The John Marshall Journal of Information Technology & Privacy Law

Volume 22
Issue 4 *Journal of Computer & Information Law - Summer 2004*

Article 3

Summer 2004

# The Concept of "Harm" in Computer-Generated Images of Child Pornography, 22 J. Marshall J. Computer & Info. L. 717 (2004)

Jisuk Woo

# THE CONCEPT OF "HARM" IN COMPUTER-GENERATED IMAGES OF CHILD PORNOGRAPHY

JISUK WOO, PH.D., J.D.†

## I. INTRODUCTION

Assume that a computer literate who produces child pornography uses his computer to create an image depicting a child as being engaged in sexual act, where there is no real child involved. The images he produces look so real that they are indistinguishable from actual photographs of real children, but the photographic image is entirely a technological creation. Could the person who produced these images be convicted for violation of child pornography law? Where the "person" in the image is created by the computer, and does not actually exist, should these images still be banned in order to protect children from being harmed? This paper examines such issues surrounding computer-generated images of child pornography against the concept of harm which has been the central focus of child pornography regime.

Part I describes the ways in which the technological development has generated new concerns about child pornography, and Part II discusses child pornography law and relevant arguments of anti-pornography feminists. Part III analyzes the ways in which different kinds of harm are conceived and supported by empirical evidence. Part IV examines the ways in which computer-generated images of child pornography raise different concerns regarding the harm caused by child pornography.

† Assistant Professor, Graduate School for Public Administration, Seoul National University. J.D., 1997, New York University School of Law; Ph.D., 1995 (communication), University of Pennsylvania Annenberg School for Communication; B.A., 1989, Yonsei University in Korea. The author would like to thank Professor Amy Adler for her invaluable guidance in writing this article. She is also grateful to her husband Jae-Hyup Lee for his constant encouragement and support.

## II. THE INTERNET AND CHILD PORNOGRAPHY

The Internet, often described as a "network of networks,"[1] is a revolutionarily efficient and widely available electronic delivery system for text and image.[2] The move from analog to digital technology enables the convergence of different forms of content such as video, sound, image, text, data and computer code in a common system. Both pornography and child pornography that appear on the Internet have raised a concern and controversy regarding the rationales and effective means of prohibiting those materials.[3]

A recent study conducted by Carnegie Mellon University suggested that over eighty-three percent of the pictures on Usenet[4] groups which stored digitized images were pornographic.[5] While the study suggests a pervasive presence of pornographic materials in cyberspace, the study has been the object of a great deal of criticism on-line.[6] The methodology and ethics of the study is questioned, and it is argued that Usenet represents only 11.5 percent of the traffic on the Internet, which itself is only a part of the cyberspace.[7]

---

1. Bruce Lehman, Information infrastructure Task Force, *Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual property Rights,* 1 (Sept. 1995) (available at <http://www.uspto.gov/ web/offices/com/doc/ipnii/front/pdf>).

2. For review of the environment of digital information and information networks, *see* Nicholas Negroponte, *Being Digital* (Knopf 1995); Ithiel de Sola Pool, *Technologies Without Boundaries: On Telecommunications in a Global Age* (Harvard 1990); Ethan Katch, *Law in a Digital World* (Oxford U. Press 1995).

3. According to the Webster's Dictionary, pornography is defined as the "depiction of erotic behavior (as in pictures or writing) intended to cause sexual excitement, or material (as books or a photograph) that depicts erotic behavior and is intended to cause sexual excitement." Webster's Ninth New Collegiate Dictionary 1024 (1984). "Child pornography" refers only to visual depictions of children. *Id.* at 16, n. 6. Similarly, the U.S. Department of Justice defines pornography as "material that presents sexual content of some sort with the intent to arouse." *See* Attorney General's Commission on Pornography: Final Report 227 (July 1986) [hereinafter Final Report].

4. Usenet functions as an electronic bulletin board and permits a more public interactive discussion similar to a conference meeting.

