

RESEARCH ARTICLE

Paper in the Age of the Digital: The Curious Case of 65-B Certificates in India

Shikhar Goel

New York University, New York, United States Email: sg6802@nyu.edu

Abstract

Law enforcement institutions in India are undergoing fundamental media technological transformations, integrating digital media technologies into crime investigation, documentation, and presentation methods. This article seeks to understand these transformations by examining the curious case of 65-B certificates, a mandatory paper document that gatekeeps and governs the life of new media objects as evidence in the Indian legal system. In exploring the tensions that arise when bureaucratic institutions change their means of information production, the article reflects on the continued stubborn presence of paper at this transformative juncture in the life of legal institutions. By studying the role of paper in bureaucratic practices, analyzing jurisprudential debates and case law surrounding 65-B certificates, and thinking through some scattered ethnographic encounters around these certificates involving police officers, forensic scientists, and practicing lawyers, this article argues that despite ongoing digital transformations, law essentially remains a technology of paper.

Keywords: evidence; digital; paper; technology; law

"Legal studies lack any reflection on their tools." (Vismann, 2008, p. 11)

Cornelia Vismann

"I have never had any other subject: basically, paper, paper, paper." (Derrida, 2005, p. 41)

Jacques Derrida

I. Introduction

As they are in many other parts of the world, Indian law enforcement institutions are undergoing fundamental media technological transformations or what Foucault would call "technical mutations," (Foucault,1995, p. 257) where the means to produce, use, store, and disseminate information are changing rapidly. Forensic labs, police stations, and courts have started relying on various software, websites, digital platforms, databases, and video conferencing facilities for their everyday operational needs. Interrogation techniques, forensic procedures, filing and recording practices, and documentation infrastructures are all undergoing rapid transformations. In addition to affordable technological tools and turnkey telecommunication infrastructures, these transformations in the realm of law are only a subset of the larger coordinated transformations undergoing in governance

© The Author(s), 2025. Published by Cambridge University Press on behalf of Asian Journal of Law and Society. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

infrastructures in India since the early 1990s by successive governments. These transformations aim to create India into a "digitally empowered society and knowledge economy" (Government of India, 2022) by integrating Information and Communication Technology (ICT) facilities in governance. The Indian state is embracing digital technology to improve efficiency, accessibility, and accountability, and ease citizens' interaction with the state. While all this integration has the potential for increased control and surveillance over the polity, along with the dangers of systematic marginalisation of vulnerable groups, the Government of India, mainstream political parties of all hues and colours, and the public at large understand these initiatives as a significant move towards citizen empowerment in a technologised world.

Interestingly, one of the ways citizen empowerment has been described in the Government of India's flagship program Digital India's website is to remove the need for the citizens to "physically submit Govt. documents/certificates" (Government of India, 2022). Paperless parliament, paperless courts, paperless cabinet meetings, and paperless governance have become the new buzzwords, characterising the new age of advanced digital governance in India. Embracing the seamless accessibility of the digital as opposed to the brittle and cumbersome materiality of the paper seems to be one of the governing rationales of this mediatised transformation. Paper and files have been seen as quintessential symbolic markers of the slow, inefficient, labyrinthine, layered, and corrupt bureaucratic Indian state, run by petty desk clerks, from the colonial times. Scholars have characterised the Indian state as Kaghazi Raj (Moir, 1993) or the paper state (Mathur, 2016, p. 3) to highlight this obsession with paper. No wonder this populist, techno-corporatist ideology of E-Governance and Digital India, embedded in the cultural logic of the neoliberal technocracy, propelled by what William Mazzarella has identified as the "politics of immediation," 1 that imagines a frictionless state with minimum distance between state and citizens—fulfilling the promises of the ideals of direct democracy by embracing new technology—sees the removal of the paper media as a form of empowerment.

The media materiality of law and state has emerged as a problem quite recently in South Asian scholarship. While most of the research in history and anthropology had previously looked at the content of paper files while studying law and state, they had mostly not examined its materiality (Hull, 2012a, p. 252). It is only now, with the reconstitution of the state under the influence of digital technology that the paperality of the state has become a site of interrogation for both historians and anthropologists. Bruno Latour has suggested an "ethnography of inscriptions" to examine the material basis of how modern social organisations and institutions come into being. Instead of studying intentions, Michel Foucault prescribes looking at the instruments, techniques, procedures, and apparatuses when one is looking to study the "how of power" (Foucault, 2004, p. 24). Matthew Hull, in the South Asian context, emphasises the need to study the interplay (emphasis added) of paper documents and new media formats, suggesting that there needs to be a focus on studying the continuities and breaks with the coming of electronic technologies in the bureau, while not falling into the trappings of the rhetoric of the IT revolution (Hull, 2012a, p. 262). Following their advice and building on the recent scholarship on the media materiality of law and state in South Asia and elsewhere, this article reflects on the ongoing internal media technological transformations within the

¹ "E-governance is, it seems to me, one important avatar of a more general desire for what I am calling a politics of immediation—that is to say, a political practice that, in the name of immediacy and transparency, occludes the potentialities and contingencies embedded in the mediations that comprise and enable social life." See (Mazzarella, 2006, p. 476).

Indian law enforcement agencies by examining the curious case of 65-B certificates. As described in the Indian Evidence Act, 65-B certificates are a mandatory paper document required by the law to be submitted along with new media objects such as CCTV footage, emails, Call Record Data (CDRs), audio recordings, and photographs among various other things, when they enter the court of law in the form of evidence. These certificates assign human authorship to electronic records while assuring their integrity and authenticity as evidentiary objects. In thinking about these certificates from various ethnographic encounters involving police officers, forensic scientists, lawyers, and judges, I reflect on the stubborn presence of paper in a legal system undergoing rapid digital transformations. I use the case of 65-B certificates to argue that despite all the digital transformations and internal re-tooling, law continues to be a technology of paper. A hybrid media ecology does not remove the central and constitutive importance of paper in the operations of law. Eccentric paper practices and epistemes continue underwriting, supplementing, and complementing the usage of advanced digital technologies as the Indian state rapidly adopts them. Newer media forms despite their augmented recording, storage, and dissemination capacities fail to generate trust in the system that is by design based on paper as the dominant medium.

2. Strange encounters

2.1. Another day in lynch-istan

Late in the evening on 1 April 2017, news channels and social media platforms like Facebook, Twitter, Instagram, and WhatsApp were suddenly abuzz with the video footage of a violent mob lynching a middle-aged Muslim man. The victim in the video was identified as Pehlu Khan. Khan along with his sons was driving down the Jaipur-Delhi highway in a pickup truck.² In the truck, they carried two newly purchased cows, which he planned to sell further for some profits.³ Their truck was suddenly stopped by a mob of approximately 200 men, allegedly associated with some Hindutva vigilante groups (Scroll Staff, 2017). They mercilessly thrashed Khan and his sons, damaged their vehicle, and took away their cattle. Attackers accused Khan and his sons of being "cowsmugglers" who had plans of butchering the cattle later. Pehlu Khan succumbed to his injuries a few days later in the hospital. Several such incidents of vigilante mob violence, mostly against Muslim and Dalit men, have been reported from India over the last few years (Daniyal, 2019; Human Rights Watch, 2019). Vigilante groups who carry out these attacks usually video record the entire incident on mobile phones (Mukherjee, 2020). These videos, shot using low-cost media infrastructures of internet-enabled smartphones are later circulated via social media on platforms like Facebook, YouTube, and WhatsApp as vehicles of hate speech against minority groups. Pehlu Khan's lynching was recorded similarly by his attackers. These videos later circulated on news and social media platforms as the incident gained traction.

