

Universidade do Minho

Escola de Direito

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Extraterritoriality on Digital Copyright Law "The photographs challenge between Portugal and Brazil"



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Thesis dissertation LL.M in European and Transglobal Business Law

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During all my formation I have met amazing persons that have contributed for me to be here. Since my graduation I have met amazing professors that had taught me the real bases to became a real jurist, but essentially, a jurist that never forgets that is a person, and as a person he needs to respect and be kind with others.

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To everyone a huge THANK YOU.

STATEMENT OF INTEGRITY

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration.

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Extraterritoriality on Digital Copyright Law "The Photographs challenge between Portugal and Brazil"

ABSTRACT

Our reality nowadays is essentially focused on the "virtual world", where everything is for our disposal through a mere "click". We can say that what would be a set of atoms in the past, is nowadays a set of bits.

Knowledge is now disseminated through digital means, such as computers or other forms of communication. However, not everything is perfect under the Digital World, and it is necessary to pay attention to the central issue of our subject that is the copyright and its protection under the digital environment.

So, this dissertation will have as main objective the understanding of the Copyright World under the Digital World, questioning how do they relate and connect. We are going also try to understand the photography as an intellectual work, under the international context, focusing on the Brazilian and Portuguese legal system's perspective. For this, we will have three chapters under analysis.

The first one focus on a general approach to the subject, where I am going to present a brief historical introduction, moving towards a general understanding of the subject, and try to provide a concept of copyright, its legal nature, economic and moral value and its protection.

Under the second chapter we are going to analyse some technical concepts that involve our subject, the concept of photography, digital environment and the relation between law and Intellectual Property, as well as the concept of applicable law.

In the last and third chapter, we are going discuss the problems that lie at the basis of our study, entering on the details of the understanding of Private International Law, and types of legislation applicable in cases of information societies and the relation with the Intellectual Property, as well as the concrete analysis of the Portuguese and Brazilian legislation, the establishment of the applicable law and lastly the final conclusions of all our study.

KeyWords: APPLICABLE LAW; COPYRIGHT; DIGITAL ENVIRONMENT; INTERNATIONAL RIGHT; PHOTOGRAPHY.

A Extra- territorialidade no Mundo Digital "O desafio fotográfico entre Portugal e o Brasil"

RESUMO

A nossa realidade hoje é essencialmente focada no "Mundo Virtual", onde tudo se encontra à nossa disposição através de um mero "click". Nos dias de hoje podemos afirmar que aquilo que seria constituído por um conjunto de átomos é hoje constituído por conjunto de bits.

O conhecimento é hoje disseminado através de meios digitais, como computadores ou outras formas de comunicação, sendo fácil o acesso ao mesmo. Porém, nem tudo é perfeito no Mundo Digital, sendo mesmo necessário prestar atenção à questão central do nosso tema que são os direitos de autor e respectiva protecção no ambiente digital.

Assim sendo, esta dissertação terá como principal objectivo entender o Mundo dos direitos de Autor, o Mundo Digital, e a forma como estes se relacionam e conectam, indo mais longe ainda, tentando entender a fotografia como obra intelectual no contexto internacional, focando nos sistemas jurídicos Brasileiro e Português essencialmente.

São três os capítulos em análise, iniciando-se o primeiro com uma breve introdução histórica, avançando depois para um entendimento geral do tema. No segundo capítulo conhecemos alguns conceitos técnicos que envolvem o nosso tema. No terceiro e último capítulo entramos no estudo do Direito Internacional Privado e tipos de legislação aplicável no caso das sociedades de informação e respectiva Propriedade Intelectual, bem como a análise concreta da legislação portuguesa e brasileiro, o estabelecimento da lei aplicável e em último lugar a apresentação das conclusões finais sobre o nosso tópico.

Palavras-chave: ambiente digital; Direitos de autor; direito internacional; lei aplicável; fotografia.

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LIST OF ABBREVIATIONS AND ACRONYMS

BC – Berne Convention BL9.610 – Brazilian Law n.º 9.610, of 19th February of 1998 CJEU – Court of Justice of the European Union DBMS – Database Management Software EU – European Union IP – Intellectual Property; OMPI - Organização Mundial da Propriedade Intelectual PCC – Portuguese Civil Code PCCRR- Portuguese Code of Copyright and Related Rights PP - Page/(s)SBD – Database system WCT – Wipo Copyright Treaty WIPO – World Intellectual Property Organization

WTO – World Trade Organization

INTRODUCTION

As we all know, the world is changing with the technological development, and with "world" we are talking about the all types of developments that we have in the society, and, especially focusing on our study, under the juridical systems. In our topic we are going to study basically three main topics: the copyright; the digital world; and the Private International Law.

Why this three main "pillars"? Because I want to show and make understand how do things work under the digital world, being the main question, "is that a world without any type of legislation?". Of course not, and this is what I am going to explain you, specially focus my attention on the understanding of the photography under the copyright and the digital world. Also, I am going to explain the law applicable to a specific case that can happen online, viewing essentially two legal systems in our particular study: the Brazilian legal system; and the Portuguese legal system.

In that way, on the I Chapter we are going to understand the most theoretical and historical topics, trying to make understand the development of the copyright and also the photography, essentially focusing on some particularities of the copyright world. Under the II Chapter we are going to focus essentially on the understanding of some terminologies and concepts important to our study. Under the III Chapter we are basically going to explain the all problematic of our topic and make some personal conclusions.

So, in conclusion, the most important concepts that I want to highlight are basically the understanding of the copyright, essentially focusing on the photography concept, under the digital world and across boundaries, being in that way the international private law so important in our study. Basically we are doing here a connection between the Copyright world, the digital world and the Private International law world, focusing our attention on the Brazilian and Portuguese legal systems, as we mentioned before.

1. CHAPTER I: BACKGROUND AND STATEMENT OF THE PROBLEM

We have to understand, firstly, the Intellectual Property concept: Intellectual Property is basically a law area that takes precedence over the protection of rights arising from products or knowledge processes, and can be divided in two sub areas: Copyright and Industrial Property. The Copyright law is essentially focused on the protection of artistic, scientific, musical, literary or other creations such as photography or painting, determining the protection of the work and the rights of its author. The Industrial Property is more focused on industrial activities, such as brands, patents and product designs.

We have to clarify the understanding of copyright and the definition of photography under the copyright and authorial world, in the way that this is our topic, and we really need to be clear and make understand the real problem that surrounds our study.

Is really easy to see pictures nowadays around the world, for example in postcards, advertising, digital network, social network, websites ... but, until which point can the photographer protect his work?

Firstly we have to define the concept of "Copyright" or "Author's rights", that is the settle of powers that an author have to use and protect his creation, being able to enjoy in the way that he understands and wants.

Sometimes, and being more focused on our topic, we could have things that doesn't have a physical existence, but still need to be protected, as we are analysing photographs under the digital world. The digital world is quite complex, and the protection of rights online can really be a complicated problem to the legal systems, in the way that we have a work, and we see it, but we cannot touch or feel this work. So, how do we protect this type of *rights related to things*¹? To make our knowledge more clear and understand the real complex world of the copyright under the digital world we really have to travel in time and see how it all begun.

¹ In the sense that we have to be quite careful when we are talking about things that doesn't have a physical existence and deserves to be protected. One thing is the copyright, the direct object of the juridical relation, and another thing is thing/ the creation of the author, that is the indirect object of the juridical relation. The copyright has, as we are going to mention later, as main object the protection of the right of the author, and this is the direct concern of the copyright and the relations made under the copyright protection. In that sense Sérgio Branco says "First of all, it is important to clarify that the protected intellectual work differs from the physical object in which it is eventually incorporated. The doctrine usually calls the intellectual work of corpus misticum, whereas to the physical good is usually attributed the denomination of corpus mechanicum. In this way, the LDA aims to protect the intellectual work, not its support." in "A natureza jurídica dos direitos autorais", Sérgio Banco, pp.2.

Under the prehistory we can see the first steps of the man as a "thinking being", starting to see the use of the natural things that nature give to us, and make it have some form and use, by the creation of agricultural implements, hunting, and more, with basic raw materials, such as bones, wood and stones. We see also, in this first phase of the human development, a more rustic art, where sculptures arise inspired on the female body, as well as paintings on walls representing the hunts among other points that demarcate the human prehistory.

Moving on to the Antiquity, we verified the birth of writing and also, of a great diversity and number of creations. However, although there were many artistic creations, the artists did not have the property or exclusivity status of their work, it means, we saw a huge growth of intellectual creation, but we still do not have a protection of the authors. Staying on the antiquity understanding, we can also see the first steps with the concerning of the question of plagiarism, we can verify with António Chaves that it was already discussed on the ancient Greece, although, the condemnation was still a public condemnation, a merely moral question, even dictating the author the following "In antiquity, the use of literary property - some anthropologists argue, although in somewhat improper way - was recognized, prevailing the moral character on the patrimonial aspect of the authorship, since this was not recognized (non-existent)"². To the Romans, the defence of this type of actions were made by the use of the "action injurium3", an action aimed at the defence of the rights of personality and thus applied to Intellectual Property. We can conclude that, under this period of time, even not having the concept of protection of copyright and authorship that we have nowadays, we saw already the raising of these concepts, and the first steps started to the "born" of copyright law.

In the Middle Age, a certain cultural retrogression was verified in Europe, even using the expression "Dark Ages", in the sense that the human knowledge knew a certain darkness and it has regressed since the time of the Greeks and Romans. The cultural Monopoly was centralized on church, and even the monk's task was to copy the books that were made manually at the time. We did not get much evolution towards Intellectual Property at this time.

Under the modern age, cultural evolution began to take place, with the great outcropping of European navigations and discoveries of new lands and new products. We saw the creation of the typographic printing by the hand of Gutenberg, the chiffon paper⁴ of Spanish creation appeared as an alternative to the expensive papyrus and the book industry begins.

² In "Criador da Obra Intelectual", António Chaves, pp 39.

³ In "Direito de Autor", Carlos Arberto Brittar, pp. 12.

⁴ In "Direitos Autorais: Problemas gerados pelas novas tecnologias, e possíveis soluções", André Buheno Vieira de Brito, pp. 22-36.

In 1469, we have known the first exclusive printing rights granted for *John Speyer* ⁵,that was the inventor of the first printer, and until that moment, the copies of books were made by those who know to write and read, and then can do a copy manually.

Basically, until the eighteenth century the works of intellectual creation depends entirely and exclusively on the privilege given to printers and publishers, but little or nothing to the authors. So, what we have here is basically a privilege that publishers and printers have and can use, to get gains from works that aren't a creation of them, and the real author doesn't have any type of earn or guarantee related to his work.

In 1709, we have the first known law about Copyrights in England, decreed by the British Queen Anne and named as "Statute of Anne". This statute have entered in operation in 1710, and basically consists, following the words of Oswaldo Santiago's, on an "Act for the encouragement of learning, by vesting the copies of printed books in the authors or purchasers of such copies during the time therein mentioned⁶". So, at this period of time, we have the first law that has as focus the protection of the rights of the writers, that is, the right to copy, to have some type of control by the printing and reprinting of books, but, with any type of provision to benefit the owner of this rights. So basically it was the first mention to the protection of the IP⁷ rights, but still exists the need to develop this type of protections, specially the safeguard of the position of the intellectual creators.

The first reference to the expression "Copyrights⁸" was made in 1725 by the French lawyer Louis d'Héricourt in a process between booksellers in Paris. In 1777 the French playwright Beaumarchais urges theatre writers to organize themselves for the defence of their rights that were systematically usurped by the promoters of show. So basically, the travel around the history of the concept of "copyright" is really long, but the concept of copyright has we have nowadays is a really recent creation.

In what touches to the Portuguese and Brazilian law protection, we have the first step in Portugal with the Constitutional Charter of 1826 in its article 145 paragraph 24, by the

⁵ In "Forrester, Ian S. "Regulating Intellectual Property via Competition? Or Regulating Competition via Intellectual Property? Competition and Intellectual Property: Tem Years On, the Debate Still Flourishes" – European Competition Law Annual (2005),pp.59.

⁶ In "História dos Direitos Autorais no Brasil e no Mundo" – Rodrigo da Costa Ratto Cavalheiro (2001), pp.1.

⁷ Intellectual Property Rights – IP is the abbreviation that I am going to use from now to designate Intellectual Property.

⁸ One thing that we need to know is a difference made between "Copyright" and "Droit D'auteur": to the English/Anglo-Saxon concept the understanding of copyright is that one and all inclusive right of pecuniary nature; to the French concept we have a double right a pecuniary right and a moral right that belongs to the creator and which can not be transferred, disposed or waived. Even me preferring the French concept, we are going to use the Anglo-Saxon expression because of the easier understanding to the English text that I am writing.

recognition to the inventors "the property of its discoveries or its productions". In 1838, the Constitutional Charter in its article 23 § 4 says that the "Inventors right's to property over their discoveries and of writers over their writings" ... by time and in the manner determined by law ...", that is, the inventors have property rights over their discoveries and writings, but, it still was necessary for the law the regulation of the matter in its specificities. This constitutional provision does not guarantee the protection to the literary creation, and, even having many temptives to the creation of legislation and groups to the copyright protection. In 1851, we have the first law project approved by the parliament, and this law remained in force until 1867, the year in which the Code of Seabra was born, which in its article 579 the right of the author's heirs to publish or authorize the publication of a work from 30 to 50 consecutive years after the death of the author was raised. Only in 1886, by the signature of the Berne Convention, we have the first steps to a concrete legislation of the protection of the copyright in Portugal, and in 1911 the Provisional Government of the Portuguese Republic signs the decree of adhesion of Portugal to the Berne Union. There were several decrees laws and laws created for the protection of copyright, but only in 1985 the "Code of Copyright and Related Rights" was approved by the Decree-Law no. 63/85 of March 14 of '859.

In Brazil, the concept of author is distinct from the holder of copyright. In the first is the individual creator of the literary, artistic or scientific work; in the second, it is the natural or juridical person entitled to exercise the rights over the work. This is because, in Brazil, the ownership of a work can be transferred to third parties, but the authorship, because it is a personality right, is non-transferable (this understanding is also valid under Portuguese law). Historically¹⁰, the first record for copyright protection on Brazilian dates from August 11, 1827, when two legal courses were created, and ensured teachers the rights to their works for ten years. The Criminal Code of 1830 established penalties for anyone who used the work of a living author or before completing ten years of his death, if the author had heirs. The Article 847 (Penal Code), promulgated on October 11, 1890 specifically dealt with copyright, establishing punishment for the crime of plagiarism and counterfeiting.

The Constitution promulgated on February 24, 1891 guaranteed the copyright of literary and artistic works. In August 1898, the first Brazilian Copyright Law was enacted, Law n. ° 496, guaranteeing copyright of national works. This law was supplemented in 1912, and started

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⁹ Never forgetting the actual developments and alterations made by many European directives.

¹⁰ See in that sense "Direito Autoral na era digital: impactos, controvérsias e possíveis soluções", Manuella Silva dos Santos, pp. 50.

also the protecting of foreign works. The consolidation of the author right occurred in 1917 with the entry into force of the Brazilian Civil Code, making the registration optional, declarative of right and no longer constitutive. Several updates of this code were made until 1973, when the Brazilian Authorial System (Law 5988) was created, supported by the National Copyright Council (CNDA), created in 1973 and extinguished in 1990. With constant commercial, economic and social developments, updates and developments were adopted, and in 1886 Brazil adheres to the Berne Convention. Finally, Brazil enacting the law that is in force from 1998, Law n°. 9610 of February 19, 1998, until nowadays.

1.1 Copyright Concept:

Copyright is a set of rights conferred by law to the creator of some intellectual work, to enjoy any moral and patrimonial benefits resulting from its exploitation, as Sérgio Branco says "the copyright are those conferred to the creator of literary, artistic or scientific works¹¹".

But, to the law eyes, what is the copyright concept? Is it a thing that can be appropriated or does it only make arise patrimonial and moral rights? We have a division here, for example to the Brazilian Law n.º 9.610, of 19 of February 1998 article 3 "copyright is deemed to be, for legal purposes, movable property", it means, the Brazilian law equates "copyright", for certain legal effects, with corporeal things. To the Portuguese juridical understanding, under the articles 1302 and 1303 of the Portuguese Civil Code, the right of property only applies to corporeal things (movable and immovable) and that "property" on intangible things (intellectual property) is governed by special legislation (the Portuguese Code of Copyright and Related Rights for Copyright, and Industrial Property Code, for Trademarks and Patents), even though the article 1303/2 of the Portuguese Civil Code admits the subsidiary application of the provisions of the Portuguese Code of Copyright and related rights. That is, under the Portuguese law understanding, we cannot say that a creative work is the same thing as movable things, but, if the Portuguese Code of Copyright and Related Rights has a "gap", we have to apply additionally the rules of corporeal things¹².

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¹¹ In "A natureza jurídica dos direitos autorais", Sérgio Branco, pp.1.

¹² Predicted under the Portuguese Civil Code- articles 1302 and follow, see in that respect "ARTE, TECNOLOGIA E PROPRIEDADE INTELECTUAL", Alexandre Libório Dias Pereira, pp. 1-2, available in https://eg.uc.pt/handle/10316/28788.

To the Portuguese author Oliveira Ascensão copyrights are "the bundle of personal and patrimonial rights that are independent and with different characteristics of behaviour in the face of the vicissitudes suffered by a legal situation respected to copyright"¹³, so basically, to the Brazilian concept the authors rights are understood as movable property ¹⁴rights, and to the Portuguese concept "copyright "is the term used to denote the area of intellectual property relating to the protection of the work resulting from an intellectual creation that are the unification of powers of patrimonial and moral character.

But, when do we have a real creation that deserve the copyright protection? Following the concept of the Berne Convention the term "literary and artistic works" are the productions of literary, scientific and artistic character, regardless of their form of expression, by books, pamphlets, or other written elements; conferences; sermons; dramatic or musical works; cinematographic works; drawings; paintings; photographs ... and the same works to the Brazilian and Portuguese law conception, under the article 7 of the Brazilian Law of the Copyright Protection and to the articles 1 and 2 of the Portuguese Code of Copyright and related rights.

But, what features must the intellectual work have to be protected? Firstly the work has to be a human creation, i.e., it must always have influence/interference of man; the work has to correspond to an intellectual creation, that is, it must come from the intellect, not merely a mere discovery; and, the protection of the work is not left by the idea of the work, there must be an *externalization* of the work to be protected¹⁵.

But what is the real meaning of "<u>externalization</u>"? Here we have to understand when an idea becomes a protected work, following the words of the author Patrícia Akester "The protection of the work does not depend on its dissemination, publication, use or exploitation, but its exteriorization¹⁶", and what does this term mean? As the Author Eugen Ulmer

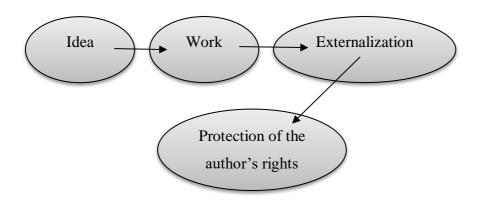
¹³ In "Direito Autoral", J. Oliveira Ascensão, pp 331.

¹⁴ In this sense, Plínio Cabral says: "The character of a movable asset, in this case, is a legal fiction without which it would be impossible to practice the different acts of use and enjoyment of copyright. It has no movement of its own and cannot be conducted, and that is why it is a special genre that deserves its own status. ", in "Curso de Direito Autoral", Elisângela Dias Menezes, pp. 30.

¹⁵ Alexandre Dias Pereira, commenting on the work of Manuel de Andrade, invokes the following words on the subject: "the object of these rights is the work in its ideal form, in its intellectual conception, and not the thing or the material things that constitute its embodiment or external incarnation, through which it makes its appearance in the sensitive world. The rights that fall upon such material things are common property rights, save any non-essential variant. Those that fall on the work as an ideal entity, as a particular combination of thoughts or impressions, are that they have a specific physiognomy, although very close, in its main aspects, of the real rights over corporeal things ", in "Informática, Direito de Autor e Propriedade Tecnodigital", Alexandre Dias Pereira, pp. 140.

¹⁶ In "Código dos Direitos de Autor e Direitos Conexos", Patrícia Akester, pp 38.

understands, we must make a distinction between "pre-existent matter" and "creative performance": to the first concept we have the data of the work; the nature; the history; the literary and artistic tradition; the scientific theories and doctrines which they freely make available for the purposes of the intellectual creation; to the second concept, we have the form and mod of expressions that each creator gives to these data¹⁷. So basically the form of the creation is the essence, and, the work/creation deserves protection from the moment that we can perceive that creation by our senses. Schematically, to make things more clearly, we can represent this understanding as follows:



The idea/expression dichotomy basically means that the "idea of work" needs to be expressed, it should be given an expression, as we can see on the article 9/2 of the TRIP'S agreement "Copyright Protection shall extend to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such", basically, to make apply the copyright protection we need to turn the ideas into expressions. But how can we define idea and expression? An idea is basically the intellect of the author, the information/creation that the creator of some work have in is mind, and this is not protected until the moment that is assumes a *form*¹⁸.

¹⁷ In "Código do Direito de Autor e dos Direitos Conexos", Patrícia Akester, pp. 38.