5. Phillip Elmer-De Witt, *On a Screen Near You: Cyberporn*, Time 38 (July 3, 1995). The study was published in the Georgetown Law Journal. Marty Rimm, *Marketing Pornography on the Information Superhighway: A Survey of 917,410 Images, Descriptions, Short Stories and Animations Downloaded 8.6 Million Times by Consumers in over 2000 Cities in Forty Countries, Provinces and Territories*, 83 Geo. L.J. 189 (1995).

6. *See e.g. How Time Fed the Internet Porn Panic; Excerpts From Online Posts About Time Magazine's June 26, 1995 Story on Internet Pornography*, Harper's Mag. 11 (Sept. 1995).

7. The National Information Infrastructure ("NII") is a global network of interconnected computers and databases of which the Internet, a collection of host and getaway computers, is a part.

While the pervasiveness of pornographic materials on the Internet is debatable, the ease of access to the Internet haunts those who are concerned about the availability and accessibility of pornographic materials to children. The computer makes pornography easily accessible because it does not require physical transportation. Moreover, the computer enables thousands of individuals to communicate while maintaining their secrecy.

In addition to these computer-transmitted materials of child pornography that have existed, the development of the computer technology raises another issue regarding computer-generated child pornography. Pornographic images can be created by a computer, without exploiting real children in making the images. In both pornography in print, and on-line, the children depicted may not actually be minors but adults. Digital images of adults may be modified to give the appearance that children are involved in the sexual acts, or images of children in sexual acts can be created without any real-person model, child or adult.

While the Supreme Court has tried to construe the child pornography exception to the First Amendment narrowly,[8] the Child Pornography Prevention Act of 1996 ("CPPA") attempted to include computer-generated child pornography, expanding the federal ban on child pornography from pornographic images made using actual children to include computer-generated images appearing to be children engaged in sexually explicit conduct.[9] The Congress found that "the use of children in the production of sexually explicit material, including photographs, films, videos, computer images, and other visual depictions, is a form of sexual abuse which can result in physical or psychological harm, or both, to the children involved."[10] On April 16, 2002, in *Ashcroft v. Free Speech Coalition*, the U.S. Supreme Court struck down sections of the CPPA as overbroad and unconstitutional.[11] Now the Congress enacted a revised version of the law, called the Child Obscenity and Pornography Prevention Act of 2003 ("COPPA"), that would ban works that are virtually indistinguishable from that of a minor engaging in sexually explicit conduct, in the apparent hope that this new wording will satisfy the Supreme Court.[12] Defenders of computer-generated child pornography argue that it does not have a victim because no child is harmed, thus should not be illegal; the counter argument is that the state's interest in protecting children from the effects of child pornography does not begin and end with the victim because computer-generated child pornography could encourage actual child pornography, which then could harm chil-

8. *Osborne v. Ohio*, 495 U.S. 103 (1990).
9. 18 U.S.C.A. § 2256 (2000).
10. Sen. Rpt. 104-358, at 2 (1996).
11. 535 U.S. 234, 266 (2002).
12. H.R. 1161, 108th Cong., 1st Sess. (2003).

dren.[13] Thus, one of the most controversial debates regarding computer-generated pornographic materials centers around the issue of "harm." The next Part will discuss a brief history of obscenity and pornography law and the central role of harm in anti-pornography and child pornography arguments.

## III. THE CONCEPT OF HARM IN CHILD PORNOGRAPHY LAW

In general, pornography is presumptively legal under the First Amendment.[14] To be illegal, pornography must be either obscene or child pornography.[15]

In the landmark case for modern obscenity laws, *Miller v. California*,[16] the defendant was convicted under California law for mailing unsolicited brochures that advertised various publications the defendant offered for sale. The brochures contained photographic depictions of young men and women engaging in sex acts. The images included prominent displays of genitalia. The jury in *Miller* convicted the defendant of the misdemeanor crime of knowingly distributing obscene material. The California statute he violated essentially codified a test developed by the Supreme Court in *Roth v. United States*,[17] which asked "whether to the average person, applying contemporary community standards, the dominant theme of the material taken as a whole appeals to prurient interest."[18] In altering the *Roth* test, the Court in *Miller* announced that the method for determining whether material is obscene was to be a modified three-step process: First, the fact finder should determine "whether 'the average person, applying contemporary community standards' would find the work, taken as a whole, appeals to the prurient interest."[19] Second, the fact-finder must establish "whether the work depicts

