

Internet Regulation and the Role of International Law

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† To the memory of my father Tomás Antonio Segura Ortega.

I. Introduction

Given the “virtual” nature of its existence, the first important legal discussion about the Internet focused on its natural resistance to regulation. Despite this supposed resistance, national laws have been erected throughout the world with the aim and effect of subjecting the Internet to “real” regulation. Considering the global character of the Internet, however, International Law could be a more suitable tool for regulation in some of the various Internet-related issues. This article, therefore, aims to study the current and future roles of International Law regarding the regulation of this field.

After a short debate of the regulability of the Internet as such the article will focus on the current role of International Law with respect to the regulation of the Internet. That exercise will allow us to identify the main different national approaches to Internet regulation, as well as the existing International Law instruments stemming from those approaches. There is an array of questions related to this new technology that national laws have addressed in various forms. We would like to focus only on some substantial issues, such as freedom of speech and the fight against harmful content; the protection of intellectual property rights against piracy and the promotion of public domain information; and privacy rights and the protection of personal data *vis-à-vis* the commercial use of collected data. Although there are other possible questions to be discussed (education, cyber security, taxation, electronic commerce and contracts, etc.), these issues will give the measure of the differences between national laws, and will reveal the present role of International Law with respect to the Internet.

Then we shall consider some traditional International Law questions or issues relating to the Internet that have not attracted enough attention until now. First, it seems clear that the integrity of Internet facilities is a matter of national security for any country. As such, we shall determine whether a cyber-attack, in the form of a virus or otherwise, may be considered an armed attack; and if so, whether such an attack may legally trigger a nation’s legitimate self-defense response, or even the collective action of the United Nations (UN). Second, because the Internet is important not only for each and every country in the world, but also because it is so crucial for the well-being of people in developed and developing countries alike, it seems fair to ask about the future governance of the Internet. In this regard, International Law may add to the discussion by introducing a very interesting concept, the concept of CHM (Common Heritage of Mankind). The analysis of this

concept may be useful in answering various questions, such as who rules the Internet, or who is entitled to appropriate the Internet, and how should the Internet be governed.

Finally, we will consider whether access to the Internet may be regarded as a human right. It is clear that freedom of expression is a human right. Access to the Internet, however, means much more than merely freedom of expression, as it involves issues ranging from education to political participation. In this respect, some steps have been taken in order to outline what could be described as a right to “universal access”, which may include a right to Internet access.

To this end, the World Summit on the Information Society (WSIS), held in Geneva in 2003¹ and in Tunis in 2005,² and sponsored by the UN and the International Telecommunication Union (ITU) will also be taken into account as the most recent international effort to bring together all issues connected with the Internet and to establish the principles on which democracy and justice can be instilled in this area.

II. The Debate on the Regulability of the Internet

From the inception of the Internet, there has been a debate that may be labeled regulation v. deregulation regarding this new field of activity.³ Is it possible and feasible to regulate the Internet, or on the contrary, is the Internet an essentially free place, a virtual *terra nullius*?

¹ Declaration of Principles, Building the Information Society: a Global Challenge in the New Millennium, World Summit on the Information Society, (quoted as Declaration of Principles of the World Summit on the Information Society) Geneva 2003, 12 December 2003, 1, para. 1, Doc. WSIS-03/GENEVA/DOC/4-E, available at <http://www.itu.int/dms_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0004!!PDF-E.pdf> (stating “the common desire and commitment to build a people-centered inclusive and development-oriented Information Society”).

² Tunis Commitment, World Summit on the Information Society, Geneva 2003 – Tunis 2005, 18 November 2005, Doc. WSIS-05/TUNIS/DOC/7-E, available at <<http://www.itu.int/wsis/docs2/tunis/off/7.pdf>>.

³ L.J. Gibbons, “No Regulation, Government Regulation, or Self-Regulation: Social Enforcement or Social Contracting for Governance in Cyberspace”, *Cornell Journal of Law & Public Policy* 6 (1997), 475 et seq. (499) (stating that “[t]he regulation of cyberspace may take one of three forms. Cyberia will be government regulated, self-regulated, or even unregulated”).

The libertarian position was embraced by a few academics, especially in the U.S., during the nineties as the Internet was spreading from small communities to larger population coverage. According to the libertarians, the Internet cannot and should not be regulated.⁴ Cyberspace sovereignty is the core idea in seminal writings like those of Johnson and Post.⁵ In their view, not only is it impossible or futile for the state to regulate the Internet, but it is also desirable for the Net to be free of state regulation.⁶ In addition, the state faces legitimacy problems in its efforts to govern activities happening on the Internet;⁷ whereas, cyberspace self-governance would more fully realize liberal democratic ideas.⁸ A further analysis would require us to establish a difference between the extremist cyber-separatists, who assert that the Internet should be a place absolutely free from regulation, and those who merely advocate for self-regulation as the appropriate way to handle cyber-

⁴ It has become common place to quote as a leading proponent of cyberspace independency from J.P. Barlow, *A Declaration of the Independence of Cyberspace*, available at <<http://www.eff.org/~barlow/Declaration-Final.html>>; also J.T. Delacourt, "The International Impact of Internet Regulation", *Harv. Int'l L. J.* 38 (1997), 207 et seq. (208) (emphasizing that the arguments for complete non-regulation are compelling).

⁵ D.R. Johnson/ D. Post, "Law and Borders – The Rise of Law in Cyberspace", *Stanford L. Rev.* 48 (1996), 1367 et seq.; D.G. Post, *Anarchy, State, and the Internet: An Essay on Law-Making in Cyberspace (article 3)*, 1995 J. Online L. available at <<http://www.wm.edu/law/publications/jol/articles/post.shtml>> [hereinafter Post, *Anarchy, State*]; I. Trotter Hardy, "The Proper Legal Regime for 'Cyberspace'", *University of Pittsburgh Law Review* 55 (1994), 993 et seq. (promoting the use of norms of "self-regulation", including mechanisms like self-help, contracts, private associations and custom); H.H. Perritt, Jr., "Cyberspace Self-Government: Town Hall Democracy or Rediscovered Royalist?", *Berkeley Technology Law Journal* 12 (1997), 413 et seq. (419) (stating that "self-governance is desirable for electronic communities").

⁶ Johnson/ Post, see note 5, 1391-1395 and 1370-1376, respectively.

⁷ A. Mefford, "Lex Informatica: Foundations of Law on the Internet", *Ind. J. Global Legal Stud.* 5 (1997/98), 211 et seq. (217).

⁸ D.G. Post, "Governing Cyberspace", *Wayne Law Review* 43 (1996), 155 et seq. (170-171); id., "The 'Unsettled Paradox': The Internet, the State, and the Consent of the Governed", *Ind. J. Global Legal Stud.* 5 (1997/98), 521 et seq. (535-542). But see N. Weinstock Netanel, "Cyberspace Self-Governance: A Skeptical View from Liberal Democratic Theory", *Cal. L. Rev.* 88 (2000), 395 et seq. (488) (contending that the liberal state would likely be a more effective guarantor of liberal rights).

space. In any case, libertarians intend to create a space for “netizens”⁹ (Net citizens) which would be free from traditional nation-state rules.

The arguments used by these cyber-separatists are numerous and cover a wide range of issues. On the descriptive side, libertarians maintain that, because there are no borders in cyberspace (an intrinsically global phenomenon),¹⁰ any efforts made by territorially based sovereigns to regulate it will be doomed to failure.¹¹ Similarly, if the Net is everywhere and nowhere in particular, in other words, if it is “a-jurisdictional,”¹² then no sovereign state has a more compelling claim than any other to subject these events exclusively to its laws.¹³ They argue, then, that it would be unjustifiable to subject acts abroad to domestic regulation,¹⁴ because it would unfairly disturb individual activities in other jurisdictions and unacceptably affect regulatory choices of other nations.¹⁵ Surprisingly, cyberspace may reproduce those very boundaries¹⁶ (called electronic boundaries) of the physical world that it was meant to abolish, though that result would supposedly correspond to a better way of organizing Internet governance.¹⁷ The libertarian discourse maintains that there is also a problem of notice within such a system, due to the fact that cyberspace users would be unable to know

⁹ D.R. Johnson/ D.G. Post, *The New “Civic Virtue” of the Internet*, available at <<http://www.cli.org/paper4.htm>>, 11.

¹⁰ J.R. Reidenberg, “Governing Networks and Rule-Making in Cyberspace”, *Emory Law Journal* 45 (1996), 911 et seq. (915) [hereinafter Reidenberg, *Governing Networks*] (underscoring that the Internet provokes the disintegration of territorial borders and undermines substantive legal sovereignty).

¹¹ They also suggest that, regarding enforcement, states may be unable to make cyber users abide by their laws, as they may very well be out of the state’s reach and control, cf. Perrit, see note 5, 423; Mefford, see note 7, 214.

¹² Post, *Anarchy, State*, see note 5, para. 36.

¹³ This argument is also based on the idea of “comity” in International Relations, cf. Johnson/ Post, see note 5, 1376 and 1391.

¹⁴ Cf. D.L. Burk, “Federalism in Cyberspace”, *Cornell Law Review* 28 (1996), 1095 et seq. (1129-1131) (describing competitive federalism, he recalls how states may not attempt to “export” their local laws into another jurisdiction).

¹⁵ Johnson/ Post, see note 9, 4-5; Burk, see note 14, 1129-1134.

¹⁶ Reidenberg, *Governing Networks*, see note 10, 917 (speaking of visible network borders).

¹⁷ Johnson/ Post, see note 5, 1395; Johnson/ Post, see note 9, 11.

beforehand when and what jurisdiction they would encounter when navigating over the Net.¹⁸

In their view, the alternative to state-based governance is self-governance.¹⁹ Building on the idea of “delegation”, they say that informal rules, called Netiquette (Internet etiquette), developed over time by cyberspace participants,²⁰ and rules designed and accepted by business-people (a kind of new *lex mercatoria*),²¹ would more appropriately fit the needs of this new virtual community. Governance of cyberspace must be construed not on the basis of remote, unaffected national legislators, but by cyberspace users themselves, “netizens”, who are the true and legitimate constituents of this new societal space.²² This kind of discourse is to some extent rooted in specific population layers, and is akin to the ideological trends of today’s politics, particularly in the U.S.²³

One of the most intricate problems posed by self-regulation is how far such regulation is to go. Even accepting the libertarian premise, that self-rule is good for cyberspace, would it mean that every regulatory area related to the Internet would be left to self-regulation? Would the

¹⁸ Johnson/ Post, see note 5, 1379 and accompanying note 33; but see J.L. Goldsmith, “Against Cyberanarchy”, *U. Chi. L. R.* 65 (1998), 1199 et seq. (1243-1244) (explaining the concept of “reasonable foresee ability”); S.S. Mody, “National Cyberspace Regulation: Unbundling the Concept of Jurisdiction”, *Stanford J. Int’l L.* 37 (2001), 365 et seq. (379-381).

¹⁹ Perritt, see note 5, 477-478 (stating that self-governance for the Internet is, not only legally feasible, but also “desirable for several reasons: self-governance may be more efficient; electronic network communities need different rules and procedures; open networks escape enforcement of conventional rules; and self-governance promotes voluntary compliance”).

²⁰ Johnson/ Post, see note 5, 1389; Reidenberg, *Governing Networks*, see note 10, 920.

²¹ Johnson/ Post, see note 5, 1389.

²² Post, see note 8, 163-165 (recalling on this point Jefferson’s ideas on decentralization of law-making to support cyberspace self-regulation).

²³ V. Mayer-Schönberger, “The Shape of Governance: Analyzing the World of Internet Regulation”, *Va. J. Int’l L.* 43 (2003), 605 et seq. (621) (stating that “self-rule and self-regulation [...] sound very American and thus resonate with many of the largely American, suburban, middle-class people on the Net today”). See also J.R. Reidenberg, “Yahoo and Democracy on the Internet”, *Jurimetrics Journal* 42 (2002), 261 et seq. (262) (confirming that “[s]eparatist philosophy derives largely from the American value placed on the unfettered flow of information”).

entire Net community be regulated by self-regulating regimes, or only some specific subsets within it?²⁴ Another complex problem that cyber-libertarians face is enforcement. If there is no physical force in place, what means does the Net community have to enforce its own-built rules?²⁵ Some commentators state that the cost of expulsion from the community would be a valid tool of deterrence,²⁶ but this issue is far from solved.

The libertarian claims have been contested, both on the descriptive²⁷ and normative fronts.²⁸ First of all, it is debatable whether in fact cyberspace constitutes a free place, a sovereign jurisdiction, far from state's reach.²⁹ Secondly, even taking for granted that assumption, what the Internet actually *is* may differ from what it *should be*, as leading scholars like Lessig have argued.³⁰ Goldsmith, in an already seminal work, has used the word "cyberanarchy" to describe (and fight back against) the kind of discourse which defends a space separate from the real world and devoid of any rules.³¹ In sharp contrast with the separatist view, those who may be called traditionalists affirm that the political and legal institution known as the state is the proper regulatory organization to carry out the task of regulating the Internet.³² The state, based

²⁴ Mayer-Schönberger, see note 23, 622-623; M.A. Lemley, "The Law and Economics of Internet Norms", *Chicago-Kent Law Review* 73 (1998), 1257 et seq. (1268-1269).

²⁵ Mefford, see note 7, 213 and 235.

²⁶ Gibbons, see note 3, 523.

²⁷ T.S. Wu, "Cyberspace Sovereignty? – The Internet and the International System", *Harvard Journal of Law & Technology* 10 (1997), 647 et seq.

²⁸ L. Lessig, *Code and Other Laws of Cyberspace*, 1999, 25.

²⁹ Wu, see note 27, 649-656; cf. J.P. Trachtman, "Cyberspace, Sovereignty, Jurisdiction, and Modernism", *Ind. J. Global Legal Stud.* 5 (1997/98), 561 et seq. (562) (stating that "[t]he argument that technological changes occurring today require the death of the state and its regulatory function proves too much").

³⁰ Lessig, see note 28, 25.

³¹ Goldsmith, see note 18; Weinstock Netanel, see note 8, 443.

³² J.L. Goldsmith, "The Internet and the Abiding Significance of Territorial Sovereignty", *Ind. J. Global Legal Stud.* 5 (1998), 475 et seq. (476); C. Fried, "Perfect Freedom or Perfect Control?", *Harv. L. Rev.* 114 (2000), 606 et seq. (621); see also A.R. Stein, "The Unexceptional Problem of Jurisdiction in Cyberspace", *Int'l Law.* 32 (1998), 1167 et seq. (1174) (stating, with regard to Cyber Law, that "[w]hatever connections the Internet facilitates among its users, it has no claim of authority over them. Whatever dif-

on elected governments combined with the rule of law, exhibits a proven democratic legitimacy³³ and encompasses the institutional mechanisms to enforce the regulations needed to manage cyberspace.³⁴ Traditionalists deal with the spillover effect, that is, the problems related to having as many regulations affecting Internet activities as there are states, many of which may be overly contradictory or conflicting,³⁵ by pointing out that this problem is hardly exclusive to cyberspace.³⁶ Moreover, conflict-of-laws doctrines have evolved to solve this problem effectively.³⁷ In sharp contrast to the spillover effect, the issue of regulatory evasion or regulatory arbitrage remains,³⁸ but this would be no more problematic within the field of Internet regulation than with regard to other areas of the real world.³⁹ Thus, at least recently, there seems to be a growing consensus that the Internet does not constitute a distinct physical space or even a different jurisdiction,⁴⁰ and that it is

facilities territorial states have in regulating elusive Internet behavior, there is no Internet sovereignty with which they must reckon”).

³³ S.T. Ratner, “New Democracies, Old Atrocities: An Inquiry in International Law”, *Geo. L. J.* 87 (1999), 707 et seq. (740).

³⁴ Mayer-Schönberger, see note 23, 612.

³⁵ Johnson/ Post, see note 5, 1374.

³⁶ Goldsmith, see note 18, 1240-1242; Trachtman, see note 29, 568-569; Mody, see note 18, 382-384. On the normative side, it has been also pointed out that states have the legitimate right to subject to their jurisdiction transnational activity having local effects even if it causes spillover effects (that is, it affects activities and regulation in other countries), cf. again Goldsmith, see note 18, 1240-1241.

³⁷ Goldsmith, see note 18, 1205-1212 (arguing that the current approach to choice of law is no longer based on a traditional and territorial conception of how conflicts of law are resolved as the “skeptics”, in Goldsmith terms, intend to show).

³⁸ A.M. Froomkin, “The Internet as a Source of Regulatory Arbitrage”, in: B. Kahin/ C. Nesson (eds), *Information Policy and the Global Information Infrastructure*, 1997, 129 et seq. (140-150); Mayer-Schönberger, see note 23, 616 (describing it as the situation in which users of cyberspace, “seeking information that is illegal in their own jurisdiction, can go out on the Internet, disguise themselves, take another identity – and thus simulate their presence in another jurisdiction – and obtain the information they desire”).

³⁹ Goldsmith, see note 18, 1222.

⁴⁰ J. Zittrain, “Be Careful What You Ask For: Reconciling a Global Internet and Local Law”, in: A. Thierer/ C.W. Crews Jr. (eds), *Who Rules the Net?*, 2003, 13 et seq. (22) (stating that early accounts “are now thoroughly dated,

starting to be viewed as the product of an advanced telecommunications technology.⁴¹ National regulation of cyberspace transactions is legitimate and feasible.⁴² The law must adjust to this new reality,⁴³ and, as technology proceeds, we should expect to experience an increase in state regulation of cyberspace.⁴⁴

There is a third way to tackle the Internet issue, namely, mixed regulation or governance.⁴⁵ This approach is not very different from a more classical view that distinguishes between default rules and mandatory rules.⁴⁶ Most commentators taking this approach think that cyberspace regulation should be the result of a mixture of national laws and self-community rules. This hybrid regulation would assure the legitimacy, flexibility and enforceability needed for Internet regulation to become a working legal system.⁴⁷ As Mayer-Schönberger has shown, it is possible to regulate the Internet avoiding the extremes (that is, relying exclusively on either national regulation or self-regulation) by way of blend-

premiered on a digital divide between offline and online that less and less exists”). Cf. Fried, see note 32, 621.

⁴¹ Cf. Stein, see note 32, 1174.

⁴² Goldsmith, see note 18, 1244, 1249 (pointing out that national and international regulations on the Internet are not only legitimate and feasible, but also necessary, because they provide the enforcement mechanisms and flexibility needed by private parties).

⁴³ J. Hughes, “The Internet and the Persistence of Law”, *Boston College Law Review* 44 (2003), 359 et seq. (364) (pointing out that “[c]yberlaw has turned out to be a project of ‘cyberizing’ law, translating familiar legal concepts and the rough balance of interests created by the legal system into the Internet environment”).

⁴⁴ Wu, see note 27, 660; J. Boyle, “Foucault in Cyberspace: Surveillance, Sovereignty, and Hardwired Censors”, *University of Cincinnati Law Review* 66 (1997), 177 et seq. (184) (forecasting the reaction of law and the state).

⁴⁵ Reidenberg, *Governing Networks*, see note 10, 929-930 (suggesting a “system of state-provided incentives through encouragement, as well as allocation of liability, that will induce networks themselves to adopt desirable public policies [...] yet state governments cannot and should not attempt to expropriate all regulatory power from network communities”).

⁴⁶ Goldsmith, see note 18, 1216 and 1245.

⁴⁷ H.H. Perritt, Jr., “The Internet is Changing the Public International Legal System”, *Kentucky Law Journal* 88 (2000), 885 et seq. (930) (stating that “[t]hese hybrid structures offer the advantages of greater flexibility and decentralization available through private ordering, while tying private ordering to public law to enhance legitimacy, political acceptability, and enforcement through state-based coercion when necessary”).

ing together national law, self-regulation and even International Law.⁴⁸ To be sure, international lawyers have always reminded us that International Law and harmonization could be, and indeed are, the natural solution for global problems. Regarding the Internet, however, International Law alone is not always recommended,⁴⁹ and as a result, a sort of mixed governance has evolved with the Internet Corporation for Assigned Names and Numbers (ICANN), an allegedly fascinating combination of the three mentioned regulatory layers.⁵⁰ We shall consider this situation and the question of Internet governance more deeply below.

Finally, that national regulation on the Internet is possible and is a reality can be confirmed very easily if we take a look at any country's existing regulations in this field. For example, the U.S. legislation on the Internet includes, among the best known, the Communications Decency Act of 1991 (CDA),⁵¹ Child Online Protection Act of 1998 (COPA),⁵² Children's Internet Protection Act of 1998 (CIPA),⁵³ Digital Millennium Copyright Act of 1998 (DMCA),⁵⁴ Uniform Electronic Transaction Act of 1999 (UETA),⁵⁵ Anti-Cybersquatting Consumer Protection Act of 1999 (ACPA),⁵⁶ Uniform Computer Information Transaction Act of 1999 (UCITA),⁵⁷ Electronic Signatures in Global

⁴⁸ Mayer-Schönberger, see note 23, 639-664 (giving examples, such as the case of obscenity laws – based on self governance and state governance, EU Directives – a mix of international and state governance, and others, to demonstrate the feasibility and the real existence of this kind of mixed regulation).

⁴⁹ Perritt, see note 47, 930-931.

⁵⁰ Mayer-Schönberger, see note 23, 656. See also Perritt, see note 47, 954 (confirming that the EU/US Data Privacy Agreement and ICANN regulation on Internet domain names are new models for international hybrid regulation). Mayer-Schönberger recognizes, however, that this kind of best regulatory option comes at a cost: "Governance blends potentially are less transparent to people than existing governance regimes [and] in some instances might lead to an increase in overlaps of governance regimes", see Mayer-Schönberger, see note 23, 669.

⁵¹ 47 U.S.C. §§ 230, 560, 561 (Supp. 2005).

⁵² 47 U.S.C. § 231 (Supp. 2005).

⁵³ 15 U.S.C. §§ 6501-6506 (Supp. 2005).

⁵⁴ 17 U.S.C. §§ 512, 1201-1205, 1301-1332 (2005); 28 U.S.C. § 4001 (Supp. 2005).

⁵⁵ §§ 1-21; 7A U.L.A. 226-299 (Supp. 2005).

⁵⁶ 15 U.S.C. § 1129 (Supp. 2005).

⁵⁷ §§ 101-905; 7 U.L.A. 195-449 (Supp. 2005).

and National Commerce Act of 2000,⁵⁸ and Computer Crime Enforcement Act of 2000.⁵⁹ So abundant national regulations on different issues related to the Internet exist along with various approaches to those issues. What we need to further advance now is the current role of International Law regarding this existing and mainly national regulation of the Internet.

III. Current Role of International Law in Internet Regulation

In this section we will analyze several issues in which it is generally accepted that there is some room for the application of International Law. First, the willingness on the part of some states (especially European countries) to control and eliminate harmful content within the Internet has collided with the firm and constitutionally protected right of freedom of expression in the U.S. Questions of jurisdiction and choice of law between sovereigns have attracted much attention in this regard. Second, there is the question of the protection of intellectual property rights. Copyright and other intellectual property rights seem to be massively violated by existing software which allows the free distribution of copyrighted material. In this case, International Law instruments have been used by states desiring to combat this ever-growing activity. Third, the protection of data privacy against illegitimate uses on the part of companies operating through the Internet has finally prompted agreement between the main antagonists in this regard, i.e. the U.S. and the European Union (the EU).

1. The Conflict Between Free Speech and Harmful Content

One of the most compelling issues related to the Internet is the protection of free speech versus the restriction of harmful content. Whereas in the U.S. there is a strong sentiment, constitutionally protected, favoring freedom of speech, we see that European countries and Australia are more favorable, on balance, towards controlling the distribution of harmful content. The *Compu Serve* and *Yahoo! France* cases demonstrate the European approach followed by Germany and France on this

⁵⁸ 15 U.S.C. § 7001-7006, 7021, 7031 (Supp. 2005).

