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Restitution for Child Pornography: Reframing a System for Victims Harmed by Too Many

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Restitution for Child Pornography: Reframing a System for Victims Harmed by Too Many

MacKenzie Durkin*

Courts have commented that victims of child pornography suffer harm that is like “a thousand cuts.” This characterization is fitting because once images of a victim’s childhood sexual abuse are on the internet, the images are there forever. As a result, these victims are constantly revictimized by the knowledge that their images are being trafficked and consumed across the world.

*This Comment analyzes the current framework for compensating victims through criminal restitution. Victims of all federal crimes, including child pornography offenses, are entitled to restitution for the full amount of their losses. However, this standard became complicated with child pornography because of the multitude of offenders responsible for causing the victim’s harm. In *Paroline v. United States*, a defendant challenged the Fifth Circuit’s imposition of joint and several liability for the victim’s losses. The Supreme Court reversed and held that district courts should order restitution in an amount which reflects “the defendant’s relative role in the causal process underlying the victim’s general losses.” In determining this relative role, the Court listed several factors to consider. The *Paroline* framework has garnered criticism for its difficulty to apply and legal inconsistency. Unlike any other federal crime victim, victims of child pornography are not guaranteed restitution for their full losses.*

*Despite complaints by lower courts about the challenges in applying the *Paroline* framework, Congress codified the *Paroline* language in the *Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018*. While this Act is a step forward, it has shortcomings. At the end of the day, victims are still left bearing the costs of their own victimization. Thus, this Comment proposes taking Justice Sotomayor’s solution outlined in her dissenting opinion in *Paroline*. This proposal charts what joint and several liability would look like for child pornography offenses—which are a unique crime that is particular suited for this treatment because the number of offenders. Instead of restitution as a “pay-per-view,” restitution can be a means of*

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recognizing the victim's humanity in the criminal justice system and a way to help mend the thousand cuts.

I. INTRODUCTION	559
II. BACKGROUND	564
A. <i>The Criminalization and Initial Obliteration of Child Sexual Abuse Imagery</i>	564
B. <i>Child Sexual Abuse Imagery is a Growing Global Issue in the Internet Age</i>	569
1. <i>The Impact of Child Sexual Abuse Imagery on Victims</i>	569
2. <i>The Role of the Internet in the Growth of the Child Sexual Abuse Imagery Industry</i>	570
3. <i>The Global Magnitude of the Child Sexual Abuse Imagery Industry</i>	575
C. <i>Mandatory Restitution for Victims of Child Sexual Abuse Imagery</i>	577
D. <i>The 1/n Calculation</i>	578
E. <i>Paroline v. United States</i>	579
1. <i>Factual Background</i>	580
2. <i>The Causation Issue</i>	581
3. <i>The “Relative Role in the Causal Process”</i>	583
4. <i>Criticism of the Impossible Statutory Construction</i>	584
5. <i>A Proposal for Joint and Several Liability</i>	586
F. <i>The Process for Receiving Restitution</i>	588
III. DISCUSSION.....	589
A. <i>The Ninth and Tenth Circuits</i>	589
B. <i>The Seventh and Fourth Circuits</i>	591
C. <i>The Fifth, Eighth, Eleventh, and District of Columbia Circuits</i>	593
D. <i>The Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018</i>	598
IV. ANALYSIS	600
A. <i>Disaggregation Conflicts with Paroline</i>	600
B. <i>The Paroline Framework Is Unworkable</i>	607
C. <i>The Shortcomings of The New Amy, Vicky, and Andy Act</i>	613
V. PROPOSAL	615
A. <i>Joint and Several Liability</i>	616
B. <i>Periodic Payment Schedules</i>	619

C. <i>A Cause of Action for Contribution</i>	620
D. <i>The Eighth Amendment</i>	621
E. <i>Arguments Against Restitution</i>	623
VI. CONCLUSION.....	625

I. INTRODUCTION

Judges have described the harm that victims of child sexual abuse imagery¹ suffer as “death by a thousand cuts,”² referring to the twofold harm that victims of child sexual abuse imagery suffer.³ First, these victims have been harmed by the physical sexual abuse that was recorded.⁴ Second, they are harmed by the viewership and continuous circulation of those images.⁵ Under the Mandatory Victims Restitution Act, victims of certain federal crimes, including victims of child

1. The commonly used term for these images is child pornography. *Child Sexual Abuse Material (CSAM): Overview*, NAT’L CTR. MISSING AND EXPLOITED CHILD., <http://www.missing-kids.com/theissues/sexualabuseimagery> [https://perma.cc/5XU5-6QZS] [hereinafter NCMEC Overview] (last visited Sept. 29, 2019). However, experts have objected to this terminology because pornography of adults is legal and the term does not accurately capture what is depicted in the images. *Id.* Because the images portray the sexual abuse and exploitation of children who cannot consent, experts opted to refer to the images as child sexual abuse imagery. *Id.* Except when discussing a criminal statute, this Comment will use the term child sexual abuse imagery.

2. See *Paroline v. United States*, 572 U.S. 434, 477 (2014) (Sotomayor, J., dissenting) (“At bottom, Congress did not intend § 2259 to create a safe harbor for those who inflict upon their victims the proverbial death by a thousand cuts.”). “Death by a thousand cuts” derives from the harshest form of execution used in China until 1905 called “ling-chi” or “lingchi chusi.” HENRY NORMAN, *THE PEOPLES AND POLITICS OF THE FAR EAST* 224–25 (1895); TIMOTHY BROOK, et al., *DEATH BY A THOUSAND CUTS* 11 (2008).

3. See, e.g., *Paroline*, 572 U.S. at 440–41 (explaining that one of the defendant’s victims wrote in her victim impact statement that she was abused by her uncle when she was eight and nine years old, entered therapy, and moved past the trauma, but regressed when she was notified that images of the abuse had been some of the most circulated series of child sexual abuse images); see also *United States v. Campbell-Zorn*, No. CR 14-41, 2014 WL 7215214, at *3–4 (D. Mont. Dec. 17, 2014) (explaining the unclear demarcation between the physical abuse and the abuse caused by the continuous circulation of the images).

4. Audrey Rogers, *Child Pornography’s Forgotten Victims*, 28 PACE L. REV. 847, 853–54 (2008) (explaining the physical injuries that the victims incur from the physical sexual abuse); see, e.g., *Paroline*, 572 U.S. at 440 (noting that after the physical abuse ended, the victim underwent therapy for two years and by all appearances, returned “back to normal”).

5. Rogers, *supra* note 4, at 853–54 (noting the revictimization of victims through the images depicting their sexual abuse); see also *Paroline*, 572 U.S. at 440–41 (“Every day of my life I live in constant fear that someone will see my pictures and recognize me and that I will be humiliated all over again. It hurts me to know someone is looking at them—at me—when I was just a little girl being abused for the camera. I did not choose to be there, but now I am there forever in pictures that people are using to do sick things. I want it all erased. I want it all stopped. But I am powerless to stop it just like I was powerless to stop my uncle. . . . It’s like I am being abused over and over and over again.”) (quoting the victim’s witness impact statement); see also SURVIVORS’ SURVEY: EXECUTIVE SUMMARY 2017, CANADIAN CENTRE FOR CHILD PROTECTION 29 (2017), https://protectchildren.ca/pdfs/C3P_SurvivorsSurveyExecutiveSummary2017_en.pdf [https://perma.cc/36NB-TK97] (providing statistics on victim harm).

pornography offenses, are entitled to restitution for the full amount of their losses.⁶ However, once the images are disseminated on the internet, district courts struggle to apply the framework announced by the Supreme Court in *Paroline v. United States* and later codified in the Amy, Vicky, and Andy Act of 2018. *Paroline* and the Act lay out requirements that victims of child pornography must satisfy in order to recover restitution, which are unique to victims of child pornography offenses compared to victims of all other federal crimes.⁷ *Paroline* and the Act task district courts with setting a restitution amount that reflects the relative role of the defendant—one of an unknowable number of total offenders—in causing the victim’s harm.⁸ This Comment will focus on the framework under which victims are currently compensated and propose a new system which imposes joint and several liability on all defendants.⁹

The criminalization of child pornography is a modern innovation that emerged in the late 1970s.¹⁰ By the early 1990s, the child sexual abuse imagery industry was virtually obliterated after heightened enforcement of new laws.¹¹ However, the child sexual abuse imagery industry drastically evolved with the boom of the internet age.¹² Since the advent

6. Mandatory Victims Restitution Act, 18 U.S.C. § 3663A.

7. See generally *Campbell–Zorn*, 2014 WL 7215214 (complaining about the difficulties in applying the *Paroline* framework when setting restitution amounts for individual offenders); see also *United States v. Rothenberg*, 923 F.3d 1309, 1328–35 (11th Cir. 2019).

8. See generally, *Paroline*, 572 U.S. at 437 (holding that defendants are liable for their “relative role” in the causal process underlying the victim’s losses and outlining factors for district courts to consider when setting a restitution amount); see also *United States v. Sainz*, 827 F.3d 602, 605 (7th Cir. 2016) (describing how the *Paroline* court handled the “difficult, nearly intractable problem” of setting a monetary amount for restitution).

9. “When, under applicable law, some persons are jointly and severally liable to an injured person, the person may sue for and recover the full amount of recoverable damages from any jointly and severally liable person.” RESTATEMENT (THIRD) OF TORTS § 10 (AM. L. INST. 2000). “Each person who commits a tort that requires intent is jointly and severally liable for any indivisible injury legally caused by the tortious conduct.” *Id.* § 12.

10. See *infra* Section II.A (detailing the criminalization of child sexual abuse imagery).

11. VIRGINIA M. KENDALL & T. MARKUS FUNK, CHILD EXPLOITATION AND TRAFFICKING: EXAMINING GLOBAL ENFORCEMENT AND SUPPLY CHAIN CHALLENGES AND U.S. RESPONSES 81 (2nd ed. 2017) (explaining that child sexual abuse imagery was just regulated as obscene speech prior to 1977); see also James R. Marsh, *Masha’s Law: A Federal Civil Remedy for Child Pornography Victims*, 61 SYRACUSE L. REV. 459, 460 (2011) [hereinafter Marsh, *Masha’s Law*] (noting that child pornography has only been criminalized for thirty years).

12. Cassell Bryan-Low, *Internet Transforms Child Pornography Into Lucrative Criminal Trade*, WALL ST. J. (Jan. 17, 2006, 12:01 AM), <https://www.wsj.com/articles/SB113746679863248267> [<https://perma.cc/VT5S-BDD4>] (explaining that law enforcement efforts in the 1980s obliterate the child pornography industry); see also Emily Bazelon, *The Price of a Stolen Childhood*, N.Y. TIMES MAG. (Jan. 24, 2013), https://www.nytimes.com/2013/01/27/magazine/how-much-can-restitution-help-victims-of-child-pornography.html?hpw&_r=0 [<https://perma.cc/Q5Q3-8TWB>] (explaining that changes in the law and increased law enforcement led to a decrease in the distribution and production of child sexual abuse imagery).

of the internet, the child sexual abuse imagery market has reemerged and developed into a global, multibillion-dollar industry.¹³

Recognizing the harm inflicted on victims of crime, Congress enacted the Mandatory Victims Restitution Act of 1996 to try to make victims of crime whole.¹⁴ Restitution compensates victims for the losses caused by an offender's criminal conduct.¹⁵ Section 2259 mandates that district courts order restitution for child pornography offenses under the Mandatory Victims Restitution Act.¹⁶ Due to the number of child pornography offenders, issues arose in restitution hearings regarding the causation standard and standard for determining an amount for restitution.¹⁷

In *Paroline v. United States*, the Supreme Court confronted the causation standard in the mandatory restitution statute for child pornography offenses, § 2259, and created a framework for setting a restitution amount.¹⁸ In the 5–4 decision, the Supreme Court held that restitution amounts should be based on “the defendant’s relative role in the causal process that underlies the victim’s general losses,”¹⁹ and created guideposts for district courts to consider when setting an amount

13. Jeremy Prichard et al., *Internet Subcultures and Pathways to the Use of Child Pornography*, 27 COMPUT. L. SEC. REV. 585, 587 (2011) (“Asides from the accessibility of child pornography online, the anonymity afforded by the Internet facilitates onset.” (citation omitted)); see also Michael H. Keller & Gabriel J.X. Dance, *The Internet Is Overrun with Images of Child Sexual Abuse. What Went Wrong?*, N.Y. TIMES, <https://www.nytimes.com/interactive/2019/09/28/us/child-sex-abuse.html> [<https://perma.cc/L69W-CAY2>] (last visited Dec. 21, 2020) (noting the growth of child sexual abuse materials on the internet).

14. See generally Mandatory Victims Restitution Act, 18 U.S.C. §§ 3663A–3664 (ordering restitution to victims of certain crimes); see also 18 U.S.C. § 2259 (mandating restitution for victims of child pornography offenses).

15. 18 U.S.C. § 2259 (stating that victims can receive compensation for medical losses, transportation costs, lost wages, rehabilitation, attorney fees and other costs incurred, and all other relevant losses incurred by the victim); see also *Paroline v. United States*, 572 U.S. 434, 443 (2014) (further explaining § 2259 as it relates to *Paroline*).

16. 18 U.S.C. § 2259 (ordering enforcement under §§ 3663A–3664); see also *Paroline*, 572 U.S. at 443 (quoting 18 U.S.C. § 2259(b)(4)(A); 18 U.S.C. § 3664(e)) (noting that under § 2259, “[t]he issuance of a restitution order under this section is mandatory,” and that order “shall be issued and enforced in accordance with section 3664”).

17. See *Paroline*, 572 U.S. at 439, 443 (remarking that the Court granted certiorari to resolve a split on the causation standard and standard for ordering an amount of restitution for child pornography offenses); see generally *United States v. Gamble*, 709 F.3d 541 (6th Cir. 2013) (discussing the complicated causation standard debate).

18. See generally *Paroline*, 572 U.S. 434; see also Paul G. Cassell & James R. Marsh, *The New Amy, Vicky, and Andy Act: A Positive Step Towards Full Restitution of Child Pornography Victims*, 31 FED. SENT’G REP. (forthcoming), <https://ssrn.com/abstract=3317733> [<https://perma.cc/B93Q-NA2G>] (explaining Justice Kennedy’s analysis of proximate causation and the *Paroline* framework).

19. *Paroline*, 572 U.S. at 458; *United States v. Galan*, 804 F.3d 1287, 1290 (9th Cir. 2015) (explaining the *Paroline* framework).

for restitution.²⁰ The Amy, Vicky, and Andy²¹ Child Pornography Victim Assistance Act of 2018 amended § 2259,²² codifying the “relative role” language from *Paroline* into the standard for setting amounts for restitution.²³

Since *Paroline*, the federal circuits have split on the issue of disaggregation when determining the defendants’ “relative role.”²⁴ Defendants are now arguing that courts must disaggregate losses before setting an amount for the restitution award.²⁵ Disaggregation requires courts to separate (or disaggregate) the losses caused by the physical abuse from losses caused by subsequent distribution and possession of the images before the court sets an amount for restitution.²⁶ Offenders advocating for disaggregation argue that the district court must apportion the defendant’s contribution to the victim’s harm only after taking away the harm caused by the initial physical abuse.²⁷ This is important because

20. *Paroline*, 572 U.S. at 460 (listing various factors for district courts to consider in this inquiry); see also *United States v. Dillard*, 891 F.3d 151, 161 (4th Cir. 2018) (discussing the *Paroline* factors).

21. Amy, Vicky, and Andy are the pseudonyms of three victims of heavily trafficked series of child sexual abuse imagery, who now advocate for victims. When discussing victims, courts refer to the victims by pseudonyms to protect their privacy. Melanie Reid & Curtis L. Collier, *When Does Restitution Become Retribution?*, 64 OKLA. L. REV. 653, 656 n.18 (2012).

22. See generally Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018, 18 U.S.C. § 2259 (amending 18 U.S.C. § 2259 (1994)).

23. *Id.* (“[T]he court shall order restitution in an amount that reflects the defendant’s relative role in the causal process that underlies the victim’s losses . . .”).

24. See generally *United States v. Rothenberg*, 923 F.3d 1309 (11th Cir. 2019) (holding that there is no disaggregation requirement); *United States v. Halverson*, 897 F.3d 645 (5th Cir. 2018); *United States v. Bordman*, 895 F.3d 1048 (8th Cir. 2018); *United States v. Monzel*, 930 F.3d 470 (D.C. Cir. 2019); but see *Galan*, 804 F.3d at 1291 (holding that there is a disaggregation requirement); *United States v. Dunn*, 777 F.3d 1171, 1181–82 (10th Cir. 2015).

25. *Halverson*, 897 F.3d at 654 n.4 (“Halverson argues that many of the psychological reports submitted by the victims did not separate the losses caused by Halverson from the losses caused by other abusers . . .”); *Bordman*, 895 F.3d at 1056 (“Third, Bordman argues that the district court abused its discretion by failing to disaggregate the harm caused by the initial abuse from the harm caused by his later possession.”); *Rothenberg*, 923 F.3d at 1314 (“Rothenberg argued, by contrast, that the starting point should be ‘apportionment between the original abuser of the child, versus the distributor, and later, possessor of the pornography,’ which Rothenberg referred to as ‘disaggregation.’ Rothenberg asserted that this disaggregation requires two steps: first, the district court must separate the harm caused by the original abuser from that caused by later distributors and possessors; and second, the district court must separate the harm caused by the defendant from that caused by other distributors or possessors.”); *Monzel*, 930 F.3d at 480 (“Specifically, he objects that the government failed . . . to disaggregate Amy’s initial-abuse losses from her general loss figure . . .”).

26. *Rothenberg*, 923 F.3d at 1333 (explaining that disaggregation would require courts to determine what losses are attributable to the circulation of the images and what losses are attributable to the physical abuse); see also *Paroline v. United States*, 572 U.S. 443, 449 (2014) (commenting in dicta that “[c]omplications may arise in disaggregating losses sustained as a result of the initial physical abuse . . .”).

27. *Rothenberg* Petition for Certiorari, *infra* note 28, at 18 (“But without first isolating the losses

it directly impacts what victims need to prove and the amount of money defendants are ordered to pay.²⁸ Since defendants began arguing this point, two circuits adopted a disaggregation requirement, four circuits rejected the disaggregation requirement, and the remaining circuits have not addressed the issue.²⁹

First, this Comment argues that a disaggregation requirement conflicts with Supreme Court precedent.³⁰ After considering the various struggles voiced by lower courts,³¹ this Comment argues that the *Paroline* framework needs to be reworked.³² Additionally, it argues that the 2018 amendment to § 2559, which codified the exact language of *Paroline*, was an inadequate response because courts continue facing similar challenges in applying and interpreting it.³³ This Comment proposes that defendants convicted of child pornography offenses should be held jointly and severally liable for the full amount of the victim's demonstrated losses, with certain provisions to simplify the process of recovering restitution and to protect criminal defendants.³⁴

Part II of this Comment discusses the background of the child pornography industry and criminalization, mandatory restitution and its

caused by the ongoing traffic, and excluding the losses caused by the [initial] abuse, there is an intolerable risk that the court will hold the defendant liable for losses that he played no role in causing.”); *see, e.g.*, *United States v. Rogers*, 758 F.3d 37, 39 (1st Cir. 2014) (affirming the district court because it based the restitution order on the losses caused by the continuous trafficking of Vicky's images and excluding the therapy costs related to her father and men).

28. Petition for Writ of Certiorari at 15, *United States v. Rothenberg*, 923 F.3d 1309 (11th Cir. 2019) (No. 17-12349) [hereinafter *Rothenberg* Petition for Certiorari] (explaining that there will be sentencing disparities among similarly situated defendants and that victims' claims packages will be rejected by courts in jurisdictions that require disaggregation).

29. *See Rothenberg* Petition for Certiorari, *supra* note 28, at 8–15 (noting the differences in reasoning between various circuits that are confronted with this issue); *see generally Rothenberg*, 923 F.3d 1309 (holding that there is not a disaggregation requirement); *Halverson*, 897 F.3d 645; *Bordman*, 895 F.3d 1048; *Monzel*, 930 F.3d 470; *but see Galan*, 804 F.3d at 1291 (holding that there is a disaggregation requirement); *Dunn*, 777 F.3d at 1181–82.

30. *See generally* *infra* Part V; *see Paroline*, 572 U.S. at 460 (“These factors need not be converted into a rigid formula . . .”); *see also Rothenberg*, 923 F.3d at 1334.

31. *See generally* *infra* Part V; *see Paroline*, 572 U.S. at 463 (Roberts, C.J., dissenting) (arguing that the majority created a framework that was substantially different from the statute that Congress enacted); *see also* *United States v. Berry*, No. 18-CR-00107, 2019 WL 5306960, at *2 (D. Or. Oct. 21, 2019) (“I was not alone in joining Chief Justice Robert's [*sic*] and Justice Sotomayor's calls for Congressional action.”) (citing *United States v. Schultz*, No. 14-10085, 2015 WL 5972421, at *3 (D. Mass. Oct. 14, 2015); *United States v. Whitely*, 354 F. Supp. 3d 930, 939 (N.D. Ill. 2019)).

32. *Paroline*, 572 U.S. at 463 (Roberts, C.J., dissenting) (stating that when it comes to possession, “it is not possible to do anything more than pick an arbitrary number” as “the amount of the loss sustained by the victim”); *see also Berry*, 2019 WL 5306960, at *2 (noting that the amendment ensures that district courts will no longer order token or nominal amounts of restitution).

33. *See generally* *infra* Part IV (explaining that the amendment did little to assist lower courts' calls for a more structured system); *Berry*, 2019 WL 5306960, at *2.

34. *See generally* *infra* Part V (arguing that periodic payment systems could alleviate concern

application, and the seminal Supreme Court decision in *Paroline v. United States*. Then, Part III explains the circuit split on disaggregation and the Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018. Part IV analyzes the disaggregation split, the *Paroline* framework, and the Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018. It will demonstrate the inconsistency between the disaggregation argument with the *Paroline* decision. Further, it will show the difficulties with the *Paroline* framework. It also recognizes the forward steps made in the most recent Act but points out some of the Act's shortfalls. Lastly, Part V details the proposal for joint and several liability, which will require a partial payment schedule, create a cause of action for contribution, and give the initial restitution hearing full faith and credit.

II. BACKGROUND

Child pornography is a newly developing and complex area of crime and the law.³⁵ The first Section discusses the modern innovation of criminalizing child pornography and the impact of the initial legislative efforts. The following Section focuses on the impact of the child sexual abuse industry on victims, the internet's role in the growth of the industry, and the global magnitude of the industry. Then, this Comment explains restitution and the federal statute which mandates restitution to child pornography victims—§ 2259—and details the $1/n$ calculations, which many courts employ when setting a restitution amount. The last Sections describe the circuit split preceding *Paroline* and explains the process by which victims recover restitution.

A. The Criminalization and Initial Obliteration of Child Sexual Abuse Imagery

Compared to other crimes, the criminalization of child sexual abuse imagery is a recent development in criminal law.³⁶ Prior to the late 1970s, child sexual abuse imagery was legal unless it was obscene, which is

that joint and several liability is unfair); see also *Paroline*, 572 U.S. at 485 (Sotomayor, J., dissenting) (explaining that enforcement of § 2259 is under § 3664, which allows courts to implement partial periodic payment schedules).

35. See generally *Paroline*, 572 U.S. 434 (discussing the atypical causal process which harms victims); see also RICHARD WORTLEY & STEPHEN SMALLBONE, U.S. DEP'T OF JUSTICE: OFFICE OF CMTY. ORIENTED POLICING SERVS., CHILD PORNOGRAPHY ON THE INTERNET (May 2006) (explaining the various complexities in effectively investigating and prosecuting these cases).

36. KENDALL & FUNK, *supra* note 11, at 81 (noting that the prosecution of child pornography is "a fairly recent development"); see also *New York v. Ferber*, 458 U.S. 747, 749 (1982) ("In recent years, the exploitive use of children in the production of pornography has become a serious national problem. The Federal Government and 47 States have sought to combat the problem with statutes specifically directed at the production of child pornography.").

unprotected speech under the First Amendment.³⁷ At that time, the government could only criminalize child sexual abuse imagery if it satisfied the obscenity standard laid out in *Miller v. California*.³⁸ The first federal child pornography statute enacted was the Protection of Children Against Sexual Exploitation Act of 1977, which criminalized the production and distribution—but not possession—of *obscene* visual depictions of minors under the age of sixteen.³⁹ The statute used the *Miller* framework to differentiate protected materials of minors engaged in sexually explicit conduct from obscene images of minors engaged in sexually explicit conduct.⁴⁰ However, in 1982, the Supreme Court carved out a new standard for child pornography in the First Amendment context.⁴¹

In *New York v. Ferber*, the Supreme Court modified First Amendment jurisprudence regarding depictions of sexual activity involving

37. KENDALL & FUNK, *supra* note 11, at 81 (noting that prior to the Protection of Children Against Sexual Exploitation Act of 1977, child pornography was “simply treated as ‘obscene speech’”); Warren Binford et al., *Beyond Paroline: Ensuring Meaningful Remedies for Child Pornography Victims at Home and Abroad*, 35 CHILD. LEGAL RTS. J. 117, 130 (2015) (explaining that before the 1970s, courts relied on incest, rape, and child welfare statutes to prosecute individuals involved in the sexual exploitation of children); *see also* *Miller v. California*, 413 U.S. 15, 20–21 (1973) (quoting *Roth v. United States*, 354 U.S. 476, 484–85 (1957)) (“But implicit in the history of the First Amendment is the rejection of obscenity as utterly without redeeming social importance. . . . We hold that obscenity is not within the area of constitutionally protected speech or press.”).

38. KENDALL & FUNK, *supra* note 11, at 81 (noting that child pornography was regulated under the *Miller* analysis, which held that the government could criminalize “obscene” material if the material met three factors); Binford et al., *supra* note 37, at 130 (explaining that the Protection of Children Against Sexual Exploitation Act of 1977, which criminalized “sexually explicit” pornography of minors under the age of sixteen, was a product of the victims’ rights movement). To be obscene, a finder of fact must decide that (1) an average person, applying contemporary community standards, would find the work as a whole appealed to a prurient interest; (2) the work depicts or describes sexual conduct in a patently offensive way; and (3) the work, taken as a whole, lacks serious literary, artistic, political, or scientific value. *Miller*, 413 U.S. at 24 (citing *Kois v. Wisconsin*, 408 U.S. 229, 230 (1972); quoting *Roth*, 354 U.S. at 489). In *Miller*, the Court abandoned the requirement that the material be “utterly without redeeming social value” created in *Memoirs v. Massachusetts*, 383 U.S. 413, 419 (1966). *Id.* at 24–25.

39. KENDALL & FUNK, *supra* note 11, at 81 (noting that creation of the Protection of Children Against Sexual Exploitation Act of 1977 arose “out of the need to address a problem that was not adequately being addressed by the obscenity statute”); Binford et al., *supra* note 37, at 130 (“This movement [referring to the victims’ rights movement] led Congress to enact the Protection of Children Against Sexual Exploitation Act of 1977, which criminalized the commercial production and distribution of any ‘sexually explicit’ pornography that utilized an individual under the age of sixteen”).

40. KENDALL & FUNK, *supra* note 11, at 81 (noting that this Act took the *Miller* scheme “one step further”); Binford et al., *supra* note 37, at 131 (explaining that after *Ferber*, Congress passed the Child Protection Act of 1984 which removed the obscenity requirement).

41. KENDALL & FUNK, *supra* note 11, at 82 (“In 1982, the Supreme Court held that the states have a compelling interest in safeguarding the physical and psychological well-being of minors . . . Differentiating child pornography from general pornography and other obscene speech,

children.⁴² The case dealt with the constitutionality of a New York state statute proscribing depictions of minors engaged in sexual intercourse *without* requiring a finding that the depictions were obscene. The Court found that the concerns⁴³ that shaped obscenity jurisprudence did not apply to the regulation of child sexual abuse imagery.⁴⁴ The Supreme Court held that the state's interest in "safeguarding the physical and psychological well-being of a minor" is "compelling"⁴⁵ and upheld the statute.⁴⁶ Thus, *Ferber* removed the obscenity requirement for child pornography offenses.⁴⁷

In response to *Ferber*, Congress enacted the Child Pornography Act of 1984, which discarded the obscenity test from the 1977 law and raised the age of victims for punishable depictions from sixteen years old to eighteen years old.⁴⁸ In 1984, Congress expanded the definition of sexually explicit conduct to include lascivious exhibition of the genital

the [Supreme C]ourt held that child pornography is outside the protection of the First Amendment."); *see generally* *New York v. Ferber*, 458 U.S. 747 (1982) (holding that child pornography is not protected speech).