13. For arguments to ban computer-generated pornography, *see* John C. Scheller, *PC Peep Show: Computers, Privacy, and Child Pornography*, 27 J. Marshall L. Rev. 989 (Summer 1994). For a view that computer-generated child pornography does not have a victim, *see* Joshua Quittner, *Computers Customize Child Porn*, Newsday 74 (Mar. 6, 1993).

14. Recognizing the blurry line between unprotected obscene speech and protected pornographic speech in the information age, a term cybersmut has been chosen by some scholars and activities to describe sexually explicit speech in cyberspace which is not protected under the First Amendment. *See e.g.* Debra D. Burke, *Cybersmut and the First Amendment: A Call for a New Obscenity Standard*, 9 Harv. J.L. & Tech. 87 (1996).

15. See *FW/PBS, Inc. v. City of Dallas*, 493 U.S. 215, 252 (1990) (stating that communities cannot close down "porn-shops" by banning pornography because pornography is protected as long as it does not cross the distant line of obscenity). *See also N.Y. v. Ferber*, 458 U.S. 747 (1982) (stating that child pornography is distinct from pornography involving adults and is unprotected like obscenity).

16. 413 U.S. 15 (1973).

17. 354 U.S. 476 (1957).

18. *Id.* at 489.

19. *Miller*, 413 U.S. at 24.

or describes, in a patently offending way, sexual conduct specifically defined by the applicable state law."[20] Third, the fact-finder must find "whether the work, taken as a whole, lacks serious literary, artistic, political, or scientific value."[21] Thus the Court narrowed the scope of First Amendment by allowing the prohibition of works that contained some value, because so long as the work, taken as a whole, lacked serious value, it would be unprotected. The concept of value as well as social norms and morality seem to be important concerns of the U.S. obscenity law.

On the other hand, child pornography law shows a dramatic shift from the concerns of obscenity law to the issue of harm. In the last fifteen years, the Supreme Court has upheld two state statutes explicitly prohibiting child pornography.[22] The Court has indicated a number of reasons for providing greater freedom to the states, focusing on the government's compelling interests in protecting children, by curtailing the distribution of sexually explicit material depicting children and destroying the market for child pornography.[23] If the material is based on the actual sexual abuse of a child, it is illegal, and it does not matter what the community standards are, or if the material has serious literary, artistic, or social value. For example, *Ferber* states that the question under the *Miller* test of whether a work, taken as a whole, appeals to the prurient interest of the average person bears no connection to the issue of whether a child has been physically or psychologically harmed in the production of the work."[24] Thus it is suggested that the question of "harm" is almost dispositive.[25]

The concept of harm is the crux also in the arguments of anti-pornography feminists such as Katherine A. MacKinnon, who introduced the issue of gender in the debate regarding obscenity and pornography. MacKinnon disregards the measures of artistic or political value but instead emphasizes that the harm caused by pornography to the equal

20. *Id.*

21. *Id.*

22. *See Ferber*, 458 U.S. 747 (holding that child pornography is not entitled to First Amendment protection provided the conduct is defined by state law); *Osborne*, 495 U.S. 103 (holding that state's prohibition of the possession and viewing of child pornography was in compliance with First Amendment principles).

23. *See Ferber*, 458 U.S. at 756-57 (noting that a "[s]tate's interest in 'safeguarding the physical and psychological well-being of a minor' is 'compelling.'") (quoting *Globe Newspaper Co. v. Superior Court*, 457 U.S. 596, 607 (1982)).

24. 458 U.S. at 761.