⁵⁹ 42 U.S.C. § 3713 (Supp. 2003).

issue. International Law has a major role to play with respect to this substantive problem because this is also a jurisdictional issue. Regulatory conflicts in cyberspace are now frequently linked to the interplay between the worldwide availability on the web of data perceived to be harmful or offensive to fundamental values in the regulating state, and the constitutional protections for freedom of expression existing in the state in which the data is made accessible, i.e. the U.S. where many of content providers are located.

The *CompuServe* case⁶⁰ was one the first and best known cases concerning a “true” regulatory conflict.⁶¹ The alleged offence to German law, the Criminal Code, consisted of the provision by CompuServe Deutschland (a 100 per cent subsidiary of CompuServe U.S.) of access to publicly available violence, child pornography and bestiality. The content was stored on CompuServe U.S.’s newsgroups servers. After blocking access worldwide to that content, CompuServe made available parental control software to its subscribers and unblocked the newsgroups. Nevertheless, a sentence was imposed by the Munich court on one of the managing directors of CompuServe Deutschland.⁶² Although the case was later overturned by a German higher court,⁶³ this sentence attracted much criticism, particularly in the U.S.

Such criticism has been scant, however, compared to the almost universal condemnation received by the *Yahoo!* case in the U.S. This case

⁶⁰ Amtsgericht München (Munich Court of First Instance), *NJW* 51 (1998), 2836, translated in <<http://www.kuner.com/data/reg/somm.html>>.

⁶¹ H.M. Watt, “Yahoo! Cyber-Collision of Cultures: Who Regulates?”, *Mich. J. Int’l L.* 24 (2003), 673 et seq. (676) (noting that “[t]ypically, an assertion of freedom of expression in the state in which the website is located clashes with restrictive legislation in the receiving state, designed to protect such values as the right of privacy, to restrict hate speech or libel, or to prohibit indecency or pornography. The free availability of information collides with the negative right of the receiving state to protect itself against outside interference”).

⁶² G. Grainger, “Freedom of Expression and Regulation of Information in Cyberspace: Issues concerning Potential International Cooperation Principles”, in: T. Fuentes Camacho, *The International Dimensions of Cyberspace Law*, 2000, 71 et seq. (90-91).

⁶³ LG München (Munich Court of Appeals), *NJW* 53 (2000), 1051. Apparently, most commentators agree that the judge in the *CompuServe* trial simply did not apply the Internet legislation properly to the case, see L. Determann, “Case Update: German CompuServe Director Acquitted on Appeal”, *Hastings Int’l & Comp. L. Rev.* 23 (2000), 109 et seq. (112).

arose when two French public interest groups, *La Ligue Contre le Racisme et L'antisémitisme* (LICRA) and *L'union des Etudiants Juifs de France* (UEFJ), sued *Yahoo! Inc.*, a Delaware corporation located in California. The alleged criminal offence was the offering for sale of Nazi memorabilia by the *Yahoo!* auction website accessible in France, which was deemed illegal under French law. Indeed, French legislation, along with many other nations' laws, may be considered to be in accordance with the Convention on the Elimination of All Forms of Racial Discrimination (CERD).⁶⁴ The plaintiffs sought an order prohibiting *Yahoo!* from displaying the memorabilia in France. The French court, which found it had personal jurisdiction because the harm was caused in France, sought an expert opinion on the possibility for *Yahoo!* to block access to French users, instead of completely eliminating the website content worldwide. After being advised that this could be achieved with a 90 per cent success rate (besides, French users were greeted by the website with advertisements in French, which meant some kind of geographical identification was already available), it ordered *Yahoo!* "to take all measures at their availability, to dissuade and render impossible all visitation on Yahoo.com to participate in the auction service of Nazi objects."⁶⁵ After that, *Yahoo!* sought a declaratory judgment that the French decision could not be recognized in the U.S. Besides finding it had jurisdiction,⁶⁶ the U.S. District Court granted summary judgment on the merits in favor of *Yahoo!*.⁶⁷ Nevertheless, the U.S. Court of Appeals has recently reversed that decision,⁶⁸ and held that the California Court had no personal jurisdiction over the French parties and that France had every right to hold *Yahoo!* accountable in France.⁶⁹

⁶⁴ International Convention on the Elimination of All Forms of Racial Discrimination, 21 December 1965, UNTS Vol. 660 No. 9464.

⁶⁵ LICRA & UEFJ v. Yahoo! Inc., T.G.I. Paris, 22 May 2000, *Dalloz* 2000, info rapides 172, translated in <http://www.juriscom.net/txt/jurisfr/cti/yauctions_20000522.htm> reprinted in: L. Brilmayer/ J. Goldsmith, *Conflict of Laws: Cases and Materials*, 5th edition, 2002, 851-853.

⁶⁶ Yahoo! Inc. v. La Ligue Contre le Racisme et L'Antisemitisme, 145 F. Supp. 2d 1168 (N.D. Cal. 2001).

⁶⁷ Yahoo! Inc. v. La Ligue Contre le Racisme et L'Antisemitisme, 169 F. Supp. 2d 1181 (N.D. Cal. 2001).

⁶⁸ Yahoo! Inc. v. La Ligue Contre le Racisme et L'Antisemitisme, 379 F. 3d 1120, 1126 (9th Cir. 2004).

⁶⁹ J.R. Reidenberg, "Technology and Internet Jurisdiction", *University of Pennsylvania Law Review* 153 (2005), 1951 et seq. (1952).

Despite the overwhelming criticism that the French ruling received in the U.S.,⁷⁰ the *Yahoo!* case has shown that traditional conflict of laws instruments may apply to cyberspace, and that France was thus entitled to apply its national law because the harmful effects had occurred in its territory.⁷¹ The case has also confirmed that in trans-boundary disputes in which issues of freedom of speech arise,⁷² it is not the place of the country of the information provider but the place of the country of the recipient that governs the situation.⁷³ The *Gutnick* case, decided by the Australian Supreme Court,⁷⁴ has recently come to corroborate this ap-

⁷⁰ B. Laurie, *An Expert's Apology* (21 November 2000), available at <<http://www.apache-ssl.org/apology.html>> (describing the solution imposed by the French ruling as "half-assed and trivially avoidable").

⁷¹ Reidenberg has been a *rara avis* in the U.S. when he has sided with the French ruling in several articles, e.g. J.R. Reidenberg, see note 23, 264 and 266, respectively (stating that "no one could seriously challenge that France has jurisdiction to prescribe rules for activities within French territory. Yahoo, however, thought it was above the law"; "[t]he Internet does not, however, displace the well-established principle in international law that allows states to exercise prescriptive jurisdiction of conduct having effects occurring within the national territory"). See also the delightful account of the Yahoo! case offered in J. Goldsmith/ T. Wu, *Who Controls the Internet? Illusions of a Borderless World*, 2006, 1 et seq.

⁷² There has been however self-criticism in the U.S. about the failure to explain the "differences between promulgation of speech-restrictive rules and mere enforcement of them" and "why speech directed abroad necessarily deserves First Amendment protection", M.S. Van Houwelling, "Enforcement of Foreign Judgments, the First Amendment, and Internet Speech: Notes for the Next Yahoo! v. Licra", *Mich. J. Int'l L.* 24 (2003), 697 et seq. (698).

⁷³ M. Reimann, "Introduction: The Yahoo! Case and Conflict of Laws in the Cyberage", *Mich. J. Int'l L.* 24 (2003), 663 et seq. (667-668).

⁷⁴ *Dow Jones & Company Inc. v. Gutnick* (2002) 210 *Commonwealth Law Reports* 575, available at <http://www.austlii.edu.au/au/cases/cth/high_ct/2002/56.html> (the Australian Supreme Court has found jurisdiction in a libel case brought by an Australian plaintiff against Dow Jones & Co. on the basis of an article published in New Jersey but accessible and downloaded in Australia). This decision has been nevertheless criticized see U. Kohl, "Defamation on the Internet-Nice Decision, Shame about the Reasoning: Dow Jones & Co. Inc. v. Gutnick", *ICLQ* 52 (2003), 1049 et seq.; N.W. Garnett, "Dow Jones & Co. v. Gutnick: Will Australia's Long Jurisdictional Reach Chill Internet Speech World-Wide?", *Pacific Rim Law & Policy Journal* 13 (2004), 61 et seq.; S.A. Bone, "Private Hares in the Cyber-World: The Conundrum of Choice of Law for Defamation Posed by

proach, and reflects therefore the emerging majority opinion.⁷⁵ The German, French and Australian democracies have chosen rules for free expression that are consistent with international human rights but that do not mirror the protection afforded by the First Amendment to the U.S. Constitution.⁷⁶

It may be said that this kind of solution ultimately goes against the basic freedom of speech and freedom of information in cyberspace, but, as leading scholars like Lessig have demonstrated, the fact that the Internet has been developed as a free place does not say anything about how it *should be*.⁷⁷ The technological designs developed by code writers, the web architecture, carries a sort of ideological or philosophical choice, very much reflecting the values expressed in the First Amendment.⁷⁸ Code is law, but this kind of *lex informatica*⁷⁹ need not entail normative implications for solutions of regulatory conflicts. The Internet is what we make of it; there is nothing essentially given and unchangeable. Technological innovation is now empowering sovereign states to assert their rules on Internet activity.⁸⁰ Filtering and zoning technologies allows for location, and claims of the ubiquity of informa-

Gutnick v. Dow Jones & Co”, *Washington & Lee Law Review* 62 (2005), 279 et seq.

⁷⁵ Zittrain, see note 40, 19.

⁷⁶ Declaration of Principles of the World Summit on the Information Society, see note 1, 2, para. 5, (stating, taking into account article 29 of the Universal Declaration of Human Rights, that in the exercise of their rights and freedoms, “everyone shall be subject only to the such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society”).

⁷⁷ Lessig, see note 28, 207-208.

⁷⁸ Reidenberg, see note 23, 262-263 (confirming that the so-called “separatist” philosophy “derives largely from the American value placed on the unfettered flow of information”; but noting also that “the American position is becoming a minority view”).

⁷⁹ J.R. Reidenberg, “Lex Informatica: The Formulation of Information Policy Rules through Technology”, *Tex. L. Rev.* 76 (1998), 553 et seq.

⁸⁰ Reidenberg, see note 69, 1960. Some authors have nevertheless expressed caveats with respect to the possibility that technology becomes the means of transmitting and implementing the values of the regulating nation, see Y. Benkler, “Internet Regulation: A Case Study in the Problem of Unilateralism”, *EJIL* 11 (2000), 171 et seq. (178).

tion on the web no longer hold.⁸¹ The *Yahoo!* case has just shifted the rule-making power from technologists back to political representatives.⁸² When considering regulatory conflicts in the international arena, then, “there is no reason that the interests of the society in which the harmful effects of free-flowing data are suffered should subordinate themselves to the ideological claim that the use of a borderless medium in some way modifies accountability for activities conducted through it. Analysis of such a claim has shown that it reverses the proper relationship between law and technology. Technology being purely manmade, and thus subject to ideological choice, should not dictate the way in which law manages conflicting interests arising through its medium”.⁸³

Extraterritoriality and jurisdiction in cyberspace have then been the focus of an intense debate, and the dichotomy between freedom of speech and the protection against harmful content has simply been the issue articulating this conflict, despite the existence of other kinds of extraterritoriality cases within the Internet, i.e. when the U.S. has required compliance with its copyright laws abroad.⁸⁴ As Goldsmith maintains, extraterritorial regulation within the Internet field is justified on the basis that cyberspace is not functionally different from transnational activities carried out through other means and because every state has the right to regulate those extraterritorial acts that may produce harm or other local effects within the national jurisdiction. This kind of approach is commonplace in national legal systems and is legitimate until

⁸¹ But see R. Corn-Revere, “Caught in the Seamless Web: Does the Internet’s Global Reach Justify Less Freedom of Speech?”, in: Thierer/ Crews Jr., see note 40, 219 et seq. (225-226) (stating that the Internet cannot be carefully calibrated by using technology to keep information out of restrictive jurisdictions).

⁸² Reidenberg, see note 23, 272.

⁸³ Watt, see note 61, 695. See also Reidenberg, see note 69, 1970-1972 (maintaining that “when technologies exist and are deployed for commercial purposes, they are typically not configured to support public policies [...] states have, as a result, a normative incentive to assert the supremacy of law over technological determinism”).

⁸⁴ A very well known case was *Twenty Century Fox Film Corp. v. iCraveTV.com*, 53 U.S.P.Q. 2d (BNA) 1831 (W.D.Pa. 2000), where the U.S. District Court applies an analysis similar to the French *Yahoo!* decision. See C. Dawson, “Creating Borders on the Internet: Free Speech, the United States, and International Jurisdiction”, *Va. J. Int’l L.* 44 (2004), 637 et seq. (657). Reidenberg, see note 23, 274 (stating that “[t]he U.S. values are inconsistent by favoring the free flow of information against data privacy and speech restrictions, but not against intellectual property”).

a nation has acquiesced to an international law rule that specifies otherwise.⁸⁵

It can be said then that extraterritorial regulation in the Internet field is feasible, although it need not be perfect in order to be effective.⁸⁶ Also, choice of law rules do work within the Internet realm as much as within other real world fields.⁸⁷ The *CompuServe*, *Yahoo!* and *Gutnick* cases just show us that International Law and doctrines like prescriptive jurisdiction, effects-based jurisdiction, and the technical solution of filtering and zoning are helping to solve transnational disputes in a fair way until there is a solution based on international harmonization or otherwise.⁸⁸ If international harmonization is difficult to achieve,⁸⁹ it may be the time for the U.S. to take some steps in order to avoid being the so-called hate speech haven.⁹⁰

⁸⁵ Goldsmith, see note 18, 1239-1240.

⁸⁶ Indeed, the contrary appears to be true, because zoning and filtering technologies may make prescription and enforcement coincide, ensuring perfect compliance, see Watt, see note 61, 688-689.

⁸⁷ Goldsmith, see note 18, 1223 and 1233-1234, respectively.

⁸⁸ M.F. Kightlinger, "A Solution to the Yahoo! Problem? The EC E-Commerce Directive as a Model for International Cooperation on Internet Choice of Law", *Mich. J. Int'l L.* 24 (2003), 719 et seq. (stating that the EC E-Commerce Directive and its "country of origin" and "home country control" rules would be a good starting point for an international agreement on internet content which would ease transnational disputes); V. Mayer-Schönberger/ T.E. Foster, "A Regulatory Web: Free Speech and the Global Information Infrastructure", in: B. Kahin/ C. Nesson (eds), *Borders in Cyberspace, Information Policy and the Global Information Infrastructure*, 1997, 235 et seq. (244) (arguing that the international concept of *ius cogens* might provide a basis for regulating speech content on the Net).

⁸⁹ On the impossibility of developing universally accepted Internet content regulation, J.L. Henn, "Targeting Transnational Internet Content Regulation", *B.U. Int'l L. J.* 21 (2003), 157 et seq. (172).

⁹⁰ C.D. Van Blarcum, "Internet Hate Speech: The European Framework and the Emerging American Haven", *Washington & Lee Law Review* 62 (2005), 781 et seq. (826).

2. The Consensus Concerning Intellectual Property Protection

With the coming of the Internet, the protection of intellectual property rights has been challenged by new technologies and software (like MP3 and Napster)⁹¹ allowing the free distribution of copyrighted digital works. These technologies permit Internet users to download perfect copies of songs, movies and other works⁹² previously protected by existing national laws and international treaties.⁹³ This problem has only been aggravated by the advent of peer-to-peer (P2P) technologies,⁹⁴ a new type of software which allows Internet users to download files between individual hard drives without a central server doing any job.⁹⁵ Apparently, these kinds of Internet technologies have paved the way for massive piracy, with the ensuing losses for authors and the industry in general. The responses to this new situation have been twofold.

On the one hand, after the first efforts were carried out by the U.S. Commerce Department in 1995 with the aim of restoring the “balance” in intellectual property law,⁹⁶ the immediate legal answer has been new national laws seeking to reinforce the protection afforded by traditional

⁹¹ J.L. Dodes, “Beyond Napster, Beyond the United States: The Technological and International Legal Barriers to On-line Copyright Enforcement”, *New York Law School Law Review* 46 (2002/2003), 279 et seq.

⁹² N. Negroponte, *Being Digital*, 1995, 58.

⁹³ K.W. Grewlich, *Governance in “Cyberspace”*, *Access and Public Interest in Global Communications*, 1999, 219 (introducing a short history on the legal protection of intellectual property).

⁹⁴ Scholars have recently proposed some solutions to the yet unsolvable question of P2P technologies, instead of suing users or facilitators of these technologies, M.A. Lemley/ R.A. Reese, “Reducing Digital Copyright Infringement Without Restricting Innovation”, *Stanford L. Rev.* 56 (2004), 1345 et seq.; J. Litman, “Sharing and Stealing”, *Hastings Communications and Entertainment Law Journal* 27 (2004), 1 et seq.; N. Weinstock Netanel, “Impose a Noncommercial Use Levy to Allow Free Peer-To-Peer File Sharing”, *Harvard Journal of Law & Technology* 17 (2003), 1 et seq.

⁹⁵ S. Biegel, *Beyond Our Control? Confronting the Limits of Our Legal System in the Age of Cyberspace*, 2001, 287 (commenting on the prominent examples of this kind of file sharing such as *Gnutella* and *Freenet*).

⁹⁶ U.S. Department of Commerce, Task Force – Working Group on Intellectual Property Rights, “Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights”, available at <<http://www.uspto.gov/web/offices/com/doc/ipnii>>.

copyright laws. In the U.S., the No Electronic Theft Act (NET Act)⁹⁷ in 1997 and the DMCA in 1998 were passed to that end, although the DMCA has been accused of shifting the balance in favor of private entities.⁹⁸ Similarly, the Copyright Directive has been adopted in the EU.⁹⁹ National courts have also made a great effort to deal with the question of how to protect copyright and to what extent, in order not to excessively limit the information available in the public domain, with the results tilting in favor of copyright protection.¹⁰⁰

On the other hand, the answer (allowed by national laws) has also been technical, because the industry (subsidized by government)¹⁰¹ has used technology as well to create copyright management schemes called “trusted systems”, that is software that makes it easier for information providers to control access to and the use of copyrighted content. In this way, enforcement by the code is “ex-ante”, free from legal scrutiny and efficient to a degree that does not exist in the non-virtual world.¹⁰² This technical response, which substitutes private empowerment for public law,¹⁰³ has led to an important criticism on the part of authors, because this perfect control carried out by private companies providing internet content may have consequences with respect to the right to

⁹⁷ 18 U.S.C. § 2311 (Supp. 2005).

⁹⁸ Hughes, see note 43, 371.

⁹⁹ Council Directive 2001/29/EC of 22 May 2001 on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society, 2001 O.J. (L 167) 10, modified by the Corrigendum to Directive 2001/29/EC, 2002 O.J. (L 6) 70. T. Hoeren, “The European Union Commission and Recent Trends in European Information Law”, *Rutgers Computer and Technology Law Journal* 29 (2003), 1 et seq.

¹⁰⁰ *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.* 125 S. Ct. 2764 (2005); *Eldred v. Ashcroft* 537 U.S. 186 (2003); *A & M Records, Inc. v. Napster, Inc.* 114 F. Supp. 2d 896 (N.D. Cal. 2000), *aff'd in part, rev'd in part*, 239 F. 3d 1004 (9th Cir. 2001); *Universal City Studios, Inc. v. Corley* 111 F. Supp. 2d 294 (S.D.N.Y. 2000), *aff'd sub nom.*; *Universal City Studios, Inc. v. Corley*, 273 F.3d. 429 (2d Cir. 2001).

¹⁰¹ Lessig, see note 28, 126.

¹⁰² N. Elkin-Koren, “Copyright in Cyberspace: The Rule of the Law and the Rule of the Code”, in: E. Lederman/ R. Shapira (eds), *Law, Information and Information Technology*, 2001, 131 et seq. (135-136).

¹⁰³ Lessig, see note 28, 135.

privacy and freedom of expression, which in turn concerns other issues like fair use and public domain doctrines.¹⁰⁴

Efforts to craft international regulation in the intellectual property field have led to WIPO Copyright Treaties, i.e. the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.¹⁰⁵ It may be said that these agreements are the only indisputable example of international treaty-based, top-down, development of legal norms regarding the Internet.¹⁰⁶ These recent WIPO treaties have been added to the existing and already longstanding international treaties, i.e. the Paris Convention for the Protection of Industrial Property and the Berne Convention for the Protection of Literary and Artistic Works,¹⁰⁷ with the stated aim of strengthening the protection afforded to copyright owners. There is some controversy as to the results achieved by these new treaties. Whereas for some it is not at all clear whether these treaties have really developed the protection previously existing,¹⁰⁸ for others the WIPO treaties may be regarded as a positive outcome, even if

¹⁰⁴ E.g. Y. Benkler, "Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain", *N.Y.U.L. Rev.* 74 (1999), 354 et seq.; J.E. Cohen, "A Right to Read Anonymously: A Closer Look at 'Copyright Management' in Cyberspace", *Connecticut Law Review* 28 (1996), 981 et seq.; id. "DRM and Privacy", *Berkeley Technology Law Journal* 18 (2003), 575 et seq.; N. Elkin-Koren, "Copyright Law and Social Dialogue on the Information Superhighway: The Case Against Copyright Liability of Bulletin Board Operators", *Cardozo Arts & Entertainment Law Journal* 13 (1995), 345 et seq.; M.A. Lemley/ E. Volokh, "Freedom of Speech and Injunctions in Intellectual Property Cases", *Duke Law Journal* 48 (1999), 147 et seq.; L. Lessig, *The Future of Ideas*, 2001, 4-16; N. Weinstein Netanel, "Locating Copyright Within the First Amendment Skein", *Stanford L. Rev.* 54 (2001), 1 et seq.; but see P. Samuelson, "Copyright and Freedom of Expression in Historical Perspective", *Journal of Intellectual Property Law* 10 (2003), 319 et seq.

¹⁰⁵ WIPO Copyright Treaty, 20 December 1996, T.Doc. 105-17, UNTS Vol. 2186 No. 38542; WIPO Performances and Phonograms Treaty, 20 December 1996, T.Doc. 105-17, UNTS Vol. 2186 No. 38543.

¹⁰⁶ Hughes, see note 43, 373-374.

¹⁰⁷ Paris Convention for the Protection of Industrial Property, 20 March 1883, as revised at Stockholm on 14 July 1967, 21 U.S.T. 1583, UNTS Vol. 828 No. 11851; Berne Convention for the Protection of Literary and Artistic Works, 9 September 1886, as revised at Paris on 24 July 1971, T.Doc. 99-27, UNTS Vol. 828 No. 11850.

¹⁰⁸ M. Franda, *Governing the Internet, The Emergence of an International Regime*, 2001, 126 (describing the recent WIPO treaties as conservative).

the “high-protectionist” negotiating agenda of the U.S. did not succeed.¹⁰⁹ It would also be pertinent to note here that the EU agenda in this regard was not less protectionist.¹¹⁰ Nevertheless, it seems that national implementation of these treaties has gone far beyond what they require,¹¹¹ and what they require is no less contentious.¹¹²

Furthermore, the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)¹¹³ which entered into force in 1995 has been a benchmark international agreement for the protection of copyright globally,¹¹⁴ and it may very well be so in the Internet field. This agreement not only sets out minimum rules and standards of protection and harmonizes domestic procedures and remedies for the enforcement of intellectual property rights, but above all, it extends the dispute settlement mechanism of the WTO to this particular field.¹¹⁵ This extension was meant to improve the enforcement mechanisms applicable to copyright violations that were almost absent before the com-

¹⁰⁹ P. Samuelson, “The U.S. Digital Agenda at WIPO”, *Va. J. Int’l L.* 37 (1997), 369 et seq. (435).