The investigating officers (IOs) of this case heavily relied on these videos and used screenshots from the footage to identify suspects.⁴ Surprisingly, on 14 August 2019, when the Alwar District Court pronounced its judgement on this incident, men charged with the murder of Pehlu Khan were declared innocent.⁵ News reports from the day of the verdict

² State of Rajasthan vs. Vipin Yadav & Ors. R.J.S 24/2019 (Order dated August 14, 2019).

³ State of Rajasthan vs. Vipin Yadav & Ors. R.J.S 24/2019 (Order dated August 14, 2019).

⁴ State of Rajasthan vs. Vipin Yadav & Ors. R.J.S 24/2019 (Order dated August 14, 2019).

⁵ State of Rajasthan vs. Vipin Yadav & Ors. R.J.S 24/2019 (Order dated August 14, 2019).

mention that as the verdict of the court came out, crowds assembled outside the Alwar court complex and shouted victorious chants of "Bharat Mata ki Jai!" or "Hail Mother India!" reflecting the coercive political environment under which this case was investigated and tried in the court (NDTV, 2019). As the human witnesses turned hostile in the court, a lot came to hinge upon the video and photographic evidence. The court declared the video evidence presented by the Rajasthan Police as inadmissible in the court as the police had failed to produce a certain 65-B certificate, which the law required it to produce with such evidence.

2.2. "It is only a piece of paper, sir"

It was the summer of 2022. I was doing some pilot fieldwork with police and forensic labs for my Ph.D. project in a small town in northern India. One day, while hanging out with the scientific officers at the computer forensics department of a state forensic lab, I realised the importance of 65-B certificates in the internal processing of evidentiary material in the various arms of law enforcement institutions. A female constable had travelled 70 km from her station to the lab. She had changed two buses and hitched rides from two shared autorickshaws to make this journey, with the sole purpose of delivering a CD containing CCTV video footage and case files associated with an ongoing investigation at her station. The CD had to be put for forensic examination at the lab to help the police with further investigations. The scientific officer in charge of the lab closely read the paperwork associated with this media artefact that had come to his lab and noticed how the 65-B certificate attesting that the data had been correctly copied from the CCTV DVR to the CD was missing and therefore refused to accept the case material for forensic examination. He showed a sample 65-B certificate to the constable, asked her to take a picture of it on her mobile phone and get a similar document along with other case material, making sure it was also signed by a Circle Level Officer (CO-a senior officer in police hierarchy) and resubmit the CD. She begged the officer to please accept the CD and paperwork, promising she would arrange for the 65-B certificate to be delivered to the lab later. Recounting the long arduous journey she had made while also lamenting the lack of funds for constables, she exasperatedly said, "ek kagaz hi to hai, sir," "it is only a piece of paper, sir." The scientific officer asked her to drink some water but politely refused to accept the case for his lab without those certificates.

These two anecdotes, eerily reminding us of Franz Kafka's parable, where a man from a far-off village waits for a lifetime to enter the gates of law in vain come before us as perplexities of our times. These anecdotes, when seen in the background of a rapidly transforming legal system, raise some empirical and theoretical questions—What are these certificates? Who issues them? What do they contain? When do they have to be submitted? Why does the law require new media objects to be supplemented by a paper certificate? What accounts for this stubborn presence of paper in the internal workings of legal institutions in a new media ecology? I attempt to answer these questions in the following sections.

3. Law

Witnessing a rapid increase in the number of new media objects, such as audio recordings, video, CCTV, mobile phone call records, chats, emails, etc., being produced as evidence in the Indian courts, the Indian parliament amended the colonial era evidence law to accommodate for the new media realities in which law found itself operating. In the year

2000, a new category of "electronic record" was added to the existing Indian Evidence Act (1872). Developments in India were not isolated, the worldwide e-commerce and dot-com boom in the late 1990s had pushed a lot of countries, including France, Estonia, Tunisia, Singapore, and the United States among many others across the world, to amend their existing rules of evidence to make way for electronic records as admissible evidence (Blanchette, 2012, p. 106). The Indian Evidence Act was originally passed in 1872. It is an illustrative example of how the legal system established under the colonial regime found a continued afterlife in independent India with only minor changes. In the long history of the existence of this legislation, one of the most important changes came about in the year 2000 when a new category called "electronic records" was introduced in it.⁶

Until then, the Indian Evidence Act recognised only two types of evidence (1) documentary and (2) oral. Documentary evidence, defined as "any matter expressed or described upon any substance by means of letters, figures or marks, or by more than one of those means, intended to be used, or which may be used, for the purpose of recording that matter," was further divided into (1) primary and (2) secondary. Primary refers to the original document itself and secondary here refers to a derivative form or a simple copy of the original document or even an oral account of the documents by the person who has seen them. The broad, multi-media definition of the term "document," lawmakers thought was capacious enough to house the new media objects as well. Electronic records were thus included as a sub-category under documentary evidence. Electronic records were defined as "data, record or data generated, image or sound stored, received or sent in an electronic form or micro film or computer generated micro fiche."

According to the Evidence Act, the admissibility of electronic records as evidence in the court is dependent on the fulfilment of certain conditions laid out in Sections 65-A and 65-B of the Evidence Act. These conditions are geared towards ensuring that during the production of electronic evidence in the courtroom, its contents are not manipulated and its accuracy is not jeopardised. They ask the person filing the evidence to testify that the computer from which the evidence has been retrieved/manufactured was not used in any fashion in which it is usually not used; it was not used by anyone else but the person who usually uses it; the record matches the primary data fed into the computer, and the computer was operating properly while the record was being produced.

- (a) the computer output containing the information was produced by the computer during the period over which the computer was used regularly to store or process information for the purposes of any activities regularly carried on over that period by the person having lawful control over the use of the computer;
- (b) during the said period, information of the kind contained in the electronic record or of the kind from which the information so contained is derived was regularly fed into the computer in the ordinary course of the said activities;
- (c) throughout the material part of the said period, the computer was operating properly or, if not, then in respect of any period in which it was not operating properly or was out of operation during that part of the period, was not such as to affect the electronic record or the accuracy of its contents; and
- (d) the information contained in the electronic record reproduces or is derived from such information fed into the computer in the ordinary course of the said activities." Section 65 (B) (2) of the Indian Evidence Act, 1872.