25. The Court also states, "It is irrelevant to the child (who had been abused) whether or not the material. . . has a literary, artistic, political or social value." *Id.* Justice O'Connor, in her concurring statement, notes that "the audience's appreciation of the depiction is simply irrelevant to New York's asserted interest in protecting children from psychological, emotional, and mental harm." *Id.* at 775.

rights of women must outweigh First Amendment considerations.[26] MacKinnon argues that while obscene materials probably do little harm to women, pornography causes attitudes and behaviors of violence and discrimination that define the treatment and status of women. According to her, pornography eroticizes inequality and degrades women, and women are harmed by the sexual culture in which the objectification and subordination of women are legitimized.

While both the Court and feminists rely heavily on the harm of child pornography, there has been a debate regarding whether the studies currently available provide enough evidence to support their arguments. The next Part will explore different kinds of harm to children and various empirical studies that have attempted to assess it.

## IV. EMPIRICAL EVIDENCE REGARDING HARM

The most immediate victim of child pornography is considered to be the child depicted in photographs. Child pornography case law has focused on the state's interest in preventing or punishing harm to the specific child photographed or whose image was being disseminated.[27] Speculations about this kind of harm have thier basis in insight, common sense, personal experience and observation. Also, the U.S. Attorney General's Commission ("Commission") on Pornography concluded in 1986 that minors abused through participation in child pornography retained an indelible mark on their psyches.[28] The Commission reported that the effects of involvement in child pornography include depression, suicidal thoughts, feelings of shame, guilt, alienation from family and peers, and massive acute anxiety within the child model.[29] The Commission further found that all victims of child pornography would suffer the agony of knowing that a record of their sexual abuse was in circulation.[30]

In addition, there is an argument that children can be more easily lured into sexual acts if they were exposed to materials in which other

26. *See* Catherine A. MacKinnon, *Feminism Unmodified: Discourses of Life and Law* (Harvard U. Press 1987).

27. *See Ferber*, 458 U.S. at 758 (stating that "[t]he legislative judgment, as well as the judgment found in the relevant literature, is that the use of children as subjects of pornographic materials is harmful to the physiological, emotional, and mental health of the child."). The Court also stated that "[t]he materials produced are a permanent record of the children's participation and the harm to the child is exacerbated by their circulation." *Id.* at 759. *See also Osborne*, 495 U.S. at 111 (noting that "[t]he materials produced by child pornographers permanently record the victim's abuse. The pornography's continued existence causes the child victim's continuing harm by haunting the children in years to come").

28. Final Report, *supra* n. 3, at 613-14.

29. *Id.*

30. *Id.*

children are similarly situated or posed.[31] The Final Report noted that child pornography is often used to lure new victims into engaging in sexual conduct.[32] The Commission explained that adults frequently show minors' pictures of other minors engaged in sexual activity with the aim of persuading the recipient that if other minors are doing it, then the behavior must be acceptable.[33]

Although the child pornography cases seem to be less concerned with the anti-social effects of pornographic materials than with the harm to the children being photographed, some feminists have encompassed the notion of social harm to the issue of pornography. The first category of social harm done by viewers of pornography involves the use of pornography as a blueprint for sexual violence and crimes against children. Research surrounding the behavioral and attitudinal effects of pornography on the men and women who use it has been the source of much controversy. Regarding a causal or correlational relationship between sexually explicit speech and social deleterious behavior, there seems to be a direct distinct division of thought over whether such a relationship exists. The reports conducted by two separate presidential commissions reflect this division clearly. In 1970, the President's Commission on Obscenity and Pornography concluded that exposure to erotic materials was not a factor in the causation of sex crimes,[34] but that, to a degree, exposure to explicit sexual materials could be a source of adult entertainment, information, and constructive communication about sexual matters in marriage.[35] In stark contrast, the 1986 Commission found that sexually violent materials, and material depicting sexual activity without violence but exhibiting degradation, submission, domination, or humiliation, demonstrated negative effects and caused harm morally, ethically, and culturally.[36] On the other hand, many social scientists objected to its procedures, its reasoning, and its recommendations, specially regarding the nature of pornography's harms.[37]

Evidence concerning the harms related to behavioral effects employ a variety of research methods. Some data are anecdotal, including reports by victims, police, and mental health professionals indicating that pornography is often a model for sexual assault. But although such ac-

31. The Court in *Osborne* acknowledged that pedophiles were using child pornography to coax and seduce minors into sexual activity. 495 U.S. at 109.

