

An analysis of cybercrimes from a global perspective on penal law

Uma análise dos crimes informáticos a partir de uma perspectiva global do direito penal

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Abstract

Technological evolution regarding communication and information in the cyberspace offers new, different possibilities about the future, bringing forth significant challenges to the Law. These considerations set forth, we intend to find the answer to the following question: with the intention of proposing advances in the study on regulation and guardianship regarding crimes committed in the cyberspace, which were the main points of convergence and divergence presented by the reports and resolutions by the First Section preliminary to AIDP's (International Association of Penal Law) 19th International Congress on Penal Law contributing to a global perspective on penal law? This research intends to answer that question through critical mapping, with the following goals in mind: (i) observe and map legislative interaction concerning cybercrimes; (ii) observe and map the results from the reports and resolutions by the First Section preliminary to AIDP's (International Association of Penal Law) 19th International Congress on Penal Law.

Keywords: Cyberspace. Information society. Penal law. Cybercrimes.

Resumo

A evolução tecnológica na área da comunicação e da informação no ciberespaço, oferece novas e diferentes possibilidades de futuro, trazendo significativos desafios para o direito. Com essas considerações, pretende-se buscar resposta a seguinte indagação: com a finalidade propor avanços no estudo da regulação e tutela dos crimes cometidos no ciberespaço, quais foram os principais pontos de convergência e divergência apresentados pelos relatórios e resoluções da Primeira Seção preparatória ao XIX Congresso Internacional de Direito Penal da AIDP – Associação Internacional de Direito Penal, de modo a contribuir com uma perspectiva global do direito penal? A pesquisa pretende responder a indagação a partir do método do mapeamento crítico e dos seguintes objetivos: (i) observar e mapear a interação legislativa no tocante ao tema dos crimes informáticos; (ii) observar e mapear os resultados dos relatórios e resoluções da Primeira Seção preparatória ao XIX Congresso Internacional de Direito Penal da AIDP – Associação Internacional de Direito Penal.

Palavras-chave: Ciberespaço. Sociedade da informação. Direito penal. Crimes informáticos.

1 Introduction

Human progress reveals itself in our ability to send information and reduces the range of “time and distance” issues concerning information. One’s rights to information expanded, making one’s access to knowledge easier, in the most diverse spots on Earth. Virtual space, or cyberspace, as it will be hereafter referred to, is a social space formed by the stream of information and messages exchanged by computers, becoming an open network which anyone is able to access, getting to interact, generate data, browse and create relations in the network, through access providers through which several activities come to happen, such as e-mail, long-distance computation, e-commerce, entertainment, research, etc.

On the internet, everyone can communicate with everyone, with no distinction. You’re only required to have a network device, which nowadays may be a computer, a tablet or a smartphone. Accessibility to information stored in devices has expanded, regarding both freely available information and private information and personal data.

In such context of undeniable technological evolution, Internet advances and cyberspace constitution lack legal, normative, sociological, cultural and even psychological analyses. Considering the evolution of Internet resources, we should reflect on the factors of cultural production, access and democratization of information, celebration of diversity, and the process of digital inclusion.

However, it’s also essential for us to reflect on legal problems which result from the massification of the access to the Internet. Thus, the critical study about rights to privacy and data protection is relevant to the legal scenario, mostly concerning regulatory frameworks on cyberspace, which go against the very premises surrounding the creation of Internet, which imply that it’s not supposed to be regulated.

Researches have been conducted in Brazil on how the Internet impacts upon consumer rights institutes and on the need for penal regulation of the Internet, in order to tackle cybercrimes suitably. In this sense, if we intend to better understand information society, we can’t avoid confronting technological evolution with the Law and regulatory frameworks concerning the cyberspace. Thus, this research intends to analyze how information and communications technologies (ITCs) are used in order to commit crimes, the so-called cybercrimes or computer crimes.

Thus, it’s essential to reflect if constructing a normative model for the governance and penal guardianship of the cyberspace is enough to solve increasingly common conflicts rooted in that space. Furthermore, it’s essential to reflect on the Brazilian case, taking the construction of the Brazilian Cybercrimes Law (Law No. 12.737/2012) as well as the Brazilian Internet Bill of Rights (Law No. 12.965/2014, also called ‘Marco Civil da Internet’) as a starting point, mostly as far as it concerns the fulfillment of the premises surrounding the construction of the Internet, with no paradigmatic

disruption of the web architecture adopted since its constitution and the constant adaptation which culminated in the constitution of cyberculture and cyberspace.

This research employs the analytical method of critical mapping¹, through comparative analysis of the Brazilian law concerning cybercrimes and the perspectives from an international penal law standpoint. Thus, the analytical paradigm adopted in this research are the Reports and Resolutions by AIDP's - International Association of Penal Law - 19th International Congress of Penal Law, which adopted the contemporary theme of "Information Society and Penal Law". The critical mapping proposed in this research considers the existence of recent regulatory frameworks for governance of the cyberspace and the penal guardianship regarding cybercrimes in Brazil.

