
CRIMINALIZATION DOWNLOADS EVIL: REEXAMINING THE APPROACH TO ELECTRONIC POSSESSION WHEN CHILD PORNOGRAPHY GOES INTERNATIONAL

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INTRODUCTION

The societal and legal condemnation of child pornography is universal. Numerous countries around the world criminalize a range of conduct relating to child pornography, namely its production (actual abuse), manufacture or distribution, sale, purchase, receipt, and possession. On the one hand, it is both justified and imperative to criminalize all of the links in the child pornography chain, including electronic possession — which is the focus of this article. On the other hand, considering the increasingly elusive nature of digital data as well as the near-constant Internet access on an international scale, the concept of electronic possession seems to have a normatively tenuous or inconclusive link to production or actual child abuse. This in turn may raise concerns of inconsistency and arbitrariness — specifically, encroaching on the human rights of those criminalized by the act of possession on the same or similar level as those with more direct links.

This article systematically examines the last and arguably most problematic link of this chain of child pornography: electronic possession. While there is no question over the repugnance of it, most scholars seem to take for granted the fundamental yet highly controversial and complicated question: is it justified to criminalize the electronic possession of child pornography in this age of increasing peer-to-peer (P2P) file-sharing and online streaming worldwide, where the normative links to actual child abuse may be becoming more remote, weak, or missing; and if so, on what bases?

Questions concerning the criminalization of child pornography often tend to be analyzed without truly objective methods or criteria. The underlying, and oftentimes overwhelming assumption — that the harms inherent to child pornography are derivative of or are conflated with actual child abuse — shades most of the analyses, which typically rely upon intuitive searches for costs and benefits. Such analyses tend to reflect the analyst’s personal views and values, which is only natural, perhaps unavoidable given the disturbing nature of the issue; however, they also tend to overlook or readily discredit counterarguments. This over-

looking is not necessarily derived from bias. The question of the criminalization of electronic possession is extremely complicated and cannot be taken for granted on the bases of intuition or universal moral repugnance, given all that is at stake in these cases.

The first part of this article establishes “the Ladder of Criminalization,” a paradigmatic tool I devised to normatively analyze the criminalization of forms of conduct and the links between them. It provides a certain sequence or order of practical and theoretical considerations behind the criminalization of an offense. The second part then applies the ladder framework to the electronic possession of child pornography to examine questions concerning the varieties of the conduct, the causes for it, the harms of it, the effectiveness of current laws, and any alternative solutions to address such conduct of electronic possession.

This article demonstrates that while the purchase and receipt of child pornography more directly promote harm to children, electronic possession via P2P downloads has a weaker or more remote normative causal link. Regarding the various forms and degrees of electronic possession, criminalization of this sort of possession may be overly broad, less justified, and less productive for the purposes of deterrence, harm prevention, retribution, and victim protection. The criminalization of electronic possession allows local regimes to arbitrarily punish those individuals who possess child pornography on the same or similar level as actual child abusers. While societies around the world undoubtedly support such legal condemnation, the criminal laws should still remain consistent and cohesive to their core principles, even when it comes to the electronic possession of child pornography, and thus factor in the highly technical nature of the electronic possession as well as its place in the larger scheme.

I. THE LADDER OF CRIMINALIZATION

The Ladder of Criminalization is a normative analytical device that I devised to help visualize the criminalization process, which can and should be applied to criminal systems of any democratic regime.¹ Before establishing this framework, a brief overview of the legal discourse on criminalization will be provided. Then, the various elements, or “rungs” of the ladder will be introduced, followed by a brief justification for the ladder as the proper paradigmatic tool for analyzing the electronic possession of child pornography.

¹ For the first work I wrote using this device, see Asaf Harduf, *How Crimes Should Be Created: A Practical Theory of Criminalization*, 49 CRIM. L. BULL. 31, 32 (2013).

A. *The Matter of Criminalization*

As an initial matter, criminalization is a core issue of criminal law in any regime.² It entails two aspects: (1) a descriptive aspect,³ which elaborates on the existing offenses⁴ as well as on the historical,⁵ political,⁶ or other related factors that contributed to the enactment of laws for such offenses;⁷ and more importantly, (2) a normative aspect,⁸ which elaborates on principles or values and helps justify punishment,⁹ such as one on an economic basis.¹⁰

While most criminal law scholarship seems to either sidestep or overlook the threshold issue of criminalization, the ones that have studied this issue tend to focus on the “Harm Principle” articulated by John Stuart Mill in his work “On Liberty,” which essentially rejects the usage of state

² HERBERT L. PACKER, *THE LIMITS OF THE CRIMINAL SANCTION* 17 (1968) (suggesting criminalization is a key problem of substantive criminal law).

³ Kimmo Nuotio, *Theories of Criminalization and the Limits of Criminal Law: A Legal Cultural Approach*, in *THE BOUNDARIES OF THE CRIMINAL LAW* 238, 239 (R.A. Duff et al. eds., 2010) (providing descriptive definitions for “criminalization” and “decriminalization”).

⁴ See JEREMY BENTHAM, *THEORY OF LEGISLATION* 147 (1986) (Bentham’s normative answer was based upon utilitarianism).

⁵ See, e.g., ANDREW ASHWORTH, *PRINCIPLES OF CRIMINAL LAW* 4 (5th ed. 2006); FRANK E. HAGAN, *INTRODUCTION TO CRIMINOLOGY: THEORIES, METHODS, AND CRIMINAL BEHAVIOR* 13 (8th ed. 2013); NINA PERSAK, *CRIMINALISING HARMFUL CONDUCT: THE HARM PRINCIPLE, ITS LIMITS AND CONTINENTAL COUNTERPARTS* 61, 78 (2007); Roger A. Shiner, *Theorizing Criminal Law Reform*, 3 *CRIM. L. & PHIL.* 167, 174 (2009) (noting the dynamics of criminalization).

⁶ See William J. Stuntz, *The Pathological Politics of Criminal Law*, 100 *MICH. L. REV.* 505, 509 (2001) (claiming that criminalization is mainly determined by political opportunity and power); William J. Stuntz, *Reply: Criminal Law’s Pathology*, 101 *MICH. L. REV.* 828, 836 (2002) (analyzing the political aspects of criminalization).

⁷ See KATHERINE S. WILLIAMS, *TEXTBOOK ON CRIMINOLOGY* (5th ed. 2004) (pointing at various aspects of criminalization); Nicola Lacey, *Contingency and Criminalization*, in *FRONTIERS OF CRIMINALITY* 1, 9 (1995).

⁸ See R.A. Duff et al., *Introduction to THE BOUNDARIES OF CRIMINAL LAW* 1, 1–11 (R.A. Duff et al. eds., 2010) (emphasizing the need for a normative theory of criminalization); Henry M. Hart, Jr., *The Aims of the Criminal Law*, 23 *LAW & CONTEMP. PROBS.* 401, 404 (1958) (suggesting that defining “crime” as whatever is being labeled as crime is intellectual bankruptcy). See also A. P. SIMESTER & G.R. SULLIVAN, *CRIMINAL LAW: THEORY AND DOCTRINE* 5 (3d ed. 2007) (explaining that the normative test asks why one behavior is criminalized while another is not).

⁹ See DENNIS J. BAKER, *THE RIGHT NOT TO BE CRIMINALIZED: DEMARCATING CRIMINAL LAW’S AUTHORITY* 2, 9 (2011); JONATHAN SCHONSHECK, *ON CRIMINALIZATION: AN ESSAY IN THE PHILOSOPHY OF THE CRIMINAL LAW* 1 (Alan Mabe et al. eds., 1994); Claire Finkelstein, *Positivism and the Notion of an Offense*, 88 *CALIF. L. REV.* 335, 358 (2000).

¹⁰ See DOUGLAS HUSAK, *OVERCRIMINALIZATION: THE LIMITS OF THE CRIMINAL LAW* 3 (2008) (connecting over-criminalization with too much punishment).

power for any purpose other than preventing harm to others.¹¹ This principle was supported by H.L.A. Hart and Ronald Dworkin.¹² Specifically, in elaborating on the contours of the harm principle, H.L.A. Hart asserted that “a primary vindication of the principle of responsibility could rest on the simple idea that unless a man has the capacity and a fair opportunity or chance to adjust his behaviour to the law its penalties ought not be applied to him.”¹³ The harm principle was also thoroughly analyzed by Joel Feinberg.¹⁴ It continues to be recognized as the most acceptable principle for criminalization in most modern and western societies.¹⁵

The harm principle, or more accurately understood as the principle of harm prevention, remains vague however, and does not alone justify a conduct to be criminalized.¹⁶ As scholars noted, Mill was mindful of this danger of vagueness, extensiveness, and “debilitating elasticity”; “although [Mill] regarded the more directly preventive function of government as ‘undisputed,’ he thought it was ‘far more liable to be abused,

¹¹ See JOHN STUART MILL, *ON LIBERTY* (David Bromwich & George Kateb eds., Yale Univ. Press 2003) (1859). See also CARL CONSTANTIN LAUTERWEIN, *THE LIMITS OF CRIMINAL LAW: A COMPARATIVE ANALYSIS OF APPROACHES TO LEGAL THEORIZING* 117 (Mark Findlay & Ralph Henham eds., 2010) (pointing to criminalization’s absence from the main studying of criminal law); Alfonso Donoso, Douglas Husak, *Overcriminalization: The Limits of the Criminal Law*, 4 CRIM. L. & PHIL. 99, 99 (2010) (book review) (describing the scarcity of criminalization discourse); Markus Dirk Dubber, *Toward a Constitutional Law of Crime and Punishment*, 55 HASTINGS L.J. 509, 510 (2004) (attempting to incorporate a constitutional dimension into substantive criminal law); Douglas Husak, *Crimes Outside the Core*, 39 TULSA L. REV. 755, 765 (2004); Douglas Husak, *Is the Criminal Law Important?*, 1 OHIO ST. J. CRIM. L. 261, 261 (2003). See also JOHN STUART MILL, *ON LIBERTY AND THE SUBJECTION OF WOMEN* 13 (1879, reprinted in 1996).

¹² H. L. A. HART, *LAW, LIBERTY AND MORALITY* 4–5 (1963); Ronald Dworkin, *Lord Devlin and the Enforcement of Morals*, 75 YALE L.J. 986, 992 (1966).

¹³ H.L.A. HART, *PUNISHMENT AND RESPONSIBILITY* 181 (1968).

¹⁴ Joel Feinberg has written at least four books on this topic. See JOEL FEINBERG, 1 *THE MORAL LIMITS OF THE CRIMINAL LAW: HARM TO OTHERS* (1984); JOEL FEINBERG, 2 *THE MORAL LIMITS OF THE CRIMINAL LAW: OFFENSE TO OTHERS* (1985); JOEL FEINBERG, 3 *THE MORAL LIMITS OF THE CRIMINAL LAW: HARM TO SELF* (1986); JOEL FEINBERG, 4 *THE MORAL LIMITS OF THE CRIMINAL LAW: HARMLESS WRONGDOING* (1988).

¹⁵ See Lindsay Farmer, *Criminal Wrongs in Historical Perspective*, in *THE BOUNDARIES OF THE CRIMINAL LAW* 214, 214 (R.A. Duff et al. eds., 2010) (recognizing the centrality of the harm principle); Darryl Brown, *History’s Challenge to Criminal Law Theory*, 3 CRIM. L. & PHIL. 271, 278–82 (2009); Shlomit Wallerstein, *Criminalising Remote Harm and the Case of Anti-Democratic Activity*, 28 CARDOZO L. REV. 2697, 2699 (2007).

¹⁶ Bernard E. Harcourt, *The Collapse of the Harm Principle*, 90 J. CRIM. L. & CRIMINOLOGY 109, 114 (1999) (claiming that the harm principle is a necessary yet insufficient condition for criminalization).

to the prejudice of liberty, than the punitory function; for there is hardly any part of the legitimate freedom of action of a human being that would not admit of being represented, and fairly too, as increasing the facilities for some form or other of delinquency.’”¹⁷

This risk is especially acute for inchoate or pre-inchoate offenses, such as offenses of attempt, conspiracy, solicitation, encouragement of terrorism, criminal membership, criminal endangerment, and possession.¹⁸ The last offense of possession is of particular concern, and is the primary subject for which the ladder framework will apply. While the harm principle is not without its shortcomings, the principle remains integral to the process and will be incorporated in the initial step of the ladder.

Before introducing the Ladder of Criminalization, I should note that scholarship that attempts to construct a model of criminalization, as opposed to directly analyze an aspect of criminalization, is very rare. In western history, I know of only two models aspiring to develop such a construct. The first is Jonathan Schonsheck’s “Filter Model” introduced in “On Criminalization” from 1994,¹⁹ and the second is Douglas Husak’s “Seven Limitations Model” introduced in “Overcriminalization” in 2008.²⁰ Both of these models are groundbreaking and enriching. However, they adhere to a highly conceptual level of criminalization analysis, which is not unique to other constitutional doctrines for reviewing legislation.

The main contribution that the Ladder of Criminalization aims to offer to the criminalization discourse is an intermediate level of abstraction, which infuses criminalization with general criminal substance, while clearly distinguishing between the different steps of criminalization and also understanding the differences and relations among them in a systematic way. Such an intermediate step between the abstract-philosophical level and the concrete-practical level allows us to distinguish clearly and systematically between the different stages of criminalization.

B. *The Rungs of the Ladder of Criminalization*

The ladder of criminalization serves as a visual metaphor for an extensive and systematic way of conceiving crimes — that is, the criminalization of certain conduct. This ladder establishes a sequential or hierarchical order of steps or rungs, to justifying criminalization; the top step, the last rung, constitutes effective and justified criminal law. While this framework is not necessarily wedded to any particular conception of criminalization, the ladder largely incorporates the harm principle in the

¹⁷ Andrew Ashworth & Lucia Zedner, *Prevention and Criminalization: Justifications and Limits*, 15 NEW CRIM. L. REV. 542, 548 (2012).

