Admissibility of Forensic Evidence and Report during Criminal Trials

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The topic set out for me is “Admissibility of Forensic Evidence and Report during Criminal Trials”. To be candid, the topic is so wide in the sense that, apart from the view of a Judge, which I am, I still have to view the topic from the position of an Investigator. However, from the letter of invitation, I am limited to a 30 minutes discuss on the topic. I shall thus not waste any time.

In starting, some descriptions of what “forensic evidence” means is apt.

Forensic evidence is **evidence obtained by the use of science**, for example DNA evidence, etc.

It is also said that forensic evidence is the application of science within legal proceedings. In this respect, the analysis of key data within Court proceedings can help to establish the guilt or innocence of possible suspects. These tests tend to be conducted via scientific, medical, or technological means.

Historically, forensic evidence was originally provided by forensic scientists, although now experts in numerous fields contribute to wide-ranging forensic work in relation to family, immigration, and criminal law, while any given discipline could technically be referred to as ‘forensic’. Professionals in the forensic field testify as expert witnesses and they are recruited by either the Prosecution, Defence or the Court.

In practical terms, forensic evidence means evidence, collected in performing an inspection through the usage of special equipment (forensic laboratory) for recovery, certifying the authenticity and analysis of digital information, being an authentic image (forensic image) of the specific medium of this information.

To explain further, forensic evidence is evidence obtained by scientific methods such as ballistics, blood test, DNA test and used in Court during a criminal trial. In this respect, forensic evidence often helps to establish the guilt or innocence of possible suspects.

The analysis of forensic evidence is or are used in the investigation and prosecution of civil as well as criminal proceedings. Forensic evidence can be used to link crimes that are thought to be related to one another. For example, DNA evidence can link one offender to several different crimes or crime scenes. This linking of crimes helps the Investigating Agents or Authorities to narrow the range of possible suspects and to establish patterns of for crimes to identify and prosecute suspects.

In terms of the etymology of the word, ‘forensics’ (derived from the Latin word, ‘forensis’), and when extracted from the phrase, ‘science’, its origins are firmly rooted in discussions or examinations performed in public. Where results were more widely accountable and strong judicial connotations began.

By and large, forensics is best described as the use of various relative methodologies and processes utilized to solve crimes. Although forensics originally concerned samples being taken from the human body, such as blood and DNA for testing processes, today forensic evidence is not typically restricted to information gathered from people's bodies. Some major categories of forensic evidence are **DNA, fingerprints, and bloodstain pattern analysis**. Fingerprint evidence can actually be more important than DNA in cases were identical twins are involved.

For example, the complex circuitry discovered within our smartphones, laptops and CCTV footage can reveal a lot about the perpetrators of cybercrimes. Those who inadvertently leave delible imprints of their nefarious activities in databases and documents throughout our digital world.

There are 4 types of forensic evidence, namely; Real Evidence, Demonstrative Evidence, Documentary Evidence and Witness Testimony.

1. Real Evidence

Real evidence is also known as physical evidence and includes fingerprints, bullet casings, a knife, DNA samples – things that a jury can see and touch. Real evidence can usually prove or disprove certain facts in the case. Real evidence also has a lot of weight can is considered more important as it tends to prove certain facts or issues beyond a reasonable doubt.

To be admitted, real evidence must be relevant, material, and authentic. Lawyers must establish that the evidence belonged to the accused or was used in the crime.

2. Demonstrative Evidence

Demonstrative Evidence can help illustrate or demonstrate the testimony of a witness. It can include a map of the crime scene or charts or images and pictures of the location that a witness describes. The demonstrative evidence needs to reflect the witness's description accurately. Often Google map print outs or photographs are provided to assist witnesses with locations and distances.

A recent example of this is, if we can remember the CNN report on the **endsars** when trying to justify that there was actually a massacre at the Toll Gate situated at Lekki.

3. Documentary Evidence

Documentary evidence is evidence introduced through documents instead of through oral witness accounts such as a diary entry, newspaper, business records or even a contract. With documentary evidence, it is essential to establish that the document is authentic and from a reliable source. The Evidence Act, section 84 thereof, establishes the rules and regulations surrounding how this evidence can be used and the conditions to tender it as an exhibit at a trial.