¹¹⁰ Grewlich, see note 93, 238 and 244 (noting that the EU wanted to have protected the ephemeral copies or temporary reproductions, together with a copyright on databases).

¹¹¹ P. Samuelson, “Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised”, *Berkeley Technology Law Journal* 14 (1999), 519 et seq. (521); Grewlich, see note 93, 257 and 261.

¹¹² These treaties require signatories to provide “effective legal remedies against the circumvention of effective technological measures that are used by authors” in the exercise of their copyrights (article 11 of the WIPO Copyright Treaty and article 18 of the WIPO Performances and Phonograms Treaty), that is, states must take legislative measures to safeguard “technical protection systems” adopted by copyright owners; Elkin-Koren, see note 102, 141 (noting that this kind of anti-circumvention legislation may lead to the privatization of information policy in cyberspace).

¹¹³ Agreement on Trade-Related Aspects of Intellectual Property Rights, 15 April 1994, *ILM* 33 (1994), 81 et seq.

¹¹⁴ It was not at all a cherished agreement for developing countries, which accepted it as a part of the Uruguay Round package deal, M. Trebilcock/ R. Howse, *The Regulation of International Trade*, 1999, 2nd edition, 320-321.

¹¹⁵ On the significance of this Dispute Settlement System, M. Matsushita/ T.J. Schoenbaum/ P.C. Mavroidis, *The World Trade Organization, Law, Practice and Policy*, 2003, 18.

ing of TRIPS.¹¹⁶ The benefits internationally of this treaty are now being coupled with other national benefits; that is, some representatives of copyright industries have already advanced the idea of using the TRIPS agreement to dispute existing exceptions to national copyright laws.¹¹⁷

As we see, International Law has played and will likely continue to play a very important role in the protection of intellectual property rights in the Internet field. It is not only that there is some regulation, but also that this regulation is of the best kind. International treaties and agreements, that is, “hard law” as opposed to “soft law”, are used here by the states in order to cooperate and establish minimum standards, mandate the setting up of domestic enforcement mechanisms, and use a system to settle international disputes arising in this context. Why is it that we find this strong approach here, but only here?¹¹⁸ The convergence of interests between nation-states and copyright holders with vast intellectual property assets has made it possible for International Law to play an important role in the regulation of this specific area of the Internet. So it seems that only if International Law completely fulfils the expectations of business within the Internet field it will be a preferred tool for states to regulate this area of human activity.

¹¹⁶ In fact, the TRIPS has not been fully effective yet, as it was agreed not to bring non-violation complaints under it until 2000 (article 64 (2) and (3) of the TRIPS Agreement), and then the Doha Ministerial Conference delayed it to the following ministerial conference in Cancun (which failed to reach any agreement). The Hong Kong Ministerial Conference has directed the General Council “to continue its examination of the scope and modalities for complaints of the types provided for under subparagraphs 1(b) and 1(c) of Article XXIII of GATT 1994 and make recommendations to our next Session. It is agreed that, in the meantime, Members will not initiate such complaints under the TRIPS Agreement”, WTO, Ministerial Conference, Sixth Sess., Hong Kong, 13-18 December 2005, *TRIPS Non-Violation and Situation Complaints*, WT/MIN(05)/DEC, 22 December 2005, para. 45.

¹¹⁷ Samuelson, see note 104, 332.

¹¹⁸ It is true that the persecution of crime in cyberspace has also led to another international treaty, the Cybercrime Treaty (European Convention on Cybercrime, 23 November 2001, 185 E.T.S.). However, the effort displayed to achieve and implement this treaty’s goals has not been so muscular, e.g. S.L. Marler, “The Convention on Cybercrime: Should the United States Ratify?”, *New England Law Review* 37 (2002), 183 et seq.; S.L. Hopkins, “Cybercrime Convention: A Positive Beginning to a Long Road Ahead”, *Journal of High Technology Law* 2 (2003), 101 et seq.; A.M. Weber, “The Council of Europe’s Convention on Cybercrime”, *Berkeley Technology Law Journal* 18 (2003), 425 et seq.

In this regard, it seems quite difficult to implement one of the action lines of the World Summit on the Information Society sponsored by the UN and the ITU, which provides for the “development and promotion of public domain information as an important instrument promoting public access to information.”¹¹⁹ The question remains whether the UN is as effective an international structure as, say, the WTO in attempting to regulate this field of human activity and in implementing regulation.

3. Different Approaches to the Privacy Issue

Large scale processing of personal data was initially reserved to institutions with centralized databases. The advent of the personal computer (PC) and the Internet has changed that situation, and now there are many more participants using personal information. Almost anyone with a PC and access to the Internet may collect and process personal information, which has led to a dramatic change with regard to the privacy issue.¹²⁰ Specially, profiling and data mining activities on the part of marketing companies have been the focus of attention by scholars for some time now.¹²¹ Therefore, the protection of personal data and privacy in the Internet era has become a critical public policy concern,¹²²

¹¹⁹ World Summit on the Information Society, Geneva 2003-Tunis 2005, Plan of Action, 12 December 2003, 4, para. 10 (a), Doc. WSIS-03/GENEVA/DOC/5-E, available at <http://www.itu.int/dms_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0005!!PDF-E.pdf>. The Plan of Action states that the action lines are aimed “to advance the achievement of the internationally-agreed development goals, including those in the Millennium Declaration, the Monterrey Consensus and the Johannesburg Declaration and Plan of Implementation, by promoting the use of ICT-based products, networks, services and applications, and to help countries overcome the digital divide”, *ibid.* 1, para. 1.

¹²⁰ F. Schauer, “Internet Privacy and the Public-Private Distinction”, *Jurimetrics: The Journal of Law, Science, and Technology* 38 (1998), 555 et seq. (557-561) (commenting on the quantitative and qualitative change in privacy).

¹²¹ E.g. J. Kang, “Information Privacy in Cyberspace Transactions”, *Stanford L. Rev.* 50 (1998), 1193 et seq. (1238-1241); J.R. Reidenberg, “Setting Standards for Fair Information Practice in the U.S. Private Sector”, *Iowa L. Rev.* 80 (1995), 497 et seq. (530).

¹²² R. Gellman, “Conflict and Overlap in Privacy Regulation: National, International, and Private”, in: B. Kahin/ C. Nesson (eds), *Borders in Cyberspace, Information Policy and the Global Information Infrastructure*, 1997,

and states have started to realize how important this question is in itself for democracy,¹²³ let alone its role in fostering e-commerce. The World Summit on the Information Society has just recalled how vital this issue is for the development of the Internet.¹²⁴

The protection of personal information is not the same in every country but varies prominently between different states, and this disparity is striking when we compare the approaches taken by the U.S. and the EU.¹²⁵ Although the U.S. was probably the first country regulating privacy,¹²⁶ the protection afforded to personal information here has always been based on a market-dominated policy¹²⁷ coupled with the strong influence of First Amendment principles that favor the free flow of information.¹²⁸ Within this model, the role of the state is limited: legal rules and statutory rights are aimed at protecting narrowly defined sectors so that privacy protection is mainly to be achieved by industry self-regulation and codes of conduct.¹²⁹

255 et seq.; J.R. Reidenberg/ F. Gamet-Pol, "The Fundamental Role of Privacy and Confidence in the Network", *Wake Forest Law Review* 30 (1995), 105 et seq. (106).

¹²³ P.M. Schwartz, "Privacy and Participation: Personal Information and Public Sector Regulation in the United States", *Iowa L. Rev.* 80 (1995), 553 et seq. (557).

¹²⁴ Declaration of Principles of the World Summit on the Information Society, see note 1, 5, whose principle No. 5 states that "[s]trengthening the trust framework, including information security and network security, authentication, privacy and consumer protection, is a prerequisite for the development of the Information Society and for building confidence among users of ICTs [...] it is important to enhance security and to ensure the protection of data and privacy, while enhancing access and trade".

¹²⁵ J.R. Reidenberg, "Resolving Conflicting International Data Privacy Rules in Cyberspace", *Stanford L. Rev.* 52 (2000), 1315 et seq. (1319).

¹²⁶ Gellman, see note 122, 255.

¹²⁷ Reidenberg, see note 125, 1318; P. Samuelson, "A New Kind of Privacy? Regulating Uses of Personal Data in the Global Information Economy", *Cal. L. Rev.* 87 (1999), 751 et seq. (770-773); D.J. Solove, *The Digital Person, Technology and Privacy in the Information Age*, 2004, 91 (arguing that the market currently fails to provide mechanisms to enable individuals to exercise informed meaningful choices).

¹²⁸ P.P. Swire/ R.E. Litan, *None of Your Business: World Data Flows, Electronic Commerce, and the European Privacy Directive*, 1998, 153.

¹²⁹ Reidenberg, see note 125, 1331.

This has been highly criticized by some scholars¹³⁰ who have seen international and, especially, European regulation, as a formula to be followed. Schwartz and Reidenberg have persistently repeated that the European, as opposed to the U.S., approach regarding privacy is the most appropriate because it rightly considers data protection as a civil rights issue.¹³¹ They highlight the normative role of privacy in democratic governance,¹³² arguing that a model based in self-regulation and the market may harmfully affect deliberative democracy.¹³³ Nevertheless, U.S. information culture may be changing.¹³⁴ To some extent, there is a growing concern among the American population with the extensive use of information technologies to build profiles of individuals.¹³⁵ That concern explains why the Federal Trade Commission (FTC) and the U.S. Congress have tried to improve the substantive and procedural rights of individuals regarding their right to privacy,¹³⁶ although it is true that this regulation is still limited by its sector-based approach.¹³⁷

¹³⁰ J.R. Reidenberg, "Restoring Americans' Privacy in Electronic Commerce", *Berkeley Technology Law Journal* 14 (1999), 771 et seq.

¹³¹ Cf. P.M. Schwartz/ J.R. Reidenberg, *Data Privacy Law: A Study of United States Data Protection*, 1996, 39-42.

¹³² Reidenberg, see note 125, 1340.

¹³³ P.M. Schwartz, "Privacy and Democracy in Cyberspace", *Vanderbilt Law Review* 52 (1999), 1609 et seq. (1615) (considering that no other option but the imposition of standards through law will serve the aim of developing effective privacy norms); id., "Internet Privacy and the State", *Connecticut Law Review* 32 (2000), 815 et seq. (analyzing the flaws in the dominant rhetoric that favors the market, bottom-up regulation, and industry self-regulation); J.E. Cohen, "Examined Lives: Informational Privacy and the Subject as Object", *Stanford L. Rev.* 52 (2000), 1373 et seq. (arguing that both legal and technological tools will foster data privacy protection).

¹³⁴ Samuelson, see note 127, 770.

¹³⁵ Kang, see note 121, 1196-1197.

¹³⁶ Even those who consider the traditional U.S. approach to privacy regulation as appropriate have conceded that there is a movement in this country towards a more intense protection in this field, F.H. Cate, "Privacy Protection and the Quest for Information Control", in: Thierer/ Crews Jr., see note 40, 297 et seq. (311) (stating that the recent U.S. enactments "reflect a much broader concept of privacy protection than previously recognized by U.S. law").

¹³⁷ Solove, see note 127, 67; R.K. Zimmerman, "The Way the 'Cookies' Crumble: Internet Privacy and Data Protection in the Twenty-first Century", *New York University Journal of Legislation and Public Policy* 4 (2000/2001), 439 et seq. (452-453).

The other predominant approach, the European approach (which is also the model existing in countries such as Canada, Australia, New Zealand and Hong Kong),¹³⁸ consists of a comprehensive data protection law.¹³⁹ In this model, a kind of omnibus legislation creates a wide-ranging set of rights and obligations for the processing of personal information and, as opposed to a market-based policy, is based upon a human rights perspective where users are not “consumers” but “citizens.”¹⁴⁰

As a result of being party to the European Convention on Human Rights (ECHR) and other international agreements,¹⁴¹ countries in the European region are under certain obligations, such as ensuring the respect for private and family life, home and correspondence (article 8 ECHR).¹⁴² Specifically, in the digital context, there exist several international legal instruments relating to privacy and data protection with undeniable European origin or flavor. The Organization for Economic Cooperation and Development (OECD) Guidelines on the Protection of Privacy and Transborder Flows of Personal Data¹⁴³ have been followed by the Ottawa Ministerial Declaration on the Protection of Privacy on Global Networks held in 1998.¹⁴⁴ The latter reaffirms the objectives set forth in the 1980 Privacy Guidelines and “the commitment to the protection of privacy on global networks in order to ensure the respect of important rights,” and both texts come to set what has been called “technological neutral principles” for the protection of personal data at the international level.¹⁴⁵ The OECD, however, continues to

¹³⁸ B. Givens, “Privacy Expectations in a High Tech World”, *Santa Clara Computer and High Technology Law Journal* 16 (2000), 347 et seq. (348).

¹³⁹ P.M. Schwartz, “European Data Protection Law and Restrictions on International Data Flows”, *Iowa L. Rev.* 80 (1995), 471 et seq. (exploring the content of substantive European standards).

¹⁴⁰ Reidenberg, see note 125, 1331.

¹⁴¹ Grewlich, see note 93, 280.

¹⁴² Council of Europe, Convention for the Protection of Human Rights and Fundamental Freedoms, 4 October 1950, art 8, 5 E.T.S. 5.

¹⁴³ OECD, Recommendation of the Council Concerning Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data, 23 September 1980, *ILM* 20 (1981), 422, available at <http://www.oecd.org/document/18/0,2340,en_2649_34223_1815186_1_1_1_1,00.html>.

¹⁴⁴ OECD, Ministerial Declaration on The Protection of Privacy on Global Networks, 7-9 October 1998, Doc. DSTI/ICCP/REG(98)10/FINAL, available at <<http://www.oecd.org/dataoecd/39/13/1840065.pdf>>.

¹⁴⁵ Franda, see note 108, 165.

stress the economic implications of data protection; that is, it focuses on individuals as “users” and “consumers” instead of treating them as “citizens.”¹⁴⁶ A slightly different approach is found within the Council of Europe in which two important legal texts have been adopted: the 1980 Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data¹⁴⁷ and the 1999 Guidelines for the Protection of Individuals with Regard to the Collection and Processing of Personal Data on the Information Highways.¹⁴⁸

Finally, the 1995 European Community (EC) Directive on the Protection of Personal Data¹⁴⁹ is the “world’s most ambitious and far-reaching data privacy initiative of the high-technology era.”¹⁵⁰ One distinctive feature of this piece of legislation is its extraterritorial effect, made effective through the data transfer ban of article 25, that prohibits the transfer of data to states that do not provide “an adequate level of

¹⁴⁶ Reidenberg, see note 125, 1353.

¹⁴⁷ Council of Europe, Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data, 28 January 1981, 108 E.T.S. Nevertheless, the U.S. is not a signatory of the Council of Europe Treaty.

¹⁴⁸ Council of Europe, Committee of Ministers, Recommendation No. R (99) 5 of the Committee of Ministers to Member States for the Protection of Privacy on the Internet, Guidelines for the Protection of Individuals with Regard to the Collection and Processing of Personal Data on the Information Highways, 660th Mtg., 23 February 1999, available at <<http://cm.coe.int/ta/rec/1999/99r5.htm>>.

¹⁴⁹ Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data, 1995 O.J. (L 281) 31, which has been partially superseded by Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 Concerning the Processing of Personal Data and the Protection of Privacy in the Electronic Communications Sector (Directive on Privacy and Electronic Communications), 2002 O.J. (L 201) 37. A. Viswanathan, “On Cookies That Don’t Crumble: Will the Electronic Privacy Directive 2002 Make Cyberspace Safe?”, *Computer & Telecommunications Law Review* 9 (2003), 63 et seq.

¹⁵⁰ S.R. Salbu, “The European Union Data Privacy Directive and International Relations”, *Vand. J. Transnat’l L.* 35 (2002), 655 et seq.; see also J.M. Fromholz, “The European Union Data Privacy Directive”, *Berkeley Technology Law Journal* 15 (2000), 461 et seq. (stating that EU governments have moved aggressively to regulate the use of personal data).

protection” of personal information.¹⁵¹ This was clearly a threat to data flows coming from the EU to the U.S., because European officials deemed the U.S. legislation not to be sufficiently protective of personal data. With this Directive on Data Protection, the EU has set both the international standard and the agenda in this field for years to come.

Some kind of understanding between the U.S. and the EU was therefore necessary in order to avoid disrupting data flows, and that is how the major international cooperation effort¹⁵² to date with real effects in this area has been achieved by a *Safe Harbor* Agreement between the U.S. and the EU.¹⁵³ As the EC Directive on Data Protection became effective in 1998 and its data transfer ban was immediately applicable, the Department of Commerce and the European Commission tried to reach some kind of common understanding on data protection. The U.S. proposal for a *Safe Harbor* Agreement was finally accepted, after two years of negotiations, by the European Commission in July 2000. This *Safe Harbor* Agreement establishes core data privacy principles for the industry to follow. Those companies joining the *Safe Harbor* principles on privacy protection would be placed by the Department of Commerce on its web site list of certifying firms and, conversely, EC Member States would not challenge them or otherwise condition any data transfers to them.¹⁵⁴ Although some scholars consider this *Safe Harbor* Agreement as insufficient¹⁵⁵ or even a surrender act on

¹⁵¹ G. Shaffer, “Globalization and Social Protection: The Impact of EU and International Rules in the Ratcheting up of U.S. Privacy Standards”, *Yale J. Int’l L.* 25 (2000), 1 et seq. (50-51) (arguing that the ban would have prevailed should the U.S. have challenged this measure within the WTO Dispute Settlement System under the GATS).

¹⁵² Reidenberg, see note 125, 359-362 (arguing that a General Agreement on Information Privacy would be the best solution to attain international cooperation and harmonization in data protection. This treaty would need an institutional setting strong enough and the WTO would offer the best choice in that regard).

¹⁵³ Commission Decision 2000/520/EC, of 26 July 2000 pursuant to Directive 95/46/EC of the European Parliament and of the Council on the adequacy of the protection provided by the safe harbor privacy principles and related frequently asked questions issued by the U.S. Department of Commerce, 2000 O.J. (L 215) 7.

¹⁵⁴ US Department of Commerce, *Safe Harbor*, available at <<http://www.export.gov/safeharbor>>.

¹⁵⁵ J.M. Wakana, “The Future of Online Privacy: A Proposal for International Legislation”, *Loy. L. A. Int’l & Comp. L. Rev.* 26 (2003), 151 et seq. (168

the part of the EU,¹⁵⁶ it is nevertheless regarded as a “compromise through institutional development pursuant to which free transatlantic information flows may be preserved while satisfying legitimate EC concerns.”¹⁵⁷ It seems, however, that this kind of negotiated settlement is not likely to serve as a permanent solution to the disparity between U.S. and European data privacy protection.¹⁵⁸

From an International Law perspective, the *Safe Harbor* agreement is clearly not an International Treaty. It has neither been signed nor ratified by the parties, and so it is not subject to the Vienna Convention on the Law of Treaties. At most, it could be maintained that it is a “Gentlemen’s Agreement,” or political agreement, but not even an “Executive Agreement.”¹⁵⁹ Some scholars consider it as an example of a new kind of international regulation.¹⁶⁰ This *Safe Harbor* agreement would then be an example of a “soft-law”, as opposed to a “hard-law” instrument, although regarding its effects it may very well achieve a *de facto* harmonization of data privacy protection. Compared to the intellectual property protection afforded by hard-law, i.e. international treaties, it is again striking that Internet regulation in this area of data privacy rights has only been achieved by a soft-law instrument. It may however not be surprising. Vigorous international cooperation in this field is necessary, but when business interests within the U.S. are at stake,¹⁶¹ even in

and 176) (stating that the *Safe Harbor* does not weigh consumer privacy concerns heavily enough and demanding a more active role for the U.S. government).

¹⁵⁶ J.R. Reidenberg, “E-Commerce and Trans-Atlantic Privacy”, *Houston Law Review* 38 (2001), 717 et seq. (744) (arguing that the *Safe Harbor* poses a weakening of European standards); S.R. Salbu, “The European Union Data Privacy Directive and International Relations”, *Vand. J. Transnat’l L.* 33 (2000), 655 et seq. (681) (wondering whether the U.S. is making real concessions with the *Safe Harbor* Agreement).

¹⁵⁷ G. Shaffer, “Reconciling Trade and Regulatory Goals: The Prospects and Limits of New Approaches to Transatlantic Governance Through Mutual Recognition and Safe Harbor Agreements”, *Columbia Journal of European Law* 9 (2002), 29 et seq. (58).

¹⁵⁸ Fromholz, see note 150, 483.

¹⁵⁹ A. Cassese, *International Law*, 2005, 2nd edition, 172 (describing executive agreements).

¹⁶⁰ Perrit, see note 47, 940 (referring to this agreement as an example of international hybrid regimes involving public and self-regulation).

¹⁶¹ Gellman, see note 122, 274 (arguing that there is no support in the U.S. business community to standardize privacy regulation).

light of support from the population, international legal texts with more teeth are difficult to achieve.

IV. Future Role of International Law on the Regulation of the Internet

As we have seen, International Law has played the role of a catalyst between states, solving some issues that affect mainly e-commerce and that require cooperation, i.e. an international response articulated through the application of traditional doctrines of conflict of laws for the problem of free speech and content regulation, international treaties (international hard-law) for the protection of intellectual property rights, or some kind of *Safe Harbor* agreements (international soft-law) for the protection of privacy rights. International Law has yet another role to play with regard to the regulation of the Internet. International Law tools and institutions may answer some of the questions that have not been, or only been tentatively, addressed to date. These questions are of an undisputed international flavor, and therefore, only International Law can answer them. International Law should be ready to react mainly to the possibility of invoking self-defense in the case of a cyber-attack; the likelihood of considering Internet's core resources as part of the Common Heritage of Mankind; and the prospect of regarding access to the Internet as an International Human Right.

1. The Use of Force and Self-Defense in Cyberspace

a. Introduction

As it is well known, the use of force between states is definitively forbidden in International Law since the advent of the UN Charter.¹⁶² This prohibition is also a principle of customary International Law, as noted by the ICJ in the Nicaragua case.¹⁶³ Nevertheless, there are two undisputed exceptions to this principle: the right of self-defense (Article 51 of the UN Charter) and the collective action by the UN as decided by the Security Council (Article 42 of the UN Charter). Other possible

¹⁶² U.N. Charter Article 2, para. 4.

¹⁶³ Military and Paramilitary Activities (Nicaragua v. US), ICJ Reports 1986, 14 et seq.; M.N. Shaw, *International Law*, 2003, 5th edition, 91.

exceptions to this peremptory norm of International Law have traditionally been defended, but they are more disputed.¹⁶⁴ Recent events, however, like the 11 September 2001 terrorist attacks, the ensuing campaign in Afghanistan and the 2003 Iraq war have again brought to the forefront the issue regarding the boundaries between the aforesaid prohibition and the related exception of self-defense.

The threat of a major Internet attack is no doubt a primary question of national security. This kind of computer network attack (CNA) may be defined as a virtual attack, that is, an attack using the Internet as opposed to a physical attack, to a state's Internet infrastructure. The latter broadly understood as the combination of technological systems, connected to the Internet, controlling essential public utilities and national security services. Thus far this threat stands more as a general and latent risk, in other words, no state has yet been the victim of a CNA (this is the passive point of view of the attack) and no state has yet threatened to use the Internet as a weapon or tool to launch an attack in any given situation (this is the active point of view of the attack). In this regard, the threat of an attack using the Internet as a means is not like the threat of use of real (as opposed to virtual) armed force due to the fact that the former is still at a developing stage. On the other hand, not every state may have resort to a cyber-force action due to its technological underdevelopment.