⁶ Inserted by Information and Technology Act, 2000 (21 of 2000).

⁷ Chapter IV and V of the Indian Evidence Act, 1872.

⁸ Section 62 and 63 of the Indian Evidence Act, 1872.

⁹ Chapter I, 2(t), Information and Technology Act, 2000.

¹⁰ "Special provisions as to evidence relating to electronic records—The contents of electronic records may be proved in accordance with the provisions of section 65B," Indian Evidence Act, 1872 and Section 65 (B) (1) Indian Evidence Act, 1872.

^{11 &}quot;The conditions referred to in sub-section (1) in respect of a computer output shall be the following, namely:

According to Section 65-B of the Indian Evidence Act, every time an electronic record has to enter a court of law, it is to be accompanied by a paper certificate that establishes that the conditions mentioned in these provisions are fulfilled. While the law calls this document a certificate, it is essentially an affidavit with no prescribed format as such. This distinction is important since certificates are usually issued by some figure of authority/institution certifying some act. For example, a degree certificate is issued by the university testifying to the fact that a candidate has fulfilled all the requirements for coursework, or birth and death certificates are issued by municipal authorities attesting to someone's birth or death. Certificates come with all the markers of authority like a seal, pre-described format, watermarks, a certain form of official lettering, a certain materiality of the paper generating an "aura," adopting a Walter Benjamin term, of authenticity and what Cornelia Vismann has termed as "gesture of power" (Vismann, 2008, p. 72).

65-B certificates are like self-attested affidavits, essentially claims or witness testimonies filed by owners of certain electronic records, illustrating an object's origin stories. The law demands that the certificates should be signed by "a person occupying a responsible official position in relation to the operation of the relevant device or the management of the relevant activities." The law requires that in the content of the certificates, the party submitting these records should identify the "electronic record containing the statement and describing the manner in which it was produced" by "giving such particulars of any device involved in the production of that electronic record as may be appropriate for the purpose of showing that the electronic record was produced by a computer." In addition to this, the law demands a declaration in the end that the person signing the certificate does it "with best of their knowledge and belief."

During my fieldwork in the summers of 2019, 2022, and 2024 at various police stations, forensic science labs, and trial courts in India, I saw many versions of these certificates (See Figures 1 and 2). There was no single authority signing these certificates. 65-B certificates were signed by different people, depending upon the nature of the evidence being submitted. For instance, I saw certificates that were signed by a police officer (SHO— Station House Officer, the head of a police station) who attested that the computer software used to register First Information Reports (FIR) at his police station was working fine and the hardcopy that has been submitted to the court was authentic, adhering to all guidelines of the Section 65-B of the Indian Evidence Act. Another one was signed by a civilian whose CCTV system had captured the accused entering the victim's house. That certificate said that the CCTV system was working fine, routinely recording all the information and there was no damage/error to the hard disk feed while it was in his lawful control, which the police had later seized for investigation purposes. Some certificates I saw were signed by the nodal officer of telecom companies, claiming that the CDRs of the stated phone numbers were true hard copies of the records stored in their computer system, which was working fine during the period when these records were generated and were under the lawful control of the company. All these certificates followed broadly similar schemata where human witnesses, with the authority of their signature were establishing the origin story of an electronic data form, certifying to the best of their knowledge that the computer systems in which they were generated and stored were working fine and the data being presented to the court as evidence had not been manipulated/tampered with.

¹² Section 65 (B) (4)(c), Indian Evidence Act, 1872.

¹³ Section 65 (B) (4)(a), Indian Evidence Act, 1872.

¹⁴ Section 65 (B) (4)(b), Indian Evidence Act, 1872.

¹⁵ Section 65 (B) (4)(c), Indian Evidence Act, 1872.

CERTIFICATE

(u/s 65B(4)(c) of the Evidence Act 1872)

Certified that this CDR of Mobile Number. has been produced from computer system using printer and its contents are true reproduction of the original to the best of my knowledge and belief. I also do hereby certify on behalf of the Company that:

- 1. The print out supplied by me in respect of the aforesaid Mobile Number are the records lawfully maintained by us in our system during our ordinary course of providing the Cellular Mobile Telephony Service i.e. during the period mentioned in the CDR.
- 2. This print outs are the retrieval of the record from the information registered in our system in our ordinary course of providing the Cellular Mobile Telephony Services, which was operational at the relevant period.
- 3. The print outs of the calls made (incoming and outgoing) through the said Cellular Number are supplied by means of Auto System Generated Electronic equipment.
- 4. The print out are true reproduction of the original, retrieved from the electronic System, which is in lawful control of the Company and password protected.

Signature-

Designation - Nodal Officer

Figure I. A 65-B certificate I had seen during my fieldwork

Performa of Co	ertificate U	/S 65B of Indian Evi	dence Act, 1872
This is to certify that I	am	and reside/work at	I am owner/
incharge/ user of the mol	bile/device having	subscriber/serial no	and description of
the mobile/device as follo	ows: -		
Electronic record: D	escription of th	e document to be proved (P	Printout/Data on CD):
Server/ Computer/Mobile	e/Others:	Make:	
Model:		Serial Number:	
Software:		OS:	
IMEI/MAC:		Others:	
I certify the aforesaid ele	ctronic record gene	erated from the above mobile/dev	ice that:
The information container the mobile which was into		oile was fed into it in the ordinary	course of activity/usage of
		the above-mentioned mobile was so as to affect the accuracy of	
		n my possession and safe custody word Protected Access Control etc	
The electronic record ge fed into it and is a true ex		bove mobile/device has been der the aforesaid mobile.	ived from the information
taken from the aforesaid	mobile/device. The	conditions, till today i.ee printout of the data/data transfer	rred on CD has been taken
I am personally involved	into the transaction	n and / or generation of aforesaid	electronic record.
I am computer literate an	d having	qualification (s) in IT/	
The above stated matter i	is true to the best of	f my knowledge and belief.	
	Authe	enticator/ Deponent	
Name:	S/O	Address:	
Police Station:	District:	Date://Mo	bile:

Figure 2. A proforma that a police station was using to draft 65-B certificates

4. Law in practice

Lately, these 65-B certificates have become a major source of confusion in the Supreme Court of India, where a contradictory sequence of judgements has come out at very short intervals. The first landmark judgement came from the high-profile parliament attack case, where the terrorists belonging to Lashkar-e-Taiba (LeT) and Jaish-e-Mohammed

(JeM), two Pakistan-based militant outfits, had indulged in mass shootings, killing several people in India's parliament building in New Delhi. In this case, *State (N.C.T. of Delhi) vs Navjot Sandhu (2005)*, while considering the call record data submitted by the police, the court admitted the electronic evidence, ruling that 65-B certificates were not necessary for admitting electronic records. ¹⁶

Some years later, in 2014 in *Anvar P.V. vs P.K. Basheer*, an election case from Kerala, while considering some CDs that contained recordings of speeches, songs, and announcements of the United Democratic Front (UDF) candidate's electoral campaign, the three-judge bench of the court overruled its previous decision. Citing the higher susceptibility of electronic records to "tampering, alteration, transposition, excision, etc.," it ruled that 65-B certificates were absolutely necessary for electronic records to be admitted in the court. This new decision created a lot of confusion in the lower courts where parties had already filed evidence under the light of the previous 2005 decision (Nappinai, 2017, pp. 616–619). Courts, in turn, were faced with new questions about the appropriate timing of the submission of these certificates - who has the authority to sign them, and if all the conditions are to be met or just some of them (Nappinai, 2017, pp. 602–632).