4. Witness Testimony

Testimonial evidence is when a witness gets on the stand and provides evidence of their observations. They are testifying to events that they personally observed or heard. Witness testimony is considered both highly important and valuable at criminal trial, but also problematic and unreliable. For example, whom they witnessed involved in a fight, the observations they personally made of the fight and anything they may have heard during the fight. They cannot testify to what others told them about the fight. Also, they cannot provide opinions or speculate about issues surrounding the fight.

The basic rule of evidence is that the evidence presented must be: ***relevant to the case***, must be ***material to the case*** (it must have some legal significance connected to the case), and there cannot be a ***law or rule that excludes it***, such as with hearsay evidence or similar act evidence.

See the following case law - ***OKONJI V NJOKANMA (1999) 12 SC PTII PG 150***, ***DUNNIYA V JOMOH (1994) 3NWLR PT 334 PG 609 @ 617*** and ***OBA R.A.A OYEDIRAN OF IGBONLA V H.R.H OBA ALEBIOSU II & ORS (1992) 6NWLR PT 249 PG 550 @ 559***.

There is no denying the fact that evidence must be reliable and relevant to a case, however there are often criticisms about the quality standards of evidence. The role of forensics in the Nigerian Judicial System is not as developed as obtainable in the United States of America (USA), Canada or United Kingdom (UK).

In the United States of America, for forensic evidence to be admissible, it must pass some test or standard. The earliest test or standard set out by the Court in the United States was established in ***FRYE V UNITED STATES, 293 F. 1013 (D.C. Cir. 1923)***. The test as laid down in that decision of the Court is that a Court applying the **Frye** standard must determine whether or not the method by which that evidence was obtained was generally accepted by experts in the particular field in which it belongs. However, the **Frye** standard has been abandoned by many States and the Federal Courts in favor of the **Daubert** standard, but it is still law in some States.

The **Daubert** standard is the standard used by a trial judge to assess whether an expert witness's scientific testimony is based on scientifically valid reasoning which can properly be applied to the facts at issue. The standard is applied after a **Daubert** motion to strike, a motion in limine, is filed before or during trial to exclude the presentation of unqualified evidence to the jury. It must also be noted that the Courts have held that the **Daubert** standard governing admissibility of expert testimony is procedural and, thus, applies retroactively.

See ***DAUBERT V MERRELL DOW PHARMACEUTICALS INC. 509 US 579 (1993)***.

Under the **Daubert** standard, the factors that may be considered in determining whether the methodology is valid are: (1) whether the theory or technique in question can be and has been tested; (2) whether it has been subjected to peer review and publication; (3) its known or potential error rate; (4) the existence and maintenance of standards controlling its operation; and (5) whether it has attracted widespread acceptance within a relevant scientific community.

As noted above, the **Daubert** standard is the test currently used in the Federal Courts and some State Courts. In the Federal Court system, it replaced the Frye standard, which is still used in some States.

I will now share some more tests or standards adopted by the Courts in the United States of America.

In ***GENERAL ELECTRIC Co. V JOINER, 522 U.S. 136 (1997)***, the Supreme Court clarified **Daubert**, holding that an Appellate Court may still review a trial Court's decision to admit or exclude expert testimony. The standard of review for this inquiry is the abuse of discretion standard.

Next is the case of ***KUMHO V CARMICHAEL 526 U.S. 137 (1999)***. In this case, the Supreme Court further clarified that the **Daubert** factors may apply to non-scientific testimony, meaning "the testimony of engineers and other experts who are not scientists."

