

ELECTRONICALLY STORED INFORMATION AND THE ANCIENT DOCUMENTS EXCEPTION TO THE HEARSAY RULE: FIX IT BEFORE PEOPLE FIND OUT ABOUT IT

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ABSTRACT

The first website on the Internet was posted in 1991. While there is not much factual content on the earliest websites, it did not take long for factual assertions—easily retrievable today—to flood the Internet. Now, over one hundred billion emails are sent, and ten million static web pages are added to the Internet every day. In 2006 alone, the world produced electronic information that was equal to three million times the amount of information stored in every book ever written.

The earliest innovations in electronic communication are now over twenty years old—meaning that the factual assertions made by way of these electronic media are potentially admissible for their truth at a trial if (and simply because) they were made more than twenty years ago. This is due to Federal Rule of Evidence 803(16), the so-called “ancient documents” exception to the hearsay rule. Under the ancient documents exception, documents that would normally be excluded as hearsay are admissible if the document is at least twenty years old, and if the party offering the document can show that the document is “genuine,” or authentic. As electronic communications continue to age, all of the factual assertions in terabytes of easily retrievable data will be potentially admissible for their truth simply because they are old.

This Article argues that the ancient document exception needs to be changed because its rationale, while never very convincing in the first place, is simply invalid when applied to prevalent and retrievable electronically stored information (ESI). Part I of the Article discusses the rationales for the ancient documents rule and that exception’s relationship with the rules of authenticity on which it is based. Part II addresses whether the rationales for the ancient document exception, such

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as they are, can be sensibly applied to ESI. Part III raises and answers some arguments against abrogating or restricting the ancient documents exception as applied to ESI or even more broadly. Part IV considers drafting alternatives for changing the ancient documents exception in light of its pending risk of use as a loophole for admitting unreliable ESI as evidence.

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INTRODUCTION

The first website on the Internet was posted in 1991.¹ While there is not much factual content on the very early websites, it did not take long for factual assertions—easily retrievable today—to flood the Internet. To take one example: the first easily retrievable web page of the National Enquirer tabloid containing assertive content is dated January 20, 1998 and can

¹ Daven Hiskey, *The First Website Ever Made*, TODAY I FOUND OUT, May 24, 2010, <http://www.todayifoundout.com/index.php/2010/05/the-first-website-ever-made> (last visited Nov. 4, 2014, 7:06 pm).

be found on the Internet Archive’s “Wayback Machine.”² On that webpage, the Enquirer asserts that Roseanne Barr and her baby were “nearly killed by [her] hubby” and that officers had to draw guns to save her life. The Enquirer webpage from January 30, 1998 asserts facts about the “Clinton Crisis”—including an assertion impliedly attributed to Hillary Clinton that she “shared Monica with Bill.”³ Similarly outrageous assertions can easily be found in electronic text communications, which began in 1992,⁴ and emails, which were used as early as 1965.⁵

All of these innovations in electronic communication are now over twenty years old—meaning that the factual assertions made by way of these electronic media are potentially admissible for their truth at a trial if (and simply *because*) they were made more than twenty years ago. This is due to Federal Rule of Evidence 803(16), the so-called “ancient documents” exception to the hearsay rule. Under the ancient documents exception, a document that would normally be excluded as hearsay is admissible if the document is at least twenty years old and if the party offering the document can show that the document is “genuine,” or authentic.⁶

It is probably fair to state that the threat of pervasive use of the ancient documents exception as applied to electronic information is not at crisis level right now because electronically stored information (ESI) did not become ubiquitous until somewhat less than twenty years ago. But it will not be long before all of the factual assertions in terabytes of easily retrievable data will be potentially admissible for their truth simply because they are old.⁷ For example, the Wayback

² *National Enquirer*, Jan. 20, 1998, WAYBACK MACHINE, <http://web.archive.org/web/19980120010422/http://nationalenquirer.com> (last visited Nov. 4, 2014). Another example of a website that allows users to access archival copies of webpages is www.cachedpages.org, which allows users to employ one interface to search three different archival services—the Wayback Machine, Google Cache, and Coral Cache.

³ *Clinton Crisis: Breaking News*, NATIONAL ENQUIRER, Jan. 30, 1998, available at <http://web.archive.org/web/19980130025606/http://www.nationalenquirer.com> (last visited Nov. 4, 2014).

⁴ Kyle Russel, *The First Text Message Ever Was Sent 21 Years Ago Today*, BUSINESS INSIDER, Dec. 3, 2013, <http://www.businessinsider.com/the-first-text-message-ever-2013-12>.

⁵ Ian Peter, *The History of Email*, NET HISTORY, <http://www.nethistory.info/History%20of%20the%20Internet/email.html> (last visited Nov. 4, 2014).

⁶ FED. R. EVID. 803(16).

⁷ For convenience, “old” in this article means more than 20 years old—i.e., old enough to trigger the ancient documents exception to the hearsay rule.

Machine allows easy retrieval of over 398 billion web pages.⁸ In 1998, there were approximately 47 million email users in the United States, sending a total of 182.5 billion emails per year.⁹ The amount of electronically stored information has been doubling or tripling every eighteen to twenty-four months.¹⁰ In 2011, the digital universe contained 1800 exabytes of information, enough data to fill 57.5 billion 32GB Apple iPads.¹¹ In 2006 alone, the world produced electronic information that was equal to three million times the amount of information stored in every book ever written.¹² Over one hundred billion emails are sent each day.¹³ Ten million static web pages are added to the Internet every day.¹⁴ Most of this information will never make it to a piece of paper.

Up until now, the ancient documents rule has been a sleepy little exception applied to hardcopy information. In the almost forty years of practice under the Federal Rules of Evidence, the ancient documents exception has been invoked in less than one hundred reported cases. Conversations that I have had with (not-to-be-named) judges indicate that many are unaware that the exception even exists. It is fair to state that, at this point, the ancient document exception is not on the radar for most

⁸ Don MacLeod, *iWitness: Archival Research*, 40 LITIG., no. 4, 2014, at 18.

⁹ THE SEDONA CONFERENCE WORKING GROUP, THE SEDONA PRINCIPLES: BEST PRACTICES RECOMMENDATIONS & PRINCIPLES FOR ADDRESSING ELECTRONIC DOCUMENT PRODUCTION 4 (Jonathan M. Redgrave et al. eds., July 2005 ed.).

¹⁰ Gil Press, *A Very Short History of Big Data*, FORBES, May 9, 2013, <http://www.forbes.com/sites/gilpress/2013/05/09/a-very-short-history-of-big-data> (noting that data was estimated to double every eighteen months between 2006 and 2010 based on projected growth rates).

¹¹ Rich Miller, *'Digital Universe' to Add 1.8 Zettabytes in 2011*, DATA CENTER KNOWLEDGE, June 28, 2011, <http://www.datacenterknowledge.com/archives/2011/06/28/digital-universe-to-add-1-8-zettabytes-in-2011>; see JOHN GANTZ & DAVID REINSEL, INT'L DATA CORP., STATE OF THE UNIVERSE: AN EXECUTIVE SUMMARY (2011), <http://www.emc.com/collateral/analyst-reports/idc-extracting-value-from-chaos-ar.pdf> (explaining the significance of the expansion of the digital universe). The IDC website states the data in terms of zettabytes. *Id.* One zettabyte is equal to one thousand exabytes. *Zettabyte*, SEARCHSTORAGE, <http://searchstorage.techtarget.com/definition/zettabyte>. This article uses exabytes for consistency (last visited Mar. 29, 2015).

¹² JOHN F. GANTZ ET AL., INT'L DATA CORP., THE EXPANDING DIGITAL UNIVERSE 1 (2007), <http://www.emc.com/collateral/analyst-reports/expanding-digital-idc-white-paper.pdf>.

¹³ THE RADICATI GROUP, INC., EMAIL STATISTICS REPORT, 2013-2017, at 3 (2013), <http://www.radicati.com/wp/wp-content/uploads/2013/04/Email-Statistics-Report-2013-2017-Executive-Summary.pdf>.

¹⁴ Jason R. Baron & Ralph C. Losey, *E-Discovery: Did You Know?*, YOUTUBE (Feb. 11, 2010) <https://www.youtube.com/watch?v=bWbJWcsPp1M>.

lawyers or judges. This is surely because the likelihood of finding a hardcopy document that is twenty years old and also relevant to an existing litigation is quite small.

But that can change now that much ESI has reached, if not surpassed, the twenty-year mark. It has been said that ESI “surrounds us like an ever-deepening fog or an overwhelming flood.”¹⁵ The question is whether anything should be done about the ancient documents exception before that exception—and its applicability to ESI—are discovered by lawyers and judges. The potential problem is that ESI might be stored without much trouble for twenty years, and the sheer volume of it could end up flooding the courts with unreliable hearsay, through an exception that would be applied much more broadly than the drafters (or the common law) saw coming in the days of paper. Examples include self-serving emails from a business, tweets and texts about events from people who were not at the event, web postings accusing individuals of misconduct, and anonymous blog posts. And while it is true that the twenty-year time period will serve as a limit to admissibility in some cases, there are many plausible examples of old ESI that will be relevant—in criminal cases, many serious crimes are no longer limited by statutes of limitations; and in civil cases such as antitrust and environmental cases, the long-term nature of the wrong may well be shown (or not shown) by old ESI.¹⁶

This Article argues that the ancient document exception needs to be changed because its rationale, while never very convincing in the first place, is simply invalid when applied to prevalent and retrievable ESI. Part I of the Article will discuss the rationales for the ancient documents rule and that exception’s relationship with the rules of authenticity on which it is based. Part II will address whether the rationales for the ancient document exception, such as they are, can be sensibly applied to ESI. Part III will raise and answer some arguments

¹⁵ DAVID ROBERT MATHEWS, *ELECTRONICALLY STORED INFORMATION: THE COMPLETE GUIDE TO MANAGEMENT, UNDERSTANDING, ACQUISITION, STORAGE, SEARCH, AND RETRIEVAL* 81 (2013). On the prevalence of ESI, see Martin Hilbert & Priscila Lopez, *The World’s Technological Capacity to Store, Communicate, and Compute Information*, 332 *SCI.* 60, 62 (2011) (“The total amount of information grew from 2.6 optimally compressed exabytes in 1986 to 15.8 in 1993, over 54.5 in 2000, and to 295 optimally compressed exabytes in 2007. This is equivalent to less than one 730-MB CD-ROM per person in 1986 (539 MB per person), roughly 4 CD-ROM per person in 1993, 12 CD-ROM per person in the year 2000, and almost 61 CD-ROM per person in 2007. Piling up the imagined 404 billion CD-ROM from 2007 would create a stack from the earth to the moon and a quarter of this distance beyond (with 1.2 mm thickness per CD)).

¹⁶ See notes 62-64 *infra* and accompanying text.

against abrogating or restricting the ancient documents exception as applied to ESI or even more broadly. Part IV will consider drafting alternatives for changing the ancient documents exception in light of its pending risk of use as a loophole for admitting unreliable ESI as evidence.

I. THE ANCIENT DOCUMENTS RULE—AUTHENTICITY RULE AND HEARSAY EXCEPTION

The ancient documents “rule” is actually comprised of two rules. One is a rule on authenticity, which provides standards for qualifying an old document as genuine. The other is a hearsay exception for all statements contained in an authentic ancient document. These rules are derived from the common law, although the relevant time period has been reduced from thirty years in the common law to twenty years in the current rules.¹⁷

Rule 901(b)(8) provides as an example of evidence satisfying the standards of authenticity a document or “data compilation” that “(A) is in a condition that creates no suspicion about its authenticity; (B) was in a place where, if authentic, it would likely be; and (C) is at least twenty years old when offered.”¹⁸ The idea behind the rule is plain: if something has been found in a likely place after more than twenty years, the chances of it being a fake are sufficiently small that its genuineness becomes a matter for the jury to consider. As the Advisory Committee puts it, the rationale for Rule 901(b)(8) is “the unlikelihood of a still viable fraud after the lapse of time.”¹⁹ The standard for establishing authenticity to the court is low—a showing sufficient for a reasonable person to believe that the document is what the proponent says it is.²⁰ Under that low standard, if a

¹⁷ See FED. R. EVID. 803(16) advisory committee’s note (citing common law basis for the hearsay exception that stems from the rule on authenticity); FED. R. EVID. 901(b)(8) advisory committee’s note (adopting the “familiar ancient document rule of the common law”). The Advisory Committee Note to Rule 901(b)(8) attempts to explain the shortening of the time period from thirty to twenty years as a “shift of emphasis from the probable unavailability of witnesses to the unlikelihood of a still viable fraud after the lapse of time” and concedes that any time period “is bound to be arbitrary.” *Id.*

¹⁸ FED. R. EVID. 901(b)(8).