Before the dust could settle and the courts could work with the new decision, a new ruling by a two-judge bench in 2018 in *Shafhi Mohammad vs The State of Himachal Pradesh* "clarified" this 2014 decision and relaxed the requirements of 65-B certificates for parties that were not in a position to produce such certificates. *Shafhi Mohammed* allowed for electronic evidence to be covered under Sections 63 and 65 of the Evidence Act (like *Navjot Sandhu*), if the party is not in possession of the device from which the document was produced. Sections 63 and 65 specify the rules via which contents of a document (not electronic records, there is a special law 65-A and 65-B for them) may be proved by the means of secondary evidence.

Interestingly, both Anwar and Shafhi Mohammed invoked the idea of a "travesty of justice" or "denial of justice" while passing these contradictory sets of orders. In Anvar, the Supreme Court said, "electronic records being more susceptible to tampering, alteration, transposition, excision, etc. without such safeguards, (implying 65-B certificates), the whole trial based on proof of electronic records can lead to a travesty of justice" (emphasis added). And in Shafhi Mohammed, the same court said, "it will be denial of justice (emphasis added) to the person who is in possession of authentic evidence/witness but on account of manner of proving, such document is kept out of consideration by the court in absence of certificates under Section 65-B of the Evidence Act, which party producing cannot possibly secure."19 When read together, the court seems to be concerned by the potentialities of easy manipulability of the electronic records and thus emphasises an additional procedural safeguard of 65-B certificates to check entry of any tampered or faulty evidence in the court proceedings. At the same time, the court recognises that these additional safeguards can be counterproductive in some cases, where the certificates are not available and thus genuine evidence can be kept out of its considerations. Both these situations of faulty evidence entering the proceedings and genuine evidence being kept out of the proceedings are against the ideals of justice.

In 2020, a three-judge bench on the Supreme Court in *Arjun Panditrao Khotkar* again revisited the law around 65-B certificates and decided to go back to *Anvar*, effectively ruling that these certificates were mandatory for secondary electronic evidence to be admitted in the court of law.²⁰ In *Panditrao Khotkar*, the court made another significant

¹⁶ It allowed for electronic evidence to be admitted under Sections 63 and 65 of the Indian Evidence Act, 1872.

¹⁷ Anvar P.V. v. P.K. Basheer, (2014) 10 SCC 473.

¹⁸ Anvar P.V. v. P.K. Basheer, (2014) 10 SCC 473.

¹⁹ Shafhi Mohammad v. State of Himachal Pradesh, (2018) 2 SCC 801 (Order dated January 30, 2018).

²⁰ Arjun Panditrao Khotkar v. Kailash Kushalrao Gorantyal, (2020) 7 SCC 1.

distinction between primary electronic evidence and secondary electronic evidence. Since Sections 65-A and 65-B were special laws governing the admissibility of electronic evidence in the court, there was a debate in the legal circles as to whether the meta distinction of the primary and secondary document as described in the Indian Evidence Act was applicable to the realm of electronic evidence or not. Here, the court in trying to map a distinction (primary and secondary) crafted essentially for the times when paper was the dominant medium, said that 65-B rules are only applicable to the secondary electronic records, which are a copy of the original record stored in the computer system and presented in the court in the form of printouts, CDs, VCDs, or pen drives among others. Without getting into the long debate of the distinction between an original and a copy in the realm of the digital, it might be fruitful to think about how the use of this distinction helped the court.

The court in its order further clarified that in the case of primary electronic evidence, the owner of the computer, tablet, or mobile phone, on which the said record was created, can be summoned to the witness box with the device, where the owner can prove that the device is owned and operated by them and the information stored is authentic. The need for 65-B certificates was not there in primary electronic records where humans can be summoned to court. However, in the case of secondary electronic records, the certificates were necessary. Here, in asking for these certificates, notice how in a circular route the court is demanding the secondary electronic evidence to stand on human foundations as well. It could be deduced that in the case of secondary electronic records, the court in asking for these certificates replaces the media object with a human witness, who signs the documents, narrates its story of origin, and establishes its authenticity. French legal theorist Pierre Legendre, while trying to figure out the process by which modern rationality was established in the West, looked at the relationship between the commentator and the text in the medieval textual economy in the Roman canon to say that a mechanism of "decorporalisation" took over this relationship. According to this, the text was reduced to "nothing more than a documentary bearer of information" and the question of the human body was completely excluded from it (Legendre, 1990, p. 10). What we witness here is not decorporalisation, but a mechanism of re-corporalisation taking place where the media evidentiary object is being made to speak via the body of a human witness. A human witness can be summoned to the court if any problem is found in the content of the secondary record at a later stage, the same can be cross-examined as well. Thus, instead of interrogating the media object, or admitting it in its own terms, the court again falls back on age-old familiar practices of interrogating human subjects by proxy.

65-B certificates mediate the relationship between media objects, humans, and courts. What is also interesting is that new media technology has unsettled the idea of authorship; these anxieties about tampering and easy manipulability of new media evidentiary objects are essentially anxieties about authorship. These certificates help the courts address those anxieties by relying on the figure of the human author/custodian who can be attached to an electronic data record via the materiality of the paper certificates. These deep continuities with the past in the realm of law that significantly curtail the witnessing potentials of new media evidence can also be seen as part of law's tendency to reduce the novel to the familiar—procedere ad similia (Goodrich, 2023, p. 7), the Roman principle that underwrites this analogical way of thinking in the practice of common law, as new media evidence comes to threaten and displace the paper corroboration and witness testimony-based paradigms that have dominated the courtrooms.

A plausible explanation of these jurisprudential confusions regarding 65-B certificates can be attributed to the bad draft of the law on the admittance of electronic records. As laid down in various judgements by the courts, any documentary evidence (including electronic records) passes through three stages in the court (Nappinai, 2017, pp. 622–623). In the first stage, the evidence is filed by the parties. In the second stage, the courts decide

on their admissibility—it is at this point that any evidence becomes part of the judicial record of the case if admitted. Then finally, it is at the third stage when the court applies its mind and decides if the evidence proves or disproves a certain claim in the court. 65-B certificates are required at the stage of admittance of evidence and are used for further scrutiny if the evidence is admitted. Just because the evidence is presented in a new technological medium, different entry thresholds are applied even before the court has applied its mind to the evidence. This indicates an inherent bias in law towards new media technology. There are anxieties about new media objects' unrealiability given their volatile nature and potentialities for easy manipulability.

