

United States Court of Appeals For the First Circuit

No. 03-1741

UNITED STATES OF AMERICA,

Respondent, Appellant,

v.

DAVID HILTON,

Petitioner, Appellee.

APPEAL FROM THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF MAINE

[Hon. Gene Carter, U.S. Senior District Judge]

Before

Torruella and Howard, Circuit Judges,
and Schwarzer,* Senior District Judge.

F. Mark Terison, Senior Litigation Counsel, with whom Paula D. Silsby, United States Attorney, was on brief, for appellant.
Bruce M. Merrill, on brief, for appellee.

April 2, 2004

* Of the Northern District of California, sitting by designation.

TORRUELLA, Circuit Judge. David Hilton was convicted of a one-count violation of 18 U.S.C. § 2252A(a)(5)(B), the Child Pornography Prevention Act ("CPPA"), on June 30, 2000. In light of the Supreme Court's decision in Ashcroft v. Free Speech Coalition, 535 U.S. 234 (2002), holding that the government may not criminalize possession of non-obscene sexually explicit images that appear to, but do not in fact, depict actual children, Hilton sought and was granted post-conviction relief under 28 U.S.C. § 2255. The government appeals. Because the district court correctly held that the prosecution did not prove an element of the crime, we affirm the grant of relief vacating Hilton's conviction.

I. Procedural History

A. Indictment, Dismissal and Appeal

Based on evidence discovered by local law enforcement pursuant to a valid search warrant, a federal grand jury indicted Hilton on December 17, 1997, charging him with a one-count violation of 18 U.S.C. § 2252A(a)(5)(B).¹ Hilton moved to dismiss the indictment, arguing that the CPPA violated the First Amendment. Section 2252A(a)(5)(B) criminalizes the knowing possession of child

¹ The statute provides that "Any person who . . . knowingly possesses any book, magazine, periodical, film, videotape, computer disk, or any other material that contains an image of child pornography that has been mailed, or shipped or transported in interstate or foreign commerce by any means, including by computer, or that was produced using materials that have been mailed, or shipped or transported in interstate or foreign commerce by any means, including by computer . . . shall be punished" 18 U.S.C. 2252A(a)(5)(B).

pornography that has traveled between states or between countries. Hilton's First Amendment challenge involved the definition of "child pornography" in 18 U.S.C. § 2256(8). That provision defines child pornography to include "any visual depiction, including any photograph, film, video, picture, or computer or computer-generated image or picture, whether made or produced by electronic, mechanical, or other means, of sexually explicit conduct, where such visual depiction is, or appears to be, of a minor engaging in sexually explicit conduct." 18 U.S.C. § 2256(8)(B). Section 2256(8)(B) was added by Congress in 1996 after finding that "new photographic and computer imaging technologies make it possible to produce by electronic, mechanical, or other means, visual depictions of what appear to be children engaging in sexually explicit conduct that are virtually indistinguishable to the unsuspecting viewer from unretouched photographic images of actual children engaging in sexually explicit conduct." Child Pornography Prevention Act of 1996, Pub. L. No. 104-208, div. A, tit. I, § 121 (1)(5), 110 Stat. 3009-26 (1996) (emphasis added).

Hilton argued that this new definition violated the First Amendment by prohibiting some adult pornography -- that appearing to be of children -- and by virtue of vagueness and overbreadth. The district court agreed, holding that the CPPA's "appears to be" provision was overbroad and left unclear exactly what images were illegal. The district court dismissed the indictment on March 26,

1998. United States v. Hilton, 999 F. Supp. 131 (D. Me. 1998) ("Hilton I"). The United States appealed, and this court reversed and reinstated the indictment. See United States v. Hilton, 167 F.3d 61 (1st Cir. 1999) ("Hilton II").

B. Trial and Appeal

After the Supreme Court denied Hilton's petition for certiorari, the case advanced to trial. Hilton waived his right to a jury trial. After the issuance of a superseding indictment on January 5, 2000, the district court heard the case against Hilton over the course of three days. This court reviewed the district court's findings extensively in United States v. Hilton, 257 F.3d 50 (1st Cir. 2001) ("Hilton IV") (reviewing United States v. Hilton, No. 97-78-P-C, 2000 U.S. Dist. LEXIS 9220 (D. Me. June 30, 2000) ("Hilton III"). Here we concentrate on the evidence at issue in this appeal.