¹⁸ Under the understanding of the Portuguese copyright and Brazilian Copyright, the majority of works do not have to be externalized through a certain material embodiment. It suffices for its ephemeral expression by a means that makes it perceptible to the senses of third parties (like reciting the poem, playing the music) the expression in a particular corporeal material will be required only for those works that require this embodiment for its expression (like sculptures or paintings) and here we can include photography, that is our major topic, which now abandons its usual corporeal expression (the negative) for a digital expression, see in that sense "Código do Direito de Autor e dos Direitos Conexos", Patrícia Akester, pp. 38 – 39 and "Direitos Autorais", Sérgio Branco,pp.2.

Can we conclude then, that, after the author's creation externalization we can protect that? Actually no, the externalization of the work is the first step, but, than we need to consider the criteria of copyright in its whole, in the sense that we are analysing the copyright protection.

The protection conferred by copyright law is a national matter of protection, it means, is a protection attributed by the law of each country, has the Berne Convention recognizes on is articles 1 and 2/2. However, we can see many similarities between the protection afforded by national copyright and the protection conferred in other countries. The major difference are on the requirements for registration and the formalities that we need to observe.

Focusing on the two countries that we have under analyse, Portugal and Brazil, are both signatory countries of the Berne Convention to the Protection of the literary and artistic works, so basically both countries can have specific rules to apply to the register and to the formalities that one IP creation can have. The conception of formalities in both countries are similar, to the Brazilian Law n.º 9.610, of 19 of February 1998 article 7 are protected all the "creations of spirit, expressed by any means or attached to any support, tangible or intangible, known or to be invented in the future (...)", giving some examples of form that a work can assume. We can see basically the same in the Portuguese Code of Copyright and Related Rights article 2. Copyright presupposes the existence of a work, which has to be an intellectual creation of the spirit. The form of expression, gender, merit, mode of communication and objective is not important to the Portuguese legislator as well, giving also a non-exhaustive list of examples that a literary or artistic work can assume.

All of this understandings, comes from the international conception of copyright protection granted by the Berne Convention. The Convention does not indicate any kind of subordination of the literary or artistic work to the form or mode of expression, only indicating that it must be original, that is, it must consist in an intellectual creation, we can see that for example on the article 2/5 of the Berne Convention.

In what touches to the register of the intellectual creations, for the Brazilian concept, article 18 of the Brazilian Law, and for the Portuguese conception, article 11 and 12, the registration of the intellectual creation is optional¹⁹. And, when it's done, it is a presumption that the right really exists and belongs to the registered holder, in the precise terms that the registry defines it. But, while the Berne Convention provides that there is no requirement of any kind of formality for the protection of intellectual creations, to the Universal Copyright

¹⁹ See in that sense "Direitos Autorais", Pedro Paranaguá and Sérgio Branco, pp. 16, and "Código do Direito de Autor e dos Direitos Conexos", Patrícia Akester, pp.61-62.

Convention, formalities are required. Given the widespread application of the Berne Convention, these type of formalities as a condition of copyright protection is followed only by a few countries, for example the United States given its late entry into the Berne Union²⁰.

1.2 Legal Nature of Copyright:

In first instance, it is important to consider the definition of good, which, according to the Roman master Ulpiano understanding will be "bona ex eo dicuntor quod beant, hoc est beatus faciunt²¹", that is, a good is all the things that are capable of satisfying a human desire or need. This definition has different means to the economic world and to the legal world, in the sense that, to the economical concept, a "good" is basically an object capable of satisfying a human need that is available and scarce. To the juridical world, "good" is an object of a right, that is, something that is capable of give to someone rights related to it. For example, when someone bought a pencil, this person has the patrimonial rights related to her pencil, and then can protect her rights.

Although, we have to note that all the legal assets of "goods" are in some part economic, in the sense that the "non-patrimonial" goods exist. However, these type of goods only arise from family or social relations, and aren't capable of being appropriated, but still are protected by law. My intention here is making understand that under the legal world we can have an economical concept of goods, but also a social concept of goods. Usually we don't attribute an economic value, in the sense that they cannot be economically evaluated, they have a huge value to us personally, but is not possible of establish a rigid price to them.

On the other hand, we cannot say that all the goods are capable of satisfying a human desire or a need. But, there are goods capable of satisfying desires or needs, however being not available nor scarce, and here we can talk about, for example, the air.

Another concept that we have to meet, is the difference between corporeal and incorporeal things. Once again, being of great importance here the knowledge coming from the Roman law that basically says that a corporeal right is the full property "in re postesta", it means, the complete right of the thing.

²⁰ See in that sense "Direito Autoral na Era Digital: impactos, controvérsias e possíveis soluções", Mestrado em Direito – Pontifícia Universidade Católica de São Paulo, Manuella Silva dos Santos, pp. 67-77.

²¹ "Fr. 49 D verb.sing. L. 16" – mentioned in "Do bem incorpóreo à Propriedade Intelectual", Denis Barbosa 2009, pp.9 – available in http://denisbarbosa.addr.com/teoria.pdf.

Following the more recent concepts, we can use the concept of "corporeal thing" said by José de Oliveira Ascensão that is "a reality outside man and independent of him in his subsistence, which has individuality and utility and is susceptible of appropriation²²". This definition gives the possibility of extracting the four characteristics generally accepted by the doctrine. Firstly the absence of legal personality, one thing is not endowed with legal personality, in the sense that this "thing" is different from a person, is something that has as main objective the satisfaction of interests of Human ²³. Secondly, autonomy or individuality, in the sense that a "thing" is always capable of being appropriated in whole or in part by exclusion of other goods that are physically associated with it, saying José de Oliveira Ascension that the characteristic of individuality is only assumed for those who do not exclude the possibility of partial rights over the thing or part of it ²⁴. This can lead to a subdivision of the concept of thing, simple and complex, dictating in this sense Cabral da Moncada, in the line of thought of the Roman Law, that simple things will be those that correspond to "a simple and unique concept that we form of them, being juridically in the vast majority of times as indivisible things, in turn, composite things will be those that" always result from the meeting or combination of other things "25". Lastly, the fourth and final characteristic, the susceptibility of exclusive appropriation, being at bottom the understanding that the "thing" must always be susceptible of appropriation, that is, they will have to be susceptible of individual appropriation.²⁶

In regard to incorporeal things, we will also follow the line of thought of the four characteristics we have previously analysed for corporeal things, which will be endowed with a different sense from that which applies to corporeal things, and adding yet another set of characteristics that really typify things incorporeal.

As regards the characteristic of the absence of legal personality and usefulness will be equally extended to intangible things, as well as the understanding of utility, and here we can

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²² In "Direito Civil - Teoria Geral, I, 2.ª Edição ed." JOSÉ DE OLIVEIRA ASCENSÃO, p. 344, but also we have another authors that follow these concept, like Mota Pinto, Teoria Geral do Direito Civil, pp. 340; or LUÍS A. CARVALHO FERNANDES, Teoria Geral do Direito Civil, I - Introdução aos Pressupostos da Relação Jurídica, 4.ª (Revista e Actualizada) ed., Universidade Católica Portuguesa, Lisboa, 2007, pp. 65.

²³ In "Lições de Direito Civil, Cabral Moncada, pp. 394).

²⁴ In "Teoria Geral do Direito Civil", José de Oliveira Ascensão, pp. 345; and in the same line of thought Mota Pinto speaks on "autonomous or separate existence", in Teoria Geral do Direito Civil, Mota Pinto, pp. 340.

²⁵ In "Lições de Direito Civil", Moncada, pp. 432 to 433 and "Teoria Geral do Direito Civil", Mota Pinto, pp. 341.

²⁶ In this sense pronouncing authors as Oliveira Ascensão "Teoria Geral do Direito Civil", pp. 346 and 347 and Menezes Leitão "Direitos Reais", pp. 63.

touch on the understanding of Intellectual Property, in the sense that each society evolves and in this sense also evolve things and their usefulness.

The big question lies on the understanding of the characteristics of "autonomy" and "susceptibility to exclusive ownership". As far as autonomy is concerned, we must emphasize that incorporeal things are also capable of being divided, however, each of these things, now divided, will assume a new specific utility and are therefore seen as a "one and independent" right. In the case of susceptibility, it is almost obvious that an incorporeal thing is not capable of being apprehended by our senses, and a physical appropriation of the good cannot be given, in this sense Dário Moura Vicente mentions that "incorporeal things, hoc sensu, devoid of existence physical, are unfit for individual appropriation although the corporeal things that constitute the material support, for example, the copy of a book"²⁷.

1.2.1 Some introductory thoughts to the relation between the incorporeal intellectual creation and the legal systems under analyse:

Focusing this understanding on the world of Intellectual Property, is it possible for a work to be apprehended? In this sense, Alberto de Sá e Mello points out that "as well knowable in the immateriality of its formal expression, intellectual work is only susceptible by the intellect, and not for appropriation"²⁸, where the same author concluded that "what only intelligence understands is by its nature improper". This characteristic is also pointed out by Dário Moura Vicente²⁹, on the issue of the international protection of intellectual property, when he states that a relevant characteristic inherent to the intangible or intangible nature of the incorporeal thing is its ubiquity.

Thus, incorporeal things being characterized by being perceived by the intellect and not by the senses, unlike corporeal things that hold physical existence in a given space and place, incorporeal things can be apprehended intellectually everywhere and in every place, by all human beings, simultaneously and at all times. However, while it is true that the ubiquity of intangible things will raise controversial issues to the protection of the national legal systems.

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²⁷ In "A Tutela Internacional da Propriedade Intelectual", Dário Moura Vicente, pp. 14 and 15.

²⁸ In "Contrato de Direito de Autor - A autonomia contratual na formação do direito de autor, Almedina, Coimbra, 2008ALBERTO DE SÁ E MELLO", p. 83.

²⁹ In "A Tutela Internacional da Propriedade Intelectual", Dário Moura Vicente, pp.17 and 18.

We will thus conclude with Pedro Dias Venancio ³⁰that "in order to be capable of being the object of juridical relations, incorporeal things will likewise contain the same four essential characteristics which we recognize in corporeal things with the exceptions we have made above. Is it then, that, what are apprehended by the senses will find the essential distinction between bodily things and incorporeal things? In favour of the susceptibility of being apprehended by the senses, it is the characteristic in which the distinct nature of corporeal things vis-a-vis intangible things, manifests itself in a more easily apprehensible form.

Accordingly, we can understand that under the Intellectual Property, as regards Copyright and Industrial Rights, only intangible things that (among other requirements) result from the intellectual creation of its author, inventor or creator, and not those that already exist as such nature ".

Another important feature is the aforementioned characteristic of "externalization", which requires that the works are in any way externalized so that they are capable of being protected.

We must also mention one last characteristic, which is that incorporeal things are, in principle, independent of the corporeal thing or physical reality (matter or energy) in which they are externalized, in the sense that what its protection is always the intellectual creation as an intelligible expression and not its physical externalization which is only a way of revealing it, although without exhausting it³¹.

Being the Intellectual Property something that is invisible or less visible, many questions have been raised until the understanding if it as a legitimate right to the author. One thing that we should keep in mind is that: law is defined by the conjunction of social, political, economic and cultural relations and facts that identify it at a given historical moment and that are in permanent complementation and transformation. In that sense, is not possible to define the legal nature of Intellectual Property as unique, or omnipresent. We cannot deny the historicity that the IP have in her development, because since the beginning of the understanding of the IP rights and copyright law, we can see most theories and concepts raised, but they are not the same for all the time. To the actual technological development the concept is really different from the concept that we have in, for example, 20 years ago, so, we can conclude that the IP concept is a concept that is in constant development.

 $^{^{\}rm 30}$ In "A Tutela Jurídica do Formato de ficheiro electrónico", Pedro Dias Venâncio, pp. 138.

³¹ In this sense we have the pronunciation, among others, "Obras de arquitectura como obras protegidas pelo Direito de Autor", Maria Victória Rocha, or "Contratos de Direito de Autor e de Direito Industrial", Almeida Gonçalves, pp. 159

For the juridical understanding, as we have already mentioned, a corporeal thing will be a reality outside man and of him independent in his subsistence that has individuality and utility and can be targeted of appropriation, that is, we speak of the things like a land that can be appropriate by man and it is an object with physical existence, and then there are four characteristics that we must connect with the definition of corporeal coercion, as indicated by José Oliveira Ascenção³²: absence of legal personality; autonomy or individuality; utility; and susceptibility to exclusive ownership. But does it work as well when we have something incorporeal in our hands?

First and foremost, an incorporeal thing is not also endowed with Legal Personality, in the sense that, only the entities susceptible of rights have legal personality, in regard to the characteristic of utility. We can say that as the times were evolving also the notion of utility of incorporeal goods was altered, being that today we can say that yes, an incorporeal good assumes the characteristic of utility. In regard to the autonomy or individuality of the thing, we must understand that incorporeal or intellectual things are intellectually susceptible of division into categories similar to simple and compound things, that is, an incorporeal thing regarded as something complex and one with a specific utility, may be divided into simpler incorporeal things, but which nevertheless also assume a specific utility, being also the object of one and independent right. The susceptibility of exclusive appropriation, if you form by the strict concept of physical appropriation of the good, we quickly conclude that the incorporeal thing cannot be appropriated because it is not endowed with physical existence or apprehension by our senses, but if we look at the understanding more abstractly, why cannot someone took hold of something incorporeal like the idea of someone else? So we can say that it can also be an intolerable good to be appropriated by someone, putting the question alone or not.

As we mentioned before, Dário Moura Vicente ³³on the question of the international protection of intellectual property refers the relevant characteristic of *ubiquity*: being corporeal things apprehensible by senses, incorporeal things are not capable of being apprehended by senses, but can be apprehended by the intellectual in every place, by all human beings, simultaneously and at all times. Although, this "fictitious legal appropriation" can give rise to numerous problems in the national legal systems and beyond, in the sense that it is by the responsibility of each legal system to decide which protection they should or should not apply to these assets, which reveals for the analysis of our subject and will be later developed.

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³² In "Teoria Geral I -2ª Edição", José Oliveira Ascenção, Direito Civil-pp. 344.

³³ See, "A Tutela Internacional da Propriedade Intelectual", pp 17 e 18.

So we may say that incorporeal things obey the same characteristics as corporeal things, but can we give them a definition? Pedro Dias Venâncio understands that we can define incorporeal things, as "the autonomous and externalized result of an intellectual creation, devoid of juridical personality, and to which the right recognizes utility and susceptibility of exclusive private appropriation³⁴".

Focusing on the legal systems understandings that we are analysing, to the Portuguese concept we have a specific article in our civil code that refers that the applicable law will be the law of things. To the Brazilian Concept we don't have a specific article under the civil code that refers the applicable law. We only have a mention in his article 5 line XXVII and XXVIII of the Brazilian Constitution that says that the Intellectual Property deserves law protection has a fundamental right.

In the article 48 of the Portuguese Code we can find the conflict rule that will be really important to all our study. To the resolution of the international juridical conflicts is really important to find where is the conflict rule to know what is the legal branch capable of being applicable. The Portuguese legislator is quite clear, by understanding that the applicable law will be the regulatory law of things, it means, in that type of conflicts the applicable law is the Law of things. To the Brazilian Law, in its article 3° the copyright are understood as movable things, it means that also to the Brazilian Law establishes that the applicable law will be the "Law of things". Although, in both systems we have an open area in what touches to the law that will regulate the relation raised from the IP/ copyright, and, in both system we have specific legislations to regulate these type of relations and rights borne from. In Portugal, we have the Portuguese Code of Copyright and Related Rights and in Brazil the Law n.° 9.610, of 19th February 1998, and some other individual documents, for example in Portugal we have the Decree Law n.° 122/2000, of 4th July that regulates the Copyright in creative databases.

But, even being both systems quite similar, they still have some differences in what touches to the legal concepts and rules to the application of copyright law. The Portuguese understanding is under the article 48 that says that the applicable law will be the law of things. To the Brazilian Law we have some clarity in the Law n.° 9.610, of 19th February 1998, that basically says that the copyright are to the law understudied as movable goods, it means also as things. In that sense we can say that the Brazilian law concept is direct and simple, all the

³⁴ In " A Tutela Jurídica do Formato de Ficheiro Electrónico", Tese de Doutoramento em Ciências Jurídicas, Especialidade em Ciências Jurídico Privatísticas, Pedro Dias Venâncio, pp 141.

n " A Tutala Jurídias da Farmata da Fiabaira Flastránias". Tasa da Daut

copyrights are movable things, but this concept to the Portuguese understanding is more complicated³⁵.

So, in conclusion to this point of our study, we can say that to both legal systems in analyse, the applicable law is the law of things, and to the Brazilian Law all the copyright creations are movable things to the eyes of the law, and to the Portuguese understanding, following the thinking of José Oliveira Ascenção³⁶, we have incorporeal things that can be appropriated and subjective and personal rights that can arise from this creation to the author, and this need to be protected by the law.

1.3 Moral and Patrimonial rights

After an author conceives an intellectual creation, which fulfils the requirements of protection by copyright, it is also necessary to consider that on this work, to the author, is recognized two different rights: moral and patrimonial rights.

Regarding the concept of *moral rights*, we have to keep in mind that these are rights linked to the nature of is creation. The main objective of the law protection here is the intimate structure of human in the relationship established with his work from the moment of his creation.

We have the first steps to the conception of "moral rights/ droit moral", with the French jurisprudence, where in XIX the French Court of Justice ³⁷have determined that an author has the right to protect and have his manuscript not modified without the prior permissions of the publisher to which he had submitted.

In 1928 the moral rights of the author have been incorporated on the Berne Convention, where the author has enshrined the rights to "paternity" and "integrity" ³⁸of is work, that is,

³⁸ Here our main concern is to make clear that the author has the right to obtain monetary gain from its intellectual creation, keep is moral rights with him, and also persue his intellectual work wherever it can be. That is, under the intellectual property world, and specifically under the copyright world, the author deserves to gain some monetary quantity from its intellectual creation, maintain his integrity, his moral integrity until the moment he dies, and also persue his intellectual creation, being this thought more developed later. See in that sense "Os Direios Morais do Autor", Allan Rocha de Souza,pp.9-20; "O futuro do Direito Moral", Revista de Direito do Tribunal de Justiça do Estado do Rio de Janeiro, José de Oliveira Ascenção, pp. 47-67; "Código do Direito de Autor e Direitos Conexos" Patrícia Akester, pp.81-83 and 92-109.

³⁵ In the sense that we have to interpret and say which rights are or not protected.

³⁶ In "Teoria Geral I -2^a Edição", José Oliveira Ascenção, Direito Civil-pp. 344.

³⁷ In "Direitos de Autor e Direitos Conexos", Eliane Y Abrão, pp.30.

the right to claim the paternity of his work and to oppose any kind of change in it, as well as to any kind of act that damages his honour or reputation.

Basically, the moral rights come automatically with the act of creating some work, in order to ensure the respect for the personality of the author. In that way, the author has the power to control the use of his work independently of the transmission of the patrimonial rights, it means that moral and patrimonial rights are two distinct worlds. Also, the moral right cannot be transmitted "*inter vivos*", only in cases of succession by death to the successors, following the sense that moral rights are inalienable and imprescriptible rights.³⁹

Here, we can mention the wise words of a Spanish Author Isabel Espin Alba, "The Starting point for the recognition of the moral rights of authors was, of course, the theoretical construction of the rights of the personality. However, as the moral rights currently and especially with regard to Spanish legislation, whether they constitute rights, or, as De Castro understands, personality", because, "when an author discloses a work, in addition to establishing an act of communication, an image about him. Hence its particular interest in preserving the integrity of the work and respect for its authorship"⁴⁰.

However, one thing we have to pay special attention to is that, although the author's moral rights are linked to the author's personality, this does not mean that the author's moral rights are born with the personality, but with the elaboration of the work, that is, "they are not intrinsic part of them, but of his creative act⁴¹".

To the Portuguese Code of Copyright and related rights we have on its article 56 and follow the definition of "moral rights of the author", and to the Brazilian Law N.°9.610, of 19th February 1998, the same definition, in its article 24 and follow. To both legislations we have a quite similar understanding of "moral rights of the author", that is: moral rights are inalienable and imprescriptible rights, even if the author allows a third party to modify his work.

As Sá e Mello points out "it does not convey the author's right to authorize modification, nor does he renounce the right to oppose any other amendments that are intended to be introduced"⁴². The author can consent to a third person the modification of his work, but he does not lose the ownership of its moral rights. These type of rights are unbearable of "inter vivos" transmission, and only transmissible to his successors after his death. Once the author is

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³⁹ See in that sense note 38.

⁴⁰ In "Contrato de Edicion Literária", Isabel Espin Alba editorial Comares, 1994 Spain.

⁴¹ In "A Nova Lei de Direitos Autorais – Comentários", Plínio Cabral, BuscaLegis.ccj.ufsc.Br, pp. 44

⁴² In "A. Sá e Melo, O Direito Pessoal de Autor no Ordenamento Jurídico Português, SPA", pp. 124-125.

dead, the rights of claiming the authorship of the work are transmitted to his heirs but keeping its name, preserving and non-publishing it, to ensure the integrity of the author creation.