The draft of the Indian law legislated in 2000, had been almost entirely lifted from the Civil Evidence Act, 1968 of the United Kingdom (UK) on the admittance of computer output, which was itself discarded in the year 1995 for reasons that it erected a complicated regime around admittance of electronic evidence.²¹ The new UK Act makes no distinction between electronic and other forms of evidence.²² It also allows for a more flexible method of authentication of the electronic record as approved by the court, given the circumstances of a case.²³ Unlike India, there are no technologically specific conditions for the admissibility of electronic records in present UK law. To take an example from another liberal democracy working with the common law system, the USA's Federal Rules of Evidence (FRE) on the admissibility of electronic records, also applies the same rules to electronic and other types of records (Sethia, 2016, p. 7). Post amendments in FRE in 2017, a party producing electronic records in the court can take multiple routes under Section 901 or Section 902 of the Act, thereby giving a more relaxed regime on the admissibility of electronic records.²⁴ There have been arguments from practising lawyers and police officers in India in favour of establishing a more relaxed regime around the admittance of electronic forms of evidence at the trial stage, which allows for alternative modes of establishing the integrity of an evidentiary object.²⁵ Justice Ramasubramanian of the Supreme Court wrote an addendum to the main judgement of Justice Fali Nariman in Panditrao Khotkar, where he compared the legal regime on electronic evidence in the UK, USA, and Canada, pointing out the relaxed methods of authentication that these jurisdictions provide. J Ramasubramanian in his conclusions strongly recommended that it is time to relook at Section 65-B of the Indian Evidence Act, which has created "huge judicial turmoil, with law swinging from one extreme to the other."26 Similarly, in a recent judgement, calling out the outdatedness of 65-B provisions of the Indian Evidence Act, the Madras High Court has suggested that a new law needs to be passed given the ubiquity of electronic evidence in the court of law. The Madras High Court further proposed that at each critical step, when the evidence exchanges hands unique hash values should be noted down which could ensure the authenticity of the evidentiary objects.²⁷ As this article was being finalised, the Indian Parliament, under the BJP government, passed a new law called the Bharatiya Sakshya Adhiniyam (2023) to replace the present colonial era evidence act. Despite the recommendations of the Indian Supreme Court and Madras High Court to revisit Section 65-B of the Indian Evidence Act in various judgements, this new law has copied Section 65-B of the Indian Evidence Act, 1872 almost verbatim in Section 63, entitled "Admissibility of Electronic Records" (Bharatiya Sakshya Adhiniyam, 2023). It

²¹ Arjun Panditrao Khotkar v. Kailash Kushalrao Gorantyal, (2020) 7 SCC 1.

²² Arjun Panditrao Khotkar v. Kailash Kushalrao Gorantyal, (2020) 7 SCC 1.

²³ Section 8 (b) and Section 9 (5) of The Civil Evidence Act of 1995 (UK).

²⁴ Arjun Panditrao Khotkar v. Kailash Kushalrao Gorantyal, (2020) 7 SCC 1.

²⁵ Arjun Panditrao Khotkar v. Kailash Kushalrao Gorantyal, (2020) 7 SCC 1.

²⁶ Arjun Panditrao Khotkar v. Kailash Kushalrao Gorantyal, (2020) 7 SCC 1.

²⁷ Hash values are like fingerprints for digital files, they change if changes are made in the file (Sajeev 2023).

retains the requirement of a similar paper certificate, whenever electronic evidence is submitted to the court.

German cultural critic Walter Benjamin argued that positive law aims to guarantee the justness of ends through the justification of means (Benjamin, 2021, p. 40). In other words, procedural aspects of the law (means) are themselves an assurance for its just outcomes, or outcomes will be deemed just if they have come about by following all the requirements of due process of law. In the case of the mandatory requirement for 65-B certificates, which were brought about as a procedural safeguard to ensure that trials will not be marred by unreliable and manipulated new media evidence, has itself become a problem for the administration of justice. 65-B certificates work as Kafkaesque gatekeepers that sometimes keep even relevant evidence out of the courts, even before judges have applied their minds to them. As in the case of Pehlu Khan lynching, narrated at the beginning of this essay, the witnessing potentialities of a bystander video footage were de-mediated by these paper certificates, rendering the footage useless for the trial. 65-B certificates are a good example to debunk the misleading euphoria around new media technologies and their expanded potentialities to act as evidence in the court that many seem to be promoting in the name of the emergence of a "forensic turn" (Schuppli, 2020, p. 9) and an "object-oriented juridical culture" (Schuppli, 2020, p. 14). We can see that media objects are not directly intelligible to law. Research has shown us that their access to law is determined by a series of mediating processes like lawyerly presentations, expert testimonies, the gaze of the judges and jury, structures of feelings, forensic manipulations, technological apparatuses, courtroom architecture, societal subtexts (racist, gendered, classist attitudes that inform participants), and norms and rules of the juridical forum in which these objects participate as witnesses (Feldman, 1994; Mnookin, 1998; Cole, 2001; Parker, 2015; Moore, 2022; Kruse, 2016; Bechky, 2021; Schwartz, 2009; Ristovska, 2021). Given these multiple mediating processes, there is no guarantee that these new kinds of evidence will yield the desired results from the juridical forums.

In the two encounters, I mentioned at the beginning of this article, why were the police so forgetful and careless? Was it a genuine oversight that happens when we deal with paper, or was there a motivation behind that carelessness? In the Pehlu Khan case, given the political circumstances surrounding that case, the oversight seemed more than an innocent mistake. Benjamin, identifying two functions of violence as law-preserving and law-positing (or law-making), noted that both these forms of violence are present as a spectral mixture in the police force, especially in democracies where the separation between the two functions gets suspended (Benjamin, 2021, p. 47). Police in its operations has the power to both legislate and execute the law simultaneously, or in other words, in every act of execution of the stated law (or its interpretation), it simultaneously legislates a new law on the ground. Here, we see that even though the text of the law required the police to furnish these certificates along with the video footage, the police did not do so, rendering the evidence in the court inadmissible. Thus, it predetermined the fate of the trial (case-law decision) by executing (or not) the law in a particular way. The mandatory requirement of 65-B certificates thus augments these dual functions of making and preserving law or in other words, significantly enhances the discretionary powers present in the police force.

