4 Barriers to Cooperation

An Analysis of the Origins of International Efforts to Protect Children Online

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Introduction

While providing an innovative platform for global communications and economic transactions, the Internet brings some of society's worst ailments, such as the proliferation of images of child abuse, into the public sphere. Every day, children are sexually abused, and graphic images of this exploitation are transferred over the Internet to a global audience.[1] Despite a near worldwide consensus on the illegality of the trafficking of images of child abuse (often referred to as child pornography) on the Internet, effective international cooperation on this issue remains elusive.[2] Instead, an increasing number of countries are simply hiding online child sexual abuse through the cosmetic practice of Internet filtering—the technical blocking of Internet content within a country's territorial boundaries—rather than cooperating internationally to remove such content at its (foreign) source and subsequently prosecuting those who produce and traffic in images of the sexual abuse of children.

However, there was an early recognition among diverse international actors that tackling the problems posed by new information communication technologies (ICT) would require potentially new forms of cooperation. These forms of cooperation emphasize sustained communication and interaction among a community of diverse actors spanning supranational institutions such as the European Union, national governments, law enforcement, private industry including Internet service providers (ISPs), and nongovernmental organizations. This concept of ''dynamic cooperation'' constitutes not just the outcome of an agreement reached through bargaining, but the ongoing practice of cooperation in which actors must rely on each others' capabilities for continual implementation in situations where compliance cannot be achieved solely through unilateral means.

While the prospect of dynamic cooperation was consistently raised in international deliberations concerning the challenges of combating child pornography and ICTs, it is not reflected in official outcomes such as declarations and conventions. Moreover,

preliminary evidence indicates that the introduction of Internet filtering, to prevent *accidental* access to child pornography, correlates with decreasing efforts to have images of child abuse removed at the source. As a result, child pornography identified and filtered by one country remains available on the Internet and is accessible in other countries. This situation occurs among countries that participate in institutions designed to facilitate cooperation targeting the source of the child pornography. Thus, countries that participate in the institutions dedicated to removing child pornography—such as international law enforcement task forces, including the Virtual Global Task Force and the Innocent Images International Task Force, as well as the INHOPE association of ''hot line'' providers—filter Internet content located within each other's territorial boundaries.

This evidence suggests that traditional cooperative mechanisms may have unintended consequences that conflict with rather than complement dynamic cooperation. This potential conflict raises the concern that contemporary cooperative institutions do not have the capacity to meet the global challenges posed by the proliferation of ICTs. This chapter argues that the dominant conception of cooperation, the domestic implementation of the results of bargaining, obscures potentially new forms of dynamic cooperation at the international level. A conceptual shift in the understanding of what constitutes cooperation is required to capture this emergent practice.

In this chapter, I present an analysis of the widespread adoption of filtering as the primary solution to combating the proliferation of child pornography on the Internet. While international agreements concerning the protection of children played a role in spurring state action, the emphasis on domestic implementation over dynamic cooperation facilitated the preference for filtering as the solution to the problem of Internet child pornography. Internet filtering is a solution that states can implement domestically irrespective of international agreements, and it does not require sustained cooperation. The goal of filtering is to block domestic access to Internet content located in another country. Dynamic cooperation—in contrast to blocking domestic access to foreign-hosted child pornography—refers to the continual cooperation necessary to have foreign-hosted content removed at its source.

Within this context, I trace how filtering has been constituted as a solution to the problem of Internet child pornography and how its implementation was made possible by delinking the issue from three key factors: the interpretation of filtering mandated by the state as a form of censorship, the effect of filtering on freedom of expression as a result of technical deficiencies, and the overall effectiveness of filtering technology itself in combating Internet child pornography. I present a preliminary analysis of the ways in which the continued emphasis on domestic implementation may be affecting attempts to move toward dynamic cooperation on this issue. Finally, I suggest areas for further research that result from treating cooperation as a dynamic practice rather than an instance of bargaining and domestic implementation.

Following the methodology outlined by Richard Price, this chapter does not focus on causal explanations, but emphasizes historical contingencies that reflect ideational contests and defining moments in international agreements, conferences, and events concerned with the issue of child pornography.[3] The chapter will employ a genealogical method as a means of understanding how the conception of cooperation as domestic implementation emerged in the international arena concerning the issue area of the protection of children. It will trace how the discourse of domestic implementation overshadowed that of dynamic cooperation and thus enabled the practice of filtering. It examines the role of discourses and power in redefining filtering from an ineffective tool of state censorship to one of effective cooperation. The following is not a comprehensive history of international efforts to protect children or of Internet filtering but, following Price, an analysis of events that ''provide discursive moments'' and reflect ''crucial dimensions.''[4] Such an analysis detects the unsuccessful attempts to constitute cooperation as more than an outcome of bargaining but as a dynamic practice based on sustained communication and interaction.