To the patrimonial rights' concept basically the author have the exclusive right to use, enjoy and dispose his "literary, artistic or scientific work", article 28 and following of the Brazilian Law and 40 and following of the Portuguese Code.

Here this two legislative systems recognize the power of the author (or his successors) to dispose of his patrimonial rights, by authorizing the use of the work by a third party or transmitting or paying in full or in part its patrimonial rights, as Carlos Alberto Brittar says "Patrimonial rights are those referring to the economical use of the work, by all possible technical processes. They consist of a set of pecuniary prerogatives that, born also with the creation of the work, manifest in concrete, with its communication to the public⁴³".

We have a difference between the Brazilian concept and the Portuguese concept on the understanding of the patrimonial rights. To both juridical understandings what we have here is a choice of the author to transfer or not is patrimonial rights.

To an author transfer is patrimonial rights, this transfer needs to be done to a third party granted in writing, being this a formality "ad probationem", i.e., the written reduction of the authorization is a probative requirement.

And if we don't have this formality? Will this going to lead us to the nullity of the act? No, if we have the transfer of the rights reduced into paper, we will have a proof, a proof that dictates the terms of use of this right. In other words, a *proof that the patrimonial right is on the power of a third person and this person has the limits of the use of these rights and its conditions writhed in paper⁴⁴.*

To this two legal systems the moral rights are non-transferable, only a small part can be after the dead of the author to his successors. On the other hand, the patrimonial rights can be transferable, but, this does not imply the transmission of the copyright on the work.

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⁴³ In "Direito de Autor", Carlos Alberto Brittar, pp. 46.

⁴⁴ In that understanding see the Portuguese Judgement of the Court of Appeal of Lisbon N.° 10779/2007 -602/07/2008, that treats a case where the formalities of the use of the patrimonial rights have passed the limits foreseen order and there was no authorization for such use, available in http://www.dgsi.pt/jtrl.nsf/33182fc732316039802565fa00497eec/9300ddfa4e645a3a802573fc00516703?OpenD ocument.

1.4 Breach and Defence of copyright:

When does the use of some work lead to an unlawful perspective and what kind of defence can we apply? The problem raised is mostly in the unlawful use of a work, or performance, in whole or in part, without the authorization of the respective rights' holder, which leads to a violation of the law.

In that context we have to emphasize the article 9/2 of the TRIPS agreement where we can see that the copyright law protects, not the simple idea, but the exteriorization of this idea. The use of the mere idea can be done freely, the question starts only under the copyright protection after the exteriorization of the idea, that is, when we know the threshold of expression of the intellectual creation.

As soon as there is an infringement of copyright, in the sense described above, for a legal action to be brought, it is necessary to prove that the rights in question are owned, that the work is a protected work; and, in cases of concession of rights, we will have to observe whether or not the contractual limits have been exceeded.

To the Portuguese conception we have stipulated on the Code of copyright and related rights, article 195 and following the terms and protections that we need to know and "apply", and to the Brazilian conception we have that information in article 101 and following.

To the Portuguese and Brazilian law concepts, we have the civil and criminal protection, so we have to know and recognize the acts that are available to civil and criminal sanctions. The issue of protection of copyright goes always beyond the civil or criminal parameter, this because it reaches the holder's patrimony, causing him material and moral damages.

1.5 Economic importance of copyright:

We understand that intellectual property is very important for the cultural and economic development of a society, in the sense that if we proceed to protect a creation from the human mind, we will encourage that same person and influence many more, to create more, create new "things", thus enabling the greater diffusion of knowledge, in the most varied versions that it can assume.

The IP protection leads us to the understanding of the connection between the human creation and the economic gains that it can arise, it means, when a person create something, it

can lead to profits, really huge profits, to the creator, but not only, to the country of his residence, to the editor and so on so forth. So basically, the human mind can contribute to the human evolution, but also to the human gains and global economy and development. Unfortunately, the truth is that, is not always easy the guarantee of economic gains under the IP world, and focusing only on our conception of copyright, it is not always easy for the society to understand that something that may not have physical existence, essentially in the digital world, deserves its protection and economic gain. In that sense, Robert M. Sherwood says "It is rather curious that concepts of property are more easily attributed to tangible things than to intangible things. If a person steals my pen or my bicycle, there is a general sense of violation in almost every culture. If a person steals my project for a pen or a bicycle, the condemnation instinct is no longer so strong. However, the commercial usefulness of the intangible can be very large. ⁴⁵(...)", with this example of Robert M. Sherwood, what we want to point out is that society is essentially focused on the object itself and not so much on the idea that led to the creation of it. Focusing essentially on copyright, imagine a book, if our book is robed, as it is an object that may be appropriate, society condemns this kind of attitude, but does not condemn or does not do this so markedly when we have only the idea of the creation of a book. What we should keep in mind is that everything always begins with an idea, an idea that leads to the realization of a project and consequently to the evolution of humanity.

António Chaves ⁴⁶even point out that governments, understanding the economic competitiveness that we live in today, have begun to worry about the protection of intellectual property, in the way that this can be a boost to the economy of a country.

1.6 Is it possible that the Intellectual Property is in crisis?

We can start here by asking ourselves what is the meaning of the word crisis, and we can see that to Occidental countries it is a word with a bad meaning, where we can see war, times of prosperity difficulties, economies seeing really awful difficulties where the competitiveness is rare with other countries, because of the lost of fortune in the country, disasters, and so on so forth. Basically when we said in the occidental that our country is in crisis this is not a good meaning, and we start to concern ourselves with the future of our country, asking if this is going to have a way out, and everything is going to prosper again.

⁴⁵ In "Propriedade Intelectual e desenvolvimento económico", Robert M. Sherwood, pp. 23.

⁴⁶ In "Enciclopédia Saraiva de Direito", SARAIVA, v.26, pp. 110.

The definition of copyright law is the defence of the rights that can rise from some creation to the author, and when we are talking about the digital environment we are talking about a "free world" where everyone can search for some information in some free. As André Françon said "Pessimists are rushing to conclude that Intellectual Property is in crisis. Some even speak of its decay. Still, others announce their near end. This view of facts is certainly excessively negative, today as yesterday, the need to stimulate intellectual creation justifies the maintenance of copyright, but, what is certain is that Intellectual Property is evolving 47"- Here we have an author position where we can see that the digitalization of the IP is not a bad thing, or something that can lead its protection to some type of crisis, but something new, something that can make the IP grew instead of prejudice its protection. Other author's, like Fábio Ulhoa Coelho defends that the internet can be a treat to the Intellectual Property, as we can see in his book "At present, the technological innovation that poses the greatest treaty to copyright is the internet. In a matter of minutes, any work of certain types (books, music, films, and photography, among them) can be reproduced and transmitted to thousands of people spread around the world, without any remuneration to the author or the cultural loan"48. To this author understanding the internet can harm the IP protection, in the sense that it may hinder the preservation of copyright and the remuneration derived from the fruit of their work.

So, the big question that we raise here is basically the understanding of how the Internet can help or hurt Intellectual Property, and a division of the doctrine. Some authors maintain that the Digital World can be a support for Intellectual Property, in which it facilitates the dissemination of the author's work. On the other hand, other part of the doctrine argue that, by facilitating the dissemination of the author's work, we can prejudice gains that the author can obtain from his work, in the sense that digital is given information and access to creative works mostly free of charge and without full control by the author.

Giving a more personal opinion, we cannot take an extremist position here, regarding the relationship between Intellectual Property and the Digital World. We should have intellectual property as an Open World and in constant growth. As the world evolves, Intellectual Property must also evolve, and the protection given to the Intellectual Property in the digital world should not be too extreme. But also, we must never fail on the establishment of a certain standard of protection to the author's rights.

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⁴⁷ In "Revue Internationéle du Droit D'auteur" – RIDA – Paris, N.º132, pp 3, 1996, André Françon.

⁴⁸ In "Curso de Direito Civil, v.4", Fabio Ulhoa Coelhor, pp.271.

In that sense, I think that we should opt for a defence according to the digital standards, because, if we apply too much protection we could also create damages to the Intellectual Property, since it can cause a decrease in the demand of information by the internauts.

2. CHAPTER II: TECHNOLOGICAL AND SCIENTIFIC CONCEPTS AND UNDERSTANDINGS

A first approach on essential topics in our study is fundamental. In order to understand the relationship between law and the digital world we need to master some concepts of the digital world. It is also fundamental the understanding of the copyright law, and its connection with the state relations, that is, with the relations that are established between the different countries for the protection of the copyright on the digital world, inside and across their borders.

Nowadays, it is becoming more and more usual the use of the internet and the digital world to complete various acts of our life, from our professional life to our personal life. In our study, we intend to analyse the use of photographs in the digital environment and beyond borders. We are going also to make a brief mention of what we can understand by photography, digital world and its components. On the other hand, we are going to analyse the understanding of Private international law, and digital international relations.

2.1Photography concept

We can define photography as the "art or process of producing images by the action of radiant energy and especially light on a sensitive surface (such as film or an optical sensor)" ⁴⁹. Once a particular image is captured, it can be saved through a sensitive film, for example the photographs captured by instant photo cameras, or in CCD, CMOS or digital memories (when we speak of digital photos).

If we travel in time, we can say that the first invented photo gallery takes us to the year of 1826 by the hand of Joseph Nicéphore Niépce⁵⁰. However, we cannot say that photography is a result of the work of only one author, but of several authors, being targeted of countless

⁴⁹ Definition available in: https://www.merriam-webster.com/dictionary/photography, research done on March 20, 2019

⁵⁰ In "Discursos Fotográficos, "Fotografia: meio e linguagem dentro da moda", Valdete Vazzoler de Souza e José de Arimathéia Cordeiro Custódio, pp. 237.

evolution from the moment in which the photographic principles have been created for decades. Nowadays we have a great facility in accessing photographic and artistic contents online.

There were several concepts provided by different authors throughout history until we came to a concept of photography now recognized, *dating back to the year of 1558*, the "dark chamber" concept, by the hand of Giovanni Baptista Della Porta, concept that was recognized by authors such as Leonardo Da Vinci during the 16th century⁵¹.

The first recognized photograph was taken by the hand of a French artist, Joseph Nicéphore Niépce⁵², on a tin plate covered with an oil derivative called Bitumen of Judea. The image was produced with a camera, requiring about eight hours of exposure in the light of the sun, who Niépce called the process of "heliography". To Daguerre, another French author, produced in turn with an obscure camera, visual effects in a spectacle called "Diorama". These two authors eventually formed society and after Niépce's death, Daguerre developed a process with mercury vapour that reduced the time of revelation from hours to minutes, having been called this process as "daguerreotype process"⁵³.

In 1888 it was when we observed the phenomenon of the great popularization of photography, where the company Kodak opens its doors with the speech that it would be possible for us to capture photographs at a professional level, without our needing of a photographer. Since then, the growth of the photographic market has been increasing, with the technological process, where we can observe, for example the standard or the automatic focus, being notorious the use of image capture, the quality and speed of the processing, ... among others ... During the 20th century, the great evolution of photography in the digital world, leads us to a reduction of costs, steps, speeding up procedures, facilitating the manipulation, storage and even the transmission of photographs.⁵⁴

We began the world of black-and-white photograph catches during the 19th century, and it is still during this century that the first explorations of colourful photographs begin to take place. Later we went to the panoramic photo gallery and then to the digital photo gallery.

⁵² In Discursos Fotográficos, "Fotográfia: meio e linguagem dentro da moda", Valdete Vazzoler de Souza e José de Arimathéia Cordeiro Custódio, pp. 237.

⁵¹ Based in "A Brief History of light and Photography", Rick Doble, pp. 5, available in https://www.researchgate.net/profile/Doble_Rick/publication/265612332_A_Brief_History_of_Light_Photograp hy/links/5416c3630cf2788c4b35e519.pdf.

Based in "A Brief History of light and Photography", Rick Doble, pp.12, available in https://www.researchgate.net/profile/Doble_Rick/publication/265612332_A_Brief_History_of_Light_Photograp hy/links/5416c3630cf2788c4b35e519.pdf.

Based in "A Brief History of light and Photography", Rick Doble, pp. 15, available in https://www.researchgate.net/profile/Doble_Rick/publication/265612332_A_Brief_History_of_Light_Photograp hy/links/5416c3630cf2788c4b35e519.pdf.

Nowadays, the use of digital photography is becoming increasingly common, with numerous databases where we can collect various types of photographs and share them online, but, how do we get to the art that we call "photography"?

It is during the 1950's that we take the first steps of photography as it is now known, transforming light signals into electricity and recording these signals on magnetic tape. In the 1960's during the so-called "space race" the system we had so far as analogue becomes digital.

The first digital camera was presented in 1980, named "Nikon F3". Since that we have seen many technological developments, but, on the processes of capture and photographic language the procedures remain the same, and one talented photographer can still be distinct by a beginner photographer. The easy access to the cameras is undoubtedly one of the causes that make it difficult for photographers to exercise their copyrights. Since Kodak n°. 1, in 1888, began an accelerated process of popularization of photography, an irreversible and rising fact, with the technology and cheapening of digital cameras. The widespread use of photography has vitiated the working relationships of professionals, since they are all potential photographers today. The multiplication of photographers and the mass use of photography contributed to trivialize respect for copyright.

2.1.1 Legal concept of "photographic work" by the International, Portuguese and Brazilian copyright perspective:

Photography is the process by which light is transformed into a set of electrical impulses that will later be stored as information on a digital card and storage. The way we expose the photographs has varied from year to year, and we start with black and white pictures presented on paper, then we advance to the "half collared" pictures, and nowadays we have the coloured photos (truly we can see the three types, but the developments took us to the coloured photos, that can be observed in paper or in digital format).

That's here that we have to put our major questions: what is the relation between photography and intellectual property, and how can we put this problem under the digital world? The answer is quite simple, and leads us to analyse the most important legislations in our study.

The great secret for a photograph to be protected by copyright is that it is an artistic and personal creation of its author, that is, it must be a work of human creation and endowed with

originality in its creation. In that way, pictures from documents or business papers are not protected by the copyright law, it means, pictures that have born from a simple automatic act⁵⁵.

Under the Portuguese Code of Copyright and Related Rights we can see this conclusion in the article 164 and under the Brazilian Law N°9.610 in its article 79.

When the work of the photographer is considered as an intellectual work by the Copyright Law, he gains the exclusive right of reproduction, diffusion and sale, that is, the author of the intellectual work gains the right to earn money from is intellectual effort. That we can see under the articles 15 of the Berne Convention; 165 of the Portuguese Code of Copyright and related rights; and 79/2 of the Brazilian Law n. ° 9.610, 19th February, 1998. What we can conclude under the legal mentions referred is that, the copyright law protecting "enters in action" when we can see that the intellectual work made under the photographic art, is endowed with originality. For the European Court of Justice⁵⁶, the photograph will be protected by copyright law if it consists of an intellectual creation of the author, reflecting his personality according to his free and creative choices taken during his execution.

When we are under the artistic world we can see that the photograph concept is focused essentially on a scientific work, where we play with lights and scientific facts. However, when we are under a juridical concept of copyright work, we can see that things are quite more difficult. Here we need to understand if the intellectual work have influence of some intellectual sense, and, by executing the photographic process we can conclude if this is a mere mechanical act, or, an act doped of originality, imagination and human interference. In that context, we can refer an interesting case ⁵⁷that goes back to the year 1857, where the photographer Félix Tournachon tries an action against his younger brother, Adrien, in order to avoid the use of the pseudonym that became famous "Nadar". Under his claim to exclusive ownership of his pseudonym, and in an attempt to protect his artistic sense and knowledge as an artist, Adrien distinguishes photography as technique and photography as art. Under the first case we speak of something that can be apprehended. Under the second case we speak of something that comes from individual talent, a unique sensitivity, a particular vision and ability to grasp the physiognomy of a particular model. So, what we have are the words of Adrien referring to the artistic, to a certain intellectual creation. A creation endowed with a unique sensitivity, with human intervention, essentially demarcated by its originality, which is so underlined by the

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⁵⁵ See in that respect "Direitos Autorais", Pedro Paranaguá e Sérgio Branco, pp. 22-25.

⁵⁶ Case C-145/10, 1 of December of 2011.

⁵⁷ In "A Reivindicação de Nadar a Sherry Levine: Autoria e Direitos Autorais na fotografía", Annateresa Fabris, pp. 58-64.

legal systems under analysis, Portuguese and Brazilian, regarding the legal concept of photographic work.

And why the relation and question made under the digital world? Basically, after the technological developments it is really common the emergence of copyright-related problems in the digital world, in the sense that the internet can be understood both as a benefit to authors and as a problem in the sense that the control of rights over the work diminishes, but its publicity increases. As José de Oliveira Ascensão says, "Today, communication of images, sound and ideas is easier and faster than at any other time in history. The future will see a further increase in technologies that will allow direct and immediate access to providing the possibility of listening to classical or modern music at any time or watching a chosen movie from the living room of each one. The videophone will be as commonplace as today's phones and video conferencing will allow companies to reorganize their services and communication strategy⁵⁸".

It is notorious that we are increasingly living a digital reality rather than a concrete reality. In this sense, several questions of law are raised, and where our study is essentially focused, as is the case of the understanding of personality rights, where includes the right to property, which is of great importance in our subject, and which leads us to the understanding that intellectual works are the property of the author. We must be aware that copyright and technology are nowadays "hand in hand", as it happens Eduardo Lycurgo Leite "*The destiny of copyright is always to go hand in hand with technology and to evolve in that it evolves, adapting to the changes and overcoming contradictions without, however, eliminating the latter,* "59, that is, under the actual developments of the society, we cannot say that the copyright world and the internet world are separated worlds. We have to know that the simple act of taking some picture can may raise really complicated problems, imagine, a picture can be an artistic creation of some person, and this person has rights over his creation, but, when we are in the digital environment is really complicated to protect these rights, in the way that every person can publish and save this artistic creation in its computer or social page.

That's here that the understanding of photographic reproduction is important, and, we have to underline that we are only under a reproduction when the reproduction is not a diverse type of the original picture. That is, we will only have a reproduction when the object is indeed a work, and in this respect there is a case judged by the European Court of Justice, Case C-

⁵⁹ In "A história dos direitos de autor no Ocidente e os tipos de Gutenberg", Eduardo Lycurgo Leite, pp. 109.

⁵⁸ In "Sociedade de Informação: estudos jurídicos", José de Oliveira Ascensão, 1999, pp.7.

510/10⁶⁰. It is, in this context that we are going to focus our study and understanding the juridical relations made between copyright, photography, digital world and International Law.

Under the world of copyright law, the photography are something controversial, where we may raise the question about if the photography should be or not an artistic creation, in the sense that we have to understand if it is art or only a mechanical reproduction. Under the Berne Convention concept, in its article 2/1, the photography is an artistic creation. Being the same predicted under the Portuguese Code of the Copyright and Related Rights (article 2/1/h and 164), and under the Brazilian Law n. ° 9.610 of 19th February 1998 (under its article 7/ VII and 79). However, we have to note that not all photography's can be considered as artistic creations, for a photography to be considered an artistic creation needs to be a human act. We need to have a human interference to the photography be an artistic creation, for example, when we took a picture for our ID this cannot be considered as an artistic creation, but only a mechanic creation, in the sense that we don't have here a human act.

On this subject, ALINOVI states: "The birth of photography, as well as its entire history, is based on a strange misunderstanding that has to do with its dual nature of mechanical art: it can be a precise and infallible instrument as a science and, at the same time, inaccurate and false as the art. Photography, in other words, embodies the hybrid form of an "exact art" and, at the same time, of an "artistic science", which has no equivalents in the history of Western thought⁶¹". We can say that the photography as an artistic creation is basically the result of three essential elements: the photographer; the camera; and the landscape. That means, it all needs to be a result of the human intellect to create something that is considered art, and not something that is a mere mechanical act.

2.1.2 A Portuguese and a Brazilian copyright case:

2.1.2.1 Judgment of the Portuguese Supreme Court n. °15/2013⁶²:

Under this case, the Public Prosecutor appeal at the Court of Relation of Guimarães to set the case-law of the judgment on 07/01/2013, in the sense that, we have an opposition to the

0Acórdão.pdf.

 $^{^{60}} A vailable in https://www.gedipe.org/website/images/gedipe/jurisprudencia/C51010\%20TV2DANMARK\%20vs\%20NCB\%2$

⁶¹ In ALINOVI, 1981 apud FABRIS, 2008, pp. 173.

⁶² Available in https://dre.pt/web/guest/pesquisa/-/search/483940/details/maximized?p_p_auth=paD46I8k.

same point of law in a judgement of the same court in 02/07/2007, delivered under the process n.° 974/07. That is, the Public Prosecution Service before the Court of appeal of Guimarães brought an appeal to set the case-law issued in 7 of January 2003, claiming that the commission in 2nd July 2007, under the case 974/07.2 in the field of the same legislation have considered the non-occurrence of ant modification which directly or indirectly interferes on the resolution of the legal disputation. The question that the Public Prosecutor asks to the court is basically that the crime of usurpation needs to be considered, in the sense that the article 195/1 and 197 of the Portuguese Code of Copyright and related rights states that the usurpation is a crime, and the fact that the commercial establishment put the music of some author under the television without his consent. However, the defence of the defendant, based on the facts described, the judgment under appeal concluded that the mere receipt, in a public place by a TV show (in our specific case the MTV program) does not depend of the authorization of the authors, and in that way we do not have a crime of usurpation.