These considerations set forth, we intend to find the answer to the following question: with the intention of proposing advances in the study on regulation and guardianship regarding crimes committed in the cyberspace, which were the main points of convergence and divergence presented by the reports and resolutions by the First Section preliminary to AIDP's (International Association of Penal Law) 19th International Congress on Penal Law contributing to a global perspective on penal law?

This research intends to: (i) observe and map legislative interaction concerning cybercrimes; (ii) observe and map the results from the reports and resolutions by the First Section preliminary to AIDP's (International Association of Penal Law) 19th International Congress on Penal Law.

Thus, the relevance of this study resides in the evidence that globally even after the evolution of technologies that contribute for the advance of cyberspace, we still haven't given due relevance to legal, normative, sociological, cultural and even psychological analyses addressing the need for reflection on the institution of regulatory frameworks for the guardianship related to cybercrimes, that is, committed in the cyberspace.

And that context is exactly where the present study will shed light on fundamental concepts of the cyberspace, of the perspectives from Brazilian penal law and of international penal law, in order to present the results obtained from the reports and resolutions by First Section preliminary to AIDP's - International Association of Penal Law - 19th International Congress of Penal Law.

1 The term mapping can be understood as properly revised version of an analogical analysis with no further questions, realized close to reality, or in other words, the shape of a legal analysis doesn't necessarily bring about any groundbreaking legal proposition. Mapping is an attempt to describe in detail the microstructure legally define by society regarding its also legally articulated ideals. The second moment of this analytical procedure must be called criticism. That is to say, a revised version of what rationalist jurists take contemptuously as a transformation of legal analysis into ideological conflict. It's supposed to explore in detail the relations between society's institutional arrangements such as represented by the law, and the ideals or programs professed by these institutional arrangements, as they fail or succeed. In: UNGER, Roberto Mangabeira. **What should legal analysis become?** New York: Verso, 1996, p. 130.

2 What is it – cyberspace?

This research comprises several epistemological variables performance related to the relativization of legal theory due to a new social, global context comprising the advance of information and communications technology. According to Lessig², one of the forerunners of Cyberlaw at Stanford University, the concept of the cyberspace changes rapidly, mostly due to the identity revealed in time and in space according to the users' goals in the web.

The cyberspace herein mentioned corresponds to the space constituted by Internet users and web infrastructure. As everyone knows, the Internet had its first experiences in 1969, since the creation of ARPANET – The Advanced Research Projects Agency Network, with the intention of attending the American Department of Defense's demands, mostly due to Cold War military uncertainties. From then on, web connections grew significantly, until the creation of the World Wide Web (WWW) in the late 1980s by the physicist Tim Berners-Lee, and the development of the first softwares for navigation on Internet pages in the early 1990s³.

Considering the evolution of technology and resources linked to the World Wide Web, or the Internet, as it became popularly known, we should reflect on the factors of cultural production, access and democratization of information, celebration of diversity, and the process of digital inclusion. However, it is also fundamental to promote reflections on legal problems resulting from technological evolution, mostly resulting from the massification of Internet access.

In order to exemplify that evolution and the impact of technologies on society, Lessig⁴ mentions the speech entitled “A Declaration of the Independence of Cyberspace” delivered just after the collapse of bipolar culture with the end of Cold War by Grateful Dead (60s rock band) composer John Perry Barlow, who is also the founder of EFF (Electronic Frontier Foundation), a nongovernmental organization whose scope is the defense of Web users' interests, in which he says: “Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather.”⁵.

From then on, it is possible to identify a constant change in the perception of cyberspace and the possibilities of regulation and governance, mostly as far as it concerns the range of normative instruments which assure an expanded vision of penal guardianship concerning computer crimes, that is, committed in cyberspace.

2 LESSIG, Lawrence. **Code v2**. New York: Basic Books, 2006.

3 VASCONCELOS, Fernando Antonio de. **Internet: a responsabilidade do provedor pelos danos praticados**. Curitiba: Juruá, 2003.

4 LESSIG, Lawrence. **Code v2**.

5 BARLOW, J. P. **A Declaration of the Independence of Cyberspace**. Available at: <<https://projects.eff.org/~barlow/Declaration-Final.html>>. Accessed: 23 Feb. 2011.

Thus, the confrontation of technological evolution, the Law and regulatory frameworks concerning the cyberspace, especially in the Brazilian context, is unavoidable in order to better understand information society, or, as referred to by Castells⁶, web society. Actually, according to the foresaid author, in web society there is no predominance of space crowded with information streams which overlap physical spaces which constituted pre-modern societies and, thus, have become the dominant spatial manifestation in current societies

In this scope, promote a critical study surrounding penal guardianship for computer crimes committed in cyberspace, mostly when it comes to a reflection on regulatory frameworks set on a global scale, with the goal of establishing normative parameters reaching different jurisdictions regarding cyberspace.