Competing Perceptions of Cooperation

An analysis of the texts of key international agreements and conferences focused on the rights of children highlights a tension between perspectives that view cooperation as the implementation of domestic laws and procedures by states and those that see it as constituting the continual practice of interaction and information sharing between a diverse set of actors. This becomes particularly evident with the rise of new communications technologies and the complex set of problems, including the proliferation of child pornography, that result. It also reflects a dynamic between state and nonstate actors that emerged as a result of the prominent role that nongovernmental organizations (NGOs) played in international conferences and agreements concerning the rights of children.

While given an arguably low priority in international political affairs, children have constituted an important issue at the international level.[5] Primarily framed in terms of human rights, children have been singled out for protection in international agreements as far back as the Declaration of Geneva, which was adopted by the League of Nations in 1924.[6] A more specific emphasis on children followed with the United Nations' (UN) Declaration on the Rights of the Child adopted in 1959. This declaration put forward ten principles that emphasized diverse issues such as the child's right to nutrition, education, and nationality. The protection of children from forms of exploitation was also explicitly raised, as was a prohibition on any forms of trafficking in children.[7] Although these Declarations firmly entrenched the issue of children on the international agenda they were not legally binding on states and did not ''lay down precise obligations for states.''[8]

The UN Convention on the Rights of the Child (UNCRC) was adopted in 1989 after 11 years of negotiation among the UN and its related bodies such as UNICEF, as well as the International Committee for the Red Cross and many NGOs.[9] In fact, NGOs were instrumental in the development and adoption of both the 1924 and 1959 declarations as well as the 1989 convention. Nongovernmental organizations played a critical role in ensuring that a legally binding agreement was reached. Moreover, particular elements including ''articles which give the child protection against sexual and other exploitation, traffic, torture, and armed conflicts'' would have not been included were it not for the determined efforts of NGOs.[10] However, while the role of international cooperation was acknowledged, the convention relied heavily on domestic mechanisms and little on the ''international machinery'' required to enforce these rights.[11]

The United Nations created the Special Rapporteur on the sale of children, child prostitution, and child pornography in 1990, but its emphasis was also domestic implementation. However, by 1994 an increasing awareness emerged concerning the lack of international cooperation, including a UN General Assembly resolution calling for the ''need to adopt efficient international measures'' in addition to domestic solutions.[12] The Special Rapporteur began to highlight the international character of the problem of child sexual exploitation by framing the issue in terms of states that fall on the demand or supply side of the problem.[13] By 1995, the Special Rapporteur began to note the impact of new communications technology on legislation and jurisdiction, noting that ''new technology gave birth to concepts and applications like cyberporn or audiopornography, not envisaged by most legislation'' and that when ''materials cross national boundaries the determination of the forum having jurisdiction over the offence will also pose a problem.''[14] The Special Rapporteur represented an early attempt to sustain cooperation after the UNCRC was adopted in 1989; however, it was confined to an advisory role. Although the ability to make recommendations helped in terms of agenda setting and raising the profile of the issue, it fell well short of facilitating sustained cooperation.

The 1996 World Congress against Commercial Sexual Exploitation of Children (CSEC) was the result of the considerable efforts of End Child Prostitution in Asian Tourism (ECPAT), a child advocacy NGO, and UNICEF. The congress centered on the UNCRC and culminated in the Stockholm Declaration and Agenda for Action. Despite the growing awareness of the challenges posed by the rapid expansion of Internet technology, the Stockholm Declaration and Agenda for Action contains no mention of the Internet. Instead, they focus on the promotion of national laws and policies that would allow states to meet their obligations under the UNCRC. The Stockholm Declaration encourages states to develop national plans of action to combat child exploitation. Despite some recommendations focused on increasing communication and cooperation among states, civil society, and international organizations, the primary emphasis of the document is on domestic state action. In fact the document explicitly

states that the ''primary task of combating the commercial sexual exploitation of children rests with the State and families.''[15]

However, the extensive background paper on child pornography presented at the conference as well as the congress's child pornography panel all highlighted the role of new technologies, particularly the Internet, and the global character of the problem. It was argued that, whereas domestic legislation and increased enforcement led to a reduction in the production of child pornography in the 1980s, video and Internet technologies were dramatically changing the production and distribution of images of child sexual abuse. The background report concluded that domestic efforts, such as updating legislation to cover criminal activities made possible by new technologies, must be ''supported by global cooperation of an enormous magnitude.''[16] Although increased enforcement of domestic legislation led to a decrease in child pornography in the 1980s, such methods would not be sufficient to deal with the problems posed by new technologies:

> Regulation of child pornography in the computer age presents special challenges that require considerable technical expertise. . . . The establishment of an international resource organisation which would employ a team of specialists in the areas of investigation, law enforcement, behavioural science, prosecution, law and computer technology could be an invaluable resource for the global community.[17]

Although it does not explicitly suggest reconceptualizing cooperation as a sustained practice, it does strongly indicate that the problems posed by new technologies require more than domestic implementation by states. It does clearly articulate that past practices, such as domestic legislation, would be insufficient. These debates are not reflected in the formal outcome of the congress.

