

COMPARISON OF SIGNATURE OR HANDWRITING BY COURT IN DIGITAL SIGNATURES AND ARTIFICIAL INTELLIGENCE ERA: A NOTE OF CAUTION

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Abstract

A legal provision that does not enhance justice or adapt to contemporary realities such as the impact of technology on adjudication has outlived its usefulness. Based on the foregoing principle, this paper examined the continued relevance of section 110 of the Evidence Act, 2011 as amended which empowers the Court to manually compare any signature, writing, seal or finger impression admitted or proved to the satisfaction of the court in order to ascertain whether such a signature, writing, seal or finger impression is that of the person by whom it purports to have been written or made. This became compelling following the nascent introduction of the admissibility of digital signatures under the Evidence (Amendment) Act, 2023. The paper established that the power of the Court to manually compare signatures in this digital age has become superannuated and that for effective determination of the authenticity of digital signatures or electronic writing, seal or finger impression, a Court should rely on evidence of forensic experts in terms already provided under the law rather than casual, analogue or manual comparisons. It was therefore recommended that the provision of section 110 of the Evidence Act, 2011 should be repealed.

Keywords- Artificial intelligence, Comparison, Digital signature, Signature

1.0 Introduction

The world has moved away from the analogue to the digital age. The advent of technology keeps changing the way things are being done daily. Nigeria has also embraced the technology age, especially in judicial proceedings although not on a very fast-paced note or advanced form like the developed countries. In Nigeria, the Evidence Act, of 2011 has fully recognised the admissibility of electronic evidence in its *section 84*. Subsequent amendment of the Evidence Act, 2011 under the Evidence (Amendment) Act, 2023 introduced a new wave of admissibility of electronic evidence in adjectival or procedural laws one of which is digital signatures. This means that variants of electronic evidence including those generated by means of technological devices like artificial intelligence¹ often called “AI” are admissible if they are relevant to the case. However, the application of technology or electronic evidence presents a number of procedural or ethical problems, one of which is whether it is a substitute for human intelligence. In other words, where there is a clash between artificial intelligence with human intelligence, which one should a Court of law prefer? Is it possible for the Court to effectively compare digital signatures without the assistance of forensic experts? Answers to these posers have become

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¹ Hereinafter abbreviated and referred to as “AI”.

necessary against the specific provision of *section 101* of the Evidence Act, 2011 that authorises the Court to compare signatures and handwriting in order to ascertain whether a signature, writing, seal or finger impression is that of the person by whom it purports to have been written or made. This should not be mistaken for the provisions of the Evidence Act that regulate proof of handwriting by expert evidence. This comparison is to be undertaken by the Court itself and not with the assistance of anyone else. Against the foregoing, for ease of understanding, the paper is divided into eight parts beginning with the introduction. Thereafter, other parts will include a critical examination of the following namely: statutory provision on comparison of signature, writing, seal or finger impressions; conditions precedent to the comparison of signature, writing or finger impression; judicial decisions on comparison of signature, writing, seal or finger impressions; notes of concern on comparison of handwriting in Artificial Intelligence era; determination of who makes the final decision- the expert or the Court; the way forward or recommendations; and conclusion.

2.0 Statutory provision on comparison of signature, writing, seal or finger impressions

An innocuous but powerful provision of the Evidence Act, 2011 as amended relates to the power of the Court to undertake a comparison of signature, writing, seal or finger impressions with others admitted or proved. *Section 101* of the Evidence Act, 2011 as amended provides in general terms as follows:

(1) In order to ascertain whether a signature, writing, seal or finger impression is that of the person by whom it purports to have been written or made, any signature, writing, seal or finger impression admitted or proved to the satisfaction of the court to have been written or made by that person may be compared with the one which is to be proved although that signature, writing, seal or finger impression has not been produced or proved for any other purpose.

(2) The court may direct any person present in court to write any words or figures or to make finger impressions for the purpose of enabling the court to compare the words, figures or finger impressions so written with any words, figures or finger impressions alleged to have been written or made by such person:

Provided that where a defendant does not give evidence, he may not be so directed to write any words or figures or to make finger impressions.

(3) After the final termination of the proceedings in which the court required any person to make his finger impressions, such impressions shall be destroyed.