¹⁹ FED. R. EVID. 901(b)(8) advisory committee’s note.

²⁰ See, e.g., *United States v. Reilly*, 33 F.3d 1396, 1404 (3d Cir. 1994) (“the burden of proof for authentication is slight”); *United States v. Holmquist*, 36 F.3d 154, 168 (1st Cir. 1994) (“the standard for authentication, and hence for admissibility, is one of reasonable likelihood”); *United States v. Coohy*, 11 F.3d 97, 99 (8th Cir. 1993) (“the proponent need only demonstrate a rational basis for its claim that the evidence is what the proponent asserts it to be”).

document looks old and not suspicious, and is found where it ought to be, it makes sense to leave the question of authenticity to the jury.²¹

But as the Advisory Committee noted, finding a document to be authentic is different from finding the assertions in that document to be *reliable*. Authenticity is a question of whether the item offered is what the proponent says it is—for example, that an email purportedly written by a person was actually written by that person. Reliability is a question of whether the assertions in a genuine item are in fact true—and that is the concern of the hearsay rule.²² As the Committee put it, “since most of these items are significant inferentially only insofar as they are assertive, their admission in evidence must be as a hearsay exception.”²³ To address the hearsay issue, the drafters included a hearsay exception, Rule 803(16), which provides that “[a] statement in a document that is at least 20 years old and whose authenticity has been established” is admissible despite the fact that it is hearsay.²⁴

Professors Christopher Mueller and Laird Kirkpatrick set forth the most complete articulation of the rationale for the ancient documents hearsay exception:

Need is the main justification. The lapse of 20 years since the acts, events or conditions described almost guarantees a shortage of evidence. Witnesses will have died or disappeared. Written statements that might fit other exceptions (business records, past

²¹ Rule 901(b)(8) is not, however, the only avenue for authenticating an ancient document and thus triggering the ancient documents exception to the hearsay rule. Rule 803(16) says that the statements in a document that is at least twenty years old and whose “authenticity is established” are admissible for their truth. “Authenticity is established” means established in any way. FED. R. EVID. 803(16). Thus, as will be discussed below, the tried and true methods for authenticating ESI in general are fully applicable to authenticating twenty-year-old ESI.

²² See, e.g., STEPHEN A. SALTZBURG, MICHAEL M. MARTIN & DANIEL J. CAPRA, 4 FEDERAL RULES OF EVIDENCE MANUAL § 801.13 (10th ed. 2012) (“The hearsay rule is designed to exclude a certain type of unreliable evidence. Hearsay is presumptively unreliable because when an out-of-court statement is offered for its truth, it is only probative if the person who made the statement—the declarant—was telling the truth. But the truthfulness of an out-of-court declarant cannot be assessed by the ordinary methods with which we determine the truth of testimonial evidence—oath, cross-examination, and the factfinder’s scrutiny of the witness’s demeanor.”).

²³ FED. R. EVID. 803(16) advisory committee’s note.

²⁴ FED. R. EVID. 803(16).

recollection) are typically thrown out or lost or destroyed²⁵

Naturally, statements in ancient documents are affected by risks of misperception, faulty memory, ambiguity, and lack of candor (they are not intrinsically more reliable than oral statements), and a written statement unreliable when made is unreliable forever. Ancient documents do, however, bring fewer risks of misreporting (because the document is in writing),²⁶ and they bring at least some assurance against negative influences: When authenticated, an ancient document leaves little doubt that the statement was made; there is little risk of errors in transmission; because of its age, the document is not likely to have suffered from the forces generating the suit, so there is less reason to fear distortion or lack of candor.²⁷

If a document satisfies the authenticity requirements of Rule 901(b)(8) or satisfies any other ground of authentication provided in Rules 901 or 902, and is over twenty years old,²⁸ then every statement in that document can be admitted for its truth. That is so because Rule 803(16) simply equates authenticity of the document with admissibility of the hearsay statements in that document. The rule does not purport

²⁵ Whether the assertion of Professors Mueller and Kirkpatrick is applicable when the old material is ESI will be discussed in Part III, *infra*.

²⁶ Mueller and Kirkpatrick's reliance on a writing as a guarantee of reliability is in fact misplaced. The problem that the hearsay rule addresses is that there is an out-of-court declarant who may be unreliable and cannot be cross-examined. The reporting of the statement is not a hearsay problem because the person reporting is on the stand subject to cross-examination. Therefore it does not matter, for purposes of the hearsay rule, whether the statement is oral or written. That is to say, whether the statement was *made* is not a hearsay problem; the hearsay problem is about whether the statement is *true*.

²⁷ CHRISTOPHER MUELLER & LAIRD KIRKPATRICK, 4 FEDERAL EVIDENCE § 8:100 (4th ed. 2013); *see also* FED. R. EVID. 803(16) advisory committee's note (arguing that "age affords assurance that the writing antedates the present controversy").

²⁸ As noted above, the ancient documents hearsay exception does not require the document to be authenticated under Rule 901(b)(8); it can be authenticated in any way. So, for example, a twenty-year-old domestic public document under seal is self-authenticating under Rule 902(1). Thus, the statements in the document would escape the hearsay bar without the need of the proponent to show authenticity under Rule 901(b)(8).

specifically to regulate the reliability of the contents of an ancient document through some circumstantial guarantee, even though other hearsay exceptions in Rule 803 are grounded in circumstantial guarantees of reliability.²⁹ While the Advisory Committee obliquely states, “age affords assurance that the writing antedates the present controversy,” there is no admissibility requirement in the rule that, in fact, the statements must predate the controversy.³⁰ As the court put it in *Threadgill v. Armstrong World Industries, Inc.*, “Once a document qualifies as an ancient document, it is automatically excepted from the hearsay rule under Fed. R. Evid. 803(16).”³¹ Consequently, the *Threadgill* court reversed a trial court’s ruling that excluded an ancient document because the content was untrustworthy.³²

Rule 803(16) is the only rule of evidence that equates authenticity with admissibility of hearsay.³³ It is a curious assumption that, just because an old document is authentic,

²⁹ See, e.g., FED. R. EVID. 803(4) (outlining a hearsay exception for statements made for purposes of medical treatment based on circumstantial guarantees of reliability inherent in obtaining medical treatment, and on the fact that the statement must be pertinent to the doctor’s treatment or diagnosis); FED. R. EVID. 803(6) (outlining a hearsay exception for statements made in the course of regularly conducted activity based on circumstantial guarantees of reliability inherent in regular recording of regularly conducted activity).

³⁰ FED. R. EVID. 803(16) advisory committee’s note.

³¹ 928 F.2d 1366, 1375 (3d Cir. 1991).

³² A qualification to the rule of broad admissibility in text does arise if the ancient document itself refers to a hearsay statement—e.g., an old diary entry stating that “The defendant just sent me a letter in which he confessed to robbing my store.” The hearsay exception would cover the fact that the diarist received a letter, but whether the defendant actually confessed to the robbery would have to be handled by another exception—in this case that would be a party-opponent statement, FED. R. EVID. 801(d)(2). In other words, the ancient documents exception does not abrogate the rule on multiple hearsay imposed by Rule 805—at least in the view of right-thinking courts. See, e.g., *United States v. Hajda*, 135 F.3d 439, 443 (7th Cir. 1998) (noting that the ancient documents exception “applies only to the document itself,” and that “[i]f the document contains more than one level of hearsay, an appropriate exception must be found for each level”). For more on the ancient documents exception and multiple hearsay, see Gregg Kettles, *Ancient Documents and the Rule Against Multiple Hearsay*, 39 SANTA CLARA L. REV. 719 (1999) (arguing that the ancient documents exception is subject to the rule on multiple hearsay, but noting the split of authority).

³³ See *Fagiola v. Nat’l Gypsum Co.*, 906 F.2d 53, 58 (2d Cir. 1990) (“Because of the hearsay rule, authentication as a genuine ERCO document would not generally suffice to admit the contents of that document for its truth. One exception is when documents are authenticated as ancient documents under Rule 901(b)(8), in which case they automatically fall within the ancient document exception to the hearsay rule, Rule 803(16).”).

the statements in it are automatically reliable enough to escape the rule excluding hearsay. Despite the Advisory Committee's assertion that the "danger of mistake is minimized by authentication requirements,"³⁴ none of the guarantees for authenticity set forth in Rule 901(b)(8) or any other authenticity rule do anything to assure that the statements in the authentic document are reliable. As the Seventh Circuit aptly put it in *United States v. Kairys*, the authentication rule's requirement that a proffered document be free of suspicion "goes not to the content of the document, but rather to whether the document is what it purports to be."³⁵ For example, a twenty-year-old *National Enquirer*, kept in an archivist's study, will be found authentic—but should that mean that every single statement in the *Enquirer* about Michael Jackson, or alien invasions, should be admissible for its truth?

Indeed, that would follow from the Advisory Committee's assertion that *any* authentic document should be admissible for the truth of its assertions. Yet the Advisory Committee gives no indication of why the danger of unreliable assertions is minimized by authentication requirements for ancient documents but not for any other documents or statements. The Advisory Committee's assertion is especially weak given the fact that a statement in an ancient document is admissible for its truth even if the document is authenticated in some way other than under Rule 901(b)(8)—Rule 803(16) simply states that a statement is admissible whenever authenticity "is established."³⁶ It follows that there is apparently nothing about the authenticity requirements of Rule 901(b)(8) in particular that warrant an assumption of the reliability of statements in an ancient document; so why not throw out the hearsay rule whenever *any* document is authenticated? The answer is plain: the policy of the hearsay rule is to exclude unreliable out-of-court assertions,³⁷ and that policy is not sufficiently furthered—indeed it is ignored—if the only standard for admissibility is that the document itself is genuine.

A further anomaly of the ancient documents hearsay exception is inherent in its bright-line nature. For example, a copy of the *National Enquirer* that is 19 years and 364 days old could be authenticated,³⁸ but none of the assertions in that

³⁴ FED. R. EVID. 803(16) advisory committee's note.

³⁵ 782 F.2d 1374, 1379 (7th Cir. 1986).

³⁶ FED. R. EVID. 803(16).

³⁷ See, e.g., Laurence H. Tribe, *Triangulating Hearsay*, 87 HARV. L. REV. 957, 958 (1974) (noting that hearsay is subject to "testimonial infirmities" that can render it unreliable).

³⁸ See FED. R. EVID. 902(6) (material purporting to be a newspaper or

Enquirer would be automatically admissible for their truth. The equation of authenticity and hearsay admissibility occurs the second that the periodical becomes twenty-years-old. Perhaps it is true, as the Advisory Committee concedes, that “[a]ny time period selected is bound to be arbitrary.”³⁹ But that assertion only begs a number of questions. First, why is an arbitrary time period the correct solution to either authenticity *or* reliability? Given that the basis for an ancient documents rule lies somewhere among the principles of necessity and lack of motive to fabricate a document for litigation so far down the road, why not articulate those policies as a textual standard of admissibility? An arbitrary time period is an inexact surrogate for the policies that appear to underline the ancient document rules.