The International Conference on Combating Child Pornography on the Internet in 1999 focused almost exclusively on child pornography and new communications technologies. This conference also marked the introduction of filtering as an option to deal with the problem. However, the discussion of filtering was limited to applications at the individual level in order to ''empower Internet users.'' Efforts at the national and international level focused on increasing international cooperation, since Internet child pornography ''does not know or respect borders.''[18]

> The fight against this abuse cannot be done alone but only through strong international cooperation, among governments, particularly law enforcement agencies, but equally important between States and the Internet industry, hotlines and non-governmental organizations.[19]

The result of the conference, the Vienna Commitment, called for ''common measures to speed up and enable the transborder use of coercive powers such as transborder computer search and seizure'' in conjunction with government, law enforcement, and the Internet industry.[20] It explored the relationship between law enforcement organizations, Internet service providers, and ''hotlines'' to which illegal content could be

reported. These ''hotlines'' had recently formed an association known as INHOPE in order to increase sustained cooperation based on the development of ''common good practices'' to facilitate the ''exchange of reports internationally.''[21] The heavy focus on technology and the inclusion of diverse actors signaled the emergence of a conception of cooperation as a sustained practice.

While the Vienna Commitment was explicitly recognized by the UN's Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution, and child pornography, which was introduced in 2000, its emphasis on sustained cooperation as a response to the challenges of new technologies was not. While noting challenges posed by the Internet in the preamble, the actual text of the document does not explicitly mention new technologies, nor does it provide for mechanisms of sustained cooperation. Instead, the Optional Protocol focuses primarily on domestic implementation by highlighting issues of legislating criminal offenses into national law. The Optional Protocol, which has been the basis of action against child pornography since 2000, constitutes cooperation as a form of domestic implementation and does not reflect the diversity of discourse on the issue of child pornography.[22]

Recognizing the challenges posed by new communications technologies, nonstate actors devoted considerable efforts toward broadening the conception of cooperation to include practices that leveraged the continual and coordinated efforts of multiple actors. However, these efforts are not reflected in official declarations and conventions. The official discourse thus heavily favors solutions that can be domestically implemented.

The Emergence of Filtering

Filtering technology emerged in 1995, and by 1999 authoritarian states had already implemented such technology to block access to political content at the national level.[23] Inspired by these developments, studies concerning the role of the state in regulating access to Internet content at the national level through technical means began to emerge in democratic states. However, these studies concluded that filtering technologies deployed at the national level would be ineffective and would have the unintended consequence of harming freedom of expression online.[24]

At the international level, deliberation on the role that technology could play in combating Internet child pornography was also taking place. The Second World Congress against Commercial Sexual Exploitation of Children held in 2001 resulted in the Yokohama Global Commitment, which encouraged states to ''take adequate measures to address negative aspects of new technologies, in particular child pornography on the Internet.''[25] However, the specific measures to be taken are not specified. While articles emphasizing cooperation reflect the need to include diverse actors, their role is confined to one of supporting state actors in increasing the effectiveness of domestic

measures taken to protect children. However, documents presented during the conference reflect a broader debate.

The Theme Paper on Child Pornography presented at the conference does focus on the challenges of sustained interaction. It highlights the successes and challenges of coordinated efforts of law enforcement agencies from multiple states to arrest and prosecute those involved with the production and exchange of child pornography. It noted that ''closer working relationships'' were required between law enforcement agencies worldwide to further ''greater co-operation within the international law enforcement community.''[26] In conjunction with the need to cooperate, the paper also makes clear that technology can play a role. The technological focus of the paper was devoted to technologies that can identify and remove, as opposed to filter, child pornography online.

