UNPUBLISHED

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

No. 09-4520

UNITED STATES OF AMERICA,

Plaintiff - Appellee,

v.

THOMAS YU,

Defendant - Appellant.

Appeal from the United States District Court for the Eastern District of Virginia, at Alexandria. Gerald Bruce Lee, District Judge. (1:08-cr-00196-GBL-1)

Argued: October 29, 2010 Decided: December 30, 2010

Before TRAXLER, Chief Judge, and DUNCAN and KEENAN, Circuit Judges.

Affirmed by unpublished opinion. Judge Duncan wrote the opinion, in which Chief Judge Traxler and Judge Keenan joined.

ARGUED: Lisa Hertzer Schertler, SCHERTLER & ONORATO, LLP, Washington, D.C., for Appellant. Jay V. Prabhu, OFFICE OF THE UNITED STATES ATTORNEY, Alexandria, Virginia, for Appellee. ON BRIEF: Neil H. MacBride, United States Attorney, Andrew McCormack, Special Assistant United States Attorney, OFFICE OF THE UNITED STATES ATTORNEY, Alexandria, Virginia, for Appellee.

Unpublished opinions are not binding precedent in this circuit.

DUNCAN, Circuit Judge:

This appeal arises from a jury's conviction of Thomas Yu on three counts--alleging possession, receipt, and distribution of child pornography--in violation of 18 U.S.C. §§ 2252A(a)(5)(B) and 2252A(a)(2). Yu claims the district court abused its discretion by limiting his cross-examination of a government witness and by excluding a defense witness. He further argues that the district court erred with respect to its jury instructions and violated Federal Rule of Criminal Procedure 43 by delivering an amended version of those instructions to the jury in writing, despite his request that it be given in open court. For the reasons that follow, we affirm.

I.

Α.

In August 2006, federal authorities executed a search warrant at the Illinois home of a man named James Faulds. Investigators learned that Faulds had been operating a computer file server that allowed individuals to upload and download images of child pornography. They further learned that a computer with an internet protocol address registered to Yu's

¹ "Each computer connected to the Internet is assigned a unique numerical address, otherwise known as an Internet protocol or IP address, to identify itself and facilitate the (Continued)

Virginia home had, on July 20, 2006, uploaded forty-four files containing images of child pornography to Faulds's computer and downloaded more than one hundred such files from it.

on this information, federal Acting and state law enforcement officers executed a search warrant at Yu's residence in February 2007. Agents seized a variety of items from his home, including three desktop computers, two laptop computers, and more than one hundred computer disks. Forensic review of these materials revealed, inter alia, more than 9,000 images of child pornography and records of Internet searches for terms related to child pornography. Investigators also uncovered evidence that files containing images of child pornography had been created in a folder associated with a peer-to-peer file sharing program² on multiple occasions. On October 15, 2008, a grand jury indicted Yu on three counts of possessing, receiving, and distributing child pornography.

orderly flow of electronic traffic." Peterson v. Nat'l Telecomm. & Info. Admin., 478 F.3d 626, 628 (4th Cir. 2007).

[&]quot;[P]eer-to-peer networks permit the users' computers to communicate directly with each other." <u>United States v. Morace</u>, 594 F.3d 340, 343 (4th Cir. 2010) (quoting <u>Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.</u>, 545 U.S. 913, 919-20 (2005)) (internal quotation marks omitted).

We briefly review the proceedings in the district court, with particular attention to the disputes that gave rise to Yu's present claims. Shortly after his indictment, Yu moved for disclosure of materials related to the case against him, including any expert testimony the government intended to introduce at trial. In response to Yu's motion and with the government's agreement, the district court entered a discovery order on October 23, 2008. The order mandated a variety of disclosures, including that both parties provide notice of any anticipated expert testimony.