The grounder judgement, on the basis of the identical decision to the judgement under appeal, states that we don't a mere reproduction of the song on the television, we have a connection of the television to four sound speakers and the court therefore decided the need authorization from the respective authors of the works so the person responsible for that commercial establishment, committed the crime of usurpation under the article 195 and 197 of the PCCRC. So, here the question of the right to clarify focuses after all in discussion is basically the distribution of the sound, and not the mere reproduction under the television. Here, what we have is basically determine whether the crime of usurpation is verified or not under the transmission of the sound through sound speakers in different places of the commercial establishment without proper authorization and payment of a pecuniary percentage to the author.

Under the STJ agreement is possible to read the recognition of the moral and patrimonial rights, however, the final decision is that "The application to a television of extension equipment broadcast by television channel in a commercial establishment does not represent a new use of the work transmitted, so its use does not need to be authorized by the author, consequently we don't have here a crime of usurpation under the article 149, 195 and 197 of the Portuguese Code of Copyright and Related Rights". So the court have decide that here we don't have a crime of usurpation here, in the sense that in this type of situation where we have the reproduction of the some music with a song speaker does not need the authorization of the author.

As Patrícia Akester says⁶³ "The crime of usurpation involves a unauthorized use of a work or performance, as well as the use that exceeds the limits of the authorization granted", and here we don't have any, so I agree with the STJ decision. Also, in my personal opinion, if the determine that this type of use of an intellectual work, than we are going to apply a really rigid protection to a right that gives to the society the possibility to use and access to the knowledge, and has we have mention before and we are going to develop this idea before, the Copyright protection should not be a rigid protection and needs to be open, in the sense that the world is in constant development.

2.1.2.2 Judgment of the Brazilian Supreme Court n.° 1.561.671 - SP (2015/0070627-1)⁶⁴:

The controversy here is circumscribed to whether there was a negative; a copyright charges arising from the public performance of musical works on a foreign ship during a cruise under the Brazilian coast; and whose burden the proof of facts. In this particular case we have the reproduction of a song of a Brazilian singer on a ship with an Italian flag during a cruise, having the facts occurred within the Brazilian territorial and maritime boundaries.

When we have a ship transiting through a limits of the maritime of territorial limits of some country, under the rules of international law, specially the rules of the United Nations Conventions of the Sea, that Brazil has ratified in 1993, the applicable law should be the law of this country, that is, the Brazilian Law under this case.

The main question of the appeal to the supreme court that has been denied, is the understanding if the applicable law should be or not the Brazilian law, in the sense that we have a foreign ship under the water, and the main question goes to the understanding if we are or not under the maritime limits of the Brazilian boundaries. The denial of the appeal was due to the fact that under the present case, it is undisputed that the presentation of the Brazilian singer took place on a forewing ship. In that sense, the Brazilian law needs to be applicable when we can determine that the damage happens under the Brazilian maritime boundaries. However, in here we don't have certain that the fact really happens under the Brazilian maritime limits.

⁶³ See in that sense "Código dos direitos de Autor e direitos conexto- anotado", Patrícia Akester, pp. 265.

⁶⁴ Available in https://politica.estadao.com.br/blogs/fausto-macedo/wp-content/uploads/sites/41/2018/10/ITA.pdf

The court adds that here there are not even a request for production of evidence by the author, who waived the conciliation hearing and the evidence by any means and expressly requested the judgment of the advance of the dispute, as can be seen in the petition.

Thus, the court ruled that "there is no need to speak of nullity arising from the early judgment of the fact, in the hypothesis, it was the plaintiff itself that waived the probative". In that sense, and on the basis of the all mentioned above, the final decision has been "In view of the foregoing, I am partly aware of the special appeal and, to I dismiss the case".

So, in this case we have already a connection with the understandings of the International Law, by determining that we are not under the Brazilian legal borders, and in that sense we need to apply other law that is not the Brazilian law. Also here, we don't have a protection required by the author, and in that sense we don't have specifically a juridical case, so here I must agree with the final decision of the Brazilian Supreme Court.

2.2Digital Environment

The First question we have to ask is, what is the digital environment? How does it work? The first computer was created in the year of 1946 ⁶⁵by the American scientists John Eckert and John Mauchly of the Electronic Control Company, and this is the first step in the creation of the so essential "digital world" nowadays. The second essential creation of the digital world was the creation of the Internet that was observed in the 60's, during the Cold War, where two technologically highly developed countries, USA and USSR, were fighting for the continuous technological development of their countries, and then arose the so precious internet in our days.

Nowadays all types of actions can be done through a simple and quick "click", not only being limited to, social networks, but also to other types of actions and shares, such as shopping online.

One thing that we can affirm with all certainty is that from the appearance of the Digital Environment, the market has undergone a great change, being that from various types of businesses, advertising campaigns, sales and much more, the personalization, expansion and

⁶⁵ In "Revista Olhar Científico – Faculdades Associadas de Ariquemes – V. 01, n.2, Ago./Dez. 2010- A Interação Homem-Computador Através dos Tempos", Igor Aguiar Oliveira, pp. 178.

immersion of the market, this is because everything and every type of information can be obtained simply and quickly.

All this resourcefulness and technological growth have led to a great publicity of products, and not only, it is also simple to acquire information of all kinds and types. The internet can lead us to a great evolution and growth, and also to developments of the countries by leading to easy relations between many different people and many different cultures. On the other hand, the internet can lead us to some problems, crimes, frauds, and other types of acts that may raise various legal issues: "There is no single way to distribute material: the versatility of the networked digital world has resulted in various mechanisms, both legal and illegal, through which content (treated often simultaneously as a public good and private property) may circulate, and different types of organizations that facilitate this movement⁶⁶".

What is a computer? A computer is basically a system composed by electronic dispositive's that have as aim importance the safeguard, manipulation, storage and presentation of data's through a process of calculation and logic operations, following instructions given by a set of programs that determine the physical operation of the devices and also, the way of processing data⁶⁷.

Its usual determine that the informatics system is basically composed by the "hardware", the physical structure of the computer, and the software, the logic structure of the computer, but, this type of thought is not entirely correct, in the way that the logic structure of a computer is not only composed by programs, but also by systems and computer networks, programming languages, electronic files, and databases (in the field of information technologies in the strict sense) and, the communication protocols and domain names (in the field of communication technologies).

Since the physical structure of the computer consists of electronic devices and the logical structure of a set of rules, instruction and data, is only possible for these two interact if they use the same language, so here is really important the conception of programming languages.

The programming languages are not the same thing as the software, in the way that they do not contain specific instructions for the CPU to execute. The machine language represents the primary "tasks" that the CPU is capable of executing. Assembly language and high-level

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⁶⁶ In "Understanding copyright – Intellectual Property in the Digital Age", Bethany Klein, Giles Moss, Lee Edwards: pp. 45 1st paragraph.

⁶⁷ Definition based on : https://conceito.de/computador.

languages are more than a simple "machine language translations" into language that is closer to human language. The entire computer program must be written in a programming language to be executable, but not confused with, just as a literary text must be written in a language (a country language like Portuguese or English) and obey its grammatical rules and orthographic to be correctly interpreted. But, the text itself is not confused with the language which it is expressed. The machine language represents the semantics and syntax to which instructions inserted in a program must comply so that the computer is able to understand and perform the primary tasks of which it is technically capable.

On the other hand, the entire computer system requires a computer program for its operation. The programs relate not only to the physical structure of the computer, but also to other logical elements and still each other, so, in a technical definition, we can say that the computer program "consists of a sequence of instructions (commands) formulated in a notation which the computer understands. Such instructions strictly specify (without ambiguity and imprecision) the intended actions, and to some extent are the written representation of the algorithms⁶⁸". This basically means that a full understanding of its technical concept leads us to the analysis of the concept of the algorithm.

In a mathematical definition, we can say that the algorithm is basically "an infinite sequence of steps (intended to serve as instructions), each of which is defined and executable, operating on the data, producing results⁶⁹", but we cannot here be focused only on a mathematical definition, it is also necessary to give a general definition compatible with the most diverse sciences that exist. So, in a few words, we can say that algorithm is the set of precise, unambiguous, analytical, general and abstract rules, created at an earlier time, that when applied by a person to lead that person to be able to achieve a correct result.

In the computer science, authors like José Braga de Vasconcelos and João Vidal de Carvalho define algorithm as "a procedure that can be implemented and executed by a computer science and, in particular, the development of computer programs". But, can we say that an algorithm and a computer program are the same thing? No, the algorithm is the ideal conception, theoretical, abstract, of the problem solving; and the computer program a practical realization, a representation, of that solution.

In our study, two other concepts are relevant: the concept of electronic file and, the concept of databases. For electronic file we can understand "a set of information usually stored"

⁶⁸ In Coelho, Computador e Informação, pp. 47.

⁶⁹ BORRUSO: RUSSO; TIBERI, Informatica per il giurista: dal bit a internet – pp.207.

in magnetic form (disks, floppy disks or other) in the form of computer data. This data may or may not be interpreted directly by the machine. A file can be a text document, graphics, images, or sounds. Through its extension we can usually identify its content or type⁷⁰"; the concept of Database could be "A Database system (SBD) is a computer-based system(s) whose main purpose is to store data in order to allow users to query and update the requested information⁷¹". But, from a technical and summary point of view, we can say that the databases are a set of registers stored in the memory of the computer in a systematic way, that is, a register stored in the memory of a computer so that it can be used by a set of users for the most diverse purposes.

So, we can say basically that a computer is in is background "a physical structure, composed of a set of electromechanical, magnetic or optical devices, destined for the storage, processing, input and output of digitized data and, on the other hand, in a logical structure composed by rules of syntax and semantics, codes and algorithms designed for the operation of physical devices⁷²", but how do we establish the relation of this brief knowledge of the Digital World to our subject?

There are many influences of the digital environment in our personal lives. We use the technology to communicate with others and still have information and be linked to the world around us. The digital environment is a fundamental piece to all of us nowadays, having also influences in which news and types of entertainment media is produced, distributed and consumed. By consequence, all of our world have suffered changes, including law that needs to be in constant development to control crimes and other type of juridical questions and problems that can arise from the Internet World.

That's here that we have to question how we can protect the IP rights and specifically the copyright under the digital world. The copyright law have, day by day, more and constant presence in the ordinary people, so the understandings of the copyright protection and debates between the jurists are quite new. Imagine, someone took a picture of a person and makes this picture a parody under the internet, where everyone can watch and show the picture, how can we protect it? Many years ago, the law is not capable of protecting this type of abuses and

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⁷⁰ Matos, Dicionário de Informática e Novas Tecnologias, pp. 151.

⁷¹ In "Desenho e Implementação de Bases de Dados em Microsoft Access XP, Centro Atlântico, 2002", Ana Azevedo; António Abreu; Vidal de Carvalho, pp.38 to 43.

⁷² In "A Tutela Jurídica do Formato de Ficheiro Electrónico", Tese de Doutoramento em Ciências Jurídicas Especialidade em Ciências Jurídico Privatísticas – Pedro Dias Venâncio.

crimes under the internet, by the simple fact that we don't have juridical institutions capable of protecting people against these types of interference in their fundamental circle of rights.

According the words of *Dr.*° *YiJun Tian*⁷³, there are mainly six problems that the digital world can may rise under the copyright protection, that are: Piracy; Social Resistance problems, like the lack of public support for the IPR enforcement; Legislative problems, such as lack of strong copyright legislations; Law enforcement problems, such as lack of transparency of court systems, local protectionism and inadequate well-trained legal personnel; Economic problems, such as conflicts of benefits between copyright importing and exporting countries and conflicts between strong copyright and the growth of domestic copyright industries. This type of problems has more impact in nations with more economic growth, like the US, the EU or China, where we can see lots of trades, international and bilateral trades to try to fix these type of problems with the objective to colmate the situation and give to the countries a solution, to know what the law should we apply to a specific situation/case law issue.

So, here what we have is basically a new part of the legal protection that have borne with the digital development, being our focus essentially on the protection of the copyright law under the photography reproduction that can be made easily on the internet. In what touches to the reproduction rights, we can have many different types, for example, exclusive rights to make copies of any work; the right to authorize the possibility of make copies of this work; we can also have mechanical rights, that are the rights of a holder to grant permission of reproduction of some work, like the copies made under CD or other types of digital uses; the performing rights, that are the rights of an holder to have payment when his work is used in public, for example to expose or represent; the publishing rights, the rights that are a way of authorizing an artist or person to use the first author's work by his self with the first creator consent, usually the first creator is paid for his work and then he loses the rights against is creation, this type of rights are really common under the musical world.

As far as works on the internet are concerned, we have to distinguish between protected works and unprotected works: works are protected on internet pages; the texts of that page; graphics and photographs as artistic works; being even the form of organization of the page protected as a form of expression of a computer program, but, for example, a reference to another page is no longer protected in the scope of intellectual property.

⁷³ In "Re-thinking Intellectual Property – The Political economy of copyright protection in the Digital Era", Dr.° Yijun Tian, pp. 125-168.

The unprotected works ⁷⁴are the works that a person can access for free downloading, thus granting the free use of these rights. ⁷⁵What we are talking here is basically the transfer for free granting or for a symbolic price of the rights of the use of any program, for a specific time and with certain limitation of use, and, often ends up being a marketing strategy that offers the users the use of a particular product for a symbolic value, for example the Netflix subscription, that for some period of time the subscriber can use for free the channel, by seeing the TV-shows offered by a symbolic price, the subscriber have an account and then he use the products offered by a specific period of time for a symbolic price.

Another concept that we have to know here is the so called "public domain", that is the work that deserves protection by the copyright law, but in which the rights have already expired (as a rule 70 years after the death of the author). The work in the fallen in public domain remain the moral rights of the Author that are imprescriptible (namely the right to paternity, and even integrity).

But what are the new ways of using ⁷⁶ some work in concrete? <u>Digitalization</u> that is a way of reproduction and placement of a work under a configuration that allows the use of the computer. Another way of use is <u>printing</u>, that is allowed with some limits to the copies made, in the sense that if we overtake some numbers of copies, then we are practicing a violation under the law. <u>Upload</u>, that corresponds to the placement of a data by an internet participant on a destination server, making them available to the public. <u>Download</u>, that consists in a transfer to the computer of a file that is localized in another place. <u>Per-to-per (P2P)</u> transmission, that is, a sharing of computer files resulting from a network connection of several personal computers, which does not require the connection to a central server because it harnesses the memory, speed and resources of all networked computers, and, its capacity increases depending on the number of networked computers, but this implies the use of appropriate programs. <u>Simple transport (mere conduit)</u>, here we are talking about the simple transportation, it means, a typical way of transporting data through the internet, which is not carried out globally, but rather in small packages Internet browsing, that is the typical way of using internet in which trough a browser, users have access to the documents that make up the website. <u>Caching</u>, that

⁷⁴ Because this type of creations does not respect the specific requirements to be a protected work by the copyright law and in that sense they do not have the specific rights linked to an intellectual creation, like for example the moral or patrimonial rights.

⁷⁵ In that sense, "Re-thinking Intellectual Property - The political economy of copyright protection in the digital era", Dr. YiJun Tian, pp. 82-85.

⁷⁶ In that sense, "Re-thinking Intellectual Property – The political economy of copyright protection in the Digital era", Dr. YiJun Tian, pp. 155-163.

is a short-term storage process for existing data on a remote site in order to allow the users to have faster access to that data instead of constantly requesting it from the same site. Hosting, defined as the storage of information provided by a recipient of a service at the request of that recipient of the service. The distribution of works by electronic messages and other means of individual communication, it means, here we are speaking about of chats, the distribution of works must be allowed or free. Placement of hypernexes (links), these ones do not correspond to a form of reproduction of the work not to its making available to the public, being mere reference to certain sites on the Internet. The placement of frames, they are limited to refer to other content, that is, they even integrate parts of an external website on the sites, since they divide the site into two windows, one of the windows that is open to a foreign site. And finally, on demand service, that corresponds to the digital offer of audio-visual works or simply audio, at the request of the user. The offer can either be or involve a fee, and can be made on the internet or through special networks, such as the cable network.

In that sense, our world have suffered transformations like the permissions that we have when we are surfing under the internet. For example, the HBO channel, that is an American channel that have authorization to put some TV shows happening, and have license from the creator of some series to do that, and then we can see that for a symbolic price. But, in other hand, when we are seeing the TV show online we have to be careful, in the sense that we can use a pirate program that have no license to show the TV shows, films and other type of intellectual creations. Another point that we have to pay attention is the new type of contracts that this new legal area may rise. Here the relations are not the common relations that we know (B to B or B to C -business to business or business to consumer), here we have an artist that creates something and then have the power to sign with the company the sale of his rights. To protect the authors, the companies are really controlled by law, in the sense that the copyright law main concerned is the protection of the allocation of intellectual property rights, it means, our main concern here is the protection of the rights that one author have from some intellectual creation.

We can have many types of online contracts⁷⁷ here, like, <u>software license agreement</u>, that are typical agreements where the owner of a computer programme allows others to use them for the purposes agreed upon by the parties, and these type of licenses can be licenses of production, where the holder of the program authorizes another entity to produce it, distribution,

^{77 77} In that sense, "Re-thinking Intellectual Property - The political economy of copyright protection in the digital era", Dr. YiJun Tian, pp.129.

in which the holder of the program allows its commercial distribution to others, and, the enduser, where the program owner allows an end user to use it for the purposes intended by the end user. <u>Atypical licenses</u>, that correspond to copyright license agreements in which the licensing is not aimed at the economic exploitation of the work, but rather other purposes.

Going back to the concept of databases, they had reached gigantic proportions, and may raise the problem of when there is a protected work among the elements used in the computer, and, in this sense, it is necessary to pay attention to some digital concepts. Bases/data sources, that are refers to the work itself placed on the computer. Referential bases, those that give the mere indications of a work, as is the case of the bibliographical indications. General indications, here we are talking about the references in its general, as the reference to the author or publisher for example. Extract vs. abstract, the extract is a partial use of the work where traces of a particular work are removed, and the abstract is a set of words that can be realized both by the author and third, with the main objective to give a brief introduction to the clarification of the work under analysis. Elaboration/ transformation, in the sense that is also possible through a computer the elaboration of works being able to transform them, like for example joining several texts in one, making the source text not recognizable. The author's consent⁷⁸, it is high questioned under the digital world, trying to see whether or not the author has to give his consent for a given user to use his work online. Works input and output, input are works that require the author's authorization to be input on the user's computer, for example one book, and, output when we have works that only require the authorization of the author when reproduced or presented, for example a film. And finally, the concept of databases, that are increasingly used in the research and use of information online, being of great importance in our subject matter, as I mention before, and here we can have several examples of photo banks, for example the Fotolia Portugal, that we can use without infringing the copyright law, however, the databases are somewhat controversial subject in the world of copyright, for example, to the Portuguese legal system the law must apply the principle recognized under the article 3° of the PCCRR, that basically says that we must do a comparison of the sets of works with the originals.

⁷⁸ José de Oliveira Ascensão defends that this does not have any kind of support, since the digital world makes it possible for the author to consent the use of a particular work. In "Direito Civil – Direito de Autor e Direitos Conexos", José de Oliveira Ascenção. Let us remember that the internet works 24 hours a days, and requiring the author's consent for all kinds of actions would be impossible or would take days or hours until that user obtains it, which, and agreeing with the position of the aforementioned author is very difficult or even impossible.

Our great question then goes to the understanding of the problems that digital reality can create in the World of copyright⁷⁹ and photography. We usually ask ourselves immediately the concept of territoriality in the field of copyright in the digital world, with the meaning of the Digital World as a "world without frontiers", where anyone can access a work anywhere in the world. In the specific case of photographs this is even more complicated, in the sense that photographs are used in really huge proportions and in basically every website, so we need to determine how it can be protected and under what circumstances. Another point that we must address is the economic and patrimonial rights that must be linked to the work, in the sense that even online the author does not cease to be entitled to his moral and patrimonial rights. Under the first sense, because the author did not stop to be an author, and as an author did not stop to be a person, and, in the second sense because everyone who creates something intellectually is worthy to obtain a reward for the work that was done by him. Imagine a photographer that have putted his works on its website, but, someone, admiring its work, uses a photo to promote some type of business. Does not deserve this photographer the protection under the copyright? Did he loose his rights only because he likes to put his work online? Of course not, as we mention before, he is an author, and has an author and person deserves to be protected.

So, in conclusion we may say that, even being the works putted online, they still being an intellectual creation, and being an intellectual creation deserves to be protected. We are going to develop these thoughts afforded.

2.3 Rights connected to Photographs and the legal discussion about the necessity or not to register the creative work:

Under the rights that involves the photography, we debate the rights in case of works done for another. That is, the rights that correspond to the employer or the person who made the photographic order, i.e., in this type of situations the copyright will belong to the person who whom the work is intended. Also the rights of the person photographed, this is because when someone is photographed, a set of rights enters into her sphere of rights. In this specific case, the person can abdicate from its rights, if there isn't an agreement to the contrary, for example the right to publish or reproduce the photograph. And finally the alienation of the

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at 1st of April 2019.