Second, even if a statutory time period is used, why use it in such a binary fashion? Why not, for example, apply more or less stringent standards of admissibility whenever a document falls on one side or the other of the line? For example, Federal Rule of Evidence 609(b) contains a ten-year time period applicable to impeaching a witness with a prior conviction.⁴⁰ But while the time period is arbitrary, the Rule does not arbitrarily state that a conviction is admissible if falling on one side of the timeline and inadmissible if it falls on the other. In contrast to Rule 803(16), Rule 609(b) provides for a less generous rule of admissibility if the conviction falls on the “old” side of the line. An analogous solution for Rule 803(16) that would avoid the irrationality of a statement inadmissible on one day but admissible for its truth on another would be to provide a different, somewhat more generous, rule of admissibility for the “old” statement. But Rule 803(16) makes no such effort.

In the end, Rule 803(16) is a radical and irrational hearsay exception—an error of the common law that was adopted and indeed exacerbated by the original Advisory Committee’s reduction of the time period necessary to trigger it. The original Advisory Committee did not provide a convincing explanation for equating authenticity of a document and the reliability of its contents—no explanation can be found in the legislative

periodical is self-authenticating).

³⁹ FED. R. EVID. 901(b)(8) advisory committee’s note.

⁴⁰ Rule 609(b) provides that “if more than 10 years have passed since the witness’s conviction or release from confinement” evidence of the conviction may be admitted to impeach the witness only if “its probative value, supported by specific facts and circumstances, substantially outweighs its prejudicial effect” and proper notice is provided. FED. R. EVID. 609(b).

history other than the Advisory Committee Note's assertion that statements predating litigation are more likely to be reliable.

But if the rule is so misguided, why has the modern Advisory Committee not done something about it?

The answer, I believe, is that Rule 803(16) has flown under the radar because it is so rarely invoked.⁴¹ A Westlaw search indicates that ancient documents have been admitted in fewer than one hundred reported cases since the Federal Rules of Evidence were enacted.⁴² Of course, it is not possible to determine how often the exception has been used in unreported cases, but it is fair to state that judges do not invoke the exception very often.

The Advisory Committee on Evidence Rules has always taken a conservative approach to proposing amendments to the Evidence Rules. Amendments are costly because experienced litigators and judges need to know the rules that exist, often without having the luxury of referring to a book. Any change to those rules imposes dislocation costs on litigators, judges, and the legal system as a whole—so the change had better be worth it. For example, in 2003, the Justice Department sought to amend Rule 410 to provide that statements made by a prosecutor during plea negotiations could not be admissible against the government if the defendant ended up going to trial;⁴³ as written, the Rule protects statements made by the defendant in plea negotiations, but not those made by the government.⁴⁴ The rationale for the proposed change was that Rule 410 is intended to encourage uninhibited plea negotiations, and that this goal would be maximized by protecting the statements of both sides. While the Department of Justice seemed to propose a worthy and sensible change, the Advisory Committee refused to pursue it, as indicated in the minutes of the Spring 2004 meeting:

[A] number of questions and concerns were raised about the merits of the draft amendment

⁴¹ The fact that the ancient documents exception was a backwater exception might well explain the original Advisory Committee's relative lack of concern about it. But the problem addressed by this Article is that the prevalence of ESI has destroyed the original "backwater" premise.

⁴² In contrast, for example, state of mind statements have been admitted under Rule 803(3) in around 900 published cases. Searches for "803(16)" and "803(3)" conducted on Oct. 1, 2014.

⁴³ Minutes of the Meeting, ADVISORY COMM. ON EVIDENCE RULES 10-13, Nov. 13, 2003, <http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/Minutes/1103EVMin.pdf>.

⁴⁴ See FED. R. EVID. 410.

to Rule 410. The most important objection was that the amendment did not appear necessary, because [every reported case has] held that a statement or offer made by a prosecutor in a plea negotiation [is inadmissible] against the government as an admission of the weakness of the government's case [n]otwithstanding the questionable reasoning [sometimes used to reach this result]

. . . .
Given . . . the fact that the courts are reaching fair and uniform results under the current rules . . . members of the Committee questioned whether the benefits of an amendment to Rule 410 would outweigh the costs. The Committee ultimately concluded that Rule 410 was not "broken," and therefore that the costs of a "fix" are not justified.⁴⁵

If the goal is to propose amendments only when necessary to remedy a real problem, it is understandable that the Advisory Committee has not yet chosen to amend a rule that many litigators and judges have never used or even thought about. But now that terabytes and zettabytes⁴⁶ of information are reaching or have already reached a twentieth birthday, the committee should rethink the ancient documents exception. In other words, data overload is already, or soon will be, a real problem worth fixing.

This new concern about the possible overuse of the ancient documents hearsay exception has not gone unnoticed by the Advisory Committee. The Committee is currently considering whether the use of ESI warrants amending Rule 803(16) to avoid abuse of that exception.⁴⁷

⁴⁵ Minutes of the Meeting, ADVISORY COMM. ON EVIDENCE RULES 11-12, Apr. 29-30, 2004, <http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/Minutes/EV04-2004.pdf>.

⁴⁶ See Sridhar Pappu, *To Handle the Big Data Deluge, HP Plots a Giant Leap Forward*, HP MATTER, June 2014, <https://ssl.www8.hp.com/hpmatter/issue-no-1-june-2014/handle-big-data-deluge-hp-plots-giant-leap-forward> (explaining how much data exists in the world).

⁴⁷ See Agenda for Committee Meeting, ADVISORY COMM. ON EVIDENCE RULES 5, Apr. 4, 2014, <http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/AgendaBooks/Evidence/EV2014-04.pdf> (displaying "Possible Amendment to Rule 803(16)" as an agenda item).

II. DOES THE RATIONALE FOR THE ANCIENT DOCUMENTS EXCEPTION APPLY TO ESI?

It can certainly be argued that if the rationale of the ancient documents exception is enough to support admissibility of hardcopy, then it is enough to support the admissibility of ESI. That argument begins with the observation that the original Advisory Committee was aware of the existence of electronic information and sought in some way to accommodate it within the ancient documents rule. Rule 901(b)(8)—which as stated above is an authenticity-based rule that provides a gateway for admissibility under the hearsay exception—specifically covers an old “data compilation” that is in suspicion-free condition and found in a suspicion-free place. However right or wrong the Advisory Committee was about ancient documents’ admissibility, the Committee decided to treat electronic information the same as hardcopy for purposes of authenticity.⁴⁸ The fact that the Advisory Committee foresaw and accommodated ESI in the authenticity rule arguably counsels caution in trying to rethink the ancient document rule.

But even though consideration of a question by the original Advisory Committee is surely relevant to the merits of an amendment, it is not as clear that the original Advisory Committee thought much about the risk to the hearsay rule that might be found in the explosion of ESI. It is notable that Rule 901(b)(8) specifically mentions data compilations and Rule 803(16) does not. Given the vast rate of data growth, it is likely that the Advisory Committee was not explicitly thinking of the possibility that terabytes upon terabytes of information would become admissible for their truth simply because that information was stored in a server for twenty years.⁴⁹ Indeed,

⁴⁸ See FED. R. EVID. 901(b)(8) advisory committee’s note (“The familiar ancient document rule of the common law is extended to include data stored electronically or by other similar means This expansion is necessary in view of the widespread use of methods of storing data in forms other than conventional written records.”).

⁴⁹ It should be noted that any argument based on the omission of a reference to ESI in Rule 803(16) is weakened by the fact that after the restyling of the Evidence Rules in 2011, Rule 803(16) can now in fact be plausibly read to cover ESI. This is because the new Rule 101(b)(6) provides that “a reference to any kind of written material . . . includes electronically stored information.” Thus the reference to a “document” in Rule 803(16) would appear to have been, so to speak, “electrified” by the restyling. The counter to that argument is that, as emphasized in the Committee Notes to the restyling, no change in the substance of any rule was made or intended. See FED. R. EVID. 101 advisory committee’s note to 2011 Amendments; FED. R. EVID. 803 advisory committee’s note to 2011

the proliferation of ESI shows that taking a hands-off approach to a rule of evidence simply because the Advisory Committee thought the rule was a good idea several decades ago ignores relevant changes that take place over time.⁵⁰

The question, then, is whether the explosion of electronic information has separated ESI from the original justifications for the hearsay exception for ancient documents. As stated above, the primary justification for the ancient documents exception is necessity, which comes down to the premise that it is likely that all reliable evidence (such as business records) has been destroyed within the twenty-year time period, and thus we have to make do with more dubious evidence. This necessity assumption is substantially undermined by the growth of ESI. Because ESI is prevalent⁵¹ and easily preserved, whatever reliable evidence existed at the time of a twenty-year-old event *probably* still exists. Indeed, the probability that most or all ESI records (emails, text messages, receipts, scanned documents, etc.) will be available is certainly higher than the probability that hardcopy documents or eyewitnesses will still be available and useful several decades after a contested event.⁵² There is no reason to admit *unreliable* ESI on necessity grounds if it is quite likely that there will be *reliable* ESI that is admissible under other hearsay exceptions.⁵³ Thus the

Amendments.

⁵⁰ The Supreme Court often finds the Advisory Committee's opinions persuasive. See *Jaffee v. Redmond*, 518 U.S. 1, 15 (1996) (establishing a psychotherapist-patient privilege under Federal common law, a decision "reinforced" by the fact that such a privilege was included in the list of privileges that the original Advisory Committee sent to Congress). But that does not mean those opinions are always controlling. See, e.g., *Green v. Bock Laundry Mach. Co.*, 490 U.S. 504, 510 (1989) (noting that original Rule 609(a)(1), as written, led to an anomalous result in civil cases and therefore "can't mean what it says."). And it especially does not mean that the Advisory Committee has always been able to predict the changes in society and technology that might justify a change to the Evidence Rules.

⁵¹ See Ronald J. Hedges, Daniel Riesel, Donald W. Stever & Kenneth J. Withers, *Taking Shape: E-Discovery Practices Under the Federal Rules*, SN085 ALI-ABA 289, 292 (2008) ("According to a University of California study, 93 percent of all information generated during 1999 was generated in digital form, on computers. Only 7 percent of information originated in other media, such as paper."); see also David K. Isom, *Electronic Discovery Primer for Judges*, 2005 FED. CTS. L. REV. 1 (showing that, of an estimated 5.6 million terabytes of data stored in 2002, 5.18 million terabytes were stored electronically and an additional 420,000 were stored on film).

⁵² Challenges to the premise that old ESI is actually preserved/accessibile will be discussed in the next Part.

⁵³ See, e.g., *Paramount Pictures Corp. v. International Media Films Inc.*, No. CV 11-09112 SJO (AJWx), 2013 WL 3215189 (C.D. Cal. June 12, 2013) (finding that records regarding a film, more than twenty years old, were

“necessity” of proving claims based on older information of whatever provenance has been and will be answered by the existence of bytes upon bytes of *reliable* electronic information—information that was not or could not have been preserved further in the past. If the ancient documents exception remains as is, the legal system will face a situation in which parties can freely admit unreliable ESI just because it is old notwithstanding the existence of prevalent, reliable alternative evidence.

But there is another (lesser) justification for the exception that needs to be addressed—that an old statement has some indicium of reliability due to the fact that it was made before any litigation motive could have arisen. That justification is not completely without merit, and it would seem to apply to ESI as much as it applies to hardcopy. But there are a number of counterarguments.

First, the fact that a statement was made before a specific conflict arose does not mean it did not have *some* litigation motive. For example, take a case in which a plaintiff is suing a major corporation for employment discrimination. The defendant wants to admit twenty-year-old text messages from the plaintiff’s previous employer, casting aspersions on the plaintiff’s work. It is certainly possible that such messages, if true, could be probative to prove the employer’s lack of intent to discriminate, or for some other non-propensity purpose.⁵⁴ But as to hearsay—whether the activity even occurred—the statements may well have been made under the previous employer’s *own* litigation motive at the time.

Another common example of old evidence made under a non-specific litigation motive is that of documents produced in an environmental cleanup action under the Comprehensive Environmental Response, Compensation, and Liability Act of

admissible as business records). At the very least, the threat of rampant use of old and unreliable ESI should lead to an adjustment of the Rule to include something like the necessity language of Fed. R. Evid. 807—requiring that the proffered evidence is more probative than any other evidence reasonably available. One of the drafting alternatives *infra* considers this possibility.