¹⁸ *Id.* at 544-45 (describing the taxonomy of offenses).

¹⁹ See SCHONSHECK, *supra* note 9.

²⁰ See HUSAK, *supra* note 10.

first step, and in total, consists of four basic rungs, each of which will be discussed briefly below.

1. First Rung: Identifying the Conduct, Causation, and Harm

Criminalization is normatively viable only after we conclude that a form of conduct is harmful. This step involves identifying three elements: conduct, causation and harm. While conduct is the most easily identifiable, questions of causation and harm do not receive clear, consistent answers; the scope of the harm, in particular, remains a troublesome topic.²¹ Instead of committing to an abstract and vague definition, the ladder only requires a clear, cohesive articulation of harm, whether real or potential, direct or indirect, inflicted by the conduct.²² Of course, such articulation likely depends on the type of conduct.²³

Then, between conduct and harm stands causation, the third variable. Unlike the other two elements, causation is far more vague,²⁴ as it can cover a broad range of proximate causes and but-for causes²⁵ and is not governed by any sort of rubric or probability estimations.²⁶ Nevertheless, for the purpose of this analysis, once the conduct and harms are identified, causation can be analyzed by looking to specific, direct and tangible normative links between the conduct and harm.²⁷

As this rung constitutes the first step, it seems easy to bypass. However, since this step also constitutes the most foundational rung — that is, the threshold to climb up the rest of the ladder — it actually requires the most dedicated examination and the most solid understanding before

²¹ See Markus D. Dubber, *Criminal Law Between Public and Private Law*, in *THE BOUNDARIES OF THE CRIMINAL LAW* 191, 206 (R.A. Duff et al. eds., 2010) (emphasizing the vagueness of “harm” or “public interests”). See also HYMAN GROSS, *A THEORY OF CRIMINAL JUSTICE* 114–119 (1979).

²² The discourse on harm is much clearer and potentially more objective than the discourse on morality. See Harduf, *supra* note 1, at 42–44.

²³ See generally Ashworth & Zedner, *supra* note 17, at 544–45.

²⁴ Patricia Smith, *Legal Liability and Criminal Omissions*, 5 *BUFF. CRIM. L. REV.* 69, 72 (2001) (noting how difficult it is to define, describe and evaluate causal judgment).

²⁵ See James F.X. Petrich, *Constitutionality of Sexually Oriented Speech: Obscenity, Indecency, and Child Pornography*, 16 *GEO. J. GENDER & L.* 81, 100 (2015) (describing charges against teenagers who have sent each other sexual pictures of themselves); Whitney Strachan, *A New Statutory Regime Designed to Address the Harms of Minors Sexting While Giving a More Appropriate Punishment: A Marrying of New Revenge Porn Statutes with Traditional Child Pornography Laws*, 24 *S. CAL. REV. L. & SOC. JUST.* 267, 270 (2015).

²⁶ See Matthew D. Adler, *Risk, Death and Harm: The Normative Foundations of Risk Regulation*, 87 *MINN. L. REV.* 1293, 1310–12 (2003) (writing about probability conceptions of risk with regard to risk regulation).

²⁷ See CHARLES FRIED, *RIGHT AND WRONG* 39 (1978) (claiming that the demand for directness limits the norm of “do not harm” and makes it practical).

proceeding onto the other steps. This step requires looking closely at the three elements to ensure that they are all logical and cohesive.

2. Second Rung: Examining the Ability to Achieve Goals

By identifying the types of offensive conduct, causes and harms, the harm principle provides the threshold theoretical justification for criminalization. However, this next rung requires examining the practical abilities of the criminal law system to formulate and enforce the laws. In other words, the step considers the question: is criminal law capable of dealing with the offensive conduct, meeting the challenge of reducing the offensiveness or harm?

To address such question, this rung looks specifically to two considerations. The first relates to punishment, which can come in various forms, such as incapacitation, deterrence, rehabilitation, retribution or condemnation.²⁸ Unlike civil or tort law, criminal law has a distinct effect on people's incentives, in particular, by making certain behaviors less appealing through any of these aforementioned means.²⁹ As such, depending on the kind of offense, a certain type of the punishment or means listed above may apply.

The second aspect concerns enforceability.³⁰ That is, the state must have the practical abilities to detect the types of conduct and those who practice them; apprehend and detain the perpetrator; gather evidence sufficient for prosecution; and most importantly, reduce these given types of conduct through punishment.³¹ This part also looks to externalities

²⁸ See Sara Sun Beale, *Federalizing Hate Crimes: Symbolic Politics, Expressive Law, or Tool for Criminal Enforcement?*, 80 B.U. L. REV. 1227, 1255, 1265 (2000); Dan M. Kahan, *Between Economics and Sociology: The New Path of Deterrence*, 95 MICH. L. REV. 2477, 2489–90, 2496 (1997); Neal Kumar Katyal, *Deterrence's Difficulty*, 95 MICH. L. REV. 2385, 2386, 2389–92 (1997); Richard H. McAdams, *A Focal Point Theory of Expressive Law*, 86 VA. L. REV. 1649, 1650 (2000); Paul H. Robinson & John M. Darley, *The Utility of Desert*, 91 NW. U. L. REV. 453, 456 (1997). See also R.A. Duff, *Rule-Violations and Wrongdoings*, in CRIMINAL LAW THEORY: DOCTRINES OF THE GENERAL PART 47, 53, 74 (Stephen Shute & A. P. Simester eds., 2002); GEORGE P. FLETCHER, *RETHINKING Criminal Law* 414 (1978).

²⁹ See John C. Coffee, Jr., *Does "Unlawful" Mean "Criminal"?: Reflections on the Disappearing Tort/Crime Distinction in American Law*, 71 B.U. L. REV. 193, 223 (1991). See also A. P. Simester & A. T. H. Smith, *Criminalization and the Role of Theory*, in HARM AND CULPABILITY 1, 4 (A. P. Simester & A. T. H. Smith eds., 1996) (discussing the criminal law's attempt to influence the choices subjects make).

³⁰ Dan M. Kahan, *What Do Alternative Sanctions Mean?*, 63 U. CHI. L. REV. 591, 598–601 (1996); Paul H. Robinson, *Why does the Criminal Law Care What the Layperson Thinks is Just? Coercive Versus Normative Crime Control*, 86 VA. L. REV. 1839, 1866 (2000) (discussing the need for enforcement and punishment).

³¹ See Harduf, *supra* note 1, at 52–56. See also S.E. Marshall & R.A. Duff, *Criminalization and Sharing Wrongs*, 11 CAN. J.L. & JURIS. 7, 8, 12–13, 17, 21–22 (1998); Victor Tadros, *Criminalization and Regulation*, in THE BOUNDARIES OF THE

and other types of conduct that may cause the same or similar harms.³² With the larger view of the goal to prevent harm, the related “underbreadth” test gauges and determines whether the criminal law achieves “sufficient criminalization,” wherein the law effectively diminishes harm, or alternatively, “selective criminalization,” where it does not.³³

3. Third Rung: Examining Alternatives to Criminalization

Even if criminalization may meet the standards at the second step, it still must climb over the next two rungs. The third rung here serves as a checkpoint and considers the possibilities of overcriminalization and also of better alternatives, since criminalization is usually deemed a harsh solution.³⁴ To determine if either circumstance exists, it requires reverting back to the information assessed (or not assessed) under the first rung and then looking for possible weaknesses within the normative causal links.

Here, three possible points can emerge: (1) “pre-behavioral causation intervention,” which involves an interfering move before conduct, at its foundation, either by denying necessary preconditions or by reducing positive incentives leading up to it;³⁵ (2) “behavioral causation intervention,” which focuses on phases between conduct and harm;³⁶ and (3) “post-behavioral causation intervention,” which concerns the negative consequences after the harm.³⁷

Depending on whether any intervening causes have arisen, alternatives to the criminalization of the offense must be considered. To that end, the legislature has diverse regulative tools, such as licensing, administrative fines, taxing, tort law and contract law.³⁸

CRIMINAL LAW 163, 164–69 (R.A. Duff et al. eds., 2010) (claiming that the civil-criminal distinction regarding punishment is not always sharp).

³² William J. Stuntz, *Self-Defeating Crimes*, 86 VA. L. REV. 1871, 1897 (2000) (noting that the easier and more attractive the conduct, the harder it will be for punishment to obtain its goal on the general level).

³³ Harduf, *supra* note 1, at 59.

³⁴ See Andrew Ashworth, *Conceptions of Overcriminalization*, 5 OHIO ST. J. CRIM. L. 407, 408–10 (2008) (looking for alternatives to criminalization); Paul H. Robinson, *The Criminal-Civil Distinction and the Utility of Desert*, 76 B.U. L. REV. 201, 210–11, 214 (1996) (claiming that if criminal law is over-extended, it will lose its unique power).

³⁵ Harduf, *supra* note 1, at 43, 63.

³⁶ *Id.* at 46, 63.

³⁷ *Id.* at 60, 64.

³⁸ *Id.* at 65. See also Nils Jareborg, *Criminalization as Last Resort (Ultima Ratio)*, 2 OHIO ST. J. CRIM. L. 521, 524–25 (2005) (emphasizing the need to look for alternatives to criminalization).

4. Fourth Rung: Assessing the Social Costs of Solutions and Striking a Balance

The last step of criminalization requires assessing the consequences of the possible solutions. Under the harm principle, the benefits are obviously harm prevention and deterrence; but the estimation of the benefits are oftentimes difficult to gauge.³⁹ The costs of criminalization include: (1) proscription costs, which are derived from the very existence of the written law,⁴⁰ namely the deprivation of human freedom to act in certain manners, the proliferation of black markets, and the over expansion of criminal law;⁴¹ and (2) enforcement costs, which are derived from the enforcement strategy devised,⁴² and can be both intangible and tangible.

Criminalization obviously impedes human rights such as that of freedom and privacy,⁴³ and it can involve resource allocation⁴⁴ and selective enforcement.⁴⁵ Nevertheless, at the very end of the criminalization process, at the top of the ladder, comes the complex balancing process, choosing the best regulative solution.⁴⁶ In order to reach the top, to justify criminalization as the only viable solution, we must make sure its costs do not exceed its benefits.⁴⁷

C. *Towards an Analysis of Child Pornography Possession*

The ladder is intended to promote transparency and order in the criminalization process; it helps visualize and uncover weak and strong areas along the way.⁴⁸ While the ladder framework is relatively clear and easily maneuverable to justify the criminalization of certain offenses, such as murder, rape, and robbery,⁴⁹ it tends to prove more difficult and complex for inchoate conduct, particularly those that have been impacted by recent social, legal, economic or technological phenomena. To that end,

³⁹ See generally Darryl Brown, *Cost-Benefit Analysis in Criminal Law*, 92 CAL. L. REV. 323 (2004).

⁴⁰ See Harduf, *supra* note 1, at 67.

⁴¹ *Id.* at 67–70.

⁴² *Id.* at 67.

⁴³ *Id.* at 70. See PACKER, *supra* note 2, at 283–85 (noting enforcement may require invasion of privacy).

⁴⁴ Harduf, *supra* note 1, at 70.

⁴⁵ See Erik Luna, *Principled Enforcement of Penal Codes*, 4 BUFF. CRIM. L. REV. 515, 556–62 (2000) (specifying the dynamics and dangers of selective enforcement).

⁴⁶ Harduf, *supra* note 1, at 71; see also T. Alexander Aleinikoff, *Constitutional Law in the Age of Balancing*, 96 YALE L.J. 943, 945, 972–78, 992–94 (1987) (explaining the complexity of balance).

⁴⁷ Harduf, *supra* note 1, at 71–72.

⁴⁸ See generally *id.*

⁴⁹ See *id.* See also Susan W. Brenner, *Complicit Publication: When Should the Dissemination of Ideas and Data Be Criminalized?*, 13 ALB. L.J. SCI. & TECH. 273, 335–37 (2003) (suggesting that some offenses exist everywhere, while others differ).

the ladder aims to re-examine and compare offenses in light of such recent significant changes.

The next sections aim to address several serious questions: Is the electronic possession of child pornography harmful, and if so, how? In light of the recent technological trends, with the near-constant Internet access and endless P2P file-sharing across the globe, is punishment for such an offense enforceable? Are there issues of selective criminalization? Are there viable alternatives to criminalization? And what are the costs and benefits of the criminalization of electronic possession?

To address these questions, the ladder organizes and provides insight to help determine the larger issue, of whether criminalization is indeed justified, or perhaps on the right grounds. The examination below will reveal one major weak spot in the criminalization of the various conducts pertaining to child pornography: the electronic possession through P2P networks.

II. APPLICATION TO THE ELECTRONIC POSSESSION OF CHILD PORNOGRAPHY

Like several jurisdictions around the world, the federal law of the United States proscribes the production, transportation, distribution, reception, access, solicitation, advertising, and possession of child pornography.⁵⁰ Specifically, the Prosecutorial Remedies and Tools Against the Exploitation of Children Today Act (“PROTECT Act”) codified in 18 U.S.C.A. § 2252, provides that a person violates the Act when the person:

knowingly receives, or distributes, any visual depiction using any means or facility of interstate or foreign commerce or that has been mailed, or has been shipped or transported in or affecting interstate or foreign commerce, or which contains materials which have been mailed or so shipped or transported, by any means including by computer, or knowingly reproduces any visual depiction for distribution using any means or facility of interstate or foreign commerce or in or affecting interstate or foreign commerce or through the mails, if — (A) the producing of such visual depiction involves the use of a minor engaging in sexually explicit conduct; and (B) such visual depiction is of such conduct [. . .]⁵¹

⁵⁰ 18 U.S.C. §§ 2251–60A (2012) (Sexual Exploitation and Other Abuse of Children). See also Tony Krone, *Combating Online Child Pornography in Australia*, in VIEWING CHILD PORNOGRAPHY ON THE INTERNET: UNDERSTANDING THE OFFENCE, MANAGING THE OFFENDER, HELPING THE VICTIMS 17, 24–27 (Ethel Quayle & Max Taylor eds., 2005) (proposing an interesting typology of criminality regarding online child pornography); Audrey Rogers, *From Peer-to-Peer Networks to Cloud Computing: How Technology Is Redefining Child Pornography Laws*, 87 ST. JOHN’S L. REV. 1013, 1033–42 (2013) (claiming that under the current technology, the lines blur between various forms of conduct regarding child pornography).