⁷⁹ See in that sense https://www.bad.pt/publicacoes/index.php/congressosbad/article/view/420, website analysed

negative, where we extract the sphere from the mere tradition of the negative, linking it to the business of alienation, giving the presumption that the rights were ceded over the author of the photograph.

With regard to the faculties of patrimonial character granted to the author, what we have to take into account here is that the protection falls on the photograph and not on its object. The photograph reproduces a reality, not imprisoning the same reality, giving an economic exploitation of the work of art, but in a limited way. For example, someone photographs a landscape, the object, which is the landscape, is not liable to calculation, but the photographic work itself will already be.

In the past, to the Portuguese law concept, the protection of the author of the photographic work in comparison with other authors, is in some way prejudiced, since the work is only protected 25 years after the photographic realization. After the European Council directive n.° 93/98/CEE⁸⁰, in Portugal, the photographic works are protected under the Code of Copyright and related rights, dictating the article 31 of the Portuguese Code that the protection of the author ends seventy years after his dead, even if the work has only been published in the past.

"The authors who are dedicated to the study of copyright emphasize that they are endowed with a hybrid, double or sui generis nature. The author is, in fact, the holder of two sets of rights, one respect, for moral rights, which would be an emanation of the personality of the author and which are closely linked to the relationship of the author with the elaboration, disclosure and titling of his work. The other refers to patrimonial rights, which consist basically of economic exploitation of protected works". To the Brazilian law concept, usually, the doctrine states the copyright as personal rights, that is, rights that cannot be renounced or inalienable, as the article 27 of the Brazilian Law says. Under the article 41 of the Brazilian Copyright Law, the protection of the patrimonial rights of the author has a duration of "seventy years counted from 1st January of the year following his death, in accordance with the order of succession of the civil law", and adding Article 44 of the same law that "the term of protection of economic rights for audio-visual and photographic works shall be seventy years, beginning on January 1st

⁸⁰ Important to our study is the article 6 of this directive, that says that the "Protection of Photographs which are original in the sense that they are the author's own intellectual creation shall be protected in accordance with Article 1. No other criteria shall be applied to determine their eligibility for protection. Member States may provide for the protection of other photographs."

⁸¹ In "Direitos Autorais", Pedro Paranaguá e Sergio Branco, pp. 47.

of the year following the date of its publication", therefore, as in the case of the protection of photographic work in Portugal, the general regime of the Brazilian law on the protection of copyright will also apply the general Brazilian legal regime to the protection of the photographic works.

One situation that may occur is the transfer of author rights by the owner or successors to third parties, and in this type of situation the law that is being analysed by us, regulates this type of relationship in order to protect the interests of the author relating to his work. The article 49 of the Brazilian copyright law states that "copyright may be wholly or partially transferred to a third party, by the author or his successors, in a universal or singular capacity, in person or through representatives with special powers, through licensing, concession, assignment or other means admitted in law ", that is, copyrights may be transferred, by right to be recognized, to third parties, in whole or in part, in whole or in part only.

To the Portuguese legal concept, under the article 40 of the Portuguese Code of Copyright and related rights "The original owner, as well as his successors or transmitters may: a) authorize the use of the work by a third party; b) transmit or encumber, in whole or in part, the patrimonial content of the copyright in that work." Under the scope of protection of the Portuguese legal regime, as in the Brazilian legal regime happens, the author, his successors or transmitters are allowed to the provisions of the property rights in the work, allowing third parties, through authorization, partially or fully, onerous or transmit these patrimonial rights. But the article 42 of the Portuguese law concept states that the moral rights over the work to third parties, but moral rights cannot be transferred inter vivos. Moral rights are rights that falls on the author's personality rights, as we have previously referred to the Brazilian legal understanding. But also when we speak about the moral and patrimonial rights of the author, the personality rights are non-transmissible and inalienable. But it should be noted that under the article 57 of the Portuguese Code of Copyright and Related Rights, certain moral rights may be transmitted after the death of the author to his successors.

Is the mention of the name of the author or the date of its publication a mandatory element for the protection of copyright? According to the Brazilian conception, copyright

⁸² See in that respect the judgment of the Portuguese Supreme Court of Justice, Case n. ° 3501/05.0TBOER.L1.S1,04/29/2010.

⁸³ In that sense says Luís Francisco Rebello that the defense of the genuineness and integrity of the work that has fallen into the public domain extends to the claim of paternity, see "Código do Direito de Autor e dos Direitos Conexos", Patrícia Akester, pp.114.

protection is independent of registration, article 18 of the Brazilian Copyright Law. Thus, authors may or may not register their works, and registration is therefore a faculty and not an obligation. The same dictates the article 12 of the Portuguese Code of Copyright and Related Rights. But, the question is, if we don't have the register of any work, how can we protect the intellectual creation? As stated by Pedro Paranaguá and Sergio Branco, "It is important to emphasize that registration is not a right, that is, it is not the fact of having a record of a work that its holder will be considered as the author. The registration as any other evidence and, if it is satisfied that the holder of the registration is not the author, may decide in favour of the one who is not the holder of the registration⁸⁴". So, taking into account the two legal systems under analysis, we can say with Patricia Akester that "(...) copyright is, usually, attributed to the intellectual creator, and, unless otherwise provided by contract, the "author" is the intellectual creator of the work, with copyright belonging to the work "85, that is, the intellectual creator will be always the "author", unless we have a contract that establishes a different conclusion. But, if registration is optional⁸⁶, what is the purpose of registering the work? Well, sometimes the registration is necessary for distribution purposes, as well as for the purposes of proof in cases of determining the priority of the work, that is, the registration can be useful, therefore, in case it is necessary to prove in an eventual dispute in which more than one person claims to be the owner of the rights to a particular work.

2.4Relation between law, Intellectual Property (copyrights and photography) and the digital world

The first main thing that we have to know is that with all the countries trying to solve the problem of IP imbalance we have lots of international trades and legislative process's related to IP and copyright. A demarcated example is the established relations between copyright importing and copyright exporting countries, what can lead us sometimes to IP trade wars in certain circumstances. Although, even having international agreements that leads us to increased standardization of copyright regulation around the globe, the legislative variation

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⁸⁴ In "Direitos Autorais", Pedro Paranaguá e Sergio Branco, pp. 29.

⁸⁵ In "Código do Direito de Autor e Direitos Conexos – Anotado", Patrícia Akester, pp. 60.

⁸⁶ As we have mention before, see in that context, "Código do Direito de Autor e Direitos Conexos", Patrícia Akester, pp. 61-62; and, "Direitos Autorais", Pedro Paranaguá e Sérgio Branco, pp. 28-29.

persists. We have many different social and cultural settings trying to produce responses, but, we still have many debates around the law, copyright and the digital world.

In what touches to the digital environment we have a group of persons that are linked like, consumers, companies, police makers, creative workers, pirates, (...), that assume an important paper to understand our topic. To understand the copyright under the digital age, we need to know how copyright have developed, and, also, we have to stress that the digitalization of the copyright have resulted in many opportunities, economic cultural, but also, in many ways to infringe the legal limits imposed.

But what are specifically the main copyright problems than may arise? Piracy; social resistance problems, like the lack of public support for the IPR enforcement; legislative problems such as the lack of strong copyright legislations; law enforcement problems, such as the lack of transparency of court systems, local protectionism and inadequate well-trained legal personnel; economic problems, such as conflicts of benefits between copyright importing and exporting countries and conflicts between strong copyright protectionism and the growth of domestic copyright industries; public interest problems, such as conflict between strong copyright protection and effective technology transfers, and conflicts between strong copyright protection and the public's right to access information.

How do we solve that? One thing that we should may say is that, these type of problems are more common and have more impact in nations with really strong economies, like the US, the EU and China, where we can see lots of trades made, international and bilateral trades, that try to fix these types of questions and problems, with the objective to fill the situation and give a solution, helping for example what is the law applicable to a specific case or problem.

It is also possible to limit the protection of the copyright law, within the scope of Article 46 of the Brazilian Copyright Law, we can say with Pedro Paranaguá and Sérgio Branco⁸⁷ that "limitations to copyright are legal authorizations for the use of third-party works, protected by copyright, regardless of the authorization of the authors. and since the rule is to prevent the free use of works without the consent of the author, the exceptions provided for by the law in its article 46 are interpreted as a restrictive rule, that is, any exception not explicitly indicated is inadmissible in the said article ". Under the Brazilian Legal conception, we can have limitation to the copyright protection, but only under the examples that are recognized in the article 46 of the Brazilian Law. Under the article 7 of the Portuguese Code of Copyright and

^{87 &}quot;Direitos Autorais", Pedro Paranaguá e Sérgio Branco, pp. 72.

related rights we have a similar understanding, where certain intellectual creations are excluded from legal protection, and this understanding is also provided for in the Berne Convention, article 2, Convention of which the two countries in question are signatories. The Berne Convention reserves to the legislations of the countries of the Union the determination of the protection to be granted to certain productions, such as political speeches that are translated. We come in this sense with an understanding of a certain social function of copyright, where we seek to strike a balance between the right held by the author and the right of access to the knowledge that society enjoys.

What are the means that we have to protect the copyright? We are not going to extend much in this sense, but we are going to emphasize essentially the provision of civil protection under the copyright world. We are now going indicate the civil means of protection that we have in both legal systems under consideration, never forgetting that there are also means of protection under the criminal law, but due to lack of time that we have, we will focus on the analysis of civil protection, in the sense that I consider this to be the most important means of protection for the subject that we are currently analysing.

First of all we have to point out that the unlawful use of a work and / or provision, in whole or in part, without the authorization of the respective right holder lead to a breach of jurisdiction. Also, still needs to be noted that the copyright is not intended to protect an idea, but rather protects the exteriorization of that idea, i.e., the idea of a particular person can freely be used, which cannot be to be used is the externalization of that idea. Imagine for example that I think about writing a story for children about farm animals, someone else comes and actually writes the book, I cannot say that this person stole my idea and that it is violating my copyrights, in the sense that in my case my idea never ceased to be this, a mere idea, and in the case of the other person came to be the externalization of this idea, the existence of an intellectual creation in concrete. It is also important to underline that, at the moment when we are dealing with a request for the protection of the copyright of a certain intellectual creator, the defendant may also claim that there has been no breach of justification, invoking for example, some of the exceptions provided for by law or the expiry of the time provided by law (70 years for both legislations under review). We must also take into account that when faced with legal situations in which all elements are domestic, the Forum Court will apply the local rules to render its decision, but when there are elements of connection regarding foreign legal orders will arise a series of issues to be resolved under private international law, such as the determination of the competent court or the applicable law, which we will examine later.

As Patricia Akester ⁸⁸says, the crimes of usurpation and counterfeiting ⁸⁹ are nuclear, and correspond to what is usually called piracy and plagiarism ⁹⁰are core. According to articles 195 and 196 of the Portuguese Code of Copyright and Related Rights and articles 102, 103 and 104 of the Brazilian Law on copyright, anyone who reproduces, publishes or sells another's work will be sanctioned under the terms legally established. Under Portuguese law, crimes of usurpation and counterfeiting are distinguished by the fact that, in the case of usurpation, the work or performance is used without authorization or beyond the limits of the authorization granted, in the case of counterfeiting the work is used as in the case of usurpation, we are essentially infringing the patrimonial content of copyright, even in the case of infringement, not only the patrimonial content of the work, but also the moral right to paternity of the work or performance⁹¹.

In the digital environment, we must understand that the protection of technological measures was first enshrined in the 1996 WIPO treaties. In the European Union, the obligations relating to technological measures arising from the WIPO Treaties were implemented through Article 6 of the European Directive n.° 2001/29/CE, which seeks to ensure adequate legal protection against the neutralization of technological measures, and also ensure protection against the commercialization of devices aimed at neutralizing these technological measures, and also covers the measures used to control access to protected content in a context that distorts copyright protection. Like the WIPO treaties, the 2012 Beijing Treaty ⁹²also contains obligations relating to technological measures, obligations concerning information on the regime of rights and obligations concerning the effective enforcement of rights.

In this sense, the article 217 of the Portuguese Copyright and Related Rights Code provides the concept of "effective technological measures", following the understanding of the Information Society Directive, assimilating to technologies that are intended to prevent or restrict acts performed in respect of works, services or databases and data which require the authorization of the holder of a copyright or related right or the sui generis right, this article is not intended to prevent technological development, but rather to confer legitimate protection on the author consumer "online". In the scope of the understanding of Brazilian legislation regarding protection in the digital environment, we will have a communion with the Consumer

⁸⁸ In "Código do Direito de Autor e Direitos Conexos – Anotado", Patrícia Akester, pp. 266.

⁸⁹ See in that sense the Portuguese Case Law n.° 5670/2006-7, 01/16/2007.

⁹⁰ Even the crimes being not a topic that we are going to develop much.

⁹¹ See in that sense the Portuguese Case Law n.° 10441/2003-7,03/02/2004.

⁹² See in that sense https://beijingtreaty.com/.

Protection Law, and civil law, in the sense that the understanding is that online the consumer finds with the author's side also several risks and so it must also be protected through the application of the Consumer Law. ⁹³

In conclusion we, may say that, Portugal and Brazil, in a similar form of what happens in the rest of the globe, have some open rules that try to answer to the copyright protection digital problems, always with a conscience that this is an open area in constant development, and what can be an answer today, can be not an answer tomorrow. So, the digital copyright problems are questions that are in constant development and don't have specific solutions, we have trades and agreements around the globe with the intention to fill this problem, but we need to keep in mind that we are studying a sensitive area, and what is an answer today cannot be an answer tomorrow and we need to remain attentive.

2.5 Applicable law

We come here into a problematic of Private International Law, where we will try to designate the law competent for a juridical case. When we have plurilocalized juridical questions, we will have several legal systems that will be understood as competent to solve a certain this exact legal question. However, how do we determine which law should be applicable? It is with Savigny⁹⁴ that the conflict or technical method of the conflict rule is born, this author dictating that the problem of private international law is to find, for each legal question, its headquarters, which in turn will dictate the local law to which it is subject. The method of private international law is the conflict method and is characterized by the use of conflict rules, that is, private international law does not provide by itself, which law applies to a particular case, but rather designates which rule should be applied for assuming here an important role the rules of conflict of law. But what are the conflict rules? Conflict rules are parts of some article that indicate the typical factuality, by means of which will be indicated the law competent to regulate the aspect of the legal life in question. That is, with the conflict rule we are going to understand the area of the law that needs to be applicable.

Following the classical conception, rules of conflict were understood as rules of rigid content, not giving much marge of action to the judge. The element of connection would already

⁹⁴ In "Nótulas de Direito Internacional Privado", Maria João Mimoso e Sandra C. Sousa, pp. 54.

 $^{^{93}}$ See in that respect "Direitos Autorais", Pedro Paranaguá e Sérgio Branco, pp. $81-92.\,$

be predetermined or determinable by the norm, whenever the forecast fits. This is because, in order to understand this doctrine, private international law is at the service of values of legal certainty and security.

From the outset, there have been voices against this conception, right from the beginning in the USA, which points out the difficulty or even impossibility of determining the closest connection in certain situations. Such as the problem of the connection of personal status, domicile or habitual residence. In addition to the fact that the rules of domestic law are misguided to regulate international situations, and it is still a method that makes it difficult to adopt a solution that is materially adequate to the specific characteristics of plurilocalized legal situations.

Among several authors who have been assuming against the classic conception are David Cavers, Brainerd Currie and Albert Ehrenzweig⁹⁵. To David Cavers, we have two thoughts, the first one is that we must reject conflict rules completely and the second one prefers the principles of preference. In Cavers' first thought, the DIP problem would not be a problem of choice between law, but between substantive rules, in a concrete case of international life. The court should compare the various laws that would apply to it and the concrete results of that application, then, it would have to compare these results in the light of considerations of material justice and the imperatives of social interest conveyed. After this inquiry, the judge should choose the "best law", that is, the law that are fairer to the parties and, at the same time, respect the objectives of legislative policy pursued by the competition rules. Secondly, in 1965, David Cavers⁹⁶ advanced in The Choice-of-Law-Process a series of criteria that should guide the judge, principles of preference, in matters of non-contractual and contractual liability. These principles were intended to limit the scope of the laws applicable in each case, depending on certain connections, from which the judge would choose the applicable law having regard to the content of the material precepts in question.

To Brainerd Currie⁹⁷, we need to go to a total rupture with the connection method, denying the system of conflicts. For the author, the resolution of conflicts of law would be based on the governmental method, the analysis of state interests, and, on the basis of this construction is the idea that all material norms have the purpose of realizing a certain policy and the State that edits these norms has an interest in the realization of the policies that underlie

⁹⁵ In "Nótulas de Direito Internacional Privado", Maria João Mimoso e Sandra C.Sousa, pp. 64-70.

⁹⁶ In "Nótulas de Direito Internacional Privado", Maria João Mimoso e Sandra C.Sousa pp. 64-67.

⁹⁷ In "Nótulas de Direito Internacional Privado", Maria João Mimoso e Sandra C. Sousa pp. 67 – 68.

it. Thus, seeing this author in the conflict of laws a conflict of sovereignties, therefore, before an international situation, it would be necessary to analyse the policies of the various laws in competition, the scope of application of each of these standards delimited according to the state interest that will be the basis of this rule. So the author makes a public analysis of the resolution of the conflict of laws.

Finally, to Albert Ehrenzweig ⁹⁸the existence of conflict rules can be accepted, however, his starting point would always be the application of the law of the *forum*. To this author the conflict problem arises only after it has been concluded, that it is not a question of cases where the law of the forum is independent of any choice. Once that conclusion has arrived, it would be up to the conflict rules of the forum to designate the applicable law. In the event that we are faced with the lack of a conflict rule, the application of the rule foreign law can only result from the interpretation of the *lex fori* rule according to its ratio or policy. Applying a foreign law is dependent, not on the ratio of foreign law, but on the law of the forum: the interpretation of the law of the forum determines whether it is the one that applies or the foreign law.

In the end, what can happen in this type of situations that are plurilocalized situations can lead us to situations of legal accumulation or legal vacuum, in the case of the legal accumulation we will have situations in which two or more material norms are seen as contradictory; in the case of the legal vacuum what we have is the absence of an applicable norm, resulting this type of situations into the technique of adaptation. But what is the technique of adaptation? The technique of adaptation is the comparison and combination of the laws in presence to find a solution that adapts to the singularity of the concrete case, this technique is being sometimes fallible and falls as much on norms of material right, as rules of private international law.

Another technique used in the field of private international law is a qualification, which consists of operating within the framework of a particular concept, that is, we qualify the norm in order to subsume them in framework concepts that will have to be interpreted and integrated later.

Lastly, we have the technique of interpretation, which is composed of four theories⁹⁹: the theory of *lex fori*, that is, the theory that always refers to the law of the forum on the subject in question; the theory of *lex causae*, that is, the theory that refers to the place where the cause of the legal problem occurred; the comparative theory; and finally the teleological theory.

⁹⁸ In "Nótulas de Direito Internacional Privado", Maria João Mimoso e Sandra C. Sousa, pp. 68-70.

⁹⁹ In "Nótulas de Direito Internacional Privado", Maria João Mimoso e Sandra C. Sousa, pp. 119 – 124.

One concept that is very important in the study of private international law is the concept of conflict norm, which is basically a means of coordinating the different legal orders, allowing a given aspect or effect of a life situation with relevance to the law to be disciplined by a law that is intended as the most appropriate to apply, because the purpose of private international law is not a direct regulation of international private relations but rather indicate the legal order competent to regulate a particular international private legal relationship.

The conflict rule consists into two elements that form part of its structure: the framework concept and the connecting element. The framework concept is, in essence, what delimits the scope of the conflict rule, that is, it determines the legal matter to which the rule refers, as *Ferrer Correira* ¹⁰⁰argues, by saying that it is through the framework concept that the conflict rule defines its connection object or cuts the normative category for which the chosen connection is operational. The connecting elements have the function of designating the applicable law, and the legal order will be the one where the connecting elements are located.

The connecting elements may be classified according to their nature; number of connected elements used; designation function; structure; and the variability of its content. As regards their nature, the connecting factors relate to circumstances relating to the subjects of the legal relationship, which may be subjective or personal; or objective and real; of fact or material; or as to the elements of guarantee of the legal relationship. But, still we can have several elements of connection highlighted, for which we will have to designate which will prevail.

The connection elements may be single or single connection: they have only one connection element; or multiple or complex connection when they have two or more connection elements. Here we can still have an alternative connection, where the interests to which the International Private Law responds may require the use of two or more connections. Cumulative connection, it is, as a subordination, the production of a certain legal event to the agreement of two laws, that is, to the satisfaction of the requirements established in each of them, with a view to avoiding the creation of situations that cannot aspire to recognition in one of more closely related states (thigh or lame situations). Distributive connection, here, there is a distribution of different legal orders of the conditions of validity of the same act. And finally subsidiary connection, as a way to prevent the hypothesis of missing the primary connection element, the

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¹⁰⁰ See in that sense "Lições de Direito Internacional Privado", Ferrer Correia.

subsidiary connection conflicts rule designates the substitute element to which that standard recurs.