The search of Hilton's computer room on November 7, 1997, produced a number of pornographic images. These were found on a Sony Backup Tape, in Hilton's hard drive, and printed up and stored in a "gray box." According to Agent Marx of the local police, whom the parties stipulated as a computer forensics expert, the Sony Backup Tape was used to back up Hilton's computer two months before seizure. The Sony tape contained thousands of images; the government introduced seven of them. The "gray box" contained a print-out with four images identical to four in the Sony tape. The

hard drive contained three images, and this court on review found two to be non-explicit. See Hilton IV, 257 F.3d at 58.

To prove that these images depicted children, rather than adults, the government introduced the testimony of Dr. Lawrence Ricci. Dr. Ricci testified as to the Tanner Scale and its application to the seized images. The Tanner Scale was developed through analysis of many children both in the United States and throughout the world and provides a basis for estimating a person's stage of physiological development. Dr. Ricci marked on the backs of the images his opinion as to the children's ages. In his opinion, apart from an image that morphed a child's face with an adult woman's body, the other nine images represented children at various stages of development, ranging from pre-school to young teen. See Hilton III, 2000 U.S. Dist. LEXIS 9220 at *23-26.

Based on this evidence, the district court found beyond a reasonable doubt that the images satisfied the definition of child pornography in 18 U.S.C. § 2256(8). The court also found the required element of scienter and an interstate nexus. Since the court did not find merit in Hilton's affirmative defenses that he was possessing the images under authority of the government, it convicted Hilton on June 30, 2000, and subsequently sentenced him to forty months imprisonment.

Hilton appealed his conviction, challenging the constitutionality of the CPPA and the sufficiency of the evidence.

He reiterated his affirmative defense that he had collected the images at the government's request. Hilton IV, 257 F.3d 50. Hilton also claimed that the district court erred in his sentencing. We rejected all but the sentencing claim. Since we concluded that two of the three hard drive images did not qualify as child pornography or involve the sexual exploitation of a minor, we remanded for resentencing because the record did not support the Sentencing Guidelines upward adjustment applied by the district court for possession of "ten or more . . . items, containing a visual depiction involving the sexual exploitation of a minor." U.S.S.G. § 2G2.4(b)(2); see Hilton IV, 257 F.3d at 58. As for Hilton's constitutional challenge, we noted that we had "rejected this claim on Hilton's earlier appeal." Hilton IV, 257 F.3d at 53. Hilton asked us to reconsider our prior holding in light of the Ninth Circuit's decision in Free Speech Coalition v. Reno, 198 F.3d 1083 (9th Cir. 1999), but we declined to do so.² Id. Thus, on

² We noted that "the Ninth Circuit struck down only those portions of the Act making illegal possession of computer generated images of fictitious children." Hilton IV, 257 F.3d at 53. The government argues that this language implies that we found Hilton's images to represent actual children. The flaw in the argument is that it is the Supreme Court's Free Speech Coalition, rather than Hilton IV, which controls and from that case it is clear that the law in this circuit must change. No longer can a pornographic image be assumed to depict real children until proven otherwise. Our comment in Hilton IV reflected the law of this circuit under Nolan. Free Speech Coalition together with changing technology has superseded those precedents.

July 27, 2001, we affirmed Hilton's conviction and remanded for resentencing.

On remand, the district court sentenced Hilton to thirty-four months of incarceration.

C. The CPPA after Ashcroft v. Free Speech Coalition

While Hilton's direct appeal was pending, the Supreme Court granted certiorari to review the Ninth Circuit's Free Speech Coalition v. Reno, 198 F.3d 1083 (9th Cir. 1999), a civil suit challenging on its face the constitutionality of the CPPA as amended in 1996. The key challenge, and the one relevant here, was against prosecution for "child pornography" that only "appears to be, of a minor engaging in sexually explicit conduct." 18 U.S.C. § 2256(8)(B). In Ashcroft v. Free Speech Coalition, 535 U.S. 234 (2002), the Court affirmed the Ninth Circuit holding that such prosecutions violate the First Amendment's protection against governmental abridgement of the freedom of speech. Id. at 258; see U.S. Const. amend. I.