⁵¹ 18 U.S.C. § 2252(a)(2) (2012).

While all of these aforementioned actions are intertwined, both on and offline,⁵² the conduct of electronic possession is arguably more elusive and problematic than the others.⁵³ As such, U.S. federal law sets a mandatory minimum sentence for all child pornography offenses, *except for possession*.⁵⁴

Other jurisdictions also proscribe possession of child pornography, sometimes under heavy punishment. For example, the laws in Canada, England and New South Wales proscribe such possession under penalty of ten years imprisonment.⁵⁵

These various conducts pertaining to child pornography are usually done in secret, and are often misunderstood due to the difficulty of studying child pornography in general.⁵⁶ While some literature exists that is devoted to the semantics of “child pornography,” it is important to first define “child pornography” for the purpose of this analysis here. Distinct from mainstream pornography,⁵⁷ child pornography covers both “soft”

⁵² See William R. Graham, Jr., Comment, *Uncovering and Eliminating Child Pornography Rings on the Internet: Issues Regarding and Avenues Facilitating Law Enforcement's Access to 'Wonderland,'* 2000 L. REV. M.S.U.-D.C.L. 457, 461 (2000) (writing that cyberspace has made consumers an integral part of production; when they forward pictures to other people, they become distributors).

⁵³ Giannina Marin, *Possession of Child Pornography: Should You be Convicted When the Computer Cache Does the Saving for You?*, 60 FLA. L. REV. 1205, 1207 (2008).

⁵⁴ Hanna Roos, *Trading the Sexual Child: Child Pornography and the Commodification of Children in Society*, 23 TEX. J. WOMEN & L. 131, 136 (2014). § 2251(e) provides: “Any individual who violates . . . this section shall be fined . . . and imprisoned not less than 15 years.” § 2252(b) provides: “Whoever violates . . . [this section] shall be fined . . . and imprisoned not less than 5 years.”

⁵⁵ Canada Criminal Code, R.S.C. c. C-46, s. 163.1(4) (Can.); Protection of Children Act 1978, c. 37 (Eng.); Crimes Act 1900, s. 91H(2) (N.S.W.).

⁵⁶ See PHILIP JENKINS, *BEYOND TOLERANCE: CHILD PORNOGRAPHY ON THE INTERNET* 12, 17–20 (2001) (noting that the lack of academic research is understandable due to the consensus surrounding the issue and the fear of committing offenses while studying the issue); TIM TATE, *CHILD PORNOGRAPHY: AN INVESTIGATION* 13 (1990) (writing, prior to cyberspace, that “[t]he greatest single obstacle to the fight against child pornography is that too few people ever see it”); Beryl A. Howell, *Real World Problems of Virtual Crime*, 7 YALE J.L. & TECH. 103, 115 (2004) (explaining that the crime of child pornography possession is so strict, even lab employees and lawyers must be careful not to possess too many pictures).

⁵⁷ KERRY SHELDON & DENNIS HOWITT, *SEX OFFENDERS AND THE INTERNET* 21 (2007) (noting that like mainstream pornography, the definition of child pornography is greatly dependent on values and culture); Bernadette H. Schell et al., *Cyber Child Pornography: A Review Paper of the Social and Legal Issues and Remedies — And a Proposed Technological Solution*, 12 AGGRESSION & VIOLENT BEHAVIOR 45, 52 (2007). For an interesting view that suggests a new definition for child pornography, based on the creation of images through sexual exploitation or abuse of children in order to isolate the principle harm, see Carissa Byrne Hessick, *The Limits of Child*

material — nudity in non-sexual settings or fully clothed children in stealth or secretly-taken photographs — and “hard” material of sexual depictions.⁵⁸ Dependent on the context, which alone can turn “innocent” pictures into child pornography,⁵⁹ the concept of child pornography has been continually expanding and thus becoming more vague.⁶⁰

Furthermore, contrary to popular belief, not all those who view or possess child pornography are child abusers.⁶¹ Although most scholars are reluctant to study the two offenses of possession or receipt of child pornography and child abuse separately, the notion that currently stands, though vague, after empirical studies have been conducted, is that “child pornography viewers *sometimes* overlap with child sexual abusers.”⁶² Pedophilia describes a social deviation involving the sexual attraction that adults experience towards children.⁶³ On its own, it simply describes a perversion,⁶⁴ not a particular behavior or conduct. While an elaboration on the history of child pornography is important, it is beyond the scope of this article; nevertheless, it remains important to note that studies do sug-

Pornography, 89 IND. L.J. 1437, 1451–61 (2014). U.S. federal law broadly defines child pornography as a visual depiction of a minor engaged in sexually explicit conduct. 18 U.S.C. §§ 2252(a)(1)(A), 2256(2)(A) (2012).

⁵⁸ Mehagen Doyle, *Bad Apples in Cyberspace: The Sexual Exploitation and Abuse of Children Over the Internet*, 21 WHITTIER L. REV. 119, 120-121 (1999) (discussing terminology like child pornography, child erotica and “hurtcore”); Molly Smolen, *Redressing Transgression: In Defense of the Federal Sentencing Guidelines for Child Pornography Possession*, 18 BERKELEY J. CRIM. L. 36, 42–44 (2013). See also Matthew H. Birkhold, *Freud on the Court: Re-interpreting Sexting & Child Pornography Laws*, 23 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 897, 905–06 (2013) (emphasizing the ambiguity and overbreadth of the term “child pornography”).

⁵⁹ See Doyle, *supra* note 58, at 121 (child pornography includes “visual material that uses children in a sexual context, and/or visual material that focuses on a child’s sexual behavior or genitals”).

⁶⁰ See Laura E. Avery, *The Categorical Failure of Child Pornography Law*, 21 WIDENER L. REV. 51, 65–78, 94 (2015) (describing and criticizing the overexpansion and vagueness of child pornography, for drifting away from the confines of categorization and the core of the First Amendment).

⁶¹ See Roos, *supra* note 54, at 141. But see Michael L. Bourke & Andres E. Hernandez, *The “Butner Study” Redux: A Report of the Incidence of Hands-on Child Victimization by Child Pornography Offenders*, 24 J. FAM. VIOLENCE 183, 187-88 (2009) (finding that non-contact child pornography offenders frequently had committed child sexual abuse).

⁶² Roos, *supra* note 54, at 141.

⁶³ JENKINS, *supra* note 56, at 28.

⁶⁴ Although symbiosis might exist between pedophilia and child pornography, they are distinct: pedophilia is merely a mental condition or state, which alone violates no rule, and pedophiles do not necessarily abuse children, and might never realize their impulses; in contrast, there are child abusers who are not pedophiles. See *id.*; TATE, *supra* note 56, at 104–05.

gest that the empirical links between child pornography possession and molestations are weak, or inconclusive.⁶⁵

A. *First Rung: The Offensive Conduct of Electronic Possession*

To begin with, we must identify the conduct, causation, and harm under this framework. Since this is the most fundamental rung, upon which the success of climbing up the rest of the ladder is based, it is critical to be clear and cohesive on the identification and clarification of these variables.

1. Conduct of Electronic Possession

In the past, child pornography was only available underground, but now, with the internet, it has become more readily and cheaply available.⁶⁶ Technological advances contributed to the increase in “production quality” and decrease in production costs,⁶⁷ and created several avenues to access child pornography, namely through Usenet, bulletin boards, chat rooms, websites and, of course, file-sharing (e.g., Kazaa and Bear-

⁶⁵ See TATE, *supra* note 56, at 33-69 (extensively covering the history of child pornography around the world); Karl A. Groskaufmanis, *What Films We May Watch: Videotape Distribution and the First Amendment*, 136 U. PA. L. REV. 1263, 1265-69 (1988); Marin, *supra* note 53, at 1208-10; MacKenzie Smith, *You Can Touch, But You Can't Look: Examining the Inconsistencies in Our Age of Consent and Child Pornography Laws*, 87 S. CAL. L. REV. 859, 867-69 (2014); Emily Weissler, *Head Versus Heart: Applying Empirical Evidence About the Connection Between Child Pornography and Child Molestation to Probable Cause Analyses*, 82 FORDHAM L. REV. 1487, 1491-95 (2013) (providing historic descriptions of child pornography and its criminalization); Jessica A. Ramirez, Note, *Propriety of Internet Restrictions for Sex Offenders Convicted of Possession of Child Pornography: Should We Protect Their Virtual Liberty at the Expense of the Safety of Our Children?*, 12 AVE MARIA L. REV. 123, 124-26 (2014).

⁶⁶ Ronald J. Mann & Seth R. Belzley, *The Promise of Internet Intermediary Liability*, 47 WM. & MARY L. REV. 239, 291-92 (2005) (noting that cyberspace has made distribution cheaper and less dangerous: producers can be anywhere, far beyond authorities' reach, and so materials proliferate).

⁶⁷ Tink Palmer, *Behind the Screen: Children Who Are the Subjects of Abusive Images*, in VIEWING CHILD PORNOGRAPHY ON THE INTERNET: UNDERSTANDING THE OFFENCE, MANAGING THE OFFENDER, HELPING THE VICTIMS 61, 62 (Ethel Quayle & Max Taylor eds., 2005) (describing the development of child pornography in the age of computers and cyberspace); Janis Wolak et al., *The Varieties of Child Pornography Production*, in VIEWING CHILD PORNOGRAPHY ON THE INTERNET: UNDERSTANDING THE OFFENCE, MANAGING THE OFFENDER, HELPING THE VICTIMS 31, 47 (Ethel Quayle & Max Taylor eds., 2005); Bill W. Sanford, “*Virtually*” a Minor: Resolving the Potential Loophole in the Texas Child Pornography Statute, 33 ST. MARY'S L.J. 549, 551 (2002).

Share).⁶⁸ Users need only a few mouse clicks to access child pornography.⁶⁹ Now, possession is more feasible than it ever was.⁷⁰

Though there has been a significant debate over the differences between “receipt” and “possession”⁷¹ and over the nuances of internet search histories and computer caches,⁷² for the purpose of this ladder framework, “electronic possession” is confined to P2P sharing, which entails downloading child pornography from other users’ computers and saving it to one’s computer hard drive.⁷³ While downloading the files does not necessarily automatically lead to viewing, an issue which will be discussed in detail later, the names of the files may hint at or reference the content of child pornography.⁷⁴

As such, electronic possession essentially encompasses the user’s control and dominion over the material: “the user can enlarge it, zoom in, zoom out, rotate it, print it, share it, edit it, and delete it,” and the file remains on the computer “until the user takes affirmative steps to delete it.”⁷⁵

Under the present possession approach, an individual “is prosecuted for possessing whatever files are presently in the computer, be they cached files or manually saved files,” and for knowledge of such possession.⁷⁶

⁶⁸ Eric R. Diez, Comment, “*One Click, You’re Guilty*”: A Troubling Precedent for Internet Child Pornography and the Fourth Amendment, 55 CATH. U. L. REV. 759, 759 n.5 (2006).

⁶⁹ Audrey Rogers, *Child Pornography’s Forgotten Victims*, 28 PACE L. REV. 847, 847 (2008).

⁷⁰ See Avery, *supra* note 60, at 78–81 (emphasizing that possession of some obscene materials in the home is legal and questioning the rationales for criminalization).

⁷¹ For such discussion on the distinction between “receipt” and “possession,” see generally Roos, *supra* note 54.

⁷² For an analysis on specific components of the Internet as well as on computer caches, see generally Marin, *supra* note 53.

⁷³ *Id.* at 1211.

⁷⁴ *Id.* at 1210 (citing MAX TAYLOR & ETHEL QUAYLE, CHILD PORNOGRAPHY: AN INTERNET CRIME 162 (2003) (discussing specific identifiers)).

⁷⁵ *Id.* (internal citations omitted).

⁷⁶ *Id.* at 1228–29. The Canadian Penal Code separately proscribes possession versus access to child pornography. The Canadian Supreme Court majority stated that viewing photos counts as accessing and not as possessing. The court emphasized that offenses of possession have evolved with regards to tangible objects, and as such, expanding them to cyber territories presents problems. One can transfer tangible objects to others; however, one cannot transfer an object that one views without first downloading it. See *R. v. Morelli*, [2010] 1 SCR 253 (Can.).

2. Harm to Children

Among the many harms articulated by current scholarship, the principal potential harm⁷⁷ entailed in child pornography possession is actual sexual abuse to children.⁷⁸ The second derivative harm is the violation of children's dignity and privacy,⁷⁹ both generally and individually or specifically — a “re-victimization” from the continuing harm to victims whose sexual abuse is permanently recorded.⁸⁰

Under the latter category, general expressive harm to children's dignity is derived from the very possession of such material; criminalization

⁷⁷ Virtual child pornography creates five potential harms. For a discussion of those harms, see Adam J. Wasserman, Note, *Virtual.Child.Porn.com: Defending the Constitutionality of the Criminalization of Computer-Generated Child Pornography by the Child Pornography Prevention Act of 1996—A Reply to Professor Burke and Other Critics*, 35 HARV. J. ON LEGIS. 245, 267 (1998) (counting five “compelling interests” for proscribing virtual child pornography).

