



Research Paper

A Legal Analysis of Witness Depositions in Digital Age: Exploring the Impact of Technology on Testimony

Victor Nonso Enebeli, PhD* & Edwyn Jonathan**

Abstract

In recent years, there has been an increasing use of video conferences to deliver witness testimony. It has recently been regarded as feasible for all lay or factual evidence to be delivered by video conference. The concept of witness testimony, particularly that of the deponent, as well as the rationale for examining witness statements, will be first delineated. The impact of modern technology on witness testimony is considered next, with traditional positions and current developments being illustrated in the context of civil and common law jurisdictions. Particular attention is paid to the use of written witness statements and hearing oral evidence through video conferencing and closed-circuit television. Thereafter, this considers the implications of the use of modern technology for the administration of justice. The advantages and disadvantages of written witness statements and the use of technology are considered. Admissibility, reliability, and fair hearings are of paramount interest. It will also examine the need for cross-examination and for deponents to appear as a fait accompli. In doing so, it will discuss the impact of technology and the disparity of treatment applicable to various forms of witness testimony. The overriding questions of due process and the right to a fair hearing will be considered at all times.

Keywords: Exploring, Depositions, Legal Analysis, Technology, Testimony, Witness

Received 14 Sep., 2024; Revised 27 Sep., 2024; Accepted 30 Sep., 2024 © The author(s) 2024.

Published with open access at www.questjournals.org

I. Introduction

Witnesses and their depositions represent a guiding principle of trial advocacy and the administration of justice. Legal systems mandate the recording of witness testimony in a variety of ways.¹ European inquisitorial legal systems developed an extensive practice of witness depositions, while common law systems relied, at their initiation, primarily on live witness evidence. A reason for concern is that technological innovation has evolved at a rapid pace while traditional evidence and hearing practices have not adapted at the same rate.² The law traditionally has been tested through all elements within it being subjected to analysis, and during this period of change, we must reconsider key components that configure the way things are done, including witness testimony. This paper deals with the well-known fact that modern technology is pervasive and integral to society and explores how witness testimony has developed in an increasingly digital world.

Some of the main reasons that justify this investigation are: remote communication tools, such as video conferences, have become an absolutely ubiquitous form of face-to-face interaction between people. Digital evidence has become predominant, displacing many forms of physical data, including voice, image, and biometric data. Recent constitutional developments have provided that the visual or acoustic recording of both witness testimony and a trial is to be used not only to decide whether evidence has been lawfully obtained or if there have

* PhD (Coventry), B.L., (Abuja), LLM (Coventry), LLB(Hons) (London Met), Director of Studies, Justice Mary Odili Judicial Institute, Port Harcourt, Rivers State of Nigeria. Senior Lecturer, Department of Public Law, Faculty of Law, Rivers State University. Phone: 09020176657, email: victor.enebeli@ust.edu.ng

** PhD, LLM, BL, LLB(Hons). Senior Lecturer, Department of Jurisprudence and International Law, Faculty of Law, Rivers State University, Port Harcourt. Phone: 08032608644, Email: edwynjonathan@gmail.com

¹Wells, G. L., Kovera, M. B., Douglass, A. B., Brewer, N., Meissner, C. A., & Wixted, J. T. (2020). Policy and procedure recommendations for the collection and preservation of eyewitness identification evidence. *Law and Human Behavior*, 44(1), 3–36. <https://doi.org/10.1037/lhb0000359> accessed on the 22/09/2024

² Gill N, Hynes J. Courtwatching: Visibility, publicness, witnessing, and embodiment in legal activism. *Area*. 2021;53:569–576. <https://doi.org/10.1111/area.12690> accessed on the 22/09/2024

been any human rights violations, but whether the evidence presented is reliable. These changes can be seen to carry significant challenges and present windows of opportunity for the use of technology in the courtroom and digital witness testimony.³ Technology, evidence, and reliability have always played a complex relationship, but due to the prevalent use of digital evidence, today more than ever, courts and legislation are forced to address problems of evidentiary reliability concerning hearsay statements and statements contained in reports. There is a tremendous corpus of material that is indicative of the important trends in legal reasoning and judicial outcomes in some important jurisdictions that is relevant to the analysis that we carry out in this paper. Consequently, this paper calls into question the current legal practice, defends the analytical method adopted as indicative of legal answers to a complex issue, and can be seen to make a strong call for recognition of this problem area that merits further legal training and a body of research that can assist with the adoption of appropriate international norms.