Because of the novelty of this threat though, the question arises whether an actual Internet attack or a threat of an attack of this sort might come within the terms of Arts 2 (4) and 39 of the UN Charter, triggering collective action and possibly allowing the right of self-defense. As mentioned, however, there is no state practice up until now on this possibility. From a legal point of view, a clearly different episode took place in the case of the North Atlantic Treaty Organization (NATO) strike against Yugoslavia, where some of the physical Internet facilities existing in Belgrade were one of the military objectives specifically targeted by NATO. A strike of this kind was an armed attack that may arguably have given way to a response justified by self-defense.¹⁶⁵ NATO military campaign also included "limited" computer warfare in

¹⁶⁴ Cassese, see note 159, 350.

¹⁶⁵ B. Simma, "NATO, the UN and the Use of Force: Legal Aspects", *EJIL* 10 (1999), 1 et seq. (11) (noting that already the threats previous to the strikes against Yugoslavia, "not having been authorized by the Security Council either expressly or implicitly, are not in conformity with the UN Charter").

what could be characterized as the “first cyber-war.”¹⁶⁶ Setting aside, however, these computer attacks in wartime occurred during the NATO campaign, that is governed by *ius in bello*, we will focus on the possibility of attacks in peacetime, that is governed by *ius ad bellum*.

What about a CNA through viruses or otherwise directed to cause a major collapse in the functioning of a state’s vital infrastructure? Does this kind of attack constitute a use of force in Cyberspace? Could it even be considered an armed attack? Will a state’s reaction in the form of self-defense be justified? Could this self-defense reaction reasonably include the use of force? It seems that there is a need for answers based on International Law.¹⁶⁷ These sort of questions have already been posed by some scholars¹⁶⁸ who have foreseen the possibility of the Internet being used either as the battlefield of the 21st century (likely attacks from some countries have already been anticipated)¹⁶⁹ or as the preferred tool for terrorist action.¹⁷⁰ The low-risk character of this sort of Internet attack and the asymmetrical benefits that it offers to states (or non-state actors) which do not have the level of economic and military supremacy of developed states such as the U.S. makes it a very attractive tool.¹⁷¹ We will limit our analysis, though, to actions engaged in by states.

¹⁶⁶ G.K. Walker, “Information Warfare and Neutrality”, *Vand. J. Transnat’l L.* 33 (2000), 1079 et seq. (1081).

¹⁶⁷ C.C. Joyner/ C. Lotrionte, “Information Warfare as International Coercion: Elements of a Legal Framework”, *EJIL* 12 (2001), 825 et seq. (827) (suggesting that legal norms found in contemporary UN Charter law are helpful but insufficient for reaching acceptable solutions).

¹⁶⁸ W.G. Sharp, Sr., *CyberSpace and the Use of Force*, 1999, 7; E.T. Jensen, “Computer Attacks on Critical National Infrastructure: A Use of Force Invoking the Right of Self-Defense”, *Stanford J. Int’l L.* 38 (2002), 207 et seq. (208).

¹⁶⁹ D.M. Creekman, “A Helpless America? An Examination of the Legal Options available to the United States in Response to Varying Types of Cyberattacks from China”, *Am. U. Int’l L. Rev.* 17 (2002), 641 et seq.

¹⁷⁰ S.W. Brenner/ M.D. Goodman, “In Defense of Cyberterrorism: An Argument for Anticipating Cyber-attacks”, *University of Illinois Journal of Law, Technology and Policy* (2002), 1 et seq. (12-13) (explaining how the permeability of cyber space facilitates cyber terrorism and therefore makes cyberspace an attractive method for terrorists).

¹⁷¹ M.N. Schmitt, “Computer Network Attack and the Use of Force in International Law: Thoughts on a Normative Framework”, *Colum. J. Transnat’l L.* 37 (1999), 885 et seq. (897).

b. Computer Network Attacks (CNA) as Use of Force

From the point of view of International Law, the first question to be answered is whether or not a CNA can be considered a use of force, or even an armed attack and when. Before we try to develop any analysis, it would be good to bear in mind some previous assumptions. As we maintained before with regard to the question of jurisdiction, the location of the attack must be determined according to the “effects doctrine”; that is, what matters is not the physical location of the attacker but where the effects of the attack are felt.¹⁷² Also, there is a broad spectrum of possible attacks, meaning not every CNA will meet the level comparable to a use of force. On the contrary, it would also be unreasonable to maintain that because a CNA does not physically destroy the object of the attack (although the effects are felt elsewhere), it can never amount to a use of force.¹⁷³ In order to illustrate this idea, we should consider some examples of possible computer attacks against vital interests like an attack of the New York Stock Exchange, thereby shutting down the financial markets, the NYC subway system causing a massive collision or derailing, or the U.S. Air Control System resulting in the crash of civilian aircrafts. The question arises whether or not these other uses of force and these new kinds of weapons¹⁷⁴ now available thanks to Internet technologies are covered by the prohibition of Article 2 (4) of the UN Charter.

In this regard, it is clear that the prevailing interpretation of the UN Charter makes the prohibition of the use of force applicable only to “military” force. After all, one of the main purposes of the UN Charter is the elimination of classic war between states, established in a rule of law through Article 2 (4). This restriction of the prohibition to armed force can be, however, interpreted broadly so as to include in some situations physical and indirect force.¹⁷⁵ Accordingly, the ICJ affirmed in the Nicaragua case that other activities not necessarily amounting to armed force, such as the arming and training of the Contras in Nicara-

¹⁷² S.P. Kanuck, “Information Warfare: New Challenges for Public International Law”, *Harv. Int’l L. J.* 37 (1996), 272 et seq. (286-287).

¹⁷³ Jensen, see note 168, 222.

¹⁷⁴ Joyner/ Lotrionte, see note 167, 836 (elaborating a description of information warfare weapons, including “sniffers”, “Trojan horses”, “logic bombs”, “denial of service attacks”, “computer worms” or “viruses”, etc.).

¹⁷⁵ A. Randelzhofer, “Article 2(4)”, in: B. Simma (ed.), *The Charter of the United Nations. A Commentary*, 2002, 2nd edition, Vol. 1, 112 et seq. (118-120).

gua, were also prohibited.¹⁷⁶ Therefore, it seems appropriate to suggest that there are other activities also prohibited by Article 2 (4) even though they do not strictly consist of armed force, as long as they have the same consequences, that is, they are “employed for the destruction of life and property”.¹⁷⁷

In this vein, some scholars maintain that CNA’s challenge the prevailing paradigm and have ventured that it should be possible to equate a CNA to a use of force, taking into account the results or consequences of the attack. If the attack causes physical destruction and human injury, then it could be considered a use of force prohibited by Article 2 (4).¹⁷⁸ On the other hand, as the ICJ stated in the Nuclear Weapons Advisory Opinion, Article 51 does not refer to specific weapons,¹⁷⁹ so the choice of arms by the attacking state is irrelevant.¹⁸⁰ There may even be some support for this reading in treaty law.¹⁸¹

This interpretation has been presented as a modification to the traditional normative construction of Article 2 (4)’s prohibition, which would focus not on whether or not the attack actually has an armed character (or amounts to strictly military action), but on the causation of similar damage.¹⁸² This interpretive flexibility,¹⁸³ however, seems justified in order to keep pace with the new technology. As the wording of Article 2 (4) does not explicitly refer to armed or military force, a flexible interpretation according to the evolution of weaponry and the logic

¹⁷⁶ Military and Paramilitary Activities, see note 163, 119.

¹⁷⁷ I. Brownlie, *International Law and the Use of Force by States*, 1963, 362.

¹⁷⁸ Schmitt, see note 171, 913 (arguing that “[a]rmed coercion is not defined by whether or not kinetic energy is employed or released, but rather by the nature of the direct results caused [...] that computer network attack employs electrons to cause a result from which destruction or injury directly ensues is simply not relevant to characterization as armed force”).

¹⁷⁹ Legality of the Threat or Use of Nuclear Weapons, ICJ Reports 1996, 225 et seq. (244).

¹⁸⁰ Y. Dinstein, *War, Aggression and Self-Defense*, 2001, 3rd edition, 166.

¹⁸¹ T.A. Morth, “Considering Our Position: Viewing Information Warfare as a Use of Force Prohibited by Article 2 (4) of the U.N. Charter”, *Case W. Res. J. Int’l L.* 30 (1998), 567 et seq. (591-592) (arguing that the analysis of information warfare as a weapons system is supported by the 1989 U.S.-U.R.S.S. Agreement on the Prevention of Dangerous Military Activities, whose article VI considers interference with command and control networks a “dangerous military activity”).

¹⁸² Schmitt, see note 171, 914.

¹⁸³ Shaw, see note 163, 843 (referring to interpretive flexibility).

behind this provision does not prevent a broadening of its prohibition in order to incorporate new uses of force. In the light of the foregoing, therefore, it is our opinion that CNA's having the effects of armed force attacks can be equated to uses of force regularly forbidden by Article 2 (4) of the UN Charter.

The problem that remains would be how to classify and clearly demarcate these attacks from those attacks not amounting to use of force, as traditionally interpreted. Regarding the possible response to those attacks that fall short of classic "armed force", as the ICJ stated in the Nicaragua case¹⁸⁴ the offended nation will only have recourse to countermeasures, limited by the applicable conditions as declared by the ICJ in the Gabčíkovo case.¹⁸⁵ Therefore, CNA's involving some kind of violence but not causing physical destruction and human injury should be considered as unlawful acts surely triggering state responsibility and the possibility of adopting countermeasures, or even an intolerable intervention in the internal affairs of another state,¹⁸⁶ but should not be regarded as a breach of Article 2 (4) as long as their consequences are not similar to those stemming from an armed use of force.¹⁸⁷

c. CNA and Self-Defense

In the event of a CNA that could be equated to the use of force according to the analysis of the previous section, then, as we know, there are only two possibilities. Either the Security Council decides to take collective action according to Chapter VII of the UN Charter, or in the absence of such a reaction, the attacked state decides to make recourse to the right of self-defense. Article 51 limits the right of self-defense to those situations where there is an "armed attack", not merely use of force as set out by Article 2 (4), so both provisions do not correspond to one another in scope.¹⁸⁸ As stated in the Nicaragua case, and confirmed in the Oil Platforms case, only the most grave forms of the use

¹⁸⁴ Military and Paramilitary Activities, see note 163, 110.

¹⁸⁵ Gabčíkovo-Nagymaros Project (Hungary v. Slovakia), ICJ Reports 1997, 7 et seq. (55-56).

¹⁸⁶ Joyner/ Lotrionte, see note 167, 847.

¹⁸⁷ Schmitt, see note 171, 914 (offering criteria to distinguish between them according to their consequences).

¹⁸⁸ A. Randelzhofer, "Article 51", in: Simma, see note 175, 788 et seq. (790).

of force may constitute armed attacks.¹⁸⁹ Recognizing the difficulty that the ordinary meaning of the wording “armed attack” presents, however, the interpretive gap should be surmounted whenever a lethal result to human beings or serious destruction of property is caused.¹⁹⁰ Therefore, as has been pointed out,¹⁹¹ it is appropriate to include within the right of self-defense responses directed against a CNA constitutive of use of force as previously stated, that is, one provoking the destruction of life and property.¹⁹² Of course, the attacked state will have to comply with the requirements of self-defense, meaning the immediate response must be necessary and proportional¹⁹³ as well as subsidiary and provisional,¹⁹⁴ in addition to the obligation to report to the Security Council according to Article 51. The question arises, then, whether the state attacked must react in the Internet field itself in order to comply with the proportionality requirement, in other words, with another CNA. In this regard, even if the response must be directed to halt and repel an attack, the defending state is not restricted by any International Law rules to the same weapons used by the attacking state.¹⁹⁵ Furthermore, the defending state may not have the technological capacity and ability to defend itself in that particular field. For these reasons, an armed self-defense must be deemed appropriate in this case as a normative solution, as the attacked state can not remain devoid of an effective protection under its inherent right of self-defense. Of course, factual issues¹⁹⁶ will be a key point whenever a CNA is launched, as the attacked state

¹⁸⁹ Case Concerning Oil Platforms (Iran v. U.S.A.), 6 November 2003, 27, available at <<http://www.icj-cij.org/icjwww/idocket/iop/iopframe.htm>>.

¹⁹⁰ Y. Dinstein, “Computer Network Attacks and Self-Defense”, in: M.N. Schmitt/ B.T. O’Donnell (eds), *Computer Network Attack and International Law*, 2002, 100.

¹⁹¹ Joyner/ Lotrionte, see note 167, 855 (arguing that if a computer-generated intrusion “resulted in shutting down a state’s air traffic control system, as well as in collapsing banking institutions, financial systems and public utilities, and opened the floodgates of dams that caused deaths and property damage, considerable merit would reside in alleging that such an attack inflicted damage equivalent to that caused by an ‘armed attack’”).

¹⁹² Schmitt, see note 171, 929.

¹⁹³ C. Gray, *International Law and the Use of Force*, 2nd edition, 2004, 120.

¹⁹⁴ N.Q. Dinh/ P. Daillier/ A. Pellet, *Droit International Public*, 7th edition, 2002, 943 (recalling that self-defense may be invoked and exercised until the Security Council gets involved and there is collective action).

¹⁹⁵ Gray, see note 193, 121.

¹⁹⁶ Joyner/ Lotrionte, see note 167, 828 and 853.

may be unable, not only to respond with the same kind of technological weapons but even to provide proof of the origin of the attack or the identity of the attacker. These questions involving evidence make it more complicated, though not impossible, for international law to offer sound solutions according to established rules. Supposing, however, that both states involved have the same technological capacity, proportionality requires that the degree of cyber-force employed be limited in magnitude, intensity and duration.¹⁹⁷

If the right to self-defense is available to states in this field, another important issue would be where and at what moment is it possible to invoke this right. If the Internet allows for instant lethal attacks that do not let state officials have much time to react, it would make no sense to speak of a self-defense response designed to repel and end the attack when this attack takes no more than a computer click to occur. In other words, the question here is whether it is even possible to talk about self-defense in the ultra-fast Internet field (that is, a late response may be considered an unjustified reaction because it is non-immediate, and thus a retaliation¹⁹⁸) and, therefore, whether some kind of anticipatory self-defense would then be justified.

There seems to be some truth in the assertion that in the age of instant computer lethality, it makes no sense to speak about self-defense if this self-defense is not somehow anticipatory (there could be no point in taking defensive measures against a CNA that within seconds achieves its targets causing damages and death). In principle, anticipatory self-defense is ruled out by Article 51 of the UN Charter, which requires an “armed attack” in order to exercise self-defense.¹⁹⁹ This reading is also consistent with the object and purpose of this provision and state practice and it seeks to avoid the risk of an abuse on the part of some states exercising wide discretion.²⁰⁰ Some international lawyers

¹⁹⁷ *Id.*, 858 (arguing that “a cyber-generated effort to bring down a society’s financial or banking infrastructure [would not] be appropriate as a response to a computer intrusion that temporarily disrupted public telecommunications in the victim state”).

¹⁹⁸ But see Dinstein, see note 190, 107-108 (considering “on-the-spot reaction” to CNA troublesome, and arguing in favor of armed reprisals at a different time and place as a legitimate response).

¹⁹⁹ Brownlie, see note 177, 275-278; I. Brownlie, *Principles of Public International Law*, 6th edition, 2003, 700.

²⁰⁰ Randelzhofer, see note 188, 803-804.

though have traditionally supported, under certain conditions, the doctrine of anticipatory self-defense.²⁰¹

The approach to the question of anticipatory self-defense, however, needs to be balanced in the light of recent events starting with the terrorist attacks of 11 September 2001. The ensuing developments and actions taken by the U.S., mainly the use of force in Afghanistan,²⁰² the National Security Strategy (NSS) enacted in September 2002²⁰³ (the so-called Bush doctrine) and the invasion of Iraq have brought about an overwhelming reaction on the part of authors, either favoring or rejecting the concept of anticipatory self-defense. As a practical matter, there is an array of terms referring to the conceptual idea of an expanded interpretation of self-defense, and so we find concepts like anticipatory self-defense, pre-emptive self-defense, preventive self-defense and interceptive self-defense.²⁰⁴ For the sake of simplicity, we will assume with the majority of the doctrine that anticipatory and pre-emptive self-defense refer to the very same principle reflected by the Caroline case. According to this commonly quoted precedent, pre-emptive self-defense is justified whenever the perceived threat is imminent, in other words, there is a “necessity that self-defence is instant, overwhelming, and leaving no choice of means and no moment for deliberation.”²⁰⁵ A more flexible standard for determining necessity has been advanced by some authors, which have accepted the new parameters introduced by

²⁰¹ E.g. O. Schachter, “The Right of States to Use Armed Force”, *Mich. L. Rev.* 82 (1984), 1620 et seq. (1634-1635); T.M. Franck, *Recourse to Force, State Action Against Threats and Armed Attacks*, 2002, 105; S. Schwebel, “Aggression, Intervention and Self-Defense”, *RdC* 136 (1972), 411 et seq. (479-481).

²⁰² T. Franck, “Terrorism and the Right of Self-Defense”, *AJIL* 95 (2001), 839 et seq. (arguing that the United States’ use of military force against the Taliban and Al Qaeda in Afghanistan is lawful under the United Nations Charter); but see A. Cassese, “Terrorism is Also Disrupting Some Crucial Legal Categories of International Law”, *EJIL* 12 (2001), 993 et seq. (997) (finding worrisome the broadening of the notion of self-defense).

²⁰³ National Security Council, *The National Security Strategy of the United States of America* § V (2002), available at <<http://whitehouse.gov/nsc/nss.pdf>>.

²⁰⁴ N. Ochoa-Ruiz/ E. Salamanca-Aguado, “Exploring the Limits of International Law relating to the Use of Force in Self-defence”, *EJIL* 16 (2005), 499 et seq. (500).

²⁰⁵ A summary of the dispute is found in A.D. Sofaer, “On the Necessity of Pre-emption”, *EJIL* 14 (2003), 209 et seq. (214-220).

the NSS and therefore the justifications presented for the war in Iraq.²⁰⁶ This new standard, which is a step further from the already controversial doctrine of anticipatory self-defense leads to a concept of preventive self-defense,²⁰⁷ whereby a state may legally react in self-defense to repel not simply an imminent attack, but rather a merely expected threat. This innovation will mean that, not only the moment for a military response is pushed back to an undefined earlier time, but also that it is for the U.S. government alone to determine whether a future threat is real and deserves reaction.²⁰⁸ In the light of the foregoing, most authors have concluded that preventive self-defense or preventive war is not acceptable.²⁰⁹

As Thomas Franck has pointed out, the doctrine of anticipatory self-defense has been known to International Law for a long time and has augmented its credibility “both by contemporary practice and by deduction from the logic of modern weaponry.”²¹⁰ In other words, even if a strict interpretation of Article 51 of the UN Charter would initially render anticipatory self-defense unlawful, no state is obliged to wait and endure an imminent strike.²¹¹ A more flexible and presently accepted interpretation of this strict exception²¹² recognizes that the con-

²⁰⁶ W.H. Taft IV/ T.F. Buchwald, “Preemption, Iraq, and International Law”, *AJIL* 97 (2003), 557 et seq.; J. Yoo, “International Law and the War in Iraq”, *AJIL* 97 (2003), 563 et seq.; R. Wedgwood, “The Fall of Saddam Hussein: Security Council Mandates and Preemptive Self-Defense”, *AJIL* 97 (2003), 576 et seq.

²⁰⁷ M. Sapiro, “Iraq: The Shifting Sands of Preemptive Self-Defense”, *AJIL* 97 (2003), 599 et seq. (criticizing preventive self-defense); W.M. Reisman, “Assessing Claims to Revise the Laws of War”, *AJIL* 97 (2003), 82 et seq. (supporting preemptive self-defense understood as preventive self-defense).

²⁰⁸ T. Franck, “Preemption, Prevention and Anticipatory Self-Defense: New Law Regarding Use of Force?”, *Hastings Int’l & Comp. L. Rev.* 27 (2004), 425 et seq. (428).

²⁰⁹ E.g. R. Falk, “What a Failure for the UN Charter System of War Prevention?”, *AJIL* 97 (2003), 590 et seq. (598) (asserting, with regard to the Iraq war, that “the facts did not support the case for preemption, as there was neither *imminence* nor *necessity*”).

²¹⁰ T. Franck, “What Happens Now? The United Nations After Iraq”, *AJIL* 97 (2003), 607 et seq. (619).

²¹¹ M. Bothe, “Terrorism and the Legality of Pre-emptive Force”, *EJIL* 14 (2003), 227 et seq. (231).

²¹² But see Ochoa-Ruiz/ Salamanca-Aguado, see note 204, 517 and 520 (underscoring that the ICJ has opted in the recent Oil Platforms case for a restrictive interpretation of the concept of armed attack and self-defense).

ditions arising from the Caroline case for anticipatory self-defense, namely necessity, immediacy and proportionality, are in fact regarded as valid under current International Law and indeed pertinent to all categories of self-defense.²¹³ If this reading is valid it should not imply, however, an expanded right to react whenever a state perceives a potential threat to its security, which is actually what the NSS proposes and the Iraq war has confirmed as a preventive war.²¹⁴

As a practical matter, it seems difficult to discern when a CNA may be considered imminent. There are a number of scholars, however, who defend the applicability of the doctrine of anticipatory self-defense to the Internet field. According to Sharp, the anticipatory right of self-defense should apply whenever there is a “penetration of sensitive systems that are critical to a state’s vital national interests.”²¹⁵ Jensen is also in favor of a flexible anticipatory self-defense doctrine and supports legal measures listing or defining those critical infrastructures that should be defended even by active means.²¹⁶ Others, like Schmitt, are more cautious and provide some limited factors for the anticipatory self-defense to take place, but always within the framework of an overall armed attack and always by stressing that it is not the CNA but its context which should be used as the guiding principle.²¹⁷ This latter posi-

²¹³ Dinstein, see note 180, 219.

²¹⁴ R. Wolfrum, “The Attack of September 11, 2001, the Wars Against the Taliban and Iraq: Is There a Need to Reconsider International Law on the Recourse to Force and the Rules in Armed Conflict?”, *Max Planck UNYB* 7 (2003), 1 et seq. (33) (stating that there are good reasons, basically the need to avoid abuse, for not extending the right of self defense *de lege ferenda* so as to legitimize preventive use of force); M. Sapiro, “Preempting Prevention: Lessons Learned”, *N.Y.U. J. Int’l L. & Pol.* 37 (2005), 357 et seq. (367) (asserting that “[t]he Iraq experience may suggest that there is wisdom in preempting further talk of preventive self-defense”); E. Benvenisti, “The US and the Use of Force: Double-edge Hegemony and the Management of Global Emergencies”, *EJIL* 15 (2004), 677 et seq. (691) (noting that while relaxing the doctrine of self-defense the new Bush doctrine has the effect of relaxing the concept of sovereignty).

²¹⁵ Sharp, see note 168, 166 (in fact his starting point is more wide-ranging as he affirms that all hostile intent constitute a threat to use of force which triggers the right to use force to respond in anticipatory self-defense *ibid.*, 95, but he seems to nuance his position in order to affirm the lawfulness of cyber espionage *ibid.*, 129).

²¹⁶ Jensen, see note 168, 226-231.