In this paper, the specific provision calling for special attention is *section 101(2)* which is to the effect that the court may direct any person present in court to write any words or figures or to make finger impressions for the purpose of enabling the court to compare the words, figures or finger impressions so written with any words, figures or finger impressions alleged to have been written or made by such person. It must be understood that the keyword in this section is comparison. Synonyms for comparison include contrast and assessment. You can only compare two or more things. No one thing is liable to be compared with itself. Hence, the comparison contemplated here is between disputed signature, writing, seal or finger impression on one hand with the others admitted or proved on the other hand. As

will be further expatiated below, comparison of signature or handwriting and the like is not an investigation either.

2.1 Conditions Precedent to the Comparison of Signature, Writing or Finger Impression

There is no doubt that under *section 101* of the Evidence Act, 2011, the Court is authorised to compare signature, writing, seal or finger impression with others admitted or proved. However, that power is subject to certain conditions precedent namely:

(a) It is limited to admitted or proved signature, writing, seal or finger impression. It does not extend to an inquisitorial or investigative exercise to discover whether the writing on a set of documents is the same. This was the decision in *Enwerem v Abubakar & Anor*² and *Aliyu v Okoye & Ors.*³ The comparison authorised under *section 100* is not for the trial Court to do so in private in Chambers as it must be made in open Court. The Supreme Court, per Kutigi, JSC, had stated when and how a trial Court is permitted to compare writings and/or signatures in *Yongo & Anor v COP*⁴ as follows:

I am of the view that the Senior Magistrate was wrong when he single-handedly in his chambers proceeded to examine EXH.K and thereby arrived at the conclusion that "the writing and the signatures" thereon were all done by one single -individual. (See *R. v. Wilcox* (1961)2 S.C.N.L.R. 296; (1961) 1 ALL N.L.R. 631). No wonder he did not say who wrote and or signed it!

I think although the law permits trial Courts to compare writings and or signatures in order to discover their authors, this only arises in a case where the writings and or signatures are in dispute and therefore in issue. And in such cases proven or acknowledged writings or signatures of the disputants must be before the Court. (See *Zakiah v. Board of Customs & Excise* (1966) N.M.L.R. 293).

(b) The comparison must be made in open Court and never in private

The distinction between a comparison made in open Court and that not made in open Court was vividly drawn in the old case of *Duriminyia v Commissioner of Police*.⁵ It was to the effect that whereas those in open Court constitute part of the proceedings and are acceptable, those out of Court are regarded as if in the process of investigation, and not acceptable. In doing the latter, the Magistrate will not be trying the case he will be regarded as investigating. It is not the function of the Court in our adversary procedure to investigate. Where there is evidence that the investigation was made in chambers and not in open Court, it will not be acceptable. In *APC v INEC & Ors.*,⁶ the Court of Appeal per Bolaji-Yusuff, JCA, cited and relied on the Supreme Court of India's decision in *Thiruvengadam Pillai v Navaneethammal*,⁷ where it was held in extenso that while there is no doubt that Court can compare the disputed handwriting/signature/finger impression with admitted handwriting/signature/finger impression, such comparison by Court without the assistance of any expert, has always been considered to be hazardous. When it is said that there is no bar to a Court to compare the disputed finger impression

² 2016) LPELR-40369(CA).

³ 2018) LPELR-45429(CA).

⁴ (1992) LPELR-3528(SC).

⁵ (1961) NRNL.R. 70.

⁶ (2022) LPELR-58974(CA).

⁷ (2008) 3 ALD 112, SC.

with the admitted finger impression, it goes without saying that it can record an opinion or finding on such comparison, only after verifying whether the same characteristics are found in the disputed finger impression. The comparison of the two thumb impressions cannot be casual or by a mere glance. Further, a finding in the judgment that there appeared to be no marked differences between the admitted thumb impression and disputed thumb impression, without anything more, cannot be accepted as a valid finding that the disputed signature is of the person who has put the admitted thumb impression. Where the Court finds that the disputed thumb impression and admitted thumb impression are clear and where the Court is in a position to identify the characteristics of fingerprints, the Court may record a finding on the comparison, even in the absence of an expert's opinion. But where the disputed thumb impression is smudgy, vague or very light, the Court should not hazard a guess by casual perusal. When there is a positive denial by the person who is said to have affixed his finger impression and where the finger impression in the disputed document is vague or smudgy or not clear, making it difficult for comparison, the Court should hesitate to venture a decision based on its comparison of the disputed and admitted finger impressions. Further, even in cases where the Court is constrained to take up such comparison, it should make a thorough study, if necessary, with the assistance of counsel, to ascertain the characteristics, similarities and dissimilarities. Necessarily, the judgment contains the reasons for any conclusion based on a comparison of the thumb impression, if it chooses to record a finding thereon. The Court should avoid reaching conclusions based on a mere casual or routine glance or perusal.