The First Amendment does not protect obscenity, Miller v. California, 413 U.S. 15 (1973), or the possession of child pornography produced using children. Osborne v. Ohio, 495 U.S. 103, 110 (1990) ("It rarely has been suggested that the constitutional freedom for speech and press extends its immunity to speech or writing used as an integral part of conduct in violation of a valid criminal statute.") (quoting New York v. Ferber, 458

U.S. 747, 761-62 (1982) (quoting Giboney v. Empire Storage & Ice Co., 336 U.S. 490, 498 (1949))).

The CPPA is not circumscribed by the Miller definition of obscenity. Free Speech Coalition, 535 U.S. at 246.³ Therefore, since the "appears to be" definition prohibits non-obscene speech, the Free Speech Coalition Court addressed the government's contention that the rationale behind Osborne and Ferber extended to the criminalization of sexually explicit images that appear to contain children. Those two cases viewed the trade in and possession of child pornography as bearing a proximate link to the child abuse that produced the images in the first place. See Free

³ Congress has responded with amendments to the CPPA in the Prosecutorial Remedies and Other Tools to end the Exploitation of Children Today Act of 2003 ("PROTECT") that specify a class of obscene child pornography reaching "Any person who . . . knowingly produces, distributes, receives, or possesses with intent to distribute, a visual depiction of any kind, including a drawing, cartoon, sculpture, or painting, that:

(1) (A) depicts a minor engaging in sexually explicit conduct; and

(B) is obscene; or

(2) (A) depicts an image that is, or appears to be, of a minor engaging in graphic bestiality, sadistic or masochistic abuse, or sexual intercourse, including genital-genital, oral-genital, anal-genital, or oral-anal, whether between persons of the same or opposite sex; and

(B) lacks serious literary, artistic, political, or scientific value; or attempts or conspires to do so, shall be subject to the penalties provided in section 2252A(b)(1), including the penalties provided for cases involving a prior conviction.

18 U.S.C. § 1466A(a) (2003).

Speech Coalition, 535 U.S. at 249-50. The government presented two types of arguments to show that the prohibition on virtual pornography was indeed proximate to compelling interests; one argument was based on the injuries allegedly flowing from "appears to be" child pornography and the second on prosecutorial necessity.

Two concerns motivated the first argument: (1) that "pedophiles may use virtual child pornography to seduce children," id. at 251, and (2) that virtual child pornography "whets the appetites of pedophiles and encourages them to engage in illegal conduct." Id. at 253. Contrary to our earlier conclusion in Hilton II, 167 F.3d at 72-74, the Court held that the availability of virtual child pornography to child abusers does not provide a basis for the prohibition because while "[t]he objective is to prohibit illegal conduct . . . this restriction goes well beyond that interest by restricting the speech available to law-abiding adults." Id. at 252-53. As for the concern that virtual child pornography motivates child abuse, the Court disagreed with the premise behind the government's argument: "[t]he mere tendency of speech to encourage unlawful acts is not a sufficient reason for banning it." Free Speech Coalition, 535 U.S. at 253. Because "[t]he Government has shown no more than a remote connection between speech that might encourage thoughts or impulses and any resulting child abuse," it "may not prohibit speech on the ground

that it may encourage pedophiles to engage in illegal conduct." Id. at 253-54.

The government's second argument was that eliminating actual child pornography necessitates the prohibition on virtual pornography because virtual images are indistinguishable from real ones. Id. at 254-55. First, the government contended that "[v]irtual images . . . are indistinguishable from real ones[, and] they are part of the same market and are often exchanged." Id. at 254. The Court found this "hypothesis . . . somewhat implausible. If virtual images were identical to illegal child pornography, the illegal images would be driven from the market by the indistinguishable substitutes. Few pornographers would risk prosecution by abusing real children if fictional, computerized images would suffice." Id. To the government's claim that indistinguishability meant that the successful prosecution of actual child pornography necessitated criminalization of virtual child pornography, the Court responded: "[t]he argument, in essence, is that protected speech may be banned as a means to ban unprotected speech. This analysis turns the First Amendment upside down." Id. at 255. Thus the Court held that possession of

material that satisfied only § 2256(8)(B) could not be punished.⁴
Id. at 256.