32. *Final Report, supra* n. 3, at 413-14.

33. *Id.* at 649.

34. *Report of the Commission on Obscenity and Pornography*, 27 (1970).

35. *Id.* at 53.

36. *Final Report, supra* n. 3, at 323-35.

37. For critical review of the evidence, *see* Frederick Schauer, *Causation Theory and the Causes of Sexual Violence*, 1987 Am. B. Found. Research. J. 737. *See also* Deborah Rhode, *Justice and Gender* 268-89 (Harvard U. Press 1989).

counts might suggest their cumulative impact, they do not provide an indication of the frequency with which pornography serves this function.[38] Nor do they indicate how important pornographic materials are in causing sexual aggression, other than shaping the forms of the aggression.[39]

The Final Report concluded that there was strong support for "the hypothesis that substantial exposure to sexually violent materials. . . bears a causal relationship to acts of sexual violence and, for some subgroups, possibly unlawful acts of sexual violence."[40] However, the Final Report shows that a causal relationship exists under a probabilistic account, and it does not entail the conclusion that the cause is the greatest one, or that the cause increases the likelihood of the effect in an individual case.[41] In addition, this conclusion is based on laboratory studies which found that exposing male subjects to depictions of sexual violence against women results in lowered sensitivity to the harms of rape and a greater expressed willingness to commit it. Yet the extent to which the attitudinal change affects behavior remains unclear.[42]

This more indirect effect involving pornography's effects on attitudes toward sexual violence and sexual subordination is the one that feminists consider the most pervasive and powerful, yet the most difficult to prove with empirical studies. MacKinnon's notion of harm to women extends to women as a group, and to the prevalent social environment, which makes it almost impossible to discern the direction and scope of causal or associational link between the pornography and social harm. In the case of child pornography, an indirect harm to children may include de-sensitization toward child abuse, society's possible tolerance toward sexual acts with children, and perception of children as sexual beings. The role of pornography in the construction of society's sexual culture would be very hard to determine with any magnitude of social science research.

The difficulty in determining the nature and scope of harm is compounded by the need to recognize the positive effects of pornography. Carlin Meyer, for example, emphasizes positive aspects of cybersexual expression for children not only from a free speech perspective, but also discusses how the availability of sexual images on the Internet, including sexual words and images pertaining to children, can be positive from the perspectives of children's welfare, health, safety, and physical and psy-

38. Rhode, *supra* n. 37, at 268.

39. *Id.*

40. *Final Report*, *supra* n. 3, at 326.

41. Schauer, *supra* n. 37, at 742.

42. Rhode, *supra* n. 37, at 268.

chological well-being.[43] Therefore, even if evidence of negative effects of child pornography becomes reasonably conclusive, it still needs to be considered against possible positive aspects of pornography to justify regulation.

The critical question is not whether there is some link between pornography and harm, but whether it is strong enough to justify regulation. But empirical evidence in this regard seems to be inconclusive. Many studies have been conducted, only to generate contradicting results. All social scientific studies are subject to limitations and problems inherent in surveys, face-to-face interviews, and laboratory experiments, although some are more problematic than others.[44] Moreover, different readings of the evidence and different degrees of skepticism about what it shows, rather than objective scientific evidence that provides the same meaning to everyone, influence the opinion regarding how much and what kind of harm is enough to justify regulation. Anyone who attempts to favor or oppose pornography is able to find some kind of evidence to support his or her argument.[45]

The uncertainty of the empirical evidence of pornography's harm to children is not induced only by the quest for so-called objective evidence of pornography's effect. Richard S. Randall, in his book about pornography and taboo, asks whether clear proof on one side or the other would make much difference in the perceptions of most persons or in public opinion, and suggests that it likely would not.[46] According to Randall, in the President's Commission's national survey of attitudes and opinion, taken in 1970, respondents were asked whether their views on control would be modified if there were clear evidence about effects. Fewer than half indicated flexibility on this point. Forty-one percent said their views would not change, while fifteen percent had no opinion or did not answer. Of those favoring restraints on pornography, fewer than a third would