II. Historical Development of Witness Depositions

In ancient and medieval legal cultures, methods for recording depositions hinged on predilections and were not consistent. Examiners recorded witnesses in the language they knew best in the auditory legal culture found in many courtrooms throughout history.⁴ The realization of an omnipresent, non-erroneous divine intelligence reported by early polytheistic societies and by monotheistic religious groups came across as less relevant to many other people. Throughout countless centuries, the prevailing view across the world has been that the way in which people store evidence and deliver judgments about events depends on testimony made up of human memory full of omissions, commissions, ambiguities, distortions, circumstances, and relationships.⁵ Such comprehension has led to the creation of a variety of evidence intelligence devices, the best known of which is the witness deposition before the record of a lawsuit. In examining the historical continuum of evidence recording, the multiple methods of obtaining testimony are the focus of this chapter: as a result of changing perceptions, knowledge, and technology, evidence recording has undergone constant change.⁶ Among the various ways in which we remember the past is testimony. Since it first surfaced in ancient legal and religious texts, human memory has rarely changed. The method of recording and cross-evaluating memories, on the other hand, has changed.

2.1. Origins and Evolution

The recognizable concept of a witness deposition has grown alongside Western civilization up to the present day. Testimony and the quest for objective evidence sources are central to legal decision-making, and similar practices predate the first trial. Excluding mythology, we can recognize testimony obtained by various means and question these to find an origin to current deposition practices observable in each of these steps in Western civilization. Each society's legal culture and pragmatic decisions further adapt the gathering of testimonies to accomplish the decision-making function of a nascent legal ordering process embedded in oral custom.⁷

Exponentially, literatures addressing the contentious issue of origins and developments of witness depositions find it useful to illustrate legal practices and evolutionary steps of the Western civilization legal practice. In ancient Greece and Rome, practices developed that appear to have been testimony depositions. The accounts herein find themselves developing and multiplying into the civil tradition of gathering witness testimonies in such diverse ways as inquisitors in papal Europe, ecclesiastical practice, and later secular clergy and royal officials reporting testimony in trials and proceedings.⁸ On the other end of the Roman world, decentralized and common-law inspired procedures evolved differently and appear to have developed along the practice of a "law of truth," a mix of local customs, chivalric values, and discretionary norms.⁹ Significant social constraints were imposed to reach an acceptable judgment. In areas of southern, central, and western France, this

³ Ingram, J.L. (2021). *Criminal Evidence* (14th ed.). Routledge. <https://doi.org/10.4324/9781003092360> accessed on the 24/09/2024

⁴J. B. Mahr and G. Csibra (2020). Witnessing, Remembering, and Testifying: Why the Past Is Special for Human Beings. *Perspectives on Psychological Science* 2020, Vol. 15(2) 428–443

⁵ J. J. Roberts R. Lightbody R. Low & S. Elstub (2020). Experts and evidence in deliberation: scrutinising the role of witnesses and evidence in mini-publics, a case study. *Policy Sciences* (2020) 53:3–32. Available at <https://doi.org/10.1007/s11077-019-09367-x> accessed on the 24/09/2024

⁶ Supra (n3)

⁷ Susan Hogervorst (2020) The era of the user. *Testimonies in the digital age, Rethinking History*, 24:2, 169-183, DOI: 10.1080/13642529.2020.1757333 accessed on the 24/09/2024

⁸B. Altman (2022), Can't We Just Talk About This First?: Making the Case for the Use of Discovery Depositions in Arkansas Criminal Cases, 75 *Ark. L. Rev.* (2022).