> Software developers have a particular responsibility to develop technologies which can locate child pornographic images on the Internet more swiftly, and allow for their rapid identification and removal.[27]

The report noted the increased use of filtering technology at the individual level but warned that ''none of this software is perfect and it would be wrong if parents thought of it as being a substitute for sound advice and appropriate supervision.''[28] Moreover, the report noted that increasing public demand to do something about the problem of child pornography online was leading to the preference of restrictive technologies, such as filtering at the national level, and warned of possible negative unintended consequences:

> Unless the Internet industry, Governments and the civil society can find a convincing way of assuaging these strong concerns which are beginning to surface, public opinion will sooner or later force politicians to consider forms of intervention which could rob us of much that it is truly marvellous, dynamic and revolutionary about the Internet.[29]

With the exception of a growing number of authoritarian countries using filtering to impose political censorship, democratic states had not implemented filtering at the national level.[30] In 2004 the role of filtering technology was thrust into the international spotlight. In the United States, the Pennsylvania state legislature passed a law in 2002 that required ISPs to block access to Web sites suspected of hosting child pornography. When the Pennsylvania attorney general's office identified Web sites containing child pornography, they issued an informal notice to ISPs requiring that access to these Web sites be blocked. The ISPs subsequently blocked access to these Web sites. Because of the nature of ISP networks, these ISPs blocked access nationally, since they were technically unable to differentiate users located in Pennsylvania.[31]

However, civil liberties organizations challenged the law in court, arguing that these informal notices constituted ''secret blocking orders'' issued by the state and thus violated the First Amendment of the U.S. Constitution. Moreover, they argued that the

technical filtering process implemented by ISPs resulted in large-scale overblocking that further violated free speech rights. Ultimately, the Federal District Court in Philadelphia ruled that the law violated the First Amendment. This ruling details the process, both legal and technical, that led to the blocking of 1.5 million legitimate Web sites while trying to block access to approximately 400 Web sites suspected of containing child abuse images. The decision by Judge Jan E. duBois stated:

> There is little evidence that the Act has reduced the production of child pornography or the child sexual abuse associated with its creation. On the other hand, there is an abundance of evidence that implementation of the Act has resulted in massive suppression of speech protected by the First Amendment.[32]

The decision explicitly confirmed what had been implicitly noted by NGOs throughout their involvement in international agreements and conferences on child pornography: state-mandated national filtering was technically ineffective and posed a threat to the right of freedom of expression. While the case of the United States may be exceptional given the strong preference for the First Amendment guaranteeing the right to freedom of speech, the events in Pennsylvania did not go unnoticed. A report published in 2004 by UNESCO after the World Summit on the Information Society in 2003 noted that some countries were beginning to follow the legislative approach of the United States by introducing their own legislative efforts to ''require the implementation of filtering at ISPs and gateways.''[33] However, these attempts were plagued by the same issues faced in the United States, and widespread adoption did not occur until filtering was reconstituted as a legitimate practice.

The Legitimization of Filtering

The legitimization of filtering centers on three interlocking developments: a model of implementation in which the role of the state is reduced, the delinking of filtering and free speech concerns through technological developments, and a reframing of the effectiveness of filtering.

In 2004, British Telecom (BT), the largest ISP in the United Kingdom, and the Internet Watch Foundation (IWF), a ''tip line'' for reporting illegal online content, developed a partnership in consultation with the government.[34] British Telecom agreed to block access to a list of Web sites compiled by the IWF. This model of private partnership removes the need for government to implement legislation requiring ISPs to filter—it is a voluntary private initiative. This development changed the perception of filtering from one of state imposition to one of private initiative. While technically a private arrangement, the state's involvement in the process leading to the implementation of filtering allowed it to retain some influence.[35] British Telecom's filtering system, known as Cleanfeed, was designed to be extremely precise and cost effective.[36] Cleanfeed elegantly avoids the pitfall of overblocking, the key objection that was consistently raised

with respect to filtering. This innovative system created a flood of interest from ISPs worldwide and received an endorsement from the leading child advocacy group ECPAT.[37]

The Cleanfeed filtering system was promoted as a method to block inadvertent access to child pornography. The reduction of the scope of the mandate to simply inadvertent access protected Cleanfeed from the charges of ineffectiveness that plagued earlier filtering technologies. While those determined to access such content could easily circumvent the filtering system, Cleanfeed is in fact effective at blocking inadvertent access.[38] The advocacy group ECPAT, whose background documents submitted to the World Congress against Commercial Sexual Exploitation of Children had been critical of filtering, now added filtering to its model National Action Plan. The National Action Plan, which has its roots in the first World Congress against Commercial Sexual Exploitation of Children held in 1996, now recommends ''cooperation arrangements between ISPs and police in place to block illegal content.''[39] Following the UK's lead, numerous countries began implementing national filtering systems, including Norway (September 2004), Germany[40] (February 2005), Sweden (May 2005), Denmark (October 2005), Canada (November 2006), Switzerland (January 2007), Italy[41] (January 2007), the Netherlands[42] (September 2007), and Finland (January 2008).[43]

The rapid spread of filtering across numerous democratic countries was enabled by conceptual and technological changes that legitimized filtering.[44] Countries that had previously shunned the practice now embraced it. From a traditional perspective the introduction of filtering technologies can be seen as the successful domestic implementation of agreements such as the UNCRC. However, such a ''thin'' conception of cooperation obscures the calls for sustained interaction that emerged within the competing discourses in and around international conferences and agreements. Dominant discourses and key events sidelined conceptions of dynamic cooperation that key nonstate participants advocated as a response to the challenges posed by new ICTs.