(c) Comparison of signatures or thumbprints should be done sparingly. The provision in all subsections of *section 110* is that the Court “may” and not that the Court “shall”. This is discretionary and does not command any positive and mandatory obligation on the part of the Court. So far as the comparison of the signatures or the thumb impression is concerned, such a course has to be done sparingly. The Judge, who comes to an opinion after comparison, should also disclose his expertise and give reasons for the conclusions. A mere statement that the Court is of the opinion that the thumb impressions or the signature appear to be similar is not proper since an expert, whose evidence is to be assessed, the Judge, who is also giving his opinion, should mention the reasons.⁸

As ably summarised from the kernel of the judgment in *APC v INEC & Ors* (supra), the clear principle established by the above cases is that while the law permits the Court to compare writings and/or signatures in order to discover their authors in cases where the writings and/or signatures are in dispute, proven or acknowledged writings or signatures of the disputants must be before the Court. The Court should always be cautious in exercising that power without input from the parties or counsel and without assistance from an expert especially where several sensitive documents are involved. Mere perusal or scrutinization no matter how painstaking without stating the reasons and the characteristics found in the documents cannot be accepted as a valid basis for finding that the result sheets were written by the same person.

(d) In addition, following the provision for admissibility of digital signatures under the Evidence (Amendment) Act, 2023, where the signature to be compared is digital in terms provided for under *section 93* of the Evidence Act, 2011 as amended, the integrity of the digital signature must be guaranteed. To guarantee the integrity of digital signatures, the law requires that such digital signature

⁸ *Y Jogulamma Jyothi v Chukkakulakondamma* 2011 (6) ALD 741 cited in support.

or other form of authentication must be secure or reliable or fulfil other conditions specified in the statute. Specifically, proof of digital signature is covered under *section 84D* of the Principal Act (introduced by *section 3(1)* of the Evidence (Amendment) Act, 2023 in the following ways-

(1) Except in the case of a secure digital signature, if the digital signature of any person is alleged to have been affixed to an electronic record, the fact that such digital signature is the digital signature of the person must be proved.

(2) A digital signature shall be deemed to be secure if the signature creation data- (a) at the time of affixing the signature, was under the exclusive control of the signatory and no other person; and (b) was stored and affixed in such exclusive manner as may be prescribed.

From the foregoing, a secure digital signature does not require proof but if it is alleged that the digital signature of a person has been affixed to an electronic record, it must be proved that it is the digital signature of that person.⁹ This burden is cast on the party alleging and not on the trial Court.

3.0 Judicial decisions on comparison of signature, writing, seal or finger impressions

The question of whether a Court can form its opinion as it relates to hand-writing is settled and beyond doubt under section 101 of the Evidence Act, 2011 as amended. Furthermore, judicial authorities have been consistent in upholding and preserving that power. Put tersely, it is within the lawful remit or province of Courts to examine documents if the resolution of the controversy between the parties before them so requires. As far back as 1976, in *Ozigbo V COP*¹⁰ the Court restated the principle thus:

In *R v Smith* 3 Cr. APP. R. 87 and *R V. Rickard* 13 CR. APP. R. 140, the Court of Criminal Appeal formed its own opinion as to the handwriting alleged to be that of the appellant after confirming it with a letter written by her after conviction and without resort to expert evidence. We have ourselves compared the specimen undisputed handwritings of the appellant with the forged documents and, in particular, the forged cheque, Exhibit A, and see no reason for disturbing the finding of the learned senior magistrate that the appellant forged the cheque Exhibit A.

Instructively, in 2016 in *Ezechukwu & Anor v Onwuka*,¹¹ Muhammad, JSC, gave wholesale approval of the above dictum. In *Odunewu v Martins & Ors*,¹² decided in 2010, the genuineness of the signature in a will was an issue. Expert opinion of a handwriting expert was introduced. In resolving the matter, now on appeal, the Court of Appeal, per Rhodes-Vivour, JCA (as he then was), reiterated that it is the duty of the trial Court to evaluate the evidence of the handwriting expert on the genuineness of the alleged signature on the Will. In doing so the learned trial Judge must keep the following facts in view-

⁹ N.O. Obiaraeri, *New Regime of Electronic Evidence under the Evidence (Amendment) Act, 2023* (Owerri, Imo State University Press, November 2023) 18-19.