On January 16, 2009, pursuant to the discovery order and Federal Rule of Criminal Procedure 16(a)(1)(G), the government filed summaries of the testimony to be offered by its two expert witnesses. The government had earlier provided Yu with access to the raw computer data that its forensic experts had evaluated. Yu employed his own computer forensic examiner, a woman named Tami Loehrs, to review this data. However, Yu did

³ Rule 16(a)(1)(G) provides, in pertinent part, that "[a]t the defendant's request, the government must give to the defendant a written summary of any testimony that the government intends to use under Rules 702, 703, or 705 of the Federal Rules of Evidence during its case-in-chief at trial." Expert testimony is governed by Federal Rule of Evidence 702.

not disclose any prospective expert testimony--by Loehrs or anyone else--prior to trial.

Yu's jury trial began on February 2, 2009. Consistent with its pre-trial disclosures, the government relied heavily on expert testimony to link Yu to images of child pornography. Immigration and Customs Enforcement Agent Joseph Mizell, a forensic computer expert, testified about a variety of data extracted from the computers seized from Yu's home.

For instance, after reviewing images of child pornography found on one of those computers, Mizell noted that the same hard drive contained documents that had "the name Thomas Christopher Yu written on the bottom of them." J.A. 253. He observed that some of these documents had apparently been accessed on the same date as images of child pornography. Agent Mizell confirmed the presence of similar documents containing Yu's name on another computer on which child pornography had been found. He further testified that he had not found evidence that anyone else had controlled that machine.

Agent Mizell also testified about the seized computers' Internet browsing histories. Agent Mizell explained that he had extracted material related to child pornography from a larger file containing a record of all websites visited on a particular computer. He referred to a government exhibit that he had prepared containing those portions of a computer's browsing

history related to child pornography. The government opted not to introduce the computer's complete browsing histories into evidence.

Defense counsel cross-examined Agent Mizell at length, eliciting a variety of concessions. Agent Mizell admitted that he had not searched to see if digital records reflected that friends of Yu, who might have had access to his computers, had used the machines to download the illegal files. Agent Mizell further conceded that he had focused his analysis on material useful to the prosecution and had "omit[ted] certain images" that were irrelevant to the search warrant. J.A. 311.

Defense counsel also asked a series of questions about the criteria Agent Mizell had followed when excerpting information the computers' browsing histories. from Agent Mizell acknowledged that he had "arbitrarily picked out what [he] thought was relevant." J.A. 300. He also stated, as he had on direct examination, that the material presented to the jury did not reflect the entirety of the computers' browsing history. response to repeated queries by defense counsel, Agent Mizell explicitly acknowledged on at least seven occasions that he could not verify whether Yu in particular had conducted the searches reflected in the computers' browsing histories or had actually viewed any of the illegal images. See, e.g., J.A. at 297 ("As you sit here today, you can't say that Mr. Yu ever

viewed a single pornographic image; is that right?" "Correct.");

id. at 317 ("I take it that you weren't present and have no
personal knowledge as to who was using the computer [at] those
particular times; is that right?" "That's right."); id. at 326

("[Y]ou can't say anyone, Mr. Yu or [his friend] or anyone in
the world actually viewed that particular image on that
particular day?" "No.").

During his cross-examination of Agent Mizell, defense counsel attempted to introduce three unauthenticated documents, which were purportedly prepared by Yu's forensic examiner, Tami Loehrs. Defense counsel asserted that the first such document contained some of the raw data from which Agent Mizell's browsing-history excerpts were drawn. Over the government's objection, the court gave defense counsel the opportunity to lay foundation for the document. Defense counsel asked Agent Mizell a series of questions about the material. Agent Mizell confirmed that Loehrs had accessed the data at issue, but he did not know if that information was reflected in the document. The document was not admitted into evidence.

Shortly after the first document was rejected, defense counsel asked the court if he could pursue a line of questioning designed "to show [Agent Mizell] that there is actually evidence on the computer that . . . he chose to ignore that would really show that" someone other than Yu had downloaded the illegal

images. J.A. 316. After hearing from both sides, the district court sustained the government's objection to that line of questioning.

Defense counsel later referenced a second document that allegedly contained part of the seized computer's Internet browsing history from a particular date. When the government objected, defense counsel was given another opportunity to lay foundation. Once again, Agent Mizell was able to confirm that defense expert Loehrs had accessed the raw data, but he was unable to speak to how she had prepared the document at issue. The government renewed its objection to the use of material "which was not created by [Agent Mizell]" on cross-examination.