D. Post-Conviction Relief

Based on the Court's ruling in Free Speech Coalition, Hilton filed a motion for post-conviction relief under 28 U.S.C. § 2255 on November 13, 2002. The magistrate judge hearing the petition agreed that Hilton was entitled to relief. United States v. Hilton, Crim. No. 97-78-P-C, Civ. No. 02-235-P-C, 2003 U.S. Dist. LEXIS 4208, (D. Me. March 20, 2003) ("Hilton V"). The district court adopted that recommendation and vacated Hilton's conviction. United States v. Hilton, Crim. No. 97-78-P-C, Civ. No. 02-235-P-C, 2003 U.S. Dist. LEXIS 8130, 2003 WL 21135703 (D. Me. May 15, 2003). The government's appeal has put Hilton's petition before this court.

II. Analysis

After Free Speech Coalition, the government must prove that an image depicts actual children to sustain a § 2252A(a)(5)(B) conviction. Both parties agree that the holding of Free Speech Coalition applies retroactively. See Teague v. Lane, 489 U.S. 288, 307-11 (1989) (exception to non-retroactivity when new rule "places

⁴ The Court applied the same reasoning to find § 2256(8)(d) contrary to the First Amendment. That section, defining as prohibited child pornography "such visual depiction [that] is advertised, promoted, presented, described, or distributed in such a manner that conveys the impression that the material is or contains a visual depiction of a minor engaging in sexually explicit conduct," is not at issue in this case.

certain kinds of primary, private individual conduct beyond the power of the criminal law-making authority to proscribe," id. at 311) (quoting Mackey v. United States, 401 U.S. 667, 675 (1971) (Harlan, J., concurring in part and dissenting in part)). In arguing the habeas court's error, the government asks us to conclude that the trial court found that the seized images depicted actual children and that we should, therefore, reinstate the conviction.

For the government to prevail in this appeal and persuade us to reinstate the conviction, we must agree that sufficient evidence was presented at Hilton's trial to satisfy the element of the crime that the children depicted in the images are real. Evidence is deficient, as a matter of law, when "after assaying all the evidence in the light most amiable to the government, and taking all reasonable inferences in its favor, a rational factfinder could [not] find, beyond a reasonable doubt, that the prosecution successfully proved the essential elements of the crime." United States v. O'Brien, 14 F.3d 703, 706 (1st Cir. 1994). We agree with the district court and conclude that the government presented insufficient evidence at Hilton's trial to sustain a conviction under 18 U.S.C. § 2252A(a)(5)(B).

Congress amended the CPPA in 1996 as a response to technological developments that enabled the manufacture of images that look like child pornography and yet are produced without

children. See Pub. L. No. 104-208, div. A, tit. I, § 121(1)(5), 110 Stat. 3009-26 (1996). Because the Supreme Court has established that the First Amendment does not countenance prohibitions on such speech, we hold that conviction under § 2252A (a)(5)(B) requires the government to present evidence proving that the child in the image is not confabulated, but real.

The government is not released from this burden of proof by a failure on the defendant's part to argue, or by an absence of evidence otherwise suggesting, the artificiality of the children portrayed. That the children in the images are real amounts to an element of the crime which the government must prove. The artificiality of the children depicted is not to be rendered a mere affirmative defense.⁵ "Protected speech does not become unprotected merely because it resembles the latter." Free Speech Coalition, 535 U.S. at 255.

The government argues, and other circuits have agreed, that the pornographic images themselves should suffice to prove the use of actual children in production. See United States v. Kimler,

⁵ The CPPA, as it existed at Hilton's conviction, provided an affirmative defense for persons charged with non-possession offenses, i.e., distribution, production, and sale, by showing only adults were used in the production of the material. 18 U.S.C. § 2252A(c) (1996). The Supreme Court in Free Speech Coalition recognized that "[t]he Government raises serious constitutional difficulties by seeking to impose on the defendant the burden of proving his speech is not unlawful" but did "not decide, however, whether the Government could impose this burden on a speaker." Free Speech Coalition, 535 U.S. at 256.