Now coming back home, the relevant sections of our Evidence Act which aids the admissibility of forensic evidence are sections 34, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 68, 84 and 149. These sections of the Evidence Act highlighted in this paper can be likened to the tests or standards that will apply with respect to the admissibility of forensic evidence within our jurisdiction. The provisions of these sections of the Evidence Act are reproduced for ease of reference:

Section 34 provides as follows:

1. *"In estimating the weight, if any, to be attached to a statement rendered admissible as evidence by this Act, regard shall be had to all the circumstances from which any inference can reasonably be drawn as to the accuracy or otherwise of the statement, and in particular-*

(a) to the question whether or not the statement was made contemporaneously with the occurrence or existence of the facts stated, and to the question whether or not the maker of the statement had any incentive to conceal or misrepresent facts; and

(b) in the case of a statement contained in a document produced by a computer-

(i) the question whether or not the information which the statement contained, reproduces or is derived from, was supplied to it, contemporaneously with the occurrence or existence of the facts dealt with in that information, and

(ii) the question whether or not any person concerned with the supply of information to that computer or with the operation of that computer or any equipment by means of which the document containing the statement was produced by it, had any incentive to conceal or misrepresent facts".

2. "For the purpose of any rule of law or practice requiring evidence to be corroborated or regulating the manner in which uncorroborated evidence is to be treated, a statement rendered admissible as evidence by this Act shall not be treated as corroboration of evidence given by the maker of the statement".

Section 39 provides as follows:

39. "*Statements, whether written or oral of facts in issue or relevant facts made by a person-*

(a) *who is dead*;

(b) *who cannot be found*;

(c) *who has become incapable of giving evidence; or*

(d) *whose attendance cannot be procured without an amount of delay or expense which under the circumstances of the case appears to the court unreasonable, are admissible under section 40 to 50*".

Section 40 provides as follows:

40. (1) "*A statement made by a person as to the cause of his death, or as to any of the circumstance of the events which resulted in his death in cases in which the cause of that person's death comes into question is admissible where the person who made it believed himself to be in danger of approaching death although he may have entertained at the time of making it hope of recovery*.

(2) "*A statement referred to in subsection (1) of this section shall be admissible whatever may be the nature of the proceeding in which the case of death comes into question*".

Section 41 provides as follows:

41. "*A statement is admissible when made by a person in the ordinary course of business, and in particular when it consists of any entry or memorandum made by him in books, electronic device kept in the ordinary course of business, or in the discharge of a professional duty, or of an acknowledgement written or signed by him of the receipt of money, goods, securities or property of any kind, or of a document used in commerce written or signed by him, or of the date of a letter or other document usually dated, written or signed by him: Provided that the maker made the statement contemporaneously with the transaction recorded or so soon thereafter that the court considers it likely that the transaction was at that time still fresh in his memory*".

Section 42 provides as follows:

42. "*A statement is admissible where the maker had peculiar means of knowing the matter stated and such statement is against his pecuniary or proprietary interest and-*

(a) *he had no interest to misrepresent the matter; or*

(b) *the statement, if true, would expose him to either criminal or civil liability*".

Section 43 provides as follows:

43. (1) "*A statement is admissible when such statement gives the opinion of a person as to the existence of any public right or custom or matter of general interest, the existence of which, if it existed, the maker would have been likely to be aware*".

(2) "*A statement referred to in subsection (1) of this section shall not be admissible unless it was made before any controversy as to such right, custom or matter, had arisen*".

Section 44 provides as follows:

44. (1) "*Subject to subsection (2) of this section, a statement is admissible when it relates to the existence of relationship by blood, marriage or adoption between persons as to whose relationship by blood, marriage or adoption the person making the statement had special means of knowledge*.

(2) "*A statement referred to in subsection (1) of this section shall be admissible under the following conditions-*

(a) *that it is deemed to be relevant only in a case in which the pedigree to which it relates is in issue, and not to a case in which it is only relevant to the issue; and*

(b) *that it must be made by a declarant shown to be related by blood to the person to whom it relates, or by the husband or wife of such a person: Provided that- (i) a declaration by a deceased parent, that he or she did not marry the other parent until after the birth of the child is relevant to the question of the paternity of such child upon any question arising as to the right of the child to inherit real or personal property under any legislation; and (ii) in proceeding for the determination of the paternity of any person, a declaration made by a person who, if an order were granted, would stand towards the petitioner in any of the relationships mentioned in paragraph (b) of this subsection, is deemed relevant to the question of the identity of the parents of the petitioner; and*

(c) "*that the statement must be made before the question in relation to which it is to be proved had arisen, but it does not cease to be admissible because it was made for the purpose of preventing the dispute from arising*".