⁹ P. J. Byrne (2023). Taking Depositions at Molong: The Operation of Legal Power in 1850s New South Wales. *Law, Crime and History* Volume 11, issue 1 (2023): 52-81

"law of truth" developed differing customs in a region of decentralized yet overlapping jurisdictions that required judges to recruit up to 100 neighbors—all preferably of the same rank, usually the litigants—through a process of renvoi back to one's adversaries to collectively try the dispute.¹⁰

III. Legal Framework for Witness Depositions

Depositions of witnesses and experts are conducted pursuant to various rules depending on the jurisdiction where the deposition is taking place. Regardless of venue, many constitutional and statutory provisions and common law decisions establish general principles that undergird the deposition process.¹¹ There are foundational rules and guidelines that undergird the examination of a witness through a deposition and determine its admissibility at a later trial. This area of law, while regularized to some extent via enshrined and evolving practice, may be more fluid than other evidentiary norms. Societal and technological change have sometimes moved swifter than the law to guide depositions, potentially providing some clues to how depositions may be used in the future. This system of practice governed by mechanical procedures finds its guiding principles in a legal system deeply influenced by technology. The law adjusts to technology through the evolution of substantive law and societal norms. Constitutional and statutory provisions, as well as common law principles, provide the framework of the practice of depositions. Such rules remain viable even as society and related technological and indispensable practices for society at large emerge. Federal and state courts also diverge on many specific rules covered in the Federal Rules of Evidence and the Federal Rules of Civil Procedure. The standardization of deposition practice is not uniform throughout the United States. In addition to the laws informing the process, depositions and witness testimonies have been shaped through practice and various judicial decisions.¹²

3.1. Constitutional and Statutory Foundations

As the United States Supreme Court has observed, the history of witness depositions extends into the nation's "early days." In principle, witness depositions protect the due process rights of deponents by allowing them to provide testimonial evidence under controlled circumstances. Deposing parties reciprocally derive a benefit from the deposition process: they may obtain a firmer command of the underlying facts or leverage the imprecise deponent deposition as a strategy to extract favorable trial inferences. This historical interrelationship between deponents' rights and obligations, however, does not mean that modern systems of due process and conflict-of-laws principles compel identical treatment of deposing parties and nonconsensual deponents.¹³

This subsection canvasses three sets of legal principles that underpin modern witness depositions. First, due process implications of witness depositions are examined in light of the constitutional amendment and its statutory counterpart granting rights to confront adverse witnesses. Second, statutory deposition provisions are scrutinized. Much like admissibility rules, deposition statutes contain explicit directives related to process: they dictate the manner in which testimonies may be obtained; they set procedural limits on the admissibility of experiment and demonstration evidence. Third, recent observations by state and federal courts regarding the utility of witness depositions give guidance for the conflict of law issues. These issues, the strategic purposes of deposition, and the consequences of depleting resources of remote trial locations by having pretrial proceedings that functionally resemble remote trials, merge rights-as-obligations analysis and conflict-of-laws principles.¹⁴ Modern, European, and conflict-of-laws treatments of videotaped pretrial depositions indicate that a background principle of giving deponents control over a process that uses their image as a communicative medium might generate an entitlement to consent limited to videotaped copies of one's own depositions. Each discussion emphasizes the interplay between constitutional and statutory law, residual procedural discretion, modern values, and the digitization of written communication.¹⁵

¹⁰ *Supra* (n9)

¹¹ M. Zamoff (2024). Criminalizing Depositions in Arbitration. *Minnesota Law Review* [108:2437]. Available at https://scholarship.law.umn.edu/cgi/viewcontent.cgi?article=2078&context=faculty_articles assessed on the 24/09/2024

¹² Line, E.N., McCowan, K., Plantz, J.W., & Neal, T.M.S. (2022). Expert witness testimony. In R. Roesch (Ed.), *Psychology and Law Section*; R. Gurung (Ed.), *The Routledge Encyclopedia of Psychology in the Real World*. Taylor and Francis Online. <https://doi.org/10.4324/9780367198459-REPRW5-1>. Accessed on the 24/09/2024

¹³ Gheorgh B. (2024). Expertise in the criminal judicial process. *Technium Social Science Journal* Vol. 54 216-233

¹⁴ Alsaden S. (2023). Foreign Law in Federal Trial Courts: Analysis of Challenges and Guidelines for Remedy. *Boston University International Law Journal* [Vol 41:213]

¹⁵ Zahra S. & Lohani A. (2022). Documentary and oral Scientific expert Evidence and Modes of Scientific Examination under Pakistani Laws. *Journal of Law & Social Studies (JLSS)* Volume 4, Issue 1, pp. 203-216