Prospects for Dynamic Cooperation

International cooperation often produces unintended consequences. These ''side effects'' may be positive or negative.[45] Empirical evidence is beginning to emerge that suggests that domestic filtering efforts may be acting as a disincentive to cooperate. Consistent with a conception of cooperation as domestic implementation, filtering is perceived as cooperation, thus conceptually negating the need to engage in dynamic cooperation.

INHOPE is an international organization founded in 1999 comprising state-delegated NGOs that operate ''hotlines'' that deal with the issue of child exploitation. While distinct from the state, these organizations were empowered with authority and legitimacy by their strong connections to the state. These domestic organizations

accept tips from the public and act to remove images of child abuse if located within their territorial jurisdiction. They may also act within the INHOPE organization to have the content removed at the source by their international counterpart within INHOPE. One of INHOPE's major objectives is ''to ensure rapid and effective response to illegal content reports around the world by developing consistent, effective and secure mechanisms for exchanging reports between hotlines internationally and ensuring a coordinated approach is taken.''[46] It has been argued that ''cooperation between members of INHOPE has facilitated the removal of illegal content from the Internet and avoided the 'difficulties in the complex diplomatic procedures necessary for cross border cooperation of law enforcement authorities.'''[47]

Save the Children is an NGO and a key member of INHOPE. In a 2003 position paper, Save the Children outlined a vision of dynamic cooperation that centered on INHOPE. INHOPE is the nexus that links intergovernmental organizations, such as the European Union, primarily through national law enforcement organizations, the Internet industry, and child advocacy NGOs. The report provides examples of interaction across these actors but particularly emphasizes the relationship between INHOPE and law enforcement leading to ''high profile police-operations [that] have led to the infiltration [of] and legal action against international child pornography/abuse networks.''[48] The vision of INHOPE before the proliferation of filtering technologies in 2004 was clearly on the dynamic cooperation necessary to remove Internet child pornography at its source and arrest and convict those found responsible for trafficking in such content.

Many countries with representation in INHOPE have subsequently implemented national filtering technology to block access to foreign-host Internet child pornography. Some, but not all, members of INHOPE are now filtering such content, including content hosted within the territorial boundaries of other INHOPE members.[49] INHOPE reports that between September 2004 and December 2006 reports sent through the network between ''hotlines'' has decreased by 11 percent per year.[50] This decrease correlates with the increase in the number of INHOPE countries that implemented filtering, although for a variety of reasons it does not indicate causation.[51] Further research is required to determine precisely why this decrease in cooperation is occurring within the organization.

However, even when there is cooperation to have content removed at its source (rather than filtered), there are still significant delays and limited effectiveness. In 2006, the IWF, an INHOPE member, conducted a six-week test in which they found that 20 percent of the sites in their database remained active after having been reported to the relevant authorities in other countries.[52] Moore and Clayton obtained 2,585 suspect domains from the IWF and noted that nearly all of them had been previously reported and had removed images of child sexual abuse. They found that ''child sexual abuse image websites fare worse than other types of offending content,'' such as phishing and copyright violations, when it comes to removal, with most last-

ing 719 hours after being reported.[53] While the IWF has been successful within the United Kingdom, their own jurisdiction, they acknowledge that there are Web sites that have been reported to relevant national authorities outside the United Kingdom that continue to remain active.

> One site, for example, has been reported to us 224 times since 2002; another has been reported to us 54 times since 2000 and in that time has been found on seven different servers in different countries; yet another has been reported by us to the relevant authorities 32 times since 2005.
>
> Some of the most prolific of these commercial child abuse websites have remained ''live'' for long periods of time, despite our concerted efforts to the contrary. 94 of these websites reported by us to relevant authorities in 2006 are known to have been actively selling child abuse images in 2005. Indeed, 33 were ''live'' in 2004 and 32 were ''live'' prior to that.
>
> We regularly pass details of the websites and other intelligence to Interpol via our own police agency links, to international hotlines and the apparent host countries' own police services to enable them to launch a united assault on the organised criminals selling images of child abuse. However, the ever-changing jurisdictions, the differing laws, priorities and police responses as well as the varying cooperation of internet service providers around the world, mean that some countries face challenges to remove content.[54]