42. *Ferber*, 458 U.S. at 749 (noting that at least half of the statutes did not require that the material be legally obscene before criminalizing it). In *Ferber*, the defendant, Paul Ira Ferber, sold two videos depicting young boys masturbating to undercover agents. *Id.* at 752. At the time, in New York, there were two statutes that criminalized the distribution of child pornography—one had an obscenity requirement and the other did not. *Id.* He was indicted under both statutes. *Id.* The jury found Ferber guilty under the statute without the obscenity requirement, and acquitted Ferber under the statute with the obscenity requirement. *Id.*

43. *Id.* at 754–55 (discussing *Chaplinsky v. New Hampshire*, 315 U.S. 568 (1942); *Roth v. United States*, 354 U.S. 476 (1957); *Interstate Circuit, Inc. v. Dallas*, 390 U.S. 676 (1968); *Miller v. California*, 413 U.S. 15 (1973); and many other cases which have struggled with the balance between protecting free speech and limiting obscenity).

44. *Id.* at 756.

45. *Id.* at 756–57 (noting that the Court has upheld legislation protecting children in many instances and highlighting the importance of protecting children from childhood sexual exploitation). The Court explained that "[t]he care of children is a sacred trust and should not be abused by those who seek to profit through a commercial network based upon the exploitation of children. The public policy of the state demands the protection of children from exploitation through sexual performances." *Id.* at 757 (quoting 1977 N.Y. Laws, ch. 90 § 1); *see also id.* at 759 (finding that child pornography harms minors by memorializing their abuse and exacerbating the harm through circulating the images).

46. *Id.* at 758; KENDALL & FUNK, *supra* note 11, at 82 (noting that the Court upheld the constitutionality of the statute by "applying a stricter test than the one set forth in *Miller*").

47. *Ferber*, 458 U.S. at 761; KENDALL & FUNK, *supra* note 11, at 82 ("Differentiating child pornography from general pornography and other obscene speech, the *Ferber* court held that child pornography is outside the protection of the First Amendment. . . . '[A court] need not find that the material appeals to the prurient interest of the average person; it is not required that sexual conduct portrayed be done so in a patently offensive manner; and the material at issue need not be considered as a whole.'").

48. KENDALL & FUNK, *supra* note 11, at 81–87 (outlining the various federal laws on child pornography and the development of the different statutes); *see also* WORTLEY & SMALLBONE, *supra* note 35, at 5 (charting the important cases and statutes in the development of child pornography laws).

area of any person.⁴⁹ Under the lascivious standard, even images that did not depict sexual acts could be criminalized.⁵⁰ Finally, in 1990, the Supreme Court upheld the criminalization of the private possession of child pornography.⁵¹

Responding to growing public awareness⁵² and developments in technology,⁵³ Congress amended the federal offenses in 1988 and 1990, tightening restrictions on child sexual abuse imagery by imposing heavier penalties and criminalizing the use of computers to depict or advertise child pornography.⁵⁴ A few years later, Congress enacted the Child Pornography Prevention Act of 1996.⁵⁵ This Act proscribed virtually created images of children, morphed images of children, and images appearing to be a minor.⁵⁶ In 2002, the Supreme Court limited the

49. *United States v. Dost*, 636 F. Supp. 828, 830–31 (S.D. Cal. 1986) (explaining that the decision to replace “lewd” with “lascivious” was because “lewd” was associated with obscenity and Congress wanted to be clear that the matters did not need to meet the obscenity standard); WORTLEY & SMALLBONE, *supra* note 35, at 5.

50. *See Dost*, 636 F. Supp. at 832 (explaining that lascivious exhibition can be decided by the trier of fact by considering whether the focal point of the image is the child’s genitalia, whether the child is positioned in a sexually suggestive pose, whether the child is in an unnatural pose or inappropriate attire, whether the child is clothed or nude, whether the image suggests sexual coyness, or whether the image is intended to elicit a sexual response); WORTLEY & SMALLBONE, *supra* note 35, at 6 (noting that this standard captured videos in which the camera focused on the clothed genital region of young girls).

51. *Osbourne v. Ohio*, 495 U.S. 103, 108–11 (1990) (noting that criminalization of possession might encourage possessors to destroy the material, ending the abusive circulation of the images, and refusing to extend *Stanley* to protect possession of child pornography); *but see Stanley v. Georgia*, 394 U.S. 557, 567–68 (1969) (holding that individuals have a constitutional right to possess pornography within the home but not addressing whether this extended to child pornography).

52. *See, e.g., Marcia Chambers, Sexual Abuse of Boys: Case in Brooklyn Focuses Attention on a Nationwide Problem*, N.Y. TIMES, May 3, 1984, at B5 (describing a 13-year-old boy’s account which uncovered the abuse of ten other children, leading to the arrests of several recognized professionals and noting that the FBI and police viewed the “adult exploitation of boys . . . as a nationwide problem”); *Woman Charged in Child Pornography Operation*, N.Y. TIMES, Aug. 22, 1982, at 28 (reporting the arrest of a mother who controlled as much as eighty percent of the country’s child pornography and had mailing lists of 30,000 names and 7,000 subscribers seeking “deviate material”).

53. KENDALL & FUNK, *supra* note 11, at 82 (explaining that developments in technology presented a challenge to the enforcement of child pornography statutes); Binford et al., *supra* note 37, at 123 (noting that “easy-to-use cameras” that developed in the mid-twentieth century contributed to the growth of the child sexual abuse imagery).

54. KENDALL & FUNK, *supra* note 11, at 82–83; Binford et al., *supra* note 37, at 131 (explaining that the Child Pornography Prevention Act of 1996 was the first move by the federal government to address child sexual abuse imagery in the digital age by criminalizing the distribution and receipt of child sexual abuse imagery through electronic means).

55. Child Pornography Prevention Act of 1996, H.R. 4123, 104th Cong. (1996) [hereinafter CPPA]; KENDALL & FUNK, *supra* note 11, at 83 (noting that Congress enacted the CPPA six years later, “further expanding the reach of child protection statutes and broadening the definition of child pornography . . .”).

56. CPPA, *supra* note 55, at 7 (defining child pornography as depictions appearing to include

criminalization of child pornography in *Ashcroft v. Free Speech Coalition* by holding that the government can only proscribe offenses involving the interests of real children.⁵⁷ Thus, the government must prove that the images depict a real child, that an innocent image of a real child was altered into a sexually explicit or suggestive image, or that a sexually explicit or suggestive image uses the likeness of a real child.⁵⁸ The government can only prosecute offenses based on images that harm real children. Computer-generated images of fake children or images that appear to depict children but do not actually (such as actors purporting to be underaged) are legal.⁵⁹

The child sexual abuse imagery industry was virtually eliminated by the early 1990s due to the growing public awareness, more stringent statutes, and stricter enforcement of the laws.⁶⁰ It became much riskier to physically exchange the materials through the mail or during meetings.⁶¹ The increased penalties and law enforcement action successfully reduced the expansion of the industry to the point of virtual nonexistence.⁶²

children engaged in sexually explicit conduct and depictions advertising that the images contain children engaged in sexually explicit conduct); KENDALL & FUNK, *supra* note 11, at 83–84 (describing the expanded definition of “child pornography” and noting that this Act expanded the definition to include “images that may have been created without the use of actual minors”).

57. *Ashcroft v. Free Speech Coalition*, 535 U.S. 234, 242, 251 (2002) (rejecting the argument that the statute was justified due to the possibility that the images could be used to groom children for future abuse); *see also* KENDALL & FUNK, *supra* note 11, at 84 (explaining that the Court was hearing challenges from the nudist community and the adult entertainment industry).

58. *See generally Ashcroft*, 535 U.S. 234; KENDALL & FUNK, *supra* note 11, at 84–85 (analyzing the Supreme Court’s holding in *Ashcroft*).

59. *Ashcroft*, 535 U.S. at 245–48 (noting that the age of consent and marriage are sixteen and that teenage sexual activity and sexual abuse of children have inspired various literary works such as *Romeo and Juliet* and the movies *Traffic* and *American Beauty*); *see also* KENDALL & FUNK, *supra* note 11, at 85 (remarking that the standards under the CPPA would criminalize “mainstream Hollywood movies” and “falsely marked products”).

60. *Proliferation of Child Pornography on the Internet: Hearing before the S. Comm. of the Comm. on Appropriations*, 105th Cong. 2 (1997) [hereinafter Senate Committee Hearing] (“By the early 1990’s, the cottage trade of child pornography was almost nonexistent, due to the U.S. Postal Service’s commitment to catching child pornographers who distribute material through the U.S. mail.”); William R. Graham, Jr., *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, 467 (2000) (stating that the Child Pornography Prevention Act successfully controlled child sexual abuse imagery in print media by the late 1980s).

61. Senate Committee Hearing, *supra* note 60, at 3 (explaining that while the exchange of child pornography through the mail has mostly been controlled, the exchange and solicitation via the internet is a huge issue); Graham, *supra* note 60, at 467 (noting that with the criminalization of the distribution of child pornography, the possession of any child pornography was now a criminal offense).

62. Bryan-Low, *supra* note 12 (“In the 1980s, a broad crackdown in the U.S. and other countries largely choked off the flow of child pornography, forcing it out of its traditional niche of sex bookshops and into underground networks of collectors.”); Emily Bazelon, *The Price of a Stolen*

B. Child Sexual Abuse Imagery is a Growing Global Issue in the Internet Age

The rise of the internet transformed child sexual abuse imagery into a global industry and exacerbated victims' harms.⁶³ Growing numbers and advanced technologies have made it increasingly difficult for law enforcement to track and prosecute offenders.⁶⁴ This Section first discusses the impact on victims, then explains the impact of the internet, and finally explores the global magnitude of the industry.

1. The Impact of Child Sexual Abuse Imagery on Victims

Victims of child sexual abuse imagery incur significant losses as a result of the image circulation.⁶⁵ Many face difficulties moving past the abuse because the pictures and videos memorialize the abuse forever.⁶⁶ A large number of victims report that the images impact them differently than physical abuse because the images are permanently on the internet and continuously distributed.⁶⁷ Additionally, the distribution of the images contributes to feelings of powerlessness, shame, and humiliation.⁶⁸ Victims express fear of being recognized in public or being

Childhood, N.Y. TIMES MAG. (Jan. 24, 2013), https://www.nytimes.com/2013/01/27/magazine/how-much-can-restitution-help-victims-of-child-pornography.html?hpw&_r=0 [<https://perma.cc/Q5Q3-8TWB>] (explaining that congressional and state actions approved by the Supreme Court lead to plummeting distribution and production of child sexual abuse imagery).

63. Binford et al., *supra* note 37, at 117 (noting that the National Center of Missing and Exploited Children has described child pornography as a “crime of international distribution”); see generally *infra* Sections II.B.2–3.

64. KENDALL & FUNK, *supra* note 11, at 179 (explaining that, due to the rise of the internet, the child pornography industry has outpaced law enforcement’s ability to investigate and prosecute offenders); see generally *infra* Sections II.B.2–3.

65. See e.g., Paroline v. United States, 572 U.S. 434, 441 (2014) (stating that Amy reported \$3.4 million in losses); see also United States v. Sainz, 827 F.3d 602, 606 (7th Cir. 2016) (remarking that one-third of Cindy’s losses was \$366,000.00).

66. DOJ CONGRESSIONAL REPORT, *infra* note 72, at 3 (“The child victims are first sexually assaulted in order to produce the vile, and often, violent, images. They are then victimized again when these images of their sexual assault are traded over the Internet in massive numbers by like-minded people across the globe.”); see, e.g., Binford et al., *supra* note 37, at 117 (stating that since 2002, the National Center for Missing and Exploited Children has processed over 70,000 files containing images of Amy’s sexual abuse and noting that her images have been recovered in Denmark, Germany, Canada, Australia, and New Zealand).

67. SURVIVORS’ SURVEY, *supra* note 5; United States v. Rothenberg, 923 F.3d 1309, 1319 (11th Cir. 2019) (“Jenny expressed a strong desire to forget the abuse she had suffered but explained that ‘[w]ith the pictures still out there I can’t.”); Ateret Gewirtz-Meydan, et al., *The Complex Experience of Child Pornography Survivors*, 80 CHILD ABUSE & NEGLECT 238, 244 (2018) (explaining that the images were different from the physical abuse because they could be “interpreted as [the child victim] participating voluntarily in the crime” and the ongoing vulnerability of having the images on the internet for anyone to see).

68. SURVIVORS’ SURVEY, *supra* note 5; (displaying responses to being asked how the imagery

tracked down by people who have seen the images.⁶⁹ Many suffer from severe psychological and psychiatric disorders.⁷⁰ Further, the abuse negatively impacts victims' work experiences, academic success, family life, friendships, and sexual relationships.⁷¹

2. The Role of the Internet in the Growth of the Child Sexual Abuse Imagery Industry

The number of images of child pornography on the internet has exponentially grown in the past twenty years.⁷² From 1998 to 2018, yearly reports for child sexual abuse imagery jumped from 3,000 to 18.4 million—the latter report flagged 45 million unique images and videos of child sexual abuse imagery.⁷³

Experts and law enforcement acknowledge that the internet has “dramatically changed the scale and nature” of the child sexual abuse

impacts them differently from hands-on abuse); *Rothenberg*, 923 F.3d at 1318 (“In her victim impact statements, Vicky described the effects of the ongoing distribution of the images of her sexual abuse as a child, including feelings of fear and paranoia, nightmares, and panic attacks. In a 2014 psychological status report, Dr. Green opined that Vicky continued to require therapy as a result of the continuing traffic in her images, as well as her discovery of attempts by some viewers of her images to invade her privacy. Dr. Green explained that Vicky continued to experience anxiety, dissociative responses, social withdrawal, anger, feelings of powerlessness, and sleep disruption.”).

69. SURVIVORS' SURVEY, *supra* note 5 (reporting that approximately a third of victims have been identified by a person who has seen the victim's images, that over 80% have been targeted by someone that has seen imagery of the abuse, that substantial amounts suffer further trauma and fear from being identified, and that they were being targeted to be propositioned, revictimized, blackmailed, and threatened); Gewirtz-Meydan et al., *supra* note 67, at 244 (“When a man approaches at the grocery store and tells me that he knows me from somewhere or that he recognizes me. . . I get so scared that he has seen my images.[.] . . . ‘I can’t run for public office or speak in public beyond a certain level for fear of my photo getting out there.’ . . . ‘I am afraid that people have seen them. Thinking strangers recognize me from the images.’”).

70. SURVIVORS' SURVEY, *supra* note 5, at 31 (reporting that two-thirds or more of victims experience self-harm, depression, relationship difficulties, suicidal ideation, body image difficulties, hypervigilance, sleeping difficulties, and anxiety); CHILD SEXUAL ABUSE STATISTICS, DARKNESS TO LIGHT 1–4 (2015) (explaining the various psychological, physical, and social problems that victims of child sexual abuse faces at higher rates).

71. SURVIVORS' SURVEY, *supra* note 5, at 30 (reporting that over half of victims experience negative effects including intimacy issues, trust issues, sexual intimacy issues, lack of contact with family, unsupportive family, difficulties concentrating, inability to complete schooling); CHILD SEXUAL ABUSE STATISTICS, *supra* note 70, at 2–3 (noting adverse impacts to academic success, substance abuse issues, and long-term mental health impacts).

72. U.S. DEP'T OF JUSTICE, NATIONAL STRATEGY FOR CHILD EXPLOITATION PREVENTION AND INTERDICTION: A REPORT TO CONGRESS 2 (2010) (“The expansion of the Internet has led to an explosion in the market for child pornography . . .”) [hereinafter DOJ CONGRESSIONAL REPORT]. See also WORTLEY & SMALLBONE, *supra* note 35, at 12 (“It is difficult to be precise about the extent of Internet child pornography, but all of the available evidence points it to being a major and growing problem. At any one time there are estimated to be more than one million pornographic images of children on the Internet, with 200 new images posted daily.”).

73. Keller & Dance, *supra* note 13 (exhibiting growth in reports of child sexual abuse imagery from 3,000 in 1998, to 100,000 in 2008, to over 1 million in 2014, to 18.4 million in 2018).

industry.⁷⁴ The internet escalated the problem of child sexual abuse imagery in several ways, including permitting users access to vast quantities of images from around the world; increasing the availability of accessing images to any time or place; allowing for private and anonymous access; facilitating nameless communication and image sharing between offenders; providing relatively inexpensive imagery; improving the quality and storage of the images; expanding the formats to include everything from pictures, videos, and sound to real-time and interactive experiences; and allowing access to morphed or modified images.⁷⁵

Advances in technology negatively impact abused children in the United States and across the globe.⁷⁶ The proliferation of the internet allows consumers from the United States to gain new material from abusers in other countries.⁷⁷ Additionally, digital cameras, webcams, and cellphone cameras allow abusers to more easily record high-quality imagery without the detection that occurs during the development of film.⁷⁸ Lastly, the internet allows offenders to trade, upload, and disseminate child sexual abuse imagery at unprecedented rates.⁷⁹ While there are risks, like sting operations by law enforcement and shutdowns of illicit websites, new websites reopen at faster rates than law enforcement can keep up with, and offenders continuously advance their

74. WORTLEY & SMALLBONE, *supra* note 35, at 1 (noting that this change caused by the advent of the internet “has required new approaches to investigation and control”). *See also* Prichard et al., *supra* note 13, at 589 (“It is generally accepted that the supply of and demand for child pornography has dramatically increased with the advent of the Internet.”).

75. *See* WORTLEY & SMALLBONE, *supra* note 35, at 8 (explaining how the internet has “escalated the problem of child pornography” in various ways); *see also* DOJ CONGRESSIONAL REPORT, *supra* note 72, at 3 (explaining the impact of the internet on the child sexual abuse imagery industry and enforcement of child pornography laws).

76. *See* WORTLEY & SMALLBONE, *supra* note 35, at 9 (explaining that the internet allows the distribution of images abroad and increasingly sophisticated technology allows offenders to make higher quality homemade recordings); *see also* Bryan-Low, *supra* note 12 (“[T]he Internet has transformed what was once a cottage industry into a sophisticated business.”).

77. WORTLEY & SMALLBONE, *supra* note 35, at 9 (noting that many images circulating on the internet “often document the abuse of children in third-world countries” and “images may be stored on servers located almost anywhere in the world”). *See, e.g.*, Bryan-Low, *supra* note 12 (reporting the story of a foreign syndicate that ran child sexual abuse imagery websites with customers from all over the world).

78. WORTLEY & SMALLBONE, *supra* note 35, at 9 (noting that with the development of electronic recording devices, like digital cameras and web cams, individuals can create high quality, homemade images). *See* KENDALL & FUNK, *supra* note 11, at 20–21 (explaining the technology used by offenders to create child sexual abuse imagery, avoid detection from law enforcement, and distribute child sexual abuse imagery).

79. WORTLEY & SMALLBONE, *supra* note 35, at 9 (“Child pornography may be uploaded to the Internet on websites or exchanged via e-mail, instant messages, newsgroups, bulletin boards, chatrooms, and peer-to-peer (P2P) networks.”). *See* Prichard et al., *supra* note 13, at 590 (explaining that new methods of communication via the internet caused an evolution of the child pornography industry).

security measures, which allows them to fall through the cracks.⁸⁰

Easier avenues for obtaining and viewing child pornography on the internet led to higher numbers of offenders and more organization between offenders.⁸¹ Because the images are more readily available for viewing within the privacy of a personal device, there has been a growth of offenders who do not have sexual compulsions toward children.⁸² Additionally, the ability to connect and communicate on the internet has increased the level of organization between offenders.⁸³

There are several kinds of offenders in these cases.⁸⁴ For example, there are collectors who procure and share child sexual abuse imagery in chatrooms, websites, emails, and file-sharing programs.⁸⁵ The levels of security used by the collectors vary—some do not use any security while others employ sophisticated encryption and file destroying technology.⁸⁶

80. WORTLEY & SMALLBONE, *supra* note 35, at 9–10 (“Child pornography websites are often shut down as soon as they are discovered . . . Increasingly those distributing child pornography are employing more sophisticated security measures to elude detection and are being driven to hidden levels of the Internet.” (citation omitted)); KENDALL & FUNK, *supra* note 11, at 20 (explaining that offenders use encryption technology that inhibits law enforcement from accessing the images, for instance one computer used encryption technology that was so sophisticated that neither NSA or NASA computers could break it or view the entirety of the defendant’s collection).

81. WORTLEY & SMALLBONE, *supra* note 35, at 12–13. (“It is difficult to be precise about the extent of Internet child pornography, but all of the available evidence points to it being a major and growing problem.”). See KENDALL & FUNK, *supra* note 11, at 19 (“The dramatic growth of the Internet, social networking, and electronic means of communication, and the digitalization of the international community have significantly impacted the manner in which sexual offenders commit crimes.”); see generally Keller & Dance, *supra* note 13 (explaining the growth of the child sexual abuse imagery industry after the internet boom).

82. WORTLEY & SMALLBONE, *supra* note 35, at 14–15 (explaining that individuals with curiosities or less intense interests in child pornography and children as sexual objects are more likely to offend as a result of easy access to the images on the internet); Prichard et al., *supra* note 13, at 587 (explaining that individuals are more likely to view child sexual abuse imagery “impulsively and/or out of curiosity” because it is so easily accessible on the internet).

83. WORTLEY & SMALLBONE, *supra* note 35, at 14–16; KENDALL & FUNK, *supra* note 11, at 22 (“When coupled with the offender’s communications with other offenders via the Internet in chat rooms or through e-mails—including providing accolades for each incident of exploitation—this unique characteristic of child pornography reinforces the distorted fantasy that the deviant sexual behavior has some social merit.”).

84. WORTLEY & SMALLBONE, *supra* note 35, at 15–17 (describing the different typology of child pornography offenders and their associated patterns of internet behavior, level of involvement, degree of networking, expertise in employing security strategies, and extent to which their internet behavior involves direct sexual abuse of children); KENDALL & FUNK, *supra* note 11, at 21–28 (explaining that there are offenders involved in hands-on abuse, offenders that just view child sexual abuse imagery, manufacturers, situational offenders, preferential offenders, sex travelers, and groomers).

85. WORTLEY & SMALLBONE, *supra* note 35, at 15–16 (describing the behavior of both non-secure and secure collectors). See KENDALL & FUNK, *supra* note 11, at 19 (explaining that offenders use online technology to connect with other offenders and collect images of child sexual abuse).

86. WORTLEY & SMALLBONE, *supra* note 35, at 15–16 (describing the various security strate-

Collectors' networks also vary—some engage in casual communications while others are members of pedophile rings.⁸⁷ On one hand, collectors that have less structured networks and do not use security technology are limited in the kind and quantity of images they can obtain.⁸⁸ On the other hand, collectors that employ advanced technology and maintain structured networks have access to more images and more severe content.⁸⁹ Additionally, there are groomers who develop relationships with children to abuse them.⁹⁰ They use child sexual abuse imagery to

gies employed by different types of collectors); see Dominique A. Simmons, *Sex Offender Typologies*, U.S. DEP'T JUST. OFF. SMART https://www.smart.gov/SOMAPI/sec1/ch3_typology.html [<https://perma.cc/VEA7-J8PB>] (explaining the various types of sex and child pornography offenders) (last visited Oct. 22, 2020).

87. WORTLEY & SMALLBONE, *supra* note 35, at 15–16 (describing the various levels of networking used by different collectors); see e.g., Megan Jones, *Montgomery Man Sentenced to 17 Years in Prison for Creating and Sharing Child Porn in Online Chatrooms*, BEACON NEWS (Sept. 30, 2019), <https://www.chicagotribune.com/suburbs/aurora-beacon-news/ct-abn-montgomery-man-sentenced-to-prison-child-pornography-st-1001-20190930-da6e5t626ff67enhzw6l6cnbqi-story.html> [<https://perma.cc/F9XR-N4FK>] (explaining that the defendant used Kik to create chatrooms to share child sexual abuse imagery); but see, e.g., Kate Fazzini, *Four Men Sentenced for Child Pornography, DOJ Said They Used Bitcoin and Tor to Cover Their Tracks*, CNBC (Aug. 12, 2019, 4:33 PM), <https://www.cnbc.com/2019/08/12/doj-sentences-four-for-child-porn-used-bitcoin-tor-to-cover-tracks.html> [<https://perma.cc/4YK9-C5BX>] (reporting that the Justice Department said that the four men used “highly sophisticated” encryption technology to run an underground network of child pornography trafficking).

88. WORTLEY & SMALLBONE, *supra* note 35, at 15–16; Binford, *supra* note 37, at 119.

In 2011, U.S. officials penetrated a child pornography ring that engaged in “horrific” and “unspeakable” crimes involving the sexual exploitation of children, some of whom were infants. This ring centered on a members-only online community called Dreamboard, which required prospective members to upload pornography of children under twelve years of age. After being admitted to the community, participants had to continually upload child sexual abuse images, with greater access and higher statuses awarded based on their “level of commitment to the enterprise.” Participants achieved the highest level of membership by producing their own child pornography, with particular benefits bestowed on members who caused the infants and children “obvious and . . . intentional pain.” One area of the site mandated that the victims were “in distress and crying.”

The child pornography ring was truly an international affair. The global nature of the Internet meant that U.S. law enforcement arrested not only members from various states, but also required the cooperation from foreign officials to arrest offenders in “Canada, Denmark, Ecuador, France, Germany, Hungary, Kenya, the Netherlands, the Philippines, Qatar, Serbia, Sweden, and Switzerland.”

Id. at 120 (internal citations omitted).

89. WORTLEY & SMALLBONE, *supra* note 35, at 15–16 (explaining that secure collectors' occupation of hidden levels of the internet gives them access to a wide range of images); see, e.g., *Technological Level of Wonderland Network Shocked All Investigators*, IRISH TIMES (Sept. 3, 1998), <https://www.irishtimes.com/news/technological-level-of-wonderland-network-shocked-all-investigators-1.189298> [<https://perma.cc/R9AY-YN4R>] (“Wonderland’s [a club of child pornography offenders] closed network on the Internet was protected by an extremely advanced security system. Unconfirmed reports from the US claim that it used a code originally developed by the KGB to encrypt all its communications.”).

90. *Grooming*, CAMBRIDGE DICTIONARY, <https://dictionary.cambridge.org/us/dictionary/english/grooming> [<https://perma.cc/TJX8-D9SA>] (last visited Oct. 21, 2020) (defining grooming as

normalize sexual abuse and manipulate the children.⁹¹ Lastly, there are physical abusers who record themselves abusing children as part of their pedophilic interest.⁹² They may or may not distribute the images or be involved in online networks.⁹³

The impact of viewing child sexual abuse imagery on offenders is inconclusive.⁹⁴ On one hand, some believe that the images help people with pedophilic compulsions avoid physically abusing minors.⁹⁵ On the other hand, child pornography can be used to groom and prepare children for physical abuse.⁹⁶ Furthermore, continuous viewing of child sexual abuse imagery can desensitize offenders, leading to thirst for more

“the criminal activity of becoming friends with a child in order to try to persuade the child to have a sexual relationship”); KENDALL & FUNK, *supra* note 11, at 22 (“By showing the child that others have engaged in sexual contact, that they are seemingly enjoying the sexual contact, . . . the adult offender grooms his victim by ‘educating’ him that such contact is normal and acceptable.”).

91. WORTLEY & SMALLBONE, *supra* note 35, at 15–16 (elaborating that grooming involves direct abuse of children, which exposes them to greater risk of detection); Simmons, *supra* note 86 (explaining that “experts” manipulate victims and that the usage of child pornography to groom potential victims is common in this subset of offenders).

92. WORTLEY & SMALLBONE, *supra* note 35, at 16–17 (concluding that, in the case of physical abusers, the possession of pornography is secondary to the evidence of abusive behavior it records); see KENDALL & FUNK, *supra* note 11, at 24 (“[A]n exploiter armed with a digital camera that he uses to take a picture of a naked minor displaying genitalia in a lewd and lascivious way is sufficient to qualify for a ‘manufacture of child pornography’ charge.”).