IV. Challenges and Opportunities in Digital Age

There is both good and bad news about the fact that in this day and age, technology can bring out witnesses' depositions in legal matters. The digital period also brings a series of challenges in order for witness testimonies to be usable in legal matters. Data, documents, or any other pieces of information stored electronically are subject to corruption during the formal legal processes.¹⁶ As soon as documents or other pieces of evidence are permitted to be presented in court, there appear at least two opportunities for corruption. Forensically, there is also a risk that digital evidence can be manipulated in whole or in part so that it can be presented as a singular event, harming the chain of custody and integrity of the evidence.¹⁷ On the positive side, technology also makes it convenient to access electronic evidence or information in cross-border cases. Technological developments represent a series of opportunities and challenges in witness depositions in the digital age. Digital evidence attracts manipulation risks, breaks, and disproves, leading to the development of methods to verify its integrity. Another investigation concerning witness testimony through technology is, "What value would the use of technology in the verification process add?"¹⁸ Further cross-border considerations for legal testimonies and practicalities include the concept and practicalities of recording arrangements, as well as whether video and audio recordings can be accessed. An evidence-based analysis of these issues follows in the sections below.¹⁹

4.1. Authentication and Integrity of Digital Evidence

Evidence does not lose its importance even if it is in electronic form. Rather, sometimes electronic data are authenticated and have more integrity than other types of data. One of the key aspects of electronic data is that when it is taken into custody, it has to be protected according to the rules of evidence. In this sense, a change in the form of the deposition during or after taking it into custody causes a breakdown of the chain of custody and leads to inadmissibility. In order to ensure that evidence, which is primarily electronic, continues to have the power to convince, it must be safeguarded. If sufficient measures are taken to ensure continuity, the value of evidence will be preserved, and it will remain one of the fundamental sources.²⁰

Courts should be vigilant in both whether this type of evidence has been authenticated to the actual case and whether it has retained its integrity. Authenticating whether the digital evidence is related to the person in question is necessary, but it alone is not sufficient for the evidence to move to the probative assessment stage. Evidence can be accepted as authentic in relation to the case but may be inadmissible on the grounds of another rule of evidence. The integrity of any digital litigation evidence is a critical point. To achieve this, it is necessary to prove that it has been tamper-proof from the moment it has been received until the time it is submitted to the court, even if it is not stored as a record. The fact that digital depositions are made with the principle of audio and video facilitates the follow-up of necessary technical infrastructure regulations.²¹ The electronic signature law includes many standard rules of international law and has drawn up technical documents aiming to secure the systems. However, the principles introduced are not applied in the courts in practice. Ensuring the integrity of digital recordings is an absolute must, even if the practice is not applied. The fact that the usage standards, such as the functioning of digital systems, are determined only between the persons in question has the potential to seriously damage the legal system.²² With the adoption of suitable technical regulations, providing the Human-Computer Interaction, which is the basic factor in the operations maintained by different people, gets increased. There is no restriction on the person who takes the oath. Therefore, the principle of equality will be ensured in the sense that everyone is equal before the law. Since the witness does not physically enter the court, the deepfake recording has a minimum possibility. A complex spectrum audio voice has audio voices specialized to detect such interventions.²³

¹⁶ James R. Steiner-Dillon (2024). Expert Malpractice, 2024 URL 281 (2024)

¹⁷ Losari, J. J. (2023). Geography has little impact: a comparative study on the role of judges in Singapore and Indonesia in the taking of evidence in civil proceedings. *Asia Pacific Law Review*, 32(1), 190–212. <https://doi.org/10.1080/10192557.2023.2274635> accessed on the 25/09/2024

¹⁸ *Supra* (n17)

¹⁹ *Supra* (n17)

²⁰ G. T.P Siregara, S. A. Siregarb, R. Silabanc (2020). Legal Implementation of Electronic Information and Transaction Law in Preventing the Spread of Content Containing SARA Issues through Social Media. *International Journal of Innovation, Creativity and Change*. www.ijicc.net Volume 13, Issue 10, 2020

²¹ H. Wua & G. Zheng (2020). Electronic evidence in the blockchain era: New rules on authenticity and integrity. *Computer Law & Security Review* 36 (2020) 105401

²² Karagiannis, C.; Vergidis, K. Digital Evidence and Cloud Forensics: Contemporary Legal Challenges and the Power of Disposal. *Information* 2021, 12, 181. <https://doi.org/10.3390/info12050181> accessed on the 25/09/2024