Fieldwork at police stations in a Hindi-speaking town in North India in the summer of 2024 revealed that 65-B certificates are used flexibly by the police force in their everyday investigations. IOs (Investigating Officers) at various stations mentioned to me that they often get the CDRs from the telecom agencies without any 65-B certificates. They use these uncertified records to carry out investigations and ask for certificates from the nodal agents of telecom companies only if they decide to include a particular record as evidence in the case diaries submitted to the court. These days police heavily relies on advanced surveillance tools, electronic records, and databases to identify and track criminals,

however, very little of these activities and new media-based investigative labour of the police is revealed in the case diaries submitted to the court. Case diaries, I have come to realise, do not reflect the actuality of the investigation processes carried out by the police, they are an evidence-backed narrative of investigation made up by the police to argue a case in the courtroom. Often investigations are done using a lot of methods that are technically outside the bounds of law, but paperwork is done keeping in mind the legal limits. One of the constables while describing this practice said, "police ki karni aur kathni mein bahut farak hota hai," "there is a huge difference between what the police does and what the police says." An inspector shared with me that, "writing case diaries is like writing novels, we need to write a believable story based on evidence, within the bounds of the laws." While discussing the use of CCTV footage and bystander footage as evidence during investigations, some police officers told me that ordinary citizens are often reluctant to get involved in cases as it means regular trips to courts to give testimony in ongoing trials or sometimes even violent threats from the parties involved. People are not ready to sign 65-B certificates for CCTV footage even if an incident is captured on their camera systems. Thus, even if the police officers use CCTV footage or bystander footage obtained from citizens to resolve a case or identify the suspects, they are often not shown in the case diaries submitted to the court because it is hard to get hold of these certificates from citizens. Even though Indian law under Section 91 CrPC (The Code of Criminal Procedure) and Section 165 of the Indian Evidence Act, 1872 has given police and judges the power to demand any document from anyone for an investigation, these powers are selectively used by the police in everyday cases, as it means more work at their end. Courts usually send CCTV footage and mobile footage for forensic analysis, which delays the case proceedings by a year or two, given the time that labs take to make their reports, therefore, police officers are even more reluctant to use video footage as evidence in everyday cases. Given the complexity of the law on the admissibility of electronic evidence, they often use alternative narratives based on human testimonies and anonymous informers instead of electronic forms of evidence to build a case for the courtrooms, even if investigations are carried out using electronic means such as CDRs and CCTV footage. They explained to me that it is difficult to argue a case based on electronic evidence in the court given the complicated legal regime around them.

5. Paper, law, and state

The arbitrariness associated with 65-B certificates in terms of their use in the courts reveals a deeper underlying tension between law and new media technology. To understand the stubborn presence of paper in a rapidly digitalizing legal system, one needs to appreciate the deep roots of paper as a medium in the constitution of modern states and legal systems. According to Bruno Latour, paper forms the material foundation of our social institutions. He notes that even though fun is made of the red tape and paperwork practices prevalent in bureaucracy and other places considering them as futile and unnecessary, "in our cultures 'paper shuffling' is the source of an essential power, that constantly escapes attention since its materiality is ignored" (Latour, 1990, p. 26). Max Weber, early in recognising the central role of paper and written documents in the formation of bureaucratic institutions, wrote that "the combination of written documents and a continuous operation by officials constitutes the office (bureau)" (Hull, 2012b, p. 18). Cornelia Vismann has demonstrated that historically speaking, files (standing here for paper documentation practices and recording instruments) and law have always constituted each other (Vismann, 2008). Vismann argues that media technological developments in the processes of recording, binding, writing, data-collection, or what the German media theorists would collectively call cultural techniques (Siegert, 2015;

Vismann, 2013) influence the legal frameworks as well (Vismann, 2008, p. xiii). Ethan Katsh, for instance, argued that the system of precedent in modern law was only possible after the medium of print allowed standardised copies of legal orders to be distributed and preserved (Katsh, 1989, p. 20).

Understanding documents as "talking things" that have the unique ability to deliver the same story, again and again, David Levy argues that most of our social institutions like science, law, government, administration, religion, education, and business corporations rely on the stabilising power of documents to achieve their goals (Levy, 2001, pp. 62–89). James Scott in *Seeing like a State* argued that one of the major functions of the modern state has been to produce forms of writing and paperwork to make citizens and spaces more legible for taxation, conscription, and prevention of rebellion (Scott, 1998, pp. 11–52). Generating paperwork like identification documents and land deeds among others has been an attempt to control what was deemed uncontrollable, to stabilise moving entities, and to quicken their processing for the purposes of governance. Media theorist Ben Kafka in the context of post-revolutionary France noted that the essential function of the production and preservation of paperwork in the modern bureaucratic state was to render it accountable to society (Kafka, 2012, p. 38).

In the context of South Asian states of the past and present, recent studies by historians, such as Bhavani Raman, Miles Ogborn, and Hayden Bellenoit along with the writings of anthropologists such as Akhil Gupta, Nayanika Mathur, Shrimoyee Nandini Ghosh, and Mathew Hull, have collectively demonstrated that paperwork and practices around it have played and continue to play a constitutive role in state formation and not just an instrumental one (Raman, 2012; Ogborn, 2007; Bellenoit, 2017; Gupta, 2012, p. 153; Mathur, 2016, p. 5; Ghosh, 2019; Hull, 2012b). In a very Foucauldian vein, they collectively argue that the state gets constituted by the everyday acts of reading, writing, file transfers, meetings, surveys, and audits. The key methodological move in this set of scholarship is not to assume that the state exists as an *a priori* conceptual or empirical object but to understand how it comes into being and then study it as a relational set of material practices (Mathur, 2016, p. 5). In this imagination, the state is fundamentally a scattered entity, which is brought together into an assemblage or an apparatus by everyday bureaucratic papery activities.

Historians of early colonial administration in India have revealed that paper certificates with signatures in the form of land deeds, lease documents, certificates, registers, stamp papers among others emerged as technologies of authentication in colonial India primarily because the colonial master always mistrusted native's claims (Raman, 2012, pp. 137-160; Bellenoit, 2017, pp. 118-154). Native mendacity and their proclivity to commit forgery were seen as one of the major motivations to regulate and standardise paper practices in colonial collectorates and courts. The colonial administrators undertook fundamental administrative reforms in the eighteenth and nineteenth centuries that inculcated a culture of "forensic mode of recordkeeping," (Raman, 2012, p. 54) where the records were underwritten by an evidentiary paradigm that sustained a mode of proof synchronous with modern jurisprudence as it was being developed in the metropole. The forensic mode of viewing documents made them self-evident, objects that could speak for themselves, and that could be mined for content. Writing from the archives of South India's Madras presidency, Raman shows during the early colonial period there were fundamental changes in the attestation practices of written claims. Previously the oral testimonies of Kanakkans (Tamil scribes) had a lot of value, this was displaced by the need to produce signed paper records for corroboration like land deeds, stamp papers, lease documents, certificates, and registers. The emergence of a paper-based corroboration paradigm for authentication, along with the techniques of signatures, fingerprints, seals, and oaths, trumped over the oral testimonies of the natives. This should be seen as a crucial development in the history of modern law, as paper here emerged as a technology of truth-telling during this time. Paper certificates as bureaucratic technologies of authentication thus have a racist and colonial genealogy to work as a remedy when the problems of mistrust arise in law. We have seen previously in this article that lawmakers and judges in India work with the assumption that new technology is inherently volatile, more susceptible to manipulation and tampering, and thus difficult to control for juridical purposes. Judges, by emphasising the need for these paper trails in the form of certificates, tread familiar grounds of established courtroom practices of handling paper. In doing so, they also try to preserve a sense of control and domination over these seemingly volatile new media objects such as video, audio, and images, which otherwise can generate unpredictable, immediate, and visceral responses in the courtroom.

