Critical Analysis of Pakistani law of Electronic Evidence from the Perspective of Sharī'ah and English Law-Recommendations for Pakistan

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Abstract

This article claims that law of electronic evidence in Pakistan lags behind from two perspectives. First, it is quite primitive from the perspective of modern development in legal rules in other states. Secondly, since the primary source of law of evidence in Pakistan is Qanun-e-Shahadat Order 1984, which is based on Evidence Act 1872 (A British Empire's legislation in Indo Pak subcontinent). So, law of evidence in Pakistan does not carry basic principles of Sharī'ah regarding testimony and evidence. This article is aimed at exploring the shortcomings of law of Pakistan from both perspectives. Areas that are mostly relevant in this regard shall be discussed, like, oral testimony, authentication of evidence, expert testimony, circumstantial evidence etc. in this article.

Key words: Pakistani law, Shariah, English law

Introduction

This research is going to critically evaluate, Pakistani law of electronic records, from the perspective of Sharī'ah and English law. Law of electronic evidence in Pakistan, are mainly covered in three legislations which are;

- Oanoon-e-Shahadat Order 1984.
- Electronic Transaction Ordinance 2009.
- Prevention of Electronic Crimes Act 2016.

Two points need to be kept in mind before making the analysis of Pakistani law:

The law of electronic evidence is not different from law of physical evidence. There are no separate legal rules for electronic evidence. Most of the states like Canada, Australia, India and USA, deal with electronic evidence under the rules of physical evidence. But this is a fact that these countries have made necessary amendments pertaining to electronic evidence. The areas dealing with physical evidence are also applicable to electronic evidence, hence, both operate with the same legal rules. Foundation of all evidences is the same, whether physical or electronic.

The law of Evidence followed in Pakistan was Evidence Act, (1872) till 1984. This law was made by British Rulers in Indo Pak subcontinent, and consisted of English rules. After that Qanun-e-Shahadat Order 1984 was

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passed which in reality, is a mere repetition of Evidence Act 1872, except article 3 to 6 (with reference to Hudood), adding art. 44 and addition of a proviso to art 42.4 So, it can be concluded, that Pakistani law does not carry Sharī'ah complaint rules of electronic evidence in Qanun-e-Shahadat Order 1984, other than a few terminologies like Shahādah and Shahādah 'alā Shahādah etc.

Current article shall make analysis of Pakistani law on electronic evidence, from Sharī'ah as well as English law's perspective. It will explore the basic areas which are incumbent for evidence, like authentication, oral testimony, expert testimony and circumstantial evidence, from the perspective of Sharī'ah as well as common law.

Authentication of Evidence

Admissibility of evidence is conditioned with its reliability and trust, whether it is dealt under; Islamic law, Western law or Pakistani law. If the evidence lacks in reliability, it would be inadmissible in any court of law. Methods of authentication, however, vary in each legal system. For instance, Islamic law introduced a number of methods of authentication which includes the followings,

Purgation of witnesses,⁵

Testimony is admissible only if it is delivered by a Just witness, ⁶

Expert witnesses were not trusted blindly unless authenticity of their opinion was mentioned and.⁷

Strong Circumstantial evidence.8

With the help of above-mentioned methods, judges of Islamic courts were able to seek authenticated evidence by employing latest means of proof of that time. Above four principles shall be elaborated in next part of the article under the heads of circumstantial evidence and expert testimony.

Now-a-days, modern laws of evidence, along with application of above methods for authentication, also apply technological methods. It is usually believed that technology is difficult to handle, while dealing with investigations. In reality, technology though difficult to handle, is very helpful too for investigating modern crimes like for instance, investigating through call records, finger prints, bank statements, videos etc. Electronic evidence can be authenticated by technological means. Chances of falsification of such evidence are one in million. These methods include;

Hash tags

Hash Values have a huge importance especially in digital forensics. Hash values are principally used for verification of digital data. These values are generated from a document, at the start of the investigation, which makes the integrity of digital material verifiable. Later, at the time of delivering document the hash values are compared to initial ones. It discloses if the document is tampered or not and

Meta data⁹

Like English and Islamic law, Pakistani law also talks about authentication of electronic evidence through modern means. Section 5 of Electronic Transaction Ordinance in 2002 says;