⁵⁴ See, e.g., *Alaniz v. Zamora-Quezada*, 591 F.3d 761 (5th Cir. 2009) (finding admissible evidence of the employer’s activity toward other employees to establish *modus operandi*); *Buckley v. Mukasey*, 538 F.3d 306 (4th Cir. 2008) (holding that evidence of plaintiff’s long-running participation in a race discrimination class action should have been admitted as probative of employer’s retaliatory intent); *Jackson v. Quanex Corp.*, 131 F.3d 647 (6th Cir. 1999) (finding admissible evidence of racial graffiti at employer’s plant and racially offensive conduct toward African-American workers to prove discriminatory intent even if not directed toward the plaintiff).

1980 (CERCLA), which imposes liability for cleanup costs on any company that deposits hazardous materials at a place covered by the statute.⁵⁵ The statute of limitations for a cost recovery action under CERCLA runs from the day the plaintiff performed certain acts to clean up the contamination, which could be decades after the materials were deposited.⁵⁶ It is more than plausible to believe that a party would generate self-serving documents in anticipation of the possibility of some CERCLA action far in the future. Another obvious example is mass tort litigation stemming from hazardous substances. The time differential here arises from a combination of latency periods for the risks and the lengthiness of the proceedings. But, as is seen in tobacco litigation, the litigation motive can exist at the time a document is prepared even if the litigation potential is far in the future.⁵⁷

Given the sheer volume of old ESI, it is apparent that some old ESI will have been made with a litigation motive of some kind—and yet this ESI would be automatically admissible under an unamended Rule 803(16) simply because it is old. It is important to note that the existing Rule does not require that the document actually have been prepared before a controversy arose. The Advisory Committee assumed there would be no litigation motive affecting old documents, but did not *require* a finding of lack of motive in the text of the rule.⁵⁸ Given docket

⁵⁵ Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) § 107, 42 U.S.C. § 9607 (West 2014).

⁵⁶ CERCLA § 113(g)(2), 42 U.S.C. § 9613(g)(2) (establishing statutory period running from “initiation of physical on-site construction of the remedial action”). Indeed, a good percentage of reported cases applying the ancient documents exception to hardcopy are CERCLA actions. *See, e.g.,* United States v. Atlas Lederer Co., 282 F. Supp. 2d 687 (S.D. Ohio 2001) (finding hardcopy customer documentation regarding a battery disposal site inadmissible as business records but admissible as ancient documents); Reichhold Chem. Inc. v. Textron, Inc., 888 F. Supp. 1116 (N.D. Fla. 1995) (offering ancient documents in opposition to an affirmative defense to CERCLA liability).

⁵⁷ *See, e.g., Rule 803(16): Ancient Documents*, 15 FEDERAL RULES OF EVIDENCE NEWS 90-177, 90-189 (1990) (“The phenomenon of docket delays as well as the frequent litigation of liability arising from health detriments that may take decades to come about may be giving new life to the neglected ‘ancient documents’ hearsay exception.”).

⁵⁸ *See, e.g.,* Langbord v. U.S. Dept. of Treasury, Civil Action No. 06-5315, 2011 WL 2623315, at *3 (E.D.Pa. July 5, 2011) (“Requiring courts to ignore the ancient document rule’s three requirements and make determinations based on whether a document was prepared with similar litigation in mind would require courts to assess a document’s trustworthiness or bias, a task inappropriate when resolving threshold authenticity questions.”); Columbia First Bank v. United States, 58 Fed. Cl. 333 (Fed. Cl. 2003) (finding no requirement in the rule that the

delays and the lengthiness of disputes endemic to certain kinds of large cases, it would not be surprising that ESI could have been prepared more than twenty years earlier for the *specific* dispute before the court.⁵⁹

Second, even if an absence of litigation motive might exist for a particular ancient document, that would be the only reliability-based factor supporting admissibility for hearsay admitted under Rule 803(16). No other hearsay exception relies solely on the absence of litigation motive in establishing the reliability required for admission of hearsay. Hearsay statements are excluded every day even though they are made without a litigation motive. Take as an example a statement of an unaffiliated bystander to an accident, made the day after the accident, indicating that the defendant-driver was at fault. That statement is inadmissible hearsay even if the declarant is unavailable at trial. There is no reliability-based justification for admitting the same statement simply because the event is twenty years old. The basic position of the hearsay rule and its other exceptions—that absence of litigation motive is relevant but not dispositive for determining admissibility of hearsay—makes eminent sense because many out-of-court statements are demonstrably unreliable, even if made without litigation motive. Personal animosities, rampant misperceptions, and just plain willingness to lie can impair the reliability of an out-of-court statement even if the declarant made it with no upcoming litigation.

Third, the thin reed of (possible) reliability based on absence of litigation motive might once have been tolerable because the ancient documents exception was rarely used. But again, that is likely to change with the advent of ESI. It is surely the case that lawyers will seek to use the exception more frequently to admit stored ESI for its truth.⁶⁰ Establishing admissibility under 803(16) is likely to be easier than, for example, using the business records exception to the hearsay rule.⁶¹ That exception, Rule 803(6), requires foundation testimony or an affidavit from a knowledgeable witness, as well

document must actually antedate the controversy).

⁵⁹ See *Osprey Ship Management, Inc. v. Jackson County Port Authority*, Civil No. 1:05CV390-HSO-RHW, 2008 WL 282267 (SD. Miss. Jan. 29, 2008) (finding admissible as an ancient document an affidavit prepared earlier in a lengthy dispute).

⁶⁰ G. Michael Fenner, *Law Professor Reveals Shocking Truth About Hearsay*, 62 UMKC. L. REV. 1, 30 (1993) (predicting that the ancient documents exception “will be applied more frequently and more frequently it will be applied to prove essential elements of the case.”).

⁶¹ FED. R. EVID. 803(6).

as a showing that the record is one of regularly conducted activity.⁶² Other exceptions, such as for excited utterances and present sense impressions, contain their own detailed admissibility requirements.⁶³ In contrast, all that needs to be shown for an ancient document is that it is old enough and meets the low standards for authenticity (a requirement that must be met for any document).⁶⁴ For ESI, age will be simple to establish because the information will be dated in the metadata.⁶⁵ Indeed, the metadata attendant to a file will make it easier to show that it has not (or has) been suspiciously altered—thus making the authentication question that is the basis for the hearsay exception easier to solve than with hardcopy. In sum, while we once might have been able to tolerate the fallacy of the ancient documents exception—that authenticity establishes reliability of content—the prospect of more frequent use due to the prevalence of ESI requires more attention to the reliability of old information.

III. ARGUMENTS AGAINST AN AMENDMENT TO RULE 803(16)

This Article has hopefully made the case that the ancient documents exception to the hearsay rule is based on the faulty assumption that the authenticity of a document justifies admitting all of its contents for their truth—an assumption

⁶² See, e.g., *United States v. Duron-Caldera*, 737 F.3d 988 (5th Cir. 2013) (finding a record inadmissible as a business record because it was not prepared in the regular course of business activity, but admissible under Rule 803(16)).

⁶³ See FED. R. EVID. 803(1) (stating that to be admissible as a present sense impression, the statement must have been made at the time of the event to be proved, or immediately thereafter, and must describe the event); FED. R. EVID. 803(2) (stating that to be admissible as an excited utterance, the statement must have been made by the declarant while under the influence of a startling event, and it must relate to that event).

⁶⁴ See, e.g., *United States v. Kalymon*, 541 F.3d 624, 633 (6th Cir. 2008) (“Suspicion does not go to the [factual] content of the document,” when considering whether the ancient document exception applies, but instead, “to whether the document is what it purports to be.”); *United States v. Firishchak*, 468 F.3d 1015 (7th Cir. 2006) (finding an ancient document admissible even though it would not satisfy any reliability-based hearsay exception).

⁶⁵ Metadata is information about data that is not readily apparent on the screen view of the file. “Metadata includes information about the document or file that is recorded by the computer to assist in storing and retrieving the document or file [Metadata] includes file designation, create and edit dates, authorship, comments, and edit history.” SHIRA A. SCHEINDLIN, DANIEL J. CAPRA & THE SEDONA CONFERENCE, *ELECTRONIC DISCOVERY AND DIGITAL EVIDENCE: CASES AND MATERIALS* 380 (2d ed. 2012).

that is problematically triggered by an arbitrary up-or-down time period. The Article has argued that the prevalence of ESI has led to a tipping point where we can no longer allow the exception to operate the way it has. But all that said, there are a number of counterarguments to amending Rule 803(16).

A. *How Prevalent and Retrievable Is Old ESI?*

The two primary arguments for an amendment to Rule 803(16) are: (1) courts are going to be overrun with unreliable old ESI; and (2) the necessity of the existing exception is undermined because facts can be proven by reliable, stored ESI. Both of these premises assume that there is a significant amount of ESI that is (or will soon be) over twenty years old and retrievable for use at trial. But is that assumption valid? There are many cases in which a party to litigation has moved for sanctions because their adversary has *destroyed* ESI.⁶⁶ Preservation orders and the duty to preserve ESI take up much of litigators' time—time that would seem unnecessary if ESI was not routinely being destroyed (made irretrievable) pursuant to records management policies of countless businesses.⁶⁷ Many organizations delete e-mails automatically after a certain amount of time unless they are specifically saved or archived.⁶⁸ So why should we be worried about an onslaught of old ESI? And how can we assume that old reliable ESI will be readily available so that an ancient documents exception is unnecessary?

In answering these questions, one must first separate out “lost” ESI from “deleted” ESI. An email is lost, for example, if the user did not delete it but simply cannot locate it through search options within her email account. But “lost” information like this is not destroyed and can be fairly easily retrieved. A Google search requesting “how to recover old emails” will produce step-by-step instructions for easy retrieval.⁶⁹ So the focus for the question of “how much retrievable ESI is there?” is

⁶⁶ See generally *Zubulake v. UBS Warburg LLC*, 229 F.R.D. 422 (S.D.N.Y. 2004) (seeking and obtaining sanctions after employees were instructed to destroy emails that were relevant to the plaintiff's claims).

⁶⁷ For examples of disputes over records retention policies and preservation orders, see the materials in Chapter II of SCHEINDLIN, CAPRA & THE SEDONA CONFERENCE, *supra* note 65. See also *Arthur Andersen LLP v. United States*, 544 U.S. 696 (2005) (describing document destruction that amounted to obstruction of justice when retention policy was suspiciously implemented).

⁶⁸ MATTHEWS, *supra* note 15, at 98.

⁶⁹ See *How to Access Old Emails*, EHOW, http://www.ehow.com/how_5070600_access-old-emails.html (last visited Nov. 4, 2014).

most importantly on information that has been deleted automatically (through a data management program) or by hand.

Generally speaking, even after ESI is deleted, it is retrievable before it is overwritten.⁷⁰ Retrieval becomes more difficult, however, when ESI is overwritten, or, when a new file takes the place of the old file on the hard drive.⁷¹ Many operating systems are likely to overwrite deleted data that is twenty years old.⁷² However, hundreds of software companies specialize in restoring deleted and overwritten data, even from computers that have been severely damaged. For example, Computer Checkup Premium offers a program specializing in undelete functions for only \$39.95 per year.⁷³ It is, in fact, questionable whether a standard records management system wipes its files completely simply by overwriting them. Certainly, the possibility of wiping a file becomes more and more unlikely as technology advances. For example, magnetic force microscopy (MFM) is a recently developed technique that makes it more difficult to wipe deleted data simply by overwriting it.⁷⁴ Thus, there is a solid claim that even deleted

⁷⁰ See MATTHEWS, *supra* note 15, at 120, 205; *Why Deleted Files Can Be Recovered*, HETMAN SOFTWARE, http://hetmanrecovery.com/recovery_news/why-deleted-files-can-be-recovered.htm (last visited Nov. 4, 2014) (“If you run a data recovery tool in a timeframe when the file has been deleted but its disk space not yet used by another file, you will be able to get that file back. Of course, many things depend on what kind of a tool you’ll be using.”).