Thus, the rules of conflicts may be bilateral, when they indicate how competent either the law of the forum or the foreign law; or unilateral, when they indicate as competent only a legal order. Pointing Ferrer Correia that "The paradigmatic norm of the traditional model of the conflict rule is bilateral, that is, the one indicated by the competent law to solve any concrete juridical question that is subsumable to the respective conflict category, regardless of whether this law is the country where the problem arises or a foreign law. This is the guideline usually followed in practice, but not the only one possible. The bilateralism system opposes the one-sidedness ¹⁰¹".

Another important problem is the problem of characterization that is a general problem of law. However, the particularity that exists in DIP results from the fact that the framework concepts are not descriptive concepts but technically legal, and therefore raise more problems. The problem of characterization is a problem of interpretation and application of conflict rules. Normally, we divide the characterization into two stages: the characterization criteria, which is a problem of interpretation of the framework concept, and the criteria which should guide the interpretation of the framework concept; and the characterization itself or, according to another designation, the object of the characterization which is the problem of the application of the conflict rule. It is a question of whether a given institute or rule of a designation designated by a conflict rule may fall within the legislative category covered by the rule.

With regard to the characterization criterion, there are several theories as to how interpretation should be made. For the traditional perspective, the theory of the qualification of *lex materialis fori* prevails, that is to say, the determination of the content of the framework concepts is obtained by means of the material law of the legal order of the forum, and it can be seen from the outset that this international function of the DIP, and here there is no opening to foreign legal contents or institutes which, although not entirely coincident, have the same social-legal function as ours.

Another interpretation would be the interpretation according to the competent law, a doctrine that is defended by Rabel¹⁰² and which advocates the interpretation of the framework concept according to the competent law. That is, according to the applicable law, but the criticism is that, if we admitted In this interpretation, the conflict rule would be defined not by

¹⁰¹ In "Lições de Direito Internacional Privado", Ferrer Correia, pp. 169.

¹⁰² In "Nótulas de Direito Internacional Privado", Maria João Mimoso e Sandra C. Sousa, pp.98 -101.

the conflict rule but by the competent law. Another position is that of interpretation under comparative law, where, according to this perspective, the interpretation of the framework concept must take into account the comparative law. The content of the framework concept must be defined by an abstraction, from the different legal-material systems. However, as Ferrer Correia points out, this is an unrealizable task in practice, since even if it were possible for the interpreter to know all existing laws, it would be impossible for him to predict future changes in their content.

It seems to us then reasonable to follow the position advocated by Ferrer Correia ¹⁰³, where the interpretation of the framework concept must be an interpretation: firstly teleological, that is, we must try to understand why the legislator, in that concrete rule of conflicts, chose a certain connection; and secondly, must be autonomous in relation to substantive law, that is, we must take into account the purposes of private international law and not material law. The meeting of these two characteristics, then leads to the criterion of *lex formalis fori*, the formal law of the forum. Each framework concept tends to have a hard core, which is constituted by the homologous concept of material law, but then there is a peripheral zone where we can cover normative data from other arrangements that, although they are diverse, correspond to the same function.

Then, for the sake of the characterization itself, what we have is a fundamental problem of characterization, which consists in ascertaining which of the material precepts of the ordering referred to by a certain conflict norm correspond to the category defined by the framework concept of that rule. That is, whether a particular institute or concept of the competent organization may be subsumed within the category defined by the framework concept of the conflict rule.

Characterization in the strict sense is thus a problem of subsumption, but how do we qualify a norm? We must resort to the content and function of the precepts in question, and the determination of the socio-legal function of the competent rule can only be done within the context of the relevant legal system, thus overcoming the traditional dichotomy between a qualification in accordance with *lex fori or lex causae*: the delimitation of the concept framework belongs to the law of the forum, while the socio-legal function of the norm that we are going to subsume in the rule of conflicts will be found in the order to which the material norm belongs.

¹⁰³ In "Lições de Direito Internacional Privado", Ferrer Correia, pp. 169.

To the Portuguese law, the legislator in article 15 of our civil code understood that the characterization method, would be material for us, resorting initially to the criterion of *lex formalis fori* and secondly to the criterion of Article 15. So, to our method, conflicts of characterizations may arise, as these would only be avoidable with a strict *lege fori* characterization. If we were to make a definitive primary qualification, since then we would only reach a competent law and there could be no conflict. However, as we have already seen, this position is unacceptable and, on the other hand, these conflicts are not an exclusive consequence of the method of characterization adopted.

Thus, by not doing the primary characterization, we may have several legal systems called simultaneously by different rules of conflict, and once we have operated the article 15, we may come to contradictory results.

What is this incongruous result? We must distinguish between positive and negative conflicts, positive ones occur when the norms of the various competent jurisdictions pass the "sieve" of characterization and their simultaneous application is irreconcilable; and negative ones occur when there are two or more competent jurisdictions by virtue of the various rules of conflict, but none of them passes the sieve of the characterization.

How are these conflicts solved? The PCC does not propose any criteria here, which is perceived, since this is a complex subject and the doctrine is hesitant. To Ferrer Correia, we must seek a solution in the area of private international law, which means that we should preferably try to rank the rules of conflicts, according to the interests that they aim to serve; when this is not possible, we must adopt a material perspective. According to this perspective, we must take into account the solutions offered by the laws in force and then harmonize them in terms of making their combined the possible application; or to apply one of them, after being suitably adjusted to the new situation, so we will always have a situation of adaptation.

Under the Brazilian concept, the classification process that leads to the connecting element takes into account one of three different aspects: the personal status (subject), the real status (the object), and the legal act or fact, all depending on the categorization that is initially established. To the personal status: this includes the state of the person and his capacity, the state of the person is defined as "the set of constitutive attributes of his legal individuality", and, in order to govern this personal status, it is necessary to resort to a legal system that is indicated by the Private International Law of each country (in the case of Brazil, the Civil Code, as well as in LINDB in its article 7, refers to the beginning and end of personality, name, capacity and family rights); in the treatment of the real status, the legal seat must be located by means of the situation of the property (movable or immovable), *Lex rei sitae*, used only for tangible goods,

it means the application of the law where the thing is situated (acquisition, possession, real rights, etc.); in the case of the obligations, the acts are subject to the law of the place of its occurrence, place of the constitution of the obligation or the place of its execution or to the law chosen by the parties¹⁰⁴.

Under the article 14 of the Brazilian Decree-law n.° 4.657 of 4th September of 1942 we can see that, "Not knowing the foreign law, the judge may demand from those who invoke proof of the text and validity," it means, those who invoke the law must prove the text of the same, as well as the validity of that law.

2.6 Relation between applicable law and copyright:

We have seen that the rules of private international law do not solve the issue of substantive law, so it is necessary to know the applicable law (which may be national or foreign - in this case, proof of the content and validity of the right may be necessary the foreign law. However, the internal norm of Private International Law only indicates the Law applicable to the concrete case, for this reason they are called Indicative or Indirect Norms. Thus, the judge, when confronted with the legal relationship of private law with international connection, performs two operations: Determines the applicable law, through the application of the indicative rule; and then applies the chosen law.

The Indicative or Indirect rules are limited to Indicate Applicable Law, which may be unilateral or bilateral. They will be unilateral when they declare only a single applicable legal order, as a rule of national law, thus assuming themselves in international law as exceptional. They will be bilateral when they indicate how applicable the rules of national law or foreign law, being this type of the rules the most seeing rules under the private international law and its nature.

In the context of the Portuguese law, we are familiar with the so-called conflict rules in Articles 25-65 of the Civil Code, on the other side, under the Brazilian case there is a set of rules recognized in the Law of Introduction to the Rules of Brazilian Law, calling the rules of conflict as indicative rule.

We need also to make a distinction between indicative rules/ rules of conflict between the connecting element and the connecting object. The connecting element will be, as previously

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¹⁰⁴ In "Direito Internacional Privado", Marcelo Loeblein dos Santos, pp. 31-36.

mentioned, the part of the rule that indicates which law is going to be applicable, the law of nationality, domicile, habitual residence or the law of the forum. In its turn, the object of connection will be the one that describes the matter to which the standard refers.

But what is the great function of this type of rules? The designation of the applicable law through the connecting element ¹⁰⁵, which will be the element that will point to the law that is considered best placed to intervene according to certain criteria underlying the particular case.

Take, for example, the article 48/1 of the Portuguese Civil Code, that says the follow: "Copyright shall be governed by the law of the place where the work is first published and, when it's not yet published, by the personal law of the author, without prejudice to special law. ", what is the connecting element and what is the object of connection? The connecting element will be the place of first publication or the personal law, and the object of connection will be the "copyright", so, with this words, given by law, we can conclude the matter and the law that is applicable in our case, even being this article subsidiary, in the sense that we need to look first to the international or European conventions, treaties, regulations or directives.

The connecting element will be in the background the connection, the contact between a life situation and the norm that will govern it ¹⁰⁶, existing in this sense three species of study that may be called to the application: personal status (the subject); real study (the object); and the legal act or fact. In case of personal status we speak of the person's state and capacity, that is, the set of attributes that constitute his legal individuality, such as birth, personality acquisition, or marriage. Within the scope of the real statute we will observe the place or legal seat of the situation of the property (be it movable or immovable), applying the law where the thing is situated (for example ownership, acquisition or rights real). In the case of the statute of the act or legal fact, the law of the place of occurrence, constitution of the obligation, execution, or law chosen by both contracting parties shall be applied.

Now, since we are faced with a Copyright situation, how will the International Legal Order act in this situation? First of all we must know that we are faced with a situation involving the right of ownership, that is, a right that involves the understanding of real status, so the applicable law will be the law of the place where intellectual creation meets. But we go even further, putting the issue in the Digital World, understood as a "World without frontiers". Once a work or service is made available to the public in an electronic communications network, it

¹⁰⁵ See in that seen "Nótulas de Direito Internacional Privado", Maria João Mimoso and Sandra C. Sousa, pp. 107-110; and "Direito Internacional Privado", Marcelo Loeblein dos Santos, pp. 34-38.

¹⁰⁶ See in that sense "Direito Internacional Privado", Marcelo Loeblein, pp. 35.

can be used by anyone and anywhere, as long as they have access to the network, which complicates the determination of the applicable law.

Copyright is normally regarded as a territorial right, and the Internet has a worldwide scope and anyone in the world can access to a particular intellectual work. Various treaties and conventions have been concluded, such as the WIPO Treaties. Saying in that sense Luis Lima Pinheiro¹⁰⁷ the most important ones to our study: the Berne Convention; the Universal Convention on Copyright; the World Intellectual Property Organization Copyright Treaty; the TRIPS agreement; and finally in an European perspective the European Directive n.° 2001/29/CE, that speaks about the harmonization of some aspects of the Copyright and the information society.

The article 5 (2) of the Berne Convention states that jurisdiction is exclusive of the country where the protection is claimed (lex loci protectionis), ie the law of the country where the work was used in an unauthorized manner. This solution is, as Dário Moura Vicente ¹⁰⁸ defends, "the solution that is more in line with the interests that dominate the regime of copyright and related rights, as well as the nature of them."

The big question is how we will determine the law applicable in the digital sphere, in the sense that the law in question may belong to any country in the world provided that it has access to the network. Also in this scope are several protected doctrines, indicating certain authors that the applicable law will be the law of the country where the uploading was done and others the country where the donwloading was done.

As Luis Lima Pinheiro ¹⁰⁹says, the digital world is a world with a specific characteristic of ubiquity, where everyone can be using that at any time and in every place. In that sense, sometimes is difficult to place the state where the damage act to the author right happens as well the determination of the place of first publication, what is important to the determination of cases where we need to know the ownership of the copyright or the applicable law in cases of infringement.

In that sense, under the next chapter we are going to see different positions about the applicable law to specific cases under the digital world, and see, in that sense, that the applicable law needs to be determined under the different questions that can arise under the digital world connected to the copyright, that: the understanding of the protection of the ownership of the

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¹⁰⁷ See in that sense "Algumas considerações sobre a lei aplicável ao Direito de Autor na Internet", pp. 16.

¹⁰⁸ In "Problemática Internacional da Sociedade da Informação", Dário Moura Vincente, pp. 165.

¹⁰⁹ See in that sense "Algumas considerações sobre a lei aplicável ao Direito de Autor na Internet", pp. 16-18.

copyright/intellectual creation; and on the other side the specific cases of infringement. To this two types of questions that can arise under the digital world we are going to have different laws applicable.

3. CHAPTER III: JURIDICAL UNDERSTANDINGS: THE PORTUGUESE, BRAZILIAN AND INTERNATIONAL PERSPECTIVE

The big problem here is based essentially into two questions: first, the new possibilities of processing, storage and communicate information associated to the advent of the digital technology; Secondly, the dissemination of communication networks where information is easily made available and analysed by the public.

With the technological development, there were several legal problems that have arisen, like the need to institutionalize the means of controlling the use of information that can be found in the digital world; and the emergence of new categories of intellectual property such as computer programs and databases. In that sense we have questions about whether exclusive rights should be attributed to the use of such goods, or, whether those rights should already be recognized in their use under electronic communications networks; contracts that may be concluded; the illegality of certain publications and information on online bases; the imputation of responsibility for damages caused to third parties; the issue of conflict of interest in the digital environment; between others.

The reality is that, a huge part of the electronic legal commerce transcends the state borders, often leading to a great exploitation of goods, and our case of interest, intellectual property, with more and more frequent occurrences of rights violations on these goods, and in more than one country. Thus, many individuals who are online, whether they are producers of information or users of information, often seek the protection of their rights in more than one country, thus creating a new part of the study of Private International Law related to Intellectual Property.

Therefore, the first question we have to put is whether the situation in question is a "relocated legal situation", that is to say, whether it is outside the borders of the country of the agent's nationality, or whether it is an issue which must be submitted to national law. With regard to "relocated situations", we must always try to understand if the circumstances in which certain information was circulated was within the now known "cyberspace", and if so, how will we determine which law to apply?

As *John Perry Barlow* ¹¹⁰tells us, to determine the counterpoint of the metaphor understood as "cyberspace" we must determine the physical space in which material goods are situated and transported, it means, whether we have a person with a material good committing some type of digital act. Is it known to any jurist that national law is of particular relevance, but in this type of situation, how far can we apply national law to a national who has committed a particular act against the law? Concerning the digital environment, the issue of determining the applicable law is more complicated than a normal issue of private international law. The so-called "conflict rules" often call for a spatial location to this effect elements of connection are quite difficult to determine.

Although, there are many efforts towards harmonization and uniformity of legislation, there are still many divergences, and these are still characterized as very marked among the different legal orders. Therefore, the determination of the law and the competent court is difficult for a number of reasons. For example the ubiquity of electronic communication networks, in the sense that we can have several countries intervening. The information can be easily disseminated in a multiplicity of countries and it is difficult to determine the specific place for subsequent designation of the law and the competent court. The interactivity, that is, the instructions that a user of the digital world can give, since through the internet, a multiplicity of acts, are admitted without knowing for sure where is the real location that they are being practiced. And finally, the immateriality of digital goods, that is, if it is a good without real physical existence how do we protect it? And we may also have problems with the declarations of will issued by electronic means.

The Internet is understood as an area of freedom that provides a set of informative matters to its users, where the disclosure of a certain thought is almost instantaneous to divulge. If we apply to much regulation in the digital relations, it can lead us to the limitations of the digital information. We have here a free world where everybody can find and use online information, but, if we control that type of "online searching and knowledge" with too many rules and legislation, we can have strong problems in what touches to the cultural growing, because we are limiting the easy access that we have to the information nowadays.

Thus, two theories ¹¹¹are confronted in this area, one that supports the free movement of information society services and a broad recognition of exclusive rights over information

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¹¹⁰ In John Perry Barlow, A Cyberspace Independence declaration, available in http://www.eff.org.

¹¹¹ See in that sense "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente, pp. 124-143.

technology, and another that calls for the imposition of limits on these activities, in order to strengthen the protection of the interests of the state and social groups that have to be protected.

When we put the problem at an international level, we will verify that in the first theory, one will defend the application of the "lex originis", that is the law of origin, and in the second theory the application of the "lex destinationis", ie, the law of the destination, the law where the protection is required. In that sense Dário Moura Vicente says that "A too extensive application of the lex destinationis will inevitably compromise this value and the very reinforcement of individual freedom that many have augured with the advent of the Internet" 112.

There are several attempts to solve the issue of the regulation of "cyberspace", with the issue of legal uniformity and pluralism and the connection method essential to our subject. The issue of legal uniformity and pluralism is based on the regulation of the "relocated situations" by the attempt of unification of the material applicable law¹¹³. In a first modality we have the uniform law that consists in the formulation of material rules destined to regulate so many internal situations as international situations. A second modality is the understanding of the International Private Material Law, which consists of a material right, specially geared to international situations. Thirdly, a modality of harmonized national rules which is based on the subjection of the plurilocalized situation to national rules.

Law is a cultural phenomenon referred to values that are, in different countries and cultures, legal conceptions and values. Their different understood, and its national legal concept must be respected in order to preserve the cultural identity of the nations and the individuals that compose them.

Thus, uniformity would promote the suppression of the diversity of rights, but the reality is that each country will continue to have its interpretation, even though there are laws applicable in the domestic and international level, that make necessary to resort to rules of conflict of each of the countries under debate to understand what law we should apply.

Therefore, the full uniformity of law would require a convention to which all states agreed to adhere and a consistent interpretation in the different states, in this sense Dário Moura Vicente "(...) the Uniform Law, such as the Regulatory Material Law of International Private situation, and, for the most part, harmonized national law, while circumscribing conflicts of laws in space, correspond to a way of regulating such situation it does not dispense with the

¹¹² In, "Problemática Internacional da Sociedade de Informação", Dário Moura Vicente pp 97.

¹¹³ See in that sense "Nótulas de Direito Internacional Privado", Maria João Mimoso and Sandra C. Sousa, pp.61-85 and "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente, pp. 105-108.

rules of conflict. § It is therefore imperative to examine the problems raised by the information society in international situations also in the light of these rules."¹¹⁴.

And, what about the method of connection and possible application of the "lex fori"? Here the thought is this: international private situations must be subject, regardless of the connections they have with another legal order, to the law of the forum (lex fori).

Focusing specifically on the Portuguese case, the transposition of the Article 5/3 of the Decree-Law n.º 7/2004, leads us to the understanding that all electronic legal situations that are extra-community, that is, all the situations that come from a country that is outside of the EU, should have as applicable law the Portuguese law, that is, we have a reference to the application of the law of the forum, although Portugal is only the country of destination and not the country of origin. But will the situation always be capable of such a linear response? No, firstly because we find ourselves applying domestic law to foreign legal situations, which may lead to unfair solutions and disbelief in the law of the countries of the citizens concerned. On the other hand, we would obtain different solutions 115 at the international level for the same situations.

So, how do we solve this situation? The coordination of national legal systems in international situations should be solved in the context of the understanding of the conflict rules that submit the legal situation to the law that has a sufficient connection with the situation. But, we must never forget the questions concerning legal rules of implementation of the economic policies of each state and of the competition regime, for example, issues related to the Freedoms and Guarantees Rights.

3.1 Sources of regulation and regulatory institutions:

The first question that we have to put here is the understanding if in the international law, informatics questions should be analysed by the common right or, on the other hand, we should have a specific regulation to those type of questions.

In this respect we must take into account the *principle of technological neutrality of* law^{116} , which teaches us that for issues arising in the legal-electronic sphere we must apply the

¹¹⁵ In the sense that each court would analyse the legal situation under the law of the forum, thus leading to the so-called "Forum shopping", which is unacceptable, as it may result in situation of inequalities between different actors in different countries.

¹¹⁴ In, "Problemática Internacional da Sociedade de Informação", Dário Moura Vicente, pp 107 and 108.

¹¹⁶ See in that sense "Taking Sides on Technology Neutrality", Chris Reed, pp. 270-275 and "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente, pp. 115-116.

law that would regulate situations constituted over other types of media. Therefore, in order to solve the problem we must apply the common rules of the discipline in question, from an international perspective, national or other source, but note, it does not follow from this principle that is inadmissible the emanation of *special rules* ¹¹⁷ for this type of issues.

It is also necessary here to understand the common rules of Private International Law or the creation of special rules to this discipline whenever the former does not prove sufficient regulation to the international issues that are under consideration.

As Maria Cristina Gennari says, "The internet has no owner, no president, no headquarters or geographic limits. To participate in this network you only need a microcomputer, modem, telephone line and the services of an access provider to connect you to the internet, ¹¹⁸"but does this mean that the internet is a lawless world? No, it is not for the simple fact that we are online that all rights are supressed.

Focusing on our topic, the author does not lose his moral and patrimonial rights simply because his work is now online. As a result, a great number of international conventions have been observed in the last decade, aiming at a unification of the International Intellectual Property regime. To our topic is essentially of interest the Convention for the Protection of Literary and Artistic Works that was signed in 1886 in Berne, better known as the Berne Convention.