In Brazil, just like in other diverse States, the penal guardianship for cybercrimes is addressed by special laws which tackle issues such as computer device invasion, disruption or disturbance of telegram, telephone, informatics or telematics service, or of public utility information, and falsification of private documentation.

Well, if there are native normative provisions, why should we discuss such issue? Is the law the suitable alternative to solve legal problems identified in this research? Addressing the questions herein presented and reflecting on the solution of complex legal conflicts, Streck⁷ says that the Law doesn't meet such demands

not because such 'complexity' wouldn't be comprised in the legal system, but because of a model crisis [...] which exists exactly because legal dogmas, in a transmodern society full of transindividual conflicts, keep operating under the perspective of laws shaped to tackle interindividual conflicts, which are very clear in our Codes [...]⁸.

Facing such premises, we can say that the layers that constitute the communication system of the Internet and the digital media are increasingly more

6 CASTELLS, Manuel. **A sociedade em rede**: a era da informação: economia, sociedade e cultura. São Paulo: Paz e Terra, v.1. 2002.

7 STRECK, Lenio Luiz. **Hermenêutica jurídica e(m) crise**: uma exploração hermenêutica da construção do Direito. 10.ed. Porto Alegre: Livraria do Advogado, 2011. p. 46.

8 These issues receive additional critical components when analyzed through Brazilian Supreme Court decisions, mainly because of the absence of a trustable decision theory. The usual and wrong use of the principles and value of Law became a portion of "danger" to the Brazilian Supreme Court, because of the trial to legitimate historical trues through their decisions, which brings a large scale impact to the juridical policies. (TASSINARI, Clarissa; JACOB DE MENEZES NETO, Elias. Liberdade de expressão e Hate Speeches: as influências da jurisprudência dos valores e as consequências da ponderação de princípios no julgamento do caso Ellwanger. **Revista Brasileira de Direito**, v. 9, n. 2, p. 7-37, jan. 2014. ISSN 2238-0604. Available in: <<https://seer.imed.edu.br/index.php/revistadedireito/article/view/461>>. Access in: 28 feb. 2017).

controlled. However, there remain doubts about which factors should be considered effective in the regulation of the Internet⁹. In this perspective, it is relevant to consider the analytical model developed by Lessig¹⁰, which addresses specifically how to regulate the advance of technology. For this American scholar, in the early 19th century, the dominant liberalism cared about maintaining and assuring freedom, so, thus, any threat to freedom provoked the power of the state and its capacity to create the Law¹¹.

In the context of penal guardianship for computer crimes and above all the guarantee of rights in cyberspace, Lemos¹² questions which factors effectively threaten freedom. According to this author, in the 19th century, the answer would be the Law. However, as the author adds, in the context of contemporary technology, now the Law is not the only factor contributing to limiting individual freedom or making it more flexible, or even to the regulation of web society¹³.

In this perspective, Lemos¹⁴ points out that this same question about which factors threaten individual freedom in the information society can be answered in at least four different ways: the Law, the social norms, the market and the architecture or code. In the author's conception, law is defined as "the whole government normative set supported by the constitution in its most diverse natures and hierarchical categories". Social norms include the use and customs and "any normative postulation shared by communities or inherent to certain situations and circumstances". The market context "is another factor relevant for regulation, since it's the predominant mechanism for accessing economic goods", as well as architecture, which is "the inherent structure of how things are built and how they happen"¹⁵.

In the Lessig's perception¹⁶, in the scope of technology law, "the code is the Law". What the professor at Stanford University intends as he assert such thing is to say that software programming languages become more relevant than conventional normative structures in the scope of the Internet and technology regulation. As Lemos¹⁷ analyzes the groundbreaking premises presented by Lessig, he remarks that the traditional dogmatic categories don't contemplate the contemporary normative characteristic proclaimed by that author, according to which "the code is the Law". In this sense, from

9 LEMOS, Ronaldo. **Direito, tecnologia e cultura**. E-book publicado pela licença Creative Commons na plataforma Google Books. Available at: <http://books.google.com/books?hl=en&lr=&id=xG-2W7YnTfUC&oi=fnd&pg=PA7&dq=DIREITO,+TECNOLOGIA+E+CULTURA&ots=PXCUp6AS7u&sig=2dkpHEIZXv_3UBOaPkho2wMKO58>. 2005. p. 22.

10 LESSIG, Lawrence. **Code v2**.

11 LESSIG, Lawrence. **Code v2**.

12 LEMOS, Ronaldo. **Direito, tecnologia e cultura**.

13 LEMOS, Ronaldo. **Direito, tecnologia e cultura**.

14 LEMOS, Ronaldo. **Direito, tecnologia e cultura**.

15 LEMOS, Ronaldo. **Direito, tecnologia e cultura**. p. 22.

16 LESSIG, Lawrence. **Code v2**.

17 LEMOS, Ronaldo. **Direito, tecnologia e cultura**.

the paradigmatic disruption in the analysis of the law through technological evolution, above all in the scope of cyberspace, past controversies and positions deemed to have been resolved may be rediscussed and whole new questions based on sociological, political and economic aspects “so interdisciplinary that they threaten the specificity of the law itself¹⁸” may be proposed.