93. WORTLEY & SMALLBONE, *supra* note 35, at 16–17; see, e.g., DOJ CONGRESSIONAL REPORT, *supra* note 72, at B-3 (explaining that a pedophile voiced his desire to sexually abuse a minor, “especially if he could film or photograph the anticipated abuse”); see *Child Pornography Victim Recovers \$93,532.57 in Restitution*, JONES DAY (July 2019), <https://www.jonesday.com/en/practices/experience/2019/07/child-pornography-victim-recovers-9353257-in-resti> [<https://perma.cc/HH7L-KY9P>]. In *United States v. Jones*, the defendant was a famous YouTuber who used Facebook Messenger and iMessage to contact young female fans. He requested and received images of child pornography, but the images were never distributed. *Id.*

94. WORTLEY & SMALLBONE, *supra* note 35, at 18–19 (explaining that while the effects of pornography on users have been extensively researched, the results are contentious); Prichard et al., *supra* note 13, at 586 (remarking that research was unclear on whether child sexual abuse imagery leads to higher instances of abuse or prevents hands-on abuse); Benedict Carey, *Preying on Children: The Emerging Psychology of Pedophiles*, N.Y. TIMES (Sept. 29, 2019), <https://www.nytimes.com/2019/09/29/us/pedophiles-online-sex-abuse.html> [<https://perma.cc/8CPA-W2UH>] (“The relationship between viewing or collecting images and committing hands-on abuse is a matter of continuing debate among some experts . . .”).

95. WORTLEY & SMALLBONE, *supra* note 35, at 18–19 (explaining that, for these users, viewing child pornography is the only outlet for their sexual attraction to children); Jérôme Endrass et al., *The Consumption of Internet Child Pornography and Violent and Sex Offending*, 9 BMC PSYCHIATRY 1, 1 (2009) (concluding that child pornography alone is not a risk factor for committing hands-on abuse).

96. WORTLEY & SMALLBONE, *supra* note 35, at 18–19 (explaining that in this case, pornography is a by-product of pedophilia); KENDALL & FUNK, *supra* note 11, at 22 (“The offender uses the pornography as a tool to lower the inhibitions of the minor and to prepare the minor for future sexual contact. By showing the child that others have engaged in sexual contact, that they are seemingly enjoying the sexual contact, and that it has been captured for viewing, the adult offender grooms his victim by ‘educating’ him that such contact is normal and acceptable.”).

images and more grotesque content.⁹⁷ Additionally, some research suggests viewing child sexual abuse imagery may increase the chances that a person will commit physical abuse of a minor.⁹⁸ Nevertheless, while it remains unclear whether viewing child sexual abuse imagery leads to predatory sexual abuse, viewing child sexual abuse imagery itself is an act of violence against the children depicted, whose abuse is memorialized, circulated, and viewed by adults.

3. The Global Magnitude of the Child Sexual Abuse Imagery Industry

The global magnitude of the child sexual abuse imagery industry creates two major problems. First, the prevalence outpaces law enforcement's capabilities to effectively prosecute these crimes.⁹⁹ Second, the global industry facilitates the victimization of children abroad and contributes to the rise of organized criminal syndicates producing child sexual abuse imagery.¹⁰⁰

Advances in technology facilitate the sexual exploitation of children at home and abroad.¹⁰¹ The internet allows consumers from the United States to obtain new material from producers in other countries.¹⁰²

97. WORTLEY & SMALLBONE, *supra* note 35, at 18–19 (explaining that pornography in this case can have a corrosive effect); Carey, *supra* note 94 (“But the images and online communities can help erode inhibitions further, drawing pedophiles into more frequent or more aggressive acts, Dr. Bourke [chief of the behavioral analysis unit of the United States Marshals] said.”).

98. WORTLEY & SMALLBONE, *supra* note 35, at 18–19; Tori DeAngelis, *Porn Use and Child Abuse: The Link May Be Greater Than We Think, a Controversial Study Suggests*, 40 AM. PSYCH. ASS'N 56, 56 (2009) (discussing a study where 85% of child pornography offenders admitted to sexually molesting a child at least once).

99. WORTLEY & SMALLBONE, *supra* note 35, at 25–27 (concluding that the decentralized structure of the internet makes control of child pornography difficult); KENDALL & FUNK, *supra* note 11, at 179 (explaining that although a child pornography bust led to a number of significant convictions, thousands of offenders were not fully investigated because of limited law enforcement resources).

100. WORTLEY & SMALLBONE, *supra* note 35, at 2 (“Local citizens may access child pornography images that were produced and/or stored in another city or on another continent.”); *see generally* KENDALL & FUNK, *supra* note 11, at 177–94 (describing the investigation and prosecution of Dr. Watzman, a U.S. citizen who was a subscriber to Regpay, a child sexual abuse imagery website, and would specially order videos customized to his preferential age and fantasies from a Russian syndicate). Regpay received at least \$2.5 million from membership fees for the websites alone, and this was an “extremely conservative amount based on traceable purchases only.” *Id.* at 178, 473 n.2.

101. WORTLEY & SMALLBONE, *supra* note 35, at 9 (explaining that images may be stored on servers located almost anywhere in the world); KENDALL & FUNK, *supra* note 11, at 195 (“In the context of child sexual exploitation, the inescapable contemporary truth is that commercial and noncommercial exploiters alike satisfy a global demand by selling and trading sexually explicit images of children, as well as the children themselves, across national borders as if they were guns or narcotics (the other top-dollar commodities headlining the global black market).”).

102. WORTLEY & SMALLBONE, *supra* note 35, at 9 (explaining that child pornography may be uploaded to the internet on websites or exchanged via e-mail, instant messages, newsgroups, bulletin boards, chat rooms, and peer-to-peer networks); *see* KENDALL & FUNK, *supra* note 11, at 195 (noting that the internet allows users to access the child exploitation market more easily).

Additionally, criminal organizations have recognized the profit within the child sexual abuse imagery industry and have capitalized on it.¹⁰³

Similarly, sexual tourism is intertwined with the child sexual abuse imagery industry.¹⁰⁴ Sexual tourism is when people visit developing, poorer nations to engage in commercial sexual acts.¹⁰⁵ Because offenders can abuse children in foreign countries without facing the repercussions that they would encounter in more developed countries,¹⁰⁶ offenders travel to foreign countries to abuse children and record that abuse.¹⁰⁷ Furthermore, individuals in less developed countries can record abuse of children to sell on the internet and profit from the demand in more developed countries. Thus, the impact is twofold. First, sex tourists can actually visit different countries to perpetrate abuse and record it. Second,

103. See generally KENDALL & FUNK, *supra* note 11, at 171–94 (explaining the investigation of Regpay, a criminal syndicate based in Moscow that had a global network of subscribers to its child pornography websites where offenders could order customized videos depicting the abuse of children that met their individual preferences).

104. See H.R. REP. NO. 107-525, at 2 (2002) (“Many developing countries have fallen prey to the serious problem of international sex tourism. According to the National Center for Missing and Exploited Children, child-sex tourism is a major component of the worldwide sexual exploitation of children and is increasing. . . . Because poor countries are often under economic pressure to develop tourism, those governments often turn a blind eye toward this devastating problem because of the income it produces.”); see, e.g., DOJ CONGRESSIONAL REPORT, *supra* note 72, at B-4 (detailing the case against Angel Mariscal, who was convicted of working with several co-conspirators to produce videos of child sexual abuse, including made-to-order videos, and selling the videos for as much as \$975). In *Mariscal*, the defendant abused more than 150 children, mostly in Ecuador and Cuba. *Id.*

105. COMBATING CHILD SEX TOURISM: QUESTIONS AND ANSWERS, ECPAT INTL. 6 (2008) [hereinafter ECPAT] https://www.ecpat.org/wp-content/uploads/2016/04/cst_faq_eng.pdf [<https://perma.cc/HX3T-5ARR>] (noting that sex tourists can be domestic as well as international); see, e.g., Bill Smith, *Florida Man Gets 330 Years on Child Porn Charges in “Sex Tourism” Trial*, USA TODAY (Apr. 22, 2018, 1:57 PM), <https://www.usatoday.com/story/news/nation-now/2018/04/22/florida-man-gets-330-years-child-porn-charges-sex-tourism-trial/540295002/> [<https://perma.cc/FP97-EJ42>] (reporting that the defendant visited the Philippines multiple times from 2005–2016 to abuse prepubescent minors, record the abuse, and distribute the images online). Furthermore, a “striking feature of child sex tourists . . . is the frequency with which they produce, collect and exchange images of abuse. In many CST [child sex tourism] cases, the offending adult films or records the abuse The offender may keep the images for his or her own consumption or may share them with other child pornography consumers.” ECPAT, *supra*, at 21.

106. See H.R. REP. NO. 107-525, at 2–3 (2002) (“There would be no need for a sex tourism statute if foreign countries successfully prosecuted U.S. citizens or resident aliens for the child sex crimes committed within their borders. However, for reasons ranging from ineffective law enforcement, lack of resources, corruption, and generally immature legal systems, sex tourists often escape prosecution in host countries.”); see also Najat Maalla M’jid (Special Rapporteur on the Sale of Children, Child Prostitution and Child Pornography), *Report of the Special Rapporteur on the Sale of Children, Child Prostitution and Child Pornography*, 5, U.N. Doc. A/HRC/22/54 (Dec. 24, 2012) (“As child protection laws, mechanisms and prevention efforts are strengthened by States, civil society and the tourism industry in some countries, neighboring countries become obvious alternative destinations for travelling sex offenders.”).

107. H.R. REP. NO. 107-525, at 2–3 (2002) (noting the various factors that allow sex tourists to avoid prosecution); see, e.g., Smith, *supra* note 105 (noting that the defendant made multiple trips to the Philippines to sexually abuse minors without detection or prosecution).

people in less developed countries can create the imagery themselves and make a profit by selling it to the markets in more developed countries via the internet.

C. Mandatory Restitution for Victims of Child Sexual Abuse Imagery

Restitution is a remedy based on the defendant's unjust enrichment by gaining something from another.¹⁰⁸ Criminal restitution is imposed on convicted offenders to make victims whole through reimbursement of the victim's losses caused by the criminal act.¹⁰⁹ Restitution in criminal law can be traced back to 1925, when restitution was imposed as a condition of supervision.¹¹⁰ In 1982, Congress passed the Victim and Witness Protection Act of 1982, which allowed courts to impose discretionary restitution.¹¹¹ In 1990, the Supreme Court held that restitution is only allowable for losses caused by the specific conduct that is the basis for the convicted offense.¹¹² In the 1990s, Congress passed several acts which expanded federal restitution, including restitution for failure to pay child support, crimes against women and children, and telemarketing crimes.¹¹³

The Mandatory Victims Restitution Act of 1996 mandates that district courts enter restitution orders for certain crimes.¹¹⁴ The Act applies to several crimes, and 18 U.S.C. § 2259 directs that district courts shall enter restitution orders to victims for the full amount of their losses.¹¹⁵ Section

108. *Restitution*, BLACK'S LAW DICTIONARY (11th ed. 2019); RESTATEMENT (THIRD) OF RESTITUTION AND UNJUST ENRICHMENT § 1 (AM. L. INST. 2011) ("Liability in restitution derives from the receipt of a benefit whose retention without a payment would result in the unjust enrichment of the defendant at the expense of the claimant.").

109. *Restitution*, U.S. ATT'Y'S OFF. DIST. ALASKA, <https://www.justice.gov/usao-ak/restitution> [<https://perma.cc/UZB8-TCDW>] (last visited Oct. 22, 2020); *Restitution*, BLACK'S LAW DICTIONARY (11th ed. 2019) ("The set of remedies associated with that body of law, in which the measure of recovery is . . . [c]ompensation for loss; esp. full or partial compensation paid by a criminal to a victim, not awarded in a civil trial for tort, but ordered as part of a criminal sentence or as a condition of probation.").

110. Pub. L. No. 68-596, 43 Stat. 1260 (1925), *repealed by* Pub. L. No. 98-473, 98 Stat. 1987, 2031 (1987); Ashleigh Boe, *Putting a Price on Child Porn: Requiring Defendants Who Possess Child Pornography Images to Pay Restitution to Child Pornography Victims*, 86 N.D. L. REV. 205, 209 (2010) (describing the first federal restitution act, the Federal Probation Act).

111. *See* Victim and Witness Protection Act of 1982, Pub. L. No. 97-291, 96 Stat. 1248 (codified as amended at 18 U.S.C. §§ 3663–3664) (providing that a court *may* order restitution in addition to other penalties).

112. *See generally* *Hughey v. United States*, 495 U.S. 411 (1990).

113. Child Support Recovery Act of 1992, Pub. L. No. 102-521, 106 Stat. 3403; Violent Crime Control and Law Enforcement Act of 1994, Pub. L. No. 103-322, 108 Stat. 1796.

114. Mandatory Victims Restitution Act of 1996, 18 U.S.C. §§ 3663–3664; *Paroline v. United States*, 572 U.S. 434, 443 (2014) (noting that the statute states that courts "*shall*" order restitution).

115. *Paroline*, 572 U.S. at 464 (Roberts, C.J., dissenting) ("[S]ections 3663A and 3664 were not designed specifically for child pornography offenses; they are a part of the Mandatory Victims

2259 is enforced under the Mandatory Victims Restitution Act, 18 U.S.C. § 3664.¹¹⁶ Under § 3664, the government must demonstrate, by a preponderance of the evidence, the amount of loss sustained by a victim as a result of the offense committed by the defendant.¹¹⁷

Under § 2259, victims can recover costs incurred from medical treatment, psychological and psychiatric care, physical therapy, rehabilitation, necessary transportation, housing, childcare costs, lost income, attorney fees, and any other costs incurred.¹¹⁸ In 2018, Congress amended the portion of § 2259 dealing with restitution for child pornography offenses, but these changes did not impact the costs that victims can recover.¹¹⁹ The amendment to § 2259 changed how much a victim can recover from individual defendants and is discussed in detail in Section II.E.

D. The 1/n Calculation

Courts have struggled imposing restitution in child pornography cases because of the causal requirement that restitution be ordered based on the losses caused by the defendant's offense and because there are likely numerous offenders for each victim. In *United States v. Gamble*, a pre-*Paroline* case, the Sixth Circuit devised a method of calculating restitution amounts on which many courts have subsequently based their orders.¹²⁰ This formula calculates a restitution amount by dividing the full amount of the victim's demonstrated losses by the total number of convicted offenders involving the victim's images, including the defendant at bar.¹²¹ The Sixth Circuit noted that district courts have wide discretion in this matter and that depending on the number of defendants,

Restitution Act of 1996 and supply general restitution guidelines for many federal offenses.”); 18 U.S.C. § 2259 (stating that courts “shall” order restitution).

116. 18 U.S.C. § 2259 (noting that enforcement of the section should be under § 3664); *Paroline*, 572 U.S. at 443 (stating that § 3664 in turn provides that the burden of demonstrating the amount of loss sustained by a victim is on the government).

117. 18 U.S.C. § 3664(e) (“Any dispute as to the proper amount or type of restitution shall be resolved by the court by the preponderance of the evidence. The burden of demonstrating the amount of the loss sustained by a victim as a result of the offense shall be on the attorney for the Government.”); *United States v. Safford*, 1:17-CR-54, 2019 WL 4044038, at *2 (N.D.N.Y. Aug. 15, 2019) (providing similarly that the government bears the burden of proving the amount of a victim's losses).

118. 18 U.S.C. § 2259(c)(2) (listing the various costs that victims can recover); *Safford*, 2019 WL 4044039, at *1 (describing similarly the costs included in the full amount of the victim's losses in § 2259).

119. 18 U.S.C. § 2259 (providing that the order of restitution shall direct the defendant to pay the victim the full amount of the victim's losses); see *infra* Section II.F.

120. *United States v. Gamble*, 709 F.3d 541, 543–45 (6th Cir. 2013) (explaining that one defendant pleaded guilty to possession and the other defendant pleaded guilty to receipt of child pornography).

121. *Id.* at 554–55.

such discretion may not be appropriate.¹²² For instance, if only a couple offenders have been convicted, using the formula would result in a disproportionately large share of the losses. On the other hand, if thousands of offenders are known, using the formula could result in a token amount. Many district courts still consider the $1/n$ calculation when setting restitution amounts, despite post-*Gamble* case law cautioning otherwise.¹²³

E. Paroline v. United States

In *Paroline*, the Supreme Court addressed the causation standard and created a framework for formulating the amount of the restitution for defendants convicted of child pornography offenses.¹²⁴ This Section will review the factual history leading to the *Paroline* case and then analyze the Court's ruling on the causation standard for § 2259 in the majority and dissenting opinions.¹²⁵ Justice Kennedy, joined by Justices Alito, Breyer, Ginsburg, and Kagan, authored the majority opinion. Chief Justice Roberts wrote a dissenting opinion, which Justices Scalia and Thomas joined. Justice Sotomayor also dissented in a separate opinion.

Before the Supreme Court decided *Paroline*, several circuit courts were split on the issue of causation and setting an amount for restitution under §§ 2259 and 3664. Ten circuits read in a proximate causation standard but based on different reasoning.¹²⁶ The Fifth Circuit rejected the

122. *Id.* at 554 (“This second step [referring to the decision to use the $1/n$ calculation or a variation of it] provides district courts with considerable discretion.”); *but see* *United States v. Rothenberg*, 923 F.3d 1309, 1335 n.8 (11th Cir. 2019) (explaining that strict or sole reliance on the $1/n$ calculation would not meet the muster of the *Paroline* framework).

123. *See, e.g.*, *United States v. Sainz*, 827 F.3d 602, 605 (7th Cir. 2016) (noting that the government relied on the $1/n$ calculation); *Rothenberg*, 923 F.3d at 1314 (explaining that the government proposed a variation of the $1/n$ calculation); *United States v. Bordman*, 895 F.3d 1048, 1056 (8th Cir. 2018) (using the $1/n$ calculation); *United States v. Campbell-Zorn*, No. CR 14-41, 2014 WL 7215214, at *5 (D. Mont. Dec. 17, 2014) (discussing the application of the $1/n$ calculation (citing *United States v. Wencewicz*, 2014 WL 5437057, at *3–5 (D. Mont. Oct. 24, 2014))).

124. *Paroline v. United States*, 572 U.S. 434, 439 (2014) (“The question is what causal relationship must be established between the defendant’s conduct and a victim’s losses for purposes of determining the right to, and the amount of, restitution under § 2259.”).

125. *Infra* Section II.E.4 (discussing the “relative role” standard and the *Paroline* factors); *infra* Section II.E.5 (discussing the argument that the statute was unworkable); *infra* Section II.E.6 (discussing Justice Sotomayor’s proposal for joint and several liability).

126. *United States v. Kennedy*, 643 F.3d 1251, 1261–62 (9th Cir. 2011) (reading in a proximate causation standard using principles of general statutory construction); *United States v. McDaniel*, 631 F.3d 1204, 1208–09 (11th Cir. 2011) (holding that § 2259 limits recoverable losses to those proximately caused by the defendant’s conduct); *but see* *United States v. Monzel*, 641 F.3d 528, 535 (D.C. Cir. 2011) (basing the proximate causation standard in the “traditional principals of tort and criminal law”); *United States v. Burgess*, 684 F.3d 445, 456–57 (4th Cir. 2012) (examining the issue of proximate cause through the employment of a tort law principle in the construction of the criminal statute); *United States v. Aumais*, 656 F.3d 147, 153 (2d Cir. 2011) (endorsing the D.C.

proximate causation standard and imposed joint and several liability.¹²⁷

1. Factual Background

The defendant, Doyle Randall Paroline, pleaded guilty to one count of possession of child pornography.¹²⁸ He possessed between 150 and 300 images, several of which were images of the victim, Amy.¹²⁹ Amy was abused by her uncle, who recorded the assaults.¹³⁰ Her images became some of the most trafficked series of child sexual abuse imagery.¹³¹ Amy received treatment and recovered from the trauma caused by her uncle's abuse in her early teenage years.¹³² However, when she was seventeen, she was notified that the recordings of her abuse were being trafficked on the internet.¹³³ Knowing that thousands of people were viewing images

Circuit's reasoning in *Monzel*); *United States v. Benoit*, 713 F.3d 1, 1 (10th Cir. 2013) (referring to the court's holding in *Burgess*); see *United States v. Evers*, 669 F.3d 645, 658–59 (6th Cir. 2012) (acknowledging the different rationales for reading in a proximate causation standard but stating that “[w]e need not choose between the rationales”); *United States v. Kearney*, 672 F.3d 81, 94–98 (1st Cir. 2012) (imposing a proximate causation standard based on the aggregate result of the actions of the offenders); *United States v. Fast*, 709 F.3d 712, 721–22 (8th Cir. 2013) (finding that no courts' reasoning is absolute, but similarly concluding that proximate cause is required); *United States v. Laraneta*, 700 F.3d 983, 990–92 (7th Cir. 2012) (holding that there was a proximate causation standard which imposed joint and several liability on producers and distributors but not for possessors).

127. *In re Amy Unknown*, 701 F.3d 749, 765, 769 (5th Cir. 2012) (“We cannot read the ‘proximate result’ language in § 2259(b)(3)(F) as applying to the categories of losses in § 2259(b)(3)(A)–(E). The joint and several liability mechanism applies well in these circumstances, where victims like Amy are harmed by defendants acting separately who have caused her a single harm.”), *rev'd sub nom.* *Paroline v. United States*, 572 U.S. 434 (2014); James R. Marsh, *Federal Criminal Restitution for Child Pornography Victims*, 17 CHILD. RTS. LITIG. 12, 13 (2014) (explaining that at least three circuits agree that under rules of statutory construction, the “proximate result” language cannot be read to apply to the categories of losses listed in § 2259(b)(3)).

128. *Paroline*, 572 U.S. at 439; Cassell & Marsh, *supra* note 18, at 3.

129. *Paroline*, 572 U.S. at 439 (“He admitted to possessing between 150 and 300 images of child pornography, which included two that depicted the sexual exploitation of a young girl, now a young woman, who goes by the pseudonym ‘Amy’ for this litigation.”); Cassell & Marsh, *supra* note 18, at 3 (explaining that nine years after Amy's abuse ended, Paroline downloaded images of Amy).

130. *Paroline*, 572 U.S. at 440 (“When she was eight and nine years old, she was sexually abused by her uncle in order to produce child pornography.”); Lorelei Laird, *Pricing Amy*, A.B.A. J., Sept. 2012, at 48, 51 (“Amy recalls telling him the penetration hurt, but it kept happening. And like most child victims, she trusted him when he told her it was a normal thing adults do with children, that he loved her and that it was their special secret . . .”).

131. *Paroline*, 572 U.S. at 440 (explaining that her images were available worldwide, and that there were “easily” thousands of possessors); Laird, *supra* note 130, at 51.

132. *Paroline*, 572 U.S. at 440 (stating that she underwent therapy for two years and by the end, she was “back to normal”); Cassell & Marsh, *supra* note 18, at 2.

133. *Paroline*, 572 U.S. at 440 (explaining that a major setback in her recovery came when she was notified that her images were being trafficked on the internet); Cassell & Marsh, *supra* note 18, at 2.

of her abuse triggered Amy to relapse.¹³⁴ In a victim impact statement, she explained that the circulation made her feel like she was being abused again and again.¹³⁵

Amy sought restitution under § 2259 for \$3 million.¹³⁶ The parties stipulated that the victim did not know Paroline and that her losses did not derive from knowledge about his specific conduct.¹³⁷ The United States District Court for the Eastern District of Texas and the United States Court of Appeals for the Fifth Circuit both denied relief.¹³⁸ After a rehearing en banc, the Fifth Circuit reversed and held that § 2259 does not limit restitution to harms proximately caused by the defendant. The court ordered Paroline to pay the full amount of Amy's losses.¹³⁹

2. The Causation Issue

The Court needed to decide two major issues on appeal in *Paroline*. The first issue the Court considered was the causation standard for § 2259. The Supreme Court explained that § 2259 mandates restitution for offenses involving the sexual exploitation of children, including child pornography.¹⁴⁰ Moreover, § 2259 directs enforcement under 18 U.S.C. § 3664.¹⁴¹ Section 3664 requires that the government prove the losses sustained by the victim result from the defendant's specific offense.¹⁴²

134. *Paroline*, 572 U.S. at 440–41 (quoting Amy's victim impact statement where she explains that the images make her feel humiliated and powerless); Laird, *supra* note 130, at 51.

135. *Paroline*, 572 U.S. at 441 (“It’s like I am being abused over and over and over again.”); *see also* Laird, *supra* note 130, at 51.

136. *Paroline*, 572 U.S. at 441 (stating that Amy requested \$3.4 million for lost income and future treatment costs); Laird, *supra* note 130, at 51 (noting that Amy has suffered significant trauma because of the magnitude of the circulation—it took two days to open all of the victim notification letters from 2006–2007).

137. *Paroline*, 572 U.S. at 442 (“They stipulated that the victim did not know who Paroline was and that none of her claimed losses flowed from any specific knowledge about him or his offense conduct.”); Cassell & Marsh, *supra* note 18, at 3 (noting that the district court denied restitution because Amy could not prove that Paroline was responsible for her specific harm).

138. *Paroline*, 572 U.S. at 442 (denying relief because the government did not prove Amy's losses were “directly produced by Paroline”).

139. *Id.* at 442–43 (remarking that in an en banc hearing, the Fifth Circuit held that § 2259 did not limit the restitution to losses proximately caused by the defendant and imposed joint and several liability on defendants); Cassell & Marsh, *supra* note 18, at 3–4 (noting that the Supreme Court granted Paroline's petition for certiorari).

140. *Paroline*, 572 U.S. at 443 (explaining that § 2259 mandates restitution for offenses involving sexual exploitation of children and child pornography); *United States v. Rothenberg*, 923 F.3d 1309, 1324 (11th Cir. 2019) (explaining the background of § 2259 in child pornography cases).

141. *Paroline*, 572 U.S. at 443 (“Section 2259(b)(2) provides that “[a]n order of restitution under this section shall be issued and enforced in accordance with section 3664’”); 18 U.S.C. § 2259(b)(2).

142. *Paroline*, 572 U.S. at 443; 18 U.S.C. § 3664(e) (“The burden of demonstrating the amount of the loss sustained by a victim as a result of the offense shall be on the attorney for the Government.”).

Lower courts were split on what causation the government would have to prove: but-for or proximate causation.¹⁴³

The Supreme Court first confronted the complications arising from but-for causation, which requires proof one event caused another event.¹⁴⁴ The Court noted that but-for causation cannot be proven in the typical child pornography restitution case because the defendant is one of an unknowable number of people possessing and distributing the images.¹⁴⁵ The victim does not know the specific defendants, and she is still harmed even if the individual defendant had not committed the offense.¹⁴⁶ Simply put, but for the defendant's actions, the victim still would have suffered.¹⁴⁷ The Court explained that proximate causation, on the other hand, only requires proof that there is a sufficient connection between the defendant's conduct and the victim's losses.¹⁴⁸ A defendant's possession or distribution of a victim's images is sufficiently connected to the victim's losses because it is foreseeable that a victim would be harmed by the circulation of images depicting the victim's

143. *Paroline*, 572 U.S. at 443–44 (citing *In re Amy Unknown*, 701 F.3d 749, 752 (5th Cir. 2012); *United States v. Rogers*, 714 F.3d 82, 89 (1st Cir. 2013); *United States v. Benoit*, 713 F.3d 1, 20 (8th Cir. 2013); *United States v. Fast*, 709 F.3d 712, 721–22 (8th Cir. 2013); *United States v. Laraneta*, 700 F.3d 983, 989–90 (7th Cir. 2012); *United States v. Burgess*, 684 F.3d 445, 456–57 (4th Cir. 2012); *United States v. Evers*, 669 F.3d 645, 659 (6th Cir. 2011); *United States v. Aumais*, 656 F.3d 147, 153 (2d Cir. 2011); *United States v. Kennedy*, 643 F.3d 1251, 1261 (9th Cir. 2011); *United States v. Monzel*, 641 F.3d 528, 535 (D.C. Cir. 2011); *United States v. McDaniel*, 631 F.3d 1204, 1208–09 (11th Cir. 2011)).

144. *Paroline*, 572 U.S. at 449–50 (“The traditional way to prove that one event was a factual cause of another is to show that the latter would not have occurred ‘but for’ the former.”); Cassell & Marsh, *supra* note 18, at 4 (explaining that Justice Kennedy acknowledged the various tort principles implicated in the causation issue and, for complicated reasons, concluded that proximate causation should be applied).

145. *Paroline*, 572 U.S. at 450 (explaining that but-for causation could be proven with producers or initial distributors of child pornography but not possessors); Cassell & Marsh, *supra* note 18, at 4 (noting that Justice Kennedy concluded that it would not be possible to prove but-for causation).

146. *Paroline*, 572 U.S. at 450 (“From the victim’s perspective, Paroline was just one of thousands of anonymous possessors.”); Laird, *supra* note 130, at 51 (explaining that she feared the public because people might recognize her from the images depicting her childhood rapes).

147. *Paroline*, 572 U.S. at 450 (“But it is not possible to prove that her losses would be less (and by how much) but for one possessor’s individual role in the large, loosely connected network through which her images circulate.”); Laird, *supra* note 130, at 52 (explaining that before the Supreme Court decided *Paroline*, legal experts said there was “no precedent for these questions under VAWA or anywhere else in criminal or in tort law”).