43. Carlin Meyer, *Reclaiming Sex From Pornographers: Cybersexual Possibilities*, 83 Geo. L.J. 1969 (1995).

44. For discussion of empirical and methodological difficulties of these studies and review of efforts of social science to assess the impact of pornography, *see* Richard S. Randall, *Freedom and Taboo: Pornography and the Politics of a Self Divided* (U. of Cal. Press 1989).

45. An example of different assessment of available scientific evidence is demonstrated in opinions of an obscenity case, *Memoirs of a Woman of Pleasure v. Attorney General of Massachusetts*. 383 U.S. 413 (1966). Justice Douglas, in his concurring opinion, stated that "perhaps the most frequently assigned justification for censorship is the belief that erotica produce antisocial sexual conduct. But such relationship has yet to be proven." *Id.* at 431. But Justice Clark, in his dissenting opinion, stated, "psychological and physiological studies clearly indicate that many persons become sexually aroused from reading obscene material. While erotic stimulation cause by pornography may be legally insignificant in itself, there are medical experts who believe that such stimulation frequently manifests itself in criminal sexual behavior or other antisocial conduct." *Id.* at 451.

46. Randall, *supra* n. 44, at 114.

change their views even "if it were clearly demonstrated that materials dealing with sex had *no harmful effects*."[47]

Randall suggests that these findings confirm that the views many persons have of pornography's effects may be partly irrational, and the utility of knowledge itself is questionable.[48] Harmful effects are much more likely to be seen as experienced by others than by oneself, and even if pornography were shown to be not harmful or less harmful than commonly supposed, these views would resist change. Then, Randall suggests, belief that pornography is harmful, particularly to other persons,[49] may be an important means of avoiding disturbing confrontations with the self while also offering apparent rational ground for supporting external controls.[50] If, as is suggested, the need and desire to regulate pornography are based more on the feeling that it is disturbing than on the knowledge that it is harmful, then is the regulation of child pornography not as much about preventing harm as about exercising control? In an effort to clarify this question, the specific kind of harm that computer-generated child pornography may cause to children will be analyzed.

## V. COMPUTER-GENERATED CHILD PORNOGRAPHY AND HARM TO CHILDREN

The analysis of the nature and scope of harm caused by computer-generated pornographic images of children is conducted against the following question: What difference does the technological development make to the general argument regarding pornography and harm?

The first reason for prohibiting child pornography that *Ferber* states is that the use of children as subjects of pornographic materials is harmful to the physiological, emotional, and mental health of the child. When there is no child involved in producing pornographic material, this particular kind of harm is not involved. The current precedents do not prohibit adults posing as a child, and *Ferber* explicitly suggested that if live performances and photographic reproductions of children engaged in lewd sexual conduct were necessary for literary or artistic value, "a person over the statutory age who perhaps looked younger could be utilized." Also, literary description of child pornography, or even paintings

47. President's Commission, *Technical Report*, vol. 6, 91-92 (emphasis in survey question) [hereinafter *Technical Report*].

48. Randall, *supra* n. 44, at 114. For example, harmful effects are much more likely to be seen as experienced by others than by oneself, and even if pornography were shown to be not harmful or less harmful than commonly supposed, these views would resist change.

49. In the opinion survey conducted by the President's Commission in 1970, there was a great disparity between perceived effect on oneself and presumed effect on others. *Technical Report*, *supra* n. 47, vol. 6, at 54-59.

50. *Id.* at 114.

of children's nudes are not prohibited. In *Ferber*, it was suggested that "simulation outside of the prohibition of the statute could provide another alternative." Therefore, if the primary concern is potential harm to the children involved with the pornographic production, when the animated images do not involve any real children, prohibiting the images would not be necessary.