In that context, it is clear that penal guardianship for cybercrimes is a latent topic of fundamental importance for every government’s agenda. It is essential to shed light on the Brazilian case, as shown in the exposition of the reasons for the Brazilian Internet Bill of Rights (Draft no. 2.126/2011), the National Research by Domicile Sampling (PNAD) conducted in 2009 by the Brazilian Institute of Geography and Statistics (IBGE) had already pointed out the existence of 68 millions of Internet users in Brazil, with a growth rate of about one million each three months. That statistics represents opportunities for the country. However, it points out many risks concerning many aspects, such as the lack of specific legislation for the regulation of cyberspace and the guardianship for cybercrimes¹⁹.

The lack of specific legal definition concerning the current situation allows the Judicial Power to make conflicting, contradictory decisions on topics directly related to the use of the Internet²⁰. According to the elements listed in the exposition of the reasons for the ‘Marco Civil da Internet’, the absence of specific standardization makes Brazil face many risks, such as:

- a) the disjointed passing of specific normative proposals that create divergence and damage to a harmonic treatment of the matter;
- b) significant legal damages until the jurisprudence adapts to the realities of the information society;
- c) mismatches or even omissions in public policies; and
- d) progressive violation of the users’ rights for practices and contracts freely entered into.

This enables us to perceive the current global relevance of the normative, regulatory treaty for the cyberspace, specially as far as it concerns the penal guardianship for cybercrimes, in order to bring together both the defense of human rights essential to the free exercise of democracy, which currently comprises the free access to the Internet as a regular exercise of a right inherent to the human condition, and the assignment of sanctions toward crimes committed in that environment.

18 LEMOS, Ronaldo. **Direito, tecnologia e cultura**. p. 08.

19 BRASIL. **Exposição de motivos ao projeto de lei n.º 2.126/2011**. Available at: <http://www.planalto.gov.br/ccivil_03/Projetos/ExpMotiv/EMI/2011/86-MJ%20MP%20MCT%20MC.htm>, Accessed: 24 Dec. 2012.

20 BRASIL. **Exposição de motivos ao projeto de lei n.º 2.126/2011**.

3 On the legal analysis of cybercrimes from the Reports and Resolutions preliminary to AIDP's (International Association of Penal Law) 19th Congress of Penal Law

It's necessary to remark initially that the International Association of Penal Law (AIDP) is the oldest worldwide organization consisting of experts on crime science. AIDP was founded in Paris in 1924, as a result of the reorganization of the International Union of Penal Law²¹.

This research proposes an analysis of the reports and resolutions proposed for AIDP's 19th International Congress of Penal Law that took place in 2014 in Brazil addressing the topic "Information Society and the Penal Law". We should remark that AIDP's congresses represent a significant occasion for the discussion of relevant topics that express AIDP's positions on questions related to penal law and crime policy, in order to make it echo on the development of the governments²².

AIDP's 19th International Congress's theme is analyzed through four customary perspectives of the Association, that is: general penal law, special penal law, procedural penal law and international penal law. We stress that these analyses are developed from resolutions and reports from the four preliminary colloquiums that took place in Verona/Italy, Moscow/Russia, Antalya/Turkey and Helsinki/Finland²³.

The section concerning general penal law presents three basic documents: questionnaire, general report and resolutions. The questionnaire addresses themes related to criminalization, legislative technique on the guardianship for cybercrimes, limits for anonymity and the internationalization of these crimes. The questionnaire essentially delimits the so-called "cybercrimes" as a term which comprises criminal behavior which affect interests associated with the use of information and communications technologies (ICTs), such as the computer systems' and the Internet's proper operation, the intimacy and integrity of data stored or transferred through these technologies, or the virtual identity of Internet users. It also refers to a typical aspect shared by every cybercrime-related figure and the investigation of them, which is the relation with systems, networks, computer data on the one hand, and systems, networks and cybernetic data on the other side. In this sense, cybercrime is directly related to both computers in the tradition sense and cybernetic databases²⁴.

21 ASSOCIAÇÃO INTERNACIONAL DE DIREITO PENAL. **Historia de la Asociación Internacional de Derecho Penal**. Available at: <http://www.penal.org/?page=mainaidp&id_rubrique=18&lang=es>. Accessed: 25 Apr. 2014.

22 ASSOCIAÇÃO INTERNACIONAL DE DIREITO PENAL. **Historia de la Asociación Internacional de Derecho Penal**.

23 CONGRESSO INTERNACIONAL DE DIREITO PENAL AIDP. **Mensagem do Presidente da Associação Internacional de Direito Penal**. Available at: <<http://aidp2014.org/>>. Accessed: 25 Apr. 2014.