J.A. 323. The district court sustained the objection, rejecting in the process defense counsel's argument that the material was intended only to refresh Agent Mizell's recollection.

Part way through defense counsel's cross-examination of Agent Mizell, court adjourned for the day. That evening, Yu filed notice, for the first time, of his intent to call Tami Loehrs as an expert witness. Styled as a Rule 16(a)(1)(G) notice, 4 Yu's motion described Loehrs's extensive background as a

 $^{^4}$ Yu's characterization of his motion notwithstanding, defendants' obligation to disclose information about expert witnesses under certain circumstances arises under Federal Rule of Criminal Procedure 16(b)(1)(C). Here, the district court's discovery order created an independent obligation to divulge any (Continued)

computer forensic examiner. It explained that Loehrs would testify about images and other digital material recovered from Yu's computers and describe evidence she found that showed additional users had access to those machines. The motion cited Loehrs's "experience and training in the field of computer forensic analysis" as the basis for her testimony. J.A. 25C. It included a twenty-page attachment, consisting of Loehrs's CV and a list of the more than one hundred cases in which she had served as an expert witness.

The next day, the district court ruled that Loehrs could not testify as an expert witness. The court explained that Yu had had months since the entry of the discovery order "to engage an expert . . and disclose any expert opinions" but had failed to do so in a timely manner. J.A. 328. Defense counsel promptly responded that the expert notice had been filed purely as a "prophylactic measure," as Loehrs was in fact slated to testify as a lay witness. J.A. 329. He argued that Loehrs would speak only to the "chain of custody" of the data that she gathered from the computers and would "not . . . offer an

planned expert testimony. Yu does not dispute that he was required to disclose expert testimony in advance of trial.

⁵ The data at issue included the two excerpts from computers' Internet browsing histories noted above, as well as a (Continued)

opinion . . . as to what happened and what didn't happen." J.A. 332. He explained that, to the extent expert testimony was necessary, Yu intended to rely exclusively on the testimony provided by Agent Mizell.

The district court rejected Yu's recharacterization of Loehrs's testimony. The court noted that Yu had engaged Loehrs to review forensic data from the seized computers, that she had done so, and that she had subsequently prepared charts for use by the defense during trial. The court expressed incredulity at defense counsel's claim that he intended "to prove that [Yu] was not guilty . . ., relying sole[ly] upon the government[] witness's testimony." J.A. 331. Citing Yu's failure to disclose Loehrs's existence until after the trial had started, the district court dismissed Yu's efforts to reframe the substance of her testimony as "sandbagging" and precluded her from testifying at trial. J.A. 329.

The defense ultimately called two lay witnesses to testify on Yu's behalf: Yu's sister and Yu himself. Yu's defense centered on his argument that a friend of his was responsible for downloading the files recovered from the computers and that he had been unaware of the files' presence. When pressed by the

third document that purportedly showed when certain computer files had been most recently accessed.

government on cross-examination, Yu conceded that, on his theory, his friend had managed to secretly download many of the illegal images over a period of years, from a computer located in Yu's bedroom, just "ten to twelve" feet from his bed. J.A. 482-83. At the conclusion of Yu's testimony, the defense rested.

On February 4, 2009, the district court charged the jury in open court. Its jury instructions included, inter alia, a thorough description of the government's burden of proof on Count II, receipt of child pornography, § 2252A(a)(2).6 Before

Section 2252(a) Subsection(a)(2) of Title 18 of the United States Code provides in part that "it is a crime for any person who knowingly receives or distributes any child pornography that has been mailed or shipped or transported in interstate or foreign commerce by any means including by computer or any material that contains child pornography that has been mailed or shipped or transported in interstate or foreign commerce by any means, including by computer."

To sustain its burden of proof for the crime of receiving child pornography, the government must prove the following essential elements beyond a reasonable doubt.

One, that the defendant did knowingly receive computer files or any other material that contained child pornography.

And two, that such material of child pornography had been mailed or shipped or transported in interstate or foreign commerce by any means, including by computer.

And three, that at the time of such receipt of child pornography, the defendant believed that such (Continued)

⁶ The district court's oral instruction on Count II was as follows:

beginning deliberations, the jury was provided a written copy of the court's instructions.