⁷¹ See D Lamberti, *How to Perform Hard Drive Recovery After Overwrite*, BRIGHT HUB, <http://www.brighthub.com/computing/hardware/articles/94420.aspx> (last updated Mar. 28, 2011) (“Whenever we store a document in a PC, and then store another document with the same name and in the same location of the disk, Windows alerts us, inquiring if we’re certain we want to overwrite the original document. If we choose Yes here, the original document is overwritten, and from that point going back to alter our choice is not possible.”).

⁷² See *Recover Lost Files and Deleted Emails*, PARETO LOGIC, <http://www.paretologic.com/products/datarecovery/pro/index.aspx> (last visited Nov. 4, 2014); see also Daniel Feenberg, *Can Intelligence Agencies Read Overwritten Data?*, NAT’L BUREAU ECON. RES., <http://www.nber.org/sys-admin/overwritten-data-guttman.html> (stating that an attempt to retrieve overwritten data is likely to have an error rate).

⁷³ SHAREWARE CENTRAL, <http://www.sharewarecentral.com/search.html?q=computer+checkup+premium> (last visited Nov. 4, 2014).

⁷⁴ MFM “is a technique for imaging magnetization patterns with high resolution and minimal sample preparation. The technique is derived from scanning probe microscopy (SPM) and uses a sharp magnetic tip attached to a flexible cantilever placed close to the surface to be analyzed, where it interacts with the stray field emanating from the sample.” Peter Guttman, *Secure Deletion of Data from Magnetic and Solid-State Memory*, USENIX, <http://www.usenix.org/legacy/publications/library/proceedings/>

ESI is reasonably accessible, and that claim gets stronger every day.⁷⁵ On the other hand, it is fair to say that there will be some ESI that will be obtainable only through extraordinary efforts, such as information on an outdated program on an old hard-drive.⁷⁶

In addition to software that can recover overwritten data, it is now a common practice for data to be backed up in alternate locations, such as in cloud storage, even if it is deleted from a particular computer or server.⁷⁷ Businesses and lawyers have discovered the importance of backing up old files.⁷⁸ Computer forensic experts have found multiple ways to access cloud-based email and other information. For example, with respect

sec96/full_papers/gutmann/index.html (last updated Jan. 10, 2003). Because of developments such as MFM, examination of a disk with an electron microscope “can still reveal the previous contents of the wiped area, because the obliterating bytes are not written in exactly the same tracks as the original data . . .” *Id.*

⁷⁵ See Clayton L. Barker & Philip W. Goodin, *Discovery of Electronically Stored Information*, 64 J. MO. B. 12, 15 (2008). In *Lozoya v. Allphase Landscape Constr. Co.*, Civil Action No: 12-cv-1048-JLK, 2014 WL 222326 (D. Colo. Jan. 21, 2014), the court found that information on the plaintiff’s computers could not be considered unavailable until a forensic expert fully examined the machines. The case suggests a distinct trend toward recognizing that retrieving old ESI is much less cumbersome or expensive than it once was.

⁷⁶ See Jack Halprin, Sarah M. Montgomery & Hon. David C. Norton, *Preserving and Protecting: How to Handle Electronically Stored Information*, YOUTUBE (Mar. 28, 2013), <https://www.youtube.com/watch?v=YUQq-03-NUfi> (noting that “extraordinary measures” may be necessary to get data off a very old hard drive).

⁷⁷ Use of virtual servers—cloud storage—is a “way to use the storage space and hardware on a computer or server efficiently to store more than one operating system or more than one server on the same physical device.” MATTHEWS, *supra* note 15, at 102. Virtual systems have “become quite popular as a way to save energy, space, and resources in our ever-expanding information universe.” *Id.*; see also MICHAEL R. ARKFELD, PROLIFERATION OF “ELECTRONICALLY STORED INFORMATION” (ESI) AND REIMBURSABLE PRIVATE CLOUD COMPUTING COSTS 4 (2011), available at http://www.lexisnexis.com/documents/pdf/20110721073226_large.pdf. Storage in the cloud results in permanent retention. See *The Lifespan of Storage Media*, CRASHPLAN (2012), <http://www.code42.com/crashplan/medialifespan>.

⁷⁸ Cf. Wells Anderson, *How to Protect Electronic Documents—From Yourself*, AMERICAN BAR ASSOCIATION, June 2003, http://www.americanbar.org/newsletter/publications/gp_solo_magazine_home/gp_solo_magazine_index/protect.html (“In addition to a nightly backup routine, consider running a backup utility that operates continuously or periodically throughout the day, copying new and changed files to an alternative location such as another computer’s local hard drive.”). The cost for a gigabyte of storage was \$2,000,000 in 1956; in 2009 the cost was less than \$1. Jason R. Baron & Ralph C. Losey, *e-Discovery: Did You Know?*, YOUTUBE (Feb. 11, 2010), <https://www.youtube.com/watch?v=bWbJWcsPp1M>.

to email, messages “can be downloaded to a computer in Outlook, to applications that preserve the email from the cloud” and thus the emails are “reasonably accessible.”⁷⁹

Moreover, the very existence of spoliation disputes means that more and more ESI is now being preserved. The 2006 amendments to the Federal Rules of Civil Procedure’s e-discovery rules have imposed duties to retain ESI.⁸⁰ Preserving ESI is “important to companies that may ever be in a litigation or employment dispute, or that have to comply with the Sarbanes-Oxley Act, Foreign Corrupt Practices Act, PATRIOT Act, or other statutory or regulatory requirements. That’s virtually every public and private company of every size.”⁸¹

The significance of the 2006 amendments “becomes even more striking when one considers that nearly ninety percent of U.S. corporations become engaged in lawsuits; and that at any one time, the average \$1 billion company in the U.S. faces 147 lawsuits.”⁸² As such, more and more ESI will be preserved due to retention obligations.

But even if records retention programs do not prevent the mass deletion of ESI by organizations, and even assuming that the ESI cannot be retrieved through reasonable efforts once deleted, there would remain many reasons to be concerned about overuse of the ancient documents exception as applied to ESI. For one thing, much of the ESI that is relevant to litigation is not generated by organizations with records management programs. Rather, it is generated by individuals in the form of personal emails, Tweets, Facebook posts, text messages, chat room dialog, voice mails, and on and on.⁸³ Much of this information is unlikely to be deleted by individuals, and even if it is, the ESI will often be available from others who had access to the information (such as the recipients of the Tweet,

⁷⁹ Joshua Gilliland, *Nitty Gritty Discovery Requests*, BOW TIE LAW’S BLOG (Jan. 29, 2014), <http://bowtielaw.wordpress.com/2014/01/29/nitty-gritty-discovery-requests>.

⁸⁰ See generally Richard P. Marcus, *The 2006 Amendments to the Federal Rules of Civil Procedure Governing Discovery of Electronically Stored Information: Fitting Electronic Discovery into the Overall Discovery Mix*, in SCHEINDLIN, CAPRA & THE SEDONA CONFERENCE, *supra* note 65, at 1-17.

⁸¹ Linda Volonino, Janice C. Sipior & Burke T. Ward, *Managing the Lifecycle of Electronically Stored Information*, 24 INFO SYSTEMS MGMT. 231, 232 (2007).

⁸² *Id.*

⁸³ Professor Jeffrey Bellin has documented the increased use in litigation of ESI generated by individuals in their personal lives. See, e.g., Jeffrey Bellin, *eHearsay*, 98 MINN. L. REV. 7 (2013); Jeffrey Bellin, *Facebook, Twitter, and the Uncertain Future of Present Sense Impressions*, 160 U. PA. L. REV. 331 (2012).

or the third-party provider).⁸⁴ These personal assertions will often be made without any verification at all—a Facebook post in the privacy of one’s own home, for example—so there is reason to be concerned about their reliability. That concern is not at all alleviated by the fact that the assertion is old.

Second, web postings are preserved for posterity by the Internet Archive. Indeed, the express goal of the Internet Archive is to “prevent the Internet . . . and other ‘born-digital’ materials from disappearing into the past.”⁸⁵ Thus, records management programs do nothing to alleviate the threat of overuse of the ancient documents exception as applied to the overwhelming amount of information that is posted on the web.⁸⁶ The same can be said for other types of ESI. For example, the Google library project estimates that there are nearly 130 million books,⁸⁷ and it has so far digitized over 20 million of them, most of which are old and out of print. These books are now easily accessible, with many more to come.⁸⁸ That means assertions of fact in those books are automatically admissible under the ancient documents exception so long as the books are more than twenty years old.

⁸⁴ See, e.g., Seth P. Berman et al., *Web 2.0: What’s Evidence Between “Friends”?*, BOSTON B. J. (2009) (noting that Facebook posts can be obtained from the computers of any participant in a Facebook conversation, or “from Facebook itself”); Biz Stone, *Tweet Preservation*, TWITTER BLOGS (Apr. 14, 2010) <http://blog.twitter.com/2010/04/tweet-preservation.html> (stating that Twitter is now donating “access to the entire archive of public Tweets to the Library of Congress for preservation and research”).

⁸⁵ *About the Internet Archive*, THE INTERNET ARCHIVE, <https://archive.org/about> (last visited Nov. 4, 2014).

⁸⁶ See Daniel J. Solove, *Privacy and Power: Computer Databases and Metaphors for Information Privacy*, 53 STAN. L. REV. 1393, 1412 (2001) (“[A]lmost everything on the Internet is being archived We are accustomed to information on the web quickly flickering in and out of existence, presenting the illusion that it is ephemeral. But little on the Internet disappears or is forgotten, even when we delete or change the information.”).

⁸⁷ Ben Parr, *Google: There Are 129,864,880 Books in the Entire World*, MASHABLE, Aug. 5, 2010, <http://mashable.com/2010/08/05/number-of-books-in-the-world>.

⁸⁸ Claire Cain Miller & Julie Bosman, *Siding with Google, Judge Says Book Search Does Not Infringe Copyright*, N.Y. TIMES, Nov. 14, 2013, <http://www.nytimes.com/2013/11/15/business/media/judge-sides-with-google-on-book-scanning-suit.html>. In November 2013, Judge Chin, sitting by designation in the S.D.N.Y., paved the way for Google to continue digitizing these books despite copyright objections by ruling that the digitization constituted “fair use” under the copyright laws. *Authors Guild, Inc. v. Google Inc.*, 954 F. Supp. 2d 282 (S.D.N.Y. 2013).

Finally, it is important to remember that the concern about deletion of ESI in the case law arises in the context of spoliation claims. That is, a party is complaining that its opponent deleted ESI that was unfavorable to the opponent's position. But that kind of ESI, were it preserved and in fact unfavorable, would be admissible against the record-keeper over a hearsay objection as party-opponent statements.⁸⁹ Consequently, there is a litigation-based incentive to delete it (if you can get away with it). But the problem posed by ESI with respect to the ancient documents exception is that the record-keeper would have an incentive to keep information that is *favorable* to its position. It will not matter whether that information is reliable. Indeed there will be an incentive to keep self-serving, unreliable accounts as ESI because the cost of preserving that information will be so low.

In sum, the fact that some or even much of the world's ESI is deleted will do little to prevent overuse of the ancient documents exception as applied to ESI.⁹⁰

B. *Does the Ancient Documents Exception Even Apply to ESI?*

ESI that is stored for twenty years is not like a magazine sitting in the attic for twenty years. Electronic data is dynamic. It is changed, at least in some ways, by the action of accessing it, viewing it, or moving it. “[N]onapparent information that

⁸⁹ FED. R. EVID. 801(d)(2).