But whether and how the computer-generated images of child pornography harm children by influencing those who watch them is a source of controversy.[51] While the images could still function as a blueprint for sex crimes on children, the fact that it is not real may mediate the willingness of a viewer to copy the behavior, when it is recognized by the viewer. But the computer-generated images may be so close to photographs of real children that they may not be distinguishable to the viewers, especially to children. In such a case, the possibility of using computer-generated images as a blueprint form of sexual crime, and the possibility of being lured to act as depicted in the images will not be different just because the images do not involve real children. Therefore, the main question regarding the behavioral effects of computer-generated images of child pornography is the extent to which the real act and images may be recognized, and the ability of the viewers to distinguish between the reality and imagery.

The attitudinal effects of computer-generated child pornography may also occur. As suggested in laboratory experiments, those who are exposed to child pornography might be de-sensitized toward engaging in sexual acts with children. But the extent to which this de-sensitization would actually translate into behavioral change is yet to be known. Anti-pornography feminists tend to be concerned about the attitudinal change itself as much as the resulting sexual crime. Again, the de-sensitization toward the sexual abuse of children may occur to a lesser degree if the viewer recognizes that the images are not real. But it is important to consider that children may not be harmed by the attitude itself, unless it results in sexual conduct. Although anti-pornography feminists may be concerned with harm to children as a group, it is still difficult to identify any harm unless there are specific children who end up being sexually molested as a result of the attitudinal change. If looking at children as sexual beings and thinking that engaging in sexual acts with children is

51. For review of opposing arguments regarding the regulation of child pornography on the Internet, *see Regulating the Internet; Should Pornography Get a Free Ride On the Information Superhighway? A Panel Discussion*, 14 Cardozo Arts & Ent. L.J. 343 (1996). Barbara Bennet Woodhouse asserted that children can still be victimized even if a particular child is not photographed, and suggested the possibility of harm to all children from sexual exploitation of images of children. *Id.* at 360-61. But Nadine Strossen argued that there is a very important distinction between protecting actual children from illegal exploitation in sexually explicit productions, and mere words and images. *Id.* at 368.

not so bad after all itself is considered harmful to children, prohibiting pornographic materials because of this reason would amount to be an attempt to control thoughts rather than an attempt to prevent harm.

For example, there may be some people who would not otherwise engage in sexual acts with children but now feel that they are allowed to do so after being exposed to pornographic images because they began to see children more as sexual beings than before. But at the same time, there may be someone who changed his opinion about children as sexual beings or not after watching child pornography, but still did not engage in any sexual conduct with a child. Thus, the alleged harm caused by attitudinal change seems to be based on an assumption that it will cause anti-social behavior, which may or may not be true in a specific incident. This suggests an importance of distinguishing between general and specific harm.

Debra D. Burke notes that all other less protected speech other than obscene and pornographic speech has been connected to a specific harm, such as falsely shouting fire in a theater and causing a panic, instead of the assumption that shouting "fire" would cause a panic and prohibiting the utterance of the word.[52] In the case of pornography, it may be true that exposure to child pornography "tends to" change the viewer's attitude, and the attitudinal change "tends to" influence the viewer's behavior. However, this tendency in general does not provide any guidance about a particular attitude or behavior. Therefore, although pornography might result in a generalized harm to society, specific harm from child pornography will vary from incident to incident. In that sense, if not tailored to specific harm that is actually caused by the computer images, prohibiting computer-generated images based on generalized effect on social attitude (which is what feminists argue) would be controlling ideas rather than conduct.[53]

It has been suggested that computer-generated images of child pornography do not involve harm to a specific child being photographed, and that their anti-social effects do not seem to vastly differ from child pornography that poses real children. The potentially different effects are speculated from the possibility that the recognized distinction between real and imagery, between conduct of a child and ideas about the conduct, plays a role in mediating the behavioral and attitudinal effects. But current arguments about harm of child pornography do not require any nexus to be established between ideas and conduct. An important

52. Burke, *supra* n. 14, at 130.

53. As such, MacKinnon's anti-pornography statute was viewed as thought control. The Indiana pornography ordinance that was modeled after MacKinnon's ordinance was struck, because harm caused by "mental intermediation" but not "action" should be protected. *Am. Bookseller's Assn. v. Hudnut*, 771 F.2d 323, 327-28 (7th Cir. 1985) (*quoting W. Va. St. Bd. of Educ. v. Barnette*, 319 U.S. 624, 542 (1943)).

dimension of what people do with the pornographic images, not what images are out there, nor whether the images are real or animated, seems to be missing.