⁷⁸ See JENKINS, *supra* note 56, at 28 (assuming that any sexual contact with children is harmful); Palmer, *supra* note 67, at 69–70 (elaborating that the act could entail traumatic effects).

⁷⁹ See *New York v. Ferber*, 458 U.S. 747, 756–64 (1982) (discussing, prior to cyberspace, the various interests to restrict child pornography: mainly the need to protect children from sexual assault and protect children already abused from being pursued by the material throughout the rest of their lives); Hessick, *supra* note 57, at 1461–64 (rejecting the harm of circulation as a basis to classify images as child pornography); Ramirez, *supra* note 65, at 129–30 (explaining the mental long-term harm to the victims by knowing that the images of their abuse can be indefinitely distributed); Smolen, *supra* note 58, at 44–53 (elaborating on the long-term harms to victims). Other interests, related to the categorizations of speech, seem less substantive; they explain the lack of constitutional protection, not the need of restriction.

A third possible form revolves around the harm inflicted to children from exposure to the above materials; this is an argument not often made regarding child pornography (except for its connection to the Seduction Theory, soon to be addressed), but mostly covered in discussions on children's exposure to pornography in general or even to any negative materials, not necessarily to child pornography. See *Reno v. ACLU*, 521 U.S. 844, 844–46 (1997); *Ginsberg v. New York*, 390 U.S. 629, 629–31 (1968) (discussing the matter of children's exposure to pornography in general); Michael D. Birnhack & Jacob H. Rowbottom, *Shielding Children: The European Way*, 79 CHI.-KENT L. REV. 175, 175–76 (2004) (discussing the matter of children's exposure to pornography online); Edward M. Wise, *Criminal Law: Sex, Crime, and Cyberspace*, 43 WAYNE L. REV. 137, 139 (1996). See also Elizabeth S. Anderson & Richard H. Pildes, *Expressive Theories of Law: A General Restatement*, 148 U. PA. L. REV. 1503, 1527–30 (2000) (addressing expressive harm, which relates not so much to the act and its consequences, but rather to the approach it expresses, for example rudeness and indifference to one's interests); Roos, *supra* note 54, at 142–52 (suggesting that the child pornography market promotes the objectification of children as sexual commodity).

⁸⁰ Roos, *supra* note 54, at 135 (internal citation omitted).

serves merely expressive goals.⁸¹ And individual harm is derived from “[t]he repeated viewing of their exploitation [which] causes victims to feel violated long after their initial abuse and to fear being recognized by those who find pleasure in their humiliation.”⁸² In these instances, sexual assault is not on the line; victims’ dignity and privacy are.

Like dignity, privacy has intrinsic and instrumental aspects.⁸³ The intrinsic aspects do not require one’s knowledge of the harmful act or the possibility of harm in order for one’s privacy to be violated: privacy may be violated without future consequences and externalities.⁸⁴ The instrumental aspect focuses on social goals and values that privacy serves,⁸⁵ like friendship, respect and individuality, intimate relations, autonomy and freedom.⁸⁶ Regarding child pornography, the intrinsic aspect suggests that possession violates the child’s privacy and dignity; while the instrumental aspect perceives harm when the child (or former child) or anyone in the child’s social circle cognitively processes the photo.⁸⁷

While these harms are egregious and warrant legal condemnation, an analysis of causation below may qualify the normative link between the specific conduct of electronic possession and these articulated harms.

3. Causation: Four Possible Links

Between electronic possession of child pornography and the alleged harms, four causal claims are typically made, through the Market Deterrence Theory, Tendency Theory and Seduction Theory. Each will be examined, in light of the two harms of child abuse and violation of children’s dignity and privacy.

⁸¹ See *id.*

⁸² See Rogers, *supra* note 69, at 853.

⁸³ Julie E. Cohen, *Privacy, Ideology, and Technology: A Response to Jeffrey Rosen*, 89 GEO. L.J. 2029, 2039 (2001) (supporting both aspects).

⁸⁴ See Robert C. Post, *Three Concepts of Privacy*, 89 GEO. L.J. 2087, 2087 (2001); Jeffrey H. Reiman, *Driving to the Panopticon: A Philosophical Exploration of the Risks to Privacy Posed by the Highway Technology of the Future*, 11 SANTA CLARA COMPUTER & HIGH TECH. L.J. 27, 38–40 (1995); Daniel J. Solove, *Conceptualizing Privacy*, 90 CAL. L. REV. 1087, 1092–93 (2002).

⁸⁵ In this sense, privacy does not necessarily have an intrinsic value. See Stan Karas, *Loving Big Brother*, 15 ALB. L.J. SCI. & TECH. 607, 635 (2005).

⁸⁶ See Daniel J. Solove, *Digital Dossiers and the Dissipation of Fourth Amendment Privacy*, 75 S. CAL. L. REV. 1083, 1115–16 (2002) [hereinafter Solove, *Digital Dossiers*]; Daniel J. Solove, *The Virtues of Knowing Less: Justifying Privacy Protections Against Disclosure*, 53 DUKE L.J. 967, 1064–65 (2003) [hereinafter Solove, *Virtues*].

⁸⁷ See Rogers, *supra* note 69, at 853–54 (claiming that with respect to the instrumental aspect, when the images are viewed by others, the children depicted are once again victimized and suffer shame, humiliation, and powerlessness, and their rights of privacy and human dignity are violated).

(i) *Market Deterrence Theory*

Sexual assault to children is a serious, prominent and intuitive harm inherent to the production of child pornography, and Market Deterrence Theory constitutes the first and common causation claim relating to such harm. Under this theory, the logic goes: consumption of such materials encourages markets to continue producing them; production, in turn, involves sexual assault on children.⁸⁸ Focus is on both ends of the supply chain.⁸⁹ This is how causation might appear:

Child pornography possession → child pornography consumption → signaling demand → creating incentives to supply new materials → producing new materials = sexual assault on children.

The above illustration of causation demonstrates a gap — or a need for an additional step. That is, does electronic possession via P2P downloading constitute consumption that signals demand to producers and increases production? We address each link in detail below.

Even if possession does mean consumption, it is important to distinguish that electronic possession does not necessarily mean payment or receipt that can send a palpable signal to producers, since many users around the globe share information-based products or digital files for free,⁹⁰ including child pornography.⁹¹ Therefore, a major gap in the causal chain is that possessors can consume child pornography without payment.⁹²

The platform of P2P networks fosters this sort of access.⁹³ File-sharing software enables those who possess digitals, including child pornography, to bypass the market,⁹⁴ and also to maintain anonymity.⁹⁵ Neither payment exchanges nor advertisements are typically involved. While some

⁸⁸ See *Ferber*, 458 U.S. at 759–60 (noting that child pornography is a profitable business, producing economic incentives to abuse children, and the only way to combat this business is draining the market at both its ends).

⁸⁹ See *Osborne v. Ohio*, 495 U.S. 103, 108–11 (1990) (discussing possession of material in private residence, and finding that the state is permitted to protect physical, psychological and emotional welfare of victimized children in pornography markets by punishing consumers).

⁹⁰ See, e.g., MICHAEL STRANGELOVE, *THE EMPIRE STATE OF MIND: DIGITAL PIRACY AND THE ANTI-CAPITALIST MOVEMENT* 5, 70–71, 90, 134–35 (2005).

⁹¹ In mid-1970s, child pornography journals containing 30 pictures used to cost ten dollars. See *JENKINS*, *supra* note 56, at 3–4.

⁹² See *Doyle*, *supra* note 58, at 123–24 (noting that child pornography viewers also include dabblers, enthusiastic about its online accessibility but tending not to pay for materials or consume it offline).

⁹³ *Marin*, *supra* note 53, at 1235.

⁹⁴ See Daniel J. Gervais, *The Price of Social Norms: Towards a Liability Regime for File-Sharing*, 12 J. INTELL. PROP. L. 39, 40–42 (2004) (stating technology is not part of the market thereby making P2P file-sharing extremely difficult to stop).

⁹⁵ *Marin*, *supra* note 53, at 1235.

argue that consumption does signal an increase of demand, where the producers can trace and review the number or frequency of downloads,⁹⁶ given the nature of digital files and near-constant, global Internet accessibility however, the normative link between electronic possession and production seems tenuous. The supply chains may be quite long when someone downloads material from one site and uploads it in some other country, especially when it reaches P2P networks.

Moreover, the intellectual property industry claims that downloading copyrighted material on P2P networks impedes the creation of new materials.⁹⁷ Under this logic, it seems that free files on P2P do not promote the creation of new material of child pornography; they likely hinder it. Supply of new materials could be derived not only from production, but also from appropriation.⁹⁸ Such materials are not “copyright protected,” and those who come by them might simply offer them to others.

Even if the consumption signaled demand to producers, the incentives to produce additional material, to commit child abuse, which could be related to financial,⁹⁹ social,¹⁰⁰ or personal reasons,¹⁰¹ are offset by the risk of prosecution and jail time and checked by the frequent and wide accessibility of material on P2P networks. But if the producers are nevertheless incentivized to produce additional material, the cause for the harm seems to take place in the production of hardcore pornography. In other instances, of stealth photography¹⁰² or virtual child pornography,

⁹⁶ See Kaleb Noblett, *Caging Uncertainty: Responsible Reform of Federal Child Pornography Sentencing Guidelines*, 42 N. KY. L. REV. 65, 83 (2015) (writing that downloading or possessing images of child pornography creates and encourages demand to produce more images); Dana Brudvig, Comment, *Today's Tool for Interpreting Yesterday's Conviction: Understanding the Mandatory Statutory Sentence Enhancement in Federal Child Pornography Cases*, 2015 WIS. L. REV. 153, 156 (2015).

⁹⁷ See Chad Woodford, *Trusted Computing or Big Brother? Putting the Rights Back in Digital Rights Management*, 75 U. COLO. L. REV. 253, 269–70 (2004) (explaining the argument made in this arena).

⁹⁸ See generally, U.S. DEP'T OF JUSTICE, CHILD EXPLOITATION AND OBSCENITY SECTION, CHILD PORNOGRAPHY, <http://www.justice.gov/criminal-ceos/child-pornography>.

⁹⁹ See Sanford, *supra* note 67, at 560 (claiming the profitable character of the markets is substantively related to child abuse; the former promotes the latter).

¹⁰⁰ See Ethel Quayle & Max Taylor, *Child Pornography and the Internet: Perpetuating a Cycle of Abuse*, 23 (4) DEVIANT BEHAVIOR 331, 353 (2002) (suggesting that sometimes materials are gathered not for stimulation, but because they are new or part of production lines).

¹⁰¹ Those who seek to exchange child pornography pictures are exposed to the PROTECT Act, now 18 U.S.C. § 2252A (2012), that bans knowingly pandering materials in manners that reflect the belief that the material contains obscene child pornography or non-obscene actual child pornography. This act was challenged and upheld. *United States v. Williams*, 553 U.S. 285, 307 (2008).

¹⁰² See Doyle, *supra* note 58, at 125–26.

which uses CGA effects,¹⁰³ the normative link between the electronic possession and harm of child abuse to children seems weak, particularly in the latter case, where no real children are involved or injured in such virtual productions.¹⁰⁴

(ii) *Tendency Theory*

The second causation claim concerns the Tendency Theory, which relates to imitative harm.¹⁰⁵ Under this theory, child pornography fosters a desire in possessors to sexually abuse children;¹⁰⁶ that is, viewers may be tempted to act on these fantasies after watching material to the point of eventually physically victimizing children.¹⁰⁷ Unlike the previous theory, which placed possessors relatively far from the supplier of harm, as indirectly contributing to it, this causal chain places the possessors closer to harm, “requiring” them to make another behavioral step after possession and not prior to it. The argument may also relate to virtual child pornography.¹⁰⁸ The logic of the Tendency Theory goes as follows:

¹⁰³ Debra D. Burke, *The Criminalization of Virtual Child Pornography: A Constitutional Question*, 34 HARV. J. ON LEGIS. 439, 440–41 (1997); Shepard Liu, *Ashcroft, Virtual Child Pornography and First Amendment Jurisprudence*, 11 U.C. DAVIS J. JUV. L. & POL'Y 1, 2–3, 37 (2007) (specifying categories of virtual child pornography).

¹⁰⁴ See *Ashcroft v. Free Speech Coal.*, 535 U.S. 234, 250–56 (2002) (ruling, six versus three, that proscribing only actual child pornography could bring producers to stick to virtual pornography only, in light of the price of actual materials as well as possible enforcement; virtual materials push actual ones outside the market). Congress later gave up proscribing virtual child pornography. See Adam Walsh Child Protection and Safety Act of 2006, Pub. L. No. 109-248, § 502(a)(1), 120 Stat. 587, 625 (2006).

¹⁰⁵ See generally JOHN F. WIRENIUS, *FIRST AMENDMENT, FIRST PRINCIPLES: VERBAL ACTS AND FREEDOM OF SPEECH* 182–91 (rev. ed. 2004).

¹⁰⁶ See TATE, *supra* note 56, at 110–11 (suggesting that child pornography validates pedophiles, disseminating the notion that children depicted or documented enjoy the act). Perhaps such arguments assume the feeling of validation is independently harmful; but addressing “harm to children” as indirect harm is more accurate than addressing “validation regarding sexual deviation” as direct harm. See Wasserman, *supra* note 77, at 282.

¹⁰⁷ See Wasserman, *supra* note 77, at 272 (claiming that “child pornography is often used by pedophiles . . . [to increase] . . . their own sexual appetites, and as a model for sexual acting out with children; such use . . . [could] desensitize the viewer to the pathology of sexual abuse”).