²¹⁷ Schmitt, see note 171, 932-933 (delimiting the three factors that may trigger anticipatory self-defense as “1) the CNA is part of an overall operation

tion seems to be the most sensible and resembles the doctrine of “interceptive” self-defense.²¹⁸ Again, as has been previously mentioned enough factual basis must be provided by the victim state in order to justify a defensive response in this very ultra-fast field. Otherwise, these forcible reactions may just conceal pure aggressions.

Bearing all these assertions in mind, if CNA’s cause damage similar to conventional uses of force they should be considered uses of force, allowing for self-defense responses. Claims for an anticipatory right of self-defense in cyberspace should be accepted in principle, but only under limited conditions. There is no reason at all to treat cyberspace attacks any differently from conventional armed force attacks or even nuclear missile attacks. In this sense, the Internet has not brought about any single innovation which should modify the traditional normative analysis of International Law on the right of self-defense, except for the need to consider the factual differences that this field presents. The UN Charter and International Law rules on the prohibition of the use of force and self-defense are flexible enough to be applied to the Internet.

2. Internet Governance and the Common Heritage of Mankind

a. Introduction

The history of the Internet is an American history. Invented, funded and developed in the U.S.,²¹⁹ the Internet has an unquestionable American flavor when it comes to analyzing its features. As we have seen, freedom of information and free flows of data, as part of the First Amendment culture, are profoundly rooted characteristics of the Internet. They are part of its code. They are in fact the law of the Internet. Although there are recent efforts that try to change this state of affairs, as the judicial decisions reviewed above demonstrate,²²⁰ it is still diffi-

culminating in armed attack; 2) the CNA is a irrevocable step in an imminent (near-term) and probably unavoidable attack; and 3) the defender is reacting in advance of the attack itself during the last possible window of opportunity available to effectively counter the attack”).

²¹⁸ Dinstein, see note 180, 172-173.

²¹⁹ Benkler, see note 80, 172 (noting that these factors should not be overlooked).

²²⁰ See Section III.1.

cult to modify the current functioning of the Internet where there is a country, i.e. the U.S., that bluntly plays the major role in its governance. In this regard, special attention has to be paid to the technical body called the ICANN (mentioned above). The ICANN is responsible for the control of the domain name system, the distribution of IP addresses, the establishment of standards for Internet protocols and the organization of the root-server-system.²²¹ As has been pointed out, the importance of root governance goes well beyond the face value of the market for names and addresses.²²² Although the ICANN pretends to be a model of mixed or hybrid regulation²²³ which should take into account the interests of all stakeholders, the truth is that the ICANN is an American private non-profit organization incorporated under Californian law, subject to U.S.' jurisdiction and authority, where commercial interests have a leading role,²²⁴ but which on the other hand may violate fundamental U.S. policies.²²⁵ Furthermore, the major Internet Exchange Points through which Internet access is provided are still located within the U.S. This overwhelming U.S. control of Internet's core resources lets this country set up provisions like the Digital Trademark Right provision of the Anticybersquatting Consumer Protection Act (ACPA) that allows a U.S. court to transfer a foreign registrant's domain name

²²¹ F.C. Mayer, "The Internet and Public International Law – Worlds Apart?", *EJIL* 12 (2001), 617 et seq. (621) (noting the fact that the ICANN is recognized as the final authority on matters of domain names by WIPO, which in turn shows a situation where an international organization defers to a corporation subject to US jurisdiction); id., "Europe and the Internet: The Old World and the New Medium", *EJIL* 11 (2000), 149 et seq. (165).

²²² M.L. Mueller, *Ruling the Root, Internet Governance and the Taming of Cyberspace*, 2002, 10 (noting that "[c]entralization of control at the root [including names and addresses] does create levers for the intrusion of politics, policy, and regulation").

²²³ W. Kleinwoechter, "From Self-governance to Public-private Partnership: The Changing Role of Governments in the Management of the Internet's Core Resources", *Loyola of Los Angeles Law Review* 36 (2003), 1103 et seq.

²²⁴ J. von Bernstorff, "Democratic Global Internet Regulation? Governance Networks, International Law and the Shadow of Hegemony", *ELJ* 9 (2003), 511 et seq. (522).

²²⁵ A.M. Froomkin, "Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution", *Duke Law Journal* 50 (2000), 17 et seq. (27) (engaging in a thorough critical assessment of the creation of ICANN by the Department of Commerce).

to the U.S. trademark owner in spite of the Uniform Domain Name Dispute Resolution Policy (UDRP) of the ICANN.²²⁶

Given this situation, we could pose the question of what would happen if some day the U.S. decided on its own to shut down the whole Internet for alleged national security reasons, if only because it has the ability to do so. What would be the grounds to contest that kind of decision? Is there any answer or any theory that could be opposed to such an act on the part of the U.S.? We may try here to develop a new way of thinking about the Internet provided by an international doctrine that has been largely ignored for many years by developed states, namely, the Common Heritage of Mankind (CHM) concept. In order to assess the applicability of this concept to Internet's core resources, it would be good to analyze the origin and the elements that define this institution in International Law.

b. Brief History

As far back as in 1898 the concept of "common heritage" was applied by a scholar to the legal status of the sea.²²⁷ The CHM concept, however, first arose in the 20th century in relation to the Law of the Sea. This concept is generally attributed to Ambassador Arvid Pardo, Malta's UN representative, who proposed that the General Assembly declare the seabed and the ocean floor and its resources a "common heritage of mankind" and take the necessary steps to embody this basic principle in an internationally binding document.²²⁸ Pardo's ideas were

²²⁶ X.T. Nguyen, "The Digital Trademark Right: The Troubling New Extraterritorial Reach of United States Law", *North Carolina Law Review* 81 (2003), 483 et seq. (547) (stating that "[p]otentially, if an ICANN panel ruled in favor of a foreign domain name registrant, the foreign nation will accept the panel's decision. On the other hand, if the trademark holder complainant in that case decided, after the unfavorable UDRP decision, to bring an ACPA action against the domain name, U.S. courts are not bound by the UDRP decision and could rule in favor of the trademark holder complainant").

²²⁷ A.G. Lapradelle, "Le droit de l'Etat sur la mer territoriale", *RGDIP* 5 (1898), 264 et seq. (283).

²²⁸ Reservation Exclusively for Peaceful Purposes of the Sea-bed and of the Ocean Floor, and the Subsoil thereof, Underlying the High Seas Beyond the Limits of Present National Jurisdiction and the Use of Their Resources in the Interests of Mankind, GAOR 22nd Sess., 1st Cttee, 1515 Mtg, Agenda Item 92, Doc. A/C.1/PV.1515; Doc. A/ 6695; Doc. A/C.1/952.

taken up by Part XI of the 1982 United Nations Convention on the Law of the Sea (UNCLOS),²²⁹ which provided in article 136 that the “Area and its resources are the common heritage of mankind” (“Area” is defined in article 1 (1) of UNCLOS) and established an international regime (with an International Seabed Authority) to administer the access to and exploitation of the Seabed Area.²³⁰

As some scholars have pointed out, however, this concept had already appeared in the field of Outer Space and in the Antarctic Treaty.²³¹ The General Assembly’s Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space²³², which referred to the “common interest of all mankind,” was followed by the 1967 Outer Space Treaty,²³³ which stated that exploration and use of outer space shall be “the province of all mankind” (article I). Later, the 1979 Moon Treaty,²³⁴ adopted by a General Assembly Resolution,²³⁵ became the first treaty in force to give effect to the CHM principle,²³⁶ coming into effect on 11 July 1984. Article 11 (1) of this treaty proclaims that “(t)he moon and its natural resources are the

²²⁹ United Nations Convention on the Law of the Sea, 10 December 1982, UNTS Vol. 1834 No. 31363.

²³⁰ W.M. Reisman, “The Common Heritage of Mankind: Success or Failure on International Regulation?”, *Canadian Council on International Law Conference* 14 (1985), 228 et seq. (233) (stating that “the Seabed Authority provisions of the Law of the Sea Treaty represent the most complete effort at implementing the core of Pardo’s common heritage”).

²³¹ S. Gorove, “The Concept of ‘Common Heritage of Mankind’: A Political, Moral or Legal Innovation?”, *San Diego L. Rev.* 9 (1972), 390 et seq. (391); M.V. White, “The Common Heritage of Mankind: An Assessment”, *Case W. Res. J. Int’l L.* 14 (1982), 509 et seq. (510) (presenting an account of the history of this principle).

²³² A/RES/1962 (XVIII) of 13 December 1963.

²³³ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, 27 January 1967, 18 U.S.T. 2410, UNTS Vol. 610 No. 8843.

²³⁴ Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, 5 December 1979, UNTS Vol. 1363 No. 23002.

²³⁵ A/RES/34/68 of 5 December 1979.

²³⁶ H.S. Rana, “The ‘Common Heritage of Mankind’ and the Final Frontier: A Reevaluation of Values Constituting the International Legal Regime for Outer Space Activities”, *Rutgers Law Journal* 26 (1994), 225 et seq. (247).

common heritage of mankind.” The Antarctic Treaty²³⁷ dates back to 1959, and although it does not refer expressly to the CHM, it has been widely seen as an international regime in which CHM elements are found,²³⁸ at least with respect to its substantial normative content.²³⁹ Other examples where the CHM is deemed to be applicable are cultural and natural resources,²⁴⁰ the environment,²⁴¹ although in this latter field the concept of the common concern of mankind is preferred,²⁴² genetic resources²⁴³ and sustainable development,²⁴⁴ and world’s food

²³⁷ Antarctic Treaty, 1 December 1959, 12 U.S.T. 794, UNTS Vol. 402 No. 5778.

²³⁸ E. Suy, “Antarctica: Common Heritage of Mankind?”, in: J. Verhoeven/ P. Sands/ M. Bruce (eds), *The Antarctic Environment and International Law*, 1992, 93 et seq. (96); C. Diehl, “Antarctica: An International Laboratory”, *Boston College Environmental Affairs Law Review* 18 (1991), 423 et seq.

²³⁹ F. Francioni, “La conservation et la gestion des ressources de l’Antarctique”, *RdC* 260 (1996), 239 et seq. (266) (noting that the institutional side of the CHM to be applied to the Antarctic would have to be regulated by way of conventional rules).

²⁴⁰ A.C. Kiss, “La Notion de Patrimoine Commun de l’Humanité”, *RdC* 175 (1982), 99 et seq. (171) (asserting that the 1972 UNESCO Convention establishes the CHM principle for cultural goods and natural resources even though they are located within a given state and therefore under its sovereignty).

²⁴¹ E.g. P.S. Rao, “Environment as a Common Heritage of Mankind: a Policy Perspective”, in: United Nations (ed.), *International Law on the Eve of the Twenty-first Century, Views from the International Law Commission*, 1997, 201 et seq.

²⁴² E.g. P.W. Birnie/ A.E. Boyle, *International Law and the Environment*, 2002, 144; F. Biermann, “Common Concern of Humankind: The Emergence of a New Concept of International Environmental Law”, *AVR* 34 (1996), 426 et seq. (430).

²⁴³ C. de Klemm, “Le patrimoine naturel de l’humanité”, in: R.J. Dupuy (ed.), *The Future of the International Law of the Environment. Workshop, The Hague*, 1985, 117 et seq. (138) (quoting the FAO International Understanding on Phytogenetic Resources, Resolution 8/83 of the General Conference, 23 November 1983, where the term common heritage is used).

²⁴⁴ E. Mann Borgese, “The Common Heritage of Mankind: From Non-Living to Living Resources and Beyond”, in: N. Ando/ E. McWhinney/ R. Wolfrum (eds), *Liber Amicorum Judge Shigeru Oda*, 2002, Vol. 2, 1313 et seq. (1326 and 1332).

resources.²⁴⁵

Initially, the U.S. was willing to apply the CHM principle to the deep seabed.²⁴⁶ Also, because the result of the space race between the U.S. and the Soviet Union was uncertain, the U.S. wanted to have CHM elements inserted in the Outer Space Treaty.²⁴⁷ Soon, however, this CHM was associated with a “socialist” type of claim on the part of developing states, and opposition from developed countries emerged.²⁴⁸ Developed states pressed hard in order to reach a new agreement on Part XI of UNCLOS, which was arrived at in 1994,²⁴⁹ and introduced some important changes in the exploitation system previously devised

²⁴⁵ M. Bedjaoui, “Le droit au développement”, in: M. Bedjaoui (ed.), *Droit International, Bilan et perspectives*, 1991, 1247 et seq. (1268); id., “Propos libres sur le droit au développement”, in: *International Law at the Time of its Codification. Essays in honour of Roberto Ago*, 1987, Vol. II, 15 et seq. (40); id., “Are the World’s Food Resources the Common Heritage of Mankind?”, *IJIL* 24 (1984), 459 et seq. (461) (asserting that “this innovatory concept is undoubtedly able to give fruitful expression to universal solidarity. It may show itself particularly rich in possibilities for the future of world relations and give rise to possible applications not only in and under oceans, but also in space [...] not only on earth but in the air, in the environment, in the climate; on *inner matter*, but also on *living matter*, such as the genetic heritage, both animal and vegetable, whose richness and variety must be preserved for future generations. It can also open perspectives and suggest attractive solutions for questions such as the cultural and artistic achievements of humanity, as it can and should likewise be applied in the first place to human beings, the *primary* common heritage of mankind, and to humanity itself – as a new subject of international law and the primary heritage to be preserved from wholesale destruction”).

²⁴⁶ L. Henkin, *Law for the Sea’s Mineral Resources*, 1968, 52.

²⁴⁷ B. Cheng, *Studies in International Space Law*, 1997, 156; S.L. Lowder, “A State’s International Legal Role: From the Earth to the Moon”, *Tulsa Journal of Comparative and International Law* 7 (1999), 253 et seq. (268); J.A. Jiru, “Star Wars and Space Malls: When the Paint Chips Off a Treaty’s Golden Handcuffs”, *South Texas Law Review* 42 (2000), 155 et seq. (162).

²⁴⁸ A. Cassese, *International Law in a Divided World*, 1986, 381.

²⁴⁹ Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, A/RES/48/263 of 28 July 1994; D.H. Anderson, “Legal Implications of the Entry into force of the Convention on the Law of the Sea: A Redistribution of Competences between States and International Organizations in Relation to the Management of the International Commons”, *ICLQ* 44 (1995), 313 et seq.

(decision-making process and financial requirements), watering down the CHM features of the 1982 UNCLOS.²⁵⁰

c. Status and Elements of the CHM

Regarding the legal status of the CHM, it is initially difficult to ascertain whether the CHM constitutes a principle of International Law, a theory, a doctrine, or just a political or philosophical concept. There has been much debate, about the legal standing of the CHM, with many of the International Law writers concluding, on the one hand, that it may only be taken as a political challenge from developing countries so that “the CHM as a legal concept is dead”²⁵¹ or just a flexible label²⁵² and therefore “belongs to the realm of politics, philosophy or morality.”²⁵³ On the other hand, it is undeniable that the CHM is written in applicable international treaties²⁵⁴ which have effectively prevented private enterprise from developed countries from starting to exploit CHM spaces until now.²⁵⁵ But it is not settled whether the CHM constitutes a principle of customary International Law,²⁵⁶ or is rather a concept, though some of the elements of the CHM have become principles themselves.²⁵⁷ Its legal status nowadays is far from clear, because if in the 1980’s it was progressively gaining momentum,²⁵⁸ it has been severely

²⁵⁰ Cassese, see note 159, 94.

²⁵¹ B. Larschan/ B.C. Brennan, “The Common Heritage of Mankind Principle in International Law”, *Colum. J. Transnat’l L.* 21 (1982), 305 et seq. (336).

²⁵² C.A. Fleischer, “Fisheries and Biological Resources”, in: R.J. Dupuy/ D. Vignes (eds), *A Handbook on the New Law of the Sea*, 1991, 989 et seq. (1125).

²⁵³ Gorove, see note 231, 402.

²⁵⁴ A. Arnaldo Cocca, “The Common Heritage of Mankind: Doctrine and Principle of Space Law”, *Proceedings of the 29th Colloquium on the Law of Outer Space*, 1986, 17 et seq. (speaking of positive international law).

²⁵⁵ Cf. B.M. Hoffstadt, “Moving the Heavens: Lunar Mining and the Common Heritage of Mankind in the Moon Treaty”, *University of California Los Angeles Law Review* 42 (1994), 575 et seq. (620-621).

²⁵⁶ R. Wolfrum, “Common Heritage of Mankind”, in: R. Bernhardt (ed.), *EPIL* 11 (1989), 65 et seq. (68).

²⁵⁷ K. Baslar, *The Concept of the Common Heritage of Mankind in International Law*, 1998, 2-3.

²⁵⁸ C.C. Joyner, “Legal Implications of the Concept of the Common Heritage of Mankind”, *ICLQ* 35 (1986), 190 et seq. (199) (noting that the CHM could be considered an “emergent principle of international law”).

questioned since the 1990's.²⁵⁹ It may be too early to predict the success or failure of the CHM,²⁶⁰ but it is our opinion that the CHM may be a principle, a legal regime and a concept, depending on the context in which it is used. It is a principle of International Law introduced by General Assembly resolutions, which may even have reached the legal standing of a *ius cogens* principle. It is also the legal regime set forth in Part XI of UNCLOS to regulate the Seabed Area. Furthermore, it is a concept applicable to the governance of the post-material global commons and, in this regard, it seems appropriate for our purposes to extend it to the Internet field.

aa. CHM as a Principle

General Assembly Resolution 2574 was the first step in the process of building-up the CHM principle.²⁶¹ This resolution sought to introduce a moratorium in relation to the exploitation activities and sovereign claims over the Seabed Area until an agreed international regime was reached. It was followed by General Assembly Resolution 2749,²⁶² also known as the Declaration of Principles of 1970, which established fifteen principles, all of them flowing from the very first one, the CHM principle.²⁶³ This resolution in fact anticipated the parameters of the future conventional regime,²⁶⁴ as it provided for the principles of non appropriation, peaceful use, universal participation in its management and exploitation, equitable sharing in the benefits flowing from the exploitation of the Seabed (specially benefiting developing countries), scientific

²⁵⁹ S. Hobe, "ILA Resolution 1/2002 with regard to the Common Heritage of Mankind Principle in the Moon Agreement", *Proceedings of the 47th Colloquium on the Law of Outer Space*, 2004, 536 et seq. (arguing that, in the new international context of growing commercialization and privatization of space activities together with the 1994 amendment to UNCLOS, the interpretation of the CHM has been modified and its equitable sharing element has been abandoned).

²⁶⁰ Shaw, see note 163, 454.

²⁶¹ A/RES/2574 (XXIV) of 15 December 1969.

²⁶² Declaration of Principles Governing the Seabed and the Ocean Floor, and the Subsoil Thereof, Beyond the Limits of National Jurisdiction, A/RES/2749 (XXV) of 17 December 1970.

²⁶³ Kiss, see note 240, 205.

²⁶⁴ J.M. Pureza, *El Patrimonio Común de la Humanidad, ¿Hacia un Derecho Internacional de la Solidaridad?*, 2002, 257.

cooperation and protection of the environment.²⁶⁵ The CHM principle was also taken by article 29 of the Charter of Economic Rights and Duties of States established by General Assembly resolution 3281.²⁶⁶ The legal status of the CHM principle, especially as stated in the Declaration of Principles of 1970, was not at all clear, due to the transactionist character of the Resolution.

From the very beginning of the negotiations, there was a gap between developed and developing countries regarding the interpretation of the CHM. Developing countries wanted to introduce a communitarian CHM. In this regard, CHM should incorporate the key elements of non appropriation and equitable sharing. On the contrary, developed countries preferred a liberal concept of the CHM, therefore a CHM understood as a *res communis* mirroring the freedom of access and use of the high seas.²⁶⁷ The Declaration of Principles of 1970 was purportedly vague because it was a compromise between both interpretations.²⁶⁸ Nevertheless, the main elements of a communitarian reading of the CHM were present. Developing countries thus achieved a symbolic victory in their effort to transform the international community according to the New International Economic Order (NIEO).²⁶⁹

The legal status of the CHM in the Declaration of Principles was then ambiguous. It was understood as a *lex ferenda* proposition,²⁷⁰ because of its programmatic character.²⁷¹ On the other hand, it was stated that the CHM had achieved full binding force, either as an instant cus-

²⁶⁵ R.P. Arnold, "The Common Heritage of Mankind as a Legal Concept", *Int'l Law*. 9 (1975), 153 et seq. (157) (affirming that the essential thrust of the declaration and heritage clause is that all states must share in the resources of the sea).

²⁶⁶ A/RES/3281(XXIX) of 12 December 1974.

²⁶⁷ Pureza, see note 264, 233.

²⁶⁸ R.P. Anand, *Legal Regime of the Sea-Bed and the Developing Countries*, 1976, 202.

²⁶⁹ Declaration on Establishment of a New International Economic Order, A/RES/3201 (S-VI) of 1 May 1974, Doc. A/9559 (1974), 3. E.g. E. Mann Borgese, "The New International Economic Order and the Law of the Sea", *San Diego L. Rev.* 14 (1977) 584 et seq.

²⁷⁰ K. Skubiszewski, "La nature juridique de la Declaration des principes sur les fonds marins", *Annales d'Études Internationales*, 1973, 377 et seq. (241-242).

²⁷¹ E. Salamanca Aguado, *La Zona Internacional de los Fondos Marinos, Patrimonio Común de la Humanidad*, 2003, 295.

tom²⁷² or even as a *ius cogens* norm.²⁷³ We believe that, in any event, the Declaration of Principles created some rights through the estoppels mechanism²⁷⁴ and defined new and emergent values in the then ongoing process of law-making.²⁷⁵

In article 136 of UNCLOS the CHM principle was written the same way as in the Declaration of Principles. However, regardless of UNCLOS the CHM principle, in its general aspects, has attained the legal status of customary International Law, as has been demonstrated.²⁷⁶ The question arises whether article 311 (6) of the Convention, which prohibits any amendment of this principle, could be used, together with the circumstances surrounding the Convention's adoption, as an argument to defend the *ius cogens* nature of the mentioned principle.²⁷⁷ It may be suggested that even the U.S., the major objector to Part XI, never expressly denied the legal nature of the Area, yet it was against the system of exploitation and the institutional arrangement.²⁷⁸ State

²⁷² Anand, see note 268, 203.

²⁷³ Salamanca Aguado, see note 271, 298 (referring to the statements made by some developing countries during the 70's regarding the *ius cogens* nature of the CHM principle).

²⁷⁴ Anand, see note 268, 204; Pureza, see note 264, 261.

²⁷⁵ Kiss, see note 240, 207; E.D. Brown, "Freedom of the High Seas Versus the Common Heritage of Mankind: Fundamental Principles in Conflict", *San Diego L. Rev.* 20 (1983), 521 et seq. (545) (stating that the Declaration of Principles did not create binding rules, but provided a significant basis for the generation of legally binding rules through a broader law-creating process).

²⁷⁶ R. Wolfrum, "The Principle of the Common Heritage of Mankind", *ZaöRV* 43 (1983), 312 et seq. (333-334) (asserting that the preconditions that have to be met for a new principle of customary international law to emerge, that is, a distinct content and state practice, accompanied by *opinio iuris*, generally accepted, can be found regarding the CHM principle).

²⁷⁷ J.A. Pastor Ridruejo, "La zona internacional de los fondos marinos como patrimonio común de la humanidad: alcance real del principio", in: *Pensamiento Jurídico y Sociedad Internacional. Libro-Homenaje al Profesor D. Antonio Truyol y Serra*, 1986, Vol. II, 921 et seq. (923); S. Sucharitkul, "Évolution continue d'une notion nouvelle: le patrimoine commun de l'humanité", in: Y. Dinstein/ M. Tabory (eds), *International Law at a Time of Perplexity. Essays in Honour of Shabtai Rosenne*, 1989, 887 et seq. (903); But see T. Treves, "Problemas generales del Derecho internacional a la luz de la Convención de las Naciones Unidas sobre el Derecho del Mar", *Cursos de Derecho Internacional de Vitoria-Gasteiz*, 1984, 17 et seq. (62).