335 F.3d 1132, 1142 (10th Cir. 2003) ("Juries are still capable of distinguishing between real and virtual images"); United States v. Deaton, 328 F.3d 454, 455 (8th Cir. 2003) (reaffirming the reasonableness of "a jury's conclusion that real children were depicted even where the images themselves were the only evidence the government presented on the subject"); United States v. Hall, 312 F.3d 1250, 1260 (11th Cir. 2002) (affirming pre-Free Speech Coalition conviction because "no reasonable jury could have found that the images were virtual children created by computer technology as opposed to actual children"). These courts' holdings express a judgment that a jury can distinguish a depiction of an actual child from a depiction of a virtual child "even where the images themselves were the only evidence." Deaton, 328 F.3d at 455. While the images form essential evidence without which a conviction could not be sustained, we hold that the government must introduce relevant evidence in addition to the images to prove the children are real.

In United States v. Nolan, 818 F.2d 1015 (1st Cir. 1987), this court reviewed a conviction under the CPPA before Congress amended the definition of child pornography to include images that "appear[] to be" of children. See Pub. L. No. 104-208, div. A, tit. I, § 121(2)(4), 110 Stat. 3009-26 (1996). Nolan argued on appeal that since the government had relied on the images to prove the crime, it had presented insufficient evidence. We held that

"on this record the prosecution was not required, as part of its affirmative case, to rule out every conceivable way the pictures could have been made other than by ordinary photography." Id. at 1020. Rather, we noted that Nolan "presented no expert evidence at trial that these pictures were or could have been produced by any such artificial means." Id. at 1019. Today we recognize that the vast technological revolution underway since 1987 -- when we decided Nolan -- has made undeniable the fact that sexually explicit images portraying children can be produced by artificial means; the burden of proving that the images "were or could have been produced by any such artificial means" can no longer rest on the defendant. To convict under § 2252A(a)(5)(B), the government must supplement the images with other relevant evidence proving that the children portrayed are real. The defendant is entitled to have this element proved affirmatively without entering any evidence to the contrary. Otherwise, "[p]rotected speech [could] become unprotected merely because it resembles [unprotected speech]." Free Speech Coalition, 535 U.S. at 255.

The government contends that Dr. Ricci's testimony constituted relevant evidence establishing that the children in Hilton's computer images were real. Dr. Ricci's testimony and image-by-image evaluations supported the district court's finding that the images represented children rather than adults. The government argues that in proving that the images represented

children, Dr. Ricci also made the case that the children were real.

In the government's own words:

The "Tanner Scale" was developed through an analysis of "large numbers of children" both in the United States and throughout the world. Commonsense establishes that the scale was developed through the assessment of actual children. The reasonable and commonsense inference is also that Dr. Ricci, as an expert pediatrician, would apply the "Tanner Scale" only to actual children.

We find more commonsensical a proposition leading to the contrary inference that someone manufacturing images to look like children will try -- and with sufficient technology will manage -- to produce images that would be amenable to expert analysis under the Tanner Scale. Whatever parameters of body proportion, growth and development serve as signs of age under the Tanner Scale, those parameters will be mimicked by the virtual pornographer -- whether by design or as a byproduct of the goal of realism. What a finding of guilt beyond a reasonable doubt demands is evidence that the indicators of youth apparent to the untrained eye belong to an actual child. Accordingly, we find the government's contention

that Dr. Ricci presented sufficient evidence to prove that the children represented were real unavailing.⁶

In response to Free Speech Coalition, Congress rewrote the invalidated sections of the CPPA. In place of the "appears to be" language formerly at § 2256(8)(B), Congress added a new definition of child pornography: "such visual depiction is a digital image, computer image, or computer-generated image that is, or is indistinguishable from, that of a minor engaging in sexually explicit conduct." 18 U.S.C. § 2256(8)(B) (2003). Our holding today applies equally to the new § 2256(8)(B) because "appears to be" is equivalent to "indistinguishable" in this context.⁷ Possession of non-obscene images can only be punished when real

⁶ This appeal does not require us to delineate what kinds of evidence can prove that the children depicted are real, as the government proffered no evidence relevant to this element apart from the images. We note, however, that evidence establishing the identity of a depicted child could demonstrate to a factfinder that real children were used to produce images. Other evidence, such as the testimony of a computer graphics expert, could also permit the factfinder to reasonably determine that this element of the crime was proved beyond a reasonable doubt. See, e.g., United States v. Rearden, 349 F.3d 608, 613-14 (9th Cir. 2003).