¹⁰⁸ David B. Johnson, *Why the Possession of Computer-Generated Child Pornography Can Be Constitutionally Prohibited*, 4 ALB. L.J. SCI. & TECH. 311, 327–30 (1994) (writing that proscribing possession of virtual child pornography would prevent child sex-crimes because child pornography incites viewers to commit such crimes). The majority in *Ashcroft* rejected the Tendency Theory, reasoning that the tendency of speech to provoke illegal conduct is not sufficient to proscribe it. *Ashcroft*, 535 U.S. at 253. The approach of the U.S. administration, proscribing

Electronic child pornography possession → viewing child pornography → internalizing the desire to sexually-physically abuse children → committing sexual assault on children

Once again, any sub-link requires a closer, more critical analysis. It demonstrates another gap in the causal chain: does electronic possession necessarily mean viewing child pornography? Such a presumption seems plausible in most cases — only disqualifying those random and innocent electronic possessions, such as random email attachments; mistaken searches for mainstream pornography, quickly leaving and not returning; cached files; among other possible scenarios.¹⁰⁹

However, the other two components following are more problematic: (1) does viewing child pornography cause the internalization of a desire to sexually abuse children, and (2) does such internalization lead to actual acts of sexual abuse to children? As mentioned earlier, these links are far from obvious. A study of the correlation between viewing child pornography and sexually abusing children demonstrates that the correlation is at most unclear and vague.¹¹⁰ Furthermore, it is important to remember that correlation does not even necessarily mean causation,¹¹¹ which only substantiates the inconclusiveness.¹¹² It is possible to derive pleasure

virtual child pornography, was also rejected, as no direct linkage was found between such materials and pedophiles' encouragement. *Id.* at 236. The majority addressed works like *American Beauty* and *Traffic*, emphasizing that there is no place to prohibit the distribution of the idea of sexual relations with children. *Id.* at 247-48.

¹⁰⁹ See generally Catherine Thérèse Clarke, *From CrimINet to Cyber-Perp: Toward an Inclusive Approach to Policing the Evolving Criminal Mens Rea on the Internet*, 75 OR. L. REV. 191 (1996) (discussing the complicated issue of mens rea online). One might try proving criminal intent by researching and analyzing the circumstances: the electronic trail of surfing, user surfing patterns, files detected on user's computer, acquisitions made, accompanying conducts, and so on. In other cases, proving intent might be relatively easy. See Aaron M. Bailey, *A Nation of Felons?: Napster, the NET Act, and the Criminal Prosecution of File-Sharing*, 50 AM. U. L. REV. 473, 476, 517 (2000) (claiming that such proof is not problematic regarding file-sharing). Regarding child pornography possession, criminal intent might be indicated through surfing trail and other possible distinguishing marks between mainstream and child pornography. See Rebecca Michaels, *Criminal Law—The Insufficiency of Possession in Prohibition of Child Pornography Statutes: Why Viewing a Crime Scene Should Be Criminal*, 30 W. NEW ENG. L. REV. 817, 832–42 (2008).

¹¹⁰ See Wasserman, *supra* note 77, at 273.

¹¹¹ See Burke, *supra* note 103, at 464–65 (emphasizing that using child pornography for sexual stimulation does not necessarily translate into sexual abuse; viewing virtual child pornography could even produce the opposite effect, alleviating the desire to seek out children).

¹¹² See Quayle & Taylor, *supra* note 100, at 332–33, 353–54 (explaining that one difficulty in investigating the relations between child pornography and physical injury involves methodology).

from viewing, without committing the act,¹¹³ and it seems like a gross generalization to assume that anyone who enjoys watching certain acts would attempt imitating them.¹¹⁴ Additionally, consideration of the demographic is important; it is plausible that the very people who watch and possess child pornography had the perverse desire in the first place.¹¹⁵ As such, we need to also consider claims of opposing causal linkage, the most prominent of which being Catharsis Theory.¹¹⁶

(iii) *Seduction Theory*

A third causal claim involves the Seduction Theory, which provides that abusers initiate contact with children through email, chat rooms, or social networks, luring them to meet in the real world, which results in child abuse.¹¹⁷ In such situations, possessors sometimes bring up possibilities of modeling or having sex, and send pictures of children having sex, to show it is done or how it is done.¹¹⁸ The causal claim goes as follows:

Electronic child pornography possession → using materials to lure children → committing sexual assault on children¹¹⁹

The causal link between luring children and committing sexual abuse to children seems fairly obvious.¹²⁰ However, the link between electronic possession and the desire or act of luring children is actually not direct.¹²¹ Some scholars argue that it is direct enough and even relevant to virtual

¹¹³ Phillip Jenkins, *Cut Child Porn Link to Abusers*, GUARDIAN (Jan. 23, 2003), <http://www.theguardian.com/technology/2003/jan/23/comment.onlinesupplement>.

¹¹⁴ *Id.* (searching for the internal discussion made by possessors in an environment that they believed to be safe, and finding that while some users admitted abusing, the vast majority admitted being sexually excited by child pornography, but denounced actual contact; many users were simply curious, defying authority or searching for forbidden temptations).

¹¹⁵ See U.S. Sentencing Comm'n, Report to the Congress: Federal Child Pornography Offenses 79 (2012), <http://www.ussc.gov/news/congressional-testimony-and-reports/sex-offense-topics/report-congress-federal-child-pornography-offenses>.

¹¹⁶ See Quayle & Taylor, *supra* note 100, at 333 (referring to research finding that child pornography might function positively, affording catharsis that prevents contact offenses). See also Cheryl B. Preston, *Consuming Sexism: Pornography Suppression in the Larger Context of Commercial Images*, 31 GA. L. REV. 771, 791–93 (1997) (discussing an argument regarding mainstream pornography that suggests that viewing pornography provides satisfaction for potential rapists through secluded fantasy).

¹¹⁷ See Schell et al., *supra* note 57, at 48. See also Doyle, *supra* note 58, at 123; Sanford, *supra* note 67, at 604.

¹¹⁸ See Doyle, *supra* note 58, at 123; Sanford, *supra* note 67, at 604.

¹¹⁹ See Wasserman, *supra* note 77, at 267.

¹²⁰ *Id.*

¹²¹ See Wasserman, *supra* note 77, at 268 (supporting this argument, but admitting it is challenged on the basis of insufficient empirical data).

child pornography;¹²² while others have applied a sort of underbreadth test, finding that there are many means, innocent (candy, romantic pictures, child model pictures, regular photos) or otherwise (mainstream pornography, especially including young-looking adult actresses), which may be used to lure children.¹²³ Apart from that, we need not assume that all child pornography possessors necessarily feel the impulse to relive the material, and that all who feel it necessarily act on it.¹²⁴

(iv) *Dignity Theory*

As raised earlier, the second derivative harm is the violation of children's dignity and privacy.¹²⁵ The two components of this theory, the intrinsic and the instrumental, can be broken down as follows:

The Intrinsic:

Electronic child pornography possession = violation of children's dignity and privacy¹²⁶

The Instrumental:

Electronic child pornography possession → distributing photos, until they reach the depicted child's social circle → violation of the child's dignity and privacy¹²⁷

Regarding both aspects, we can assume the photo's nature determines the harm's nature. Photos of documented rape differ from secretly taken nude photos, which differ from photos taken by teenagers engaged in consensual sexual activity, which differ from technologically morphed photos, which differ from regular photos of children, which by context and usage have turned them into "child pornography." The latter, however, leaves a bit more room for question, particularly for instances regarding the transition from possession to distribution, which is far from

¹²² See Johnson, *supra* note 108, at 327–28; Sanford, *supra* note 67, at 572, Wasserman, *supra* note 59, at 267–69 (suggesting that proscribing virtual child pornography possession prevents pedophiles from using those pictures to sexually lure children).

¹²³ See Burke, *supra* note 103 (claiming that mainstream pornography could be used to lure children, but that has not led to oppressing it). Seduction Theory was dismissed by the Supreme Court. See *Ashcroft, v. Free Speech Coal.*, 535 U.S. 234, 251 (2002) (ruling that there are many innocent things, like cartoons, video games and candy, which can be used for immoral purposes, but they are not prohibited).

¹²⁴ See ADAM N. JOINSON, UNDERSTANDING THE PSYCHOLOGY OF INTERNET BEHAVIOUR: VIRTUAL WORLDS, REAL LIVES 113 (2003) (explaining that generally speaking, curiosity motivates viewing online pornography).

¹²⁵ See *id.*

¹²⁶ See Post, *supra* note 84, at 2092.

¹²⁷ See Solove, *Digital Dossiers*, *supra* note 86, at 1148.

obvious, especially for surfers who are not a part of an online community of child pornography possessors, or surfers who are merely free viewers.

However, if we wish to criminalize the violation of privacy and dignity, one might suggest that an independent offense should be established to this end, one that would accurately signal the harm involved. Child pornography offenses do not provide the proper frame. Protecting privacy and dignity is important even and perhaps especially in the age of information. However, it is important also when victims are adults. Assuming criminalization is the right tool for the job, the appropriate framework for such legal protection should be an offense tagged by these harms. In other words, such an offense need not be associated with children and certainly not with pornography. There are countless ways in which one may violate another's privacy or dignity that do not relate to pedophiles, children, sex or assaults. Those who wish to protect others from it by utilizing the criminal law should do it clearly, directly and generally, not by annexing these important social goals to offenses devoted to a specific sexual deviance.

4. Offensiveness: Summation

In this global age of constant Internet access, the availability of digital child pornography has increased.¹²⁸ While the harms inherent to child pornography are universally repugnant, an examination of the offense of electronic possession, the last action in the scheme, demonstrates that the normative links between the various causes may be weak or inconclusive. Under the Tendency and Seduction Theories, the causal connection is uncertain, to say the least, befitting possession crimes in general.¹²⁹ A rise in the frequency of electronic downloads and possessions may suggest more harm, but may equally plausibly suggest accident or solely viewership without action. Market Deterrence Theory seems even less definitive since the consumption no longer relies on payment or even advertising.¹³⁰ The lack of payment suggests a lack of signaled demand, which in turn suggests a lack of financial incentive to supply new materials — an important factor for the production of new materials that cause sexual assault on children. As for the secondary harm, it may certainly be realized online. However, a violation of privacy and dignity does not

¹²⁸ Mann & Belzley, *supra* note 66, at 291–92; Katelyn McKenna & Gwendolyn Seidman, *You, me, and we: Interpersonal Processes in Electronic Groups*, in *THE SOCIAL NET: HUMAN BEHAVIOR IN CYBERSPACE* 191, 202–05 (Yair Amichai-Hamburger ed., 2005).

¹²⁹ See generally GEORGE P. FLETCHER, *BASIC CONCEPTS OF CRIMINAL LAW* 176 (1998); R. A. Duff, *Criminalizing Endangerment*, 65 *LA. L. REV.* 941, 955–56, 961 (2005); Douglas Husak, *Applying Ultima Ratio: A Skeptical Assessment*, 2 *OHIO ST. J. CRIM. L.* 535, 542 (2005) (pointing out various problems of possession offenses).

¹³⁰ *But cf.* Rogers, *supra* note 69, at 856 n.54.

relate to child pornography only.¹³¹ Criminalization of such harm requires a different and independent framework.

B. *Second Rung: Criminal Law's Ability to Reduce Harm to Children*

After carefully identifying all of the elements in the first step, the second step on the ladder requires us to examine criminal law's practical ability to reduce possession of child pornography (enforceability) and its harm (underbreadth test) through punishment.

1. Enforceability of Child Pornography Laws

The next question is, can criminal law apply its methods to prevent child pornography possession?¹³² Unlike most online "products," child pornography is often hard to detect, even with its near global criminalization.¹³³ However, it is not undetectable altogether; the claims of its proliferation suggest otherwise. There are ways to detect such materials,¹³⁴ sometimes with the help of agencies or volunteer groups,¹³⁵ and through the increasing number of online or digital avenues, which continuously evolve.¹³⁶

Obviously, in addressing the feasibility of enforcement, the global perspective must be taken into account.¹³⁷ Child pornography engenders nearly a universal response of disapproval. For example, the European

¹³¹ See generally Post, *supra* note 84.

¹³² See JENKINS, *supra* note 56, at 143 (explaining that since 1977, there has been a technological race between child pornographers and the police; the police had the upper hand before cyberspace because distributing and storing photos used to pose difficult problems).

¹³³ See Graham, *supra* note 52, at 465–66; Mann & Belzley, *supra* note 66, at 292 (noting that it is not easy to identify child pornography sites).

¹³⁴ See JENKINS, *supra* note 56, at 155 (discussing surveillance techniques on pornography sites visitors); Graham, *supra* note 52, at 481–82 (suggesting possible steps to improve enforcement: increasing online patrols; improving policing training, technical abilities, interrogation techniques and using anonymous tips from around the world; and emphasizing decryption ability).

¹³⁵ See SHELDON & HOWITT, *supra* note 57, at 25 (pointing to Internet Watch Foundation established in 1996 by the UK internet industry; it helps remove child pornography, as well as obscene and racist materials; it is the only agency besides law enforcement that is allowed to lawfully access child pornography and related photos).

¹³⁶ See Schell et al., *supra* note 57, at 57–61 (stating that corporations like Microsoft have decided to assist law enforcement to combat child pornography, elaborating on their assistance and suggesting a technical proposal to modify secured networks solutions to detect malicious traffic).

¹³⁷ See Aaron Burstein, *A Survey of Cybercrime in the United States*, 18 BERKELEY TECH. L.J. 313, 318 (2003) (finding child pornography to illustrate the way in which the law has proven capable of dealing with certain cybercrime forms, although the easiness of transnational distribution was responsible for delaying the development of new law enforcement strategies).