Section 45 provides as follows:

45. (1) "*The declarations of a deceased testator as to his testamentary intentions and as to the content of his will, are admissible when-*

(a) *his will has been lost, and when there is question as to what were its contents; or*

(b) *the question as to whether an existing will is genuine or was improperly obtained: or*

(c) *the question as to whether any and which of more existing documents than one constitute his will*.

(2) "*In the cases mentioned (1) of this section, it is immaterial whether the declarations were made before or after the making or loss of the will*".

Section 46 provides as follows:

46. (1) "*Evidence given by a witness in a judicial proceeding, or before any person authorised by law to take it, is admissible for the purpose of proving in a subsequent judicial proceeding or in a later stage of the same judicial proceeding the truth of the facts which it states, when the witness cannot be called for any of the reasons specified in section 39, or is kept out of the way by the adverse party. Provided that-*

(a) "*the proceeding was between the same parties or their representatives in interest*";

(b) "*the adverse party in the first proceeding had the right and opportunity to cross-examine; and*"

(c) "*the questions in issue were substantially the same in the first as in the second proceeding*".

(2) "*A criminal trial or inquiry shall be deemed to be a proceeding between the prosecutor and the defendant within the meaning of this section*".

Section 47 provides as follows:

47. "*A statement in accordance with sections 290 and 291 or section 319 of the Criminal Procedure Act, may afterwards be used in evidence on the trial of any person accused of an offence to which the same relates, if the person who made the statement cannot be called for any of the reasons specified in section 39, and if reasonable notice of the intention to take such statement was served upon the person against whom it is to be read in evidence and he had, or might have had, if he had chosen to be present, full opportunity of cross-examining the person making the statement*".

Section 48 provides as follows:

48. "*Any statement made by a defendant at a preliminary investigation or at a coroner's inquest may be given in evidence*".

Section 49 provides as follows:

49. "*Notwithstanding anything contained in this Act or any other law but subject to this section, where in the course of any criminal trial, the court is satisfied that for any sufficient reason, the attendance of the investigating police officer cannot be procured, the written and signed statement of such officer may be admitted in evidence by the court if-*

(a) *the defence does not object to the statement being admitted; and*

(b) *the court consents to the admission of the statement*".

Section 50 provides as follows:

50. "*In the case of a person employed in the public service of the Federation or of a State who is required to give evidence for any purpose connected with a judicial proceeding, it shall be sufficient to account for his non-attendance at the hearing of the said judicial proceeding if there is produced to the court either a Federal or State Gazette or a telegram, an e-mail or letter purporting to emanate from the head of his department, sufficiently explaining to the satisfaction of the court his apparent default*".

Section 68 provides 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 identity of handwriting or finger impressions, the opinions upon that point of persons specially skilled in such foreign law, customary law or custom, or science or art, or in questions as to identity of handwriting or finger impressions, are admissible*".

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

See ***KUNLE SHONUBI V PEOPLE OF LAGOS STATE (2015) LPELR – 24807 (CA)***

Section 84 provides as follows:

84. (1) "*In any proceeding a statement contained in a document produced by a computer shall be admissible as evidence of any fact stated in it of which direct oral evidence would be admissible, if it is shown that the conditions in subsection (2) of this section are satisfied in relation to the statement and computer in question*".

(2) "*The conditions referred to in subsection (1) of this section are-*

(a) *that the document containing the statement was produced by the computer during a 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, whether for profit or not, by anybody, whether corporate or not, or by any individual*;

(b) *that over that period there was regularly supplied to the computer in the ordinary course of those activities information of the kind contained in the statement or of the kind from which the information so contained is derived*;

(c) *that throughout the material part of that period the computer was operating properly or, if not, that in any respect in which it was not operating properly or was out of operation during that part of that period was not such as to affect the production of the document or the accuracy of its contents*; *and*

(d) *that the information contained in the statement reproduces or is derived from information supplied to the computer in the ordinary course of those activities*".