- "1) The requirement under any law for any document, record, information, communication or transaction to be presented or retained in its original form shall be deemed satisfied by presenting or retaining the same if:
- (a) There exists a reliable assurance as to the integrity thereof from the time when it was first generated in its final form; and (b) it is required that the presentation thereof is capable of being displayed in a legible form.
- (2) For the purposes of clause (a) of sub-section (1);
- (a) the criterion for assessing the integrity of the document, record, information, communication or transaction is whether the same has remained complete and unaltered, apart from the addition of any endorsement or any change which arises in the normal course of communication, storage or display; and (b) the standard for reliability of the assurance shall be assessed having regard to the purpose for which the document, record, information, communication or transaction was generated and all other relevant circumstances."

Above mentioned section reveals that requirement for authentication to be satisfied is that the document is presented in original form. The requirement will be satisfied if "there is a reliable assurance as to integrity at the time when it was generated in its final form." Here, this article argues, no methods of authentication either scientific or physical are clearly identified. It has been mentioned that the document has remained complete and unaltered, apart from the changes arising in the normal course of communication, storage or display. Moreover, the above mentioned section does not define what should be the course of communication. The method of proving a document is incomplete and term 'unaltered' remains ambiguous.

For authentication, idea of electronic information being complete and unaltered makes sense for computer-generated evidence. ¹⁰ But if the information is in the form of computer stored evidence¹¹, this idea cannot be justified. The reason behind, is that it is manually stored in a computer. a confusion that what is meant by reliable assurance of integrity? The method of reliable assurance should have been discussed. Other legal systems talk about methods of authentication like, US code¹² Indian IT ACT 2000.

Electronic data changes rapidly even without the knowledge of an ordinary computer user. If a document is saved from one place to another the Meta Data of that particular document changes. So, the method of ascertaining that this document is unaltered and complete is not defined. Authentication of electronic evidence means it is unaltered and complete. This article argues that the method of ascertaining authentication still remains a grey area.

Such problems are addressed in the laws of other countries. For instance, in the USA's law of evidence, they have clearly mentioned that they would assess the integrity of a document with the help of hash values. In US codes, Code no. 44926, it is clearly mentioned that the document shall be maintained and secured by encryption and hashing. Such rules of procedure should be absorbed in the ETO, 2002 as well, so that the chances of confusion may be avoided among the judges as well as the lawyers.

Challenges of reliability and admissibility are raised if the document is not protected by technological measures. ETO, 2002 is silent about ascertaining the reliability of data. This article argues that, in this age of high technology and cyber-crimes, a state cannot afford a silent law on this delicate issue which can cost millions to the institutions.

Section 46-A discusses the integrity of the information system. The criterion for authentication of a document generated by an automated information system is defined in terms of "in working order". The meaning of working order is unexplained and remains ambiguous. The law is silent about the methods of checking working order of an information system. All these factors lead to uncertain statements about the authentication of electronic documents.

Apart from the technological loopholes in Pakistani law, there are lacunas from Sharī'ah perspective too. Unfortunately, it is silent about the methods of authentication mentioned in Islamic law. These shall be discussed in the article below.

Hearsay Evidence

Hearsay issues have high importance, at the time of dealing with electronically stored evidence. ¹⁴ As most of the social media conversations are made via internet and electronic means. All of these statements are hearsay if they are not authenticated by the person who made the statements. All of these issues need to be clarified by the judge before admitting that evidence. In electronic evidence, it is quite important where there is a matter of computer stored evidence¹⁵.

Islamic law does not allow hearsay evidence except in four cases which includes death, birth or kinship. Article 1688 of Majallah Al-Aḥkām stated that, "It is necessary that the witness should know personally that to which they depose, and that their evidence should be given in that way. It is not permissible for them to give evidence saying, "By hearsay, i.e. I heard from people Pakistani law, on the other hand, does not discuss any relationship of hearsay with electronic evidence nor does it discuss any of the exceptions to hearsay rule, whether from Islamic or Western law perspective. Keeping in view the importance of hearsay in electronic evidence, this article advocates, some exceptions must be inculcated in Pakistani law. For instance, there

should be two sets of hearsay exceptions, i.e., where the declarant's unavailability is immaterial, and where declarant's unavailability is not required ¹⁶ certain exceptions are added in Federal rules of evidence USA¹⁷.