But isn't paper also susceptible to manipulation, tampering, and forgery? There is no material quality about paper that lends it the aura, function, and power to authenticate new media objects. Paper is as prone to distortion as other media formats. What then explains the need for paper trails? Focusing on the materiality and affordances of paper, Sellen and Harper in The Myth of the Paperless Office have argued that the coming of new technologies does not replace the use of paper in organisations, but transforms it (Sellen and Harper, 2002, p. 16). They say, it is important to understand that workplace practices have developed alongside paper as dominant media technology, and that ideas about paper are embedded deep into work procedures, which makes it hard to replace it with new mediums. Similarly, Jacques Derrida in a speculative tone has noted that "for a certain time to come, a time that is difficult to measure, paper will continue to hold a sacred power. It has the force of law, it gives accreditation, it incorporates, it even embodies the soul of the law, its letter, and its spirit" (Derrida, 2005, p. 58). Progressing on the line of thinking proposed by Eyal Weizman and Thomas Keenan on "aesthetics, as the judgment of senses," (Weizman and Keenan, 2012, p. 24) Pallavi Paul has argued that the manner in which evidentiary media "objects are seized, their presentation in and address to the forum, and finally keeping pace with their afterlives are all aesthetic acts" (Paul, 2022, p. 235). In that case, the mandatory presentation of these paper certificates could also be read as essentially habitual organisational performances demanded by law, to generate an aesthetic sense of relational authenticity, trust, and stability in legal systems. Building on the conceptual vocabulary of Jacques Rancière, paper seems firmly embedded in the aesthetic regime of law, where aesthetics is defined as an established "mode of articulation" (Rancière, 2004, p. 81) within a particular sensible order. The stubborn presence of paper in our law enforcement systems can then be explained as a mixture of sheer organisational habits, deep embodied historicity, symbolic capital of paper media in legal institutions, and a sense of stability and control that paper seemingly continues to provide in the prevailing aesthetic regime of law. In other words, paper still carries a currency of trust that new media forms fail to generate in the legal system. In a media materialist vein, one can argue that modern law, despite all the digitalization, continues to be essentially a technology of paper.

6. Coda: paper in the age of the digital

The case of 65-B certificates in an increasingly digitalizing India illustrates that the move from paper states to paperless states is full of contradictions. "Hybrid" seems to be the best word for now to describe the conditions under which the digital operates (Muller, 2014, p. 263; Sundaram, 2021). While the new technology increases efficiency and quickens the service delivery mechanism for the state, it still has not been able to generate the same amount of trust that paper in its sacred power seems to embody. The case of 65-B certificates is not an isolated instance in the Indian legal system but reveals a larger dynamics at play in this period of digital transformation. During my fieldwork at police

stations and forensic labs, the junior-level clerical staff there often lamented about the fact that even though the higher authorities are pushing the use of digital platforms for everyday work, it is not that registers have been abandoned. Each entry made into the digital system has a simultaneous paper entry in a file or register as well. Effectively, their clerical work has doubled. One head constable, while showing me the FIR register in his police station, informed me that it is critical that we maintain these registers, "what if the computer system crashes one day? What if the software hangs?" He told me that the software that they are currently using for documentation purposes is not perfect, for instance, they sometimes do not have the option of adding certain penal codes in the FIR, in those instances, they have to add certain things manually by writing over with a pen on the printout of the FIR copy which has to be given to the investigating officer or is entered in the court records. Another instance shows how unique paper practices pervade the documentation logics of law enforcement systems. A head constable was preparing a case file that was to be sent to the court. He took a printout of the FIR he had registered in the computer software and made a strange marking of sorts using his pen on its backside. I asked him why was he doing it. He explained to me that this case might be heard in court in five years and added, "during this time, I would forget that I had registered this FIR. It is also possible that someone bribes the court staff and replaces this original copy with something else. If after five years, I am summoned to the court to give testimony then this unique pen marking will help me remember that this is indeed the original FIR that I had registered in the computer system." Police officers during my fieldwork had shown me more than 80 kinds of paper registers that they maintain even today.

Thinking of this more critically, even if we do away with the physical paper as we know it, law's information organizing methods are still steeped in the epistemic forms derived from paper bookkeeping and recording practices. The data entry software I had seen at the police stations and forensic labs only remediated the format of the paper register into the digital. The Supreme Court registry also demands scans of paper documents during e-filing. Despite the active promotion of e-filing and paperless courts, my fieldwork at the Supreme Court of India revealed that the majority of judges and the registry of the Supreme Court of India still use paper books, a paper replica of the original case files, as workhorses for everyday court activities. New technologies bring about new ways of creating, organising, and distributing information, which law and legal institutions actively resist by falling into the familiar paper epistemes and practices, thus explaining the stubborn presence of paper in a legal system that is increasingly undergoing an internal mediatised transformation to adapt itself to a new digital media ecology.

Acknowledgements. This article took a very long time to develop. I owe debts to my interlocuters in India for letting me enter their busy work lives. I have gained from conversations with Arvind Rajagopal, Lisa Gitelman, Kelli Moore, Ravi Sundaram, Lawrence Liang, Peter Goodrich, and Thomas Blom Hansen. Early drafts of this article were presented at conferences at Sarai-CSDS, Columbia University, and Harvard University. I sincerely thank my audience and co-panellists for their insightful questions. Lastly, comments and suggestions from the editors, reviewers, and proofreaders at the Asian Journal of Law and Society have significantly improved this article. I thank them all!

References

Anvar P.V. v. P.K. Basheer, (2014) 10 SCC 473.

Arjun Panditrao Khotkar v. Kailash Kushalrao Gorantyal, (2020) 7 SCC 1.

Bharatiya Sakshya Adhiniyam, 2023.

Civil Evidence Act of 1995 (UK).

Indian Evidence Act, 1872.

Information and Technology Act, 2000.

Shafhi Mohammad v. State of Himachal Pradesh, (2018) 2 SCC 801 (Order dated January 30, 2018).

State (N.C.T. of Delhi) v. Navjot Sandhu, AIR 2005 SC 3820.

State of Rajasthan vs. Vipin Yadav & Ors. R.J.S 24/2019 (Order dated August 14, 2019).

Daniyal, S. (2019). The Modi years: What has fuelled rising mob violence in India?. Available at: https://scroll.in/article/912533/the-modi-years-what-has-fuelled-rising-mob-violence-in-india (Accessed: 9 December 2024).