3) “*Where over a period the function of storing or processing information for the purposes of any activities regularly carried on over that period as mentioned in subsection (2) (a) of this section was regularly performed by computers, whether-*

(a) *by a combination of computers operating over that period*;

(b) *by different computers operating in succession over that period*;

(c) *by different combinations of computers operating in succession over that period; or*

(d) *in any other manner involving the successive operation over that period, in whatever order, of one or more computers and one or more combinations of computers. All the computers used for that purpose during that period shall be treated for the purposes of this section as constituting a single computer; and references in this section to a computer shall be construed accordingly*”.

(4) “*In any proceeding where it is desired to give a statement in evidence by virtue of this section a certificate-*

(a) *identifying the document containing the statement and describing the manner in which it was produced*;

(b) *giving such particulars of any device involved in the production of that document as may be appropriate for the purpose of showing that the document was produced by a computer. (i) dealing with any of the matters to which the conditions mentioned in subsection (2) above relate; and purporting to be signed by a person occupying a responsible position in relation to the operation of the relevant device or the management of the relevant activities, as the case may be, shall be evidence of the matter stated in the certificate; and for the purpose of this subsection it shall be sufficient for a matter to be stated to the best of the knowledge and belief of the person stating it*”.

(5) "*For the purpose of this section-*

(a) *information shall be taken to be supplied to a computer if it is supplied to it in any appropriate form and whether it is supplied directly or (with or without human intervention) by means of any appropriate equipment*;

(b) *where, in the course of activities carried on by any individual or body, information is supplied with a view to its being stored or processed for the purposes of those activities by a computer operated otherwise than in the course of those activities, that information, if duly supplied to that computer, shall be taken to be supplied to it in the course of those activities*;

(c) *a document shall be taken to have been produced by a computer whether it was produced by it directly or (with or without human intervention) by means of any appropriate equipment*".

See ***DR. IMORO KUBOR & ANOR V. HON. SERIAKE HENRY DICKSON & ORS CITATION: (2012) LPELR-SC.369/2012*** and ***OMISORE V AREGBESOLA (2015) LPELR - 24803 (SC)***

Section 149 provides as follows:

"*When any document is produced before any Court purporting to be a document which by the law in force for the time being in any country other than Nigeria would be admissible in proof of any particular in any Court of justice in that country, without proof of the seal or stamp or signature authenticating it, or of the judicial or official character claimed by the person by whom it purports to be signed, the Court shall presume –*

(a) *that such seal, stamp or signature, is genuine; and*

(b) *that the person signing it held, at the time when he signed it, the judicial or official character which he claims, and the document shall be admissible for the same purpose for which it would be admissible in the country where the document is produced*".

See ***KUNLE SHONUBI V PEOPLE OF LAGOS STATE (supra)***.

There is an emerging challenge in the processing of evidence pertaining to electronic and cybercrimes; and the common challenge is in the handling and processing of electronic evidence and maintaining the chain of custody and improving the technological approach.

One cannot separate for trial purposes, forensic evidence from the testimony of forensic experts. The forensic experts have obligations to the Court and an expert must help the Court to achieve the overriding objective by giving objective, unbiased opinion on matters within their expertise. This duty overrides any obligation to the person from whom he receives instructions or by whom he is paid.

In all, despite the fact that forensic evidence is admissible, according to the Law, the weight the Court will ascribe to such evidence will depend on the quality of the witness and their involvement in the gathering of such evidence. It is always best to use the expert who was involved in the investigation that led to the gathering of such evidence as the witness to tender such evidence during trial. This is the purport of section 68 of the Evidence Act.

Furthermore, such evidence gathered should not be tainted or corrupted in any manner. Once there is any evidence that the evidence is tainted or corrupted, though it may be admissible, may be a worthless piece of evidence.

To establish proper chain-of-custody of the evidence, investigators must track the evidence from place to place, documenting who retrieved, handled, transported and received the evidence, specifying all dates and times. It should be stated that without a proper chain-of-custody documentation, a Court may rule the evidence hopelessly compromised and inadmissible at trial.