²³ Horsman G., Sunde N. (2020). Part 1: The need for peer review in digital forensics, *Forensic Science International: Digital Investigation*, Volume 35, 2020, 301062, ISSN 2666-2817, <https://doi.org/10.1016/j.fsidi.2020.301062>. Accessed on the 25/09/2024

4.2. Cross-Border Considerations

Implementation of the system for witness deposition requires international cooperation, as globalization has made cross-border transactions a daily occurrence. Differences among legal systems regarding laws and regulations, adhesion or rejection of the Harmonized Uniform Rules, and standards of admissibility of evidence are important obstacles to harmonizing the conduct of witness depositions in litigation.²⁴ In transnational cases, problems such as conflicting regulations have arisen. Although most countries accept the taking of evidence provision and have included it in their numerous bilateral and multilateral agreements, they do not have the same standards of admissibility requirements, which have caused international cooperation to take a new course. The main issue nowadays in taking evidence or depositions is not whether to permit it, but how each jurisdiction permits it, given its witness-friendly culture and its adversarial or inquisitorial trial systems. Many imperatives, such as cultural differences in regard to attitudes about taking depositions and testimonial expectations, also explain the real formal requirement of a formal requesting party to an authorized judicial authority to gather testimonial proof and evidence rather than a prosecutor's investigatory interest promising to collect evidence.²⁵

Nonetheless, another perspective considers that globalization and the technology revolution drastically reduce the substance of the aforementioned barriers. Safe data privacy laws or regulations of certain states will not protect it from being accessed per one's entitlement.²⁶ Misappropriation of confidential deposition that is transmitted and stored in a peculiar third state's database can be tricky; but it is the trick of lawyers to find out how to access it and to duplicate it legally and convincingly. International practice has not laid the mechanism to take care of these complex applications if the witnesses are reading through Real-Time Video Conference, or if the Executive Director of the Secretariat is presiding over the deposition in their office while the witness is giving his testimony from his desk, or if the Notary takes a deposition swear through the internet from another location.

V. Impact of Technology on Testimony

Technology and machines increasingly impact the law where discussions occur in a formal office environment where legal practitioners gathered to review a case and plan a short itinerary. Presently, interactions on digital platforms with the use of machines can mimic person-to-person conversations, eliminating the need to be face-to-face.²⁷ Deponents can be invited via e-delivery to a temporary virtual deposition space, or to simply log in to a conference call. Whereas remote depositions were somewhat rare a few years ago, they have since become standard practice. Recently, remote depositions have been replaced with even more modern "virtual" deposition techniques designed to simulate real-time speech communication between multiple actors using computer-mediated technology.²⁸ This unprecedented thrust of depositions from paper to e-paper to screens in just three chapters of the digital age supports enacting legal adaptations for effective use of the medium. In every case, the quality and reliability of the evidence in question are called into question.

These new digital modes of evidence production are not only being observed in the context of the legal system. The covid-19 pandemic has also led to a rapid significant increase in remote and digital court hearings across Europe and some of Asia.²⁹ In the United Kingdom, remote sessions do not require permission from the Criminal Procedure Rules Committee, while for the release of video-recorded evidence, a procedure typically resorted to in cases of child or infirm witnesses, the court must consent. The use of virtual and digital evidence in court has influenced legal practice, as practitioners incorporate technology into the legal system, enhancing the practice and challenging witnesses' audio-visual credibility. Juries and lawyers overwhelmingly see a deposition via digital video recording as more realistic and less rehearsed than a deposition achieved through a transcript

²⁴ Awuson - David, K, Al-Hadhrani, T, Alazab, MA, Shah, N & Shalaginov, A 2021, 'BCFL logging: An approach to acquire and preserve admissible digital forensics evidence in cloud ecosystem', *Future Generation Computer Systems*, vol. 122, pp. 1-13. <https://dx.doi.org/10.1016/j.future.2021.03.001> accessed on the 25/09/2024

²⁵ Ibid (n23)

²⁶ Zhang L, Xu M, Chen H, Li Y and Chen S (2022) Globalization, Green Economy and Environmental Challenges: State of the Art Review for Practical Implications. *Front. Environ. Sci.* 10:870271. doi: 10.3389/fenvs.2022.870271 accessed on the 25/09/2024

²⁷ Dodson S., Rosenthal L., and Dodson C. (2020). The Zooming of Federal Civil Litigation, 104 *Judicature* 13 (2020). Available at: https://repository.uchastings.edu/faculty_scholarship/1816 accessed on the 26/09/2024