24 WEIGEND, Thomas. **Cuestionario Sección I – Parte General**. XIX Congreso Internacional de

It's essential to mention, in this context, that cybercrimes present different peculiarity which consider different levels of opportunity by type of crime, as presented by Wall²⁵ in the matrix seen below:

Figure 1: The matrix of cybercrimes: level of opportunity by type of crime (with selected examples)²⁶

Crime Types ▶	<i>Crime against machines/ Integrity-related</i>	<i>Crime using machines/ Computer-related</i>	<i>Crimes in the machine/ Content - related</i>	<i>Crimes in the machine/ Content - related</i>
Opportunities ▼	/ Harmful /Trespass	Acquisition/ (Theft /Deception)	Obscenity	Violence
<u>Traditional crime using computers</u> More opportunities for traditional crime	* Phreaking * Chipping	* Frauds * Pyramid schemes	* Trading sexual materials	* Stalking * Harassment (personal)
<u>Hybrid cybercrime</u> New opportunities For traditional crime (e.g., organisation across boundaries)	* Cracking/ Hacking * Viruses * Hactivism	* Multiple large-scale frauds * 419 type fraud * Trade secret theft * ID Theft	* Online Sex trade / * Camgirl sites	* General Hate speech * Organised paedophile rings (Child abuse)
<u>True Cybercrime</u> New opportunities for new types of crime (Sui Generis)	* Spams (list construction and content) * Denial of Service * Information Warfare * Parasitic Computing	* Intellectual Property Piracy * Online Gambling *E-auction scams *Phishing	* Cyber-sex * Cyber-pimping	* Online Grooming * Organised Bomb talk /Drug talk * Targeted hate speech

Following the complexity identified in Wall's matrix²⁷, the analysis of the future of penal guardianship for computer crimes committed in the cyberspace has become increasingly necessary. Thus, from the answers to the questionnaire proposed by Weigend²⁸ presented by sixteen legal systems (Argentina, Belgium, Brazil, Finland, France, Germany, Greece, Hungary, Italy, Japan, Netherlands, Poland, Romania, Spain and Turkey), a general report was formulated addressing the fundamental elements in these legal systems, that is:

(a) the protection of legal goods related to ICTs and the challenges regarding cyberspace²⁹;

Derecho Penal. "Sociedad de la Información y Derecho Penal" AIDP-IAPL. Available at: <http://www.penal.org/IMG/pdf/Seccion_1_Esp.pdf>. Accessed: 25 Apr. 2014.

25 WALL, D. S. **Mapping out cybercrimes in a cyberspatial surveillant assemblage**. In: WEBSTER, K.; BALL, K. (Org.). *The intensification of surveillance: crime, terrorism, and welfare in the information age*. Londres: Pluto, 2003. p. 112-136.

26 WALL, D. S. **Mapping out cybercrimes in a cyberspatial surveillant assemblage**. p. 112-136.

27 WALL, D. S. **Mapping out cybercrimes in a cyberspatial surveillant assemblage**.

28 WIGEND, Thomas. **Relación General Sección I – Parte General**. XIX Congreso Internacional de Derecho Penal. "Sociedad de la Información y Derecho Penal" AIDP-IAPL. Available at: <<http://www.penal.org/spip/IMG/SECTION%20I%20General%20Report%20ESP.pdf>>. Accessed: 25 Apr. 2014b.

29 WIGEND, Thomas. **Relación General Sección I – Parte General**. XIX Congreso Internacional de

(b) the expansion of penal prohibitions, such as preliminary acts and the ownership of materials³⁰;

(c) the issue on the respect to the principle of legality, above all the requirement for accuracy in penal prohibitions³¹;

(d) the changes in the concept of authorship and accessory liability, especially regarding access providers and content hosting providers³²;

(e) the function of penal law compared to other forms of protection of legal goods through specific Internet mechanisms such as block to access or the elimination of websites³³;

(f) the legislative reactions to the frequent problem of Internet users staying anonymous³⁴;

(g) the international efforts on coordinating and harmonizing the law in a field which transcends by definition the national frontiers³⁵;

Regarding the points observed in the questionnaire and in the general report, it is possible to identify in Koops³⁶ considerations that the Internet calls for a special attention due to several features:

(a) it is global and allows real-time interpersonal connections to be made, regardless of one's location;

(b) time, distance and the national frontiers are much less important than in traditional crime;

(c) since the Internet is a digital network, it allows automated data processing to be conducted almost at the speed of light, in an unprecedented scale. Thence, cybercrime's complexity diverges from crimes committed in other spaces and circumstances.

Ensuing the issues presented, the section of general penal law presented resolutions divided in five groups: (a) general considerations for penal law; (b)

Derecho Penal. "Sociedad de la Información y Derecho Penal" AIDP-IAPL.

30 WIGEND, Thomas. **Relación General Sección I** – Parte General. XIX Congreso Internacional de Derecho Penal. "Sociedad de la Información y Derecho Penal" AIDP-IAPL.

31 WIGEND, Thomas. **Relación General Sección I** – Parte General. XIX Congreso Internacional de Derecho Penal. "Sociedad de la Información y Derecho Penal" AIDP-IAPL.