It is stated that the basic protocols for the handling of forensic evidence depends on the circumstances. An Investigator may need to wear a sterile suit covering his body, hair, and shoes to prevent him from contaminating the evidence with his own DNA or any other trace evidence he might otherwise transport with him to the scene. At almost every crime scene, he will wear latex or chloroprene gloves, and change them often during the evidence collection process. These gloves not only help safeguard the crime scene from contamination, but protect the Investigator from potentially harmful bacteria and toxic debris. Additionally, to reduce the amount of dusts and mists from fingerprint powder or chemical processing and putrid decomposition odors he might otherwise breathe in, an Investigator may wear a respirator.

In storing such evidence retrieved, an Investigator should place most evidence into paper containers, such as bags and envelopes; evidence packaged in plastic bags may be exposed to moisture, hastening deterioration and risking environmental contamination, such as mold, and the destruction of useable DNA or other trace evidence. Investigators should not package moist evidence until it is thoroughly dry and or seal collection bags or envelopes prematurely. Most evidence should be stored at room temperature, unless it is liquid evidence, in which case it should be refrigerated and packaged in a sterile glass or plastic bottle.

An investigator is responsible for appropriately labeling all evidence collection containers with the case number, collection location, date and time, and his identifying information. He should log all collected evidence on a separate document, for later reference.

The five steps recommended by the Federal Bureau of Investigation for collecting and preserving evidence are (1) obtaining it legally; (2) describing the evidence in detailed notes; (3) identifying it accurately and positively; (4) packaging it properly for identification, storage, or shipment to the laboratory; and (5) establishing and maintaining the chain of custody. Specific precautions should be taken in handling weapons used in an attack, clothing, firearms, blood stains, seminal stains, fingernail scrapings, hairs, fibers, drugs, and poisons. The Investigator's equipment should include fingerprint accessories, a vacuum sweeper with special filters, containers, tools, magnifiers, casting equipment, and ultraviolet light equipment. The success of the laboratory technician's analysis depends directly on the Investigator for the quality of the physical evidence.

In Forensic Science, Introduction to Scientific Crime Detection - by H. J. Walls 2nd Edition Page 228 the author posited thus:

> "*What Courts require of the expert maybe summed up as: impartial, reliability, clarity, relevance forensic science service which is to command credence and respect must obviously be and be known to be completely objective and impartial*"

However, despite my opinion above, the Court of Appeal in ***BLESSING V FRN (2012) LPELR - 9838*** *(CA)* held that:

> "*It is not necessary for forensic expert who analysed the drug and issued the report Exh. 4 to come to Court, in person to tender the document for it to be admitted. What governs admissibility is relevance necessary for forensic expert pleaded and is properly tendered in the form and by the person it should be produced and if not opposed and consented by the Court such a party cannot object on appeal*."

See also ***OSENI V STATE (2012) LPELR -7833 (SC)***.

It should be pointed out that in these cases, ***BLESSING V FRN (supra)*** and ***OSENI V STATE (supra)***, the crucial issue there was that there was no objection to the admissibility of the document, which met all the conditions under the Evidence Act, when it was being tendered during trial. It was only when the decision of the trial Court was appealed against, the Appellant sought to discredit the way the forensic evidence was tendered during trial. The Apex Court in their decision held that since there was no objection as to who, the witness, tendered the forensic evidence during trial, no such objection will be entertained at the Appellate Court.

In conclusion, I will say that forensic evidence is admissible in our Courts during criminal trial. However, the presentation of such during trial is a major factor as to whether it will be admitted or if admitted, if any evidential weight will be placed on it.

I thank you for your patience and attention.

Further references:

Forensic Education – An Indispensable Tool In the Nigerian Judicial System by Dr. Abioudun Osiyemi BSc, MBBS, MSc (Distinction), MBA, MSc (Forensic Sc), PhD (Management) FIMBS, FRSPH (UK), FIMC, CMC, CFE, MITD

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