²⁸ D. Allen, S. Allen, G. Le Roux, A. Simonneau, D. Galop, and V. R. Phoenix (2021). Temporal Archive of Atmospheric Microplastic Deposition Presented in Ombrotrophic Peat. *Environ. Sci. Technol. Lett.* 2021, 8, 954–960

²⁹ Sourdin T, Li B, McNamara DM (2020). Court innovations and access to justice in times of crisis. *Health Policy Technol.* 2020 Dec;9(4):447-453. doi: 10.1016/j.hlpt.2020.08.020. Epub 2020 Aug 30. PMID: 32895624; PMCID: PMC7456584.

alone.³⁰ A recorded testimony, especially one in which the deposition itself is guided by interviewers via additional visual evidence, is viewed as even more credible. Beyond that, blooper-reel expectations have been highly overestimated. Although distractions occur more frequently when the witness is sitting in a deposition room, distractions that come with digital technology, such as poor internet connections, also detract from the deposition. A small majority of indirect witnesses also put value in a digital deposition and are not immediately dismissive. However, the digital format does not overcome instances where the deposition lacks credentials.³¹ With respect to both digital and traditional depositions, hypothetical retail witnesses slightly preferred digital depositions for their value in a trial. Overall, the emerging legal trend to exploit all this potential suggests the need for slowly enhancing earlier legal systems with the rise of new technology.

5.1. Virtual and Remote Depositions

One of the newest formats involving witness deposition is virtual and remote depositions. Technology enables parties and witnesses to join depositions and conversations from anywhere in the world, breaking geographical barriers to provide direct access. Since many courts require in-person or remote deposition testimonies, remote depositions appear to have advantages. They make it possible to reduce extraneous costs, such as travel and accommodation, and to conduct quick depositions that save time.³²

The implication of this method might be greater than it seems. To enforce the rule of law, it is important to recognize that testing the evidence is not merely about allowing the witness to be present and speak. It's also about your body language, your physical reactions, and your personal interactions when you communicate. It is critical to evaluate witness responses, which may indicate deception through voice fluctuations and uncomfortable pauses when responding.³³ This is an important, unspoken aspect of testing the proof in a criminal context, and the technology currently available still lacks the capability to fully capture all of these aspects fairly and ethically.³⁴ As a result, far from being a simple matter of accommodating witness testimony dynamics in the modern age, a new legal framework must be implemented to appropriately regulate virtual and remote depositions and the possible use of depositions testimony.

VI. Ethical and Privacy Considerations

While the practice of depositing a witness may seem to make the story available to others in the dispute, and thereby renders the content public, the primary concern is keeping the story confidential from those who were not meant to hear it.³⁵ In the digital age, tools such as remote depositions rely on connections over phone lines and the internet, which imply a greater risk for information leaks. Previous studies have shown the risks associated with the veracity of the privacy of using the internet and the correlation of risks associated with disclosing private information.³⁶

The collection, storage, and handling of so much digital evidence raise significant ethical and practical issues. Privacy laws vary across and even within different jurisdictions and will place restrictions on the use, storage, and consent of digital evidence—all of which is relevant to deposition.³⁷ These laws will generally apply

³⁰ Haigh, Richard and Preston, Bruce. "The Court System in a Time of Crisis: COVID-19 and Issues in Court Administration." *Osgoode Hall Law Journal* 57.3 (2021) : 869-904. DOI: <https://doi.org/10.60082/2817-5069.3608> <https://digitalcommons.osgoode.yorku.ca/ohlj/vol57/iss3/11> accessed on the 26/09/2024

³¹ Sourdin, Tania and Zeleznikow, John (2020) Courts, mediation and COVID-19. *Australian Business Law Review*, 48 (2). pp. 138-158. ISSN 0310-1053

³² Beightol, K. L. (2022) "Remote Depos From the Trenches." *Trial*, vol. 58, no. 6, June 2022, pp. 48+. Gale Academic OneFile, link.gale.com/apps/doc/A707472214/AONE?u=anon~adf24302&sid=googleScholar&xid=56b3a4a5. Accessed 27/09/2024.