⁷ There is some irony to this change, as the Senate's discussion of the 1996 "appears to be" amendment shows that Congress aimed with that language to target images "which are virtually indistinguishable to unsuspecting viewers from unretouched photographs of actual children engaging in identical sexual conduct." S. Rep. 104-358, at pt. I, IV(B) (emphasis added); see Hilton II, 167 F.3d at 72.

children were part of the production process,⁸ and that is for the government to prove.⁹

III. Conclusion

The district court properly granted Hilton post-conviction relief because the United States did not present sufficient evidence to prove that the images in evidence against Hilton represented actual children. The government must present relevant evidence in addition to the images themselves, and Dr. Ricci's testimony as to the ages of the children depicted in the images was not adequate to meet this burden.

Affirmed.

⁸ Participation in the production process might involve as little as having one's face photographed and then morphed into a sexually explicit image using an adult or virtual model to complete the picture. The Supreme Court, addressing the CPPA's ban on morphed images, refrained from addressing its constitutionality:

Section 2256(8)(C) prohibits a more common and lower tech means of creating virtual images, known as computer morphing. Rather than creating original images, pornographers can alter innocent pictures of real children so that the children appear to be engaged in sexual activity. Although morphed images may fall within the definition of virtual child pornography, they implicate the interests of real children and are in that sense closer to the images in Ferber. Respondents do not challenge this provision, and we do not consider it.

Free Speech Coalition, 535 U.S. at 242.

⁹ As part of PROTECT, Congress also extended the affirmative defense for a defendant, prosecuted for the possession offense of which Hilton was indicted, who can show that adults rather than children were used or that no actual children were used in creating the image. 18 U.S.C. § 2252A(c) (2003).

Concurring opinion follows.

HOWARD, Circuit Judge (Concurring in the judgment). I agree that the judgment should be vacated, but I would not hold that the government must present evidence in addition to the image itself to prove that the picture depicts an actual child and not a virtual image.¹⁰

I.

The law in this circuit has been that a trier of fact, without the assistance of an expert or other evidence, can discern between an actual and virtual image of child pornography. See United States v. Nolan, 818 F.2d 1015, 1017-19 (1st Cir. 1987). In Nolan, a pre-1996 Child Pornography Prevention Act ("CPPA") prosecution, the defendant challenged his conviction on the grounds that the government had failed to prove that the pornographic pictures at issue depicted actual children. Id. at 1017. The defendant argued that the pictures were insufficient evidence on this issue because the government failed to present expert testimony that the pictures were not generated through computer imaging or similar methods. Id. We rejected this argument, concluding that "ordinary people in today's society are quite

¹⁰ The issue here concerns only the evidence necessary to distinguish between actual and virtual images of child pornography. Evidentiary issues concerning "morphed images" of child pornography (e.g., images that combine a child and adult body to make one image) are not implicated because possession of such images remains illegal under the CPPA. See Ashcroft v. Free Speech Coalition, 535 U.S. 234, 242 at n.8 (2002).

accustomed to seeing photographs and distinguishing them from other forms of visual representations." Id.

As I read today's decision, we overrule Nolan because "the vast technological revolution underway since [Nolan was decided] has made undeniable the fact that sexually explicit images portraying children can be produced through artificial means." Ante at 15. There can be no doubt that we have undergone a technological revolution since Nolan. One need only turn on a computer, attend a movie, or view one of the latest video games to understand that we live in a digital age in which virtual images look more and more real. One certainly can understand the majority's concern that this same technology could be used to produce realistic virtual pornography.

However, I think the question we resolve here should not be whether technology has improved greatly since Nolan. The relevant question in this case, involving images created almost a decade or longer ago, should be whether the available technology had progressed to such an extent that we can never (and specifically in this case) trust lay people, unaided by experts or other evidence, to differentiate between the real and the virtual. I would adhere to Nolan and to what appear to be all of the other relevant authorities to conclude that ordinarily fact finders can

continue to distinguish between real and virtual images of child pornography based solely on the presentation of the images.¹¹

It is true that in passing the 1996 amendment to the CPPA, Congress appears to have taken the view that there are instances in which lay people are no longer able to distinguish between the real and the virtual. As the Senate report put it:

New and increasingly less complex technology and expensive photographic computer imaging technologies make it possible for individuals to produce on home computers visual depictions of children engaging in sexually explicit conduct that are virtually indistinguishable from retouched photographic images of actual children engaging in sexually explicit conduct.