Due to this reason that Abu al-Faraj suggests that certain exceptions should be added to Islamic law of evidence¹⁸ which do not have repugnancy and Pakistani law should add these exceptions too.

Best Evidence Rule

This rule is being followed by Islamic as well as English law. Whatever best possible evidence is available, must be pursued in courts of law. The evidence, which is first-hand, original and primary is reliable in courts of law for adjudication of dispute between the litigants. This rule is mostly observed for documentary evidence but for electronic evidence, best evidence rule is not really important. As the evidence is generated by electronic system- the photocopies are identical to primary evidence In this case such photocopies are considered as primary evidence. Same approach is being observed by Pakistani legal system.

The original writing rule in Pakistani law has followed the laws of other western countries. Section 4 of the ETO, 2002 deals with original writing rule and says;

Requirement for writing

The requirement under any law for any document, record, information, communication or transaction to be in written form shall be deemed satisfied where the document, record, information, communication or transaction is in electronic form, if the same is accessible so as to be usable for subsequent reference." Along with original writing rule, concept of primary evidence has also been changed entirely.

Primary evidence

"Primary evidence" means the document itself produced for the inspection of the Court.

Explanation 2: Where a number of documents are all made by one uniform process, as in the case of printing, Lithography or photography, **each is primary evidence of the contents of the rest**; but where they are all copies of a common original they are not primary evidence of the contents of the original [Explanation 3: A printout or other form of output of an automated information system shall not be denied the status of primary evidence solely for the reason that it was generated, sent, received or stored in electronic from if the automated information system was in working order at all material times and, for the purposes hereof, in the absence of evidence to the contrary, it shall be presumed that the automated information system was in working order at all material times.

[Explanation 4.- A printout or other form of reproduction of an electronic documents, other than a document mentioned in Explanation 3 above, first generated, sent received or stored in electronic form, shall be treated as primary evidence where a security procedure was applied thereto at the time it was generated, sent, received or stored.]"

In physical documents, primary evidence is the original copy of the document. But the case is different in electronic evidence where all the documents produced through the automated system are primary. Such evidence fulfils the criteria of the original writing rule.

Oral Testimony

Oral testimony is very important while dealing with electronic evidence. It is essentially required in the issues regarding completeness of data, methods of inputting data or there are alterations in it. In these cases, witnesses with knowledge are called by the court of law (www.ojp.usdoj.gov/nij). Knowledge required by the court for witness does not necessarily include technical information. It has been recognized by courts of law that witness with knowledge must carry the information regarding safe custody and method of saving data in computer. For instance, it is not necessary for the witness to have programmed the software.

Like, English law, Islamic law and Pakistani law, greatly relies on oral testimony in matters of evidence. But the basic rules followed in Pakistani law are quite more different from Islamic law, which accepts testimony from witnesses of just character. As per rules of Islamic law, a testimony for electronic evidence must be taken by a just witness. A witness who has a doubtful character cannot lead to truth. There is a long discussion of Muslim jurists explaining the attributes of a just witness (Ibn Nujaīm, n.d; Marsoof, 2010). Although the standards of the Muslim Jurists regarding these characteristics relaxed with the passage of time, but there is still a criterion to meet.¹⁹ English law does not stipulate any such condition on witnesses regarding admissibility of oral testimony.

Islamic law also introduces highly effective mechanism of purgation of witnesses.²⁰ It developed a complete system of accredited witnesses who subsequently became the helpers of the judge.²¹ English law on the other hand does not have any such procedures which involve purgation of witnesses.

Secondly, observing specific number of witnesses in different crimes is also stipulated by Quran. In fornication and slandering, four male witnesses must testify. Similarly, in matters of Qisas, two males, just witnesses must testify. But women are not allowed to testify in case of Hudood and Qisās. Likewise, in civil matters two male just witnesses must testify. In case two male testimonies are not available, two just female witnesses shall replace one male witness. ²² And if it is not possible to seek male testimony like, matters of menstruation, childbirth or girl's hostel, woman's testimony alone is admissible.²³ But this rule is based on doctrine of necessity.

Pakistani rules for oral testimony are covered by Section 70 and 71 of Qanun-e-Shahadat Order 1984. Unfortunately, these sections do not touch the very basic principles fixed by Qur'an and Sunnah.

Proof of facts by oral evidence

All facts, except the contents of documents, may be proved by oral evidence.