²⁷⁸ Salamanca Aguado, see note 271, 300.

practice and the 1994 Agreement on the Implementation of Part XI seems to have reaffirmed thereafter the CHM approach as a customary principle of International Law of a *ius cogens* character.²⁷⁹ The consensus existent at the time of the 1994 Agreement reinforces the idea that UNCLOS, and the CHM within its framework, has nowadays attained the status of an objective regime.²⁸⁰

bb. CHM as a Legal Regime

The opposition in the interpretation of the CHM by developing and developed states since it first arose continued throughout the negotiations of the Third United Nations Conference on the Law of the Sea as a new form of the classic antagonism between developing and industrialized states.²⁸¹ This antagonism was translated into the normative and institutional facets of the negotiations, as we will see. If in the first phase of those negotiations Third World proposals were on the rise,²⁸² the second phase showed the radicalization of the developed countries' positions.²⁸³ UNCLOS, approved in 1982, was the crystallization of the political compromise reached by both schools of thought. Nevertheless, Part XI of the Convention defined and regulated the Seabed as the CHM, a fact that by itself was interpreted as a major landmark and an important departure from traditional liberal International Law.²⁸⁴

²⁷⁹ N. Navarro Batista, *Fondos Marinos y Patrimonio Común de la Humanidad*, 2000, 49; but see V.D. Degan, "The Common Heritage of Mankind in the Present Law of the Sea", in: Ando/ McWhinney/ Wolfrum, see note 244, 1263 et seq. (1374-1375) (noting that "[t]here is little doubt that the Hague Court would at that time [in the 1970's] have ascribed the character of *ius cogens* to the rules and legal régime of the Area [but] [t]he 1994 Agreement has proved the fact that as the result of a shift in *opinio juris* within the 'states whose interests were specially affected', an actual rule of *ius cogens* can vanish").

²⁸⁰ F.H. Paolillo, "The Institutional Arrangements for the International Seabed and their Impact on the Evolution of International Organizations", *RdC* 188 (1984), 135 et seq. (187); cf. Wolfrum, see note 276, 337.

²⁸¹ J. Beer-Gabel, "L'exploitation du fond des mers dans l'intérêt de l'humanité: chimère ou réalité?", *RGDIP* 81 (1977), 167 et seq. (170).

²⁸² Pureza, see note 264, 268.

²⁸³ G. Albiol Biosca, *El régimen jurídico de los fondos marinos internacionales*, 1984, 57.

²⁸⁴ Paolillo, see note 280, 145.

On the *normative* side, the CHM legal regime applicable to the Seabed by UNCLOS was made of four principles:

1) The absence of any claim or exercise of sovereignty over the Area or its resources and any right of appropriation thereof (article 137). This is the first and foremost important corollary of the CHM principle and it must be understood as a non appropriation in the broadest sense.²⁸⁵ This is also an *erga omnes* obligation²⁸⁶ although this assertion has to be balanced in the light of article 137 (2), which provides that, once recovered, minerals may be subject to property rights.

2) The duty to exploit the resources in the interest of mankind in such a way as to benefit all, taking into particular consideration the interests and needs of developing countries (article 140). Although one of the main questions during the negotiations was the interpretation to be given to the term “benefit of mankind”,²⁸⁷ the Convention finally retained a broad interpretation. On the one hand, it not only means equitable sharing in the benefits flowing from the Area, but also effective participation in its management. On the other, it not only applies to financial benefits, but also to other economic benefits.²⁸⁸

The CHM calls therefore for the “equitable sharing” of benefits “taking into particular consideration the interests and needs of developing states”²⁸⁹ and “peoples who have not attained full independence or other self-governing status”. This is a critical element introduced by developing countries that wanted an obligation framed according to the NIEO and its underlying philosophy. But those benefits will not be limited to financial benefits and will also include other economic benefits²⁹⁰ such as those derived from the policies related to the activities in

²⁸⁵ A. Blanc Altemir, *El Patrimonio común de la humanidad. Hacia un régimen jurídico internacional para su gestión*, 1992, 69.

²⁸⁶ Cf. T. Treves, “Les fonds des mers au-delà de la juridiction nationale (L’Autorité International des Fonds Marins)”, in: R.J. Dupuy, *A Handbook on International Organizations*, 1998, 776 et seq. (780).

²⁸⁷ Wolfrum, see note 276, 321 (analyzing the compensation and the preferential treatment aspects of this CHM element).

²⁸⁸ Salamanca Aguado, see note 271, 308-309.

²⁸⁹ S. Paquerot, *Le Statut des ressources vitales en droit international. Essai sur le concept de patrimoine commun de l’humanité*, 2002, 43 and 60 (referring to the principle of *inégalité compensatrice* as one of the founding and hierarchically superior norms of the CHM).

²⁹⁰ Report by the Secretary-General on “Possible Methods and Criteria for the Sharing by the International Community of Proceeds and Other Benefits

the Area (article 150), scientific and research activities (article 143) and the transfer of technology (article 144).²⁹¹ The clause “for the benefit of mankind” also requires effectively universal participation in the management of the Area (article 148), that is, no discrimination and equality among all states in the administration of the activities to be carried out in the Area.²⁹² Finally, the mentioned clause also entails the protection of developing countries from adverse effects caused by activities in the Area (article 150 (h)).

Therefore, the CHM principle as provided by UNCLOS called for a *de facto* equality among developing and developed countries and was legally recognized through formal discrimination²⁹³ in a transformative way that sought to reverse the state of things as resulting from competition based on technical capacity and economic power of states.²⁹⁴ These aspects of the CHM principle have been downgraded to a large extent by the 1994 Agreement though²⁹⁵ as it was felt that the preferential

Derived from the Exploitation of the Resources of the Area beyond the Limits of National Jurisdiction”, Doc. A/AC.138/38, quoted in: Paolillo, see note 280, 209.

²⁹¹ J. Reverdin, “Le régime juridique des grands fonds marins”, *Schweizerisches Jahrbuch für Internationales Recht* 39 (1983), 105 et seq. (120) (noting that this obligation of transfer of technology became a deep concern for industrialized countries, because it may be used as a precedent and a first step towards the acceptance of technology as a common heritage of mankind).

²⁹² Paquerot, see note 289, 63 (underscoring that the legitimate representation of a humanity made of equal human beings is another central element of the CHM).

²⁹³ Wolfrum, see note 276, 327.

²⁹⁴ Pureza, see note 264, 279.

²⁹⁵ Navarro Batista, see note 279, 137-138 (stating that “[t]he Agreement has suppressed the *lata* conception of the Convention, which implied the contribution of industrialized states to the effective participation of developing countries in the development of activities in the Area. The Community of 1994 does not seek any more to alter the structures defining in general terms the division of labor in the International Society; it does not constitute any more a changing instrument of economic international relations. The Community of 1994 interprets the concept of benefit in the framework of a Society led by market principles and, therefore, reduces this term to strictly financial benefits” so that the CHM “certainly conveys development aid, in a narrow sense, as it only consists of apportionment of money sums”).

treatment aspect of the CHM principle was overemphasized in the Convention to the detriment of the idea of simple compensation.²⁹⁶

3) The obligation to explore and exploit the Area for peaceful purposes only (article 141). This peaceful use obligation can be interpreted either as requiring merely a non aggressive use or alternatively as a broad ban of any kind of military use, the latter being closer to the spirit of the CHM concept.²⁹⁷ According to article 301 UNCLOS the first interpretation, however, has prevailed as Western powers wanted the Convention to allow those military activities compatible with the UN Charter. Nevertheless, the addition introduced by article 141 consists of the complete exclusion of any possible claim of sovereignty or appropriation based on the military activities carried out by states in the Area.²⁹⁸

4) The duty to protect and conserve the natural resources and the marine environment (article 145). According to this principle, UNCLOS provides for an obligation of *rational management* of the Area's resources (article 150 (1)(b)). In that regard, the Authority is required to adopt appropriate rules, regulations and procedures. The CHM concept is therefore closely related to the concept of sustainable development, specifically provided for oceans and seas in Chapter 17 of Agenda 21,²⁹⁹ and implies some kind of intergenerational equity,³⁰⁰ also incorporated in Principle 3 of the Rio Declaration.³⁰¹ The precautionary principle has

²⁹⁶ Wolfrum, see note 276, 332.

²⁹⁷ T. Treves, *La notion d'utilisation des espaces marins à des fins pacifiques dans le nouveau droit de la mer*, *A.F.D.I.* 26 (1980), 687 et seq. (692-694) (pointing out that the latter interpretation would lead to the prohibition of all military activities, even those compatible with the U.N. Charter; however, the Convention leaves the question open).

²⁹⁸ Pureza, see note 264, 277-278.

²⁹⁹ Agenda 21 is the Program of Action adopted at the Rio Conference, available at <<http://www.unep.org/Documents.Multilingual/Default.Print.asp?DocumentID=52>>.

³⁰⁰ E.B. Weiss, *In Fairness to Future Generations: International Law, Common Patrimony and Intergenerational Equity*, 1989; id. "Our Rights and Obligations to Future Generations for the Environment", *AJIL* 84 (1990), 198 et seq. (199); id., "In Fairness to Future Generations and Sustainable Development", *Am. U. J. Int'l L. & Pol'y* 8 (1992/1993), 19 et seq. (19) (highlighting that "sustainable development relies on a commitment to equity with future generations").

³⁰¹ The Rio Declaration on Environment and Development, United Nations Conference on Environment and Development, adopted 14 June 1992,

also been incorporated by Regulation 31 (2) of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area adopted by the Authority.³⁰²

On the *institutional* side, the CHM regime calls for common governance and management of the Area by an international Authority (article 157).³⁰³ The international regime applicable to the Seabed was devised taking into account a narrow relationship between its normative and institutional facets.³⁰⁴ The establishment of the Seabed Authority therefore was seen as the vehicle to equal participation by all (“on behalf of mankind”) as stated in article 153.³⁰⁵ For this reason, the institutional framework set up by the Convention is based on the universality³⁰⁶ and supra-nationality principles and is oriented towards the car-

Doc. A/CONF.151/5/Rev.1, 13 June 1992, reproduced in: *ILM* 31 (1992), 876 et seq. (877).

³⁰² International Seabed Authority, Decision of the Assembly Relating to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (Annex), Assembly, Sixth Sess., 19, Doc. ISBA/6/A/18 (2000); e.g. D. Freestone/ E. Hey, *The Precautionary Principle and International Law: The Challenge of Implementation*, 1996.

³⁰³ Paolillo, see note 280, 171 (stating that “the common heritage of mankind implies the joint administration and management of the Area which can only be done through an international body [...] The internationalization of the Area and its resources implies therefore the institutionalization of the law applicable to them [as] was foreseen and acknowledged in the Declaration of Principles”); E. Mann Borgese, “The International Seabed Authority as Prototype for Future International Resource Management Institutions”, in: R.J. Dupuy (ed.), *The New International Economic Order, Commercial Technological and Cultural Aspects. Workshop, The Hague, 1980*, 59 et seq. (59) (asserting that, “in the context of an NIEO, there must be some degree of international resource planning and management”); but see Wolfrum, see note 276, 317 (underscoring that the establishment of an international organization is not a necessary consequence of the CHM principle).

³⁰⁴ A. Giardina, “L’ International Sea-Bed Authority: verso un nuovo esperimento di organizzazione internazionale”, *Riv. Dir. Int.* 59 (1976), 247 et seq. (248).

³⁰⁵ Pureza, see note 264, 280.

³⁰⁶ Paolillo, see note 280, 184 (asserting that “the effectiveness of the Authority will depend, therefore, on the broadest possible participation of states and other entities which form part of the international community [...] For this reason, the Authority has been conceived as an intergovernmental organization with a universal vocation, open to participation not only by states but also by entities other than states that represent peoples”).

rying out of the activities directly by the Authority.³⁰⁷ In other words, the central role of the Authority³⁰⁸ within the system made it the warrantor of the International Community's public interest.³⁰⁹ Although the trustee of mankind's interests, however, the Authority had to give special consideration to developing countries in order to reduce the inequality between states with respect to their capability to take part in the exploitation activities of the Seabed.³¹⁰

Besides the administration of the Area and its resources through the Enterprise as the operative organ,³¹¹ the Authority was moreover endowed with another function, that is, the representation of mankind.³¹² Although mankind is not a subject of International Law even within UNCLOS,³¹³ and has no real juridical dimension,³¹⁴ it has been vested with economic rights (article 137 (2)) whose exercise was attributed to the Authority as its representative in all matters concerning the protection and implementation of those rights. Nevertheless, with respect to

³⁰⁷ Pureza, see note 264, 284.

³⁰⁸ T. Treves, "Continuité et innovation dans les modèles de gestion des ressources minérales des fonds marins internationaux", in: R.J. Dupuy (ed.), *The Management of Humanity's Resources: The Law of the Sea*, 1981, 63 et seq. (71) (underscoring that the management scheme of UNCLOS has reversed the respective roles of states and international organizations because "the management of the system belongs to the organization whereas the function of states appears as subordinated and instrumental").

³⁰⁹ F. Orrego Vicuña, "Le régime d'exploration et d'exploitation", in: R.J. Dupuy/ D. Vignes, *Traité du Nouveau Droit de la Mer*, 1985, 551 et seq. (560).

³¹⁰ Paolillo, see note 280, 181 (affirming that "the establishment of the Authority reflects the recognition that solutions to political and economic problems arising from inequalities and underdevelopment are the responsibility of the international community as a whole").

³¹¹ F.H. Paolillo, "Institutional Arrangements", in: R.J. Dupuy/ D. Vignes (eds), *A Handbook on the New Law of the Sea*, 1991, 689 et seq. (759) (stating that the Enterprise is "by far the most interesting institutional innovation introduced by the Convention [as] the first international commercial organization").

³¹² Paolillo, see note 280, 182 (referring to the Authority as "the incarnation of mankind or, in more technical language, as its juridical expression").

³¹³ Wolfrum, see note 276, 319 (stating that "the participants with respect to the utilization of the common heritage are states and not 'mankind' as an independent subject of international law").

³¹⁴ Paolillo, see 280, 184 (underscoring that "mankind is a collective entity, lacking true juridical dimension; it is a social, not a legal reality").

the institutional dimension the CHM legal regime has also been watered down to a large extent through the 1994 Agreement.³¹⁵

As mentioned, taking together both aspects, normative and institutional, there has been an amendment³¹⁶ that modifies UNCLOS accommodating the objections of the U.S. and other industrial states to Part XI.³¹⁷ This amendment has been termed as a clear regression in the CHM legal regime applicable to the Seabed Area.³¹⁸ On the one hand, the world economic and political context has changed dramatically so that planned economy and public enterprise are not supported any more.³¹⁹ On the other hand, developed countries have tried successfully to recover the CHM concept.³²⁰ The end result has brought about a minimization of the CHM legal regime established by UNCLOS³²¹ and the dismissal of the solidarity philosophy that underlied it according to the NIEO.³²²

³¹⁵ Navarro Batista, see 279, 129 (concluding that “the Convention imposed legal equality, the condition of one state-one vote in the name of a sort of ‘democracy’ in the international field. The 1994 Agreement however imposed the effectiveness principle. It takes into account the inequalities of the International Society, the technological and financial disparities, and translates them into the institutional model. Perpetuation against change, effectiveness against ‘democracy’”).

³¹⁶ J.P. Levy, “Les bons offices du Secrétaire Général des Nations Unies en faveur de l’universalité de la Convention sur le droit de la mer”, *RGDIP* 98 (1994), 871 et seq. (890) (stating that the 1994 Agreement is without question, and regardless of its heading, an Amendment Protocol); T. Treves, “L’entrée en vigueur de la Convention des Nations Unies sur le droit de la mer et les conditions de son universalisme”, *A.F.D.I.* 39 (1993), 850 et seq. (862).

³¹⁷ B.H. Oxman, “The 1994 Agreement and the Convention”, *AJIL* 88 (1994), 687 et seq. (695); D. Vignes, “La Convention sur le droit de la mer répond-elle à l’attente?”, *Studia Diplomatica* 47 (1994), 29 et seq. (34).

³¹⁸ J.A. Pastor Ridruejo, “Le droit international à la veille du vingt et unième siècle: normes, faits et valeurs. Cours général de droit international public”, *RdC* 274 (1998), 9 et seq. (264).

³¹⁹ Levy, see note 316, 875.

³²⁰ M.A. Bekkouche, “La récupération du concept de patrimoine commun de l’humanité par les pays industriels”, *RBDI* 23 (1987), 124 et seq.

³²¹ Pureza, see note 264, 301.

³²² I. Forcada Varona, “La evolución de los principios jurídicos que rigen la explotación de los recursos económicos de los fondos marinos y del alta mar: Retorno a la soberanía”, *Anu. Der. Internac.* 14 (1998), 53 et seq. (80 and 105).

The CHM has also played an important role in the Outer Space legal regime. The *res communis* regime purported by developed countries was contested by developing countries as soon as exploitation of this space became evident. Alternatively the latter insisted on the CHM principle which, suggested in the 1963 Declaration³²³ and the 1967 Treaty,³²⁴ was eventually taken as a key part of the 1979 Moon Treaty.³²⁵ Indeed, General Assembly Resolution 34/68 of 5 December 1979 was, surprisingly, approved by consensus despite the existing divergences³²⁶ and the Moon Treaty introduced an important change in the traditional rules of International Law concerning resources from Outer Space.³²⁷ Therefore, roughly speaking, we find in the Outer Space regime the same features already mentioned regarding Part XI of UNCLOS,³²⁸ specifically: prohibition of occupation or appropriation (article 11 (2) of the Moon Treaty);³²⁹ utilization of the moon and its resources for the benefit of mankind (arts 4 and 11);³³⁰ peaceful use (article 3)³³¹ and protection of the environment (article 7); and common

³²³ M. Lachs, "The International Law of Outer Space", *RdC* 113 (1964), 7 et seq. (97); B. Cheng, "United Nations Resolutions on Outer Space: Instant International Customary Law?", *IJIL* 5 (1965), 23 et seq. (36).

³²⁴ J. Dutheil de la Rochere, "La Convention sur l'internationalisation de l'espace", *A.F.D.I.* 13 (1967), 605 et seq. (625); D. Goedhuis, "The Changing Legal Regime of Air and Outer Space", *ICLQ* 27 (1978), 576 et seq. (582).

³²⁵ C.Q. Christol, "The Common Heritage of Mankind Provision in the 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies", *Int'l Law.* 14 (1980), 429 et seq. (434).

³²⁶ A.D. Roth, *La prohibition de l'appropriation et les régimes d'accès aux espaces extra-terrestres*, 1992, 143.

³²⁷ S.M. Williams, "The Law of Outer Space and Natural Resources", *ICLQ* 36 (1987), 142 et seq. (146-148) (asserting that the CHM provision of the Moon Treaty extends the non appropriation rule to the fruits and natural resources of the moon and other celestial bodies).

³²⁸ Wolfrum, see note 276, 333-334.

³²⁹ But see Roth, see note 326, 169 (noting that this prohibition only applies to resources *in situ*, not to resources already extracted by way of scientific research activities).

³³⁰ But see Christol, see note 325, 478 (endorsing the interpretation of Western countries that this "cannot be treated as a device to eliminate the profits earned through the taking of risks under the free-enterprise system").

³³¹ N.L. Griffin, "Americans and the Moon Treaty", *Journal of Air Law and Commerce* 46 (1981), 729 et seq. (737) (stressing that this feature of the CHM has been reinforced through article 3 of the Moon Treaty).

administration through the setting up of institutional machinery (article 11 (5)).³³² The question arises whether or not the Moon Treaty imposes a moratorium until the establishment of the foreseen international regime. Although there is not a clear-cut answer, the indefinite legal situation has to date prevented commercial exploitation.³³³

The most specific facets of the CHM regime applicable to Outer Space, namely, the common management through an international regime and the equitable sharing are only generally stated and therefore it is difficult to ascertain what the precise conventional obligations for States Parties are. The real problem however rests on the willingness of the space powers to accept the CHM provision.³³⁴

cc. CHM as a Concept

The CHM concept was launched in the 1960's and used to symbolize a new conception of the function of International Law. The emphasis was put on a new kind of international relations based on active cooperation among states rather than on mutual national interest and self-restraint. Moreover, the CHM concept emerged as a major legal feature of the NIEO and so as an essential economic goal.³³⁵ International Law could therefore be used, not only as the instrument to regulate and control social order in the international community through conciliation processes on the basis of reciprocity.³³⁶ It could also serve to carry out dis-

³³² But see Roth, see note 326, 150 (underscoring the fact that the commitment to establish an international regime is no more than a *pactum de negotiando*).

³³³ Hoffstadt, see note 255, 620-621.

³³⁴ S. Ervin, "Law in a Vacuum: The Common Heritage Doctrine in Outer Space Law", *Boston College International and Comparative Law Review* 7 (1984), 403 et seq. (422); Griffin, see note 331, 731 (noting that the U.S. was an active participant in the Moon Treaty but did not finally sign due to strong opposition from domestic interest groups); also B. Leger, "La Lune: patrimoine commun de l'Humanité", *CYIL* 18 (1979), 280 et seq. (290).

³³⁵ Treves, see note 308, 70; Pureza, see note 264, 343.

³³⁶ P.M. Dupuy, "Humanité, communauté, et efficacité du droit, Humanité et Droit International", in: *Humanité et Droit International. Mélanges Rene-Jean Dupuy*, 1991, 133 et seq. (136) (stating that the emergence of mankind in the field of international law reinforces the tendency towards the extension of those norms whose application is not subject to the reciprocity condition).

tributive functions.³³⁷ In other words, the UNCLOS and the CHM concept were to be understood, not only as one of the farthest-reaching steps for the progressive development of International Law,³³⁸ but also for the progressive social development.³³⁹

From a conceptual point of view, the CHM has two aspects.³⁴⁰ First, it has a trans-spatial dimension. It regroups all current peoples and has a universalistic and egalitarian function; in other words, on the one hand it entails collective property and non discrimination and, on the other hand, it promotes integration and common management. Secondly, the CHM concept has a trans-temporal dimension. It compels present generations to take into account the interests and needs of future generations so that the former are only the managers and responsible *vis à vis* the latter. In this regard, the CHM concept flowing from this new International Law is ultimately opposed to the sovereignty principle³⁴¹ as framed by liberal International Law.

The CHM concept, as embodied in UNCLOS is one of the most advanced frameworks ever articulated with the aim of achieving the equitable sharing of resources among states and peoples.³⁴² Nevertheless, from a doctrinal point of view, the *de facto* equal participation and preferential treatment elements of a regime applicable to the Seabed Area are entrenched in a different background, that is, whereas the former is based on the CHM concept, the latter is founded in the development aid thinking.³⁴³ The 1994 Agreement, however, has downgraded or even removed most important aspects of these two elements so that the customary CHM concept may have experienced a modification by way of

³³⁷ Paolillo, see note 280, 149.

³³⁸ F. Zegers Santa Cruz, "Deep Sea-bed Mining Beyond National Jurisdiction in the 1982 UN Convention on the Law of the Sea: Description and Prospects", *GYIL* 31 (1988), 107 et seq. (108).

³³⁹ P. Allot, "Mare Nostrum: A New International Law of the Sea", *AJIL* 86 (1992), 764 et seq. (785).

³⁴⁰ R.J. Dupuy, "La notion de patrimoine commun de l'humanité appliquée aux fonds marins", in: *Droit et Libertés à la Fin du XXe Siècle, Influence des Données Economiques et Technologiques. Etudes Offertes à Claude-Albert Colliard*, 1984, 197 et seq. (199).