S. Rep. 104-358 (emphasis supplied).

The Supreme Court, however, does not agree. In Free Speech Coalition, the government claimed that, under current technology, "virtual images [can be created that are] indistinguishable from real ones." 535 U.S. at 1404-05. The Court found this "hypothesis [to be] somewhat implausible." It reasoned, "[I]f virtual images were identical to illegal child pornography, the illegal images would be driven from the market by the indistinguishable substitutes. Few pornographers would risk

¹¹ This is not to say the majority's concerns are off base. Indeed, as a matter of the reliability of evidence, it is not clear where the logical stopping point for the majority's concerns is, and the time may come when the rule it today establishes for this circuit will become prevalent. For now, I would leave the issue to sound trial management by the district courts.

prosecution by abusing real children if fictional, computerized images would suffice." Id. at 254.¹² The import of this statement is that the typical consumer of child pornography can differentiate between real and virtual depictions of child pornography. Presumably, if the average child pornography consumer can make such a determination, so can a judge or juror.

In the wake of Free Speech Coalition, every court to have considered the question has determined that the presentation of the pictures alone constitutes sufficient evidence for determining that an actual child is depicted in the pornographic image. See United States v. Slanina, 359 F.3d 356, 357 (5th Cir. 2004) (per curiam) ("[T]he Government was not required to present any additional evidence or expert testimony to meet its burden of proof to show that the image downloaded by [the defendant] depicted real children and not virtual children."); United States v. Kimler, 335 F.3d 1132, 1142 (10th Cir. 2003) ("Juries are still capable of distinguishing between real and virtual images."); United States v.

¹² The dissenting Justices accepted the government's argument that virtual images could be created that are indistinguishable from real ones. See Free Speech Coalition, 535 U.S. at 264 (O'Connor, J., dissenting); 535 U.S. at 268-69 (Rehnquist, C.J., dissenting). In addition to the majority opinion, Justice Thomas, stated that while technology may advance to the point that indistinguishable virtual images could be created, the government failed to demonstrate that this advancement had already occurred. Id. at 259-60 (Thomas, J., concurring in the judgment). Thus, the various Free Speech Coalition opinions indicate that the issue of whether truly indistinguishable virtual images of child pornography can be created using modern technology was considered by all the Justices and rejected by a majority.

Deaton, 328 F.3d 454, 455 (8th Cir. 2003) (upholding jury's conclusion that pictures depicted actual children "where the images themselves were the only evidence the government presented on the subject"); United States v. Hall, 312 F.3d 1250, 1260 (11th Cir. 2003) (concluding, after review of pictures, that "no reasonable jury could have found that the images were virtual children created by computer technology as opposed to actual children"); United States v. Fuller, 2003 WL 22331999, at *7 (6th Cir. Oct. 9, 2003) (unpublished disposition) (citing Deaton for proposition that "jury's conclusion that real children were depicted may be upheld even when the only evidence offered was the images themselves"); see also United States v. Brinkley, 2003 WL 22495757, at *8 (A.F. Ct. Crim. App. Oct. 31, 2003) (citing Kimler for proposition that "Free Speech Coalition does not require either direct evidence of the identity of the children in the images or expert testimony that the images are of real children rather than computer generated virtual images") (unpublished disposition); People v. Norman, 803 N.E.2d 1099, 1103 (Ill. App. Ct. 2004) (holding that under Illinois child pornography statute "the trier of fact may make a determination as to how an image was produced from the image itself."); Commonwealth v. Simone, 2003 WL 22994238, at *22-23 (Va. Cir. Ct. Oct. 10, 2003) (holding that under Virginia child pornography statute "the Commonwealth may seek to rely upon the images themselves without the necessity for expert opinion" to

prove that pictures depict images of actual children). In my view, there is nothing about this case that provides a substantial reason to decline to follow the Supreme Court's guidance on this issue and to reject the holdings of our companion courts that evidence in addition to the image itself is not required to prove that the pornographic picture depicts an actual child.