32 WIGEND, Thomas. **Relación General Sección I** – Parte General. XIX Congreso Internacional de Derecho Penal. "Sociedad de la Información y Derecho Penal" AIDP-IAPL.

33 WIGEND, Thomas. **Relación General Sección I** – Parte General. XIX Congreso Internacional de Derecho Penal. "Sociedad de la Información y Derecho Penal" AIDP-IAPL.

34 WIGEND, Thomas. **Relación General Sección I** – Parte General. XIX Congreso Internacional de Derecho Penal. "Sociedad de la Información y Derecho Penal" AIDP-IAPL.

35 WIGEND, Thomas. **Relación General Sección I** – Parte General. XIX Congreso Internacional de Derecho Penal. "Sociedad de la Información y Derecho Penal" AIDP-IAPL.

36 KOOPS, Bert-Jaap. **The Internet and its Opportunities for Cybercrime**. Tilburg Law School Legal Studies Research Paper Series. n. 09/2011. Available at: <<http://ssrn.com/abstract=1738223>>. Accessed: 23 Apr. 2014.

alternatives to penal sanction; (c) the principle of legality; (d) the expansion of penal laws; and (e) the international cooperation³⁷.

As far as the first group is concerned, regarding the general considerations on penal legislation, the conclusion was that ICTs and the cyberspace produced specific interests that must be respected and protected, following the example of integrity and privacy of ICT systems and the personal identities in cyberspace. According to these considerations, the authors of some traditional crimes such as fraud, identity theft and violations to authors' rights use ICT networks and the cyberspace, which intensifies the danger of such behavior, demanding for acceptance and adaptation by legislators, courts and penal law systems³⁸.

Besides, the first general considerations resolution concluded that the integrity of cyberspace and ICT networks are essential for modern societies, even regarding communication media, and that the noxious and dangerous behavior in these environments can compromise fundamental interests, and thence the Governments must create efficient policies for the protection of ICT networks and the interests affected by it³⁹.

On the other side, the resolutions ponders the need for avoiding excessive regulation and criminalization of cyberspace, risking compromising communication freedom, which is an authentic, particular characteristic of cyberspace. Besides, lawmakers must be aware that behavior regulation through the creation of penal laws and the imposition of unproportional mechanisms of control of cyberspace could interfere in the fundamental rights⁴⁰, specially the freedom of speech and the freedom to gather information⁴¹.

As to the second group, as far as the alternatives to penal sanction are concerned, the first resolution is emphatic when it concludes that it's fundamental to encourage

37 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”. Available at: <<http://www.penal.org/spip/IMG/SECTION%201%20Resolutions%20ESP.pdf>> Accessed: 25 Apr. 2014.

38 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

39 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

40 About this issue, it is very relevant to consult the great contribution of Zambam and Ickert (2011), in their essay about Brazilian democracy and penal penalties, mainly in situation that violate human dignity and fundamental rights, as freedom of speech and unproportional mechanisms of surveillance and control. (ZAMBAM, Neuro José; ICKERT, Airton Juarez. A democracia brasileira e a pena privativa de liberdade: alternativas que preservam a dignidade humana. **Revista Brasileira de Direito**, v. 7, n. 2, p. 147-166, out. 2011. ISSN 2238-0604. Available in: <<https://seer.imed.edu.br/index.php/revistadedireito/article/view/271>>. Access in: 28 feb.. 2017).

41 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

ITC networks' users and system providers to create protection and network safety mechanisms, including self-regulation for the providers. Carelessness about safety measures can't lead to penal liability for the users, except in case of punishment for violating specific obligations regarding data safety maintenance imposed to the liable subjects⁴².

In the same group, the first resolution ponders that penal prohibitions contain strong moral reproach, and thus could stigmatize criminals. Considering this, the Governments should carefully exam if non-criminal measures could be just as efficient in preventing attacks and abuse of freedom in ICTs and cyberspace.

Concerning this situation, the following proposals arise:

(a) damage compensation to victims according to civil law, as well as the promotion of instruments of restorative justice⁴³ as viable alternatives regarding legal orders;

(b) the imposition of administrative measures, such as block to access or removal of offensive websites, combining the dissuasive effect without resorting to penal law, but without the occurrence of unproportional actions that turn out to become censorship by executive authorities⁴⁴;

According to the need, for dissuasive effects, lawmakers can also consider allowing data storage under efficient legal control for later identification of users in suspicion committing major crimes⁴⁵.

The third group of resolutions, linked to the debate on the principle of legality, came to the conclusion that what requires regarding violations in the scope of ICT and cyberspace are define by law. It also means that it counts for the definition of liabilities and obligations for the individuals, considering the result of penal liability too. In this sense, the resolution recommends that the law employ terms that define the forbidden behavior as accurately as possible, considering also the need for legal adaptation due to technological changes, and that the courts mustn't expand the interpretation on the prohibition terms beyond its usual meaning⁴⁶.