In recent years, there have been also the recourse to non-binding international law instruments relating to electronic commerce and the use of intellectual property on the internet, often understood as flexible or *soft law*. These types of rules have as main objective the execution of a politic harmonization under the national legislations. When we are analysing the Intellectual Property world, these type of rules give some guidelines to the states, helping them under the regulation of the legal issues in analyse.

The question here is what will be the effectiveness of this type of texts in situations of International Private Life to which they relate. For the exterior of some country this type of provisions take the form of legal imperative norms, but cannot be seen as Positive Law. That is, the set of social rules that govern the social life of people in a given epoch, not being required to be observed independently of the will of its recipients. Its vocation will then be understood

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¹¹⁷ Remember the specific case of Portugal and Brazil that have specific legislation to regulate the Copyright questions, but also are members of the Berne Convention.

¹¹⁸ In "Minidicionário Saraiva de Informática", Maria Cristina Gennari, pp. 198-199.

¹¹⁹ Such as the Model Law on Electronic Commerce or the Model Law on Electronic Signatures, adopted in 1996 and 2001 by the United Nations Commission on International Trade Law.

in the background as legislative models. Thus are not right sources, since we must always take into account the principle of sovereignty of states recognized in the Treaty of Westphalia and teaches us that all states are sovereign. An effective source of law on this topic will be the State Law, understood as the main source of International Private Situations, and in the Civil Codes of the different States, we can see rules of application that leads national law to be applicable to international issues.

Jurisprudence has also been pointed out as an important source for our subject. In some countries, essentially common law countries, jurisprudence is a way to find solutions to a particular problem. Whenever it arises a legal situation that is equal or similar, we try to find another that have been already judged, and use that specific case law to solve the problem, which is not much used in Portugal or Brazil, the countries that we are analysing, but it happens for example in the USA, that is a great economic power.

As far as regulatory institutions¹²⁰ are concerned, we must address the international, supranational and private institutions. Regarding international institutions, although the Internet has an international character, there is no specific organization yet to administer it, although several international institutions have played a significant role in regulating the Internet, such as the World Intellectual Property Organization.

In what touches to supranational institutions concerned, we speak essentially of the relations established between the different States of the European Community, with the aim of avoiding divergences between the national laws of the Member States.

At the national level, we will focus on the Portuguese and Brazilian national courts, and in Brazil there are several international authorities that exercise powers over the computer world, for example the National Commission on Data Corolina Dieckmann (Law 12.737/12), and recently the Internet Civil Law (Law 12.965/14), which are more focused on penalizing cybercrimes, ¹²¹ but we also have institutions such as the Center for Cyber Defence ¹²². In Portugal we have the Law 109/2009 (Law of Cybercrime). As far as cybercrime is concerned, we must denote a very great difference between Portugal and Brazil, since Portugal subscribes to the Convention on Cybercrime in Budapest (adopting the Cybercrime Act in its precepts) and Brazil does not, so it does not treat cybercrime with the same depth as Portugal.

¹²⁰ In "Problemática Internacional da Sociedade de Informação", Dário Moura Vicente, pp. 138-142.

¹²¹ But this is not a topic that we are going to go deeper into.

¹²² In "Problemática Internacional da Sociedade de Informação", Dário Moura Vicente, pp. 140-141.

At a private level, we have the Internet Corporation for Assigned Names and Numbers (ICAAN¹²³), which can be considered as the Universal Internet powers between the Government of the United States of America. This institution has as mains objectives the preservation of the operational stability on the internet, the promotion of competition, the achievement of a broad of representation of the global internet community, and finally, the development of policies in a manner appropriate to its mission through consent-based processes. The counterpart of this institution is that it is overwhelmed only to the US Government, with many countries coming to contest a shared management of the organization.

3.2The Portuguese and Brazilian Law concepts:

What is copyright? Copyright may be understood as a human right and a fundamental right, enshrined in the Constitution of the Portuguese Republic (article 42) and in the Brazilian Federal Constitution (article V), which protects works or intellectual creations, being considered as a branch of civil law with its own legislation in both countries. ¹²⁴

Beginning with a brief historical introduction of copyright, in Portugal we must travel to the year of 1826 when the constitutional letter have for the first time talk about the copyright law. Only in 1838 we began to really to protect the authors by protecting the writers in their works. Until the year of 1838 the subject of copyright in Portugal was already introduced, but it did not yet recognize specifically the effective rights which each author has inherent in his work. In the following years, a number of legislative changes took place in this branch of law, and in 1851 the first law on copyright was approved by the Portuguese Parliament, and it remained in force until 1867. In 1911 Portugal joined the Berne Union by signing the treaty for the Berne Convention, a convention that remains in force until nowadays. And it is in the year of 1985 that the Code of Copyright and Related Rights is approved through the Decree-law n.° 63/85, and having as last update point the dictation by the decree-law n.° 100/2017, of 23/0, keeping this code in force until nowadays, with the main intention of giving a certain protection of copyright at both national and international levels. 125

¹²³ See in that sense https://www.icann.org/.

¹²⁴ Se in that respect "Direitos Autorais", Pedro Paranaguá e Sérgio Branco, pp.22-28, and "Código do Direito de Autor e Direitos Conexos- Anotado", Patrícia Akester pp. 35-38.

¹²⁵ Se in that respect https://www.spautores.pt/autores/direito-de-autor.

In Brazil, the recognition of copyright is recent dating, to know the first specific law on the subject we need to go back to the year of 1898, and until the moment the law that was applicable was the Portuguese Law. The already mentioned Brazilian author António Chaves ¹²⁶divides the history of copyright in Brazil in three phases: from 1827 to 1916, where the first diploma on copyright in Brazil is published; from 1916 to 1973, marked by the promulgation of the Civil Code; from 1973 until nowadays where the former is published (Law n.° 5.988,of December 14, 1973) and the current copyright law (Law n.° 6.610, of February 19, 1998). ¹²⁷

We can conclude, therefore, that the Portuguese and Brazilian law are really similar, because, as we referred before, the Brazilian Law ends up having a certain inspiration under the Portuguese legislation. For example the article 12 of the Portuguese Code of Copyright and Related Rights and the article 18 of the Brazilian Law n.° 9.610, of February 19 1998, says that there is no need for the copyright be registered to prevail. So, we don't need to have a register work to protect the author's right that we have by his creation, they still are going to be protected independently of being or not registered. The article 165 of the PCCRR and the article 79 of the Brazilian Law, also are quite similar by defining the rights that the author of some picture have from his creation.

3.2.1 What do a photography need to be protected under the copyright field?

Under the article 7, chapter I of the Brazilian Law we can see that the protected intellectual works are "(...) creations of the spirit, expressed by any means or fixed in any medium, tangible or intangible, known or invented in its future, such as: (...) photographic works and those reproduced by any process analogous to photography (...)". Basically, since the beginning of the reading of this article we can see that the photographic works are protected, but under what condition? And here we have to extend the interpretation of the article, by saying that, to a photograph be protected, the photograph needs to be a creation of the spirit.

In its turn, in Portugal we have also a specific regime to regulate the problems that surround the copyright law, being our main focus under the understanding of the article 164 of the Portuguese Code of Copyright and Related Rights that says "1. In order to be protected it is necessary, to the photograph, that by choice of its object or the conditions of its execution can

¹²⁶ In "Direito Autoral na Era Digital: Impactos, controvérsias e possíveis soluções", Manuella Silva dos Santos, Tese de Mestrado em Direito, Pontifícia Universidade Católica de São Paulo, pp. 50.

¹²⁷ In "Direitos Autorais", Pedro Paranaguá e Sérgio Branco, pp. 18-20.

be considered the personal artistic creation of its author; 2. The provisions of this section shall not apply to photographs of writings, documents, business papers, technical drawings and similar things; 3. Are photographs the frames of the cinematographic movies", it means, to the Portuguese conception, to a photograph be protected we need to see the originality of the work, it means, the photography merely automatic is not recognized by the eyes of the law.

3.2.2 Private International Law and the connection between copyright, photography and the digital world:

Brazil and Portugal are both parties of the Berne Convention and also parties in the TRIP's agreement, so, the first point that we have to pay attention is that, under the general rule, the applicable law will be the law of the international agreement or convention, article 1 of the Berne Convention. However, under the article 2 of the Berne Convention we can see an open area to the application of the national law of the countries that are members of the Convention. So, in that sense, we may say that the Berne Convention does not define the scope of protection in a strict and rigid way. It only establishes a minimum standard of rules that can be applied, for example, by establishing the principle of the national treatment under its article 5 that says basically that the foreign intellectual works¹²⁸ are going to be treated equally as the national ones. That is, even if a work goes further of the boundaries of its national country, it still going to be protected by law. We don't make a distinction between national and foreign intellectual works, and any alternative interpretation favouring the application of the law of the country of origin or the law of the forum as a general rule is no longer acceptable.

There are two requirements ¹²⁹to the Berne Convention be applied (article 3): the national or habitual residence, it means, the place of the connection of the person that creates a work, and how do we determine that? This requirement is going to be determined by the national courts; and secondly the first publication of the work needs to be done on a member state, that is, to the Berne Convention be applicable, we need to have an intellectual creation that has firstly been published in some country part of the convention.

¹²⁹ See in that sense "Guia da Convenção de Berna relativa à Protecção das Obras Literârias e Artisticas", Organização Mundial da Propriedade Intelectual, pp.28-31.

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¹²⁸ See in that sense "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente, pp. 165-167.

Focusing on our specific issue, we cannot say that the internet is a physical place, but it is an intellectual place that can connect many groups of persons by their computers, constituting a virtual place without physical borders nor correlation with the geographic space. The internet is maybe the major symbol of the globalization, in the sense that it is capable of abolishing the boundaries of the countries and unify the communication between people.

It is also because of the internet dissemination that is turned possible the knowing of the actual "information society", has José de Oliveira Ascensão says¹³⁰. The information society has as is nuclear instrument the Internet that nowadays covers any type of communicational content, and also any type of information. So with the internet development, the knowledge becomes commodity, and free knowledge becomes appropriable.

This leads us to the central question of our topic: the understanding of copyright under the digital world, that are increasingly dissociated from personal aspects to be considered as mere patrimonial attributes, positions or advantages in economic life. When we are faced with the placing of an intellectual work or a protected service in an electronic network, there are many difficulties regarding its protection and its determination of the applicable law¹³¹.

Among the doctrine ¹³² there are several positions that manifest themselves in this sense, for example the defence that the applicable law will be the law of the country where the uploading happened, that is, where the work was stored on a server connected to the network, referring in this sense, the article 8 of the WIPO Copyright Treaty and the article 68/2 of the Portuguese Copyright and Related Rights Code, inspired by the European Directive 2001/29 / EC.

The fundamental object of article 68 of the PCCRR is to make understand how the economic exploitation of the work can be made, and the author of the work may authorize the execution of the work by a third party. A similar article holds the Brazilian law, Article 28, defining itself as the primary protection for the author's patrimony from his work. The right of reproduction by the granted author is "in the execution of one or more copies of a work or of a substantial part thereof, in any format, including sound or visual recording 133".

Another important concept is the concept of distribution that corresponds "to the making available of tangible copies of a work in whole or in part, to the public, mainly through the

¹³⁰ In "Sociedade de Informação e o Mundo Globalizado", José de Oliveira Ascensão, pp. 22-23.

¹³¹ See in that sense "Problemática Internacional da Sociedade de Informação", Dário Moura Vicente, pp. 167-171.

 ¹³² See in that sense "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente, pp.143-145.
¹³³ In "Glossary of Terms of the Law of Copyright and Neighboring Rights", OMPI, 1978, pp.223.

appropriate commercial channels¹³⁴". In this right of distribution we can include the right of communication to the public, including making available at the request of the user, in the sense that digital interactivity is called by the right of communication to the public in which the right to make available works on demand is integrated the user.

Returning to the knowledge of the applicable law in the digital scope, we can understand that the position that defends the applicable law will be the law where it was observed the uploading, that is advantageous and has a strong connection with the facts. Since it is where the placement of the work in network and is a very favourable orientation for companies that supply content through electronic communications networks, and the law will coincide with that of the country of their establishment. But this understanding also has its negative side, it places a risk on those who usurp other people's works and who have settled in especially permissive copyright countries and from that point on the place the protected works in the network, being subtracted responsibility¹³⁵.

Another part of the doctrine states that the applicable law will be the law of the country where the downloading was made, i.e., "the law of the country in which the work was stored in the memory of the terminal equipment of a network user, your transfer from this ¹³⁶". But, this position also has her negative side, for example, this type of thought could lead to the creation of many applicable laws, which can lead to problems to the service's creators online.

There are also those who argue that the applicable law should be the law of the place where the damage occurred and, consequently, the violation of economic rights, which is a position more favourable to the interests of the author. However, this position still fails in the sense that it can be understood as scarce, because the place of the damage can assume a very insignificant character in comparison with the place where the real damage was given.

Finally, another part of the doctrine says that the applicable law needs to be the law of the forum, which can lead us to the only application of the rules of any specific state to all the copyright questions that can arise. So, which law should we apply?¹³⁷

The article 1 of the Berne Convention stipulates that "Countries constitute a Union for the protection of the rights of authors over their literary and artistic works" and then defines in its article 2§1 that "the term "literary and artistic works" comprises all production of literary,

¹³⁴ In "Glossary of Terms of the Law of Copyright and Neighboring Rights", OMPI, 1978, PP.83.

¹³⁵ See in that respect "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente, pp. 168.

¹³⁶ In "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente,pp. 168-169.

¹³⁷ See in that respect "Problemática Internacional da Sociedade de Informação", Dário Moura Vicente, pp.155-157.

scientific and artistic dominion, whatever the mode or form of expression". They are, therefore, norms of material law to be observed by its member countries, as Portugal and Brazil.

As we mentioned before, under the Chapter I point 1.1 and 1.2, the legal nature of the Copyright under the Brazilian Law and The Portuguese Law, to the major doctrine, is the Right of things, then we have to attend to the definition of "Property" under the Civil Code of both legislations.

To the Brazilian Civil Code, article 1225, Property is the real right of the ownership, it is, the broadest of the real rights (*plena in re postesta*), and, according to the article 1228 of the same Code, the owner of the property right has the faculty to use, enjoy and dispose of the thing, and the right to recover it from the power of whoever unjustly owns or holds it.

Under the Portuguese Civil Code in its article 1305 we can see the same as the article 1228 of the Brazilian Civil Code, but, under the Portuguese Civil Code we can find a specific article that defines the Intellectual Property, article 1303, and says basically that to the Copyright and Industrial Property we have specific laws to apply. So we have here a reference to the Portuguese Code of Copyright and Related Rights, it means, even having in both system references under the civil code, we must apply what is provided under the specific rules for the Copyright. But, does these terms also be applicable when we are under the digital world?

A major part of the electronic commerce has as its main objective the placing of works and services available to the public in digital networks through the application of a certain remuneration, raising questions about exclusive rights to new ways of using such works and services, and whether or not the consent of authors and holders of related rights is required.

The article 9/2 of the Berne Convention raises the problem of the inclusion in the freedom of private use as regards the reproduction of works by computer, determining the conditions which must comply with.

Technological Progress has led to a near-instant reproduction of works and services that are protected, what can lead to a large-scale of the use of intellectual property without the consent of the owners of works or any economic consideration for them, may even call the copyright industry into question.

According to the *Time Magazine*¹³⁸, following a study made in 2004, it is estimated that during the year of 2002 the number of illicit copies of films worldwide will have risen to 4.1 million and consequently implied a loss in the order of 3,500 millions of dollars for North

¹³⁸ In Time, 26 of January 2004, "Hollywood Robbery", pp 44 and follow, Amanda Ripley.

American film productions. At the heart of the matter lies the fact that, with the increasing use of technology, intellectual property is confronted with a majority of uses, but also with problems that would be unknown to the law in force.

However, there are authors who see this evolution of law as positive, as is the case of *Andre Lucas*¹³⁹, *Alexandre Dias Pereira*¹⁴⁰, *Artur-Axel*¹⁴¹, *José de Oliveira Ascensão*¹⁴², among others, which indicate that copyright is no longer, has the object of literary works and passes to have other objects. No longer being the main focus of protection under the author/ creator but, to be in the companies that supply content and providers of telecommunications services in a network.

From the moment that a work is putted under the disposition of the public by the use of the digital world, this work can be used in any space that have an internet connection, and, if the use of the referred work is made without the consent of the creator/author, it may rise questions of how will the creator react against this illicit use of his work? And if we have authorization, but we don't know to what point are we "in or out" the law borders? What is the competent court to decide such issues? The main problem stays on the understanding that the copyright law has a connection with the territory of any country, but, the internet in her way, has a connection with the all world, and the works that are under the internet can be accessed in any part of the globe, provided that we have an internet connection.

Over the years, we have seen many attempts to harmonize the law of the different states, by establishing conventions and treaties to protect copyright and intellectual property in the digital world, as the OMPI treaties or the Berne Convention, but, they are still being inadequate. So, which law will we apply in this type of situations? Here we need to do a distinction between the copyright; the non-contractual obligations that emerge from its violation; the contractual rights related to the literary and artistic works; the jurisdictional means that we have to react against the violation of the copyright and other intellectual rights.

Another part of the doctrine talks about the competence of the "lex loci protectionis ¹⁴³". Under the article 5/2 of the Berne Convention the protection of this right is under the

¹⁴⁰ In "Informática, Direito de Autor e propriedade tecnodigital", Coimbra 2001.

¹³⁹ In "Droit d'auteur et numérique", Paris 1998.

¹⁴¹ In "Wandtke/winfried Bullinge (orgs), Gesetz zur Regelung des Urheberrechts", Munique 2003.

¹⁴² In "Estudos sobre Direito da Internet e da Sociedade da Informação", Coimbra 2001.

¹⁴³ In "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente, pp. 171- 175; and see also in that sense: "Choice of law in copyright and related rights: alternatives to the lex protectionis", M. M. M Van Echoud, University of Amsterdam, pp.169-232; "Direito de Autor e Comércio Electrónico: aspectos internacionais", Dário Moura Vicente; pp.19- 35; "Copyright Infringement in the Internet Age Primetime for Harmonized Conflict-of-Laws Rules", Anita B. Froblich, pp. 853-893.

competence of the country where the protection is required (*lex loci protectionis*), it means, the country where we can see the acts of use of the non-authorized work. For example, if I am using a non-authorized work under the Portuguese boundaries, the applicable law will be the Portuguese law, even if the work has been created in Brazil, in the sense that this is the most conform solution to the copyright and related rights nature¹⁴⁴. But, note, that under this doctrine though, only the rights that are specified under the law or other sources of law deserves copyright protection. For example, if I capture some picture of my ID card and then put it on the internet to be an example of someone that doesn't know how is a Portuguese ID card, and then this person shows me this picture to another and this another put the picture in some social page I cannot say that I have copyrights under the use of this picture because this picture is not doted of exteriorization and is not an human creation, it is a mere automatic act with any type of intellectual exercise.

One principle that is really important in our study is *the principle of territoriality*¹⁴⁵ which says basically that the norms of some country will be applicable to the situations that happen in this same country. However, we cannot see this principle in a rigid way under our study, because the national law of some country can be applicable in another country and also, the law of a foreign country can be applicable under the borders of another country. That is, sometimes the law has an extraterritorial application in the sense that the courts and other enforcement bodies may apply foreign copyright law in their own boundaries.

Going back to the understanding of the "lex loci protectionis", we need to recognize that we can have quite particular difficulties when the protected work is used under the internet. The applicable law here can be the law of any country that has an internet connection, and questions about what is the law that should be applied are borne.

As we mentioned before, some authors say that the law should be the law of the country where the work is stored in an internet servitor (uploading). To others the law of the country where the work was stored in the memory of the terminal equipment of a user of the network by means of its downloading. And also, part of the doctrine says that the competent law will be the law of the country where the copyright market is more affected, that is, the law of the place where the damage happen and the author has a diminution of his patrimonial gains. Finally, the application of the "Lex fori", it means, the competent courts will be the courts of the forum of

¹⁴⁴ According to the doctrine mentioned.

¹⁴⁵ See in that sense "Nótulas de Direito Internacional Privado", Maria João Mimoso and Sandra C. Sousa, pp. 51-59.

some country, so, the law of a particular country will be the applicable law; ¹⁴⁶or the competent law will be the lex originis, that is, the law where the first publication of the work has been seen.

This last is recognized under the article 15/4/a of the Berne Convention that says that the applicable law will be the law of the country of the nationality of the author, that is, the lex originis. And, under the article 48 of the Portuguese Civil Code and the article 1 and 2 of the Brazilian Law n.° 9.610 of February 1998, the applicable law would be the law where the protection is required.

But, we have also to pay attention to the ownership of the copyright, what is established under the articles 11 and 26 of the PCRR and under the articles 11 and 14 of the Brazilian law n.° 9.610 of 19th 1998. In this specific question the principle of territoriality suffers a derogation, and the competent law to determine the ownership of the copyright is the law of the origin of the work. When we enter into the space where we have to determine the person who is capable of exercise and protect is copyright we have to know who the country of origin is, it is, the country where the work has been created.

Under the Berne Convention we cannot see any specific mention to this type of questions, only saying briefly the article 15/4/a that the applicable law will be the law of the national state of the author, when we are talking about a national of one member state of the Berne Union. And if we don't know where the work has been published? How do we solve the question under the lex originis though? We have to apply the rules of the country of origin of the worker.