The majority opinion suggests that testimony by a computer graphics expert or evidence identifying the depicted child could satisfy the additional burden that the government must now meet to prove that the picture at issue shows a real child. Ante at 17 n.6. After Free Speech Coalition, defendants will certainly argue that the government has failed to prove beyond a reasonable doubt that the pictures are of real children. And, in light of evolving technology, triers of fact may be more inclined to accept such arguments if the government relies on only the pictures as evidence. Nevertheless, it is one thing to acknowledge that the government could benefit from introducing additional evidence and quite another to insist that the government introduce such evidence in every case regardless of the circumstances. I would not require that, as a general rule, the government must introduce additional evidence to meet its burden of proving that the pictures at issue depict actual children.

II.

Although I believe that there was sufficient evidence to sustain Hilton's conviction based on the government's presentation of the images in his possession, I nevertheless agree that Hilton's conviction must be vacated.

Because Hilton's trial occurred before Free Speech Coalition, the government was not required to prove that the pictures at issue depicted actual children to gain a conviction. As a result, the trier of fact did not find that the pictures in Hilton's possession depicted actual children as is required for a valid conviction. See ante at 11 (stating that parties agree that Free Speech Coalition applies retroactively to Hilton's conviction). The failure of the trier of fact to find every element of a crime (even though sufficient evidence on the element was presented at trial) is a constitutional error that sometimes requires reversal. See United States v. Gaudin, 515 U.S. 506, 511 (1995).

However, the failure of the fact finder to find every element of a crime does not mandate reversal in all cases. Errors of this sort are susceptible to harmless error review. Mitchell v. Esparaza, 124 S. Ct. 7, 11 (2003) (per curiam); Neder v. United States, 527 U.S. 1, 19 (1999); United States v. Raheman-Fazal, 355 F.3d 40, 47 (1st Cir. 2004). Indeed, some courts have upheld pre Free Speech Coalition CPPA convictions, despite the fact finder's

failure to find that the pictures depicted actual children. See United States v. Wolk, 337 F.3d 997, 1004-05 (8th Cir. 2003) (upholding CPPA conviction, under plain error review, because strong evidence demonstrated that pictures depicted actual children; accordingly, lack of jury finding on "actual child element" did not affect defendant's substantial rights); Hall, 312 F.3d at 1260 (similar).¹³

Had the government asserted that the error here was harmless, I would have seriously considered its argument. But the government, the appellant in this case, has chosen not to do so. The argument is therefore forfeit. See Plumley v. Southern Container, Inc., 303 F.3d 364, 372 n.7 (1st Cir. 2002).

Furthermore, the state of the record does not permit us to find harmless error sua sponte. See United States v. Rose, 104 F.3d 1408, 1414-15 (1st Cir. 1997) (stating that in some cases court may raise harmless error sua sponte). The trial transcript is not part of the appellate record, which makes conducting a

¹³ These cases were decided under the "affecting substantial rights" prong of the plain error analysis under Fed. R. Crim. P. 52(b). Such analysis is essentially the same as a harmless error review except that the defendant, not the government, bears the burden of proof under Rule 52(b). See United States v. Soto-Beníquez, 356 F.3d 1, 49 (1st Cir. 2004); United States v. Ramírez-Burgos, 313 F.3d 23, 29 (1st Cir. 2002).

harmless error review all the more difficult.¹⁴ See id. at 1415. While the record before us includes the pictures in Hilton's possession, I cannot tell what other evidence, if any, would support a harmless error conclusion. Indeed, I cannot even discern how the pictures were introduced at trial or what evidence was given to the trier of fact about them by either party. While the pictures alone can constitute evidence sufficient to sustain a CPPA conviction, I am not prepared to say, on this incomplete record and without argument from the parties, that they are enough to conclude that the fact finder's failure to find that the images in Hilton's possession were of actual children was a harmless error.

¹⁴ Although the government's brief cites to the trial transcript, the docket indicates that the only transcripts filed in this court were of a bail hearing held on June 5, 2003 and a motion hearing held on June 9, 2003.