The factors that the IWF highlights as barriers to removing images of child sexual exploitation online illustrate the conception of cooperation as domestic implementation. Once the report has been handed off to the relevant domestic authorities, no further action is taken. After analyzing takedown regimes in a variety of different circumstances, including defamation, copyright violation, phishing, and child pornography, Moore and Clayton argue that incentives rather than differences in law, penalties, and other factors influence the rate at which takedown successfully occurs. In cases of phishing, banks have a high level of incentive to have the offending content removed and work with a variety of actors to achieve the takedown of such sites almost always without the use of courts or official channels. In contrast, the responsibility for the removal of child abuse images is delegated to the relevant national authorities and is subject to delay and neglect despite strong legal regimes.[55] Moore and Clayton argue:

> The Internet is multi-national. Almost everyone who wants content removed issues requests to ISPs or website owners throughout the world, believing—not always correctly—that the material must be just as illegal ''there'' as ''here.'' Unexpectedly, in the one case where the material is undoubtedly illegal everywhere, the removal of child sexual abuse image websites is dealt with in a rather different manner. The responsibility for removing material has been divided up on a national basis, and this appears to lead directly to very long website lifetimes.[56]

Not only do the domestic organizations charged with compiling lists of offending child pornography Web sites lack the willingness (or ability) to reach out to relevant nonstate actors across national boundaries, but they also have a reduced incentive to do so because their own population is ''protected'' from the offending foreign content through the use of filtering.

Conclusion

This chapter presented competing conceptions of cooperation that emerged from a genealogical analysis of the developments that led to the implementation of filtering to combat the proliferation of child exploitation on the Internet. In contrast to dominant perspectives that view cooperation as the state's domestic implementation of international agreements, this chapter presented the concept of dynamic cooperation. Dynamic cooperation constitutes a sustained practice in which actors, both state and nonstate, must continually interact to achieve implementation. While not reflected in official declarations, the behind-the-scenes debates surrounding international efforts to protect children online reflected a concern that the problems posed by ICTs required potentially new forms of cooperation. These approaches emphasized continual interaction among a diverse set of participants in order to take down images of child abuse at their source. However, this conception of cooperation was unable to unseat the dominant discourse, and Internet filtering was ultimately legitimized and implemented.

The result is a situation in which domestic organizations that have been delegated authority to combat the proliferation of child abuse images online lack the willingness or institutional capacity for dynamic cooperation. The introduction of filtering technology reduces the incentive for organizations with an already narrow conception of cooperation to further engage with relevant counterparts across international boundaries. Those engaging in the proliferation of images of child abuse online remain largely unaffected by filtering technology, as well as takedown and removal efforts. They are able to exploit the lack of cooperation among international actors. Unlike the forms of cooperation emerging in other areas of content removal, such as those targeting phishing Web sites, efforts to combat child pornography are framed and narrowly understood as the domain of states. There remain considerable barriers to dynamic forms of cooperation as a result.

Problematizing cooperation contributes to a better understanding of the complex challenges facing the international community in the 21st century. It suggests that our existing institutions may be unable to cope with the demands of problems exacerbated by the proliferation of ICTs. It suggests that new norms and mechanisms designed to promote a deeper form of dynamic cooperation may be necessary.

Notes

1. R. Barri Flowers, ''The Sex Trade Industry's Worldwide Exploitation of Children,'' *Annals of the American Academy of Political and Social Science* 575 (2001): 147–157.

2. Marie Eneman, ''The New Face of Child Pornography,'' in *Human Rights in the Digital Age*, ed. M. Klang and A. Murray (London: Cavendish Publishing, 2005); Steven Hick and Edward Halpin,

''Children's Rights and the Internet,'' *Annals of the American Academy of Political and Social Science* 575 (2001): 56–70.

3. Richard M. Price, *The Chemical Weapons Taboo* (Ithaca, NY: Cornell University Books, 1997).

4. Ibid., 10.

5. Alison Watson, ''Children and International Relations: A New Site of Knowledge?'' *Review of International Studies* 32 (2006): 237–250.

6. The Declaration of Geneva articulated the principle of ''children first'' with regard to access to emergency relief and signaled the beginning of an international emphasis on children. See Thomas Hammarberg, ''The UN Convention on the Rights of the Child—And How to Make It Work,'' *Human Rights Quarterly* 12, no. 1 (1990): 97–105.

7. United Nations, *Declaration of the Rights of the Child*, 1959, http://www.unhchr.ch/html/menu3/b/25.htm.

8. Thomas Hammarberg, ''The UN Convention on the Rights of the Child—And How to Make It Work,'' *Human Rights Quarterly* 12, no. 1 (1990): 98.