⁹⁰ One might wonder whether information on digital media might simply degrade without any attempt to destroy it. Crashplan, an organization that specializes in managing and protecting customers' digital data, created an infographic showing the expected lifespans of various types of storage mediums. Out of the twenty-five types of storage mediums analyzed, ten of them are expected to last longer than twenty years under conditions of regular use. Among the most resilient are the more modern technologies, such as memory cards and hard drives. However, some extremely old technologies such as Super 8 Film (created in 1965) and Vinyl Records (created in the late 1800s) can last for extremely long periods—seventy years of regular use for Super 8 Films, and one hundred years for Vinyl Records. Moreover, the number of storage mediums able to last over twenty years increases significantly if the medium remains unused or under appropriate care, as is likely to be the case if the medium is used for archival purposes. Of the twenty-five types of storage mediums analyzed, twenty of them are expected to last twenty years or longer if used for archival purposes (and cared for as such). See CRASHPLAN, *The Lifespan of Storage Media* (2012), <http://www.code42.com/crashplan/medialifespan>. Some Blu-Ray discs purport to be able to last essentially forever. The M-Disc claims that “once [data] is written [on the disc], your documents, medical records, photos, videos and data will last up to 1,000 years.” *What is M-Disc?*, M-DISC, <http://www.mdisc.com/what-is-mdisc> (last visited Aug. 6, 2014).

can become part of the electronic data is called metadata.”⁹¹ The dynamic nature of ESI might seem to be an ill fit for an ancient documents exception if it is thought to be grounded in the authenticity that comes from a document being in “a place” where it would “likely be.”⁹² There would be no worry about the ancient documents hearsay exception if old ESI could not be authenticated due to its dynamic nature—because, as stated above, authenticity is the requirement for satisfying the hearsay rule under Rule 803(16).

In fact, the dynamic nature of stored ESI will not raise a substantial bar to the use of the ancient documents hearsay exception. This is so for a number of reasons. First, Rule 901(b)(8) specifically contemplates that the age of an *electronic* document will provide a ground of authenticity for ESI. That rule covers “data compilation” in any form. If the mere fact that an electronic document was changed in some immaterial respect due to storage were enough to disqualify that document from being found authentic under Rule 901(b)(8), then the drafters would not have covered data compilations in that rule. It makes no sense to write a rule of authenticity that covers information that is per se disqualified from being authenticated under that rule. True, it is probably fair to state that none of the original Advisory Committee members were experts on the technicalities of storage of electronic information. But they could certainly be expected to know, even then, that electronic information was not stored in the same way as a magazine or library book. Thus, the specific inclusion of data compilations

⁹¹ MATTHEWS, *supra* note 15, at 17. For a discussion of metadata, see SCHEINDLIN, CAPRA & THE SEDONA CONFERENCE, *supra* note 65, at 356-382. It should be noted that system metadata—information about an electronic file that is generated by a computer without human input—is not hearsay and so would present no concerns for the ancient document exception or any other exception to the hearsay rule. This is because system metadata is machine-generated and a machine is not a “declarant” who makes a “statement” within the meaning of the hearsay rule. *United States v. Moon*, 512 F.3d 359 (7th Cir. 2008) (printout from gas chromatograph is not hearsay); *United States v. Hamilton*, 413 F.3d 1138 (10th Cir. 2005) (header information accompanying an image file was not hearsay because it was automatically generated). On the other hand, application metadata—including such information as spreadsheet formula or redline changes in word processing documents—is the result of human input and so “may constitute hearsay, just as any other ‘statement’ made by a human being.” THE SEDONA CONFERENCE WORKING GROUP ON ELECTRONIC DOCUMENT RETENTION & PRODUCTION, THE SEDONA CONFERENCE COMMENTARY ON ESI EVIDENCE & ADMISSIBILITY 10 (Kevin F. Brady et al. eds., 2008). Consequently, the existence of application data in old ESI further raises the risk of overuse of the ancient documents exception to the hearsay rule.

⁹² FED. R. EVID. 901(b)(8).

in Rule 901(b)(8) is a clear indication that the dynamic nature of ESI storage does not per se disqualify it from authentication under Rule 901(b)(8), and therefore does not disqualify the contents from automatic admissibility under Rule 803(16).

Moreover, the best reading of the language of Rule 901(b)(8) covers old ESI even if it has been accessed, viewed, or so on over a twenty-year period. This is because if ESI is found on a server, hard drive, cloud, etc., it really is in a “place” where it would “likely be.” Nothing in Rule 901(b)(8) requires a document to have been placed in a hermetically sealed and immovable container for twenty years; nothing in the Rule prohibits authenticating a document that has been viewed, accessed, or moved repeatedly over twenty years, so long as it is found in a place where it would likely be. So if a frequently read or moved magazine can be authenticated as an ancient document, there is every reason to give the same basic treatment to frequently accessed, viewed or moved ESI.

But even if Rule 901(b)(8) were found inapplicable to authenticate ESI that had been accessed, viewed, or moved, that would not deter the admissibility of old ESI under the ancient documents exception to the hearsay rule. Rule 803(16) operates as an exception for a more-than-twenty-year-old document *whenever* that document is found authentic on any ground. It does not require a finding of authenticity under Rule 901(b)(8). Thus, just like new ESI, old ESI can be authenticated in any number of ways, as indicated by the scores of cases involving challenges to the authenticity of ESI.⁹³ It must be remembered that the threshold for the court’s determination of authenticity under Rule 901 is not high: “the court need not find that the evidence is necessarily what the proponent claims, but only that there is sufficient evidence that the jury ultimately might do so.”⁹⁴ The possibility of alteration “[is] not and cannot be the basis for excluding ESI as unauthenticated as a matter of course, any more that it can be the rationale for excluding paper documents.”⁹⁵

The following is a non-inclusive list of possibilities for authenticating old ESI by means other than Rule 901(b)(8):

- ESI of various types can be authenticated by distinctive characteristics and circumstantial evidence under Rule 901(b)(4).⁹⁶

⁹³ For a general discussion about authenticating ESI, see SCHEINDLIN, CAPRA & THE SEDONA CONFERENCE, *supra* note 65, at 754-67.

⁹⁴ United States v. Safavian, 435 F. Supp. 2d 36, 38 (D.D.C. 2006).

⁹⁵ *Id.* at 40.

⁹⁶ See, e.g., United States v. Lundy, 676 F.3d 444, 454 (5th Cir. 2012)

- Any public record, including data compilations by a public office, can be authenticated under Rule 901(b)(7), upon a showing that the record is from “the office where items of this kind are kept.” There is no requirement that the records be reliable to be admissible.⁹⁷ Thus when an old public record is authenticated under Rule 901(b)(7), all the assertions in the record are admissible for their truth even though they would not be trustworthy enough to be admissible under the hearsay exception for public records.⁹⁸ That is, the ancient documents exception renders the limits of the public records exception irrelevant for all of the digital data of the government that is more than twenty years old.
- Under Rule 901(b)(9), ESI can be authenticated when the proponent provides enough information for a reasonable person to find that the electronic data is the product of a system that “produces an accurate result.”⁹⁹ Again, “accurate” does not refer to the reliability of assertions in the document, only that the output is not substantially changed from the input.¹⁰⁰
- Under Rule 902(5), official publications of a public authority, including website content, are self-authenticating—no extrinsic evidence of authenticity is required.¹⁰¹

(finding text messages to be properly authenticated by circumstantial evidence: specifically, that the defendant, when arrested, was texting and phoning the victim); *Safavian*, 435 F. Supp. 2d at 39-42 (noting that “@” symbol and email addresses are distinctive characteristics sufficient for authentication).

⁹⁷ See, e.g., *United States v. Meienberg*, 263 F.3d 1177, 1181 (10th Cir. 2001) (“Any question as to the accuracy of the printouts, whether resulting from incorrect data entry or the operation of the computer program, as with inaccuracies in any other type of business records, would have affected only the weight of the printouts, not their admissibility.”) (quoting *United States v. Catabran*, 836 F.2d 453, 458 (9th Cir. 1988)).

⁹⁸ FED. R. EVID. 803(8) (requiring exclusion if the opponent shows that the source of information or other circumstances indicates a lack of trustworthiness).

⁹⁹ FED. R. EVID. 901(b)(9).

¹⁰⁰ See, e.g., *United States v. Washington*, 498 F.3d 225 (4th Cir. 2007) (establishing the reliability of computer read-out of electronic forensic analysis of defendant’s blood sample for drug and alcohol content by showing that the machine and functions are reliable, that it was correctly adjusted or calibrated, and that the data put into the machine was accurate).

¹⁰¹ See, e.g., *Williams v. Long*, 585 F. Supp. 2d 679, 689-90 (D. Md. 2008)

- Websites can be authenticated by presenting information from the “Wayback Machine.”¹⁰²
- Testimony of a witness with personal knowledge about the ESI that is presented to the court can often be sufficient evidence of authenticity.¹⁰³
- Posts on Facebook, YouTube, and other account-based social media can be authenticated not only by distinctive characteristics but also by the demonstration of use of passwords and email addresses.¹⁰⁴
- Temporary Internet files, even if deleted, can be authenticated by the forensic expert who retrieved them.¹⁰⁵

In sum, there are myriad ways to authenticate ESI that certainly apply to ESI more than twenty years old, even if authentication as an ancient document were not possible under Rule 901(b)(8).¹⁰⁶ Consequently, the risk is real that the

(finding printed copies of state agencies’ websites to be self-authenticating).

¹⁰² See, e.g., *Telewizja Polska USA, Inc. v. Echostar Satellite Corp.*, No. 02 C 3293, 2004 WL 2367740, at *6 (N.D. Ill. Oct. 15, 2004) (approving the use of the Internet Archive’s “wayback machine” to authenticate websites as they appeared on various dates relevant to the litigation).

¹⁰³ FED. R. EVID. 901(b)(1); see, e.g., *Buzz Off Insect Shield LLC v. S.C. Johnson*, 606 F. Supp. 2d 571, 594 (M.D.N.C. 2012) (authenticating website where witness testified that he typed a URL, logged onto and viewed the site, and that the printout offered at trial fairly reflected what she saw); *Adamah v. Tayson*, No. 09-CV-5477 (FB), 2010 U.S. Dist. Lexis 54172, at *9 n.4 (E.D.N.Y. May 27, 2010) (allowing testimony of participant to an exchange of texts to establish authenticity).

¹⁰⁴ See, e.g., *United States v. Hassan*, 742 F.3d 104 (4th Cir. 2014) (finding that trial judge did not abuse his discretion in admitting against two defendants Facebook pages and videos hosted on YouTube and maintained by Google because the Facebook pages were captured as screenshots and displayed the defendants’ user profiles and postings; the screenshots included photos and links to the YouTube videos; the defendants had posted their personal biographical information on the Facebook pages along with quotations and listings of their interests; each Facebook page contained a section for postings from other users; and the prosecution had satisfied its low burden of establishing authenticity under Rule 901(a) by tracking the Facebook pages and Facebook accounts to Hassan’s and Yaghi’s email addresses).

¹⁰⁵ *United States v. Johnson*, No. 04-CR-12-LRR, 206 WL 2548913, at *3-5 (N.D. Iowa Aug. 31, 2006).

¹⁰⁶ This is not to say that all ESI, whether new or old, will automatically be found authentic. Certain types of ESI present thorny problems of authentication. For example, database information presents challenges because it is not just a stand-alone document sitting in a server, but rather constitutes an amalgamation of separate data elements. Certainly there will be special problems in establishing authenticity for this

ancient documents exception to the hearsay rule—simply equating authenticity with admissibility of hearsay—will become an open door to admitting unreliable hearsay in vast amounts of old ESI.

C. *No Existing Problem to Address?*

Another possible argument against amending the ancient documents exception as applied to ESI is that it is not affecting the courts at this point in time. One searches in vain for a reported case addressing admissibility of ESI under the ancient documents exception. While this of course does not mean that ESI has never been offered under Rule 803(16), it is surely a rough indication that the problem of using the ancient documents exception to admit unreliable ESI is not currently widespread.