³⁴¹ Wolfrum, see note 256, 68 (stating that this principle "conflicts with the principle of sovereignty as it raises the ideas of international public utility and the obligation to cooperate").

³⁴² Paolillo, see note 280, 149.

³⁴³ Wolfrum, see note 276, 323.

conventional law. The current CHM concept has therefore lost much of its economic dimension.

The CHM concept has recently experienced a process of expansion in its sphere of application as well. As an equitable and rational system to manage economic resources, it has been proposed to regulate post-material global commons often located within national jurisdictions.³⁴⁴ First, it has been invoked in the field of culture. Although there are traces in article 1 (a) of the 1954 UNESCO Convention for the Protection of Cultural Property in the Event of Armed Conflict,³⁴⁵ the obligation towards the protection afforded to the cultural heritage of mankind is incorporated in general International Law as of the 1972 UNESCO Convention for the Protection of the World Cultural and Natural Heritage.³⁴⁶ Within the framework established by the 1972 Convention, UNESCO on behalf of the international community will cooperate with the national state in order to protect that cultural heritage. Institutional and financial mechanisms are articulated to that end. The 1972 Convention therefore does not have the effect of superseding national sovereignty over cultural goods located within the jurisdiction of the respective state. According to the Convention, however, the national state is not only the first competent to protect, but also the first obliged to do so, which means that state sovereignty is limited by the interest of the international community.³⁴⁷ Under this approach, the state is not the owner of the cultural heritage but the trustee of mankind,³⁴⁸ an idea most welcomed by industrialized countries.³⁴⁹

³⁴⁴ Pureza, see note 264, 343.

³⁴⁵ UNTS Vol. 249 No. 3511.

³⁴⁶ UNTS Vol. 1037 No. 15511.

³⁴⁷ A. Monden/ G. Wils, "Art Objects as Common Heritage of Mankind", *RBDI* 19 (1986), 327 et seq. (336) (stating also that "cultural heritage of mankind is qualitatively different from the mere sum of national heritages, and is more consistent with common heritage of mankind as applied to the deep seabed, the celestial bodies and the environment"); but see A. Strati, "Deep Seabed Cultural Property and the Common Heritage of Mankind", *ICLQ* 40 (1991), 859 et seq. (860).

³⁴⁸ Monden/ Wils, see note 347, 336.

³⁴⁹ Baslar, see note 257, 296 (noting that "[i]ronically [...] the Common Heritage of Mankind language was largely welcomed by the prosperous, art importing nations which argued that artifacts representing universal human culture should be located where they will be best cared for").

Second, the CHM concept has also been retained in the field of natural resources³⁵⁰ (natural heritage) and the environment under a very similar approach.³⁵¹ The growing damage caused to the natural environment has created the need for international action. “The greening of International Law” conveys the idea of the special responsibility this discipline has in meeting that need.³⁵² The concept of CHM arises then as a useful tool to create international obligations and the machinery for the protection of the environment. Concerning the exploitation of natural resources, the term “common interest” and the preservation of the environment for future generations have been incorporated in international texts,³⁵³ such as the Whaling Convention,³⁵⁴ the 1952 Tokyo Convention,³⁵⁵ the 1968 African Convention,³⁵⁶ the 1979 Bonn Convention,³⁵⁷ the Natural Habitats Convention,³⁵⁸ and the World Charter for Nature.³⁵⁹ In this field, however, the concept of “common concern of mankind” has been preferred to the CHM, as expressed by General Assembly Resolutions.³⁶⁰ Other international agreements that incorporate the concept of common concern of mankind are the Climate

³⁵⁰ Paquerot, see note 289, 15 (limiting the concept of CHM to those natural resources so vital as the air, water, the sun and biological diversity).

³⁵¹ R. Wolfrum, “Purposes and Principles of International Environmental Law”, *GYIL* 33 (1990), 308 et seq. (322).

³⁵² O. Schachter, “The Greening of International Law”, in: *Humanité et Droit International. Mélanges Rene-Jean Dupuy*, 1991, 271 et seq.

³⁵³ A. Kiss/ D. Shelton, *International Environmental Law*, 2004, 3rd edition, 19.

³⁵⁴ International Convention for the Regulation of Whaling, 2 December 1946, UNTS Vol. 161 No. 2124.

³⁵⁵ International Convention for the High Seas Fisheries of the North Pacific Ocean, 9 May 1952, available at <<http://www.oceanlaw.net/texts/nphs.htm>>.

³⁵⁶ African Convention on the Conservation of Nature and Natural Resources, 15 September 1968, UNTS Vol. 1001 No. 14689.

³⁵⁷ Bonn Convention on the Conservation of Migratory Species of Wild Animals, 23 June 1979, *ILM* 19 (1980), 15 et seq.

³⁵⁸ Convention on the Conservation of European Wildlife and Natural Habitats, 19 September 1979, 104 E.T.S.

³⁵⁹ A/RES/37/7 of 28 October 1982.

³⁶⁰ A/RES/43/53 of 6 December 1988; A/RES/44/207 of 22 December 1989; A/RES/45/212 of 21 December 1990.

Change Convention³⁶¹ and the 1992 Convention on Biological Diversity.³⁶² There are slight differences that distinguish this concept of the common concern of mankind from the CHM concept already examined: a) it focuses on global problems for the international community as a whole, but from a public order point of view and far from any appropriation's approach; b) environmental protection implies, not only states, but all societies and communities from within these societies; c) the equitable sharing element refers to responsibilities.³⁶³ There is however controversy regarding the legal status of the common concern of mankind concept.³⁶⁴

In this context, international regulation is not intended for resources located beyond national jurisdiction, but on the contrary they are situated within state territories.³⁶⁵ On the other hand, as already mentioned, there is no equitable sharing (trans-spatial element) of benefits flowing from the exploitation of natural resources. The CHM concept therefore needs to be reassessed when applied to global natural resources and the environment.³⁶⁶ Mankind here is designated, not as the recipient of a natural good to be exploited, but as the holder of a trans-temporal credit towards the international community, thus including future generations.³⁶⁷ The egalitarian element therefore translates into the "equitable sharing of burdens", which means there should be more obligations for industrialized countries according to their historic contribution to pollution.³⁶⁸ This technique of common but differentiated

³⁶¹ Framework Convention on Climate Change, United Nations Conference on Environment and Development, 9 May 1992, *ILM* 31 (1992), 849 et seq. (851).

³⁶² Convention on Biological Diversity, 5 June 1992, *ILM* 31 (1992), 818 et seq. (822).

³⁶³ D. Attard, *The Meeting of the Group of Legal Experts to Examine the Concept of the Common Concern of Mankind in Relation to Global Environment*, 1991.

³⁶⁴ P.H. Sand, "International Environmental Law After Rio", *EJIL* 4 (1993), 377 et seq. (382).

³⁶⁵ Baslar, see note 257, 292-293 (recalling that traditional state sovereignty persistently works against any CHM applied to resources located within national territory).

³⁶⁶ Paquerot, see note 289, 126.

³⁶⁷ P.M. Dupuy, *Droit international public*, 1993, 2nd edition, 530.

³⁶⁸ K. Ramakrishna, "North-South Issues, the Heritage of Mankind and Global Environmental Change", in: I.H. Rowlands/ M. Green (eds),

responsibilities has been incorporated in Principle 7 of the Rio Declaration³⁶⁹ and other environmental Agreements.³⁷⁰

In this framework, the common concern of mankind does not spawn the need of strong institutional machinery.³⁷¹ The dichotomy between collective interest of the international community and subjective interest of individual states fades away.³⁷² Every state is at the same time the beneficiary of environmental protection and the obliged as trustee of the interests and needs of the international community.³⁷³

d. CHM and the Internet

Even if there are pessimistic views on the actual possibilities of the CHM in current International Law,³⁷⁴ it would be good for Internet governance to further at least some of the elements of the CHM. This is not a proposal based on natural-law-type norms,³⁷⁵ but a *de lege fer-*

Global Environmental Change and International Relations, 1992, 145 et seq. (161).

³⁶⁹ The Rio Declaration on Environment and Development, see note 301, 877.

³⁷⁰ Article 4 of the Framework Convention on Climate Change, see note 361, 855; article 20 of the Convention on Biological Diversity, see note 362, 830.

³⁷¹ But see Paquerot, see note 289, 117 and 227-228 (arguing that the concept of common concern of mankind, because it does not entail an institutional machinery, does not help to alter the established international order; as it does not have a supranational perspective, it does not offer the utensils needed to set in motion the common interest; for these reasons, it is a *re-treat* from the point of view of the CHM concept).

³⁷² Pureza, see note 264, 374.

³⁷³ A.C. Kiss, "Le droit international de l'environnement, un aspect du droit international de l'avenir?", in: R.J. Dupuy (ed.), *The Future of the International Law of the Environment. Workshop, The Hague*, 1985, 471 et seq. (483).

³⁷⁴ C.R. Buxton, "Property in Outer Space: The Common Heritage of Mankind Principle vs. The 'First in Time, First in Right' Rule of Property Law", *Journal of Air Law and Commerce* 69 (2004), 689 et seq. (705-708); J. Frakes, "The Common Heritage of Mankind Principle and the Deep Seabed, Outer Space, and Antarctica: Will Developed and Developing Nations Reach a Compromise?", *Wisconsin International Law Journal* 21 (2003), 409 et seq. (434).

³⁷⁵ But see Baslar, see 257, 8 (stating that the CHM "is a moral philosophical idea acquiring its existence and legal normativity from, above all, natural law rather than state consent and auto-limitation [which] marks the end of positivist Westphalian international law").

enda proposal which needs to be confirmed by state consent in the form of international treaties or otherwise.

There is clearly a failure in the way the CHM was conceived in the 1960's and 1970's. The use and exploitation of common resources like the Seabed, Outer Space and (perhaps) Antarctica need important economic investments that can only be brought about by private companies. A free market approach combined with a regulatory umbrella may then be a sound solution for the current impasse,³⁷⁶ with the UN playing a central role.³⁷⁷ The Internet does not need such a push towards a market-oriented approach, because it is already a private-led field. On the contrary, it may be useful to have recourse to some of the traditional CHM elements to try to develop an international regime for the common governance of the Internet's core resources. For this purpose, we consider that the CHM is a functional rather than a territorial concept,³⁷⁸ so that it is theoretically possible to extend it to this particular field. Support for this interpretation may also be found in the 1984 Declaration of Buenos Aires on Transborder Data Flow, where Latin American countries considered informatics as "Mankind's Heritage."³⁷⁹

First, the "non-appropriation" principle may not be the most crucial element to be applied to the CHM proposal for the Internet if we consider the decentralized nature of cyberspace. The Internet is nowhere and everywhere, so it may be said that no state has command and control of the Internet. However, we have already seen that the Internet's main infrastructure is run according to U.S. – established parameters, where the private enterprise leads and ultimately the U.S. government can exercise authority over the Internet's technical body called ICANN (thereby controlling the domain name system, the root server system, and the establishment of Internet protocols and standards).

Even if this wasn't true, there would be every reason to try to set up a coordinated system for "international Internet governance."³⁸⁰ The Declaration of Principles of the World Summit on the Information So-

³⁷⁶ L.M. Fountain, "Creating Momentum in Space: Ending the Paralysis produced by the Common Heritage of Mankind Doctrine", *Connecticut Law Review* 35 (2003), 1753 et seq. (1774).

³⁷⁷ Rana, see note 236, 234.

³⁷⁸ Baslar, see note 257, 91.

³⁷⁹ Transnational Data Reporting Service, *Transnational Data Report*, 1985, 265.

³⁸⁰ Declaration of Principles of the World Summit on the Information Society, see note 1, 7, para. 50.

ciety has just called for an “[e]nabling environment” (Principle No. 6) where “[t]he international management of the Internet should be multi-lateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations.”³⁸¹ The Working Group on Internet Governance (WGIG) set up by the Secretary-General of the UN according to the aforementioned Declaration of Principles has recently handed out its first report in which it defines Internet governance as “the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programs that shape the evolution and use of the Internet.”³⁸² This group makes it clear that Internet governance not only includes Internet names and addresses, as dealt with by ICANN, but also includes other important policy issues, such as “critical Internet resources.”³⁸³ This report also identifies, as the first group of public policy issues relevant to internet governance, those “relating to the infrastructure and the management of critical Internet resources, including the administration of the domain name system and Internet protocols and addresses (IP addresses), administration of the root server system, [and] technical standards”, among the most critical.³⁸⁴ In this regard, the Tunis Agenda for the Information Society has recently built on the idea expressed in the Geneva Phase that policy authority for Internet-related public policy issues is the sovereign right of all states and has therefore called for the “requisite legitimacy” of Internet governance, “based on the full participation of all stakeholders, from both developed and developing countries”.³⁸⁵ The link between legitimate Internet governance and participation of all states in the management of critical

³⁸¹ *Ibid.*, 6, para. 48.

³⁸² Report from the Working Group on Internet Governance, World Summit on the Information Society, Geneva 2003-Tunis 2005, 3 August 2005, 3, para. 10, Doc. WSIS-II/PC-3/DOC/5-E, available at <<http://www.itu.int/wsis/docs2/pc3/off5.pdf>>.

³⁸³ *Ibid.*, 3, para. 12.

³⁸⁴ *Ibid.*, 4, paras 13 (a) and 15, (stating, with respect to the administration of the root zone files and system, that there is at present a unilateral control by the United States Government).

³⁸⁵ Tunis Agenda for the Information Society, World Summit on the Information Society, Geneva 2003-Tunis 2005, 15 November 2005, 6-7, paras 31 and 35, Doc. WSIS-05/TUNIS/DOC/6(Rev.1)-E, available at <<http://www.itu.int/wsis/docs2/tunis/off/6rev1.pdf>>.

Internet resources has then been emphasized in very explicit terms in the Tunis Phase of the World Summit on the Information Society.

In the Internet field, therefore, there are vital resources that should be considered, not the property or the invention of a given state (even if it is so for historical reasons), but the common heritage or common concern of mankind. Even if the U.S. does not presently want to give up its current control over these critical Internet resources,³⁸⁶ as demonstrated in the Tunis Phase of the World Summit, it has nevertheless agreed to discuss the issue of sharing them within the framework of the new Internet Governance Forum³⁸⁷ and in the long run it may agree to declare the Internet as a CHM resource. Ultimately, the non-appropriation principle does not necessarily have to apply to every CHM resource, as is evident in the cultural³⁸⁸ and environmental³⁸⁹ fields, for the concept to be useful and applicable. Declaring Internet's core resources as a common resource would have the advantage of involving the whole international community in its governance.

Second, it follows from the above explanation that the CHM element relative to "common management" is fully applicable to the CHM proposal for the Internet. A centralized, democratically structured international regime is needed in order to achieve a legitimate representa-

³⁸⁶ J. Markoff, "Overseer of Net Addresses Ends Dispute With Verisign", *N.Y. Times*, 25 October 2005 at <www.nytimes.com/2005/10/25/technology/25internet.html?th=&emc=th> (stating that the U.S. government has recently said that it no longer plans to give over control of ICANN to an international organization or to let it become an independent organization); T. Delclós, "EEUU avisa de que no cederá el control técnico de Internet", *El País*, 29 October 2005 at <www.elpais.es/articulo/elpporsoc/20051029/elpepisoc_7/Tes>.

³⁸⁷ Tunis Agenda for the Information Society, see note 385, 11, para. 72 (mandating the UN Secretary-General to set up a body called the *Internet Governance Forum* to discuss, *inter alia*, issues relating to critical Internet resources).

³⁸⁸ Kiss, see note 240, 231 (distinguishing between CHM by "nature" and CHM by "affectation", as in the case of cultural goods, the second case implying that the CHM concept applies even if the actual good is under a given state sovereignty).

³⁸⁹ Baslar, see note 257, 279 and 287 (admitting that, where environmental resources like global commons are located in the territory of one state, this state would be under an obligation of custody, as a trustee, in which case the non-appropriation principle does not apply and so it would be better to talk about the Common Concern of Mankind as an alternative concept).

tion of mankind. The only question would be how to articulate this common management, and what would be the appropriate body or forum, existing or to be construed, for this coordinated governance. The WGIG has proposed four different models, ranging from the creation of a strong international body called Global Internet Council with widespread competences which would take over the functions currently performed by the Department of Commerce of the U.S. Government, to the simple enhancement of the ICANN's Governmental Advisory Committee.³⁹⁰ Although the concrete model to be chosen has to be discussed within the Internet Governance Forum, in any case, the WGIG recommends that any such body or forum should be linked to the UN and that no single government should have a pre-eminent role.³⁹¹ The common management of the Internet's main infrastructure under the umbrella of the UN should be not more problematic than the management of other technical issues by organisms like the ITU (which manages the radio frequency spectrum and orbits used by satellites) or the International Standards Organization (ISO), although the latter is a non-treaty organization. In other words, the common management of the Internet's core resources is not a technical, but a political question, which requires a political decision.

The third element, the "benefits sharing" element of the CHM proposal for the Internet may have two interpretations. On the one hand, it could be understood as a principle requiring Internet's common management for the benefit of all mankind. In this regard, it would not add much to the second principle already mentioned. From the point of view of its lighter version, the common concern of mankind, it would mean no more than common management without international institutions. On the other hand, it may be related to the same problem already addressed by the CHM concept that arose in the field of the Law of the Sea and Outer Space Law, that is, development or access to resources by developing countries. In other words, the CHM was devised as an attempt to provide for distributive justice³⁹² within the utilization re-

³⁹⁰ Report from the Working Group on Internet Governance, see note 382, 12-14.

³⁹¹ *Ibid.*, 10, para. 48.

³⁹² M.C.W. Pinto, "Common Heritage of Mankind: From Metaphor to Myth, and the Consequences of Constructive Ambiguity", in: J. Makarczyk (ed.), *Theory of International Law at the Threshold of the 21st Century: Essays in Honour of Krzysztof Skubiszewski*, 1996, 249 et seq. (253).

gimes created in those fields, certainly in UNCLOS.³⁹³ In the Internet field, however, there are no physical resources to be exploited (i.e. minerals), but the benefits from the digital revolution flow from the very existence of an enabling infrastructure and connectivity capacity, which are lacking in many developing countries. In this regard, the CHM applied to the Internet is more related to the concept as retained in the environmental sphere.³⁹⁴ The World Summit on the Information Society has therefore taken up the “commitment to build a people-centred, inclusive and development-oriented Information Society.”³⁹⁵ In other words, “the benefits of the information technology revolution are today unevenly distributed between the developed and developing countries,” and so the objective becomes “turning this digital divide into a digital opportunity for all.”³⁹⁶ In this vein, Principle No. 11 of the Declaration of Principles, named “International and Regional Cooperation,” calls for a commitment to the “Digital Solidarity Agenda” set forth in the Plan of Action and to the goals contained in the Millennium Declaration.³⁹⁷ This principle of action, however, has not led to the establishment of a transfer mechanism for the benefit of developing countries, except for a voluntary instrument called Digital Solidarity Fund. Such a mechanism could hardly be construed as a legal obligation arising from the CHM concept as well since this equitable sharing element has been discarded at least in the field of the Law of the Sea. Accordingly, our CHM proposal for the Internet will be limited to the common management of Internet’s main resources for the benefit of all humankind and therefore would not entail the establishment of a mechanism to redistribute the benefits flowing from the digital revolution at large.

The fourth element relative to the “peaceful use” of the CHM also makes sense in the Internet context.³⁹⁸ Information and telecommunications technologies and Internet infrastructure should serve to promote

³⁹³ Wolfrum, see note 256, 68 (asserting that the equal distribution of seabed resources can be attributed to two different approaches, based on the idea of preferences or the idea of compensation).

³⁹⁴ Kiss/ Shelton, see note 353, 21 (asserting that the equitable allocation of revenue is not the essential feature of the concept).

³⁹⁵ Declaration of Principles of the World Summit on the Information Society, see note 1, 1, para. 1.

³⁹⁶ *Ibid.*, 2, para. 10.

³⁹⁷ *Ibid.*, 8, para. 61.

³⁹⁸ But see Baslar, see note 257, 106 (asserting that this CHM element is applicable only if a territorial, instead of functional, concept of the CHM is sustained).

knowledge, information and communication, education and political participation. These technologies are also “effective tools to promote peace, security and stability, to enhance democracy, social cohesion, good governance and the rule of law.”³⁹⁹ Governments should therefore cooperate in order to avoid any kind of warfare using critical Internet resources as a possible “battlefield”,⁴⁰⁰ and they should also cooperate to prevent criminal and terrorist uses of these resources.⁴⁰¹

The final element, regarding the “preservation” of the CHM resources may not be applicable to a CHM proposal for the Internet, because the resources are not exhaustible in the same sense they are with the Seabed, Outer Space, Antarctica or environmental resources. It may apply only if we consider the Internet basic network as a precious infrastructure that has to be preserved from other dangers, such as attacks or purported blackouts through viruses, but again those are not related to the exhaustion of a given resource.

As we have seen, most of the elements of the CHM concept, as currently interpreted, apply reasonably well to the Internet’s core resources. The Internet is a global resource that should not be appropriated by any single state, should be subject to a common management system, be managed for the benefit of all mankind (paying due regard to developing countries’ needs as a principle of action),⁴⁰² and be used for peaceful purposes only. Nevertheless, the concept of the CHM has not even been mentioned to date by writers or representatives at the World Summit on the Information Society. Perhaps this concept still evokes the socialist type of claims presented by Pardo, so that it would be better not to use it while trying to negotiate with the U.S. to give up its control over the Internet’s main infrastructure. Maybe it would be better to talk about the CHM in relation to the Internet once an international Internet governance regime designed along the lines of the CHM concept is already in place.

³⁹⁹ Tunis Commitment, World Summit on the Information Society, see note 2, 3, para. 15.

⁴⁰⁰ See under Section IV. 1.

⁴⁰¹ Declaration of Principles of the World Summit on the Information Society, see note 1, 5, para. 36 (stating Principle No. 5 on “building confidence and security in the use of ICTs”).

⁴⁰² But see under Section IV. 3. c.

3. Access to the Internet as a Human Right

a. Introduction

Freedom of expression plays an important role in the political and legal analysis of the Internet.⁴⁰³ Indeed, “the Internet has been conceptualized as a forum for free expression with near limitless potential for individuals to express themselves and to access the expression of others.”⁴⁰⁴ Even if this is an overstatement, scholars vividly debate the best way to establish conditions allowing each citizen to exercise meaningfully his or her right to freedom of expression.⁴⁰⁵ Against the Net libertarian school, which contends that it is the privatization of speech forums that best advances the free speech values on the Internet,⁴⁰⁶ the school defending an affirmative conception of the First Amendment requires the government’s involvement in the market for free speech in order to incorporate certain collective values.⁴⁰⁷ This latter conception of the First Amendment finds judicial expression in the development of the “public forum doctrine.” Under this doctrine, U.S. courts impose on the government the affirmative obligation to make public facilities available for persons wanting to exercise their free speech rights.⁴⁰⁸ Nevertheless, the failure to act on the part of the courts or the legislature has led to a situation in which the Internet has become transformed by privatization into a group of privately-owned and privately-regulated places, where scrutiny under the First Amendment is absent.⁴⁰⁹ Increasingly, the ability to produce speech is only open to large scale producers of

⁴⁰³ Declaration of Principles of the World Summit on the Information Society, see note 1, 1, para. 4 (recalling article 19 of the Universal Declaration of Human Rights and stating that communication is a fundamental social process).

⁴⁰⁴ D.C. Nunziato, “The Death of the Public Forum in Cyberspace”, *Berkeley Technology Law Journal* 20 (2005), 1115 et seq. (1115).