9. David A. Balton, ''The Convention on the Rights of the Child: Prospects for International Enforcement,'' *Human Rights Quarterly* 12, no. 1 (1990): 120–129.

10. Cynthia P. Cohen, ''The Role of Nongovernmental Organizations in the Drafting of the Convention on the Rights of the Child,'' *Human Rights Quarterly* 12, no. 1 (1990): 137–147.

11. David A. Balton, ''The Convention on the Rights of the Child: Prospects for International Enforcement,'' *Human Rights Quarterly* 12, no. 1 (1990): 129.

12. United Nations, *Need to Adopt Efficient International Measures for the Prevention and Eradication of the Sale of Children, Child Prostitution and Child Pornography*, 1994, http://www.un.org/documents/ga/res/49/a49r210.htm.

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14. Ibid.

15. World Congress against Commercial Sexual Exploitation of Children, *Stockholm Declaration and Agenda for Action*, 1996, http://www.csecworldcongress.org/PDF/en/Stockholm/Outome_documents/Stockholm%20Declaration%201996_EN.pdf.

16. World Congress against Commercial Sexual Exploitation of Children, *Child Pornography: An International Perspective*, 1996, http://www.csecworldcongress.org/PDF/en/Stockholm/Background_reading/Theme_papers/Theme%20paper%20Pornography%201996_EN.pdf.

17. Ibid.

18. International Conference on Combating Child Pornography, *Vienna Commitment against Child Pornography on the Internet*, 1999.

19. Ibid.

20. Ibid.

21. Ibid.

22. United Nations, *Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography*, 2000, http://www.un.org/documents/ga/res/49/a49r210.htm.

23. Ronald J. Deibert, ''Black Code: Censorship, Surveillance, and the Militarisation of Cyberspace,'' *Millennium: Journal of International Studies* 32, no. 3 (2003): 501–530.

24. In 1999, Industry Canada commissioned a report to explore ''from a technological perspective, issues arising from attempts to regulate content on the Internet and to control access by individuals to Internet sites and facilities.'' The report analyzed the efforts by Singapore and China to block access to Internet content for political reasons as part of a censorship strategy and explored the possibility of introducing such technologies to block Canadians' access to undesirable content such as child pornography. The report focused on evaluating the effectiveness of filtering and concluded that filtering technologies are subject to underblocking (the inability to block all or most of the content one intends to block), overblocking (the accidental blocking of content that was never intended to be blocked), and circumvention (the ability to easily bypass the restrictions). Concerning the implementation of filtering at the national level, the report concluded that filtering was unreliable and would have a ''negative impact on Canada's place in the global Information Economy.'' Gerry Miller, Gerri Sinclair, David Sutherland, and Julie Zilber, ''Regulation of the Internet: A Technological Perspective'' (commissioned by Industry Canada from EXCITE, Simon Fraser University, 1999), http://www.ic.gc.ca/epic/site/smt-gst.nsf/vwapj/005082_e.pdf/$FILE/005082_e.pdf.

25. World Congress against Commercial Sexual Exploitation of Children, *The Yokohama Global Commitment*, 2001, http://www.csecworldcongress.org/PDF/en/Yokohama/Outcome_documents/YOKOHAMA%20GLOBAL%20COMMITMENT%202001_EN.pdf.

26. World Congress against Commercial Sexual Exploitation of Children, *Child Pornography*, 2001, http://www.csecworldcongress.org/PDF/en/Yokohama/Background_reading/Theme_papers/Theme%20paper%20Child%20Pornography.pdf.

27. Ibid.

28. Ibid.

29. Ibid.

30. However, legislation such as the Children's Internet Protection Act (CIPA), which was passed in 2000 in the United States, did require schools and libraries to implement filtering technology. See Lisa M. Bowman, ''Supreme Court Backs Library Net Filter,'' *CNET News.com*, June 23, 2003, http://www.news.com/Supreme-Court-backs-library-Net-filters/2100-1028_3-1019952.html.

31. Gus Hosein, ''Politics of the Information Society: The Bordering and Restraining of Global Data Flows,'' United Nations Educational, Scientific and Cultural Organization (2004): 29, http://unesdoc.unesco.org/images/0013/001375/137516e.pdf.

32. *Center for Democracy & Technology v. Pappert, G. J.*, 03-5051 U.S. District Court for the Eastern District of Pennsylvania, 2004, http://www.cdt.org/speech/pennwebblock/20040910memorandum.pdf.

33. Gus Hosein, ''Politics of the Information Society: The Bordering and Restraining of Global Data Flows,'' United Nations Educational, Scientific and Cultural Organization (2004): 16.