## VI. CONCLUSION

The most compelling rationale behind child pornography law is based on the concept of harm. The concept of harm advanced by the attempt to regulate computer-generated images of child pornography extends to include purely attitudinal effects as well as behavioral effects. Analysis of supporting evidence and its use suggests not only that the empirical evidence is inconclusive and uncertain, but also that beliefs, feelings, and opinions about the discomfort regarding pornographic materials, rather than the knowledge of objective evidence of harm, are the central nexus to people's stance on the regulation of pornography. Anti-social effects of computer-generated images of child pornography may be mitigated by the recognized distinction between images and real conduct. The problem of distinguishing between reality and imagery is compounded in the context of computer-generated child pornography. It seems to be important to decide whether harm can be created by images themselves or only through conduct. Or maybe, obtaining so-called scientific knowledge, or any kind of knowledge regarding harm is less critical than coming up with an agreement as to what kind of harm will be recognized in the child pornography regime.

The problem associated with preventing harm that occurs in a dimension of ideas (attitudes) as well as of conduct (behavior) suggests a problem in an attempt of child pornography law to ban conduct (pornographic act) while not prohibiting ideas and expression (pornographic images). Some argue that the rationale of considering "harm" the most important factor in pornography law while the value of speech is the central issue in obscenity standards is related to the distinction between speech and conduct. The Supreme Court stated that the reason child pornography laws have withstood constitutional scrutiny is because they have been prohibitions on conduct rather than content.[54] Obscenity, it is argued, is not properly a class of protected speech because it contributes nothing to the "unfettered exchange of ideas."[55] Frederick Schauer also points out that the use of pornography may be treated conceptually as purely physical rather than mental experience.[56] MacKinnon considers

54. *See Osborne*, 495 U.S. 103, 112-14 (1990).

55. *Roth v. U.S.*, 354 U.S. 476, 512 (Douglas, J., dissenting).

56. Frederick Schauer, *Speech and "Speech" - Obscenity and "Obscenity": An Exercise in the Interpretation of Constitutional Language*, 67 Geo. L. J. 899, 932. Schauer states that the mere fact that in pornography the stimulating experience is initiated by visual rather than tactile means is irrelevant if every other aspect of the experience is the same. *Id.*

pornography more of acting rather than speech. She argues that pornography is not harmless fantasy, but a form of forced sex.[57] However, as it is difficult to distinguish between acts and images, it is not so simplistic to define where the speech ends and where the act starts.

In this context, trying to deal with harm caused by attitude as well as by conduct raises a concern regarding how the harm can be prevented. Then harm may be caused by speech as well as by pornographic non-speech. And where does the visual depiction of pornographic acts fall? Is it speech or non-speech? Schauer pointed out that a legislature restricted solely to dealing with non-speech may be doomed to failure in trying to make society safer or more moral, yet no other solution is possible.[58] In other words, even if child pornography is regulated successfully, harm to children will not be completely prevented. There will be people who are influenced by other materials than child pornography and engage in sexual activities with children. There will be people who view child pornography and not engage in sexual activities with children. If the primary concern is harm, whether the conduct was affected by pornographic or other materials or no materials but the person's own imagination, does not matter any more. In that context, regulation of computer-generated child pornography may make the society more moral, but not necessarily safer for children. Therefore, the important question is who or what we are trying to protect by child pornography law. It seems that we can either prevent harm to children, or protect speech, but cannot do both, unless the concept of harm recognized by child pornography itself changes.

57. MacKinnon, *supra* n. 27, at 148.

58. Schauer, *supra* n. 56, at 933.