148. *Paroline*, 572 U.S. at 451–52 (explaining that legal fictions have been created to allow for liability when the efforts of independent actors cause a combined result).

sexual abuse.¹⁴⁹ The Court thus held that proximate causation is the more appropriate standard for § 2259.¹⁵⁰

3. The “Relative Role in the Causal Process”

The Court then considered how courts should calculate an amount of restitution. The Court held that proximate causation can be used to justify imposing some restitution award but that it does not justify imposing joint and several liability.¹⁵¹ The Court noted that offenders of child pornography, by and large, do not act in concert or within a joint enterprise.¹⁵² By adopting joint and several liability, the Court would make an individual possessor liable for “the combined consequences” of the acts of potentially tens of thousands of people.¹⁵³ The Court concluded that joint and several liability would be unjust because a single offender could be liable for the full harm caused by all offenders, even if the offender played a relatively insignificant role in causing the harm.¹⁵⁴

The Supreme Court reasoned that it was both unjust to deny any restitution to victims as well as unjust to order restitution for victims in the full amount of their losses.¹⁵⁵ But, Congress made its intent clear: victims were entitled to full compensation for their losses. The Court held that defendants are liable for their “relative role in the causal process that underlies the victim’s general losses” that is not “a token or nominal amount.”¹⁵⁶ In entering a restitution amount, district courts should not

149. *Id.* at 456–57 (explaining that Paroline was a cause of Amy’s harm, and that it was indisputable that his actions caused her harm, even though no one could determine how much harm he caused).

150. *Id.* at 458 (“It would be unacceptable to adopt a causal standard so strict that it would undermine congressional intent where neither the plain text of the statute nor legal tradition demands such an approach.”).

151. *Id.* at 455–56 (explaining that joint and several liability without a practical method of contribution could implicate the Eighth Amendment’s Excessive Fines Clause); RESTATEMENT (THIRD) OF TORTS: APPORTIONMENT OF LIABILITY § 22 (AM. L. INST. 2000) (imposing joint and several liability on intentional torts for any indivisible injury caused by the tortious conduct); *id.* § 10 (“When, under applicable law, some persons are jointly and severally liable to an injured person, the injured person may sue for and recover the full amount of recoverable damages from any jointly and severally liable person.”).

152. *Paroline*, 572 U.S. at 454 (“[T]his case does not involve a set of wrongdoers acting in concert, . . . for Paroline had no contact with the overwhelming majority of the offenders . . .”).

153. *Id.* (“[A]dopting the victim’s approach would make an individual possessor liable for the combined consequences of the acts of not just 2, 5, or even 100 independently acting offenders; but instead, a number that may reach into the tens of thousands.”).

154. *Id.* at 455 (explaining that holding a possessor liable for the full amount of the victim’s losses could be grossly excessive under the Eighth Amendment); *but see* Cassell & Marsh, *supra* note 18, at 13 (disagreeing with the Supreme Court in *Paroline*’s characterization of the Eighth Amendment in dicta).

155. *Paroline*, 572 U.S. at 457 (“[I]t would produce anomalous results to say that no restitution is appropriate in these circumstances.”).

156. *Id.* at 458–59.

rely on a “precise algorithm.”¹⁵⁷ The Court directed district courts to assess the individual’s contribution to the underlying causal process “as best [they] can.”¹⁵⁸ The Court then announced several factors courts ordering restitution should use as guideposts when formulating an amount for restitution, including

the number of past criminal defendants found to have contributed to the victim’s general losses; reasonable predictions of the number of future offenders likely to be caught and convicted for crimes contributing to the victim’s general losses; any available and reasonably reliable estimate of the broader number of offenders involved (most of whom will, of course, never be caught or convicted); whether the defendant reproduced or distributed images to the victim; whether the defendant had any connection to the initial production of the images; how many images of the victim the defendant possessed; and other facts relevant to the defendant’s relative causal role.¹⁵⁹

4. Criticism of the Impossible Statutory Construction

Chief Justice Roberts, joined by Justices Scalia and Thomas, dissented and objected to the majority’s interpretation of § 2259, arguing that the majority overstepped its authority by rewriting the statute that Congress enacted.¹⁶⁰ The Chief Justice argued that Congress enacted an unworkable standard because Congress failed to tailor it to the unique harm caused by child sexual abuse imagery.¹⁶¹

The Chief Justice reasoned that the statute required but-for causation, disagreeing with both the majority opinion and Justice Sotomayor’s

157. *Id.* at 459–60.

158. *Id.* at 459.

159. *Id.* at 460 (listing various factors for courts to consider, which are often referred to as the “Paroline factors”).

160. *Id.* at 463 (Roberts, C.J., dissenting) (“The Court attempts to design a more coherent restitution system, focusing on ‘the defendant’s relative role in the causal process that underlies the victim’s general losses.’ But this inquiry, sensible as it may be, is not the one Congress adopted.”); *id.* (“Instead of tailoring the statute to the unique harms caused by child pornography, Congress borrowed a generic restitution standard that makes restitution contingent on the Government’s ability to prove, ‘by the preponderance of the evidence,’ ‘the amount of the loss sustained by a victim as a result of’ the defendant’s crime.”).

161. *Id.* at 464 (“It provides that ‘[a]n order of restitution under this section shall be issued and enforced in accordance with section 3664 in the same manner as an order under section 3663A.’ Unlike section 2259, sections 3663A and 3664 were not designed specifically for child pornography offenses; they are part of the Mandatory Victims Restitution Act of 1996 and supply general restitution guidelines for many federal offenses.”); *id.* at 467–68 (“The problem stems from the nature of Amy’s injury. . . . The section 3664(e) standard will work just fine for most crime victims, because it will usually not be difficult to identify the harm caused by the defendant’s offense. . . . Amy has a qualitatively different injury. Her loss, while undoubtably genuine, is a result of the collective actions of a huge number of people—beginning with her uncle who abused her and put her images on the Internet, to the distributors who make those images more widely available, to the possessors such as Paroline who view her images.”).

dissent which found that only proximate causation was required.¹⁶² He explained that the government needed to prove the actual amount of harm that Amy suffered as a result of Paroline's actions.¹⁶³ However, he noted that the government could never prove this because Amy did not know that Paroline possessed her images. Rather, her harm derived from the knowledge that thousands of people were viewing and distributing her images.¹⁶⁴

Chief Justice Roberts noted the Court's holding in *Paroline* directs district courts to "look at what other courts have done."¹⁶⁵ He explained that a district court would have to "assess as best it can from available evidence the significance of the individual defendant's conduct in light of the broader causal process that produced the victim's losses."¹⁶⁶ However, he asserted that the statute actually requires a district court to impose a restitution order that reflects the harm that the defendant caused—not the defendant's relative culpability.¹⁶⁷

The Chief Justice found that the system created by the Court was inequitable to both victims and defendants.¹⁶⁸ He concluded the Court should have denied restitution. This would have forced Congress to enact a workable statute for victims of child pornography instead of creating a standard that can only be arbitrarily applied to defendants and can only

162. *Id.* at 465 (citing *Burrage v. United States*, 571 U.S. 204, 210 (2014) (holding that the ordinary meaning of "results from" requires proof of actual causation)); see *Hughey v. United States*, 495 U.S. 411, 418–19 (1990) (requiring the restitution order reflect the loss caused by the offense of the conviction).

163. *Paroline*, 572 U.S. at 466 (Roberts, C.J., dissenting) ("The offense of conviction here was Paroline's possession of two of Amy's images. No one suggests Paroline's crime actually caused Amy to suffer millions of dollars in losses . . . Determining what amount the statute does allow—the amount of Amy's losses that Paroline's offense caused—is the real difficulty of this case.")

164. *Id.* at 468 ("Amy's injury is indivisible, which means that Paroline's particular share of her losses is unknowable. And yet it is proof of Paroline's particular share that the statute requires."); *id.* at 467–68 ("The problem stems from the nature of Amy's injury. . . . The section 3664(e) standard will work just fine for most crime victims, because it will usually not be difficult to identify the harm caused by the defendant's offense. . . . Amy has a qualitatively different injury. Her loss, while undoubtably genuine, is the result of the collective actions of a huge number of people—beginning with her uncle who abused her and put her images on the Internet, to the distributors who make those images more widely available, to the possessors such as Paroline who view her images."); see also *id.* at 466 (rejecting Justice Sotomayor's argument in favor of imposing joint and several liability because §§ 3663A and 3664 require that the restitution order be reflective of the losses caused by the defendant's offenses).

165. *Id.* at 469 (commenting that the standard imposed by the majority allows district courts to impose the "going rate" of restitution orders instead of ordering a restitution order that is reflective of the harm actually caused by the defendant).

166. *Id.* at 470 (citing *id.* at 459 (majority opinion)).

167. *Id.* ("The majority's plan to situate Paroline along a spectrum of offenders who have contributed to Amy's harm will not assist a district court in calculating the amount of Amy's losses . . . that was caused by Paroline's crime (or that of any other defendant).")

168. *Id.* (commenting that victims would have to litigate for years to recover small restitution awards from various defendants).

grant piecemeal recovery to victims.¹⁶⁹ In actuality, the Court left the public with the view that the decision was a win for victims and Congress had done enough for victims, even though the decision was riddled with complications and difficulties.¹⁷⁰

5. A Proposal for Joint and Several Liability

Writing alone, Justice Sotomayor dissented and interpreted § 2259 as allowing joint and several liability on all defendants convicted of child offenses related to a victim's images.¹⁷¹ She noted that Congress enacted § 2259 and the Mandatory Victims Restitution Act of 1996 within the legal background of tort principles, which indicated that Congress intended that victims receive full restitution through joint and several liability.¹⁷² Justice Sotomayor concluded that the majority's interpretation flouted congressional intent. Despite the directive to grant restitution reflecting the full amount of the victim's losses, victims are no longer guaranteed full recovery because individual defendants are only responsible for their "relative role" in causing the victim's losses.¹⁷³

Justice Sotomayor argued that joint and several liability is appropriate in the context of child pornography offenses.¹⁷⁴ Possessors, distributors, and producers are involved in a global industry based on the sexual exploitation of children.¹⁷⁵ She noted that possessors do not play a passive role in the industry. Rather, possessors are "an integral part of the 'market for the sexual exploitative use of children.'"¹⁷⁶ Without consumers in the market, such as possessors like Paroline, the industry would not flourish.¹⁷⁷

Justice Sotomayor concluded that the lack of a cause of action for contribution was not dispositive against reading in joint and several

169. *Id.* at 471 ("Amy will fare no better if district courts consider the other factors suggested by the majority . . .").

170. *Id.* at 471–72 ("[I]t would be a mistake for that salutary outcome to lead readers to conclude that Amy has prevailed or that Congress has done justice for victims of child pornography. The statute as written allows no recovery; we ought to say so, and give Congress a chance to fix it.")

171. *Id.* at 473 (Sotomayor, J., dissenting) ("I would accordingly affirm the Fifth Circuit's holding that the District Court must enter a restitution order reflecting the full amount of [Amy's] losses and instruct the court to consider a periodic payment schedule on remand." (internal quotations omitted)).

172. *Id.* at 482 ("Second, Congress adopted § 2259 against the backdrop of the rule governing concerted action by joint tortfeasors . . .").

173. *Id.* at 472.

174. *Id.* at 483 (noting that child pornography offenders would amount to tort liability through intentional invasion of privacy).

175. *Id.* (explaining that offenders act with the "common purpose of trafficking in images of child sexual abuse").

176. *Id.* ("As Congress itself recognized, 'possessors of such material' are an integral part of the 'market for the sexual exploitative use of children.'" (quoting § 2251 Findings (12))).

177. *Id.* (explaining that possessors "fuel the process" of the industry).

liability.¹⁷⁸ Contribution allows defendants who have been held jointly and severally liable to seek money from other defendants who contributed to the victim's injuries.¹⁷⁹ She determined that allowing for contribution under the statute would congest courts with litigation.¹⁸⁰ Countering the argument that individual defendants will be forced to pay an unfair share of the restitution orders, she explained that § 3664 allows payment of restitution orders through periodic payment schedules.¹⁸¹ When making these payment schedules, district courts must consider the defendant's financial resources and obligations and can look to the substantial case law on the topic for guidance.¹⁸²

Justice Sotomayor proposed that partial periodic payments alleviate concerns that joint and several liability would be unfair to defendants.¹⁸³ A defendant ordered to pay the restitution order through a periodic payment schedule would contribute smaller amounts of money over a specified period of time at specified intervals.¹⁸⁴ Defendants would all pitch into the restitution until the victim recovers the full amount of her established losses.¹⁸⁵ When the sum of the defendants' payments satisfies the victim's restitution order, all of the orders terminate.¹⁸⁶

178. *Id.* at 485 (“I agree that the statute does not create a cause of action for contribution, but unlike the majority I do not think the absence of contribution suggests that Congress intended the phrase ‘full amount of the victim’s losses’ to mean something less than that.”).

179. *Id.* at 484–85 (discussing why the majority noted the lack of contribution was important, as contribution allows defendants held joint and severally liable to seek money from other defendants).

180. *Id.* at 485 (“For instead of expending judicial resources on disputes between intentional tortfeasors, Congress crafted a different mechanism for preventing inequitable treatment of individual defendants—the use of periodic payment schedules.”).

181. *Id.* (explaining that § 3664 allows for periodic payment schedules and that there is already “a robust body of case law clarifying how payment schedules are to be set”).

182. *Id.* at 485–86 (citing various cases which reversed district courts’ payment schedules where a defendant would not be able to pay the amount set).

183. *Id.* at 486 (“[P]artial periodic payments thus alleviate[] any concerns of unfairness . . .”).

184. *Id.* at 486–87 (explaining that the restitution payments would be offset by all of the other offenders’ payments).

185. *Id.* at 487 (noting that this system would provide victims certainty that they could recover the full amount of their losses).

186. *Id.* at 486–87 (explaining how the system would operate).

*F. The Process for Receiving Restitution*¹⁸⁷

Under the current victims' rights statutes, victims have the right to be notified about prosecution involving the people who have harmed them and to participate in those proceedings.¹⁸⁸ Generally, the government, the National Center for Missing and Exploited Children, and law enforcement work together to identify the victim¹⁸⁹ and provide her with notice.¹⁹⁰ Then, the victim or the victim's representative will send the government a restitution request with the documentation corroborating that amount.¹⁹¹ Once the victim submits the request, the government chooses to support that request or to request a different amount.¹⁹² The defendant can accept the request, negotiate with the government and victim's attorney, or challenge the request in the district court.¹⁹³ Finally, the district court sets a restitution order after considering the evidence and weighing the *Paroline* factors.¹⁹⁴

Because defendants are only liable for their "relative role," if the victim wants to recover the full amount of her demonstrated losses, the

187. This Comment does not explore the practical difficulties in recovering restitution, such as ensuring that restitution is requested by the government, or the ability to collect restitution. *See, e.g.*, U.S. GOV'T ACCOUNTABILITY OFF., GAO-18-203, FEDERAL CRIMINAL RESTITUTION: MOST DEBT IS OUTSTANDING AND OVERSIGHT OF COLLECTIONS COULD BE IMPROVED (2018), <https://www.gao.gov/assets/690/689830.pdf> [<http://perma.cc/A2MA-KKWT>]. Those problems, however, are equally important. With a simpler legal standard and awareness, hopefully the government and victims request restitution more frequently.

188. *United States v. Rothenberg*, 923 F.3d 1309, 1314 (11th Cir. 2019) (explaining the typical process for providing child pornography victims with mandatory restitution).

189. *Id.* (explaining the typical process of restitution requests pursuant to current victims' rights statutes); *see also* KENDALL & FUNK, *supra* note 11, at 252 (explaining that victims of sexual exploitation are entitled to restitution).

190. Victims have the option of refusing notice if they choose to do so. *See* KENDALL & FUNK, *supra* note 11, at 249 (explaining that the Crime Victims' Rights Act accords victims a recognized role in court proceedings); *see generally* Crime Victims' Rights Act, 18 U.S.C. § 3771 (explaining that victims have enumerated rights).

191. *Rothenberg*, 923 F.3d at 1314; *see* Reid & Collier, *supra* note 21, at 694 (explaining that victims are in a better position to apportion losses).

192. *Rothenberg*, 923 F.3d at 1314 (detailing the steps taken by the government in the restitution proceedings).

193. *Id.*; *see also* *Paroline v. United States*, 572 U.S. 434, 470 (2014) (Roberts, C.J., dissenting) ("Amy will be stuck litigating for years to come.").

194. *Rothenberg*, 923 F.3d at 1314 (providing an example of the *Paroline* factors at work); *see also* *United States v. Dillard*, 891 F.3d 151, 161 (4th Cir. 2018) ("The district court was not faced with a binary choice of accepting or rejecting the Government's proposed calculation of an appropriate amount of restitution for each . . . victim. If the district court thought the . . . awards were too high . . . , it should have adjusted the amount and explained its reasoning rather than refusing to order any amount of restitution.").

victim must repeat this process for each offender until the sum of the individual defendants' restitution orders satisfies that full amount.¹⁹⁵

III. DISCUSSION

Since the Supreme Court announced the *Paroline* framework, lower courts have applied the standard differently.¹⁹⁶ Several of the federal courts of appeals are split on whether courts must first separate the harm caused by the initial abuser before setting a restitution amount for subsequent distributors and possessors.¹⁹⁷ Courts commonly refer to this separation as disaggregation.¹⁹⁸

A. *The Ninth and Tenth Circuits*

The Ninth and Tenth Circuits more or less hold that some level of disaggregation is needed in calculating a restitution; however, there are notable differences between the two circuits. In both *United States v. Dunn* in the Tenth Circuit and *United States v. Galan* in the Ninth Circuit, the defendants were convicted of distribution and possession of child pornography.¹⁹⁹ The defendants were each ordered to pay restitution to their respective victims.²⁰⁰ In *Dunn*, the district court held the defendant jointly and severally liable for Vicky's remaining losses.²⁰¹ Conversely, in *Galan*, the district court entered a restitution order without disaggregating the losses caused by the initial abuse from the losses

195. *Rothenberg*, 923 F.3d at 1314 (explaining *Paroline*'s holding regarding damages and a defendant's "relative role" in child pornography cases).

196. Compare *United States v. Dunn*, 777 F.3d 1171, 1182 (10th Cir. 2015) (holding that there is a disaggregation requirement), with *United States v. Sainz*, 827 F.3d 602, 609 (7th Cir. 2016) (avoiding consideration of the disaggregation issue), and *United States v. Halverson*, 897 F.3d 645, 653–54 (5th Cir. 2018) (holding that a disaggregation requirement is inconsistent with the flexible *Paroline* framework).

197. Compare *Dunn*, 777 F.3d at 1181 (concluding that there is a disaggregation requirement because defendants are only supposed to be liable for the amount of harm that their conduct caused), and *United States v. Galan*, 804 F.3d 1287, 1290–91 (9th Cir. 2015) (adopting the holding articulated in *Dunn* and requiring disaggregation), with *Halverson*, 897 F.3d at 654–55 n.4 (concluding that the *Paroline* guideposts do not require a formal disaggregation), and *United States v. Bordman*, 895 F.3d 1048, 1051 (8th Cir. 2018) (concluding that disaggregation is not required because the guideposts were created to be flexible and the district courts already have to consider whether the defendant was the producer, distributor, or possessor).

198. See *Dunn*, 777 F.3d at 1181 (referring to the separation between harm caused by an initial abuser and harm caused by subsequent distributors and possessors as disaggregation); see also *Galan*, 804 F.3d at 1291 (discussing disaggregation).

199. *Dunn*, 777 F.3d at 1172–73 (explaining that the defendant traded child sexual abuse imagery through peer-to-peer networks); *Galan*, 804 F.3d at 1288 (stating that the defendant possessed images of Cindy's physical sexual abuse, which had ended eleven years prior to his offense).

200. *Dunn*, 777 F.3d at 1173 (stating that the defendant appealed his restitution order); *Galan*, 804 F.3d at 1288 (stating that the defendant appealed his restitution order).

201. *Dunn*, 777 F.3d at 1174 (noting that the restitution order amounted to \$583,955 for Vicky which represented the full amount of her unpaid aggregate losses).

caused by the defendant's actions.²⁰²

Applying *Paroline*, the Tenth Circuit in *Dunn* concluded that making subsequent offenders liable for losses caused by the initial physical sexual abuse through joint and several liability was “inconsistent with ‘the bedrock principle that restitution should reflect the consequences of the defendant’s own conduct.’”²⁰³ The defendant, *Dunn*, was only a distributor for certain images; he had no involvement in the initial physical abuse or production of those images. Moreover, he was one of the thousands of others who possessed images of Vicky.²⁰⁴ Holding him jointly and severally liable for the full amount does not reflect the loss that “*he individually* has caused.”²⁰⁵ However, the Tenth Circuit did not clarify if disaggregation was required for every case involving subsequent distributors and possessors of child pornography.²⁰⁶

Similarly, in *Galan*, the Ninth Circuit noted the difficulties in applying the restitution standard, but ultimately imposed a disaggregation requirement.²⁰⁷ The Ninth Circuit held that when calculating the restitution amount for distributors and possessors, district courts should disaggregate “losses, including ongoing losses, caused by the original

202. *Galan*, 804 F.3d at 1289 n.5 (“The district court declared that ‘until the Ninth Circuit or the Supreme Court mandates the “disaggregation” of harm and/or losses caused by the underlying sexual abuse of child pornography victims, I will not require the government to do so when seeking restitution.’”).

203. *Dunn*, 777 F.3d at 1181; *see id.* at 1179 (explaining the defendant’s argument regarding restitution and how the court ruled); *see also* *Rothenberg* Petition for Certiorari, *supra* note 28, at 8 (“This award, the Tenth Circuit easily recognized, ‘cannot stand in light of *Paroline*’ because it rendered the defendant liable for the conduct of other offenders . . .”).

204. *Dunn*, 777 F.3d at 1179 (noting the District Court improperly applied *Paroline* because the defendant was only a distributor); *see* *Rothenberg* Petition for Certiorari, *supra* note 28, at 9 (noting that it would be inconsistent with the principles of *Paroline* to hold the defendant accountable for harms caused by Vicky’s initial abuser).

205. *Dunn*, 777 F.3d at 1181 (explaining that the previous restitution amount held the defendant responsible for not only his actions, but the actions of thousands of temporally distant offenders); *Rothenberg* Petition for Certiorari, *supra* note 28, at 8 (“This award . . . rendered the defendant liable for the conduct of other offenders, ‘in contravention of *Paroline*’s guidance.”).

206. *Dunn*, 777 F.3d at 1181 (focusing on the defendant’s particular situation and not stating that disaggregation is applicable to every case); *see also* *United States v. Rothenberg*, 923 F.3d 1309, 1333 (11th Cir. 2019) (“We read *Dunn* as requiring disaggregation in that case because the defendant was held jointly and severally liable with the abuser for the entirety of the losses; we do not read *Dunn* as requiring disaggregation in each and every restitution case.”); *but see* *Rothenberg* Petition for Certiorari, *supra* note 28, at 8–9 (stating that the Tenth Circuit requires disaggregation).

207. *See, e.g.*, *United States v. Galan*, 804 F.3d 1287, 1289–90 (9th Cir. 2015) (“While Congress could and should have made determination of the amount to which a victim is entitled a simple matter, it regrettably did not.” (citing *Paroline v. United States*, 572 U.S. 434, 463 (2014) (Roberts, C.J., dissenting))); *see also* *United States v. Kennedy*, 643 F.3d 1251, 1266 (9th Cir. 2011) (noting that identifying a method for imposing restitution on defendants convicted of possession, receipt, or transportation offenses is not easy); *see also* *Galan*, 804 F.3d at 1291 (“We have no illusion that the task [of disaggregating the initial abuse] will be easy, but it does not appear any more impossible than the other tasks [referring to apportioning restitution based on the other *Paroline* factors] imposed upon courts attempting to apportion restitution amounts in this area.”).

abuse of the victim” from “the losses caused by the ongoing distribution and possession of images.”²⁰⁸ The court did not give a particular portion that should be attributable to the initial abuser, but stated that it does not need to be precise.²⁰⁹ The court reasoned that even if the images were never created, the victim would have suffered losses from the initial abuse.²¹⁰ Because the losses caused by the ongoing circulation of the images do not cause all of the victim’s ongoing losses and because the restitution amount should reflect the losses caused by the defendant’s individual actions, the court determined that possessors and distributors should not be liable for the losses caused by the initial abuse.²¹¹

B. *The Seventh and Fourth Circuits*

The Seventh and Fourth Circuits are worth discussing because both courts focused on maintaining the flexibility of the *Paroline* framework.²¹² They did not rule on whether disaggregation was required; instead, the courts emphasized the wide discretion that district courts have in setting an amount of restitution.²¹³

In *United States v. Sainz* and *United States v. Dillard*, the defendants were convicted of child pornography offenses.²¹⁴ In both lower court

208. *Galan*, 804 F.3d at 1291 (holding disaggregation was required); *Rothenberg* Petition for Certiorari, *supra* note 28, at 9–10 (noting that disaggregation was required because the Supreme Court recognized the difference between original abusers and subsequent distributors and possessors).

209. *Galan*, 804 F.3d at 1291 (noting that precision is neither expected nor required); *Rothenberg*, 923 F.3d at 1333 (quoting *Galan*, 804 F.3d at 1291).

210. *Galan*, 804 F.3d at 1290–91 (applying the Tenth Circuit’s reasoning in *Dunn*); *see Rothenberg* Petition for Certiorari, *supra* note 28, at 10 (stating that it was “logical” to disaggregate the losses caused by the initial abuse from the losses caused by the circulation of the images).

211. *Galan*, 804 F.3d at 1290–91 (concluding original abusers should be treated differently than possessors and distributors); *Rothenberg* Petition for Certiorari, *supra* note 28, at 10 (remarking that the consequences of the initial abuse and the consequences of the distribution of the images cause horrible, but separate harms).

212. *See United States v. Sainz*, 827 F.3d 602, 607 (7th Cir. 2016) (emphasizing the flexibility of the *Paroline* framework); *see also United States v. Dillard*, 891 F.3d 151, 162 (4th Cir. 2018) (reversing the district court’s denial of restitution to noncontact victims even though the district court concluded that the government had proven the harm caused by the defendant); *cf. Rothenberg*, 923 F.3d at 1330 (noting *Paroline* is a flexible standard that does not require a ruling on every single factor).

213. *See Sainz*, 827 F.3d at 607 (approving the district court’s conclusion because it set a reasonable restitution amount); *see also Dillard*, 891 F.3d at 160 (stating that the district court only needs to consider the *Paroline* factors when setting a restitution amount).

214. *Sainz*, 827 F.3d at 604 (stating that the defendant pleaded guilty to possessing thousands of images of child sexual abuse imagery, which included six images of Cindy); *Dillard*, 891 F.3d at 154 (stating that the defendant was convicted of multiple counts of sexual exploitation of a minor and distribution of child pornography). *Dillard* was a part of a website which gave members access to child sexual abuse imagery. To maintain membership, *Dillard* had to post at least one new image

proceedings, the district courts considered the $1/n$ calculation in their orders.²¹⁵ In *Sainz*, the district court set a restitution order using the $1/n$ method;²¹⁶ whereas in *Dillard*, the district court rejected the government's proposed $1/n$ calculation and denied restitution to the victims of the child sexual abuse imagery that the defendant possessed.²¹⁷

In *Sainz*, the Seventh Circuit upheld the district court's restitution order because the $1/n$ method accounted for the number of past criminal defendants who had contributed to the victim's losses, which is one of the *Paroline* factors.²¹⁸ The Seventh Circuit reasoned that the "bottom line here is that the amount of the award is substantively reasonable," "neither severe nor trivial."²¹⁹ The circuit court rejected the defendant's argument that the district court erred by not considering each of the *Paroline* factors when using the $1/n$ calculation.²²⁰ Rather, the court viewed the *Paroline* factors as flexible guideposts which gave district courts discretion in weighing certain factors as opposed to others.²²¹ As a result of this interpretation of *Paroline*, the Seventh Circuit avoided the disaggregation argument based on *Sainz*'s connection to the production of the images.²²²

Comparatively in *Dillard*, the Fourth Circuit reversed the district court's denial of restitution for the victims in the images that the defendant possessed.²²³ In response to the district court's conclusion that the $1/n$ calculation was inappropriate because the formula is no more than

of child sexual abuse imagery to the website each month. He maintained his membership by sexually abusing a five-year-old minor. Additionally, he accessed other websites and social networking apps to view, download, and upload sexual abuse imagery. *Id.*

215. *Sainz*, 827 F.3d at 605 (using the formula created by *Gamble*); *Dillard*, 891 F.3d at 155–56 (stating that the government requested restitution amounts based on the $1/n$ method). One of the victims requested double the amount of restitution calculated using the $1/n$ formula because the amount of the $1/n$ calculation was less than one percent of her losses. *Id.* at 156.