34. Martin Bright, ''BT Puts Block on Child Porn Sites,'' *The Observer*, June 6, 2004, http://www.guardian.co.uk/technology/2004/jun/06/childrensservices.childprotection.

35. Gus Hosein, ''Politics of the Information Society: The Bordering and Restraining of Global Data Flows,'' United Nations Educational, Scientific and Cultural Organization (2004): 23.

36. Richard Clayton, ''Failures in a Hybrid Content Blocking System'' (paper presented at Workshop on Privacy Enhancing Technologies, Dubrovnik, Croatia, 2005), http://www.cl.cam.ac.uk/~rnc1/cleanfeed.pdf.

37. John Carr, ''Internet Safety Must Be a Priority,'' *ECPAT Newsletter*, 3, (2004): 3–4, http://www.make-it-safe.net/eng/pdf/ECPAT_Newsletter48_Jul2004.pdf.

38. Clayton raises failures within the system including security vulnerabilities and identification of blocked content but none that impinge of freedom of expression. Clayton, ''Failures in a Hybrid Content Blocking System'' (paper presented at Workshop on Privacy Enhancing Technologies, Dubrovnik, Croatia, 2005), http://www.cl.cam.ac.uk/~rnc1/cleanfeed.pdf.

39. ECPAT, ''Model of a National Plan,'' http://www.ecpat.net/EI/Global_npaModel.asp

40. The German system differs from most others because it focuses on having search engines block sites, rather than ISPs.

41. Although filtering has been announced, the status of the actual implementation is unclear.

42. Only one of several national ISPs participate in the filtering system.

43. Irene Graham, ''ISP 'Voluntary'/Mandatory Filtering,'' libertus.net, February 20, 2008, http://libertus.net/censor/ispfiltering-gl.html.

44. Some of these countries do not implement a hybrid system such as the one in the United Kingdom and thus continue to overblock content.

45. Oran R. Young, *International Governance: Protecting the Environment in a Stateless Society* (Ithaca, NY: Cornell University Press, 1994), 151.

46. INHOPE, ''Mission and Objectives of INHOPE,'' 2008, https://www.inhope.org/en/about/mission.html.

47. Australian Communications and Media Authority (ACMA), *Developments in Internet Filtering Technologies and Other Measures for Promoting Online Safety*, 2008, http://www.acma.gov.au/webwr/_assets/main/lib310554/developments_in_internet_filters_1streport.pdf.

48. Save the Children, ''Position Paper on Child Pornography and Internet-Related Sexual Exploitation of Children,'' 2003, https://www.inhope.org/system/files/stc-pp-cp.pdf.

49. Technical testing by the author as part of a research project on Internet filtering indicates that ISPs in Canada are blocking access to Web sites hosted in the United States. At this time definitive conclusions cannot be reached about why these sites are being filtered instead of being removed at the source. In another case a Dutch blogger found that the Dutch National Police were adding domestically hosted child pornography sites to their block list rather than taking legal action against the owners. See Karin Spaink, ''Child Pornography: Fight It or Hide It?'' February 19, 2008, Spaink.net, http://www.spaink.net/2008/02/19/child-pornography-fight-it-or-hide-it/.

50. INHOPE, ''2007 Global Internet Trend Report: Trends Associated with Illegal Content on the Internet Based on the Experiences of the INHOPE International Network of Internet Hotlines,'' 2007, https://www.inhope.org/en/system/files/inhope_global_internet_trend_report_v1.0.pdf.

51. It is unclear what actions are taken within the countries found to be hosting such content. Are international sites forwarded to the relevant domestic hotlines through the INHOPE network? Are the INHOPE members receiving the content not taking action? In addition, it remains unclear how reports of action taken (or not taken) are passed back through INHOPE to the organization that initially reported the content.

52. Tyler Moore and Richard Clayton, ''The Impact of Incentives on Notice and Take-down,'' Computer Laboratory, University of Cambridge, 2008, http://www.cl.cam.ac.uk/~rnc1/takedown.pdf; Internet Watch Foundation, ''Annual and Charity Report 2006,'' April 2007, http://www.iwf.org.uk/documents/20070412_iwf_annual_report_2006_(web).pdf.

53. Ibid.

54. Internet Watch Foundation, ''Annual and Charity Report 2006,'' April 2007, http://www.iwf.org.uk/documents/20070412_iwf_annual_report_2006_(web).pdf.

55. Tyler Moore and Richard Clayton, ''The Impact of Incentives on Notice and Take-down,'' Computer Laboratory, University of Cambridge, 2008, http://www.cl.cam.ac.uk/~rnc1/takedown.pdf.

56. Ibid.