As discussed above, the Advisory Committee does not propose an amendment to the Rules of Evidence unless the amendment would solve a real problem, so it might be argued that amending Rule 803(16) due to a projected but not-yet-existing onslaught of old ESI is inappropriate. The counterargument is that technology and the use of technology at trials develops very quickly. Trying to keep up with these changes is very difficult in the context of the deliberate nature of the rulemaking process. Enacting an amendment to the national rules of procedure takes a minimum of three years.¹⁰⁷ Given all the ESI that will become potentially admissible without regard to reliability under Rule 803(16) in the next three or four years, it behooves the rulemakers to get out ahead of the curve. It would of course not be completely unreasonable to wait for the problem to rear its head in the courts. The consequence of waiting is not that the rule would lag behind

amalgamated information; and as to ancient documents, there may be some difficulty in determining whether the amalgamated information is in a place where it would most likely be. *See generally* THE SEDONA CONFERENCE, THE SEDONA CONFERENCE DATABASE PRINCIPLES: ADDRESSING THE PRESERVATION AND PRODUCTION OF DATABASES AND DATABASE INFORMATION IN CIVIL LITIGATION (David J. Kessler et. al eds., 2011). Additionally, there may be difficulty in determining the author of certain ESI if it comes from different sources, such as a dashboard in a corporate intranet. *See* THE SEDONA CONFERENCE COMMENTARY ON ESI EVIDENCE & ADMISSIBILITY, *supra* note 91, at 12. But the instances demonstrated in text, both under Rule 901(b)(8) and other rules of authentication, definitely indicate a risk that much ESI will be admissible for its truth simply because it is pretty easily authenticated.

¹⁰⁷ The rulemaking process and its deliberate pace are described well by Peter G. McCabe in *Renewal of the Federal Rulemaking Process*, 44 AM. U. L. REV. 1655, 1671-76 (1995).

emerging technology, but simply that unreliable hearsay may well be admitted en masse for a few years. The Republic will survive. Nonetheless, it is possible to avoid that problem, or at least to have a change to the ancient documents exception on the rulemaking radar so that any damage caused by admitting unreliable hearsay can be limited.

D. *Can the Problem of Unreliable Old ESI Be Handled By Use of Rule 403?*

Federal Rule of Evidence 403 provides that a court may exclude relevant evidence “if its probative value is substantially outweighed by a danger of . . . unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.” It might be argued that amending Rule 803(16) to prevent admission of unreliable ESI is not necessary because a court presented with old unreliable ESI can and will exclude it under Rule 403. The argument would be that unreliable old ESI is not “probative” and will mislead the jury. But there are at least three reasons why Rule 403 will not be as effective as the direct approach of amending Rule 803(16) to close the loophole for unreliable ESI.

The first and most important reason is that when a court assesses the probative value of a proffered statement, it does not consider the reliability of that statement. As many courts have recognized, “Rule 403 is not to be used to exclude testimony that a trial judge does not find credible.”¹⁰⁸ Rather, “[w]eighing probative value against unfair prejudice under [Rule 403] means probative value with respect to a material fact *if the evidence is believed, not the degree the court finds it believable.*”¹⁰⁹ Take a case in which the defendant is charged with a “cold case” murder and the government offers a text message from a drug addict who says he saw the murder on the

¹⁰⁸ *E.g.*, Gardner v. Galetka, 568 F.3d 862, 876 (10th Cir. 2009); *see also* Western Indus. v. Newcor Canada, Ltd., 739 F.2d 1198, 1202 (7th Cir. 1984) (finding that the trial court erred in excluding statements because it did not believe the witness who made them).

¹⁰⁹ Bowden v. McKenna, 600 F.2d 282, 284 (1st Cir. 1979) (emphasis added); *see also* Ballou v. Henri Studios, Inc., 656 F.2d 1147, 1149 (5th Cir. 1981) (finding that the district court erred in excluding blood test results under Rule 403 because it found the test to not be “credible” or “reliable”). In *Ballou*, the Fifth Circuit explained that “Rule 403 does not permit exclusion of evidence because the judge does not find it credible” and that, when applying Rule 403, district courts should “determine[] the probative value of the test results if true, and weigh[] that probative value against the danger of unfair prejudice, leaving to the jury the difficult choice of whether to credit the evidence.” *Id.* (quoting United States v. Thompson, 615 F.2d 329, 333 (5th Cir. 1980)).

way back from his LSD dealer; or a disgruntled employee who, having been fired for stealing from his employer, sends a Tweet falsely stating that the employer is dumping toxic waste. Even if those electronic communications are patently unreliable hearsay, they cannot be excluded under Rule 403 because they are very probative of the facts related *if believed*. In other words, once the hearsay is found admissible under a hearsay exception, the judge cannot exclude it under Rule 403. Unreliable hearsay has to be excluded under the hearsay rule or not at all.

It may seem anomalous that such unreliable evidence can, and indeed must, be admitted insofar as Rule 403 is concerned,¹¹⁰ but the result is understandable in light of the different roles played by different evidence rules. With respect to out-of-court statements offered for their truth, it is the *hearsay rule* that screens for reliability, and if the statement fits the hearsay exception, the Federal Rules are done regulating its reliability; reliability then becomes a question of weight for the fact finder.¹¹¹ The problem with old ESI is that the ancient documents exception fails in the mission of the hearsay rule.¹¹²

¹¹⁰ Rule 403 does have a role to play if a statement is offered for a non-hearsay purpose but the jury could misuse it for its truth. That risk of misuse constitutes prejudicial effect, which must be balanced against the probative value of the statement as to the not-for-truth purpose. *See, e.g., United States v. Reyes*, 18 F.3d 65 (2d Cir. 1994) (finding that a statement accusing the defendant of criminal conduct offered to prove the “background” of the police investigation should have been excluded because its probative value in proving “background” was substantially outweighed by the risk that the jury would use the statement as proof of the defendant’s criminal conduct, i.e., for its truth). But if the statement is properly admitted under a hearsay exception, and therefore *can* be used as proof of the fact asserted, then Rule 403 may not be used to exclude it on reliability grounds.

¹¹¹ *See, e.g., United States v. DiMaria*, 727 F.2d 265, 271 (2d Cir. 1984) (finding that a statement that fit the requirements of a hearsay exception could not be excluded even though the trial judge found it to be untrustworthy: “False it may well have been but if it fell within [the exception], as it clearly did if the words of that Rule are read to mean what they say, its truth or falsity was for the jury to determine.”).

¹¹² Notably, there are existing cases finding that ancient hardcopy is admissible even if unreliable, and these cases do not resort to a Rule 403 analysis to exclude the unreliable evidence. *See, e.g., George v. Celotex Corp.*, 914 F.2d 26, 30-31 (2d Cir. 1990) (noting that, if a document is authenticated as an ancient document, lack of trustworthiness is a matter of weight and not admissibility, as Rule 803(16) contains no independent requirement of trustworthiness); *Ammons v. Dade City*, 594 F. Supp. 1274 (M.D. Fla. 1984) (finding newspaper articles more than twenty years old admissible for their truth without an independent showing of reliability, while newspapers less than twenty years old were excluded).

Second, even if Rule 403 could somehow be used to screen out unreliable old ESI that would otherwise be admissible under the ancient documents hearsay exception, the balancing test of Rule 403 is geared heavily toward admissibility—the prejudicial effect must *substantially* outweigh the probative value for evidence to be excluded. As the courts have said, the trial court’s power to exclude evidence under Rule 403 must be invoked “sparingly.”¹¹³ Because exclusion is essentially saved for egregious cases, Rule 403 could not be expected—even if it were applicable—to be an effective device to exclude all unreliable old ESI.

Finally, it goes without saying that a Rule 403 balancing is heavily case-dependent and highly discretionary.¹¹⁴ That case-by-case approach—even assuming Rule 403 could be applied—is bound to be less effective than a rule that either prohibits old ESI or at least conditions admissibility on a finding of necessity. For all these reasons, Rule 403 is not the solution to the problem of unreliable ESI being admitted for the truth of its contents under the ancient documents hearsay exception.

E. *Ancient Hardcopy Documents Might Still Be
Necessary in Some Litigation*

A final argument in response to amending the ancient documents hearsay exception is a cautionary one. Even if old ESI is preserved and accessible, there will still be some cases in which the only evidence available is old hardcopy. For example, cases involving immigration violations for fraudulent entry into the country often must be proven by old hardcopy found in some archive.¹¹⁵ Courts have also admitted old hardcopy in asbestos cases, CERCLA cases, property disputes, and stolen art cases, among others.¹¹⁶

¹¹³ *Herrington v. Hiller*, 883 F.3d 411, 414 (1989); *see also Dartez v. Fibreboard Corp.*, 765 F.2d 456, 461 (5th Cir. 1985) (“[B]ecause Rule 403 permits the exclusion of probative evidence it is an extraordinary remedy that must be used sparingly.”).

¹¹⁴ *See, e.g., Cooley v. Carmike Cinemas, Inc.*, 25 F.3d 1325, 1332 (6th Cir. 1994) (noting that Rule 403 rulings are highly discretionary and appellate courts often affirm Rule 403 decisions “either way” they come out).

¹¹⁵ *See, e.g., United States v. Demjanjuk*, 367 F.3d 623 (6th Cir. 2004) (finding that records of Nazi activity during World War II made defendant ineligible for a visa).

¹¹⁶ *E.g., Celotex Corp.*, 914 F.2d at 29-30 (finding that a report showing that a study of asbestos plants was prepared in 1947 was evidence that the company knew about asbestos risk); *In re Paysage Bords de Seine*, 991 F. Supp. 2d 740 (E.D. Va. 2014) (using old museum records in a case about ownership of a work of art); *Tremont LLC v. Halliburton Energy Servs., Inc.*, 696 F. Supp. 2d 741 (S.D. Tex. 2010) (admitting old records

In none of the above-cited cases was there ESI (let alone reliable ESI) available to prove what the hardcopies were offered to prove. Accordingly, one could argue that even if an amendment were necessary to regulate old ESI, any amendment should preserve the exception in cases where necessity can be shown. Put another way, even though the rationale of the ancient documents exception is questionable because necessity trumps reliability, that rationale may still be applicable to certain actions today, despite the development of ESI. One of the drafting alternatives below provides for a necessity carve-out.

IV. DRAFTING ALTERNATIVES

The Federal Rules of Evidence Advisory Committee should amend Rule 803(16) in order to prevent the admission of terabytes of old and unreliable ESI. In this Part, I will propose several modifications to the Rule that, if adopted, would reduce or eliminate the problems described above.

A. *Deletion*

One alternative is simply to delete Rule 803(16). As stated above, the basic problem with the rule is that it confuses the authenticity of a document with the reliability of its contents. It simply does not follow that because a document is genuine, the statements in the document are reliable. One could argue that necessity alone cannot justify the use of unreliable evidence and that any hearsay statement that is old and that *should* be admissible (because it is reliable) can be offered under the residual exception to the hearsay rule¹¹⁷—you do not need an ancient documents exception to admit old but reliable evidence. Indeed the only case cited by the Advisory Committee in support of Rule 803(16) was one in which the court found an old document admissible not because it was an ancient document, but rather because it carried the circumstantial guarantees of trustworthiness that would support admission today under the residual exception.¹¹⁸

How would deletion be implemented? The rulemaking formula in such a situation is to delete the text, keep the rule

indicating disposal of waste in a CERCLA case under Rule 803(16)); *Koepp v. Holland*, 688 F. Supp. 2d 65 (N.D.N.Y. 2010) (admitting old deed as an ancient document in a property dispute).

¹¹⁷ FED. R. EVID. 807 (establishing a hearsay exception for statements having circumstantial guarantees of trustworthiness equivalent to the hearsay exceptions contained in Rules 803 and 804).

¹¹⁸ See FED. R. EVID. 803(16) advisory committee's note (citing *Dallas County v. Commercial Union Assurance Co.*, 286 F.2d 388 (5th Cir. 1961)).

number open (so as not to upset electronic searches relying on existing rule numbers), and provide a committee note explaining the motivation for the deletion. Thus, the deletion would look something like this:

~~(16) *Statements in Ancient Documents.* A statement in a document that is at least 20 years old and whose authenticity is established.~~
[Abrogated].