Council Convention on Cybercrime called for criminalizing nine forms of conduct, one of which includes “offences related to child pornography.”¹³⁸ The consensus is not complete, however,¹³⁹ and yet, this widening breadth of criminalization increases the odds for other interstate cooperation.¹⁴⁰ For example, Interpol might assist local authorities in enforcement.¹⁴¹

In light of the specific conduct of electronic possession, two related practical questions arise. First, is there an inherent evidentiary problem related to *virtual* child pornography? Presumably, unless virtual child pornography is criminalized, prosecutors must prove that the relevant material is authentic.¹⁴² And second, is this problem unique and unsolvable?

First, virtual child pornography does not seem to necessarily present an inherent evidentiary problem. Proving *actus reus* is important to establish that children were injured, whether a photo is or is not authentic.¹⁴³ Here, Market Deterrence Theory steps off, as there was no injury at all. In this respect, it is in fact a matter of *corpus delicti*: evidence that a crime was committed.¹⁴⁴ Similarly, establishing *mens rea* is important, in particular with the harm of violated dignity; those who think they possess virtual material cannot be held as agreeing to child injury.¹⁴⁵ Even if it is a problem, it is far from unique because most offenses, save strict liability,

¹³⁸ Council of Europe, Convention on Cybercrime, Nov. 23, 2001, C.E.T.S. No. 185, <http://conventions.coe.int/Treaty/en/Treaties/Html/185.htm>.

¹³⁹ See JENKINS, *supra* note 56, at 26; Schell et al., *supra* note 57, at 57 (emphasizing differences of legal key definitions).

¹⁴⁰ See João Godoy, *Computers and International Criminal Law: High Tech Crimes and Criminals*, 6 NEW ENG. INT’L & COMP. L. ANN. 95, 112 (2000) (claiming that child pornography, being a global problem, requires a global solution: one country cannot eradicate all accessible materials, which will continue appearing in other countries’ servers; the problem must be attacked everywhere and one recalcitrant country is enough to sabotage international arrangements).

¹⁴¹ Hamish McCulloch, *Interpol and Crimes against Children*, in VIEWING CHILD PORNOGRAPHY ON THE INTERNET: UNDERSTANDING THE OFFENSE, MANAGING THE OFFENDER, HELPING THE VICTIMS 145, 145–49 (Ethel Quayle & Max Taylor eds., 2005) (noting that since 1989 the Interpol fights crimes against children, nowadays being a central part of that war; however, it too deals with various difficulties, such as the diversity of local enforcement authorities, language barriers and more).

¹⁴² See Audrey Rogers, *Playing Hide and Seek: How to Protect Virtual Pornographers and Actual Children on the Internet*, 50 VILL. L. REV. 87, 92–97 (2005) (addressing various child pornography verdicts after *Ashcroft*, concluding that the concern regarding prosecutorial difficulties is real and growing, as prosecution must prove the pictures are of actual children, and that the defendant knew of it).

¹⁴³ *Id.* at 90.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 93.

require proof of both *actus reus* and *mens rea*.¹⁴⁶ While this task may prove difficult, it is not impossible.¹⁴⁷

What about punishment? Can it indeed reduce possession of child pornography? Some say that deterrence is impossible,¹⁴⁸ and it cannot disrupt the harm.¹⁴⁹ Obviously, draining a global market is impossible; stopping a global industry is beyond the power of any country. Still, this does not mean the local market cannot and should not be hindered.¹⁵⁰

2. Sufficient Criminalization: The Underbreadth Test

Two forms of harm were discussed: sexual assault on children, and violation of children's dignity and privacy. The first relates to three kinds of causation; the second relates to two. At this point, it is important to check for any alternative causes for the same or similar harms. That is,

¹⁴⁶ ARNOLD H. LOEWY, *CRIMINAL LAW IN A NUTSHELL* 152 (5th ed. 2009).

¹⁴⁷ In case experts cannot identify whether the material is authentic, we can apply an evidentiary presumption. If at the beginning of interrogation suspects do not clarify that they thought material is virtual, they will have a hard time convincing the jury during trial. See Rogers, *supra* note 142, at 102, 111 (concluding that regulating the industry of virtual child pornography is the solution, as well as the best way to protect children and freedom of speech, and proposing to label photos as virtual and document label).

¹⁴⁸ See JENKINS, *supra* note 56, at 3–4, 6, 71–72, 205 (writing that despite legal proscriptions, online child pornography flourishes; all censure laws and threats of criminal law and personal ruin have not been able to prevent the massive distribution of photos, as possessors feel “safety in numbers” in light of the heavy trafficking). See generally Brendan J. Sheehan, *Courts Caught in the Web: Fixing a Failed System with Factors Designed for Sentencing Child Pornography Offenders*, 63 CLEV. ST. L. REV. 799, 800 (2015) (searching for patterns of sentencing child pornography offenders). See also Noblett, *supra* note 96, at 74–82 (examining the application of the traditional purposes of punishment regarding offenses of child pornography: retribution, rehabilitation, deterrence and incapacitation).

¹⁴⁹ See JENKINS, *supra* note 56, at 16 (explaining that unlike fighting drug organizations, the battle against child pornography seems more similar to battling guerrilla war; it is harder to combat cells than fight organizations that have a command structure). Meaning, Jenkins thinks the usual assumption of criminal law, that apprehending and punishing help to prevent the defined harm, is not necessarily valid here.

¹⁵⁰ Any enforcement strategy should take into account enforcement of related proscriptions, closer and more deeply connected to harm, like production, distribution, and so on. See Gemma Holland, *Identifying Victims of Child Abuse Images: An Analysis of Successful Identifications*, in *VIEWING CHILD PORNOGRAPHY ON THE INTERNET: UNDERSTANDING THE OFFENSE, MANAGING THE OFFENDER, HELPING THE VICTIMS* 75, 75, 84–86 (Ethel Quayle & Max Taylor eds., 2005) (emphasizing the need to identify victims in photos, in order to support them, and focus investigation on finding producers and abusers, but noting that cyberspace complicates things, adding the global aspect: the children photographed could be from anywhere in the world).

are these harms produced only by electronically possessing child pornography?¹⁵¹

Let us begin with the first harm, sexual assault on children, distinct from general mental injury¹⁵² and general physical abuse of children. Had we dealt with general physical abuse, the underbreadth test would have searched for other forms of conduct producing it. An obvious example, somewhat parallel to the behavioral causation reflected in the Market Deterrence Theory, is the possession of products made in third-world country sweatshops. A major part of the western world economy is the commerce of cheaply-made products from developing countries, often produced by child labor. Children are physically exploited in less advanced countries; a western consumer buys a cheap product and turns the wheel of further child exploitation, as any purchase signals demand.¹⁵³ Why not criminalize the trade and possession of these products, hence hinder production, to protect children?

Here, we must ask, is possessing child pornography the only form of conduct producing this harm? Obviously, we must criminalize the actual sexual assault on children. There is no point to criminalize those who possess a picture of reality while ignoring those who create this reality.

Obviously, it is possible to assault children offline.¹⁵⁴ Production of child pornography, as opposed to computerized or virtual production, is

¹⁵¹ Preston, *supra* note 116, at 774, 809–12, 842–52 (claiming that commercials are a far clearer regulative object than pornography, and suggesting that attacking pictures of oppression is easier than attacking oppression itself, the latter being mysterious and illusive); *see also* Nadine Strossen, *A Feminist Critique of "The" Feminist Critique of Pornography*, 79 VA. L. REV. 1099, 1155 (1993) (making an underbreadth argument regarding mainstream pornography, regarding the harm of victimized women).

¹⁵² That is a much broader harm. Safe surfing for children is a wide issue, partially overlapping with some issues discussed here.

¹⁵³ *See* Scott L. Cummings, *Hemmed In: Legal Mobilization in the Los Angeles Anti-Sweatshop Movement*, 30 BERKELEY J. EMP. & LAB. L. 1, 9–83 (2009) (describing the sweatshop problem in the clothing industry); Claudia R. Brewster, *Restoring Childhood: Saving the World's Children from Toiling in Textile Sweatshops*, 16 J.L. & COM. 191, 194–98, 202–07 (1997) (analyzing international aspects of the sweatshop phenomenon).

¹⁵⁴ *See* AMITAI ETZIONI, *THE LIMITS OF PRIVACY* 196, 211–13 (1999) (perceiving privacy as a social license excluding categories of conduct, like most home activities, from public and governmental scrutiny; however, making exceptions like child abuse; but noting that even then, respect for privacy usually requires the state to act only after abuse was externally detected outside excluded space); Amitai Etzioni, *A Communitarian Perspective on Privacy*, 32 CONN. L. REV. 897, 897–900 (2000); Wolak et al., *supra* note 67, at 44–45 (finding that 87% of the offenders in their research were apprehended after the police were informed of child abuse; only 10% were apprehended as a result of investigating child pornography; therefore concluding that more attention should be given to the need for investigating local child abuse as a means of stopping child pornography production).

only harmful when involving sexual assault on actual children.¹⁵⁵ Commerce also pushes the related conduct forward in the causal link depicted by the Market Deterrence Theory, arriving straight to the creation of incentives to produce new material.¹⁵⁶ But perhaps markets that encourage various forms of child modeling might send the above message, even unintentionally. Dressing child models in adult clothing, putting make-up on them and posing them to appear as adult might send a subliminal message of similarities between them and adults — when child models learn to imitate facial expressions and body language of adult models, which are often associated with the increasingly sexualized global culture. Given these complexities, we must seek the roots of this phenomenon and not just focus on its most hideous expressions.

Apart from that, Market Deterrence Theory seems less problematic than the other theories. Under the view of the underbreadth test, the links between stages seem more concretely related to the harms produced by child pornography. In contrast, Tendency Theory, which concerns how the perverse desire to sexually-physically injure children might be internalized regardless of child pornography,¹⁵⁷ and Seduction Theory, which concerns the extent to which other materials might be used to lure children into producing child pornography,¹⁵⁸ fit less neatly under the underbreadth test, as it relates to sexual assault on children.¹⁵⁹ Perhaps, the test might reject the Tendency Theory, on the basis that the desire to abuse children may be internalized by viewing other materials that are relatively innocent, like mainstream books and movies, or less innocent, like mainstream pornography.¹⁶⁰

As some scholars seem to suggest, it can even be internalized as a result of a cultural environment celebrating youthful bodies, thus relating to a social construction of children and sexuality,¹⁶¹ and sex generally.¹⁶²

¹⁵⁵ See Wasserman, *supra* note 77, at 250.

¹⁵⁶ See *id.* at 251.

¹⁵⁷ Wasserman, *supra* note 77, at 272.

¹⁵⁸ See *Ashcroft v. Free Speech Coal.*, 535 U.S. 234, 251 (2002).

¹⁵⁹ If harm of violence against children is wider than initially thought, then one might wonder whether the existence of violent materials of child pornography does not bring its viewers to act violently against children in the same manner in which other violent sexual materials bring its viewers to abuse sexually.

¹⁶⁰ See Schell et al., *supra* note 57, at 47, 49 (claiming that since pornography is progressive and not merely addictive, and since it is extremely common online, it is no wonder child pornography prospers online).

¹⁶¹ This argument relates to the long-term injury regarding changes in social views and values. See Wasserman, *supra* note 77, at 273–74 (suggesting that the fifth “compelling interest” for virtual child pornography proscription concerns sexualizing children, and claiming that although courts rejected similar claims regarding women’s sexualization, children are in greater need of protection). See also JENKINS, *supra* note 56, at 27 (wondering how children’s protection coheres with allowing the lusting for young flesh, and noting sexual interest in young girls is exploited by large

The underbreadth test might exclude Seduction Theory, in light of many other means of seduction, including expressive means like photos of sex and even kisses, and others, like candy. When a predator has access to privately communicate with children, the message that sexual conduct by the child is desired by the predator has countless forms, many of them are completely legal in different contexts. In other words, even if you eliminate child pornography completely, you would still not deny predators the infinite other ways to seduce children.

The second harm involves violation of dignity and privacy. The underbreadth test adheres to the harm as previously declared and seeks for other forms of conduct that cause it. For the sake of argument, we can contend that the harm is not a “violation of privacy” (otherwise we have to seek other forms of conduct that violate privacy in general) but instead a “violation of children’s privacy,” assuming children require greater protection.¹⁶³ If these behaviors are not criminalized, it raises possible concerns about arbitrariness or unfairness for the particular focus on child pornography possession; and if they are criminalized under general proscriptions that deal with privacy, one might doubt the need to proscribe child pornography possession or enforcing it to this end.¹⁶⁴

Enforcement difficulties exist today as they had existed before the rise of the Internet.¹⁶⁵ And while it is not easy, it is still viable. Under the underbreadth test, the two forms of harm analyzed are not caused exclusively by child pornography, which is only a part of the problem.¹⁶⁶ It is clear that other aspects must be addressed as well.

American markets). A recent music video by pop artist Sia featuring 12-year-old dancer Maddie Ziegler, gave rise to discussion of implicit pedophilia. See Kory Grow, *Sia Apologizes for Controversial ‘Elastic Heart’ Video with Shia LaBeouf*, ROLLING STONE (Jan. 8, 2015), <http://www.rollingstone.com/music/news/sia-apologizes-for-controversial-elastic-heart-video-with-shia-labeouf-20150108>.

¹⁶² See Wasserman, *supra* note 77, at 273 (addressing criticism about Tendency Theory, finally summing up that although it is not convincing, it aggregates with other arguments).

¹⁶³ This approach may have been reflected in the Children’s Online Privacy Protection Act of 1998, 15 U.S.C. § 6502 (2006) (“COPPA”).