The fourth group of resolutions, committed to the discussion of the expansion of penal laws, considered that many laws criminalized actions that are merely preliminary to attacks to the interests of ICTs and cyberspace, such as production, distribution and ownership of malware. The expansion of penal laws is legitimate,

42 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

43 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

44 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

45 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

46 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

as preliminary actions, as such, create an impending risk of damage. So, when preliminary attacks are punishable, the punishment must be lighter than that prescribed for the consummated crime⁴⁷.

Other aspects considered in the fourth group are linked to the need for distinction regarding the criminalization of software ownership, which mustn't lead to improper restrictions about the legitimate use of software, and the remark that the mere ownership and exhibition of data should be punish only when they happen intentionally and cause direct and indirect damage to people⁴⁸.

Furthermore, regarding the proposal of expansion of penal laws, the ICT service provider shouldn't be constrained to censor any content processed by them. The penal liability concerning this should be limited to situations when providers are trustfully and specifically warned about the existence of forbidden content in its domain, and there are no reasonable immediate measures for the restoration of legality⁴⁹.

The fifth and last group of resolutions addresses the international cooperation, which is a recurring topic in the debate of cybercrimes. According to the proposal in that group, global policies concerning criminal law for the protection of ICT networks and the cyberspace's and its users' interests, in order to assure an efficient protection, avoid discrepancy between the regulations on the matter, improve the international cooperation and avoid jurisdiction conflicts⁵⁰.

Considering this, we observe that the commitment assumed by the International Association of Penal Law to discuss properly, seriously and responsibly contemporary topics such as the penal law in the information society is confirmed from the results identified in the questionnaire, in the general report and in the resolutions pointed out in the preliminary colloquiums. Furthermore, the content produced from the debate resulting enabled by these opportunities contributes significantly for the conceptual formulation of the penal law and its relation with cybercrimes, above all the dynamics of evolution and transformation of the criminal behavior and the media employed to commit crimes of this nature.

4 Conclusions

A little more than a decade ago, when the Internet still attempted its first steps in Brazil, the Brazilian composer and champion of freedom of rights in the cyberspace,

47 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

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49 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

50 PROPUESTA DE RESOLUCIÓN AIDP. **Sección I** – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”.

Gilberto Gil⁵¹ referred in the song “Pela Internet” to one of the first impressions that the web represented in the users’ lives: “I want to access the web, Promote a debate, Bring people together through the Internet, A group of groupies from Connecticut, [...] I want to join the web to contact, The homes at Nepal and the bars at Gabon.”

We’re definitely living in a time when the simultaneousness enabled by the Internet gives us opportunity to experience a revolution in communication, social relationship and consumption. In the sense presented by Gil, we’re living in the age of the websites and the transcendence of gigabytes in “clouds” with cloud computing. Considering this, it’s undeniable that the relations established in the virtual environment lack a legal analysis through sociological, hermeneutical, jurisdictional and *modus operandi*-based perspectives that the technology encourages us to investigate.

The modern consumer increasingly seeks the Internet to make commercial transactions, and this happens for several factors, such as the optimization of available time, the attempt to maintain privacy, the range of price searching.

A generation of individuals increasingly acquainted with “googling” takes shape. Yes, the verb “to google”, inserted in the American English vocabulary after Google search engine became one of the greatest authorities in communication and information on Earth. The Internet and above all the action of “googling” echoed as diversely as possible on the individual life and in society, putting in check several post-modern paradigms: consumption, social relationships, communication and information will never be the same.

Considering these changes, the development of researches concerning penal law and the information society is essential, in order to establish a new sight on crimes whose roots lie in cyberspace or whose vicious effects of the violation of rights will echo on cyberspace. The study developed by us enabled us to identify a series of latent weaknesses, triggered by the use of technologies that seek to spread information and knowledge through ICTs, that in the analysis proposed by the present research lies in the transformation inherent to penal law.

In this sense, the legal inaccuracy presented by the legal order in a global scale, mostly regarding cyberspace regulation and penal guardianship for cybercrimes, ends up subjecting the parts and conflicts with which they’re involved to the mercy of the jurisdictional “consciousness”. This is far from what Streck⁵² has defended for a long time as a search for a right, proper answer to the Constitution of the States.

Considering this, we must recapitulate the problematization of the research from the question: seeking to propose advances in the study on regulation and

51 ROHTER, Larry. **Gilberto Gil Hears the Future, Some Rights Reserved**. The New York Times, March 11, 2007. Available at: <http://www.nytimes.com/2007/03/11/arts/music/11roht.html?pagewanted=all&_r=0>, Accessed: 29 Aug. 2011.

52 STRECK, Lenio Luiz. **Hermenêutica jurídica e(m) crise: uma exploração hermenêutica da construção do Direito**.

guardianship regarding crimes committed in the cyberspace, which were the main points of convergence and divergence presented by the reports and resolutions by the First Section preliminary to AIDP's (International Association of Penal Law) 19th International Congress on Penal Law? After the present research herein developed, there has been a deepening of the analysis which considered elements comprised in the practice of cybercrimes in a global scale and the necessary initiatives to represent a possible answer for the problem presented in the First Section preliminary to AIDP's 19th International Congress of Penal Law.