The following day, the jury sent a note to the court, asking "[i]f the defendant is aware of 'another' person doing the act of 'knowingly receiving,' does it read on the defendant Thomas Yu unlawfully and knowingly receiving." J.A. 758. At about 4:00 pm, the district court convened the parties to discuss a response. After hearing from both sides, the district court proposed the following answer:

Concerning receipt of child pornography Count Two, the essential elements of this offense are in Instruction 16. You may want to re-read Instruction 16. Additionally, mere knowledge that a crime is or has been committed does not constitute "knowingly receiving." In further response to your question, the Government must prove that the defendant was aware

material constituted or contained child pornography as defined further in these instructions.

With respect to Count II of the indictment, the government is only required to prove that the defendant knowingly received a single image. However, you have to be unanimous with respect to the image or images of child pornography you determine were received by--by the defendant for that count.

Therefore, with respect to Count II as long as you find beyond a reasonable doubt that the defendant knowingly received a single image and that the other elements of the offense have been proved beyond a reasonable doubt, you must find the defendant guilty.

J.A. 641-42. Yu has not challenged the propriety of this instruction, nor has he argued that the court's original written instruction as to Count II--which was not included in the record on appeal--was erroneous.

that child pornography was on his computer and he--the defendant knowingly received it with the intent to (E.g. view it or store it for later control it. viewing by the defendant or someone else). If someone than the defendant downloaded the defendant pornography and the was aware child pornography was placed on his computer and the defendant intended to or did exercise control over it then the defendant has received child pornography.

J.A. 741-42, 759.

Defense counsel objected to the last sentence of the court's response, arguing that it "propose[d] hypothetical facts that the jury[]" would "take and apply to this case that weren't presented in evidence." J.A. 735. The district court rejected defense counsel's argument and submitted the instruction to the jury as drafted. It simultaneously sent word to the jury to return to the courtroom to be dismissed through the weekend.⁸

In light of the pending gap in the jury's deliberations, defense counsel requested the opportunity to file a motion on the disputed instruction. The district court consented, and, on February 6, Yu filed his "motion to modify answer to jury's question," arguing that the last sentence of the district

⁷ The record only contains a revised jury instruction, which did not include the initial instruction's disputed final sentence. We have included the language of that sentence as it appeared in Yu's motion to amend the original instruction. The government has not challenged the accuracy of that language.

 $^{^{\}rm 8}$ Although February 5, 2009 was a Thursday, the court had earlier advised the jury that court would not be in session on Friday.

court's supplemental instruction conflated receipt of child pornography with mere possession of child pornography. J.A. 741.

The court reconvened on February 9. After hearing argument from both parties on the merits of Yu's motion, the district court, without conceding error, offered to "delete the last sentence entirely." J.A. 749. Defense counsel agreed that the alteration would address Yu's concerns and asked the court to deliver the revised instruction orally. Noting that the jury had been given the original supplemental instruction "for less than five minutes," before the court "took it back," the district court instead opted to give the jury the updated answer in writing, with a note on it indicating that it had been revised. J.A. 749-50. The revised instruction was dispatched just before 10:00 am. About one hour later the jury returned a quilty verdict on all three counts.

On May 28, 2009, the district court sentenced Yu to concurrent terms of eighty-four months' imprisonment on each count of conviction, to be followed by seven years of supervised release. This appeal followed.

II.

On appeal, Yu argues that the district court committed reversible error by: (1) limiting his cross-examination of the

government's forensic expert, (2) precluding a defense witness from testifying, and (3) providing the jury with a response that broadened the theory on which he could be found guilty and then delivering a corrective instruction in writing rather than in open court. We review the alleged violations in turn.

Α.

Yu objects to the district court's handling of his cross-examination of Agent Mizell, who testified as a government forensic computer expert. Yu makes two arguments: (1) that the district court "precluded an entire line of cross-examination directed at errors and/or bias inherent in Mizell's forensic analysis," Appellant's Br. at 25, and (2) that "the district court erroneously prevented [him] from attempting to refresh Mizell's recollection," id.