¹⁶⁴ Therefore, the underbreadth test allows us to address issues such as the linguistic phrasing of proscriptions. If dignitary or privacy harm is criminalized, what is the need for an offense of child pornography possession? Perhaps it is better to address such possession as one specific (probably serious) type of privacy violation, and not as something else. See Burstein, *supra* note 137, at 318 (arguing that existing laws are capable of combating some aspects of child pornography, while new laws have faced constitutional concerns).

¹⁶⁵ McCulloch, *supra* note 141, at 148.

¹⁶⁶ See *Ashcroft v. Free Speech Coal.*, 535 U.S. 234, 251 (2002).

C. *Third Rung of Gazing Sideways: Achieving Goals through Alternatives to Criminalization*

Given the weaknesses apparent in the second rung, it is important to recheck the causal links in the first rung to see if there are any instances of causal interferences that may serve as better alternatives to the criminalization of electronic possession.

1. Pre-behavioral Causation Interference

One of the advantages of elaborating on the causal link is finding possible, alternative intersections to interrupt or preempt the harms of child pornography. The first form of interference involves identifying and then removing necessary preconditions enabling or incentivizing the electronic possession of child pornography.¹⁶⁷ Two preconditions primarily come to mind: the first and obvious precondition for possessing any material is its accessibility.¹⁶⁸

Entirely authentic materials are produced in a physical space, and that is also where possible prevention lies,¹⁶⁹ the ultimate goal of Market Deterrence Theory.¹⁷⁰ Although reducing availability will not directly prevent new production, it might prevent the signaling of demand, as discussed under the Market Deterrence Theory,¹⁷¹ the internalization of the desire to abuse children, under the Tendency Theory,¹⁷² the usage of materials to lure children, under the Seduction Theory,¹⁷³ and by and large, the violation of privacy and dignity of children. While this option seems quite appealing, the question remains whether it can be realized.

One possible approach to reducing availability concerns “architectural” or infrastructural interference, a frequent topic of debate in this discourse, which focuses on search engines and controlling internet results or answers to various inquiries for such materials.¹⁷⁴ Several possibilities have been explored here. First, search engines could ensure that child

¹⁶⁷ See Rogers, *supra* note 142, at 90.

¹⁶⁸ See Doyle, *supra* note 58, at 130.

¹⁶⁹ See Schell et al., *supra* note 57, at 48.

¹⁷⁰ Rogers, *supra* note 69, at 90.

¹⁷¹ See *New York v. Ferber*, 458 U.S. 747, 763 (1982).

¹⁷² See Wasserman, *supra* note 77, at 272.

¹⁷³ See Schell et al., *supra* note 57, at 48.

¹⁷⁴ We can go even further: cooperation between search engines and law authorities, including not only the removal of content, but also data preservation for purposes of prosecution. See Raymond Colitt & Fernando Exman, *Google in Deal with Brazil to Fight Child Porn*, REUTERS U.K. (July 2, 2008), <http://uk.reuters.com/article/internetNews/idUKN0237672120080703> (describing an arrangement between Google and Brazilian authorities). See generally Laura Tatelman, *Give Me Internet or Give Me Death: Analyzing the Constitutionality of Internet Restrictions as a Condition of Supervised Release for Child Pornography Offenders*, 20 CARDOZO J.L. & GENDER 431 (2014).

pornography sites will not be displayed as search results for mainstream pornography.¹⁷⁵ Here, search engines might present “white lists” (as opposed to “black lists”), provided to authorities: legitimate and legal (if not desired) search results, signaling legality to searchers and making it harder for other surfers to make defensive claims regarding mens rea.¹⁷⁶ Second, architectural interference might also directly aim at child pornography sites, building walls between them and surfers, through technological means or mediators, like ISPs.¹⁷⁷ Since we are dealing with digital products that do not involve interactive consumption or market transactions, where file-sharing software can supply users as well, architectural interference should preempt availability in those new advanced platforms as well.¹⁷⁸

Another possible interference might entail providing links to sites that explain the material’s harm, thus psychologically impressing onto these seekers the necessity of the prevention of future harm. Alternatively, another approach to reducing availability might involve the regulation of forums. If the state identifies relevant platforms, like online communities

¹⁷⁵ See Doyle, *supra* note 58, at 123.

¹⁷⁶ See, e.g., 18 Pa. C.S.A. §7622.

¹⁷⁷ In Pennsylvania, ISPs were made liable for allowing access to sites after being detected for their content. The attorney general enforced the law against destination providers. Providers attempted to comply, using IP filtering, but websites were able to evade their attempts. Another problem was blocking unintentional content, as one server may host various sites with a single IP address but different URLs. See Mann & Belzley, *supra* note 66, at 292-295. In light of the concern of over-blocking, a district court found the law to be overly broad and therefore unconstitutional. *Ctr. for Democracy & Tech. v. Pappert*, 337 F. Supp. 2d 606, 620-621 (E.D. Pa. 2004). See also Jacob Comenetz & Jon Boyle, *German Cabinet Backs New Law Against Child Porn*, REUTERS (Apr. 22, 2009), <http://www.reuters.com/article/internetNews/idUSTRE53L3NZ20090422>; Martha Graybow, *UPDATE 1-More Internet Companies to Remove Child Porn Sites*, REUTERS U.K. (July 10, 2008), <http://uk.reuters.com/article/governmentFilingsNews/idUKN1026030620080710>; Marguerite Reardon, *California Pols Ask ISPs to Block Child Porn*, CNET (June 20, 2008), http://news.cnet.com/8301-10784_3-9973966-7.html (focusing on ISPs in California, New-York and Germany). In 2009, the German lower House of Parliament, the Bundestag, adopted a new set of laws making it possible to block child pornography web sites. Rick Demarest, *German Parliament Passes Bill in Fight Against Child Pornography Sites*, DEUTSCHE WELLE (June 19, 2009), <http://dw.com/p/IUMK>.

¹⁷⁸ See Schell et al., *supra* note 57, at 58–59 (stating that various file sharing software designers have joined the war on child pornography, but most sharing software take no part in it); Anne Broache, *Senators OK \$1 Billion for Online Child Porn Fight*, CNET (May 16, 2008), http://news.cnet.com/8301-10784_3-9945915-7.html (reporting that a U.S. Senate Panel approved the allocation of \$1 billion to encourage the development of software designed to catch file sharers of child pornography through P2P networks).

where individuals possess child pornography,¹⁷⁹ it might focus on forum administrators in order to discourage availability of some materials, namely information or propaganda promoting child pornography and child abuse, while encouraging others, such as resources to prevent the victimization of children.¹⁸⁰

This above scenario assumes that only some forms of causation influence the production of child pornography. Those who find Market Deterrence Theory convincing, but are not swayed by the Tendency and Seduction Theories, might encourage such forums to use entirely computer-made virtual child pornography, or pornography depicting adults posing as minors.¹⁸¹ On a more practical, economic level, reducing the costs of alternate products, like virtual child pornography and even mainstream pornography, may impact the incentive to possess child pornography as well.¹⁸²

The second precondition for electronic possession is a sense of anonymity,¹⁸³ which differs from the theory of complete anonymity.¹⁸⁴ Viewers' perception of surfer anonymity might make access to pornography feel safer or more normal, in terms of both social and psychological privacy and comfort.¹⁸⁵ In other words, such perception impacts their belief that they are not being scrutinized, even if they are.¹⁸⁶ The ability to find such materials without direct human contact further enables or incen-

¹⁷⁹ See JENKINS, *supra* note 56, at 113; Quayle & Taylor, *supra* note 100, at 335 (elaborating on those such communities).

¹⁸⁰ See Quayle & Taylor, *supra* note 100, at 348–50.

¹⁸¹ See Rogers, *supra* note 142, at 89.

¹⁸² If free consumption weakens incentives to produce, like in the case of file sharing, one might think that only commerce, and not free consumption, should be battled, to directly injure the industry. Such notion relies on endorsing the Market Deterrence Theory and rejecting the other causal theories. See *New York v. Ferber*, 458 U.S. 747, 761 (1982) (referencing economic motives).

¹⁸³ See JENKINS, *supra* note 56, at 96 (arguing that the reasons why people turn into pedophiles are controversial, but clearly cyberspace poses an attractive anonymous environment, in light of users' feelings that what goes on inside their computers happens inside their private spaces).

¹⁸⁴ *Id.* at 98.

¹⁸⁵ *Id.* at 98–99 (comparing members of other sexual groups who must leave their social setting to engage in their sexual preferences unlike online child pornography users who do not need to change their physical setting with their computer being “home”).

¹⁸⁶ *Id.* (noting that before, consumers had to go to remote and questionable stores, where few cared to be seen; nowadays, consumers act from their homes); Adam N. Joinson, *Disinhibition and the Internet*, in *PSYCHOLOGY AND THE INTERNET: INTRAPERSONAL, INTERPERSONAL, AND TRANSPERSONAL IMPLICATIONS* 75, 83 (Jayne Gackenbach ed., 2d ed. 2007) (explaining that the vast accessibility of online pornography might remove many inhibitions that exist regarding the purchase of pornography in stores). This also relates to post-behavioral causation, in the form of social sanctions, to be discussed later.

tivizes such individuals, in the form of disinhibition.¹⁸⁷ Therefore, possible ways to prevent possession are attempting to reduce the perception of anonymity and/or to restore or strengthen inhibitions, in accordance with the reasons why disinhibition occurs.¹⁸⁸ This might be done through online campaigns or education about the limits of online anonymity as well as about the harms involved in child pornography possession, which may restore a sense of proximity or accountability to victims sometimes absent online.

Obviously, these proposals have shortcomings. For example, whereas search engines can be given various incentives to assist the law by changing the search algorithms to hinder child pornography seekers, it is harder to influence the architecture of P2P. P2P software and websites are already under legal pursuit, mainly regarding intellectual property, and are unlikely to adhere to legal requirements. However, regulatory solutions are seldom perfect; even criminalization is almost never perfect. This does not suggest these tools need not be used in order to hinder and prevent harm.

2. Behavioral Causation Interference

Another possibility to prevent harm focuses on interrupting intermediate phases between conduct and harm. Among the five kinds of causal links discussed, only one does not include such a phase; the intrinsic notion of privacy suggests that willingly possessing child pornography violates the child's privacy and dignity.¹⁸⁹ Causation cannot be interrupted in this context. In other words, when there is only one link between conduct and harm, and the link is inherent, cutting it is, by definition, impossible. Interference in other contexts may prove more plausible or feasible.

As far as Market Deterrence Theory relates to the consumption of paid child pornography, we might focus on payment platforms or mediators. Cyberspace facilitates the monitoring of monetary movement.¹⁹⁰ Focusing on payment mediators has the ability to significantly restrain distribution.¹⁹¹ Tendency Theory might be thwarted by reaching the user's conscience, encouraging them to overcome the potential desire to abuse

¹⁸⁷ See Neil Malamuth et al., *The Internet and Aggression: Motivation, Disinhibitory, and Opportunity Aspects*, in *THE SOCIAL NET: UNDERSTANDING OUR ONLINE BEHAVIOR* 120, 129 (Yair Amichai-Hamburger ed., 2013).

¹⁸⁸ *Id.* at 137. See also generally John Suler, *The Online Disinhibition Effect*, 7 *CYBER PSYCHOLOGY & BEHAVIOR* 321, 321-22 (2004) (acknowledging consensus regarding online disinhibition but stating that its reasons are controversial).

¹⁸⁹ See Post, *supra* note 84, at 2092.

¹⁹⁰ Mann & Belzley, *supra* note 66, at 296.

¹⁹¹ See *id.* at 295-98 (suggesting that focusing on payment mediators is not expected to entirely prevent child pornography distribution online, but it can strike at the heart of the industry).

children.¹⁹² As for Seduction Theory, those who already possess child pornography must still use it to lure and abuse children; the causal link is indeed interruptible.¹⁹³ Authorities might focus on educating parents and children of possible dangers to reduce chances of online chats between adults and children, thereby limiting the chances of such chats leading to intimate meetings.¹⁹⁴ Authorities can monitor children's chat room activities.¹⁹⁵ They can also clarify to possessors, through general proclamations or personal notices.¹⁹⁶

Once again, the above proposals are imperfect. There are diverse payment mediators, and some have incentives not to abide the law, but to break it. Still, those proposals may hinder some instances of sexual assaults and make a difference for some children.

3. Post-behavioral Causation Interference

The last type of interference involves the creation of negative externalities after possession, in order to deter future conduct. Three particular forms here pertain to computer or Internet structure, social norms, and economics. First, the structural angle might point to electronic sanctions. Perhaps it is possible to disseminate child pornography materials that include viruses, so that users might avoid downloading such materials.

¹⁹² If tendency is produced by expression, why can it not be prevented or abolished by counter expression? For a specific discussion concerning the context of pornography, see Preston, *supra* note 116, at 794–95, attributing this argument to First Amendment liberal theoreticians. See also CATHERINE A. MACKINNON, *ONLY WORDS* 16–17 (1993); Anne Wells Branscomb, *Internet Babylon? Does the Carnegie Mellon Study of Pornography on the Information Superhighway Reveal a Threat to the Stability of Society?*, 83 *GEO. L.J.* 1935, 1949 (1995) (discussing the ways of dealing with mainstream pornography and attempting to curtail “harmful consequences outside of the electronic environment”); Daniel I. A. Cohen, *The Hate that Dare not Speak its Name: Pornography Qua Semi-Political Speech*, 13 *L. & PHIL.* 195, 195 (1994).

¹⁹³ Seduction Theory focuses on a sub-form of one stage in harm's causal link. Kenneth V. Lanning, *Compliant Child Victims: Confronting an Uncomfortable Reality*, in *VIEWING CHILD PORNOGRAPHY ON THE INTERNET: UNDERSTANDING THE OFFENSE, MANAGING THE OFFENDER, HELPING THE VICTIMS* 49, 56–58 (Ethel Quayle & Max Taylor eds., 2005) (elaborating on the process of seduction).