¹⁰ (1976) NSCC (Vol. 10) 124.

¹¹ (2016) LPELR-26055(SC) para D 19-20.

¹² (2010) LPELR-4683(CA) para C 8-9.

- (a) Expert opinion on the genuineness of a signature should be received with caution especially if there are witnesses who come to Court to say they saw the deceased sign the will.
- (b) Hardly anyone signs in the same way all the time.
- (c) Tests conducted by handwriting experts, comparing handwriting and signature are merely tentative.
- (d) Opinion evidence of an expert is weak evidence this is so because it is the evidence of a person who calls himself an expert.

Against the foregoing facts, the Court of Appeal held that the bottom line is that the Court must form its own opinion by also examining the documents in question and looking for other positive evidence that would make the handwriting analyst's evidence reliable or unreliable. Expert evidence only assists the Court in this task.

4. Notes of Concern on Comparison of Handwriting in Digital Signatures and the Artificial Intelligence Era

Section 4 of the Evidence (Amendment) Act, 2023 amended sections 93(1), (2) and (3) of the Principal Act (meaning Evidence Act, 2011) by inserting after the words "electronic signature" the words "or digital signature". Thus, with respect to proof of execution of documents, following this amendment, the provisions of the various amended subsections of section 93 of the Principal Act will read thus-

- (1) If a document is alleged to be or to have been written wholly or in part by any person, the signature or the handwriting of so much of the document as is alleged to be in that person's handwriting must be proved to be in his handwriting.
- (2) Where a rule of evidence requires a signature, or provides for certain consequences if a document is not signed, an electronic signature or digital signature satisfies that rule of law or avoids those consequences.
- (3) An electronic signature or digital signature may be proved in any manner, including by showing that a procedure existed by which it is necessary for a person, in order to proceed further with a transaction, to have executed a symbol or security procedure for the purpose of verifying that an electronic record is that of the person.

Before the above amendment in 2023, the interpretation of section 101(2) of the Evidence Act, 2011 came up strongly in 2017 in the case of *Orjiakor v State*.¹³ In acknowledging the power of the Court to examine a document and form its opinion on handwriting, the Court of Appeal held the Evidence Act 2011 provides that there is no limitation to the power of a Court to examine a document and form its opinion on handwriting, signature or finger impression. The Act provides that the Court can form its own opinion as to handwriting or finger impression by comparing a genuine/specimen with a disputed one. The Court acknowledged that it is provided under section 101(2) of the Evidence Act 2011 that "The Court may direct any person present in Court to write word or figure or to make finger impressions

¹³ (2017) LPELR-42739 (CA) paras A-A.19-21.

for the purpose of enabling the Court to compare the words, figure or finger impression alleged to have been written or made by such person". However, the Court of Appeal, per Ogunwumiju, JCA (as he then was) expressed strong reservations as follows:

Let me say at this juncture that in my opinion, the power to compare and draw conclusions on finger impressions given to the Court by the Evidence Act 2011 as it existed in legislations past is not a progress in the right direction. Even fingerprint experts in the past have been found to make grievous mistakes which have led to gross miscarriage of justice and sadly, innocent people wrongly sent to the gallows.

The correct methodology in such instance is to use artificial intelligence to discover similarities in handwriting, voice and thumbprint. I don't know how that section calling for dependence on human intelligence found its way back into the statute books in this age despite the provisions of *Section 68* which deals with the admissibility of expert opinion. For the avoidance of doubt, *Section 68* of the Evidence Act 2011 is reproduced as follows: -

‘1. When the Court has to form an opinion upon a point of foreign law, Customary law or custom, or of science or art, or as to the identity of handwriting or finger impressions, the opinions upon that point of persons specially skilled in such foreign law, Customary Law or custom, or of science or art, or in questions as to the identity of handwriting or finger impressions, are admissible.

2. Persons so specially skilled as mentioned in *subsection (1)* of this Section are called experts.’

The above quoted having adequately dealt with the opinion of experts as to handwriting or finger impressions, it is my humble view that the inclusion of finger impressions in *Section 101* of the Evidence Act is entirely wrong as it contradicts and wholly defeats the intendment of the said *section 68* of the Evidence Act 2011.