Although the Sixth Amendment affords defendants the right to confront witnesses against them, trial courts enjoy "wide latitude insofar as the Confrontation Clause is concerned to impose reasonable limits on . . . cross-examination." <u>United States v. Ambers</u>, 85 F.3d 173, 176 (4th Cir. 1996) (quoting <u>Delaware v. Van Arsdall</u>, 475 U.S. 673, 679 (1986)); <u>see also United States v. Ayala</u>, 601 F.3d 256, 273 (4th Cir. 2010). We review the district court's restrictions on Agent Mizell's cross-examination for abuse of discretion, <u>United States v.</u> Scheetz, 293 F.3d 175, 184 (4th Cir. 2002), and find none.

Yu's first argument is utterly unsupported by the record. As described above, the transcript of Agent Mizell's cross-examination is replete with instances in which Mizell confirmed that he could not verify whether Yu had in fact uploaded, downloaded, or viewed images of child pornography. Agent Mizell also acknowledged that he had presented a selective sample of the available data, conceded that he had culled the browser histories with an eye toward developing the case against Yu, and noted his failure to investigate other potential users of the seized computers. Agent Mizell could scarcely have been clearer on these points. In short, defense counsel was given broad latitude to question Agent Mizell about potential errors and biases and duly availed himself of the opportunity to do so. Yu's claim that the district court precluded inquiries into these subjects lacks merit.

To the extent that Yu challenges the district court's restriction of questions that relied on the raw data prepared by the defense, his argument fails. It is a fundamental rule of evidence that authentication or identification of physical evidence is "a condition precedent to admissibility" and requires "evidence sufficient to support a finding that the matter in question is what its proponent claims." Fed. R. Evid. 901(a); see also United States v. Jones, 356 F.3d 529, 535 (4th Cir. 2004). Here, the district court found that because Agent

Mizell had no way of knowing if Yu's raw data accurately reflected the material from which Mizell had worked, there was not a proper foundation for use of the data in cross-examination. This determination was not an abuse of the court's discretion. See Ayala, 601 F.3d at 272-73 (holding that a district court did not abuse its discretion by requiring defense counsel "to abide by . . . elementary [evidentiary] precepts" during cross-examination "to ensure that the jury was not misled").

By the same token, the district court did not err by refusing to allow defense counsel to "refresh" Agent Mizell's recollections of his earlier analysis by referencing the defense's raw data. "The matter of refreshing a witness' recollection and the manner used are largely within the discretion of the Trial Judge." <u>United States v. Cranson</u>, 453 F.2d 123, 124 (4th Cir. 1971); <u>see also Charles Wright & Victor Gold</u>, 28 <u>Federal Practice & Procedure: Evidence</u> § 6184, at 458-59 (1993). As Agent Mizell did not know if the document at issue contained the same data he had reviewed, the district court could easily have determined that he could not have had his recollection accurately refreshed by reviewing it.

В.

Yu next challenges the district court's refusal to allow Tami Loehrs to testify as a lay witness. We review the district

court's choice of Rule 16 sanctions for abuse of discretion. United States v. Fletcher, 74 F.3d 49, 54 (4th Cir. 1996). Yu acknowledges that his disclosure of Loehrs's expert testimony was untimely and concedes that the district court was within its discretion to exclude Loehrs as an expert. Appellant's Br. at 36-37. However, he renews his claim that Loehrs was slated to testify as a lay witness and asserts that the exclusion of her lay testimony was an abuse of discretion. Yu's argument fails.

The Federal Rules of Evidence draw a clear distinction between "lay" testimony, governed by Rule 701, and "expert" testimony, governed by Rule 702, to avoid "the risk that the reliability requirements set forth in Rule 702 will be evaded through the simple expedient of proffering an expert in lay witness clothing." Fed. R. Evid. 701(c), advisory committee's note to 2000 Amendments; see also Fed. R. Evid. 702 (describing expert testimony as that requiring "scientific, technical, or other specialized knowledge"); Fed. R. Evid. 701(c) (proscribing lay testimony "based on . . . knowledge within the scope of Rule 702"). Yu's effort to recast Loehrs as a lay witness suggests just such an evasion.