¹⁹⁴ See Schell et al., *supra* note 57, at 48 (noting that seduction often starts when adults approach children in chat rooms to form relationships).

¹⁹⁵ See *Facebook Adds New Security to Protect Kids*, CBS NEWS (May 8, 2008), <http://www.cbsnews.com/stories/2008/05/08/tech/main4081280.shtml> (reporting that Facebook added over forty safety valves to protect young users from sexual abuse).

¹⁹⁶ Such a possibility depends on rejecting other forms of causation, such as those regarding the violation of privacy and dignity. We might consider prioritizing enforcement through encouraging pedophiles to stay online and not commit the ultimate physical harm. See Doyle, *supra* note 58, at 140, 142 (noting that in some countries, those who send materials suspected as child pornography are warned that if they send such materials again, they will be reported to the police).

The severity or pervasiveness of the virus can range, from possibly erasing all data in the hard drive, to simply shutting down computers, to presenting links to educational sites or computerized presentations.¹⁹⁷

Second, the social angle points to a seemingly effective, yet more controversial alternative, of social condemnation: a registry or report of child pornography possessors. This sort of tactic could inflict extreme injury to possessors and deter future possessors.¹⁹⁸ Whereas this method might be supplementary to criminal law, it might also be used as an alternative thereto — publicizing their names might be an effective deterrent, especially in light of today's global age of social networks, with an emphasis on reputation and shaming.

Lastly, the economic angle might also offer an alternative to criminalization, through the option of a tort lawsuit by the photographed child or by child protection organizations, or through some other form of compensation or restitution.¹⁹⁹ Money makes or breaks the child pornography industry; perhaps some civil lawsuits will bring the collapse of this harmful industry.

Again, each solution discussed here is imperfect. For example, shaming may be a harsh social sanction. On the one hand, one might suggest it is too harsh, and among other problems of shaming, it is sometimes a very short-lived sanction, since cyber attention tends to have a short life. However, on the other hand, in some cases, it might deter some would-be offenders and serves as a feasible, relatively cost-effective approach.

¹⁹⁷ See Joel R. Reidenberg, *States and Internet Enforcement*, 1. UNIV. OTTAWA L. & TECH. J. 213, 228-29 (2003) (describing various possible electronic sanctions).

¹⁹⁸ In *Operation Ore*, a large-scale investigation of a Texas-based child pornography site, the FBI provided the British Police with details on 7,200 suspects. Over 3,700 of them were arrested, over 1,500 charged, and over 1,400 convicted. Among the arrested were judges, lawyers, teachers, and surgeons. Over 30 of the arrested men have committed suicide. Duncan Campbell, *Operation Ore Exposed*, ALPHR (July 1, 2005), <http://www.alphr.com/features/74690/operation-ore-exposed>; *Internet Child Porn Arrests Rocket*, MANCHESTER EVENING NEWS (Jan. 12, 2013), <http://www.manchestereveningnews.co.uk/news/greater-manchester-news/internet-child-porn-arrests-rocket-1063685>; Lucy Sherriff, *Child Porn Suspect Suicide Tally Hits 32*, REGISTER (Dec. 21, 2004), http://www.theregister.co.uk/2004/12/21/child_porn_suicide_shame/.

¹⁹⁹ See Michelle Minarcik, *The Proper Remedy for Possession of Child Pornography: Shifting from Restitution to a Victims Compensation Program*, 57 N.Y. L. SCH. L. REV. 941, 944-45 (2012-2013) (suggesting compensation as a suitable solution to possession of child pornography); Dianne Weiskittle, *Proximate Cause, Joint and Several Liability, and Child Pornography Possession: Determining and Calculating Restitution Awards Under 18 U.S.C. § 2259*, 38 UNIV. DAYTON L. REV. 275, 283-85 (2013) (suggesting reformed restitution as a solution).

4. Achieving Goals through Alternatives: Summation

The search for alternatives suggests interesting ways of stopping or preventing harm without turning to the criminal law: architectural wars on availability, economic wars on payment platforms or mediators, and even social-psychological possibilities of shaming and cutting the chains of harm. Many countries have gotten used to criminalizing any remotely harmful conduct instead of seeking for deeper problems and searching for less offensive alternatives. Some problems can be narrowed down if we systematically gaze at the causal link of potential harm and attempt to identify ways to sever the links outside the unforgiving methods of criminal law. Non-criminal measures are out there; we simply need to look for them instead of resorting to criminal law whenever we meet a problem.

D. *Fourth Rung: Assessing the Social Costs in the Criminalization of Electronic Possession*

After climbing up the ladder, the last rung remains, which concerns the possible costs entailed in the various solutions that interfere with possession or its relevant harm. Here, while numerous costs are possibly associated with these solutions, we focus on the proscription and enforcement costs.

1. Proscription Costs

The first cost entailed in proscribing child pornography possession concerns censorship as well as the deprivation of freedom to possess such materials.²⁰⁰ Demand for that form of conduct signals value, even if extremely marginal (or controversial).²⁰¹ Criminalization hinders both freedom and autonomy.²⁰² In certain jurisdictions, like the United States, this may create a First Amendment issue, and one may debate whether certain forms of materials are constitutionally protected — and to what extent. In other jurisdictions, this may not give rise to constitutional debates, as freedom of speech is not necessarily constitutionally valued.

Most of the causal links analyzed are not applicable one hundred percent of the time.²⁰³ Not every possession produces sexual assault on chil-

²⁰⁰ See Minarcik, *supra* note 199, at 947.

²⁰¹ However, the common argument is that child pornography includes negligible social value. It is possible to draw upon mainstream pornography scholarship, claiming that if child pornography has expressive power, like the one attributed to Tendency Theory, then it also has value. For Judge Easterbrook's argument regarding mainstream pornography, see *American Booksellers Ass'n, Inc. v. Hudnut*, 771 F.2d 323, 329 (7th Cir. 1985). Even if it is not an expression, but merely an aphrodisiac or some sort of empty accessory, it could still involve intimate personal value to users. See FEINBERG, *supra* note 14, at 156-57.

²⁰² See generally *American Booksellers Ass'n, Inc.*, 771 F.2d at 323.

²⁰³ See Wolak et al., *supra* note 67, at 39 (finding that not all producers of child pornography sexually abuse their victims).

dren,²⁰⁴ nor does it always violate their privacy and dignity, especially regarding virtual materials.²⁰⁵ Possession might be derived from sexual or general curiosity, certainly in cyberspace, which generally facilitates sexual exploration through relatively low social costs.²⁰⁶ When possession does not produce the relevant harm, criminalizing it may mean depriving freedom to a certain extent and condemning people who neither harm themselves nor contribute to harm done by others.²⁰⁷ Perhaps, criminalization may even increase the risk of harm, by denying private recourses and pushing pedophiles to produce harm in more direct and immediate manners.²⁰⁸

Although it seems to be a thriving industry,²⁰⁹ the potential loss of income is irrelevant, as we do not seriously consider taxing or licensing it.²¹⁰ Obviously, there is a wide-scale child pornography black market.²¹¹ Does it increase the very risks involved in the product and the chances of harm? Since the major sub-form product can only be produced in black markets, as there are no legal ways to produce it, the answer is no.²¹² There is no legal way of producing actual child pornography of documented abuse²¹³ in all of the countries that prohibit sexual assault on

²⁰⁴ See JOINSON, *supra* note 124, at 321-22.

²⁰⁵ See Burke, *supra* note 103, at 463.

²⁰⁶ See *id.* at 470; JOINSON, *supra* note 124, at 113.

²⁰⁷ Another claim beyond the scope of this article involves children's rights. Some pedophiles claim that children have rights to choose having sex with adults, although, this matter also depends on the larger issue of a child's mental capacity to consent to "adult" activities. See JENKINS, *supra* note 56, at 125.

²⁰⁸ Catharsis Theory also relates to the matter of substitution. See generally Katyal, *supra* note 28, at 2392-96 (explaining that we cannot assume that people will commit crime X or no crime at all). If possessing material brings self-sexual relief, and if such relief nullifies the need for finding another sexual vent, then the deprivation of possession might push possessors to abuse physically.

²⁰⁹ See Schell et al., *supra* note 57, at 47, 49 (referring to reports that estimate the child porn industry generates \$3 billion annually, with over 100,000 commercial sites, and noting that the Reedy family, operating a porn ring in the late 1990s, made \$1.4 million in a single month, and almost \$10 million in two years).

²¹⁰ This raises highly charged issues of whether child pornography and child prostitution should be considered as crimes, or regulated as "work." See Kadriye Bakirci, *Child Pornography and Prostitution: Is this Crime or Work that Should be Regulated?*, 14 J. FIN. & CRIME 5, 10 (2007) (unsurprisingly concluding that both are crimes, and should not be regulated work).

²¹¹ *Id.* at 5.

²¹² See JENKINS, *supra* note 56, at 4 (explaining that unlike drug abuse, society has no tolerance whatsoever for child pornography because consent is by definition impossible). *But see* Quayle & Taylor, *supra* note 100, at 332, 353 (noting that pornography viewers justify themselves through the idea of child consent).

²¹³ MACKINNON, *supra* note 192, at 20 (referring to a parallel argument regarding mainstream pornography, claiming that every pornography production, including non-violent production, involves coercion and exploitation of women). See Leonore

children and perceive it as harmful.²¹⁴ Also, perhaps as long as proscriptions exist, they may (unintentionally) encourage demand, in a forbidden fruit phenomenon style.

2. Enforcement Costs

Obviously, enforcement means the actual and not only theoretical deprivation of human freedom.²¹⁵ Apart from that, selective enforcement seems possible, as the number of possessors is high.²¹⁶ Violating privacy seems severe, since we enter the private realm of sexual preferences, especially as possession happens at home,²¹⁷ and exposure involves significant injury due to the social stigma surrounding pedophiles.²¹⁸

E. *The End of the Ladder: Summation*

The normative road to criminalization must explore enforceability, particularly under the underbreadth test. Unlike other forms of conduct that begin online and end offline, one kind of possession of child pornography seems to begin and end online. No country can aspire to eradicate this phenomenon, but criminalization does not in and of itself have merit, and we must look for other facets of the problem. We must do more to protect children and not settle for fighting one manifestation of a broader phenomenon.

From examining the various aspects, the criminal law, in the United States and in other countries, may be over-used. The practical implications are not more justice and less peril — but rather, fewer available resources and more imprisoned people. Technology facilitates the problem, and from examining the various options, perhaps it can be harnessed to impede it.

Tiefer, *Some Harms to Women from Restrictions on Sexually Related Expression*, 38 N.Y. L. SCH. L. REV. 95, 95 (1993) (giving a counterargument, seemingly invalid regarding children, that oppressing pornography harms women of the industry, and if pornography went underground, women would suffer more oppression and abuse).

²¹⁴ See Jenkins, *supra* note 56, at 4 (explaining that subjects of child pornography cannot give legal consent, and that there is a consensus that this material is directly connected to criminal behavior).

²¹⁵ See 18 U.S.C. § 2252.

²¹⁶ The Reedy family site alone maintained 300,000 customers. See Schell et al., *supra* note 57, at 49.

²¹⁷ See *Lawrence v. Texas*, 539 U.S. 558, 562–63 (2003) (challenging the law proscribing consensual sodomy, also in light of privacy issues). Non-pedophiles who surf sex sites might also suffer through the process of searching for the guilty.

²¹⁸ The overwhelming assumption seems to be that possessors are pedophiles. See Michael C. Seto, James M. Cantor & Ray Blanchard, *Child Pornography Offenses Are a Valid Diagnostic Indicator of Pedophilia*, 115. J. ABNORMAL PSYCHOLOGY 610, 613 (2006) (examining whether child pornography offenses mean pedophilia, and concluding positively).

CONCLUSION

When deciding whether the criminalization of a behavior is justified, we must look back at the entire ladder, from the first rung to the very last. As we demonstrated in this study of the electronic possession of child pornography in this age of constant-internet access and more complicated features and avenues of downloading data, the concept of electronic possession is becoming more and more difficult to pin down. As the avenues to access child pornography has been proliferating around the globe, the normative causal link between possession and sexual assault on children seems to be becoming weaker and weaker, more removed and more remote.

When this is the case, where there are weak spots or possibly nonexistent causal links at the first rung, the very threshold to justifying criminalization, the idea of criminalization of electronic possessions becomes more difficult to justify as you climb up the ladder. Even if you surpass the first rung, examining the second step reveals weaknesses in the capability of combating this offense as well. Enforceability on the Internet is far from simple, yet not impossible. The underbreadth test suggests that perhaps our gaze is too narrow, and other aspects of the problem, particularly societal attitudes, should be combated as well. The third step reveals a number of alternative approaches as well as points of interference that may be feasible and that embodies the notion that respecting human freedom means that criminalization should be the last resort. Then, at the end of our journey, the examination of the social proscription and enforcement costs of all possible regulative solutions demonstrates that the criminalization of electronic possession of P2P downloading is less justified. Why is it chosen then? Perhaps, because it is easier to criminalize all aspects of possession, regardless of their harmfulness, which makes the criminalization of many offenses overly broad, but perhaps there may more to it, possibly taking for granted certain critical assumptions and values.²¹⁹

²¹⁹ See Noblett, *supra* note 96, at 65 (claiming that crimes against children offend us most deeply, and sexual crimes against children tear down the innocence of society's future, and therefore, the offenders attract little empathy from anyone; nevertheless emphasizing that the horrible nature of these crimes is no excuse for society to ignore the goals of the criminal justice system).