216. *Sainz*, 827 F.3d at 605; *Rothenberg*, 923 F.3d at 1331.

217. *Dillard*, 891 F.3d at 156 (explaining that the district court found that the government had not proven causation because there was no evidence that the victims were aware of the defendant's conduct and that the $1/n$ calculation was a "stab in the dark" for setting an amount for restitution); *Rothenberg*, 923 F.3d at 1330 ("The district court denied all restitution to the non-contact victims because the record contained no evidence that the victims were aware Dillard had their images . . .").

218. *Sainz*, 827 F.3d at 606; *Rothenberg*, 923 F.3d at 1330.

219. *Sainz*, 827 F.3d at 606; *Rothenberg*, 923 F.3d at 1331.

220. *Sainz*, 827 F.3d at 606; *Rothenberg*, 923 F.3d at 1331 ("Paroline does not require 'district courts to consider in every case every factor mentioned' . . .").

221. *Sainz*, 827 F.3d at 606; *Rothenberg*, 923 F.3d at 1331–32 (describing the *Paroline* factors as permissive rather than mandatory).

222. *Sainz*, 827 F.3d at 606; *Rothenberg*, 923 F.3d at 1330–31 (noting that the Seventh Circuit did not rule explicitly on disaggregation).

223. *United States v. Dillard*, 891 F.3d 151, 162 (4th Cir. 2018) (vacating the district court's order and remanding the case with instructions to order restitution after further proceedings on that issue); *Rothenberg*, 923 F.3d at 1330.

a “guesswork,” the Fourth Circuit recognized there is an “inherent imprecision” when calculating an amount of restitution in cases of noncontact possessors and distributors.²²⁴ The Fourth Circuit avoided determining whether the $1/n$ calculation was a permissible way to calculate restitution or whether disaggregation is required.²²⁵ Like the Seventh Circuit, the court opted to give district courts wide discretion in setting the amount of restitution, but reiterated that restitution is required.²²⁶

C. The Fifth, Eighth, Eleventh, and District of Columbia Circuits

The Fifth, Eighth, Eleventh, and District of Columbia Circuits reached the opposite conclusion from the other circuits. When evaluating defendants’ disaggregation arguments, the Fifth, Eighth, Eleventh, and District of Columbia Circuits rejected the analysis of the Ninth Circuit. The courts declined turning *Paroline* into a mathematical formula through the imposition of a disaggregation requirement.²²⁷

224. *Dillard*, 891 F.3d at 160 (“[A] court must assess *as best as it can* from available evidence the significance of the individual defendant’s conduct in light of the broader causal process that produced the victim’s losses.” (emphasis added) (citing *Paroline v. United States*, 572 U.S. 434, 459 (2014))); *Rothenberg*, 923 F.3d at 1330 (“In reversing, the Fourth Circuit explained *Paroline* disavowed any such requirements.”).

225. *Dillard*, 891 F.3d at 161 (stating that “the district court was not faced with a binary choice” to accept or reject the government’s proposed amount, but could adjust it to a more appropriate amount); *Rothenberg*, 923 F.3d at 1330 (noting that there are various appropriate methods of calculating restitution).

226. *Dillard*, 891 F.3d at 161 (“Moreover, the district court is charged with the responsibility of determining the proper amount of restitution in each case. It was the court’s responsibility to use its ‘discretion and sound judgment’ to determine an appropriate amount for each non-contact victim.” (citations omitted)).

227. *Rothenberg* Petition for Certiorari, *supra* note 28, at 11–15 (discussing the Eighth and Eleventh Circuits’ rejections of the disaggregation argument); *Rothenberg*, 923 F.3d at 1329 (discussing the reasoning of the Eighth and Fifth Circuits in rejecting a disaggregation requirement).

In *Halverson*,²²⁸ *Bordman*,²²⁹ *Rothenberg*,²³⁰ and *Monzel*,²³¹ the defendants were all convicted of or pleaded guilty to the same kinds of child pornography offenses.²³² They were each ordered to pay restitution to the identified victims.²³³ Each of the defendants argued on appeal that the district court erred by not disaggregating the harm caused by the initial physical abuse before calculating the restitution order for the harm caused by his possession or distribution of the images.²³⁴ Each of the

228. Halverson pleaded guilty to possessing almost two thousand images of child sexual abuse involving minors under the age of 12. *United States v. Halverson*, 897 F.3d 645, 649 (5th Cir. 2018). There were at least thirty-three victims, and “the images depicted violent sexual assault of infants, toddlers, pre-pubescents, and adolescents.” *Id.* at 654.

229. Bordman pleaded guilty to sexual exploitation of a child and possession of child pornography of a minor under the age of twelve. *United States v. Bordman*, 895 F.3d 1048, 1051 (8th Cir. 2018). The images that Bordman possessed were particularly aggravating because some depicted adult males penetrating toddlers and infants. *Id.* at 1052. Additionally, he produced child sexual abuse imagery depicting his daughter and distributed the images. *Id.* His daughter was only one-and-a-half years old at the time. *Id.* He used platforms such as Kik, Dropbox, and Google to store, receive, and distribute the images. *Id.*

230. Rothenberg pleaded guilty to possession of child pornography. *United States v. Rothenberg*, 923 F.3d 1309, 1313 (11th Cir. 2019). The conduct that Rothenberg actually engaged in, unfortunately, was much worse than possession of child pornography. *Id.* Rothenberg was a member of a chatroom, and his username was “daddaughter-sex.” *Id.* He bragged that he was a lawyer and he was sexually exploiting a young girl at his home, and he sent videos of child pornography to an undercover officer. *Id.* Law enforcement went to his home to rescue the girl, who confirmed that Rothenberg abused her. *Id.* While they were at his home, the officers seized Rothenberg’s laptop and discovered approximately 1,000 unique videos and images of child pornography. *Id.* The materials were aggravating because they depicted children under the age of twelve and sado-masochistic conduct. *Id.*

231. Monzel was convicted of distributing and possessing child pornography. *United States v. Monzel*, 930 F.3d 470, 476 (D.C. Cir. 2019). Due to numerous appeals, it took ten years to resolve the restitution. *Id.* at 476–78.

232. *Halverson*, 897 F.3d at 649–50 (explaining that the defendant pleaded guilty to possession of child pornography involving a minor under the age of twelve); *Bordman*, 895 F.3d at 1052–53 (explaining that the defendant pleaded guilty to sexual exploitation of a child and possession of child pornography); *Rothenberg*, 923 F.3d at 1313 (explaining that the defendant pleaded guilty to possession of child pornography); *Monzel*, 930 F.3d at 476 (explaining that the defendant pleaded guilty to possession and distribution of child pornography).

233. *Halverson*, 897 F.3d at 649–50 (stating that the district court ordered the defendant to pay a total of \$50,317 to six victims); *Bordman*, 895 F.3d at 1052–53 (stating that the district court ordered the defendant to pay \$3,000 to a victim who goes by the name “Pia”); *Rothenberg*, 923 F.3d at 1313 (stating that the district court ordered the defendant to pay a total of \$142,600 to nine identified victims); *Monzel*, 930 F.3d at 476 (stating that the district court ordered the defendant to pay \$7,500 in restitution to Amy).

234. *Halverson*, 897 F.3d at 654 n.4 (“Halverson argues that many of the psychological reports submitted by the victims did not separate the losses caused by Halverson from the losses caused by other abusers . . .”); *Bordman*, 895 F.3d at 1056 (“Third, Bordman argues that the district court abused its discretion by failing to disaggregate the harm caused by the initial abuse from the harm caused by his later possession.”); *Rothenberg*, 923 F.3d at 1314 (“Rothenberg argued, by contrast, that the starting point should be ‘apportionment between the original abuser of the child, versus the distributor, and later, possessor of the pornography,’ which Rothenberg referred to as ‘disaggregation.’ Rothenberg asserted that this disaggregation requires two steps: first, the district court must

district courts in these cases considered the *Paroline* factors, but used different calculations to come to a restitution amount.²³⁵

In *Halverson*, the Fifth Circuit affirmed the district court's restitution order because the record reflected that the district court relied on "various factors that bear on the relative causal significance of [Halverson's] conduct in producing victim's losses."²³⁶ The court ruled that the *Paroline* factors are merely "rough guideposts" rather than absolute requirements; and therefore, the district court's decision to forgo a formal analysis of the factors was not fatal to the decision.²³⁷ Further, the Fifth Circuit rejected the defendant's argument that the district court erred by failing to disaggregate the harm caused by the initial abuser.²³⁸ The Fifth Circuit instead concluded that neither *Paroline* nor § 2259(b)(3) requires disaggregation between the harm caused by the defendant's conduct and "all other possible sources of the victims' losses."²³⁹

The defendant's disaggregation arguments were likewise unsuccessful

separate the harm caused by the original abuser from that caused by later distributors and possessors; and second, the district court must separate the harm caused by the defendant from that caused by other distributors or possessors."); *Monzel*, 930 F.3d at 480 ("Specifically, he objects that the government failed . . . to disaggregate Amy's initial-abuse losses from her general loss figure . . .").

235. *Halverson*, 897 F.3d at 650 (explaining that the district court gave each victim \$5,000 plus \$1,409 (since defendant had possessed 1,409 images of child pornography) per image that Halverson possessed unless the sum exceeded the amount of restitution that the victim sought); *Bordman*, 895 F.3d at 1053–54 (explaining that the district court used the $1/n$ calculation to set a restitution amount); *Rothenberg*, 923 F.3d at 1315–21 (explaining that the government, by and large, supported the victims' restitution requests and that the district court considered restitution orders in other cases involving the victims' images); *Monzel*, 930 F.3d at 478 (explaining that the district court looked at the *Paroline* factors to set a restitution amount at \$7,500).

236. *Halverson*, 897 F.3d at 654 (noting that the district court took into account the number of victims, the number of images, and the content of the images depicted in creating its formula, and individualized the application of the formula to each victim); see *Rothenberg*, 923 F.3d at 1330 ("The Fifth Circuit approved the district court's use of a restitution method which awarded each victim (1) a base \$5,000 amount of restitution, plus (2) an additional sum of \$1,409 for each image of the victim that the defendant possessed because the district court discussed factors that bore on the relative significance of the defendant's conduct and the district court was not required to make findings as to all of the *Paroline* factors." (citing *Halverson*, 897 F.3d at 653–54)).

237. *Halverson*, 897 F.3d at 654 (pointing out that the Supreme Court commented that district courts "might consider" the *Paroline* factors) (emphasis added) (citing *Paroline v. United States*, 572 U.S. 434, 459 (2014)); *Rothenberg*, 923 F.3d at 1330 ("[T]he district court discussed factors that bore on the relative significance of the defendant's conduct . . .").

238. *Halverson*, 897 F.3d at 654–55 n.4 (reviewing the defendant's contention that the district court erred by not disaggregating the harm caused by the initial abuse for plain error); *Rothenberg*, 923 F.3d at 1330 (remarking that nothing in *Paroline* requires a victim to produce a psychological report that disaggregates the defendant's losses from any other source of the victim's losses).

239. *Halverson*, 897 F.3d at 654–55 n.4 ("[I]t is not clear that either *Paroline* or § 2259(b)(3) require victims to have a new report drafted in each case that disaggregates a defendant's conduct from all other possible sources of the victims' losses."); *Rothenberg*, 923 F.3d at 1330.

in the Eighth Circuit.²⁴⁰ In *Bordman*, the court noted that in *Paroline*, the Supreme Court contemplated the issues with disaggregation but did not require such a method.²⁴¹ Additionally, the Eighth Circuit reasoned that the *Paroline* factors account for disaggregation by guiding district courts to order higher amounts when the defendant is more involved in the physical sexual abuse or distribution of the images.²⁴² Recognizing that the *Paroline* factors were designed to be “rough guideposts,” the court declined to transform the disaggregation factor into a “rigid formula.”²⁴³

In *Rothenberg*, the Eleventh Circuit rejected the defendant’s argument that the district court erred by failing to disaggregate the victims’ losses.²⁴⁴ The court concluded the *Paroline* factor which guides district courts to consider whether the offender was a producer or distributor achieves the same goal as disaggregation.²⁴⁵ Furthermore, the factors “do not require that the district court make fact findings about the amount of losses caused by different groups of offenders.”²⁴⁶ The Eleventh Circuit noted that the Supreme Court repeatedly stressed that district courts have wide discretion in applying the *Paroline* factors and setting an amount

240. *United States v. Bordman*, 895 F.3d 1048, 1062 (affirming the lower court’s decision because it was consistent with past decisions in child pornography restitution cases and because the court considered various factors in setting an amount for restitution); *Rothenberg* Petition for Certiorari, *supra* note 28, at 12 (“Rejecting that argument, the court of appeals reasoned that ‘one of the *Paroline* factors already accounts for disaggregation’ . . .”).

241. *Bordman*, 895 F.3d at 1058 (“[C]omplications may arise in disaggregating losses sustained as a result of the initial physical abuse.’ Nonetheless, the Court set ‘those questions . . . aside for present purposes.’” (citing *Paroline*, 572 U.S. at 449)); *Rothenberg*, 923 F.3d at 1330 (concluding that the *Paroline* factors were not supposed to become rigid factors).

242. *Bordman*, 895 F.3d at 1057 (pointing specifically to the *Paroline* factor of “whether the defendant had any connection to the initial production of the images . . .” (citing *Paroline*, 134 572 U.S. at 460)); *Rothenberg* Petition for Certiorari, *supra* note 28, at 12 (pointing to the *Paroline* factor of “whether the defendant had any connection to the initial production of the images”).

243. *Bordman*, 895 F.3d at 1059; *Rothenberg*, 923 F.3d at 1330 (“The Eighth Circuit ‘decline[d] to transform’ this disaggregation factor ‘from a rough guidepost’ into a ‘rigid formula.’” (quoting *Paroline*, 572 U.S. at 460)).

244. *Rothenberg*, 923 F.3d at 1333 (“After careful review of *Paroline*, we conclude that a district court is not required to determine, calculate, or disaggregate the specific amount of loss caused by the original abuser-creator or distributor of child pornography before it can decide the amount of the victim’s losses caused by the later defendant who possesses and views the images.”); *Rothenberg* Petition for Certiorari, *supra* note 28, at 12 (“[T]he Eleventh Circuit expressly agreed with the Eighth Circuit, disagreed with the Ninth and Tenth Circuits, and held that *Paroline* does not require disaggregation.”).

245. *Rothenberg*, 923 F.3d at 1334; *Rothenberg* Petition for Certiorari, *supra* note 28, at 13 (“In the Eleventh Circuit’s view, the district court ‘need only indicate in some manner that it has considered that the instant defendant is a possessor, and not the initial abuse[r] or a distributor . . .’” (citation omitted)).

246. *Rothenberg*, 923 F.3d at 1334; *Rothenberg* Petition for Certiorari, *supra* note 28, at 13 (stating that the Eleventh Circuit relied on the decisions in *United States v. Dillard*, 891 F.3d 151, 160–62 (4th Cir. 2018) and *United States v. Sainz*, 827 F.3d 602, 605–07 (7th Cir. 2016), which “refused to impose more structure beyond [*Paroline*’s] multi-factored test.”).

for restitution.²⁴⁷ Agreeing with the Eighth Circuit’s analysis, the Eleventh Circuit did not want to morph the flexible factors into a rigid calculation.²⁴⁸ Since the district court weighed the factors and considered the role that Rothenberg specifically played in causing the victims’ harm, the Eleventh Circuit affirmed its judgment.²⁴⁹

In *Monzel*, the DC Circuit flatly rejected the defendant’s disaggregation argument.²⁵⁰ First, the DC Circuit noted that the disaggregation requirement would “impose a mathematical rigidity that *Paroline* eschews.”²⁵¹ Second, the DC Circuit explained that the district courts already consider whether the defendant’s conduct was connected to the initial production of the images.²⁵² And third, the DC Circuit noted that the disaggregation argument “blinks away the compounding effects of demand for child-pornography images on their production in the first place,” ignoring the harm that the victim, Amy, suffers knowing that offenders are viewing her images for pleasure.²⁵³

The DC Circuit also considered the reasoning behind the circuits that require disaggregation.²⁵⁴ Ultimately, the DC Circuit rejected the Ninth Circuit’s reasoning because it found that the level of precision needed to disaggregate ignores the “synergistic effect” possession of child sexual

247. *Rothenberg*, 923 F.3d at 1334 (citing *Paroline*, 572 U.S. at 457–61); *Rothenberg* Petition for Certiorari, *supra* note 28, at 12 (noting that the Eleventh Circuit reasoned that a strict disaggregation requirement would be inconsistent with *Paroline*’s “flexible, discretionary framework”).

248. *Rothenberg*, 923 F.3d at 1334; *Rothenberg* Petition for Certiorari, *supra* note 28, at 12 (noting that the Eleventh Circuit relied on the reasoning of the Eighth Circuit).

249. *Rothenberg*, 923 F.3d at 1334 (explaining that the district court considered that Rothenberg played no role in the victims’ physical abuse or distributed the images); *Rothenberg* Petition for Certiorari, *supra* note 28, at 13 (explaining that the Eleventh Circuit upheld the district court’s judgment after it considered that Rothenberg was just a possessor as opposed to a distributor or producer).

250. *United States v. Monzel*, 930 F.3d 470, 483 (D.C. Cir. 2019) (“*Fifth*, *Monzel* argues that the district court was required to formally backout of Amy’s lifetime of psychological treatment and social and vocational impacts those future damages attributable to both her initial abuse and the initial distribution of her image. That argument, again, seeks to impose a mathematical rigidity that *Paroline* eschews.”); see United States Sentencing Commission, *Summary of Select Appellate Cases for the Third Quarter of 2019*, CASE LAW Q., July–Sept. 2019, at 1, 9, <https://www.ussc.gov/sites/default/files/pdf/training/case-law-documents/qtrly-vol3-iss3.pdf> [<https://perma.cc/5A64-YLMP>] (explaining that *Monzel* does not require a “precise algorithm” for calculating restitution amount).

251. *Monzel*, 930 F.3d at 483; see United States Sentencing Commission, *supra* note 250, at 9 (“[T]he court held that the district court’s decision ‘reflects a reasonable exercise of discretion’”).

252. *Monzel*, 930 F.3d at 483; see United States Sentencing Commission, *supra* note 250, at 9 (describing the district court’s restitution order for distribution and possession of child pornography as reasonable).

253. *Monzel*, 930 F.3d at 483.

254. *Id.*

abuse imagery has with its production.²⁵⁵ Lastly, the DC Circuit pointed to the difficulties that district courts in the Ninth Circuit have faced disaggregating harms.²⁵⁶ Specifically, several lower courts in the Ninth Circuit denied restitution because the government could not meet its “‘impossible [evidentiary] task’ of disaggregating, in a coherent way, a victim’s lifetime of costs from the marketing of her images.”²⁵⁷

D. The Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018

The Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018 was a bipartisan bill which improved remedies and resources for victims.²⁵⁸ Amy, Vicky, and Andy are victim advocates who were depicted in heavily trafficked series of child sexual abuse imagery. The Act was Congress’s third attempt to pass legislation in response to the *Paroline* decision. The Justice for Amy Act of 2014 was introduced into the Senate and proposed joint and several liability onto defendants.²⁵⁹ The following year, the Senate passed the Amy and Vicky Child Pornography Victim Restitution Improvement Act of 2015; however, it died in the House. The 2015 Act would have imposed joint and several liability when an offender was ordered to pay restitution reflecting the full amount of the victim’s losses. Alternatively, the Act would have imposed minimum restitution awards, ranging from \$250,000 to \$25,000, depending on the offense.²⁶⁰

In 2018, Senator Orrin Hatch led the bipartisan Amy, Vicky, and Andy Child Pornography Victim Assistance Act, which was introduced alongside Senators Amy Klobuchar, Dianne Feinstein, Chuck Grassley, John Cornyn, and Pat Toomey, with several more cosponsors from both

255. *Id.*; see United States Sentencing Commission, *supra* note 250, at 9 (analyzing the *Paroline* factors as rejecting precise calculations for restitution orders).

256. *Monzel*, 930 F.3d at 484 (citing *United States v. Chan*, CR No. 15-00224 DKW; 2016 WL 380712, at *2 (D. Haw. Jan. 29, 2016); *United States v. Kugler*, No. CR 14-73-BLG-SPW, 2016 WL 816741, at *3 (D. Mont. Feb. 29, 2016); *United States v. Young*, 703 F. App’x 520, 521 (9th Cir. 2017); *United States v. Massa*, 647 F. App’x 718, 721 (9th Cir. 2015); *United States v. Blurton*, 623 F. App’x 318, 319 (9th Cir. 2015); *United States v. Campbell-Zorn*, No. CR 14-41-BLG-SPW, 2014 WL 7215214, at *14 (D. Mont. Dec. 17, 2014)) (collecting cases where victims were denied restitution on the basis of government inability to disaggregate).

257. *Monzel*, 930 F.3d at 483–84.

258. Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018, Pub. L. No. 115–299, 132 Stat. 4383 (stating in the congressional findings that the purpose of the Act was to ensure that victims of child pornography are compensated for their anguish); Cassell & Marsh, *supra* note 18, at 1 (explaining that the Act will be a “useful step forward” for victims).

259. See Justice for Amy Act of 2014, S. 2344, 113th Cong.

260. See Amy and Vicky Child Pornography Victim Restitution Improvement Act of 2015, S. 295, 114th Cong.

parties.²⁶¹ Recognizing the continuous, twofold harm victims suffer, the demand for images which drives exploitation, and the individual responsibility of each offender, Congress sought to compensate victims of child pornography “for the harms resulting from every perpetrator who contributes to their anguish.”²⁶² Thus, the 2018 Act amended the standard for restitution in child pornography cases and established a victims fund.²⁶³

Before the 2018 amendment to § 2259, district courts were to enter restitution in the amount of the victim’s full losses subject to § 3664.²⁶⁴ Post-*Paroline*, district courts entered restitution in the amount that “comport[ed] with the defendant’s relative role in the causal process that underlies the victim’s general losses,” but there was no mandated minimum amount.²⁶⁵ The 2018 amendment to § 2259 directs district courts to enter a restitution order “in an amount that reflects the defendant’s relative role in the causal process that underlies the victim’s losses, but which is no less than \$3,000,” quoting the language of *Paroline* but codifying a minimum amount.²⁶⁶ When a victim receives restitution from various defendants, the payments must stop once the recovery meets the full amount of the victim’s demonstrated losses.²⁶⁷

The 2018 Act also established the Child Pornography Victims Reserve, funded through special assessments of fees imposed on criminal defendants collected under § 2259.²⁶⁸ Additionally, private entities and individuals can choose to donate or gift assets to the fund.²⁶⁹ Victims may

261. See *Klobuchar-Backed Amy, Vicky and Andy Child Pornography Victim Assistance Act of 2018 Passes the Senate and Heads to the President’s Desk to be Signed into Law*, AMY KLOBUCHAR: U.S. SENATOR MINN. (Nov. 20, 2018), <https://www.klobuchar.senate.gov/public/index.cfm/2018/11/klobuchar-backed-amy-vicky-and-andy-child-pornography-victim-assistance-act-of-2018-passes-the-senate-and-heads-to-the-president-s-desk-to-be-signed-into-law> [<https://perma.cc/SSL2-VFWK>].

262. Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018, Pub. L. No. 115-299, 132 Stat. 4383.

263. See Cassell, *infra* note 271 (“This is an excellent new law . . .”); see generally Cassell & Marsh, *supra* note 18, at 1 (describing the Act as a “step forward” for victims).

264. Cassell, *infra* note 271.

265. *Paroline v. United States*, 572 U.S. 434, 458 (2014).

266. 18 U.S.C. § 2259(b)(2)(B) (stating that restitution amounts should be “no less than \$3,000.”); *Paroline*, 572 U.S. at 458.

267. See 18 U.S.C. § 2259(b)(2)(C) (“A victim’s total aggregate recovery pursuant to this section shall not exceed the full amount of the victim’s demonstrated losses. After the victim has received restitution in the full amount of the victim’s losses . . . the liability of each defendant . . . shall be terminated.”).

268. See 18 U.S.C. § 2259A(a)(1)–(3) (explaining that the special assessments have caps depending on which type of offense the defendant is convicted).

269. See 18 U.S.C. § 2259(B)(a) (noting that private entities can make donations into the fund). Technology companies, such as DropBox, Facebook (including Instagram), Snapchat, and Alphabet (including Google and YouTube), to name a few, should be called upon to ensure that the funds

seek a one-time payment from the fund.²⁷⁰ The one-time payment provides \$35,000, adjusted each year for inflation, and does not preclude the victim from collecting restitution from offenders.²⁷¹

IV. ANALYSIS

First, this Part argues that disaggregation contravenes the holding in *Paroline*.²⁷² Second, this Part contends that the *Paroline* framework is unworkable.²⁷³ Lastly, this Part concludes that although the Amy, Vicky, and Andy Child Pornography Victim Assistance Act was a major improvement for victims, it still falls short of creating a simple system for victims of child pornography to receive full compensation.²⁷⁴

A. Disaggregation Conflicts with Paroline

Defendants consistently advocate for courts to adopt the disaggregation requirement as it benefits them by reducing their total liability. Several defendants in child pornography cases have furthered

are available, given their platforms' roles in dispersing child sexual abuse imagery. Moreover, it may be easier for victims to recover from these entities entirely, however, that implicates issues which exceed the scope of this Comment. Furthermore, restitution plays a retributive impact on offenders and victims. While technology websites play an essential role in the child sexual abuse imagery industry, individuals are the driving force behind it. Restitution from offenders forces the offenders to confront the consequences of their conduct, and provides accountability to the victims who are harmed by so many.

270. See 18 U.S.C. § 2259(d)(2)(A) ("A victim may only obtain defined monetary assistance under this subsection once."); Cassell & Marsh, *supra* note 18, at 14–15 (noting that the fund could theoretically collect over \$15 million a year).

271. See generally 18 U.S.C. § 2259 (applying aggregate causation in the congressional findings); Paul Cassell, *The Amy, Vicky, and Andy Act Is Signed Into Law*, REASON (Dec. 10, 2018, 11:56 AM) <https://reason.com/2018/12/10/amy-and-vicky-act-signed-into-law/> [<https://perma.cc/HD6U-DCMB>] ("The Act will help victims of what are frequently referred to as 'child pornography' crimes obtain full restitution.").

272. See generally *infra* Section IV.A (explaining that even if disaggregation accounts for the defendant's relative role, there is no principled way to disaggregate losses, which are caused by the compounded effect of sexual abuse depicted in the images and the circulation of those images on the internet); see also *United States v. Rothenberg*, 923 F.3d 1309, 1309 (11th Cir. 2019) (evaluating different circuits' reasoning regarding the disaggregation argument and concluding that *Paroline* does not require formal disaggregation of losses).

273. See generally *infra* Section IV.B (noting that at least two of the other factors are useless in setting an amount of restitution); see also *Paroline v. United States*, 472 U.S. 434, 463 (2014) (Roberts, C.J., dissenting) (arguing that the *Paroline* framework results in piecemeal orders to victims); *United States v. DiLeo*, 58 F. Supp. 3d 239, 244 (E.D.N.Y. 2014) ("Bluntly, the Court finds itself among the growing throng of district courts which 'have expressed their concern with the lack of precise guidance from Congress and the Supreme Court in deciding restitution awards in these circumstances.'").