As earlier noted, the above concerns, which are opined to be legitimate and well-founded, in the case of *Orjiakor v State* (supra) came up before the full-scale introduction of admissibility of digital signatures by the Evidence (Amendment) Act, 2023. There is as yet no judicial decision on the impact the admissibility of digital signatures will have on the power of the Court to undertake a comparison of handwritings and signatures especially where they are electronically generated. It is obvious that with the addition of “digital signature” in *section 93* of the Principal Act or the Evidence Act, 2011 as amended, the way has paved the way for admission of digital signatures in judicial proceedings.¹⁴ How then can a Court that is analog or possesses little understanding of the workings of the jungle or maze called the internet be able to compare digital signatures? Even where the Court is technology savvy, it is not the place of the Court to give evidence in a matter before it. It is common knowledge that in this day and age of AI, it is not impossible to hack into a digitally secure system, clone documents, photoshop or use deepfake technology to mimic images and videos. With AI, all manner of documents

¹⁴ Obiaraeri (n 9); N.O. Obiaraeri, *Fundamental Themes on International Human Rights* (Owerri, Zubic Infinity Concept, 2015).

including signatures can be cloned and it takes the forensic ability of technology experts to detect that.¹⁵ This existential reality therefore makes the concerns about the continued relevance of the provisions of *section 110* of the Evidence Act, 2011 in the statute books more than germane. It should not be left to conjecture that, certainly, the Court will need expert evidence or forensic opinions to be able to compare digitally generated evidence and allied matters.

6.0 Who makes the final decision- the expert or the Court?

In *Odutola & Ors v Mabogunje & Ors*,¹⁶ the Supreme Court was emphatic that a handwriting expert may give his opinion on a disputed signature or writing but the final decision on the issue is made by the Judge. However, a note of caution must be sounded that a Court cannot discard the evidence of a handwriting expert and substitute it with its view where there is no contrary evidence of another handwriting expert. This was the position maintained by the Supreme Court in its 2021 decision in *Boye Industries Limited & Anor v Adisa Sowemimo & Anor*.¹⁷ One of the issues in that case was whether a Court could discard the evidence of a handwriting expert and substitute it with its view where there is no contrary evidence of another handwriting expert. The Supreme Court held as follows.

The lower Court had correctly, I repeat, held that the learned trial Judge cannot discard the evidence of the Police handwriting expert and substitute his own view therefor. There was no contrary view and evidence of another handwriting expert. In a situation very similar in *R. v. Michael Adedapo Omisade & Ors* (1964) NMLR 67 (SC); (1964) 1 All NLR 233 (SC), where the trial Judge had, in discarding the evidence of a handwriting expert, described the expert as inexpert before resolving the matter himself by comparing the disputed handwriting with other writings of the accused person, Ademola CJN stated: We do not share the view of the learned trial Judge that he can discard the evidence of the handwriting expert, confused though it was.

It is submitted that the advent of admissibility of electronic evidence under the Evidence Act, 2011 as amended under the Evidence (Amendment) Act, 2023 has made reliance on the evidence of forensic and digital experts in judicial proceedings inevitable.

7.0 Recommendations

It is recommended that the provisions of *section 110* of the Evidence Act, 2011 as amended should be deleted from the statute books as it does not make for wholesale application of electronic evidence in the robust terms contemplated under the Evidence Act, 2011 as amended. A Court should rely on expert evidence to determine cases that depend on or affect the use of technology. Relying on evidence from experts in artificial intelligence and forensics to determine cases will lead to fewer errors of human judgment and injustice. The judges should be trained and retrained on issues of application of technology in adjudication. Aside from technology, the impact of age, ill health and diseases on human

¹⁵ The World Intellectual Property Organisation (WIPO) has defined AI as "a discipline of computer science that is aimed at developing machines and systems that can carry out tasks considered to require human intelligence, with limited or no human intervention". AI is "the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages".

¹⁶ (2013) LPELR-19909(SC) para-A 23.

¹⁷ (2021) LPELR-58510(SC) paras. B-F 13.

and physical agility, abilities and characteristics cannot be ruled out. Signature or handwriting may change significantly and become irregular after the passage of a considerable number of years.

8.0 Conclusion

Despite the beauty, awe and amazing allures of AI, it is still not a substitute for human intelligence. The burden of unravelling the intricacies of the abuse to which technology could be put in a document before the Court should be left to the experts without taking away the power of the Court to have the final say on the matter. Any provision of the law which does not enhance or adapt to living in contemporary times is anachronistic and unhelpful. It should be abrogated from the statute books. The provisions of *section 110* of the Evidence Act, 2011 as amended, are one such legal stipulation and the needful should be done.