Cyberspace as a whole offers new, different perspectives and expectations for the future. A while ago, when we watched a sci-fi movie, we imagined the future to come. Now, we have the almost certain feeling that the future is now, and in this present future, it's doubtlessly necessary to subject the Law to a conceptual immersion in the cyberspace, preserving above all the fundamental rights of all participants of the relations established in that space.

References

- ASSOCIAÇÃO INTERNACIONAL DE DIREITO PENAL. **Historia de la Asociación Internacional de Derecho Penal**. Available at: <http://www.penal.org/?page=mainaidp&id_rubrique=18&lang=es>. Accessed: 25 Apr. 2014.
- BARLOW, J. P. **A Declaration of the Independence of Cyberspace**. Available at: <<https://projects.eff.org/~barlow/Declaration-Final.html>>. Accessed: 23 Feb. 2011.
- BRASIL. **Exposição de motivos ao projeto de lei n.º 2.126/2011**. Available at: <http://www.planalto.gov.br/ccivil_03/Projetos/ExpMotiv/EMI/2011/86-MJ%20MP%20MCT%20MC.htm>, Accessed: 24 Dec. 2012.
- CASTELLS, Manuel. **A sociedade em rede: a era da informação: economia, sociedade e cultura**. São Paulo: Paz e Terra, v.1. 2002.
- CONGRESSO INTERNACIONAL DE DIREITO PENAL AIDP. **Mensagem do Presidente da Associação Internacional de Direito Penal**. Available at: <<http://aidp2014.org/>>. Accessed: 25 Apr. 2014.
- LEMONS, Ronaldo. **Direito, tecnologia e cultura**. E-book publicado pela licença Creative Commons na plataforma Google Books. Available at: <http://books.google.com/books?hl=en&lr=&id=xG-2W7YnTfUC&oi=fnd&pg=PA7&dq=DIREITO,+TECNOLOGIA+E+CULTURA&ots=PXCUp6AS7u&sig=2dkpHEIZXv_3UBOaPkho2wMKO58>. 2005. p. 22.
- LESSIG, Lawrence. **Code v2**. New York: Basic Books, 2006.
- PROPUESTA DE RESOLUCIÓN AIDP. **Sección I – Derecho Penal Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal”**. Available at: <<http://www.penal.org/spip/IMG/SECTION%201%20Resolutions%20ESP.pdf>> Accessed: 25 Apr. 2014.
- ROHTER, Larry. **Gilberto Gil Hears the Future, Some Rights Reserved**. The New York Times, March 11, 2007. Available at: <http://www.nytimes.com/2007/03/11/arts/music/11roht.html?pagewanted=all&_r=0>, Accessed: 29 Aug. 2011.
- STRECK, Lenio Luiz. **Hermenêutica jurídica e(m) crise: uma exploração hermenêutica da construção do Direito**. 10.ed. Porto Alegre: Livraria do Advogado, 2011. p. 46.
- TASSINARI, Clarissa; JACOB DE MENEZES NETO, Elias. Liberdade de expressão e Hate Speeches: as influências da jurisprudência dos valores e as consequências da ponderação de princípios no julgamento do caso Ellwanger. **Revista Brasileira de Direito**, v. 9, n. 2, p. 7-37, jan. 2014. ISSN 2238-0604. Available in: <<https://seer.imed.edu.br/index.php/revistadedireito/article/view/461>>. Access in: 28 feb. 2017.
- VASCONCELOS, Fernando Antonio de. **Internet: a responsabilidade do provedor pelos danos praticados**. Curitiba: Juruá, 2003.
- WALL, D. S. **Mapping out cybercrimes in a cyberspatial surveillant assemblage**. In: WEBSTER, K.; BALL, K. (Org.). **The intensification of surveillance: crime, terrorism, and welfare in the information age**. Londres: Pluto, 2003. p. 112-136.

WEIGEND, Thomas. **Cuestionario Sección I** – Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal” AIDP-IAPL. Available at: <http://www.penal.org/IMG/pdf/Seccion_1_Esp.pdf>. Accessed: 25 Apr. 2014.

WIGEND, Thomas. **Relación General Sección I** – Parte General. XIX Congreso Internacional de Derecho Penal. “Sociedad de la Información y Derecho Penal” AIDP-IAPL. Available at: <<http://www.penal.org/spip/IMG/SECTION%20I%20General%20Report%20ESP.pdf>>. Accessed: 25 Apr. 2014b.

ZAMBAM, Neuro José; ICKERT, Airton Juarez. A democracia brasileira e a pena privativa de liberdade: alternativas que preservam a dignidade humana. **Revista Brasileira de Direito**, v. 7, n. 2, p. 147-166, out. 2011. ISSN 2238-0604. Available in: <<https://seer.imed.edu.br/index.php/revistadedireito/article/view/271>>. Access in: 28 feb.. 2017.