal, so the court will address the particularities of innovative cases and benefits for copyright infringement claims which are not covered under the Ecuadorian copyright laws. These undoubtedly are benefiting any copyright holder around the world. Precisely, the United States' protection under copyright laws in social media cases are top-notch compared to other countries regulations, this is due to the common-law system and the ground-breaking answers to technological issues that the courts address in their decisions.

Moreover, copyright infringement complaints in Ecuador are scarce and might lead to long litigations. Especially in cases when new technologies come into play as the judge's lack regulations for addressing specific issues involved behind social media platforms, such as cloud computing services and cross border data storage. The civil law system, as the one in Ecuador, depends on the legislative branch to enact innovative laws; this causes many political controversies and leads to uncertainty in the whole country by way of deterring copyright infringement. Many members of the National Assembly are reluctant to pass laws which regulate internet particularities, such as cloud computing, because they fear restraint of the constitutional rights of their citizens. Common law, conversely, has developed a more flexible judicial system in the United States, which contributes to more accurate decisions and outcomes in copyright cases.

The benefits of going to trial in U.S courts and being bound by California substantive law are broad in the case of copyright infringement. However, in order to get monetary awards from a U.S. court (which can be truly high) the artwork has to be registered in the Copyright Office of United States. Should every social media artist register their work in the United States then? This question can lead to a long discussion of private international law, specially related to the long discussion of *lex loci protectionis* and *lex origins*, such discussion will be addressed in a following paper. Whilst this discussion is a topic for another paper, is important to establish the relevance of the Bern Convention, especially since United States and Ecuador are signatories of it.

The Bern convention establishes the national treatment principle, by which foreigners are to be treated as nationals. Article 5 paragraph 3 of the Berne Convention says:

> Protection in the country of origin is governed by domestic law. However, when the author is not a national of the country of origin of the work for

> which he is protected under this Convention, he shall enjoy in that country the same rights as national authors (Berne Convention, 1886).

The national treatment principle is important for the evolution of intellectual property (IP) worldwide establishing a non-discrimination principle that prevents Member States from maintaining rules in the field of IP law that benefit national citizens. However, national treatment allows for the Member States to uphold their own national legal systems (Kur & Maunsbach, 2019).

Now, in practice what really matters is if United States courts will award same damages to Ecuadorian nationals even if their work is registered in Ecuador and not the United States. Taking into consideration the deterrence of copyright infringement, due to high fines for copyright infringement, some Ecuadorian artists could truly benefit from arguing a case like Lenz, however the outcome will depend on the court's reasoning and holding while interpreting §512. It is important to consider as well that U.S. courts will only award monetary damages to copyright holders who registered their work in the Copyright Office of United States.

Although the YouTube terms and conditions arbitration clause sets off a number of jurisdictional rules, the purpose of this paper is analyzing the extraterritorial application of copyright substantive laws. Hence no jurisdictional issues are addressed directly, even if in practice transnational litigation plays a main role in international cases[3] (Buxbaum, 2006, pp. 251, 257). Furthermore, the arbitration in social media complaints has led to a variety of cases addressing the legality of arbitration for social media cases,[4] which would not be discussed in this particular study.

Regarding Twitter's terms and conditions, if EULAs for European countries were binding on Ecuadorian artist, such rules would not establish a specific forum or a substantive law in case of disputes, this scenario would be dreadful for Ecuadorian artists. Their company's domicile is located in Ireland, which means that any notification would have to be delivered to such country, as Twitter doesn't have an agent or representative in Ecuador. Under these circumstances the process of service abroad would be more difficult as Ecuador is not a member of The Hague Service Convention (Hague

[3] Transnational litigation in United States in a broad topic, which leads to the discussion of a broad range of procedural rules, see Buxbaum (2006).

[4] See generally *Specht vs. Netscape Commc'ns Corp*., 306 F.3d 17, 2d Cir. (2002) or *O'Quin vs. Verizon Wireless*, 256 F. Supp. 2d 512, 515 (2003), cases in which the courts have discussed validity of arbitration agreements using click wrap contracts in State and Federal levels.

Conference on Private International Law, 1965). A broad number of complications might arise in practice for Ecuadorians to sue Twitter for copyright infringement. Under these hypothetical circumstances, and adding geographical access to Ireland and United States, it seems like YouTube terms and conditions might virtually be beneficial for Ecuadorian artists. Fortunately, Ecuador is part of Latin American countries and Twitter's EULAs establish choice of law and forum in California, which, as discussed above, is virtually more beneficial to Ecuadorian artists. In Europe, since the General Data Protection Regulation, many rules related to cross border transactions have evolved, this includes copyright in social media platforms, a topic that exceeds this article and must be addressed in future works.

Conclusions

Cloud computing services provide access to social media networks; thus, its particularities have to be taken into consideration when solving copyright issues. By the same token, the terms and conditions of social media for B2C services are mostly known as EULA. Due to click wrap approach held by the United States Courts, such agreements are enforceable in cases of cloud computing services such as social media networks (Twitter, Facebook, and so forth).

Notwithstanding that Ecuador and the United States have of copyright law regulations, the level of protection is different due to differences in the legal and political systems of both countries. United States case law in intellectual property provides answers to complex technological issues generated by the usage of services like social media online. Hence, Ecuadorian users might benefit from terms and conditions which apply extraterritorial copyright regulations such as YouTube; whereas facing transnational litigation issues generated by terms of service like Twitter in Europe would discourage Ecuadorian artists to litigate internationally.

The territorial application of copyrights vis a vis national treatment of the Berne convention create uncertainty in the long discussion of *lex loci protectionis* and *lex origins.* Thus, is necessary to develop a broader study of how international courts are addressing the issues of private international law related to the choice of law clauses set in terms and conditions as YouTube and Twitter.

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