274. See generally *infra* Section IV.C (analyzing the benefits, but noting the shortcomings of the Amy, Vicky, and Andy Child Pornography Victim Assistance Act); see also Cassell & Marsh, *supra* note 18, at 17 (arguing that the Amy, Vicky, and Andy Act improves remedies for victims, but does not do enough).

this argument.²⁷⁵ *Paroline* only requires courts to hold defendants liable for losses they have proximately caused.²⁷⁶ Defendants assert that the proximate cause requirement mandates disaggregation because failure to do so would render the defendants liable for all the harm suffered rather than solely their individual contribution.²⁷⁷ Even the Supreme Court commented in dicta in *Paroline* that there could be complications disaggregating losses, although the Court ultimately set that issue aside.²⁷⁸ So far, two of the defendants in federal courts of appeals that rejected disaggregation filed petitions for writs of certiorari in the Supreme Court, relying heavily on the cases which imposed disaggregation, *Dunn* and *Galan*.²⁷⁹

Dunn should not be read as placing a disaggregation requirement for all cases.²⁸⁰ That case is fact specific—when the defendant is held jointly and severally liable for the losses, disaggregation is required to comport with *Paroline*. The Eleventh Circuit’s reading of *Dunn* makes more sense

275. See, e.g., *Rothenberg*, 923 F.3d at 1313 (“On appeal, Rothenberg argues that: (1) the district court’s restitution order is flawed as to all of the victims because it failed to calculate and then disaggregate the victim’s losses caused by the initial abuser, distributors, and other possessors from those caused by Rothenberg himself”); *United States v. Dunn*, 777 F.3d 1171, 1174 (10th Cir. 2015) (“Fourth, he argues that the district court applied the wrong legal standard when it determined that he owed a victim the full amount of her unpaid aggregated losses.”); *United States v. Bordman*, 895 F.3d 1048, 1056 (8th Cir. 2018) (“Third, Bordman argues that the district court abused its discretion by failing to disaggregate the harm caused by the initial abuse from the harm caused by his later possession.”); *United States v. Halverson*, 897 F.3d 645, 653 (5th Cir. 2018) (“Halverson further raises a number of arguments related to *Paroline v. United States*: that the restitution formula was arbitrary, that the award did not sufficiently follow *Paroline*, and that the court lacked proof regarding the loss amounts that Halverson proximately caused.”) (internal citations omitted); *United States v. Monzel*, 930 F.3d 470, 480 (D.C. Cir. 2019) (“Specifically, he objects that the government failed . . . (iv) to disaggregate Amy’s initial-abuse losses from her general loss figure”); *United States v. Galan*, 804 F.3d 1287, 1289 (9th Cir. 2015) (“Galan contested the government’s calculations on the basis that no attempt was made to disaggregate the losses resulting from the original abuse from the losses resulting from Galan’s own activities.”).

276. Petition for Writ of Certiorari at 10, *Bordman*, 895 F.3d 1048 [hereinafter *Bordman* Petition for Certiorari] (focusing on the “relative role” and “proximately caused” language to justify disaggregation); *Rothenberg* Petition for Certiorari, *supra* note 28, at 18–19 (noting the “bedrock principle” that defendants should not have to pay for the consequences of actions that have not been caused by themselves).

277. *Bordman* Petition for Certiorari, *supra* note 276, at 10 (arguing that by not disaggregating losses, defendants are liable for losses that they did not cause); *Rothenberg* Petition for Certiorari, *supra* note 28, at 18 (noting that the victim’s general losses account for all of the victim’s losses—from the initial abuse to the future trafficking of the images).

278. *Bordman* Petition for Certiorari, *supra* note 276, at 8 (quoting *Paroline*, 472 U.S. at 449); *Rothenberg* Petition for Certiorari, *supra* note 28, at 18.

279. See generally *Bordman* Petition for Certiorari, *supra* note 276, at 8–10 (citing *Dunn*, 777 F.3d 1171; *Galan*, 804 F.3d 1287); see also *Rothenberg* Petition for Certiorari, *supra* note 28.

280. *Rothenberg*, 923 F.3d at 1333 (“[W]e do not read *Dunn* as requiring disaggregation in each and every restitution case.”); see generally *Dunn*, 777 F.3d at 1181–82 (holding that for *Dunn* it was *not* reflective of his relative role to impose joint and several liability without disaggregating the losses).

than the argument urged by Rothenberg and Bordman, which maintained that disaggregation is required in all cases involving possessors.²⁸¹ In *Dunn*, the district court held the defendant, a distributor with no involvement with the production of the images, jointly and severally liable with the producer of the images for the remainder of the victim's losses.²⁸² For the district court's order to comport with *Paroline*, the Tenth Circuit had to disaggregate the losses caused by the producer because those losses were not proximately caused by the defendant's actions.²⁸³ It is worth noting that the Tenth Circuit did not ever state that district courts must disaggregate in all child pornography cases. Rather, its holding focused narrowly on the circumstances of the defendant at bar, *Dunn*.²⁸⁴ The Tenth Circuit's interpretation of *Paroline* was appropriate because the imposition of joint and several liability on *Dunn* did not reflect the relative role of his actions in harming his victims.²⁸⁵

Proponents of disaggregation also rely on *Galan*, which undoubtedly imposes a disaggregation requirement for district courts in the Ninth Circuit.²⁸⁶ However, *Galan*'s interpretation of *Paroline* is flawed.²⁸⁷ Focusing on language that restitution amounts should reflect the defendant's "relative role" in causing the victim's harm and that defendants should only be liable for losses that they have "proximately caused" to justify disaggregation analyzes these phrases in isolation by

281. See generally *Rothenberg*, 923 F.3d at 1332; see also *Paroline*, 572 U.S. at 458 (rejecting attempts to hold defendants jointly and severally liable for losses).

282. *Dunn*, 777 F.3d at 1179; *Rothenberg*, 923 F.3d at 1332.

283. *Dunn*, 777 F.3d at 1181–82 (explaining that imposing joint and several liability on the remainder of the victim's general losses does not comport with *Paroline*'s rationale); *Rothenberg*, 923 F.3d at 1332–33 (explaining that holding the defendant jointly and severally liable for the victim's remaining losses with several other offenders holds the defendant liable for losses that he did not specifically cause).

284. *Dunn*, 777 F.3d at 1182 ("Thus, to the extent that the district court relied on an expert report that did not disaggregate these harms, the district court's adoption of \$1.3 million as the total measure of damages cannot stand."); *Rothenberg*, 923 F.3d at 1333 (interpreting *Dunn* as specifically binding to that factual scenario and not to all child pornography restitution cases).

285. See *Rothenberg*, 923 F.3d at 1332; *Paroline*, 572 U.S. at 454 (concluding that Congress did not intend that offenders of child pornography would be liable for the full amount of the victim's losses).

286. See *Rothenberg* Petition for Certiorari, *supra* note 28, at 9–10 (arguing that the Ninth Circuit in *Galan* came to the same conclusion as the Tenth Circuit in *Dunn*); *Bordman* Petition for Certiorari, *supra* note 276, at 9–10 (explaining the reasoning of the Ninth Circuit in *Galan* and using that line of reasoning to show the purportedly flawed reasoning of the Eighth Circuit).

287. See *Rothenberg*, 923 F.3d at 1335 ("However, the Supreme Court did not require district courts to dive into the facts of every past order and position their restitution findings in relation to those of other courts."); *United States v. Monzel*, 930 F.3d 470, 483 (D.C. Cir. 2019) ("For the type of long-term harms at issue here, courts cannot be expected to formally disaggregate the intertwined."); see also *Paroline*, 572 U.S. at 459 (explaining that setting an amount of restitution is a matter where district courts have wide discretion to use sound judgment).

separating them from their context within the Court's opinion.²⁸⁸

The *Paroline* Court noted the difficulties of proving and setting a restitution order that results from the defendant's individual offense and, accordingly, opted to create a flexible framework.²⁸⁹ In fact, the Court chose to grant certiorari in *Paroline* precisely because of these difficulties.²⁹⁰ The Court rejected but-for causation when proving that the defendant's actions caused the victim's harm because to determine the amount of harm specifically caused by individual offenders is impossible for these crimes.²⁹¹ By imposing a disaggregation requirement, defendants ask the court set aside the portion of losses caused by the initial abuser.²⁹² However, there is no way to disaggregate the harm caused by the initial abuser without being arbitrary.²⁹³ For example, Amy's case is an unusual circumstance where there is a clear demarcation from the harm cause by the abuse and the harm caused by the circulation of images. Amy received treatment and recovered from the physical abuse. Several years later when she was notified of the trafficking of the images, she regressed. For many victims, the twofold harm is blurry. They suffer the harm concurrently, and oftentimes, recovery is not linear. Even the Ninth Circuit stated that disaggregation need not be precise,

288. *Monzel*, 930 F.3d at 483 (stating that the disaggregation requirement seeks to impose the "eschews" the mathematical rigidity that *Paroline* intended to avoid); *Rothenberg*, 923 F.3d at 1328 (noting the wide range of discretion that the Supreme Court gave district courts in this inquiry).

289. *Paroline*, 572 U.S. at 449 (noting the difficulty in determining the amount of the victim's losses proximately caused by the individual offender's conduct); see *Monzel*, 930 F.3d at 448 ("We are not the first, and surely will not be the last, court to wrestle with giving practical effect to Section 2259's proximate-cause test for mandatory restitution in the context of child-pornography offenses.").

290. *Paroline*, 572 U.S. at 443 (resolving a conflict between the federal circuits on these issues); *Rothenberg*, 923 F.3d at 1325 (explaining the difficulties that the Supreme Court confronted in *Paroline* because of the "atypical" process that harms the victims).

291. *Paroline*, 572 U.S. at 450 (explaining that but-for causation could be shown by producers, people that allowed the abuse, and initial distributors, but that it cannot be shown when the possessor is one of several hundred others who are engaging in the same conduct anonymously); see *United States v. Galan*, 804 F.3d 1287, 1289 (9th Cir. 2015) ("While Congress could and should have made determination of the amount to which a victim is entitled a simple matter, it regrettably did not.").

292. *Monzel*, 930 F.3d at 483 (remarking that district court should not be required to disaggregate the "intertwined"); *United States v. Halverson*, 897 F.3d 645, 654–55 n.4 (5th Cir. 2018) (noting that *Paroline* did not clearly require disaggregation).

293. *Rothenberg*, 923 F.3d at 1335 (noting that the district court would have to look at what all other courts with cases involving the victim's images decided and explain any deviations from those other decisions); *Paroline*, 572 U.S. at 449 ("Complications may arise in disaggregating losses sustained as a result of the initial physical abuse, but those questions may be set aside for present purposes."); see also *Isra Bhatti, Navigating Paroline's Wake*, 63 UCLA L. REV. 2, 29 (2016) ("[A] related shortcoming of the Court's restitution scheme is that its reliance on the discretion of district courts in awarding restitution, coupled with a confusing set of guideposts, invites arbitrary implementation."); *Paroline*, 572 U.S. at 471 (Roberts, C.J., dissenting) ("Nor can confidence in judicial discretion save the statute from arbitrary application.").

recognizing the inherent difficulty in differentiating between the harm caused by the initial offender versus subsequent offenders.²⁹⁴ The Supreme Court intentionally created a flexible framework that gave district courts wide discretion in order to ensure that victims could recover for their losses.²⁹⁵

The Supreme Court contemplated disaggregation when the Court declared the *Paroline* factors, but decided against explicitly requiring it.²⁹⁶ Instead, the Supreme Court created a set of factors which it characterized as “rough guideposts.”²⁹⁷ Further, the *Paroline* factors state that the district courts should consider the defendant’s involvement in the imagery—whether he²⁹⁸ was a producer, distributor, or possessor of the images.²⁹⁹ Given the fact that the Court created this factor test and examined disaggregation, the Court did not intend to make disaggregation a strict requirement for calculating restitution orders because the factors do not require a strict application.³⁰⁰ Instead, the Court instructed district courts to form a restitution order that reflects the defendant’s relative role “as best it can.”³⁰¹

The *Paroline* factor that directs district courts to consider whether the

294. *Galan*, 804 F.3d at 1291 (expressing no opinions on how district courts should apportion losses caused by the initial abuse); *Rothenberg*, 923 F.3d at 1333 (analyzing *Galan*, 804 F.3d 1287, and explaining that the Ninth Circuit only requires disaggregation to the “extent possible”).

295. *Paroline*, 572 U.S. at 462 (“This approach is not without its difficulties. . . . But courts can only do their best to apply the statute as written in a workable manner, faithful to the competing principles at stake”); *United States v. Dunn*, 777 F.3d 1171, 1180 (10th Cir. 2015) (noting the wide discretion and estimation that district courts have in this matter).

296. *Paroline*, 572 U.S. at 449 (mentioning disaggregation of losses but not dealing with the argument further); *Galan*, 804 F.3d at 1290–91 (focusing on portions of the opinion that contemplate disaggregation and state that defendants should be liable for the portion that they contributed to the victim’s harms).

297. *Paroline*, 572 U.S. at 460 (elaborating that the factor should not be transformed into a rigid formula that leaves victims with trivial restitution orders); *United States v. Sainz*, 827 F.3d 602, 606 (7th Cir. 2016) (interpreting *Paroline* as not requiring consideration of each and every *Paroline* factor).

298. Offenders of child pornography prosecuted by the federal government are overwhelmingly white (82%), male (97%), U.S. citizens (97%). See Press Release, Bureau of Justice Statistics, U.S. Dep’t of Justice, Number of Persons Prosecuted for Commercial Sexual Exploitation of Children Nearly Doubled between 2004 and 2013 (Oct. 12, 2017), <https://www.bjs.gov/content/pub/press/fpcsecc0413pr.cfm> [<https://perma.cc/8YEH-CT6Y>]. Therefore, when referring to offenders, I will use male pronouns.

299. *Paroline*, 572 U.S. at 460 (noting that district courts should consider whether the defendant distributed the images or if the defendant had any involvement in the production of the images); Cassell & Marsh, *supra* note 18, at 6–7 (describing the application of the *Paroline* factors and acknowledging the criticism of the framework).

300. See *Sainz*, 827 F.3d at 605–06 (explaining that district courts were not bound to a rigid interpretation of the statute); see also *United States v. Halverson*, 897 F.3d 645, 655 n.4 (5th Cir. 2018) (noting that *Paroline* does not obviously require disaggregation).

301. *Paroline*, 572 U.S. at 459 (explaining that district courts should assess, from the available

defendant was a producer, distributor, or possessor adequately satisfies the “relative role” requirement.³⁰² If the defendant is a producer or initial distributor, his restitution amount would be higher because he played a larger role in causing the victim’s losses.³⁰³ When the defendant is a possessor, district courts typically order lower amounts, which recognizes that the defendant did not physically abuse the victim or put the images into the public sphere via the internet.³⁰⁴ Therefore, courts do not need to require disaggregation because the order will already reflect the relative role of the defendant.

Furthermore, disaggregation should not be required because it is impossible to apply without being arbitrary.³⁰⁵ The only way disaggregation can occur easily is in cases like Amy’s—she was abused, received treatment, recovered, and only relapsed several years later, when she learned her images were online.³⁰⁶ Her case is linear. There is a clear demarcation between her initial treatment for the physical abuse to her successful recovery and finally to the subsequent treatment for the online abuse. Even then, it is unclear whether part of her losses derives solely

evidence, a reasonable estimate of the significance of the defendant’s conduct in the broader causal process which causes the victim’s harm); *Dunn*, 777 F.3d at 1180 (quoting *Paroline*, 572 U.S. at 459).

302. *Paroline*, 572 U.S. at 460 (“whether the defendant reproduced or distributed images of the victim; whether the defendant had any connection to the initial production of the images”); *United States v. Rothenberg*, 923 F.3d 1309, 1334 (11th Cir. 2019) (noting that the *Paroline* factors require courts to take into account whether the offender was a distributor, producer, or offender, but that district courts do not have to make exact findings of fact on what harm was caused by each of these contributors).

303. *See, e.g.*, *United States v. Baker*, 672 F. Supp. 2d 771, 780 (E.D. Tex. 2009) (holding the defendant, who produced child pornography of his three children, liable for \$462,000); *United States v. Dillard*, 891 F.3d 151, 155–56 (4th Cir. 2018) (noting that the district court ordered \$100,000 to a victim who provided minimal documentation of her losses, but who was physically sexually abused by the defendant, and not ordering restitution for the victims which were subjects in the images that the defendant possessed).

304. *See, e.g.*, *United States v. Quignon*, No. 8:18CR43, 2018 WL 6831163, at *1 (D. Neb. Dec. 27, 2018) (ordering \$1,000 for a possessor when the average award in the series of child pornography cases was \$1,350); *see also* *United States v. Romero-Medrano*, No. 4:14-050, 2017 WL 5177647, at *6 (S.D. Tex. Nov. 8, 2017) (ordering a defendant to pay around \$4,000 to a victim whose images he possessed and around \$6,400 to a victim whose images he distributed).

305. *See* *United States v. Chan*, No. 15-00224, 2016 WL 370712, at *2 (D. Haw. Jan. 29, 2016) (characterizing the doctor’s apportionment of the damages caused by the different abusers as problematic); *United States v. Monzel*, 930 F.3d 470, 483–84 (D.C. Cir. 2019) (citing several district courts in the Ninth District that have denied restitution because the government is unable to meet the evidentiary standard of disaggregation); Bhatti, *supra* note 293, at 30 (noting that in child pornography restitution matters, district courts’ discretion is virtually limitless).

306. *See* *United States v. Reynolds*, No. 12–20843, 2014 WL 4187936, at *5 (E.D. Mich. Aug. 22, 2014) (“But [disaggregation] only seems possible in the rather unique situation presented in *Paroline* where there is some kind of demarcation between the losses from the initial abuse and the losses from continued trafficking.”); *United States v. Campbell-Zorn*, No. 14–41-BLG-SPW, 2014 WL 7215214 at *4 (D. Mont. Dec. 17, 2014) (noting that there was no demarcation for disaggregation, so a restitution order would hold a defendant liable for losses he did not cause).

from the circulation of her images, as opposed to the fact that she is constantly reminded of her initial abuse, like a reopening of a wound.³⁰⁷ Within the Ninth Circuit, several district courts struggle applying *Galan*'s required disaggregation and criticize the decision for further complicating the restitution calculation.³⁰⁸

Proponents of disaggregation assert that each offense—possession, production, and distribution—ought to be considered in isolation, despite the fact that the offenses are inherently interconnected.³⁰⁹ However, the possession of child pornography drives the production and distribution of it because there is a premium for new material.³¹⁰ Possessors contribute to the sexual abuse of children because they drive the child sexual abuse imagery industry to create new content and trade the images amongst themselves.³¹¹ Consequently, requiring disaggregation erases the role possessors have in driving the exploitation of children.

Overall, the *Paroline* Court created a flexible framework. Disaggregation transforms the restitution analysis into rigid standard. However, there is not a principled way to disaggregate because of the amorphous nature of victims' harms. Moreover, the defendant's role (i.e., producer, distributor, or possessor) is already factored into the analysis.

307. *Paroline v. United States*, 572 U.S. 434, 440 (2014) (“The knowledge that her images were circulated far and wide renewed the victim’s trauma and made it difficult for her to recover from her abuse.”); see Cortney E. Lollar, *Child Pornography and the Restitution Revolution*, 103 J. CRIM. L. & CRIMINOLOGY 343, 366, 369 (2013) (criticizing courts’ characterization that child pornography inflicts the primary harm because courts have not backed it up with social science research and “there is a substantial difference between acknowledging some degree of harm from the circulation of those images and concluding that the circulation of those images is more damaging than the actual abuse that led to the creation of the pornography.”).

308. See *Chan*, 2016 WL 370712, at *2 (“Indeed, taken together, the Court agrees with Defendant that ‘*Paroline* and *Galan* set out an impossible task for district courts’ that even *Galan*’s considered words do not sufficiently acknowledge and certainly do little to resolve.”); *United States v. Kugler*, No. 14-73, 2016 WL 816741, at *3 (D. Mont. Feb. 29, 2016) (denying restitution because of the difficulties in disaggregation).

309. See *Monzel*, 930 F.3d at 482–83 (noting that disaggregation fails to recognize the synergy between possession, distribution, and production); DOJ CONGRESSIONAL REPORT, *supra* note 72, at 25 (noting a website that contained one of the “world’s largest image repositories” of child sexual abuse imagery where users actively exchanged images and noting operations in Louisiana where young boys were enticed by operators and subjected to abuse that was broadcasted through a webcam).

310. See DOJ CONGRESSIONAL REPORT, *supra* note 72, at 2, D-25, (noting that 100% of interviewees of the National Drug Intelligence Center—including prosecutors, investigators who had inspected and reviewed massive amounts of data from the National Center for Missing and Exploited Children and other sources—agreed that there is a relationship between sex tourism and child pornography); WORTLEY & SMALLBONE, *supra* note 35, at 9 (noting that collectors place a premium on new materials).

311. See WORTLEY & SMALLBONE, *supra* note 35, at 9 (noting that amateurs can more easily record abuse, create new materials with the cell phones, and share it without similar levels of detection); *Monzel*, 930 F.3d at 482 (noting the compounding effects possession has on the demand and production of child sexual abuse imagery).

Lastly, disaggregation wipes away the synergistic effects that possession has on the exploitation of children. Thus, a formal disaggregation requirement does not comply with *Paroline*.

B. The Paroline Framework Is Unworkable

The disaggregation argument is just one of many issues with the *Paroline* factors.³¹² Doing their best to apply a vague framework, the lower courts rationally reason to different conclusions, which has led to disparate orders for defendants.³¹³

As an initial matter, Justice Kennedy rejected Amy’s argument that her harm was similar to a “gang of ruffians” or a “gang rape[.]”³¹⁴ He reasoned that child pornography offenders do not act in concert because they do not interact with a great majority of offenders.³¹⁵ However, even though child pornography offenders rarely interact in person, they interact frequently by trading the images via social media platforms, peer-to-peer file sharing, and private networks of offenders.³¹⁶ The internet has allowed these offenders to buy, sell, and trade images among each other with unprecedented ease and frequency.³¹⁷ Although these actions

312. See *United States v. Erickson*, 388 F. Supp. 3d 1086, 1088–89 (D. Minn. 2019) (“Whatever its theoretical appeal, the *Paroline* framework is very difficult—if not impossible—to apply in practice.”); Bhatti, *supra* note 293, at 28 (noting that the *Paroline* framework has no statutory support and that the Supreme Court’s “hesitance to provide further detailed guidance and its desire to leave the intricacies of calculation to lower court discretion has left lower courts wondering how to actually implement the Court’s roadmap.”).

313. See *United States v. Campbell-Zorn*, No. 14–41-BLG-SPW, 2014 WL 7215214, at *3 (D. Mont. Dec. 17, 2014) (“Rather than attempt to forge yet another path through the bramble bush that is the *Paroline* ‘framework,’ this Court relies heavily on analytical paths already beaten by other district courts that have struggled with this determination.”); see generally *United States v. Sainz*, 827 F.3d 602, 602 (7th Cir. 2016) (approving wide discretion in applying *Paroline* factors); but see *United States v. Galan*, 804 F.3d 1287, 1290–91 (9th Cir. 2015) (imposing a disaggregation requirement).

314. *Paroline v. United States*, 572 U.S. 434, 454 (2014).

315. *Paroline v. United States*, 572 U.S. 434, 454 (2014) (stating that the offenders are not acting in concert because they do not interact with a majority of those involved in the industry); but see W. PAGE KEETON ET AL., PROSSER AND KEETON ON TORTS 347 (West Group 5th ed. 1984) (applying joint and several liability where it is “incapable of any reasonable or practical division.”).

316. See KENDALL & FUNK, *supra* note 11, at 280 (explaining that peer-to-peer networks are popular means of sharing child sexual abuse imagery because they are “composed of participants who directly ‘share’ resources, . . . without intermediary network hosts or servers.”); WORTLEY & SMALLBONE, *supra* note 35, at 9 (explaining that offenders interact by using websites, emails, peer-to-peer networks, instant messengers, chatrooms, newsgroups, and bulletins on the internet).

317. See generally Keller & Dance, *supra* note 13 (noting the vastly expanding industry due to the proliferation of the internet); KENDALL & FUNK, *supra* note 11, at 19 (“Although the underlying motivation remains the same, offenders employ a variety of electronic tools to validate their behavior through communication with other offenders, to share and store their contraband, to obtain financial benefits from commercial child sexual exploitation, and to lure victims.”); Olivia Solon, *Inside the Surveillance Software Tracking Child Porn Offenders Across the Globe*, NBC NEWS (July 17, 2020, 4:04 AM), <https://www.nbcnews.com/tech/internet/inside-surveillance-software->

occur anonymously and virtually, Justice Kennedy failed to recognize the changes the internet introduced by allowing offenders to network with more individuals through various platforms via screens as opposed to physical meetings and tangible mailings.³¹⁸

If disaggregation of the initial abuser's harm were allowed, the next logical step would be arguments for disaggregation of the harms caused by all other offenders.³¹⁹ However, this argument contains the same problem that pre-*Paroline* courts were struggling to resolve. To disaggregate the harm caused by each subsequent offender would render it virtually impossible to prove a specific offender's harm. For example, in Amy's case, she could not prove that any single offender was specifically responsible for any portion of her harm, as her harm stemmed from the availability of her images to such a large number of offenders. To impose disaggregation of the initial offender would open the door to disaggregation requirements for all later offenders which would lead to the denial of relief for many victims.³²⁰

Many courts consider at least two *Paroline* factors to be unworkable³²¹: (1) the factor that directs courts to consider "any available

tracking-child-porn-offenders-across-globe-n1234019 [https://perma.cc/K7VD-K567] (noting that law enforcement has seen an upswing since the coronavirus lockdowns because the additional time people are spending viewing and distributing the materials).

318. *Paroline*, 572 U.S. at 454. It is worth noting that the only source that Justice Kennedy cited in this paragraph, *Prosser & Keeton on Torts*, was published in 1984. *Id.*; see also PROSSER & KEETON ON TORTS, § 52 (5th ed. 1984). The internet was not in mainstream use until the early 1990s. Kim Ann Zimmermann & Jesse Emspak, *Internet History Timeline: ARPANET to the World Wide Web*, LIVE SCIENCE (June 27, 2017), <https://www.livescience.com/20727-internet-history.html> [https://perma.cc/3ST6-5ZZ8] (noting that the World Wide Web did not become public until 1991).

319. Even if we had a reliable allocation among the original abuser(s), on the one hand, and distributors/possessors, on the other, the logical extension of *Paroline* and, more particularly, *Galan* require disaggregation within a given category. In other words, because *Paroline* pronounces, and *Galan* parrots, that restitution must "reflect the consequences of the defendant's own conduct," it appears non-sensical to disaggregate only between original abusers and distributors/possessors. Disaggregation must also occur among distributors and/or among possessors in order to determine the losses caused by Defendant's conduct apart from the losses caused by all others (including fellow possessors), and the task there is no less difficult nor less imprecise.

See *United States v. Chan*, No. 15-00224, 2016 WL 370712, at *2 (D. Haw. Jan. 29, 2016) (internal citations omitted); *United States v. Erickson*, 388 F. Supp. 3d 1086, 1088 (D. Minn. 2019) (remark- ing that even the starting point for *Paroline* is not helpful).

320. See *Paroline*, 572 U.S. at 449 (noting the difficulties in determining harm because of the atypical causal process underlying the harm); *id.* at 468–69 (Roberts, C.J., dissenting) (arguing that there should be no recovery because the government cannot prove but-for causation for individual offender's actions); *United States v. Dillard*, 891 F.3d 151, 160 (4th Cir. 2018) ("*Paroline* recognized the inherent imprecision of calculating an appropriate amount of restitution in cases involving non-contact victims of child pornography . . .").

321. See *United States v. Monzel*, 930 F.3d 470, 482–83 (D.C. Cir. 2019) (citing *United States v. Crisostomi*, 31 F. Supp. 3d 361, 364 (D.R.I. 2014); *United States v. Hite*, 113 F. Supp. 3d 91,

and reasonably reliable estimate” of other offenders (many of whom will never be caught), and (2) the factor that directs courts to estimate the number of future offenders.³²² These factors are purely speculative—there is no way of estimating how many offenders have possessed or distributed a victim’s images, and there is no way to determine how many individuals will traffic the images in the future.³²³ Furthermore, if these factors are considered, they would lead to nominal restitution for

96–97 (D.D.C. 2015); *United States v. DiLeo*, 58 F. Supp. 3d 239, 245 (E.D.N.Y. 2014); *United States v. Wenczewicz*, 63 F. Supp. 3d 1238, 1246 (D. Mont. 2014), *vacated and remanded on other grounds*; *United States v. Grovo*, 653 F. App’x 512, 515 (9th Cir. 2016); *United States v. Moody*, No. 417–256, 2018 WL 3887506, at *3 (S.D. Ga. Aug. 15, 2018); *United States v. Reddick*, No. 2:17-208, 2018 WL 445112, at *6 (M.D. Ala. Jan. 16, 2018); *United States v. Ayer*, No. 2:15-86, 2015 WL 7259765, at *2 n.2 (D. Nev. Nov. 17, 2015); *United States v. Romero-Medrano*, 2017 WL 5177647, at *4 (S.D. Tex. Nov. 8, 2017); *United States v. Schultz*, No. 14-10085, 2015 WL 5972421, at *3 (D. Mass. Oct. 14, 2015); *United States v. Gamble*, No. 1:10-137, 2015 WL 4162924, at *2 (E.D. Tenn. July 9, 2015); *United States v. Campbell-Zorn*, No. 14-41, 2014 WL 7215214, at *3 (D. Mont. Dec. 17, 2014); *United States v. Bellah*, No. 13-10169, 2014 WL 7073287, at *3 (D. Kan. Dec. 12, 2014); *United States v. McIntosh*, No. 4:14-28, 2014 WL 5422215, at *5 (E.D. Va. Oct. 22, 2014); *United States v. Daniel*, No. 3:07-142, 2014 WL 5314834, at *1 (N.D. Tex. Oct. 17, 2014); *United States v. Reynolds*, No. 12-20843, 2014 WL 4187936, at *6 (E.D. Mich. Aug. 22, 2014); *United States v. Watkins*, No. 2:13–00268, 2014 WL 3966381, at *6–7 (E.D. Cal. Aug. 13, 2014); *United States v. Grovo*, 826 F.3d 1207, 1221 (9th Cir. 2016); *United States v. Evans*, 802 F.3d 942, 950 (8th Cir. 2015); *United States v. Sainz*, 827 F.3d 602, 607 (7th Cir. 2016) (noting that the information may not be “reliably known”).