And here is a possible Committee Note for the abrogation:

Committee Note. The ancient documents exception to the rule against hearsay has been abrogated. The exception was based on the premise that the contents of a document are reliable merely because the document is old. While it is appropriate to conclude that a document is *genuine* when it is old and located in a place where it would likely be—see Rule 901(b)(8)—it does not follow that the contents of such a document are truthful.

The ancient documents exception could once have been thought appropriate out of necessity due to the unavailability of other proof for old disputes and because the exception has been so rarely invoked. However, given the development and growth in quantity of electronically stored information, the exception has become less justifiable and subject to greater abuse. The need for an ancient document rule that does not qualify under any other hearsay exception has been diminished by the fact that reliable electronic information is likely to be available and can be used as proof under a number of hearsay exceptions. Abuse of the ancient document exception is possible because unreliable electronic information may be widespread and would be admissible under the exception simply because it has been preserved in a database for twenty years.

One possible problem with abrogation is that it is a radical remedy in the context of the rulemaking process. No rule of evidence has been abrogated in the forty-year history of the Rules. Abrogation of Rule 803(16) is especially problematic because it would not only be based on changed circumstances, but would also be a concession that the original Advisory Committee (and the common law) was wrong in equating authenticity of a document with the reliability of statements in

the document. Moreover, the Advisory Committee has been especially wary about limiting hearsay exceptions and exemptions. The hearsay exceptions and exemptions have been amended on only four occasions since 1975. Only one of those amendments narrowed the coverage of a hearsay exception.¹¹⁹ The others expanded an exception's or exemption's coverage.¹²⁰ Just recently, the Advisory Committee rejected calls to abrogate the hearsay exceptions for present sense impressions and excited utterances, the charge being that these exceptions were ill-conceived from the beginning.¹²¹ A total rejection of the ancient documents exception, even though supportable on the merits, thus creates some tension with the careful approach—and respect for the original Advisory Committee—of the rulemakers.

The remaining proposals consider ways to limit the risk of overuse of the ancient documents exception especially as applied to ESI, without the facially drastic remedy of abrogation.

¹¹⁹ Rule 804(b)(3) was amended in 2010 to require the prosecution to show corroborating circumstances indicating trustworthiness before a declaration against penal interest can be admitted against a criminal defendant. *See* FED. R. EVID. 804(b)(3) advisory committee's note to 2010 amendment.

¹²⁰ Rule 801(d)(2), the hearsay exemption for statements made by agents of a party-opponent, was amended in 1997 to allow a proponent to establish its burden of showing agency by offering the hearsay statement itself together with some independent evidence. *See* FED. R. EVID. 801(d)(2) advisory committee's note to 1997 amendment. Rule 803(6), the business records exception, was amended in 2000 to allow the foundation requirements to be proved by a certificate rather than by testimony of a foundation witness. *See* FED. R. EVID. 803(6) advisory committee's note to 2000 amendment. Amendments to Rules 803(6)-(8) that took effect on December 1, 2014 clarify that once the foundational requirements of those exceptions are met, it is the opponent's burden to show that the preparation or other circumstances indicate untrustworthiness. FED. R. EVID. 803 advisory committee's note to 2014 amendments. Finally, an amendment to Rule 801(d)(1)(A), the hearsay exemption for prior consistent statements, that also took effect December 1, 2014 expands the exemption to allow any consistent statement to be admitted for its truth if it is properly admissible to rehabilitate a witness's credibility. FED. R. EVID. 801 advisory committee's note to 2014 amendments.

¹²¹ The suggestion for abrogating these exceptions—Rules 803(1) and (2), was made by Judge Posner in his concurring opinion in *United States v. Boyce*, 742 F.3d 792, 801 (7th Cir. 2014). The Advisory Committee rejected the proposal because members were not convinced that the exceptions were without merit and were concerned that the abrogation of two important exceptions to the hearsay rule would be a radical remedy. *See* Minutes of the Meeting, ADVISORY COMM. ON EVIDENCE RULES 5, Mar. 2014 (on file with author).

B. *Limit the Exception to Hardcopy Documents*

One possible reason for limiting the exception to hardcopy documents, as discussed above, is that the ancient documents exception may be thought to continue to play a useful role in certain kinds of litigation in which critical hardcopy documents are very old and impossible to qualify under other exceptions. An amendment with this thought in mind would look as follows:

(16) *Statements in Ancient Documents.* A statement in a document—but not including information that is electronically stored—that is at least 20 years old and whose authenticity is established.

The major problem with an amendment that carves out electronic information is that the Federal Rules of Evidence have a rule that *equates* electronic evidence with hardcopy. Rule 101(b)(6), which became effective on December 1, 2011, provides that “a reference to any kind of written material or any other medium includes electronically stored information.”¹²² Rule 101(b)(6) was added as part of the Restyling Project,¹²³ one of the goals of which was to clarify that while the original Rules of Evidence were written largely with hardcopy in mind, the evidentiary concepts established in the Rules were and remain equally applicable to ESI. Instead of specifying that equation in every single hardcopy-based rule, the decision was made to use an all-encompassing definitional approach.¹²⁴

Carving out ESI from 803(16) is inconsistent with the basic approach to ESI so recently taken in the Restyling Project. It is questionable whether a deviation from a unified approach is justified simply to allow old—and often unreliable—hardcopy to be admitted in a handful of CERCLA and deportation cases. Given the fundamental flaw in the ancient documents exception, it is probably not worth retaining it in its present form while limiting it to hardcopy. Moreover, there still could be a random case in which the only available proof of an old matter is ESI that is not admissible under other exceptions. There would seem to be no reason to treat that case differently from one where the only available proof is hardcopy.

¹²² FED. R. EVID. 101(b)(6).

¹²³ For a description of the Restyling Project and its goals, see *Committee Note to amendment to the 2011 amendment to Rule 101*, in DANIEL J. CAPRA, FEDERAL RULES OF EVIDENCE 7 (2014-15 ed. 2014).

¹²⁴ See CAPRA, FEDERAL RULES OF EVIDENCE, *supra* note 123, at 10.

If, however, ESI were to be carved out from the ancient documents exception, the Committee Note to such an amendment should explain the conflict between the carve-out and the general approach to the Evidence Rules in equating hardcopy and ESI. That Committee Note might look something like this:

Committee Note. The ancient documents exception to the rule against hearsay has been amended to specify that it is not applicable to information that is electronically stored. The ancient documents exception remains necessary for certain kinds of litigation in which information is located only in hardcopy documents that have withstood the test of time. However, the exception is subject to abuse when applied to electronically stored information. The need for old electronically stored information that does not qualify under any other hearsay exception is diminished by the fact that *reliable* electronic information is likely to be preserved and could be used as proof under a hearsay exception that guarantees reliability—e.g., Rule 803(6), Rule 807. Abuse is possible because unreliable electronic information may be widespread and would be admissible under the exception simply because it has been preserved for twenty years.

The amendment provides an exception to the general definition in Rule 101(b)(6), under which a reference to any kind of writing includes electronically stored information. Nothing in the amendment is intended to undermine any other use of electronically stored information under these Rules.

C. *Add a Necessity Requirement*

A third option is to apply the ancient documents exception to both ESI and hardcopy equally, but to limit the exception to situations in which the initial justification still exists—in other words, where it is necessary to introduce the old evidence because there are no reasonably available alternatives. That amendment might look like this:

(16) *Statements in Ancient Documents.* A statement in a document that is at least 20 years old if:

~~(A) and whose~~ the document's authenticity is established; and

(B) the statement is more probative on the point for which it is offered than any other evidence that the proponent can obtain through reasonable efforts.

The language in new subdivision (B) is taken directly from the residual exception to the hearsay rule, Rule 807. That language was intended to limit the use of the residual hearsay exception to cases where it was truly necessary.¹²⁵ That same reasoning should apply to the ancient documents exception: if other evidence admissible under other reliability-based exceptions could be obtained through reasonable efforts, then the ancient documents exception should not be used either for hardcopy or ESI. Essentially, the proposal ties the exception to its only real (albeit weak) reason for being.

Adding the “more probative” requirement to Rule 803(16) would have a substantial ameliorative effect on the potential abuses raised by ESI. As discussed above, in any case in which there is old ESI available, there is likely to be reliable ESI that could be admitted to prove a point. It is otherwise simply bad practice to allow a proponent to admit unreliable ESI just because it is old.

The added advantage of tracking the “more probative” language from the residual exception is that there is case law that can and should be borrowed from Rule 807 on what constitutes “reasonable efforts” to obtain information admissible under other exceptions. The case law under Rule 807 indicates that a proponent must try to find alternative evidence, but need not undertake Herculean efforts to do so.¹²⁶ “[L]imitations upon the financial resources available to the parties and the court are rightfully considered.”¹²⁷ As one court put it, whether equally probative evidence is reasonably available depends upon “the importance of the evidence, the means at the command of the proponent, and the amount in controversy.”¹²⁸ Thus, as applied to ESI and the ancient documents exception, old ESI might be admissible if

¹²⁵ See SALTZBURG, MARTIN & CAPRA, *supra* note 22, § 807.02[5] (explaining that the rationale for the “more probative” requirement “is that the residual exception should be reserved for cases of clear necessity”).

¹²⁶ See the cases cited in SALTZBURG, MARTIN AND CAPRA, *supra* note 22, §§ 807.17-807.21.

¹²⁷ *Id.* § 807.11.

¹²⁸ *Hal Roach Studios v. Richard Feiner & Co.*, 896 F.2d 1542, 1552 (9th Cir. 1990).

alternative ESI can only be found by expensive forensic efforts or could only be read only by obtaining software that is not easily available.

One might ask: If you are going to add a necessity requirement from Rule 807, then why not add the reliability requirement from Rule 807 as well? The answer is that there would then be another Rule 807—there need not be two of them. The additional necessity-based language would limit the exception to its original rationale and it would make it much less likely that the exception would become a broad avenue of admissibility for questionably reliable ESI because, in most cases, there is likely to be reliable ESI that can be admitted under other exceptions.

Here is a possible Committee Note explaining the addition of a “more probative” requirement to Rule 803(16):

Committee Note. Rule 803(16) has been amended to require a specific showing of necessity before hearsay may be admitted under the ancient document exception. *See* Rule 807 (imposing an identical necessity requirement). Unlike the other hearsay exceptions, Rule 803(16) imposes no requirement that the hearsay in a document be reliable. The basic justification for the exception is necessity, but the text of the existing Rule does not, in fact, require the proponent to show that there is no other way to prove the point for which the hearsay is offered. The absence of a necessity requirement is particularly troubling given the development and widespread use of electronically stored information. Without a necessity requirement, a proponent might use the ancient documents exception to admit unreliable ESI or hardcopy, even though reliable evidence may be readily available.

The language added to the Rule is intentionally chosen so that guidance from case law under Rule 807 can be used to interpret the identical language in Rule 803(16).

Of course, the necessity-based solution suffers from the fundamental flaw from which the ancient documents exception has always suffered: the unsupportable equation of authenticity and reliability. Essentially, the exception, as amended by the necessity language, would say that unreliable hearsay can be admitted when it is necessary to prove a point. That is logically problematic, but at least the addition of

necessity-based language will put the exception back where it always was—as a backwater in the hearsay rule. It will limit the damage that will occur from what would otherwise be wholesale admission of unreliable ESI, and it responds to the Advisory Committee’s understandable reluctance to abrogate hearsay exceptions where the ground for the amendment is that the exception was wrong from the start.

V. CONCLUSION

The ancient documents exception to the hearsay rule should be changed before litigants find out that it is an open door to admitting old and unreliable ESI as evidence. Academic purity would suggest that the exception should be abrogated because it did not make sense in the first place. But a compromise approach—specific language limiting the exception to the necessity-basis on which it has always been implicitly grounded—will serve to prevent overuse of the exception as applied to ESI without the jarring effect of totally eliminating a traditional exception to the hearsay rule.