Government of India (2022) Vision areas of digital India. Available at: https://digitalindia.gov.in/vision-vision-areas/(Accessed: 15 Dec 2022)

Human Rights Watch (2019). Violent cow protection in India. Available at: https://www.hrw.org/report/2019/02/18/violent-cow-protection-india/vigilante-groups-attack-minorities (Accessed: 9 December 2024).

NDTV (2019). 6 accused in mob killing of Pehlu Khan acquitted by Rajasthan Court. Available at: https://www.youtube.com/watch?v=S0gCuY2AyXA&t=224s (Accessed: 9 December 2024).

Sajeev, U. (2023). Section 65B Evidence Act | Unfortunately provisions found obsolete by UK in 1995 were readily accepted by Indian legislature: Madras High Court. Available at: https://www.livelaw.in/high-court/madras-high-court/madras-high-court-section-65b-evidence-act-obsolete-by-uk-accepted-by-indian-legislature-230232 (Accessed: 9 December 2024).

Scroll Staff. (2017). Rajasthan minister says both sides are guilty after cow vigilantes beat Alwar man to death. Available at: https://scroll.in/latest/833734/rajasthan-man-dies-after-vhp-bajrang-dal-linked-cow-vigilantes-attack-himover-suspected-smuggling (Accessed: 9 December 2024).

Bechky, B. A. (2021). Blood powder and residue: How crime labs translate evidence into proof. Princeton: Princeton University Press.

Bellenoit, H. J. (2017). The formation of the colonial state in India: Scribes, paper and taxes, 1760-1860. New York: Routledge.

Benjamin, W. (2021). 'Towards the critique of violence', in P. Fenves, and J. Ng, (eds.) *Toward the critique of violence, a critical edition*. Redwood City: Stanford University Press, pp. 39–60.

Blanchette, J. F. (2012). Burdens of proof: Cryptographic culture and evidence law in the age of electronic documents. Cambridge: MIT Press.

Cole, S. A. (2001). Suspect identities: A history of fingerprinting and criminal identification. Cambridge: Harvard University Press.

Derrida, J. (2005). Paper machine. Stanford: Stanford University Press.

Feldman, A. (1994). 'On cultural anesthesia: From desert storm to Rodney King', *American Ethnologist*, 21(2), pp. 404–418.

Foucault, M. (1995). Discipline and punish: The birth of the prison, Translated by Sheridan, A. New York: Vintage Books.

Foucault, M. (2004). Society must be defended: Lectures at the Collège De France 1975-76. New York: Picador.

Ghosh, S. N. (2019). 'Not worth the paper it's written on: Stamp paper documents and the life of law in India', *Contributions to Indian Sociology*, 53(1), pp. 19–45.

Goodrich, P. (2023). Judicial uses of images: Vision in decision. New York: Oxford University Press.

Gupta, A. (2012). Red tape: Bureaucracy structural violence and poverty in India. Durham: Duke University Press.

Hull, M. (2012a). Documents and bureaucracy', Annual Review of Anthropology, 41, pp. 251-267.

Hull, M. S. (2012b). Government of paper: The materiality of bureaucracy in Urban Pakistan. Berkeley: University of California Press.

Kafka, B. (2012). Demons of writing: Powers and failures of paperwork. Brooklyn, New York: Zone Books.

Katsh, M. E. (1989). The electronic media and the transformation of law. New York: Oxford University Press.

Kruse, C. (2016). Social life of forensic evidence. California: University of California Press

Latour, B. (1990). 'Drawing things together', in M. E. Lynch, and S. Woolgar, (eds.) *Representation in scientific practice.*Cambridge: MIT Press, pp. 19–68.

Legendre, P. (1990). 'The lost temporality of law: An interview with pierre legendre', *Law and Critique*, 1, pp. 3–20. Levy, D. M. (2001). *Scrolling forward: Making sense of documents in the digital age.* New York: Arcade.

Mathur, N. (2016). Paper Tiger: Law bureaucracy and the developmental state in Himalayan India. Delhi: Cambridge University Press.

Mazzarella, W. (2006). 'Internet X-Ray: E-Governance, transparency, and the politics of immediation in India', *Public Culture*, 18(3), pp. 473–505.

Mnookin, J. L. (1998). 'The image of truth: Photographic evidence and the power of analogy', Yale Journal of Law and the Humanities, 10 (1), pp. 1–74.

Moir, M. (1993) 'Kaghazi Raj: Notes on the documentary basis of company rule: 1783–1858', *Indo-British Review* 21(2), pp. 185–193.

Moore, K. (2022). Legal spectatorship: Slavery and the visual culture of domestic violence. Durham: Duke University Press. Mukherjee, R. (2020). 'Mobile witnessing on whatsapp: Vigilante virality and the anatomy of mob lynching', South Asian Popular Culture, 18(1), pp. 79–101.

Muller, L. (2014). White magic: The age of paper, Translated by Spengler, J. Cambridge: Polity Press.

Nappinai, N. S. (2017). Technology laws decoded. Gurgaon: LexisNexis.

Ogborn, M. (2007). *Indian ink: Script and print in the making of the English East India Company.* Chicago: University of Chicago Press.

Parker, E. K. J. (2015). Acoustic jurisprudence: Listening to the trial of Simon Bikindi. Oxford University Press.

Paul, P. (2022). 'Objects as exhibits: Performance of forensics', in Narrain, S. (ed.) Acts of media: Law and media in contemporary India. New Delhi: Sage, pp. 218–237.

Raman, B. (2012). Document Raj: Writing and scribes in early colonial South India. Chicago: University of Chicago Press. Rancière, J. (2004). The Politics of aesthetics: The distribution of the sensible, Translated by Rockhill, G. New York: Continuum.

Ristovska, S. (2021). Seeing human rights: Video activism as a proxy profession. Cambridge: MIT Press.

Schuppli, S. (2020) Material evidence: Media, forensics, evidence. London: MIT Press.

Schwartz, G. L. (2009). *Mechanical witness: A history of motion picture evidence in U.S. Courts.* Oxford: Oxford University Press.

Scott, J. (1998). Seeing like a state: How certain schemes to improve the human condition have failed. New Haven: Yale University Press.

Sellen, A. and Harper, R. (2002). The myth of the paperless office. Cambridge: MIT Press.

Sethia, A. (2016). 'Rethinking admissibility of electronic evidence', *International Journal of Law and Information Technology*, 24(3), pp. 229–250.

Siegert, B. (2015). Cultural techniques: Grids filters doors and other articulations of the real. New York: Fordham University Press.

Sundaram, R. (2021). 'Analogue and digital', BioScope, 12(1-2), pp. 14-17.

Vismann, C. (2008). Files: Law and media technology. Stanford: Stanford University Press.

Vismann, C. (2013). 'Cultural techniques and sovereignty', Theory, Culture & Society, 30(6), pp. 83-93.

Weizman, E. and Keenan, T. (2012). Mengele's skull: The advent of forensic aesthetics. Berlin: Sternberg Press/Porticus.