322. See *Sainz*, 827 F.3d at 607 (“Many of the factors discussed in *Paroline* refer to information that may not even be reliably known. For example, the government may not be able to produce evidence that would provide reasonable predictions about the number of offenders likely to be convicted in the future or the broader number of offenders who were involved but are unlikely to be caught. Such predictions might well be mere guesses. But the Supreme Court made clear in *Paroline* that the difficulty of coming up with reasonable estimates for an indeterminate number of other offenders should not be a barrier to all compensation for victims of child pornography.” (internal citations omitted)); *United States v. Sills*, 712 F. App’x 581, 853 (7th Cir. 2018) (“A court cannot reliably consider future defendants’ potential to reduce Sills’s share of responsibility without simultaneously accounting for the increase that additional defendants might cause in Cindy’s total damages. It would be unsound to use such projections to increase the denominator without also considering their effect on the numerator. Using only the number of defendants to-date and the victim’s damages to-date, as the *Sainz* method does, avoids these pitfalls.”); *United States v. Erickson*, 388 F. Supp. 3d 1086, 1089 (D. Minn. 2019) (“[T]here is simply no way for any judge or attorney to make a ‘reasonable prediction’ about ‘the broader number of offenders involved’ or ‘the number of future offenders likely to be caught and convicted.’” Billions of people around the globe now have access to the Internet, and technology is advancing rapidly and unpredictably. Those who view child pornography do so furtively, and law-enforcement resources are extremely limited, meaning that only a tiny fraction of those who view child pornography are detected, even fewer are prosecuted, even fewer are ordered to pay restitution, and even fewer actually make restitution payments. Courts can know only that the number of past, present, and future offenders is ‘tragically large.’” (internal citations omitted)).

323. See *Romero-Medrano*, 2017 WL 5177647, at *3 (acknowledging that there would be some number of future offenders that will be convicted and future offenders that will evade detection, but not assigning any numbers because “[i]t would be irresponsible to guess at the total number of offenders who will be prosecuted in the future.”); *DiLeo*, 58 F. Supp. 3d at 245 (“Indeed, it is hard to fathom how, at any given point in time, such estimates and predictions could be more than a wild guess.”).

victims.³²⁴ For example, using the $1/n$ calculation, the market share for Amy's losses would amount to \$47 per offender.³²⁵

Because at least two of the seven factors are unworkable, courts are left to rely heavily on the factor that considers the number of past defendants who have been convicted.³²⁶ However, this does not really calculate an amount that reflects the defendant's "relative role" because the offenders that are convicted are a very small portion of all offenders.³²⁷ For instance, suppose that 1,000 offenders possess Victim X's images. However, due to the limited capacities of law enforcement, only ten have been prosecuted. Additionally, Victim X has \$1 million in documented losses. Assuming that the offenders all share the same responsibility, they should each be liable for \$1,000 ($\$1,000,000/1,000 = \$1,000$). Using past defendants as a reference point thereby magnifies the defendant's responsibility because it represents his responsibility relative to convicted offenders (a smaller group), as opposed to offenders as a whole. In Victim X's case, the court would look at the ten defendants, as opposed to the 1,000 offenders. Each defendant's share of responsibility is assessed at \$100,000 ($\$1,000,000/10 = \$100,000$), instead of \$1,000. By considering the other convicted offenders, the district courts are not really considering the defendant's "relative role." Instead, they consult other courts to ensure that the amount set is reasonable.³²⁸ Moreover, reliance on the number of

324. See Bhatti, *supra* note 293, at 17 (noting that courts have decided to order restitution from the amounts of nothing to \$7,500 for offenders engaged in identical conduct); *Dillard*, 891 F.3d at 156 (explaining that the district court did not order restitution).

325. See Cassell & Marsh, *supra* note 18, at 6–7 (calculating Paroline's market share of Amy's harm by dividing the full amount of her losses by the estimated number of potential defendants (estimating potential defendants by taking the total number of known cases where Amy's images have been found multiplied by the offender apprehension rate and multiplied by the estimated percentage of child pornography offenders in the country); Respondent Amy's Br. on the Merits at 65 n.19, *Paroline v. United States*, 572 U.S. 434 (2014) (No. 12-8561) (calculating $3,367,854 \times 1/3,200 \times 1/10 \times 45/100 \approx \47).

326. See *Romero-Medrano*, 2017 WL 5177647, at *2 ("Many courts appear to focus on the most readily determined *Paroline* factor: the number of past criminal defendants found to have contributed to a victim's losses."); *Sainz*, 827 F.3d at 606 (affirming the district court's order, which utilized the $1/n$ calculation).

327. See *Paroline*, 572 U.S. at 460 (noting that a calculation would limit district courts from considering all of the facts of each individual case); *Romero-Medrano*, 2017 WL 5177647, at *4 (noting that the government argued that the factor which considers the past defendants is unworkable because the United States Attorney's Office [the prosecuting body for federal crimes, including child pornography offenses] does not have information regarding state, local, and international prosecutions and that the number of past defendants is "neither meaningful nor helpful" for setting a restitution amount).

328. See *Romero-Medrano*, 2017 WL 5177647, at *3 ("The number of defendants who have paid is not relevant to Defendant Romero-Medrano's proportional causal role . . ."); see, e.g., *United States v. Rothenberg*, 923 F.3d 1309, 1315–21 (11th Cir. 2019) (considering the various restitution orders victims have received from other offenders when setting restitution amounts).

past convicted offenders and using variations of the $1/n$ equation proposed by *Gamble* defies *Paroline*'s instruction against rigid mathematical calculations.³²⁹

Lastly, the *Paroline* framework imposes vastly different results on defendants convicted of similar conduct.³³⁰ Without clear guidance on how to approach ordering an amount of restitution, courts have done their best to assess what role the defendant played in causing the underlying harm.³³¹ Each restitution order is a shot in the dark.³³² For some, that has meant setting nominal amounts, and for others, it has meant ordering substantial amounts.³³³ In *Paroline*, Justice Kennedy stated that

329. See *Rothenberg*, 923 F.3d at 1335 n.8 (“While we affirm the thorough and multifaceted process used in this case, we caution that the application of a strict $1/n$ approach . . . ordinarily will not meet the individualized assessment requirement of *Paroline*.”); *United States v. Dillard*, 891 F.3d 151, 156 (4th Cir. 2018) (noting that the district court rejected the government’s proposed calculation of $1/n$ because the calculation was “just a ‘stab in the dark’” for setting an amount of restitution); *United States v. Romero-Medrano*, 899 F.3d 356, 358–60 (5th Cir. 2018) (affirming the district court’s restitution order and explaining that the district court applied the $1/n$ calculation to formulate a base amount for victims, Vicky and Sarah, then reduced both by 10% to reflect offenders who will be prosecuted in the future or who will not be prosecuted at all, and finally, reduced Vicky’s by an additional 10% because the defendant was merely a possessor—in Sarah’s case, he was a distributor, and the additional reduction because he was more culpable in causing her losses).

330. See, e.g., *Rothenberg*, 923 F.3d at 1318 (noting that the restitution orders to Vicky have ranged from \$24 to \$1 million); Bhatti, *supra* note 293, at 33 tbl.6 (comparing restitution awards post-*Paroline*) (table reproduced here).

**TABLE 6: MINIMUM, MAXIMUM, AVERAGE, AND MEDIAN
RESTITUTION AWARDS IN POST-PAROLINE CHILD PORNOGRAPHY
CASES, BY OFFENSE TYPE**

	Minimum award	Maximum award	Average award	Median award
Production (n=37)	\$56	\$250,000	\$23,447	\$6,000
Distribution (n=73)	\$500	\$976,418	\$18,262	\$3,000
Possession (n=35)	\$500	\$33,000	\$6,636	\$4,000

331. See *United States v. Monzel*, 930 F.3d 470, 486 (D.C. Cir. 2019) (“As to the purported \$7,186 over-inclusion of loss, the impact—if any—in determining Monzel’s share of Amy’s more than \$3 million in losses is at best *de minimis*, and at worst incalculable.”); *United States v. Berry*, No. 1:18-00107, 2019 WL 5306960, at *3 (D. Or. Oct. 21, 2019) (highlighting the Court’s order in *Paroline* that district courts should do the “best” they can in this inquiry).

332. See e.g., *United States v. Sainz*, 827 F.3d 602, 605 (7th Cir. 2016) (using the $1/n$ method to calculate a restitution order); cf. *United States v. Halverson*, 897 F.3d 645, 650 (5th Cir. 2018) (“The restitution was calculated by awarding six victims \$5,000 plus \$1,409 [the total number of images that the defendant possessed] per image possessed by Halverson, unless that amount exceeded the amount sought by the victim.”).

333. See, e.g., *United States v. Dunn*, 777 F.3d 1171, 1179 (10th Cir. 2015) (noting that the district court ordered the defendant to pay \$583,955 because he was a distributor of the images);

restitution should be an “application of law” rather than a “decisionmaker’s caprice”; however, the vague framework that the Court created left district courts with no choice but to do just that.³³⁴

Generally, this process forces victims to engage in litigation for years to recover piecemeal awards.³³⁵ Unlike victims of other crimes, who are entitled to restitution for the full amount of their losses (unless the defendant is indigent), victims of child pornography are not guaranteed recovery for the full amount of their losses.³³⁶ The only reason for this is because victims of child pornography are exploited by too many people.³³⁷ To recover the full amount of his or her losses, each victim must go through the restitution process again and again until enough defendants pay orders which, added together, equal the full amount of the victim’s losses.³³⁸ Some argue that this continuous cycle of litigation and restitution orders is detrimental to victims by making it more difficult for

Monzel, 930 F.3d at 476–78 (noting that the district court originally ordered the defendant to pay \$5,000 in restitution, then denied restitution, but finally ordered the defendant to pay \$7,500).

334. *Paroline v. United States*, 572 U.S. 434, 462 (2014) (recognizing also the difficulties in the approach); see also *Sainz*, 827 F.3d at 606 (upholding the district court’s order because “the amount of the award is substantively reasonable”); *Paroline*, 572 U.S. at 471 (Roberts, C.J., dissenting) (commenting that the approach, which “asks district judges to impose restitution or other criminal punishment guided solely by their own intuitions regarding comparative fault” undermines every defendant’s right to due process of the law).

335. See, e.g., *Monzel*, 930 F.3d at 476–78 (explaining the complicated procedural background of the case and the various appeals that occurred over the course of ten years for a restitution hearing); see also *Paroline*, 572 U.S. at 439–43 (similarly explaining the complicated procedural background of the case and the various appeals that occurred over the course of fifteen years until the Supreme Court decided the case in 2014).

336. See generally 18 U.S.C. § 2259 (limiting recovery for the full amount of the victim’s losses only for child pornography offenses); *United States v. Whitely*, 354 F. Supp. 3d 930, 933 (N.D. Ill. 2019) (“Congress authorized the ‘full amount’ of losses . . . Congress wanted district courts to ‘have broad discretion in ordering restitution . . . to compensate the victims of sexual abuse for the care required to address the long term effects of their abuse.’” (citing *United States v. Rockett*, 752 F. App’x 448, 450 (9th Cir. 2018)); *United States v. Evers*, 669 F.3d 645, 656 (6th Cir. 2012) (discussing why victims of child pornography are not guaranteed recovery for the full amount of their losses).

337. See generally *Paroline*, 572 U.S. at 458 (ruling that the defendant’s liability for child pornography offenses should reflect the “relative role” of the defendant’s contribution to the victim’s losses, although the statute directs court to order restitution for the full amount of the victim’s losses); *id.* at 477 (Sotomayor, J., dissenting) (“At bottom, Congress did not intend § 2259 to create a safe harbor for those who inflict upon their victims the proverbial death by a thousand cuts.”).

338. See *United States v. Rothenberg*, 923 F.3d 1309, 1314 (11th Cir. 2019) (explaining the complicated process by which a victim of child pornography is identified and notified and receives restitution); *Paroline*, 572 U.S. at 470 (Robert, C.J., dissenting) (“[T]he significant majority of defendants have been ordered to pay Amy \$5,000 or less. This means that Amy will be stuck litigating for years to come.” (internal citation omitted)).

victims to move on because they cannot move past the trauma that they have suffered.³³⁹

C. The Shortcomings of The New Amy, Vicky, and Andy Act

The Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018 was, without doubt, a step in the right direction for victims.³⁴⁰ The Act sets a floor for district courts ordering restitution: they must order at least \$3,000 to each requesting victim.³⁴¹ Additionally, the Act creates the Child Pornography Victims Reserve.³⁴² Once a victim shows that he or she is a victim of a defendant's offense, the victim is entitled to a onetime payout of \$35,000.³⁴³ Defendants of federal crimes supply this fund through special assessments.³⁴⁴ Additionally, the bill allows victims of child pornography to view their images, which improves victim and offender identification and can be important for the victim's recovery process.³⁴⁵ Lastly, the Act codifies the language of *Paroline* by directing district courts to order restitution in the amount that reflects the defendant's relative role in causing the victim's losses.³⁴⁶

The Amy, Vicky, and Andy Child Pornography Victim Assistance Act

339. See Lollar, *supra* note 307, at 382 (“Rather than helping child abuse victims recover from their trauma, courts and legislators are inadvertently anchoring them in their abuse experience by keeping their negative sexual experiences constantly at the forefront.”); Binford et al., *supra* note 37, at 123 (“Congress must pass new legislation. . . . [This is one step toward ensuring] that the victimization does not continue in perpetuity and the individuals harmed by this horrific crime have the opportunity to recover once and for all.”).

340. See generally 18 U.S.C. § 2259 (“It is the intent of Congress that victims of child pornography be compensated for the harms resulting from every perpetrator who contributes to their anguish. Such an aggregate causation standard reflects the nature of child pornography and the unique ways that it actually harms victims.”); Cassell, *supra* note 271 (“The Act will help victims of what are frequently referred to as ‘child pornography’ crimes obtain full restitution.”).

341. 18 U.S.C. § 2259(b)(2)(B) (stating that restitution amounts should be “no less than \$3,000”); Cassell, *supra* note 271, (noting that from a practical standpoint, the \$3,000 prevents “token award[s]”).

342. 18 U.S.C. § 2259(d)(1)(A) (noting that victims of defendants convicted of trafficking in child pornography may elect to recover from the Child Pornography Victims Reserve); *United States v. Berry*, No. 1:18-00107, 2019 WL 5306960, at *2 (D. Or. Oct. 21, 2019) (noting the creation of the new rights and remedies for victims).

343. 18 U.S.C. § 2259(d)(2)(A) (“A victim may only obtain defined monetary assistance under this subsection once.”); Cassell, *supra* note 271 (explaining that the amount of recovery is adjusted yearly to account for inflation).

344. 18 U.S.C. § 2259A(a)(1)–(3) (noting that district courts should impose special assessments for the victims fund, which should not exceed a certain amount for the different levels of offenses—i.e., lower amounts for possession, higher for distribution, and highest for production); 18 U.S.C. § 2259B(a) (noting that private entities can make donations into the fund).

345. 18 U.S.C. § 2259 (explaining that the Act amended 18 U.S.C. § 3509, which allows victims of child pornography to inspect and view the images depicting their abuse and that any victim's expert witness may view the images as well).

346. 18 U.S.C. § 2259(a)(2)(B) (“[T]he court shall order restitution in an amount that reflects

provides substantially better assistance for victims.³⁴⁷ Aside from adding new remedies, the Act gives victims more autonomy and control by allowing them to choose between different options of relief and have access to their images.³⁴⁸

While the Act significantly improves options for victims, it falls short of providing victims an avenue to obtain the full recovery for losses that victims of other crimes are afforded.³⁴⁹ Instead, by codifying the language of *Paroline*, victims will have to continue recovering the same piecemeal restitution as they would have under the former system.³⁵⁰ While the Act ensures that restitution orders will never be a nominal amount, \$3,000 is just not enough given the magnitude of these victims' losses.³⁵¹ For example, Amy reported over \$3.4 million in losses—it would take over a thousand offenders to meet this if courts order restitution amounts of \$3,000 and over three hundred offenders if courts order restitution amounts of \$10,000. Additionally, while the onetime \$35,000 payout is an improvement, it still does not provide the same recovery as full restitution would.³⁵² It typically represents a small

the defendant's relative role in the causal process that underlies the victim's losses . . ."); see *Paroline v. United States*, 572 U.S. 434, 458 (2014) ("[A] court applying § 2259 should order restitution in an amount that comports with the defendant's relative role in the causal process that underlies the victim's general losses.").

347. See generally 18 U.S.C. § 2259 (raising the minimum restitution amount, creating a victim fund, providing victims with more rights); Cassell & Marsh, *supra* note 18, at 9 (noting that the \$3,000 minimum for restitution orders was a "modest," but "important" change for victims of child pornography).

348. Cassell & Marsh, *supra* note 18, at 17 (noting that the provision allowing victims to view their own images finally gives victims and their attorneys the opportunity to see the images that are at issue in their cases because prior to the amendment, only defense attorneys, government attorneys, and judges could view the materials).

349. Cassell, *supra* note 271 ("This is an excellent new law . . .").

350. See *United States v. Berry*, No. 1:18-00107, 2019 WL 5306960, at *2 (D. Or. Oct. 21, 2019) (noting that although the new Act sets a baseline restitution amount at \$3,000, district courts still must undertake the *Paroline* analysis); see also *United States v. Darbasie*, 164 F. Supp. 3d 400, 404 (E.D.N.Y. 2016) ("Written to command Olympic effort, *Paroline* offers precious little practical guidance to the trial bench charged with its implementation.").

351. Cassell, *supra* note 271 (noting that one benefit is that it prevents token orders); *Berry*, 2019 WL 5306960, at *2 ("But this fixed minimum amount [\$3,000] prevents courts from awarding nominal or trivial amounts for restitution, which further protects victims.").

352. See, e.g., *United States v. Rothenberg*, 923 F.3d 1309, 1315–20 (11th Cir. 2019) (estimating that Sierra's future medical care costs over \$600,000, Jane's future medical costs at over \$100,000, Pia's future therapy costs at over \$80,000, Mya's future psychological treatment costing over \$100,000, Vicky's future therapy costs at over \$100,000, Amy's future counseling costs at over \$500,000, and Casseaopeia's future medical costs at over \$300,000); see also Xiangming Fang et al., *The Economic Burden of Child Maltreatment in the United States and Implications for Prevention*, 36 CHILD ABUSE & NEGLECT 156, 159 (2012) ("Total annual health care costs were 21% higher . . . for women with a history of physical or sexual childhood abuse compared to women without these abuse histories.").

fraction of the losses that the victim has suffered.³⁵³ At the end of the day, victims are still left bearing the costs of their own victimization.³⁵⁴

Due to the codification of the vague *Paroline* language, the government (who bears the burden of proving the victim's losses), the victim, and the defendant are forced to engage in drawn out litigation.³⁵⁵ Because the Act did not clarify the language in the *Paroline* framework, district courts will be confronted with the same difficulties in setting a restitution amount.³⁵⁶

V. PROPOSAL

Given the clear congressional approval of the *Paroline* framework in the Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018, the Supreme Court will not be able to simply discard the framework and replace it with something better.³⁵⁷ The most that lower courts can do is order and approve higher restitution orders given the severity of the conduct and reject arguments which attempt to transform *Paroline* into a more rigid framework.³⁵⁸ As a result, like Chief Justice Roberts and Justice Sotomayor called for in the *Paroline* decision, Congress needs to

353. See generally *Rothenberg*, 923 F.3d 1309 (noting the victims suffer from severe psychological disorders and that those costs are high); see also CHILD SEXUAL ABUSE STATISTICS, *supra* note 70, at 7 (noting that the average additional costs of medical care exceeds six figures).

354. See *United States v. Whitely*, 354 F. Supp. 3d 930, 939 (N.D. Ill. 2019) (“[T]he criminal justice system is failing survivors by forcing them to bear the permanent costs of their own trafficking.”); *Paroline v. United States*, 572 U.S. 434, 470–71 (2014) (Roberts, C.J., dissenting) (re-marking that the majority only responds that Congress has not promised “full and swift” restitution and noting that Amy may never recover the full amount of her losses because law enforcement is never going to be able to find or prosecute everyone that has harmed her).

355. See *United States v. Monzel*, 930 F.3d 470, 476–78 (D.C. Cir. 2019) (explaining the ten-year procedural background behind the ruling for \$7,500 in *Monzel*—the defendant was originally convicted in 2009, he argued that the restitution order should be \$100, the district court set it at \$5,000, Amy filed a writ of mandamus because the district court recognized that it ordered an amount that was lower than her general losses, the Eleventh Circuit held that joint and several liability did not apply and remanded the case, the district court denied restitution, the government appealed, the Eleventh Circuit denied the appeal until *Paroline*, once *Paroline* was decided the Eleventh Circuit remanded again with instructions to follow the *Paroline* framework, the district court ordered \$7,500 in restitution, and finally the Eleventh Circuit ruled on the defendant’s appeal in 2019).

356. *United States v. Berry*, No. 1:18-00107, 2019 WL 5306960, at *1–2 (D. Or. Oct. 21, 2019) (discussing *Paroline*’s application to The Amy, Vicky, and Andy Act of 2018); Cassell & Marsh, *supra* note 18, at 9 (explaining that the 2018 Act sets the baseline recovery for victims at \$3,000, which can be increased based on the defendant’s “relative role” using the *Paroline* factors).

357. LARRY M. EIG, CONG. RESEARCH SERV., 7-5700, STATUTORY INTERPRETATION: GENERAL PRINCIPLES AND RECENT TRENDS 1 (2014) (explaining that the judiciary is to “construe statutes” as “so enacted”); see *Finley v. United States*, 490 U.S. 545, 556, 578 (1989) (Stevens, J., dissenting) (“but that does not relieve us of our responsibility to be faithful to the congressional design”).

358. See EIG, *supra* note 357, at 3 (“In interpreting statutes, the Court recognizes that legislative power resides in Congress . . .”); see *Berry*, 2019 WL 5306960, at *2–3 (discussing the Amy, Vicky, and Andy Act of 2018 and *Paroline* in its analysis).

take action to improve this system.³⁵⁹

This Part proposes that all defendants should be held jointly and severally liable for the full amount of the victim's losses.³⁶⁰ District courts should have to set a periodic payment schedule, and a cause of action for contribution should be added.³⁶¹ Furthermore, once the victims have provided evidence to demonstrate their losses, the district courts should accept that amount of restitution.³⁶² Lastly, government attorneys should be the ones primarily tasked with requesting restitution.³⁶³

A. Joint and Several Liability

Joint and several liability ensures that victims have a guaranteed path toward full recovery.³⁶⁴ It holds defendants liable for all of the victim's harms individually, but also as a group.³⁶⁵ Child pornography offenses are a perfect example of when joint and several liability is appropriate.³⁶⁶

359. See *Paroline*, 572 U.S. at 472 (Roberts, C.J., dissenting) (“[W]e ought to say so, and give Congress a chance to fix it.”); see also *Berry*, 2019 WL 5306960, at *2 (“I was not alone in joining Chief Justice Robert’s [sic] and Justice Sotomayor’s calls for Congressional action.” (citing *United States v. Schultz*, No. 14-10085, 2015 WL 5972421, at *3 (D. Mass. Oct. 14, 2015))); *United States v. Whately*, 354 F. Supp. 3d 930, 939 (N.D. Ill. 2019) (“The legislative branch did its job to address this public health crisis; now it is time for the executive and judicial branches to step up and do theirs.”).

360. See *Paroline*, 572 U.S. at 473 (Sotomayor, J., dissenting) (arguing that the Court should have affirmed the Fifth Circuit’s judgment imposing joint and several liability with instructions to consider a periodic payment schedule on remand); see also Cassell & Marsh, *supra* note 18, at 13–14 (explaining the tort principles behind aggregate causation and the implications of it).

361. See *Paroline*, 572 U.S. at 485 (Sotomayor, J., dissenting) (noting that periodic payment schedules would alleviate concerns that one defendant would be left paying for the full amount of the victim’s losses).

362. U.S. CONST. art. IV, § 1 (“Full Faith and Credit shall be given in each State to the public Acts, Records, and judicial Proceedings of every other State.”); Reid & Collier, *supra* note 21, at 694 (explaining that “full faith and credit” would allow the initial district court hearing the victim’s case to set an amount of the victim’s documented losses so that the victim would not need to relitigate the issue over and over and would prevent dual recovery).

363. See 18 U.S.C. § 3664 (noting that the burden is on the government’s attorney to prove the documented losses caused by the offender’s conduct); see also *Paroline*, 572 U.S. at 443 (noting that the government must prove the amount of losses caused by the defendant’s conduct).

364. See *Paroline*, 572 U.S. at 473 (Sotomayor, J., dissenting) (explaining that offenders would be ordered to pay restitution on a periodic payment schedule until the victim’s restitution order is satisfied); 18 U.S.C. § 3664(f)(3)(A) (“A restitution order may direct the defendant to make a single, lump-sum payment, partial payments at specified intervals, in-kind payments, or a combination of payments at specified intervals and in-kind payments.”).

365. See *Paroline*, 572 U.S. at 473 (Sotomayor, J., dissenting) (“[T]ort law principles . . . treat defendants like Paroline jointly and severally liable for the indivisible consequences of their intentional, concerted conduct.”); *Joint and Several Liability*, BLACK’S LAW DICTIONARY (11th ed. 2019) (“[E]ach liable party is individually responsible for the entire obligation, but a paying party may have a right of contribution or indemnity from nonpaying parties”).

366. See *Paroline*, 572 U.S. at 475–76 (Sotomayor, J., dissenting) (discussing the tort principles underlying the Act and noting that it was common knowledge at the time the Act was passed that

Joint and several liability is typically imposed when multiple actors engage in independent conduct that inflicts an indivisible injury on a victim.³⁶⁷ An indivisible injury means that it is unknowable what portion of the losses each offender caused. This is appropriate in child pornography cases because all of the participants, the producer, distributor, and possessor, each contribute to the victim's harm.

Joint and several liability ensures that restitution is ordered "as an application of law" as opposed to as a "decisionmaker's caprice."³⁶⁸ Judges would have no discretion but to adjudge each defendant the victim's total losses, ensuring each defendant will be liable for the same amount as every other offender convicted of crimes involving a specific victim.³⁶⁹ Periodic payment schedules allow defendants to all contribute to the victim's restitution order over time. Additionally, a cause of action for contribution would allow defendants to recover costs from defendants that did not contribute. Periodic payment schedules and a cause of action for contribution are discussed in greater detail below.

Joint and several liability may incentivize defendants to work with law enforcement to expose the criminal underground of online child sexual abuse imagery offenders more effectively.³⁷⁰ The more offenders that are convicted, the less each individual convicted offender would have to pay.³⁷¹ Giving offenders an incentive to cooperate and provide more

child sexual abuse imagery was being transmitted in large amounts electronically); *id.* at 458 (majority opinion) (noting that aggregate causation is part of the "background legal tradition" that Congress relied on).

367. *See id.* at 483 (Sotomayor, J., dissenting) (providing the uniform rule governing joint and several liability under Restatement (Third) of Torts); *In re Amy Unknown*, 701 F.3d 749, 773 (5th Cir. 2012) (noting that, on remand, the district court "must ascertain the full amount of the victim's losses," focusing in particular on joint and several liability), *rev'd sub nom.* *Paroline v. United States*, 572 U.S. 434 (2014).

368. *Paroline*, 572 U.S. at 462 (quoting *Philip Morris USA v. Williams*, 549 U.S. 346, 352 (2007)) (remarking that lower courts "can only do their best" when setting a restitution amount); *but see id.* at 480 (Sotomayor, J., dissenting) (remarking that the full amount of the victims' losses are ordered onto individual defendants).

369. *See Paroline*, 572 U.S. at 473 (Sotomayor, J., dissenting) (noting that she would have imposed joint and several liability). "Once a defendant is found to bear a sufficient causal nexus to a victim's harm, § 2259 provides a straightforward instruction on how much restitution a court is to order: 'The order of restitution under this section shall direct the defendant to pay the victim . . . the full amount of the victim's losses.'" *Id.* at 480 (quoting 18 U.S.C. § 2259(b)(1)).