Oral evidence must be direct

Oral evidence must, in all cases whatever be direct, that is to say—

- If it refers to a fact, which could be seen, it must be the evidence of a witness who says he saw it;
- If it refers to a fact, which could be heard, it must be the evidence of a witness who says he heard it;
- If it refers to a fact, which could be perceived by any other sense or in any other manner, it must be the evidence of a witness who says he perceived it by that sense or in that manner;
- If it refers to an opinion or to the grounds on which that opinion is held, it must be the evidence of the person who holds that opinion on those grounds:
- Provided that the opinions of experts expressed in any treaties commonly offered for sale and the grounds on which such opinions are held, maybe proved by the production of such treaties if the author is dead, or cannot be found, or has become incapable of giving evidence, or cannot be called as a witness without an amount of delay or expense which the Court regards as unreasonable:

Provided further that, if oral evidence refers to the existence or condition of any material thing other than a document, the Court may, if it thinks fit, require the production of such material thing for its inspection:

Provided further that, if a witness is dead, or cannot be found or has become incapable of giving evidence, or his attendance cannot be procured without an amount of delay or expense which under the circumstances of the case the Court regards as unreasonable, a party shall have the right to produce, "shahada ala al-shahadah" by which a witness can appoint two witnesses to depose on his behalf, except in the case of Hudood."

The main focus of section 71 is to approve direct evidence and not hearsay. This section does not entail basic sharī'ah principles regarding Oral Testimony. It is silent about the methods of authentication of oral testimony and also about the methods of authentication which are given in sharī'ah like admitting testimony of just witnesses, purgation, or ensuring specific number of witnesses etc.

Islamic law also stipulates that blood relations, business partners cannot testify for each other because they have interest in the matter and there is a fear of biased testimony.²⁴ But such conditions have not been observed in Qanun-e-Shahadat Order, which is a question mark, on incorporation of Islamic rules in Qanun-e-Shahadat Order.

Unlike English Law, the Islamic law differentiates in women testimony²⁵. Women are not allowed to testify in cases of Ḥudūd and Qisās. It is proved by the Sunnah of Prophet (PBUH) and 'Ijma'. It is allowed only in cases other than Ḥudūd and Qiṣāṣ like financial matters, property, marriage, divorce, freeing of slave, 'Iddah and sulḥ, etc. Opinion of scholars is different regarding admissibility of women's testimony, which would be equally applicable to electronic evidence (Ibn Rushd, 1987). English law does not differentiate between both testimonies. Same is the case with Pakistani law as Pakistani law is following English law of evidence.

These terms and conditions are not only applicable for physical evidence but are equally applicable to electronic evidence. So, these rules must be incorporated in QSO 1984, both for physical and electronic evidence. In addition to this English law at present in its native countries are highly updated with respect to electronic evidence. Pakistani law on the other hand, is not updated at all. It does not discuss whether oral testimony is required for electronic evidence or not. Moreover, what shall be the requirement of oral testimony?

The standards applied for oral testimony in QSO 1984, are those which are in English law. These standards have nothing to do with Islamic laws. Although Pakistan is a Muslim country but the laws being followed by the state citizens are common law. Same is the case with electronic evidence. Witnesses who come for testimony for e-evidence are the ones who qualify through English law. The qualification for admissibility of oral testimony, in Pakistan, must be Sharī'ah compliant.

It is pertinent to mention here that not all the matters in electronic evidence need rules of proof similar to physical evidence. Keeping in view the technical nature of evidence some rules are different. They have nothing to do with repugnancy from Islamic law perspective. Like, there are number of evidences which are automatically generated by the computer. This kind of evidence do not need oral testimony, rather it needs to have surety that the system was in working order (QSO/ETO).²⁶ Or) or the document was generated in ordinary course of business.²⁷ In these cases, instead of oral testimony, documentary evidence is presented in court. As these computergenerated evidences are considered reliable proofs. An analysis of admissible documentary evidence in Sharī'ah needs to be discussed here.