³³ Marcus, Richard (2022) "Tort Litigation: Brave New World: Technology and Tort Practice," *The Judges' Book: Vol. 6, Article 15*. Available at: <https://repository.uchastings.edu/judgesbook/vol6/iss1/15> accessed on the 27/09/2024

³⁴ Stoykova R. (2021), Digital evidence: Unaddressed threats to fairness and the presumption of innocence, *Computer Law & Security Review*, Volume 42, 2021, 105575, ISSN 0267-3649, <https://doi.org/10.1016/j.clsr.2021.105575>. Accessed on the 27/09/2024

³⁵ Woodrow Hartzog & Neil M. Richards, Privacy's Constitutional Moment and the Limits of Data Protection, in *61 Boston College Law Review* 1687 (2020). Available at: <https://doi.org/10.2139/ssrn.3441502> accessed on the 27/09/2024

³⁶ *Supra* (n34)

³⁷ Emmanuel Pernot-Leplay, China's Approach on Data Privacy Law: A Third Way Between the U.S. and the E.U.?, *8 PENN. ST. J.L. & INT'L AFF.* 49 (2020). Available at: <https://elibrary.law.psu.edu/jlia/vol8/iss1/6> accessed on the 27/09/2024

to remote depositions, even if the attorneys or the witness chose a remote deposition as they would apply to the in-person deposition. Privacy laws will usually require that the witness be informed of the topics to be covered in the deposition and informed where the deposition will be used. The laws may also consider the nationality of the witness and the information itself.³⁸ For example, deponents in Canada will generally require informed consent if there is any chance that their information could be used in the United States, as Canada's higher privacy rights are vis-à-vis the United States.

6.1. Confidentiality and Data Protection

Protection of sensitive personal data is an omnipresent concern in the digital age, a concern that is especially relevant for a process as sensitive and personal as gathering testimony. The importance of this is reflected in legal frameworks that impose general and practical obligations concerning the security of personal data.³⁹ In order to protect the confidentiality of sensitive data and to comply with data protection standards, a range of mechanisms serve to protect the data against unauthorized access, and it also helps to prevent further dissemination of sensitive information. Thus, these compliance and safety standards are considered important to avoid massive data breaches and guarantee the completion of witness depositions without disturbances. The potential legal consequences of data breaches and unauthorized access or misuse concern all parties involved, their lawyers and law firms, as well as the videoconferencing software providers, who could be subject to liability under data protection regulations.⁴⁰

Observed data breaches due to unsecured virtual settings and insufficient data protection could result in damage and unrest for the witnesses testifying in this manner, especially concerning the issue of "witness intimidation."⁴¹ Certain companies have already been held liable for misleadingly advertising videoconferencing solutions as "end-to-end encrypted," but the data were actually neither encrypted nor protected. For the legal actors involved, liability could derive from procedural misconduct. Conducting a deposition in a virtual setting may be highly convenient, but it requires a host of new considerations, particularly for legal practitioners. These are of relevance immediately before the deposition, i.e., as soon as technical specifications need to be worked out, and during the session, to ensure that privileged and sensitive information is kept confidential throughout. In order to conduct a virtual deposition and comply with data protection standards and norms, a sound understanding of this question is crucial.⁴² Thus, this section seeks to explain how legal professionals can comply with the duty to ensure privacy and confidentiality while planning and conducting a virtual deposition. Emerging camera surveillance and audio recording tools and new technologies could help to ensure increased data protection and confidentiality but require further research.⁴³

VII. Conclusion

It is safe to conclude that witness depositions have been drastically impacted by the progress of technology. These days, individuals are more socialized, both legally and cosmetically, to put forward discrete accounts of themselves. Since such witness experience has become pervasive and provides opportunities for the deposition-dependent account, legal actors must balance competing ethical and legal responsibilities as technology reshapes litigation.⁴⁴ The main innovations introduced are concerned with the expansion of historical insights on the changes in legal talk taking over the centuries and identify future research opportunities. Also, we suggested some practical recommendations. Adapting to technological innovations and integrating them into legal practice is an essential task.⁴⁵ We discovered some surprises, based on our findings, which would resonate with

³⁸ Lauren Henry Scholz, *Private Rights of Action in Privacy Law*, 63 *William & Mary Law Review* 1639 (2022), Available at: <https://ir.law.fsu.edu/articles/754> accessed on the 27/09/2024