⁴⁰⁵ *Ibid.*, 1144.

⁴⁰⁶ E.g. R.A. Epstein, “Cybertrespass”, *U. Chi. L. Rev.* 70 (2003), 73 et seq.

⁴⁰⁷ C. Sunstein, *Democracy and the Problem of Free Speech*, 1993, 18.

⁴⁰⁸ E.g. R.A. Posner, “Free Speech in an Economic Perspective”, *Suffolk University Law Review* 20 (1986), 1 et seq. (52).

⁴⁰⁹ Nunziato, see note 404, 1151 (arguing that this situation is also due to the U.S. Supreme Court decision holding that Internet access provided by public libraries does not constitute a public forum).

content who are also owners of the physical network,⁴¹⁰ which undermines the very idea of a free market of ideas and meaningful freedom of expression.⁴¹¹

As is well known, freedom of expression is internationally protected by the Universal Declaration of Human Rights; the International Covenant on Civil and Political Rights (ICCPR); and the International Covenant on Economic, Social and Cultural Rights (ICESCR).⁴¹² Specifically, article 19 (1) and (2) of the ICCPR guarantees an individual the right to hold opinions and a right to freedom of expression without interference. On the other hand, arts 19 (3) (a), (b) and 20 of the ICCPR provide for exceptions to freedom of expression.⁴¹³ Of course, the Internet is not any different from the real world in this regard either, and since very un-democratic governments “seek to control the content of information to which their citizens are exposed or are imparting over the Internet, individuals around the world are experiencing human rights violations.”⁴¹⁴ This should be, then, a primary issue of concern for international lawyers, and the existing international mechanisms for the protection and enforcement of freedom of expression should be fully applied and exhausted in the Internet field to the same extent.

There is, however, a second question we would like to focus on, i.e., access to the Internet as a human right. For a start, in order to enjoy meaningful freedom of expression, connectivity to the Internet network becomes a prerequisite. As stated by Principle No. 2 of the Declaration of Principles of the World Summit on the Information Society, “connectivity is a central enabling agent in building the Information Soci-

⁴¹⁰ D. Colby, “Conceptualizing the ‘Digital Divide’: Closing the ‘Gap’ by Creating a Postmodern Network that Distributes the Productive Power of Speech”, *Communication Law and Policy* 6 (2001), 123 et seq. (123) (stating that the end-user is increasingly less capable of creating content to “push” onto the network).

⁴¹¹ Cf. C. Sunstein, *Republic.com*, 2001, 153.

⁴¹² Universal Declaration of Human Rights, A/RES/217 A (III) of 10 December 1948; International Covenant on Civil and Political Rights, 16 December 1966, UNTS Vol. 999 No. 14668; International Covenant on Economic, Social and Cultural Rights, 16 December 1966, UNTS Vol. 993 No. 14531.

⁴¹³ See the discussion under Section III. 1 on harmful content.

⁴¹⁴ A.L. Collins, “Caging the Bird Does not Cage the Song: How the International Covenant on Civil and Political Rights Fails to Protect Free Expression over the Internet”, *John Marshall Journal of Computer & Information Law* 21 (2003), 371 et seq. (388).

ety.”⁴¹⁵ Telecommunications and the Internet therefore have the potential to ensure, not only the right to inform and the right to communicate, but also to ensure the economic, educational and social parity necessary to attain equality for each member of society.⁴¹⁶ Countries that do not provide access for their citizens to telecommunications services will generate a world where citizens are denied many benefits of basic and advanced communications, including healthcare, education and economic opportunities, and the increased ability to participate in the political process.⁴¹⁷ The fact is that to date not everyone has the ability to seek, receive, and impart information and ideas through the Internet, and as a result, an important segment of the world population misses out on the political, economic, and social opportunities offered by the digital revolution.⁴¹⁸ In short, what we have today is the actualization of information “haves” and “have-nots,” in other words, a “digital divide.”⁴¹⁹ The digital divide is found both first at the domestic level⁴²⁰ and second at the international level.⁴²¹

⁴¹⁵ Declaration of Principles of the World Summit on the Information Society, see note 1, 3, para. 21.

⁴¹⁶ P.M. Worthy, “Racial Minorities and the Quest to Narrow the Digital Divide: Redefining the Concept of ‘Universal Service’”, *Hastings Communication & Entertainment Law Journal* 26 (2003), 1 et seq. (3).

⁴¹⁷ J.A. Manner, “Achieving the Goal of Universal Access to Telecommunications Services Globally”, *CommLaw Conspectus* 13 (2004), 85 et seq. (86); M.N. Cooper, “Inequality in the Digital Society: Why the Digital Divide Deserves All the Attention it Gets”, *Cardozo Arts & Entertainment Law Journal* 20 (2002), 73 et seq. (demonstrating that the digital divide is likely to persist).

⁴¹⁸ P.K. Yu, “Symposium – Bridging the Digital Divide: Equality in the Information Age. Introduction”, *Cardozo Arts & Entertainment Law Journal* 20 (2002), 1 et seq. (2).

⁴¹⁹ M. Lapointe, “Universal Service and the Digital Revolution: Beyond the Telecommunications Act of 1996”, *Rutgers Computer and Technology Law Journal* 25 (1999), 61 et seq. (80) (speaking of the risk of “information apartheid”); P.F. First/ Y.Y. Hart, “Access to Cyberspace: The New Issue in Educational Justice”, *Journal of Law and Education* 31 (2002), 385 et seq. (403) (arguing that existing civil rights in the U.S. can be applied by those affected by the digital divide to achieve access to cyberspace).

⁴²⁰ E.g. K. Mossberger et al., *Virtual Inequality. Beyond the Digital Divide*, 2003; R. Lawson Mack, *The Digital Divide*, 2001.

⁴²¹ E.g. N. Brennaman, “G8’s Dotforce Initiative: Bridging the Digital Divide or Widening it?”, *Minnesota Journal of Global Trade* 11 (2002), 311 et seq.; J.M. Spectar, “Bridging the Global Digital Divide: Frameworks For Access

b. Human Rights and the First Digital Divide

Is there something close to a right to be online? Is there a right to Internet access or even a right to communicate? Are these the proper subjects for human rights law?

From the point of view of International Law, the question arises whether access to the Internet, universal access, as an issue related to connectivity rather than freedom of expression, can then be articulated as a human right, as a right every human being has against the state. In this regard, out of the economic, social, and cultural rights established in the ICESCR cultural rights initially seem to more adequately incorporate the right to Internet access. Under article 15 of the ICESCR, cultural rights contain the following rights: the right to take part in cultural life; the right to enjoy the benefits of scientific progress and its applications; the right to benefit from the protection of the moral and the material interests resulting from any scientific, literary or artistic production of which the beneficiary is the author; and according to paragraph 3 states parties undertake to respect the freedom indispensable for scientific research and creative activity.⁴²² Alternatively, this right of access may form part of the right to education, protected by arts 13 and 14.

If we turn to the practice of states, developed countries, such as the U.S and countries of the EU, have adopted and implemented legal regimes incorporating universal service obligations in an effort to achieve the goal of increased access to the Internet and telecommunications services in general. The concept of universal service is commonly attributed to Theodore Vail, president of AT&T, who used it in 1907⁴²³ and generally refers to a public policy initiative designed to provide widespread access to telecommunications services.⁴²⁴ The deregulation proc-

and the World Wireless Web”, *North Carolina Journal of International and Commercial Regulation* 26 (2000), 57 et seq.

⁴²² A. Eide, “Economic, Social and Cultural Rights as Human Rights”, in: A. Eide/ C. Krause/ A. Rosas (eds), *Economic, Social and Cultural Rights*, 1995, 32.

⁴²³ E.g. M. Young, “The Future of Universal Service. Does it Have One?”, *International Journal of Law & Technology* 13 (2005), 188 et seq. (189).

⁴²⁴ Worthy, see note 416, 54 (arguing that the 1996 Telecommunications Act retains a functional, and therefore evolving, concept of universal service, which may include access to the Internet, that has not been taken up by the FCC yet). The EU has also adopted a functional notion of the universal service concept, see Directive 2002/22/EC of the European Parliament and

ess that affected monopolies in telecommunications services in the 1990's, like those implemented through the Telecommunications Act of 1996 in the U.S. and the EU Directives on market liberalization,⁴²⁵ was accompanied by the enactment of universal service obligations.⁴²⁶

In short, the universal service program provides subsidies to high-cost regions to ensure affordable telecommunications services in these areas. The universal service system has been criticized on several fronts,⁴²⁷ but even if it has to be modified,⁴²⁸ it seems clear that the universal service concept has socio-economic justifications and ultimately "is principally about politics", which therefore makes it highly unlikely that it can simply be retired.⁴²⁹ It is said that the universal service concept should embrace not only the provisioning of network access, but also of personal computers to low-income families, just as telephone sets were traditionally provided as part of basic telephone service.⁴³⁰ Al-

of the Council of 7 March 2002 on universal service and user's rights relating to electronic communications networks and services (Universal Service Directive), article 4 (2), 2002 O.J. (L 108) 51.

⁴²⁵ E.g. W.P. Cassidy, "Universal Service in a Competitive Telecommunications Environment: The Current State of Universal Service in the European Union and the United States", *North Carolina Journal of International Law and Commercial Regulation* 25 (1999-2000), 107 et seq. (117).

⁴²⁶ A. Segura Serrano, *El Interés General y el Comercio de Servicios*, 2003, 194.

⁴²⁷ E.g. S. Buck, "TELRIC vs. Universal Service: A Takings Violation?", *Federal Communications Law Journal* 56 (2003-2004), 1 et seq. (3) (stating that the universal service system obliges the common carrier to offer its wholesale access at cost, while it must still sell its retail services to all customers at an average price that ignores costs, which could drive the utilities to the point of insolvency); J.B. Speta, "Deregulating Telecommunications in Internet Time", *Washington & Lee Law Review* 61 (2004), 1063 et seq. (arguing that the 1996 Act should have taken additional steps to create conditions of competition).

⁴²⁸ A.S. Hammond, IV, "Universal Service: Problems, Solutions, and Responsive Policies", *Federal Communications Law Journal* 57 (2005), 187 et seq. (197) (arguing that in order to sustain the universal service a revision of the current system to provide for equitable contribution from all platforms is needed).

⁴²⁹ Young, see note 423, 191 and 203 (arguing that the concept of universal service relies on the idea that telecommunications services are so essential to social activity that everyone should have access to a basic level of communication facilities and services, to ensure that they are able to participate as citizens in modern society).

⁴³⁰ Worthy, see note 416, 55-56.

though the content of universal service is not completely clear, this regime has to some extent created some rights for individuals.⁴³¹ These rights, however, do not seem to fit very well into the currently existing human rights framework.⁴³²

Even if it would be possible to include the right to Internet access among the cultural rights internationally protected, however, there is the question of the underdeveloped justifiability of these rights due to the wording of these provisions and the relatively weak international monitoring mechanism set up by the Covenant.⁴³³ Despite the efforts deployed by some scholars in order to confer them a true legal value,⁴³⁴ there is also a pragmatic approach advanced by other authors under which those rights remain to be concretized only within a given economic and social context.⁴³⁵ So when the Secretary-General of the ITU refers to the “right to communicate”,⁴³⁶ as functionally equivalent to the right to Internet access, it seems that he does so in political terms,

⁴³¹ W. Sauter, “Universal Service Obligations and the Emergence of Citizens’ Rights in European Telecommunications Liberalization”, in: M. Freedland/ S. Sciarra (eds), *Public Services and Citizenship in European Law, Public and Labour Law Perspectives*, 1998, 117 et seq. (118).

⁴³² C. Graham, “Human Rights and the Privatisation of Public Utilities and Essential Services”, in: K. De Feyter/ F. Gomez Isa (eds), *Privatisation and Human Right in the Age of Globalisation*, 2005, 33 et seq. (56) (noting the problems of enforcing positive obligations and enforcing these obligations against private bodies).

⁴³³ P. Alston, “No Right to Complain About Being Poor: The Need for an Optional Protocol to the Economic Rights Covenant”, in: A. Eide/ J. Helgesen (eds), *The Future of Human Rights Protection in a Changing World*, 1991, 86-88.

⁴³⁴ P. Alston/ G. Quinn, “The Nature and Scope of States Parties’ Obligations under the International Covenant on Economic, Social and Cultural Rights”, *HRQ* 9 (1987), 156 et seq. (164); G.J.H. van Hoof, “The Legal Nature of Economic, Social and Cultural Rights: A Rebuttal of Some Traditional Views”, in: P. Alston/ K. Tomasevski (eds), *The Right to Food*, 1984, 97 et seq.; P. Alston, “Out of the Abyss: The Challenges Confronting the New U.N. Committee on Economic, Social and Cultural Rights”, *HRQ* 9 (1987), 332 et seq. (360).

⁴³⁵ M. Dowell-Jones, *Contextualising the International Covenant on Economic, Social and Cultural Rights: Assessing the Economic Deficit*, 2004, 8.

⁴³⁶ ITU, World Telecommunication Development Conference adopts Valletta Action Plan with series of bold measures to improve access to telecommunications worldwide, Press Release 1 April 1998, 5, available at <http://www.itu.int/newsarchive/press_releases/1998/16.html>.

because a generally accepted public notion in International Law of such a right has not so far emerged.⁴³⁷

c. Human Rights and the Second Digital Divide

There is another digital divide along the lines of the North-South development's fracture. Developed countries account for more than eighty percent of the world market for information technology, while Internet penetration is very limited in sub-Saharan Africa, the Middle East, Latin America, and South Asia.⁴³⁸ Accordingly, the World Summit on the Information Society has called in Principle No. 11 of the Declaration of Principles for a "Digital Solidarity Agenda" which will contribute to "bridge the digital divide."⁴³⁹ The objective of bridging the digital divide will only be achieved to the same extent that "universal, ubiquitous, equitable and affordable access" to digital technologies is realized.⁴⁴⁰

The right to development, interpreted in the light of today's Internet role, could possibly be invoked in order to include a right of universal access.⁴⁴¹ The right to development was first recognized by the UN Commission on Human Rights in 1977 and was also explicitly adopted by the General Assembly in the 1986 Declaration on the Right to Development.⁴⁴² It has been described as a right to solidarity among third generation rights⁴⁴³ based on natural law,⁴⁴⁴ and related to the NIEO.⁴⁴⁵

⁴³⁷ Grewlich, see note 93, 84.

⁴³⁸ Yu, see note 418, 4.

⁴³⁹ Declaration of Principles of the World Summit on the Information Society, see note 1, 8, para. 61.

⁴⁴⁰ Tunis Commitment, World Summit on the Information Society, see note 2, 3, para. 18.

⁴⁴¹ Declaration of Principles of the World Summit on the Information Society, see note 1, 1, para. 3. (recalling the "right to development, as enshrined in the Vienna Declaration").

⁴⁴² Declaration on the Right to Development, A/RES/41/128 of 4 December 1986.

⁴⁴³ K. Vasak, "Pour Une Troisième Génération des Droits de L'homme", in: C. Swinarski (ed.), *Studies and Essays on International Humanitarian Law and Red Cross Principles in Honour of Jean Pictet*, 1984, 837 et seq. (840).

⁴⁴⁴ M. Bedjaoui, "The Right to Development", in: M. Bedjaoui (ed.), *International Law: Achievements and Prospects*, 1991, 1177 et seq. (1182).

The content of this right is then “unusually open-ended and indeterminate”, which nevertheless should be considered as a strength that gives the concept the “degree of flexibility” needed in this area.⁴⁴⁶ The question remains, however, as to whether this right to development has achieved a sufficient degree of legal status, taking into account the important disagreement still existing with respect to the issues related to the content and the subject of this right (the individual or the collective).⁴⁴⁷

Certainly, there have been some voices pointing to some kind of resources transfer in order to close the gap between the North and the South in this field. For example, within UNESCO it has been asserted that “every citizen in the world should have the right to meaningful participation in the Information Society” because “information technology is by its very nature a human right, ought to be regarded as an obvious human right, and ranks alongside the concept of human liberty itself,” calling for a “global governance” of cyberspace “that is not driven by interest.”⁴⁴⁸ Some scholars, however, have warned that this kind of speech may have the effect of riskily reproducing the power struggle represented by the New World Information and Communications Order (NWICO), centered along the lines of the NIEO that led to the U.S. withdrawal from UNESCO.⁴⁴⁹ So what are developing countries doing today? Are they claiming a kind of expanded right to development in order to ensure telecommunications and Internet access to their populations? Not at all, as they seem to embrace Western policies such as competition and deregulation, fostered in the telecommunications field by the General Agreement on Trade in Services (GATS) Fourth Protocol concerning basic telecommunications.⁴⁵⁰ Therefore,

⁴⁴⁵ G. Abi-Saab, “The Legal Formulation of a Right to Development”, in: R.J. Dupuy (ed.), *The Right to Development at the International Level. Workshop, The Hague*, 1980, 159 et seq. (166).

⁴⁴⁶ P. Alston, “Revitalising United Nations Work on Human Rights Development”, *Melbourne University Law Review* 18 (1991), 216 et seq. (221).

⁴⁴⁷ P. Alston, “People’s Rights: Their Rise and Fall”, in: P. Alston (ed.), *People’s Rights*, 2001, 259 et seq. (284-286).

⁴⁴⁸ UNESCO, Ms Vigdis Finnbogadottir’s Closing Speech, Info-Ethics 98, 3 October 1998, available at <http://www.unesco.org/webworld/infoethics_2/eng/closing_remarks.htm>.

⁴⁴⁹ Spectar, see note 421, 80 and 90.

⁴⁵⁰ WTO, Fourth Protocol to the General Agreement on Trade in Services, 15 April 1996, WTO Doc. S/L/20 (30 April 1996), reprinted in: *ILM* 36 (1997) 366 et seq.

even if developing countries are pushing the Digital Solidarity Agenda to be realized within the World Summit on the Information Society, this is not a claim related to any sort of right to development.

Legal regimes based on universal service obligations, which as we have seen have been articulated in developed countries, are probably not suitable models for developing countries because those regimes build on the existence of an extensive infrastructure and are based on a funding mechanism which could not realistically be used in these countries.⁴⁵¹ As a result, developing countries are implementing a less resource intensive model of increasing access to telecommunications service not surprisingly called “universal access.” Instead of aiming to provide for a telephone in each home, the goal of the universal access is to provide each citizen access to telecommunications services, without regard to geography, on an affordable basis. There are three key components in this universal access policy: a strong political support from the government; a stable regulatory regime that encourages competition in the long term; and a realistic financing plan for universal access policy.⁴⁵² This kind of regime allows developing countries to be able to ensure that people can obtain communications services through a competitive model without having to subsidize substantial infrastructure required by the universal service system, as demonstrated by some countries like Jamaica, Senegal, Ghana and others.⁴⁵³ This is probably the concept of universal access retained by the World Summit on the Information Society.⁴⁵⁴

⁴⁵¹ Manner, see note 417, 86.

⁴⁵² ITU, Global Symposium for Regulators, Universal Access Regulatory Best Practice Guidelines, 8-9 December 2003, available at <http://www.itu.int/ITU-D/treg/Events/Seminars/2003/GSR/Documents/BestPractices_E_31.pdf>.

⁴⁵³ Manner, see note 417, 90 and 103.

⁴⁵⁴ Declaration of Principles of the World Summit on the Information Society, see note 1, 3-4, para. 21 (“[u]niversal, ubiquitous, equitable and affordable access to ICT infrastructure and services, constitutes one of the challenges of the Information Society and should be an objective of all stakeholders involved in building it. [In order to achieve this goal] policies that create a favourable climate for stability, predictability and fair competition at all levels should be developed and implemented”); see also the Report of the Task Force on Financial Mechanisms for ICT for Development, World Summit on the Information Society, Geneva 2003-Tunis 2005, 22 December 2004, page 89, available at <<http://www.itu.int/wsis/tffm/final-report.pdf>> (concluding that continued promotion of a level playing field for invest-

It seems, therefore, that the right of Internet access can hardly be deemed to be incorporated into any of the already established rights protected by the International Covenants or the right to development. This means that, as supporters of a progressive agenda, we would have to encourage such a development, while waiting to see when, if ever, this ever more important access to the Internet is deemed a right by states and other international actors, using the traditional law-making avenues existing in International Law or otherwise.⁴⁵⁵ In the meantime, states should incorporate the World Summit principle on universal access as an essential policy consideration or principle for action.

V. Conclusions

The role of International Law in the regulation of the Internet is then twofold; and has a present and a future role.

The analysis undertaken in the third section shows that International Law plays a role as a tool for cooperation among states. However, in these three realms of content regulation, intellectual property and privacy, governance decisions affecting the Internet have already been taken by national laws and courts, the result sometimes coming closer to the U.S. approach, sometimes to the EU approach. In other words, International Law does not directly govern these issues and only serves as an instrument to settle or ease regulatory conflicts. It is Private International Law which has played an important role in Internet governance until now. However, there is every reason to try to reach the consensus necessary to keep improving cooperation and harmonization. The advantage of having more international treaties and agreements in the Internet field is that regulatory conflicts would be diminished to a large extent.

In this regard, while the protection of intellectual property is already covered by several international treaties, and therefore there is no conflict anymore (leaving aside the political issue regarding enforcement that confronts the North with the South), in the fields of content

ments and regulatory policies that entice open access and fair competition are the main tools in the context of infrastructure development and enhanced access to information and communication technologies).

⁴⁵⁵ P. Alston, "Conjuring Up New Human Rights: A Proposal for Quality Control", *AJIL* 78 (1984), 607 et seq. (620) (proposing procedural requirements to be met for the new human rights to be recognized).

regulation and privacy, enhanced cooperation could prove to be most beneficial in order to put an end to existing different approaches among states. As a result, content regulation could benefit from an agreement along the lines of the EU E-commerce Directive that has set up the principles of “rule of origin” and “home country control”, thereby avoiding regulatory conflicts among EU countries. Likewise, in the area of privacy more cooperation to level the playing-field and enhance protection to individuals would also help to solve the existing caveats regarding the present *Safe-Harbor* Agreement.

The analysis carried out in the fourth section of the paper has focused on the future role of International Law regarding the regulation of the Internet. In the light of the existence of the Internet, we have considered some traditional International Law issues, namely, the questions of the use of force and self-defense in cyberspace; the likelihood of considering Internet’s core resources as a part of the Common Heritage of Mankind; and the prospect of regarding access to the Internet as an International Human Right. The study has tried to show that regarding those questions, as opposed to the ones addressed in the third section, it is for International Law to directly govern these issues. Therefore, International Law has not merely a role as a tool for solving regulatory conflicts, but a role as a tool for governance. It is then for Public International Law itself to take a normative stance regarding some of the problems related to the coming of the Internet. That does not amount to say that International Law has an existence independent from states’ consent. It only means that there are issues in which simple cooperation among states does not suffice and therefore they have to make decisions that introduce democracy and justice to a greater or a lesser extent.

If the question of the use of force in cyberspace can be solved using the existing legal institutions, and therefore a clarification is possible, that is not the case regarding the other two issues. The use of the Internet as a medium to launch an attack with results similar to those provoked by an armed attack can be addressed by the present International Law framework. However, when it comes to the issues of international governance of the Internet, through the acceptance of the CHM concept or otherwise, and the configuration of Internet access as a human right, Public International Law (and of course the states behind it) needs to take a normative decision.

The role adopted so far by Public International Law in the Internet area has been very modest. Together with historical reasons affecting this field of human activity, i.e. its inception and development by the

U.S., there are traditional structural reasons, like national sovereignty and consent that affect in a negative way the advancement in the aforesaid areas. The benefit, however, of addressing them and adopting progressive agendas in order to solve them will prove itself with the introduction of more democracy and justice in this field.