Even if defense counsel accurately represented Loehrs's testimony as going only to the "chain of custody" of data she extracted from the seized computers, such testimony would inevitably have implicated expert knowledge within the scope of

Rule 702. Agent Mizell's testimony about data recovery illustrates the point. During cross-examination of Agent Mizell, defense counsel elicited an explanation of the technique forensic examiners typically use to extract data. Agent Mizell confirmed that forensic examiners typically use software called "EnCase" to remove data, after which they translate the raw information into a viewable format.

As Agent Mizell's testimony shows, the process of forensic data extraction requires "some specialized knowledge or skill or education that is not in possession of the jurors." United States v. Johnson, 617 F.3d 286, 293 (4th Cir. 2010) (quoting Certain Underwriters at Lloyd's, London v. Sinkovich, 232 F.3d 200, 203 (4th Cir. 2000) (internal quotations omitted)); see also United States v. Ganier, 468 F.3d 920, 926 (6th Cir. 2006) (holding that testimony that would "require [the witness] to apply knowledge and familiarity with computers and particular forensic software well beyond that of the average layperson" fell within the scope of Rule 702). In other words, even if Loehrs had confined her testimony to her extraction and translation of the data at issue, she would not have offered lay opinion. Yu's assertions to the contrary strain credulity-particularly in light of the summary of Loehrs's testimony contained in Yu's Rule 16 notice and defense counsel's explicit

reference to Loehrs as "the expert . . . in the courtroom today" during his cross-examination of Agent Mizell. J.A. 303.

We have explicitly rejected attempts to make an end-run around the Federal Rules of Evidence by blurring the distinction between expert and lay testimony. See Johnson, 617 F.3d at 293. The district court did not abuse its discretion by preventing such an effort here.

C.

Finally, Yu argues that the district court committed error with respect to its jury instructions. He urges in particular that the district court impermissibly broadened the theory on which he could be convicted of receipt of child pornography when responding to a question from the jury. Although he concedes that the deletion of the disputed sentence adequately addressed the alleged error, he claims that the district court's failure to provide the revision orally violated his right under Federal Rule of Criminal Procedure 43 to be present at "every trial stage." Fed. R. Crim. P. 43(a)(2). We review preserved challenges to jury instructions as well as alleged Rule 43 violations for harmless error. United States v. Jeffers, 570 F.3d 557, 564 n.4 (4th Cir. 2009); United States v. Pratt, 351 F.3d 131, 138 (4th Cir. 2003).

Yu claims that the final sentence in the district court's initial response to the jury's question allowed the jury to

convict him for receipt of child pornography on a theory of mere possession. Even if that were so, any error was harmless. The jury had the disputed instruction for a brief period before being dismissed for a long weekend. When court reconvened on Monday morning, the jury was promptly provided with a revised instruction the substance of which Yu expressly approved. Deliberations proceeded for an hour before the jury reached its verdict. On these facts, we do not see how the challenged instruction could have affected the outcome.

Any Rule 43 error was similarly harmless. Neither Yu nor his attorney were excluded from any part of the district court's consideration of the jury's question or the preparation of the court's reply. Cf. United States v. Rhodes, 32 F.3d 867, 874 (4th Cir. 1994). To the contrary, both Yu and his counsel were informed of the jury's question, provided extensive input into the district court's revised response, were aware what instruction the jury was being given, and explicitly endorsed the contents of the corrected instruction. Once again, there is

⁹ At oral argument, Yu noted that the record does not confirm whether the corrective note was ever received by the jury. Although it would certainly have been better if the district court had created a clear record by delivering the instruction orally, absent any indication that the note was not properly delivered by the officer of the court to whom it was entrusted, we assume that it was. See United States v. Pratt, 351 F.3d 131, 138 (4th Cir. 2003).

simply "no reasonable possibility that the practice complained of might have contributed to the conviction." Pratt, 351 F.3d at 138 (internal quotations omitted); see also United States v. Solomon, 565 F.2d 364, 366 (5th Cir. 1978) (finding no prejudice from submission of supplemental instruction to jury in writing rather than orally).

III.

For the foregoing reasons we affirm Yu's conviction.

AFFIRMED