³⁹ Wexler R. (2021). *Privacy Asymmetries: Access to Data in Criminal Defense Investigations*. 68 *UCLA L. REV.* 212 (2021)

⁴⁰ A. Michael Froomkin & Zak Colangelo, *Privacy as Safety*, 95 *Wash. L. Rev.* 141 (2020). Available at: <https://digitalcommons.law.uw.edu/wlr/vol95/iss1/6> accessed on the 28/09/2024

⁴¹ Cursters B. & Stephen L. (2021). *The Use of Data as Evidence in Dutch Criminal Courts*. *European Journal of Crime, Criminal Law and Criminal Justice* 29 (2021) 25-46

⁴² Kemp K., (2020) *Concealed data practices and competition law: why privacy matters*, *European Competition Journal*, 16:2-3, 628-672, DOI: 10.1080/17441056.2020.1839228 accessed on the 28/09/2024

⁴³ Calzada, I. *Citizens' Data Privacy in China: The State of the Art of the Personal Information Protection Law (PIPL)*. *Smart Cities* 2022, 5, 1129–1150. <https://doi.org/10.3390/smartcities5030057> accessed on the 28/09/2024

⁴⁴ Scott, Morgan (2024) "A Different Standard for Different Stages: Why Parties Must Be Allowed to "Invoke the Rule" During Oral Depositions," *Vanderbilt Law Review En Banc*: Vol. 77: Iss. 1, Article 5. Available at: <https://scholarship.law.vanderbilt.edu/vlreb/vol77/iss1/5> accessed on the 28/09/2024

⁴⁵ Christopher J. Vidrine, *The Zoom Paradox: Schrodinger's Witness*, 82 *La. L. Rev.* (2021) Available at: <https://digitalcommons.law.lsu.edu/lalrev/vol82/iss1/12> accessed on the 28/09/2024

individuals within the practice of law but were not derivable from written codes or statutes. Legal practitioners should thus more fully integrate technology into their practices of deposing witnesses. The conclusion, simply stated, is that courts, practitioners, scholars, and theorists have long turned a blind eye to, been surprised by, or misunderstood the ergonomics and information systems set in place through the generations. We have set out to explore what has been lost – or, as we have argued, been veiled – through our failure to appreciate this digital transformation.⁴⁶ A related challenge is to stop running from the power of digital capitalism, which often seeks solutions in some kind of behavioral economics-based ethics. In modern society, we do, for good or ill, talk, record, and save virtually all of our interactions with each other (and with machines). This is a fundamental transformation, and one which makes possible the virtually complete record. The implications of that development have not been worked out; we have only just begun to feel their effects. The new legal field – or research domain – will be almost as alien, no doubt, to current evidence scholars as media law is to torts specialists.⁴⁷

7.1. Recommendations for Future Research

Policymaking may well be interested in studies that follow depositions years after the technological evolution since the pandemic. Are alterations offset as technology becomes better known, more controlled, and more commonly used? Do the technologies used become more effective and less invasive of judicial systems? It is also important that different jurisdictions are studied to understand their range of potential. In addition, it is also important to analyze the ethical implications of hypothetical future research. As a discipline, the law, in a context such as digital processing, must recognize its own limits. Law researchers and those transgressing the lines of other disciplines would certainly benefit from collaborations with technological researchers to enable them to apply ready-to-use tools that enable evidence to be built without significant breach of compliance with the principles of law.

Future research on this subject could also be concerned with emerging technologies such as artificial intelligence and the related jurisdictional practices of blockchain enabling the agreements associated with intelligent processes. The deposition process may change as these technologies become a reality that could change the processes, public responsibilities, and other aspects of depositions. AI-generated and recognized evidence could, for example, be able to be exchanged for artificial intelligence in exceptional cases.

⁴⁶ Michael T. Deer (2022). On-Screen v. in Person: How a Tech-Savvy World Is Impacting Jurors' Perceptions of Witnesses, 60 Duq. L. Rev. 339 (2022). Available at: <https://dsc.duq.edu/dlr/vol60/iss2/9> accessed on the 28/09/2024

⁴⁷ Bryan Altman (2022). Can't We Just Talk About This First?: Making the Case for the Use of Discovery Depositions in Arkansas Criminal Cases, 75 Ark. L. Rev. (2022). Available at: <https://scholarworks.uark.edu/alr/vol75/iss1/4> accessed on the 28/09/2024