Under the article 5/4 of the Berne Convention we can see the determination of which is the country of origin of the published work, saying the article that it is the country of first publication. And, when we have cases where we cannot see or we don't have at all a first publication of the work? We are going to apply the law of the country of origin of the author. So, to know the lex originis we have to see where the work has been firstly published or where the author of the work has is nationality¹⁴⁷.

But, when we are under the digital world, how can we see where is the place of the first publication of the work? Here have to resort an analogous interpretation¹⁴⁸ of the law, and say that the applicable law would be the law of the place where we see the first publication. That

¹⁴⁶ Points that are already discussed, see pp. 59 -60.

¹⁴⁷ See in that sense "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente, pp. 173-175.

¹⁴⁸ See in that sense "Problemática Internacional da Sociedade da Informação", Dário Moura Vicente, pp.173-176.

is, a person creates something in a Lisbon coffee, but his nationality is German, the lex originis would be the Portuguese law, because the place of the first publication is the Portuguese coffee, it means, the country where the *uploading* has been done.

Under the articles 29 and 461 of the Brazilian Copyright Law we can see that is necessary the authorization of the author to do a licit use of his work, being the same provided under the articles 67 and 68 of the PCRR. These articles are designed to answer to the problems of the technological development. As *José de Oliveira Ascensão says*¹⁴⁹, especially focusing on the question of the Brazilian Law "The national laws, in the main, attribute to the author the universality of the faculties of public use of the work. In this sense, not only the article 28 of the Lawn. 9.610 attributes to the author the exclusive righto use, enjoy and dispose, as article 29 submits to prior and express authorization of the author that use, by any modality. The enumeration he performs later is merely exemplary. It follows that whether or not that power is made available to the network expressly provided, will always include the exclusive attributed to the author, in that it represents a power of public uses of the work". Basically with this words we can conclude that the exclusive right of use, enjoy and dispose of the work is owned by the author and only the author, so, the public use of any work needs to have firstly and the authorization of the author to happen. This type of thinking is also written under the articles 9 and 11 of the PCCRR.

But how do we control the use of the work online? Through this technology, it is possible to share music files, films, texts, photos, and other works, as long as they can be placed on the internet. In that sense, it is enough to use one of the numerous search mechanism available to find the desired work. From there, the computer provides the download file, making a copy of the work, which is stored on the hard disk of the computer. The benefits to the culture consumer are evident. In that way the author *Paulo Sá Elias* ¹⁵⁰said that "The truth is that there is nothing better than the possibility of peer-to-peer file sharing over the internet, especially music. There is no nicer feeling than finding in a few seconds that song or soundtrack that was searched for years and years in various stores and could never be found. Imagine not having to pay thirty, forty and even seventy dollars for a CD (compact disc) with 12 or 13 tracks of songs, and the role chosen by the record company (for example) can happen (which is no uncommon) only two, three, or at most five tracks? Would not it be much more interesting to

¹⁴⁹ In, "A Recente Lei Brasileira dos Direitos Autorais Comparada com os novos Tratados da OMPI", José de Oliveira Ascensão, pp. 7.

¹⁵⁰ In Paulo Sá Elias, "Novas Tecnologias, Telemática e os Direitos Autorais", available under the website http://www1.jus.com.br/doutrina/texto.asp?id=3821", pp 9.

buy only the favourite songs on the internet? Create a CD to the customer's taste? This is exactly what is happening nowadays". So basically with this I want to "highlight" the thought that, we are living a really new reality, and with that, we have to adapt our systems to this development. In what touches to the technological growing we have to know that is basically impossible to establish a previous authorization of the author to the use of any work of a person online, that is, we really need to have an open mind and adapt our system to the new developments.

Focusing now on our topic, the concept of the photograph is already established under the Chapter II topic 2.1, and we already know that this concept is recognized under the articles 164 of the PCCRR and 79 of the Brazilian Law n. 9.610, so we have now to determine how is all linked to the international relations between the two countries.

Imagine for example that Thiago is a Brazilian photographer that took a picture in Brazil of his favourite waterfall and put it on his Blog. Amanda, a friend of Thiago that lives in Portugal, shared this photography on her Instagram without is identical, could it be a problem? How can we protect Thiago's rights? Firstly, we need to look at the photograph concept and conclue if it is a photograph that deserves the copyright protection. If we look at both legislations concepts, we need to have an intellectual creation of the author, that is, the photography needs to be original and reflect the personality of his author. So, it cannot be only a mere automatic act that is taken, it needs to have a human intervention and use of the human intellectual. So, in this specific case, is the Thiago's photo capable of copyright protection? Yes, it is, because Thiago is a photographer and the photography is not a mere automatic act, it involves the intellectual of Thiago, tha capacity of look to something and make this moment be an artistic creation that involves all of our senses.

So, we need to protect Thiago's rights, but which law do we need to apply? As we also mentioned before, in what touches to the understanding of wich law is applicable, we have many doctrines, so here, we are going to read a solution following a most particular opinion. In my opinion the most reasonable solution is the application of the "lex loci protectionis", that is, the law of the country where the protection is required that means, the country where the violation of the copyright is made, so the applicable law in that specific case is the Portuguese Law. And why this position? Because even having some authors saying that the damage can be worse in a different country from the country where the damage occurred, for me, this is the solutions that has more contact with the legal facts, and then, the most reasonable solution to the legal situation.

And how does the Portuguese law protect Thiago's rights? That's here were we enter under the Private International Law concepts, especially the qualification problem, that is, framing the issue into some specific concept. To do that we need to see if we have a personal, real or legal connection with the situation and the country that is applied to answer the problem.

In our specific case, and to the Portuguese Civil Code article 48, that is our conflict rule, says that the copyright are regulated by the law where the first publication of the work is done, and under the article 1303 of the Portuguese Civil Code we can see that the Intellectual Property is regulated by special legislation. In our specific case we have to apply the PCCRR, and if we look at the article 63, 64 and 65 of the PCCRR and article 3 and 5 of the Berne Convention, we can see that these articles basically says that the protection of the author's rights needs to be done under the law of the nationality country or under the law of the country of the first publication. So, the protection of Thiago's rights needs to be done under the Brazilian Law, and, in our specific case we need to apply the rules of the Brazilian Law n.° 9.610, of 19th February 1998.

But is the solution that simple? We have another problem here that has not been mentioned before, the problem of resending, and what is this? Resending is basically a remission of a conflict rule to another juridical system that is basically what happens under the article 48 of the Portuguese Civil Code. This article basically says that the applicable law is the law of the local of first publication, or, when the work wasn't published, the personal law of the author, that means, firstly the law where for the first time we saw a publication of the work, or, the law of nationality of the author, we a have here a real and personal link to establish the applicable law. But, we only have a resending situation when the conflict rules of the State of the forum refer to another legal system and the latter, through its conflicting system, designate as competent the law of another.

Following our specific example, when we call the Brazilian law system, the Brazilian law ensured that the applicable law is the Portuguese law, and, the Portuguese law, under is conflict rules conception says that the competent law is the Brazilian law, so is this or not an resending problem? Yes, it is, and is predicted under the article 16 of the Portuguese Civil Code, that says that the applicable law is the law of the nationality, so the applicable law is the Brazilian Law. The scheme under the Private International Law what we have here is L1-> L2 -> L1, that is, the Brazilian law resends to the Portuguese law and the Portuguese law resends to the Brazilian Law, so what we have here is a resending by return. But we can also have a resending by competence, when we have three systems that consider there legislations capable,

L1-> L2 -> L3, for example the Brazilian law resends for the Portuguese law and the Portuguese law in his way resends to the French law, here we have three systems involved.

In a recent US case dubbed *MGM vs. Grokster Ltd. and StreamCast*, ¹⁵¹ a group of copyright holders, MGM, sued Gokster Ltd and StreamCast, for copyright infringement in the sense that they allegedly intentionally distributed in its software products so that any user could use and reproduce it without respect for the copyrights in question. In his defense, Grokster claimed that the software it provided had as its main objective to allow the licit exchange of files. In the first instance the US court decides to apply theories of "contributory infringement" and "vicarious liability", in the sense that Grokster could not control the use of his program by third parties, but secondarily in August 2004, the Court acknowledges that while acknowledging that most of what was exchanged through the use of software was pirated, there was no way Grokster could stop the process, which led to an idea that the Internet would be "a land without law", however, this debatable decision was short-lived, as the U.S. Supreme Court reversed this trend and decided to hold Grokster responsible, considering the Court that once proven that the technology provider aims to induce people to infringe copyright, then we will have Yes, responsibility.

Why the mention of this case? Because it was with this case that we started to see that the internet world cannot be considered as "a land without law" and the all world started to apply some specific rules to this sensible area of the law, and even still not have specific and rigid solutions, we watch a really important development under this area of the law.

3.2.3 Making things more clear:

The big problem here is that, we have in one side the protection of the ownership of the author, and on the other side, the protection of the breach that we have seen under the patrimonial rights of the author¹⁵², so how can we protect those rights? As Luis Lima Pinheiro ¹⁵³mention is true that the Intellectual Property is a territorial right, in the sense that its

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¹⁵¹ Case available in https://supreme.justia.com/cases/federal/us/545/913/.

¹⁵² See in that sense "Problemática Internacional da Sociedade de Informação", Dário Moura Vicente, pp. 165-175 and also "Algumas considerações sobre a lei aplicável ao Direito de Autor na Internet", Luis Lima Pinheiro, pp. 16-23.

¹⁵³ See in that sense "Algumas considerações sobre a lei aplicável ao Direito de Autor na internet", Luis Lima Pinheiro, pp.16-23.

applicability depends of some element of connection that determine some place and time, however we can see the same under the law of the things and this is does not mean that this can't be applicable in foreign states, remember in that sense the principle of the *lex rei sitae*, that basically states that the applicable law should be the law where the immovable property is stated. The difference to the Intellectual Property is that, whenever we don't have an international or European rule to apply, we need to look to the state where the protection is required (article 5/2 of the Berne Convention), but remember that the intellectual property rights are subtracted to the right of conflict. So, in that sense Luis Lima Pinheiro is defending a different position from authors like Oliveira Ascensão ¹⁵⁴or Moura Ramos ¹⁵⁵, that basically states that in this type of situations we cannot apply a conflict law, which is not the point of view of Luis Lima Pinheiro, which understands the article 5/2 of the Berne Convention as a conflict rule. François Dissemontet ¹⁵⁶defends that even not being the article 5% of the Berne Convention a conflict rule, here we need to apply the lex locci protectionis in the sense that this is the most conform and favourable solution to author.

In that sense we have also the position of Dário Moura Vicente¹⁵⁷, by stating that the protection of the copyright needs to be done by the lex locci protectionis but, when we need to determine the owner of the rights we need to look to the lex originis, understanding this author that the article 15°/4 of the Berne Convention supports this understanding, in the sense that specifies that is reserved to the country of origin determine the competent authority to defend the author, that is, here we can see that the law of origin should be the law that will determines the protection of the authors rights. Also, the article 48°/1 of the Portuguese Civil Code, even being a subsidiary article, states that the applicable law should be the law of the original country. So, as the author ¹⁵⁸says, here we are doing a "derogation" of the principle of territoriality, being the applicable law not the law of the state where the fact happen, but the law of the nationality of the author, and, when we enter into the space where we have to determine the person who is capable of exercise and protect is copyright we have to know who the country of origin is, that is, where does the work has been created.

¹⁵⁴ See in that sense "Direito de Autor e Direitos Conexos", José de Oliveira Ascensão, pp.32.

¹⁵⁵ See in that sense "Da Lei Aplicável ao Contrato de Trabalho Internacional", Rui Moura Ramos, pp. 268 e ss.

See in that Sense "Conflict of laws for Intellectual Property in Cyberspace", François Dissemontet,pp. 22-50.
See in that sense, "Problemática Internacional da Sociedade de Informação", Dário Moura Vicente, pp. 155-

¹⁵⁷ See in that sense, "Problemàtica Internacional da Sociedade de Informação", Dário Moura Vicente, pp. 155-175.

¹⁵⁸ See in that sense "Problemática Internacional da Sociedade de Informação", Dário Moura Vicente, pp. 170-175.

However there are other authors that defend the application of the lex originis in cases of infringement, in the sense that, for them, this the most reasonable solution. Jame C.Ginsburg and Morton J.Janklow¹⁵⁹ states, that the Berne Convention does not establish a rigid concept of the principle of the territoriality, so, in that sense we can defend the application of the lex locci protectionis. The Berne Convention basically says that every country part can apply its law, so in that sense we don't have a rigid application of the principle the territoriality, and then, the applicable law should be the lex originis.

Talking about Portuguese authors, we have Alexandre Dias Pereira¹⁶⁰, that basically says that the application and defence of the lex locci protectionis can lead to much honourable decisions to the author, and, on the other side, can also be to much honourable to the offenders, and why? When we apply the law of the country where the infract act happens, it can lead to the migration of the offenders to countries where the protection of the copyright is less strong, and in that sense we are basically benefiting the person(s) who have committed the damage act. On the other side, we can have an honourable solution in a high way to the author, in the sense that he can be benefited in each country that he proposes an action to protect his copyright.

3.2.4 Some personal conclusions:

Making a connection with all the chapters that we have analyse, when we are under the Copyright understanding we really need to be careful, because this is an area of the law that is in constant development, so we should not do a restrict interpretation of the law that we have. In both systems in analyse, we really need to be careful and understand that, if we do a really restrict interpretation of the law we can go to really complicated problems.

Another thing is that we have specific legislation to regulate the copyright problems, in our specific case the PCRR, the Brazilian Law 9.610, and the Berne Convention that tries to help jurists under the search of answers to copyright problems. We have also to keep an open mind, because this is a really recent topic, and under the digital world things are quite more complicated.

¹⁵⁹ See in that sense "Private International Law aspects of the protection of works and objects of related rights transmited through digital networks", Jame C. Ginsburg; Morton L. Janklow, pp.3-5 and 22-35.

¹⁶⁰ See in that sense "Informática, Direito de Autor e Propriedade Tecnodigital", Alexandre Dias Pereira, pp. 200-252.

In our specific study we are making a connection between the civil law world, the criminal law world, and the International Private Law world, in the sense that we are studying the relations established between countries under the copyright law, and then understand which law could be applicable when we overcome the boundaries of a specific state.

When we are under the Portuguese or the Brazilian legal boundaries, we need to apply the Portuguese or Brazilian Law, but, when we go further the boundaries of these countries we need to analyse the specific case and then see which law is the "lex loci protectionis", never forgetting, following our particular opinion. Finally if we have only a problem of qualification of the law, or if we have also a problem of resending, and then establish the law that is capable of solve our problem.

Being the Private International Law a complex world we need to see how does it work in practice to have this type of information more clear, and this is why our last point in analyse is specifically focused on the analyse of some particular cases and the court decision.

4. FINAL CONCLUSIONS

To conclude our study, we can start by saying, with José de Oliveira Ascensão that "It is possible to doubt whether photography is an art, if it is a technique. The photograph is produced by purely mechanical means, and what is merely mechanical is excluded from art, and historically photography has gradually penetrated the domain of copyright, and even when it penetrated it was usually given a diminished position compared to other works, expressed mainly by the restriction of protection periods ... The very choice of the object until the operator discovered and the composition of forms and tones, will not be sufficient to ensure the artistic nature of photography, which becomes the realization of the discovery by the author of a vision of an aesthetic nature? The more the aesthetic intuition has been in the isolation of the object, the photographer does not create the object, and the photograph is limited to reproduce it by means. Therefore, strictly speaking, photography is outside our concept when it represents the mere transposition of an external object¹⁶¹". The photography can be understudied as a mere technique or art, and to became art it needs to have the human intervention, that is, it needs to be an intellectual creation, and not only a mere mechanic act where someone presses some button.

In the past, maybe the thought that the photography is only a mere technique act is understandable but not nowadays. I think that the world is in constant change and development, and art is a part of our world, so, even if we cannot compare photography works to literary or painting works, photography deserves also the intellectual protection in the sense that, in my personal opinion, photography is an intellectual creation for sure.

The photographer is an artist, a person who is sensitive enough to capture something beautiful and make it involves our eyes in a mix of emotions. We have a perfect picture in a perfect perspective. We need to keep in mind that the Intellectual Property world is a complex world that cannot be interpreted in a rigid way. We have so many types of manifestation of art nowadays, that we cannot say specifically what is and what is not a piece of art that involves and makes grow our culture.

In what touches to the digital environment and the connection between photography and the Private International Law, we need to be quite careful. Everything occurs under their normal

¹⁶¹ In "Direito Autoral, 2 ed. Rio de Janeiro, 1997", José Oliveira Ascensão, pp. 419-420.

ways until the moment that some intellectual work is seen for some person that is in a foreign country, being the solution for the problem really complicated. In spite of the harmonization of national legislation, as tested by the abovementioned international and Community instruments, the diversity of national legislation has not been abolished with regard to the subject matter and therefore the need to determine the law applicable to these matters in international situations is largely maintained.

The internet is known as a space of freedom, a space where its users can freely navigate and obtain knowledge "without limits". But can such unlimited knowledge exhale the field of the protection of the rights of someone who has intellectually created a particular work? No, and that's here that the problematic of our question starts.

We now turn to the concept of *lex originis*, that is to say, the applicability of the law of the country of establishment of the situations in question, in the sense that it appears to us to be the most appropriate situation under private international law and at the meeting of the most just and adequate solution for people and States.

The rules of private international law, as we mentioned before, do not solve questions of substantive law, and then, we need to know which law is applicable to a specific case. In that sense, when a judge is confronted with some conflict of rules under an international level he needs to firstly determine the law that can be applicable to the case and secondly apply to the specific case the choose law.

Under the copyright law we have seen that we are under the understanding of the right of ownership, it means, we are under the understanding of the "right of things", and also under the understanding of infringement, that is the violation of the patrimonial rights of the author.

The article 5 (2) of the Berne Convention states that the jurisdiction is exclusive of the country where the protection is claimed (lex loci protectionis), ie, the law of the country where the work was used in an unauthorized manner. And following the thought of Dário Moura Vicente¹⁶², this the most "reasonable" law to apply in this type of cases.

We can see under the Berne Convention that we don't have a specific solution to this question, and why? Because if we read the article 5 of this convention, we can see that is defended the two perspectives: the lex loci protection and the lex originis. The end of the article 5/2 states that "(...) In consequence, further the stipulations of the present convention, the extension of the protection, well as the granted resources to the author to safe his rights are

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¹⁶² See in that sense "Problemática Internacional da Sociedade da Informação", Dário Moura Vincente, pp. 165.

regulated exclusively by the legislation of the country where the protection is required"; and the same article in its number 3 and 4 states that the protection given by the original country is regulated by the national law of this country and then we have the concept of "country of origin". So, with that we can conclude that the Berne Convention doesn't state a unique solution to solve the question, and then the two opinions mentioned before can be accepted.

In what touches to the Portuguese and the Brazilian law perspective, we can see under the Portuguese Code of Copyright and Related Rights article 63 that the Portuguese jurisdictional order is capable of determining the protection of the intellectual creation, always keeping in attention the solutions given by international conventions. Under the Brazilian Copyright Law we can see basically the same solution under the articles 1 and 2.

In my personal opinion, the competent law will be the "lex loci protectionis", and why? First, because the article 5/2 of the Berne Convention states that the protection of the right is under the competence of the country where the protection is required, that is, we have to apply the law of the country where we can see the unlawful acts with the intellectual creation; second, the article 63 of the Portuguese Code of Copyright and related rights also defends this position as we mentioned before; third, if I am using a non-authorized work under the Portuguese boundaries the applicable law will be the Portuguese law, and, in that way we can have a most conform solution, in the sense that we are applying the law where we observe the non-authorized act, and not the law where the work has been created; And final and fourthly, if we are talking about an open area on the law world we really need to be careful, and we cannot control everything, even, sometimes, we cannot determine the place where the creation has been done or even the author, so, it is easier the application of the law where the illegal act happen, since it has more connection with the facts and it also has an answer for the online cases where we cannot determine the author or the place where the publication happens.

So, what I want to highlight here is that, the applicable law solution is not a rigid solution, in the sense that under the reading of the Berne Convention, that is the law basis to our study. So, we can apply both perspectives, and the solution to a specific case will depends on the perspective of the jurist, and we cannot say that this solution is wrong and the other one is right. Basically the digital world is not a land without law, in the sense that we cannot do anything we want online, but also, we cannot restring the solution to a specific concept, specifically talking in our case, in the sense that the Berne Convention recognizes this as an open area and does not want jurists as a mere "mouth of the law", but jurists who know how to interpret and defend their position, given the most fair solution to the specific case.

Another thing that is important to mention, is that, if the case specific occurs in Portugal we need to look to the European Directive n.° 2001/29/ CE and to the decisions made under the European understandings, for example the "Judgment of the Court (First Chamber) 6 September 2012¹⁶³". During the lack of time that we have and being our main focus under the understanding of the Brazilian and the Portuguese legal systems, we have not develop the study under this directive, however we have here a quick note to remind the importance of this directive.

¹⁶³ Available in https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62010CJ0619.

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