370. *See Contribution Claim*, BLACK'S LAW DICTIONARY (11th ed. 2019) ("A defendant's claim to recover part of his or her liability to a plaintiff from another defendant or some third party who, it is asserted, should share in the liability."); *see also* RESTATEMENT (THIRD) OF TORTS § 23 (AM. LAW INST. 2000) ("When two or more persons are or may be liable for the same harm and one of them discharges liability of another by settlement or discharge of judgment, the person discharging the liability is entitled to recover contribution from the other, unless the other previously had a valid settlement and release from the plaintiff.").

371. *See Paroline*, 572 U.S. at 487 (Sotomayor, J., dissenting) (explaining that this approach would serve the interest of justice); *see also* WILLIAM ADAMS & ABIGAIL FLYNN, FEDERAL

information leads to more effective investigations, identifications, and prosecutions of other offenders. As a result, individual offender restitution orders would decrease because more people would be contributing to the recovery.³⁷²

Joint and several liability also eliminates the commodification of victims and humanizes victims.³⁷³ Under the current system, there is a “pay-per-view” mentality.³⁷⁴ Joint and several liability avoids this commodification because courts must order repayment for the victim’s full losses, which recognizes the victim’s human dignity by compensating her for the entirety of the harm inflicted. By assigning a specific portion of the losses onto a defendant, restitution seems like payment for harm caused by individual viewing of the victim’s images.³⁷⁵ Conversely, by ordering restitution for the full amount of the victim’s losses, defendants are forced to confront the real person behind the computer screen as opposed to simply paying “per-view.”³⁷⁶ The defendant is paying the losses suffered by a person who is harmed every day that her images are traded on the internet.³⁷⁷ This humanization of victims could inspire

PROSECUTIONS OF COMMERCIAL SEXUAL EXPLOITATION OF CHILDREN CASES, 2004–2013, DEPT. OF JUST. 1 (Nov. 21, 2017), <https://www.bjs.gov/content/pub/pdf/fpcsecc0413.pdf> [<https://perma.cc/KBZ3-T35U>] (noting the increases in suspects referred, cases filed, and defendants convicted).

372. See *Paroline*, 572 U.S. at 487 (Sotomayor, J., dissenting) (“[S]chedule would allow the individual wealthy defendant’s ultimate burden to be substantially offset by payments made by other offenders”); ADAMS & FLYNN, *supra* note 371, at 2 (explaining that child pornography possession, distribution, and receipt offenses account for the vast majority of commercial sexual exploitation of children offenses—they account for over 70% of the charges—while child sex trafficking follows, and child pornography production is the lowest prosecuted commercial sexual exploitation of children offense).

373. See *Paroline*, 572 U.S. at 481 (Sotomayor, J., dissenting); ADAMS & FLYNN, *supra* note 371, at 7 (noting that offenders of commercial sexual exploitation of children crimes are likely to be convicted if charges are filed).

374. Lollar, *supra* note 307, at 379 (comparing that courts are ordering restitution like they are giving entertainment royalties); see also Erin V. Wallin, *Paroline: The Damages and the Damages Done*, 5 LINCOLN MEM’L U. L. REV. 165, 184 (2017) (remarking that the current restitution system is comparable to a “pay-per-view” system).

375. Lollar, *supra* note 307, at 379 (“This royalties approach does more than commodify victims’ images; it also commodifies the victims’ lost innocence and virginity.”); Wallin, *supra* note 374, at 187 (“randomly calculated amount ‘per-view’”).

376. See *Paroline*, 572 U.S. at 479 n.3 (Sotomayor, J., dissenting) (“[T]here is no reason to read § 2259(b)(4)’s ‘mandatory’ restitution command out of the statute for child abusers who hide behind the anonymity of a computer screen.”); but see, e.g., *United States v. Halverson*, 897 F.3d 645, 650 (5th Cir. 2018) (stating that the district court ordered the defendant to pay each victim another \$1,409 per every additional image that he possessed of him or her on top of a base of \$5,000).

377. See *Paroline*, 572 U.S. at 458 (“Restitution is an effective rehabilitative penalty because it forces the defendant to confront . . . the harm his actions have caused” (quoting *Kelly v. Robinson*, 479 U.S. 36, 49 n. 10 (1986))); *United States v. Dubose*, 146 F.3d 1141, 1144 (9th Cir. 1998) (holding that the MVRA is subject to the limitations of the Eighth Amendment because it serves “deterrent, rehabilitative, and retributive purposes”); but see *In re Amy Unknown*, 701 F.3d 749,

rehabilitation in offenders better than lengthy prison sentences.³⁷⁸

Alongside the issue of commodification, criminal law needs to be more flexible in recognizing and accommodating harm caused by violent (and particularly, sexually violent) crimes. Although losses arising from financial and property crimes are more easily quantifiable, victims of violent crimes are as entitled to full restitution as victims of financial or property crimes. Sexually violent crimes inflict severe harm on citizens, particularly in the most marginalized communities of society.

Some argue that joint and several liability is perhaps too harsh.³⁷⁹ However, in reality, defendants would not actually have to be responsible for the full amount of the victim's losses because several defendants are each contributing to pay the victim's losses through periodic payments or contribution suits.³⁸⁰ If no other offenders are chipping into a victim's restitution, the defendant can seek to have the restitution order amended.³⁸¹ Furthermore, most victims of child pornography are never identified.³⁸² Child sexual abuse is notoriously underreported and only a fraction of victims are identified or come forward.³⁸³ As a result, defendants typically are only ordered to pay restitution to a handful of their victims.³⁸⁴

B. Periodic Payment Schedules

Opponents of joint and several liability argue that one defendant could be held liable for the total amount of the victim's losses. Implementing a

771–72 (5th Cir. 2012) (rejecting the argument that restitution under the MVRA and § 2259 is subject to the limitations of the Eighth Amendment because the purpose of the restitution is remedial rather than punitive), *rev'd sub nom.* Paroline v. United States, 572 U.S. 434 (2014).

378. See Paroline, 572 U.S. at 458 (noting that imposing restitution forces defendants to acknowledge the consequences of their actions and reminds them of the harm that they have caused); Kelly v. Robinson, 479 U.S. 36, 49 (1986) (noting the impact that restitution can have on defendants).

379. See Paroline, 572 U.S. at 473 (Sotomayor, J., dissenting) (“may lead to fears of unfair treatment for particular defendants”); see also Cassell & Marsh, *supra* note 18, at 6 (explaining that Justice Sotomayor advocated for a “no safety-in-numbers” approach).

380. See Paroline, 572 U.S. at 487 (Sotomayor, J., dissenting) (discussing how this also benefits the victim as she will “be made whole for her losses”); Cassell & Marsh, *supra* note 18, at 12 (explaining that Congress embraced the aggregate causation that Justice Sotomayor proposed).

381. See Paroline, 572 U.S. at 487 (Sotomayor, J., dissenting) (noting how the majority decision allows for the consideration of the number of offenders involved in estimating a restitution amount).

382. See *id.* at 487; CHILD SEXUAL ABUSE STATISTICS, *supra* note 70 (providing additional facts stating that 38% of child victims do not disclose the fact that they have been sexually abused).

383. CHILD SEXUAL ABUSE STATISTICS, *supra* note 70 (noting that it is difficult to pull numbers on childhood sexual abuse, but noting that it is more common than people think and that it is severely underreported); Lollar, *supra* note 307, at 377–76 (noting that the real problem is sexual abuse within familial settings).

384. See generally Seto et al., *infra* note 400 (noting the lack of identified victims); see e.g., United States v. Halverson, 897 F.3d 645, 653–54 (5th Cir. 2018) (noting that Halverson possessed images of at least thirty-three victims, but only ordering restitution to the six known victims).

periodic payment schedule, however, would alleviate this concern.³⁸⁵ Instead, through periodic payments, all defendants convicted of possessing a victim's images would chip in to compensate for the victim's losses.³⁸⁶ As more defendants are convicted, more offenders pay the restitution orders.³⁸⁷ Once the sum of those payments equals the amount of the victim's losses, the restitution orders for all defendants terminate.³⁸⁸

Another benefit of a periodic payment schedule is it grants courts wide discretion in creating a payment schedule. In doing so, the court can consider the defendant's financial responsibilities and assets. Furthermore, the schedules are not permanent and can be amended in the future. Lastly, there is a body of case law guiding courts on how to set periodic payment schedules.

C. A Cause of Action for Contribution

Another facet that will minimize unfairness is creating a cause of action for contribution. A cause of action for contribution would allow defendants to collect money from offenders who did not have to pay as large a portion.³⁸⁹ As a result, if an offender paid a large portion of the losses, and other offenders are identified, the initial offender can recoup some of the money by suing the other offenders. Or, if the restitution order is satisfied, and other offenders are prosecuted, the offenders who paid the restitution can sue the subsequent offenders to recuperate some of the losses. This gives defendants the opportunity to spread losses

385. See *Paroline*, 572 U.S. at 485 (Sotomayor, J., dissenting) (disagreeing with the majority's argument that imposing joint and several liability without a cause of action for contribution would congest courts and countering that courts can order partial payment schedules instead).

386. See *id.* at 487 (explaining that an individual defendant's restitution payment would be substantially offset by payments made by other offenders).

387. See *id.* (explaining that the offset would be significant with new offenders added every month).

388. 18 U.S.C. § 2259 (noting that the restitution payments would terminate when the victim receives compensation for the full amount of her losses); see *Paroline*, 572 U.S. at 487 n.5 (Sotomayor, J., dissenting) (noting that the convicted offenders would all be paying into the victim's restitution order).

389. See Reid & Collier, *supra* note 21, at 676–77 (stating that contribution forces responsible parties to resolve their relative shares between themselves); *but see* *Nw. Airlines v. Transp. Workers Union of Am.*, 451 U.S. 77, 86–87 (1981) (“At common law there was no right to contribution among joint tortfeasors. In most American jurisdictions, however, that rule has been changed either by statute or by judicial decision.” (citations omitted)).

around themselves. Lastly, it could incentivize offenders to identify other offenders because they have a financial stake in sharing the costs.

D. *The Eighth Amendment*

In dicta, Justice Kennedy contemplated whether joint and several liability for child pornography cases “with no legal or practical avenue for seeking contribution” was so severe as to place it under the scope of Eighth Amendment.³⁹⁰ In this analysis, Justice Kennedy noted that “the Excessive Fines Clause was intended to limit only those fines directly imposed by, and payable to, the government.”³⁹¹

This Eighth Amendment analysis should not be applied to criminal restitution.³⁹² First, the Supreme Court has never held that criminal restitution is subject to the Excessive Fines Clause.³⁹³ Although the government prosecutes the matter, restitution serves a different purpose than fines and asset forfeitures.³⁹⁴ The monies from fines and asset forfeitures go back to the federal government.³⁹⁵ Conversely, restitution compensates victims—it is not collected for use and benefit by the government.³⁹⁶ This fundamental distinction is important because the government has no ulterior incentive to pursue restitution awards. Aside from some moral satisfaction and possibly some good will among the public, the government benefits in no way from this litigation and these awards. On one hand, restitution is fundamentally different from fines and asset forfeiture. On the other hand, this dicta in *Paroline* justified the cautious approach taken by the Department of Justice and Congress. Unless the Supreme Court fleshes out whether restitution really falls

390. *Paroline*, 572 U.S. at 455.

391. *Id.* at 456 (quoting *Browning-Ferris Indus. of Vt., Inc. v. Kelco Disposal, Inc.*, 492 U.S. 257, 268 (1989)).

392. *Paroline*, 572 U.S. at 455–56; *see generally* Kevin Bennardo, *Restitution and the Excessive Fines Clause*, 77 LA. L. REV. 21 (2016); *but see* Cassell & Marsh, *supra* note 18, at 11 (arguing that restitution should not fall under the Eighth Amendment analysis).

393. Bennardo, *supra* note 392, at 21 (remarking that the Supreme Court has not ruled on criminal restitution coming within the scope of the Eighth Amendment); *Paroline*, 572 U.S. at 455–56 (alluding that restitution may come under the scope of the Eighth Amendment).

394. *Kelco*, 492 U.S. at 264–65 (limiting the excessive fines clause to “payment to a sovereign as punishment for some offense” or “when the government neither has prosecuted the action nor has any right to receive a share of the damages awarded.”); *but see generally* Bennardo, *supra* note 392 (arguing that criminal restitution should be subject to the Excessive Fines Clause).

395. Anne Teigen & Lucia Bragg, *Evolving Civil Asset Forfeiture Laws*, NAT’L CONF. STATE LEGISLATURES (Feb. 2018), <https://www.ncsl.org/research/civil-and-criminal-justice/evolving-civil-asset-forfeiture-laws.aspx> [<https://perma.cc/8VX2-54DT>].

396. *Paroline*, 572 U.S. at 455–56 (remarking that joint and several liability may be so severe that it could raise concerns under the Eighth Amendment, even though restitution is compensatory in nature and is not currently regulated under the Eighth Amendment); *see generally* Bennardo, *supra* note 392 (considering the purposes of criminal restitution, its role in the criminal process, and the punitive impact that it has on defendants).

under the scope of the Eighth Amendment, *Paroline*'s dicta may be a reason against imposing joint and several liability.³⁹⁷

Nevertheless, child pornography offenses, even possession, are serious crimes that should pass the muster of the Eighth Amendment analysis.³⁹⁸ Under the Eighth Amendment, fines are only excessive if they are grossly disproportional to the crime.³⁹⁹ Imposing joint and several liability for such heinous crimes is not inherently disproportionate. Investigators are seeing increases in penetration, sadomasochism, and drugging of minors.⁴⁰⁰ Images depicting more egregious conduct are more likely to be actively traded.⁴⁰¹ The only thing that investigators are seeing decrease is the age of the victim: more toddlers and infants are being abused.⁴⁰² The imagery traded by offenders documents child rape.⁴⁰³

397. Cassell & Marsh, *supra* note 18, at 11 (“[R]estitution . . . is not a punitive measure . . . but rather is a compensation regimen [*sic*] designed to restore crime victims. . . . [A] ‘fine’ is a ‘pecuniary criminal punishment or civil penalty payable to the public treasury.’” (quoting *Fine*, BLACK’S LAW DICTIONARY (8th ed. 2004))); *but see Paroline*, 572 U.S. at 456 (highlighting that restitution is ordered in a criminal proceeding and serves punitive purposes).

398. Cassell & Marsh, *supra* note 18, at 11 (noting that child pornography offenses are punished by lengthy prison terms and some mandatory sentences); *but see Lollar*, *supra* note 307, at 371 (arguing that offenders of child pornography are “more empathetic” and “less likely to engage in sexually risky behaviors” compared to hands-on offenders).

399. *United States v. Bajakajian*, 524 U.S. 321, 334 (1998), *superseded by statute*, 31 U.S.C. § 5332, *as recognized in United States v. Del Toro-Barboza*, 673 F.3d 1136 (9th Cir. 2012) (“The amount of the forfeiture must bear some relationship to the gravity of the offense that it is designed to punish.”); Cassell & Marsh, *supra* note 18, at 11 (arguing that full restitution under the standard is not excessive because of the severity of child pornography offenses—pointing to the long prison sentences).

400. Michael C. Seto et al., *Production and Active Trading of Child Sexual Exploitation Images Depicting Identified Victims*, NAT’L CTR. MISSING & EXPLOITED CHILD. 47 (Mar. 2018), https://www.missingkids.org/content/dam/missingkids/pdfs/ncmec-analysis/Production%20and%20Active%20Trading%20of%20CSAM_FullReport_FINAL.pdf [<https://perma.cc/F87V-45GZ>] (noting the various scales that researchers use to classify the severity of the child sexual abuse imagery); WORTLEY & SMALLBONE, *supra* note 35, at 7 (explaining a scale that investigators and researchers use to classify images of children—from indicative (which are nonsexualized images) to sadistic/bestiality (which are images depicting children in pain or forced into sexual contact with animals)).

401. Seto et al., *supra* note 400, at 42 (“The historical dataset suggests there has indeed been a shift toward more egregious content over time, with more content rated at levels 3 or 4 on the sexual activity scale in later years.”); *see* WORTLEY & SMALLBONE, *supra* note 35, at 21 (noting that child sexual abuse imagery is being used to groom future victims, cyberstalk victims, promote child sex tourism, and traffic children).

402. *See* Keller & Dance, *supra* note 13 (“In a particularly disturbing trend, online groups are devoting themselves to sharing images of younger children and more extreme forms of abuse.”); *see, e.g., United States v. Bordman*, 895 F.3d 1048, 1051–52 (8th Cir. 2018) (explaining that the defendant possessed sexual abuse images of toddlers and infants and that the defendant was sexually exploiting his toddler).

403. *See* DOJ CONGRESSIONAL REPORT, *supra* note 72, at 2–3 (“While ‘child pornography’ is the term commonly used by lawmakers, prosecutors, investigators, and the public to describe this

Possession of these images is a huge invasion of the most intimate aspects of these victims' lives.⁴⁰⁴ Additionally, these victims are the most vulnerable. Due to the nature of the content and the abuse, it should come as no surprise that those victims will require significant compensation for their losses caused by the trauma.⁴⁰⁵ Furthermore, possession fuels the distribution and production of images, and with the internet age, offenders are seeking more severe content in the images.⁴⁰⁶

E. Arguments Against Restitution

One argument against restitution is that victims could simply utilize existing civil remedies. However, resorting to other existing civil remedies is not suitable for victims or defendants.⁴⁰⁷ This process forces victims to initiate a separate civil lawsuit, hire private counsel, and prove their case, which would initiate another long, legal process to which only a few defendants would be subjected.⁴⁰⁸ Additionally, there is a \$150,000 minimum damages recovery.⁴⁰⁹ While this is good for victims, it hinges on suing defendants that have the assets to pay for it, which could lead to wealthier defendants bearing larger amounts of the victim's losses.⁴¹⁰

Another argument against restitution in child pornography cases is that

form of sexual exploitation of children, that term largely fails to describe the true horror [V]ictims are first sexually assaulted in order to produce the vile, and often violent, images.”); see NCMEC Overview, *supra* note 1 (explaining that child pornography does not accurately capture what is depicted because the term “pornography” implies consent which these minors do not have).

404. See Reid & Collier, *supra* note 21, at 666 (noting that the possessor violates the victim's privacy); see also Gewirtz-Meydan et al., *supra* note 67, at 244–45 (explaining the constant fear that several victims report because the images are on the internet and can be used against them, but also remarking the images validate that the crimes occurred to them).

405. Paroline v. United States, 572 U.S. 434, 435 (2014) (“Here, the victim's costs of treatment and lost income resulting from the trauma of knowing that images of her abuse are being viewed over and over are direct and foreseeable results of child-pornography crimes”); Cassell & Marsh, *supra* note 18, at 13–14 (noting that defendants' actions are more similar to intentional torts and as a result, it is foreseeable that victims will suffer significant harms).

406. United States v. Monzel, 930 F.3d 470, 483 (D.C. Cir. 2019) (explaining that possession has a synergistic impact on production and distribution); Carey, *supra* note 94 (noting that online communities and easy access to materials lower pedophiles' inhibitions, making them more likely to more frequently offend with greater severity).

407. See United States v. Berry, No. 1:18-00107, 2019 WL 5306960, at *2 (D. Or. Oct. 21, 2019) (explaining that victims will be able to access funds more quickly); see KENDALL & FUNK, *supra* note 11, at 249–51 (explaining the importance of proceedings in these kinds of cases because the victim needs to be able to move on).

408. See generally Masha's Law, 18 U.S.C. § 2255 (providing victims a civil cause of action against offenders of child pornography); Marsh, *supra* note 11, at 474 (noting that the victim has to prove that he or she is a victim of one of the enumerated child exploitation statutes).

409. 18 U.S.C. § 2255.

410. See generally *id.* (noting that there is a ten year statute of limitations starting from the time that the victim learns of a violation or injury that forms the basis of the claim or ten years after the victim turns eighteen); Marsh, *supra* note 11, at 474 (highlighting that a victim does not need to

focusing on child sexual abuse imagery diverts the attention from child sexual abuse within the family.⁴¹¹ This argument presents a valid point: there should be higher awareness that physical sexual abuse of minors is overwhelmingly perpetrated by family members or people close to the victim, and not by strangers.⁴¹² However, child sexual abuse is prosecuted primarily by state governments, while child pornography is prosecuted primarily by the federal government.⁴¹³ Additionally, the production, distribution, and possession of child sexual abuse imagery inflicts an additional harm on victims because the images are in the public and their abuse is broadcasted to countless strangers.⁴¹⁴ There is no reason why the efforts to curb the child sexual abuse imagery industry and familial child sexual abuse cannot be effectuated concurrently. Clarifying misconceptions about child sexual abuse, promoting a culture where victims feel more empowered to report, and raising criminal penalties for state sex crimes are all efforts that should be taken to reduce the physical sexual abuse.⁴¹⁵ However, criminal restitution can work toward combating child sexual abuse on the market level because it is leveraged on the consumers of the child sexual abuse imagery—the distributors and possessors.

Overall, this approach allows for an alternative apportionment that avoids the issues with arbitrariness of the current system, but makes it

prove that the defendant was convicted under one of these statutes—but noting that in actuality, the courts have demanded levels of proof that align with the criminal standard).

411. Lollar, *supra* note 307, at 377 (noting that abuse within the family goes undetected); CHILD SEXUAL ABUSE STATISTICS, *supra* note 70, at 1, 7 (noting that it is difficult to pull numbers on childhood sexual abuse, but noting that it is more common than people think and that it is severely underreported).

412. Lollar, *supra* note 307, at 347 (“Imposing restitution on individuals unknown to the child contributes to the perpetuation of the ‘stranger-danger’ myth by focusing on unfamiliar individuals who view child pornography rather than those intimate members of the child’s inner circle who create it.”); *see also* ADAMS & FLYNN, *supra* note 371, at 2 (noting that possession and distribution offenses are prosecuted at far greater levels than production charges).

413. Lollar, *supra* note 307, at 376 (“[I]t is the familial and social circumstances of young children that are the primary factors in their victimization.” (quoting Dean D. Knudsen, *Child Sexual Abuse and Pornography: Is There a Relationship?*, 3 J. FAM. VIOLENCE 253, 263 (1988))); *see generally* Seto et al., *supra* note 400 (reporting various statistics indicating that minors are abused more often by family members, that those family members are more likely to engage in more severe conduct, and that family members are more likely to record and disseminate the abuse).

414. *See generally* *Paroline v. United States*, 572 U.S. 434 (2014) (all justices recognizing the harm that victims suffer as a result of the trafficking of images depicting their abuse); *see also* *New York v. Ferber*, 458 U.S. 747, 756–57 (1982) (recognizing a compelling need to protect children from commercial sexual exploitation).

415. *See generally* Lollar, *supra* note 307 (explaining that there needs to be more awareness and action taken to address the root of familial sexual abuse); *see also* Cassell & Marsh, *supra* note 18, at 9–10 (advocating for a system that will provide full recovery to victims).

more likely for victims to recover their full losses.⁴¹⁶ Joint and several liability with a periodic payment schedule forces all convicted defendants to pool together to pay the victim restitution in the full amount of the victim's losses and incentivizes defendants to cooperate with law enforcement.⁴¹⁷ However, the biggest challenge to this solution is *Paroline's* dicta that considers whether restitution should be under the scope of the Eighth Amendment.⁴¹⁸ The Excessive Fines Clause should not apply because the primary goal of restitution is not punitive but rather compensatory and the government does not take the property or money (the victim does).⁴¹⁹ Moreover, child pornography offenses are very serious: high amounts of restitution that come as a result of the horrific abuse that victims endure should not be considered excessive.⁴²⁰

VI. CONCLUSION

The child sexual abuse imagery industry inflicts inexpressible trauma on its victims,⁴²¹ who are among the most vulnerable. Due to the newness of the laws,⁴²² there is significant room for development to address a crime that has reached new levels since the dawn of the internet age.⁴²³ With the help of the internet, offenders of child pornography crimes do not act in isolation. Rather, they are a part of a criminal web that trades

416. See generally *supra* Part V (explaining that district courts would not have discretion to order restitution amounts); see also *Paroline*, 572 U.S. at 486–87 (Sotomayor, J., dissenting) (explaining how the restitution system would balance the rights of victims and defendants).

417. See *supra* Part V (explaining that defendants would pay less if more defendants are convicted).

418. See *Paroline*, 572 U.S. at 455–56 (explaining that the approach is so severe that it could implicate the Eighth Amendment); see also *supra* Part V (noting in dicta that although restitution has never been subject to the scope of the Eighth Amendment, the Supreme Court conceivably could extend restitution to the scope of the Eighth Amendment).

419. See Cassell & Marsh, *supra* note 18, at 11 (noting that the goal of restitution is to compensate the victim for his or her losses); Amy, Vicky, and Andy Child Pornography Victim Assistance Act of 2018, Pub. L. No. 115-299, 132 Stat. 4383 (codified as amended 18 U.S.C. § 2259) (“It is the intent of Congress that victims of child pornography be compensated . . .”).

420. See Cassell & Marsh, *supra* note 18, at 11 (arguing that restitution under the Eighth Amendment should not be excessive because child pornography offenses are serious crimes); see generally Audrey Rogers, *Child Pornography's Forgotten Victims*, 28 PACE L. REV. 847 (2008) (dispelling the misconceptions that child pornography is a less serious offense).

421. See generally SURVIVORS' SURVEY, *supra* note 5 (reporting the instances of psychological disorders that victims have); see Gewirtz-Meydan et al., *supra* note 67, at 239, 243, 246 (noting the feelings that victims possess); *Paroline*, 572 U.S. at 440 (explaining the relapse of trauma that Amy endured after learning of the publication of her images).

422. KENDALL & FUNK, *supra* note 11, at 81–82 (noting that child sexual abuse imagery was not criminalized until the late 1970s); see also *New York v. Ferber*, 458 U.S. 747, 765 (1982) (holding that child sexual abuse imagery is not protected under the First Amendment).

423. See generally WORTLEY & SMALLBONE, *supra* note 35 (explaining that the boom of the internet has transformed the child sexual abuse imagery industry); see also DOJ CONGRESSIONAL REPORT, *supra* note 72 (detailing the complications in investigating and prosecuting child pornography offenses because of the amount and international aspect resulting from the internet).

images of exploited minors.⁴²⁴ In *Paroline*, the Supreme Court created an unworkable framework for ordering restitution.⁴²⁵ The decision led to the circuit split on disaggregation, which exemplifies the difficulties and complications in applying the *Paroline* framework.⁴²⁶

At the end of the day, victims are being left to bear the costs of their harm simply because too many people are hurting them.⁴²⁷ Child pornography offenses are unique crimes which require an individually tailored response. Joint and several liability, while not appropriate for other crimes, is precisely the response warranted for these distinctive offenses because there are so many defendants; there are growing conviction rates; and victims suffer a single, indivisible injury.⁴²⁸ Including partial payment schedules and a claim for contribution balances the defendants' interests with the victims' interests by allowing defendants to spread the losses between offenders. Ultimately, what is needed is a system that sensitively approaches the unique hardship that victims of child pornography suffer and ensures that the victims who have been cut a thousand times recover just the same as victims of other crimes.⁴²⁹

424. See *supra* Part II (explaining the networks in which child pornography offenders operate); see generally WORTLEY & SMALLBONE, *supra* note 35 (also explaining child pornography networks).

425. *Paroline*, 572 U.S. at 449–63 (confronting the complex issue of causation); see Cassell & Marsh, *supra* note 18, at 6–8 (discussing the “uneven implementation” of *Paroline*).

426. See generally *United States v. Rothenberg*, 923 F.3d 1309 (11th Cir. 2019) (rejecting disaggregation for being arbitrary); *United States v. Monzel*, 930 F.3d 470, 483, 485 (D.C. Cir. 2019) (also rejecting disaggregation as arbitrary).

427. See *United States v. Whitely*, 354 F. Supp. 3d 930, 939 (N.D. Ill. 2019) (commenting that the criminal justice system is failing victims of sexual exploitation).

428. See generally *supra* Part V; see also *Paroline*, 572 U.S. at 473, 481 (Sotomayor, J., dissenting) (providing explanation for why joint and several liability is appropriate for child pornography offenses).

429. See generally *supra* Part V; see also *Paroline*, 572 U.S. at 472, 477 (Sotomayor, J., dissenting) (“[T]he victim must ‘go through life knowing that the recording is circulating within the mass distribution system for child pornography.’” (quoting *New York v. Ferber*, 458 U.S. 747, 759 n.10 (1982))).