Documentary Evidence

Documentary evidence, like oral testimony, is also one of the strongest means of proof in Islamic law. Quran itself commands in verse 282 of chapter no 02;

"O ye who believe! When ye deal with each other, in transactions involving future obligations in a fixed period of time, write them, let a scribe write down faithfully as between the parties." 28

Purpose of discussing documentary evidence in electronic evidence is that, currently most of the states have incorporated the latest forms of documentary evidence in their legal systems. These include all types of electronic evidence. Most of the states including Pakistan has expanded the meaning of documentary evidence and included electronic evidence in it.²⁹ For instance, UNCITRAL Model Law of electronic evidence 1996³⁰ and Uniform Act of Australia. ³¹

As discussed above that documentary evidence are not only permissible in Islamic law, rather they have been commanded by Qur'an to draft legal document out of big transactions or debt transactions. A number of narrations by Prophet (Peace Be upon Him) also suggests the importance of documentary evidence.³²

In classical courts there was an extensive practice of using documentary evidence. So, the admissibility of documentary evidence in Islamic courts is out of question. Islamic courts, while pondering over the criteria of admissibility of documentary evidence, had different viewpoints. But before that an important classification of documentary evidence needs to be kept in mind. Documentary evidence is of two types; Public documents and Private documents. As far as public documents are concerned, there were different types, for instance, mahadir and sijillat.³³ These documents are admissible in courts without oral testimony, if there are absolutely no chances of falsification. The practice of frequently referring to these kinds of documents was very common.

Heim Gerber (1994), while discussing the practice of documentary evidence in classical Islamic courts, states that,

"Courts accepted masses of documents in as prima facie evidence. Claims of citizens on the government and vice versa were based solely on documentation-claims of income from waqf, taxation, fetvas from the Shaikh-ul-Islam, and so on were all embedded in documents. All this was certainly an element of more importance in the work of the court." ³⁴

A proper practice of document archival, was there, which were frequently used by the courts for future references.³⁵ Such public documents were self-authenticating. Due to the stamps and seals by accredited witnesses on them, were reliable enough due to their chain of custody.³⁶

There was also an extensive practice of drawing private documents for private transactions. In fact, the private transactions were dependant on drafting of legal documents.³⁷ This practice ended up in formation of very vast

literature of legal documents used in classical Islamic courts. This literature mainly consisted of formularies (search for meaning), i.e samples of private transactions, called shurūṭ literature. ³⁸ This field expanded more in Hanafi school of thought as compared to other schools. ³⁹ Imam Tahawi⁴⁰ and Imām Mohammed⁴¹ wrote detailed books on shurūṭ literature. Abū Jaʿfar Aḥmad b. Muḥammad b. Salām b. al-Taḥawī (n.d), is considered to be one of the great religious and legal scholars of Islamic Law especially on documentary evidence. He wrote Kitāb al-Maḥāḍirwaʾl-Sijillāt. Other renown books written by him on Shurūṭ were; Kitāb al-Shurūṭ al-Kabīr and Kitāb al-shurūṭ al-Saghīr. Imām Muḥammad also compiled a book titled as "Kitāb al-Shurūṭ". ⁴²

Hence it is proved that, the practice of using documentary evidence both in private and public document is, 1400 years old. It is reported that documentary evidences were used even in pre-Islamic era. Only the thing that need to be sure is, whether it beis a private document or a public, it should be properly authenticated. In private documents, such kind of authentications is given through testimony of accredited witnesses. While, in public documents, proper chain of custody and self-authenticating seals will suffice.

A large number of countries have expressly considered electronic documents equivalent to paper documents. Likewise, Pakistani law, Qanun-e-Shahadat Order 1984 also considers in section 2(b) that paper document is equivalent to electronic document. Article 164 of Qanun-e-Shahadat Order 1984, states that acceptance of no evidence in court shall be denied on the ground that it is from modern means of proof. . Section 27 (b) of anti-Terrorism Act 1997 says that, person shall be convicted on the basis of electronic or forensic evidence, whichever is produced due to modern devices. Nevertheless, Pakistani law is silent about what will be the method of authentication of electronic documents. Method of authentication explained above in Qanun-e-Shahadat Order and Electronic Transaction Ordinance are quite general and are, therefore, vague. At this latest age of modern technology, only writing that electronic documents shall be admissible and convictions shall be made on the basis of forensic evidence is not enough. It is the age where law elaborates the procedure to minimise the confusions for lawyers, judges and public. Here the judiciary can play an important role to elaborate these provisions. But most of the cases explain what kinds of evidence are admissible in courts. For instance, In Salman Ahmad Khan v. Judge Family Court, Multan case court permitted the applicant to record her statement through a video link. The court held that recording of evidence through modern devices is permissible under article 164 of Qanun-e-Shahadat Order. In another case Asfandyar v. Kamran it was observed by the court that CCTV footage is admissible in a preview of article 164. But "mere production of CCTV footage as a piece of evidence in court was not sufficient to rely upon the same unless and until it was proved to be genuine. In order to prove the genuineness of such footage it was incumbent upon the defence or prosecution to examine the person who prepared such footage from the CCTV system". In another case Munas Parveen v. Additional sessions Judge/Ex-officio Justice of Peace, Shorkot, it was observed by the court that:

"Information conveyed over modern devices such as SMS---Such information was means of communication validly accepted all over the world however the witness in whose presence such information was conveyed or received was always important to prove a fact through its verification—Although under Art 73 of QSO, 1984 modern devices were legally acceptable yet in order to prove a fact the required procedure had to be followed."

Nowadays electronic evidence is a part and parcel of procedural laws as well. Unfortunately, law of procedure in Pakistan, Civil Procedure Code and Criminal Procedure Code, are totally silent about modern methods and procedure, like electronic discovery or electronic search and seizure. This flawed system of justice is putting a lot of delays in satisfying the complaints.

Expert Testimony/Technical Opinion

The importance of expert testimony cannot be denied in courts of an Islamic State, as well as in the matters related to electronic evidence. Quran itself says in verse no 43 of chapter 16 and verse 7 of chapter 21;

فَاسْأَلُوا أَهْلَ الذِّكْرِ إِنْ كُنْتُمْ لَا تَعْلَمُونَ

"Ask those who know [ahl al-dhikr] if you do not know". Imām Sarakhsī (1993), in his book Al-Mabsūt, says that this verse of Quran refers to the opinion of experts. ⁴³ It is being reported about Prophet (Peace Be upon Him), that:

Once he visited his Companion Sa'd b. Abī Waqās, who was ill. Prophet (peace be upon him) realised that the condition of the patient is not well, and he needs to be examined by an expert doctor. So he called upon al-Ḥārith b. Khlādah, from tribe of Thaqīf, who was quite well-known for his expertise, Prophet (peace be upon him) said: ista'īnū 'alākullṣan'a bi-ṣāliḥ ahlihā)."44

Companions of Prophet and Muslim jurists⁴⁵ were very liberal at using expert testimony wherever it was required. For instance, according to Ḥanafī jurist Sarakhsī, if a woman admits that she is pregnant and she is unmarried, her claim would be verified by two female experts. If expert's answer is positive then her hadd punishment would be postponed for two years, during which she would be imprisoned. If she is unable to deliver the baby during that time, hadd punishment shall be applied.⁴⁶

Position of expert testimony in classical Islamic courts was indispensable (look if appropriate) for technical matters of that time. Like, handwriting, property matters, matters related to medical forensics etc.⁴⁷

But if these precedents are closely explored it can be concluded that expert testimony was treated like other testimonies. The qualification of experts mattered, like there was a condition of two or more experts. When it was treated like other testimonies there were criteria regarding their character and their qualifications

Same is the case with English law, where expert testimony is accepted with conditions. Matter of qualification of experts was long being discussed in Western countries. Principles are set for their acceptance, for instance, Fryer Rule⁴⁸ and Daubert precedent.⁴⁹ Many countries like UK and Australia also stipulate their condition regarding admissibility of experts⁵⁰

Pakistani law talks about admissibility of expert testimony in section 59 and 60 in Qanun-e-Shahadat Order 1984;

Opinions of experts

When the Court has to form an opinion upon a point of foreign law, or of science/or art, or as to identity Of hand-writing or finger impressions, 1[or as to authenticity and integrity of electronic documents made by or through an information system shall be inserted; and] the opinions upon that point of persons specially skilled in such foreign law science or art, or in questions as to identity of hand-writing or finger impressions are 1[or, as to the function specification, programming and operation of information system are relevant facts.] Such persons are called experts.

Facts bearing upon opinions of experts

Facts not otherwise relevant, are relevant if they support or are inconsistent with the opinions of experts, when such opinion is relevant."

Above mentioned two sections, does not stipulate any condition for admissibility of expert testimony. It only stipulates that such expert testimony is relevant and that opinion of experts with regards to electronic evidence shall be relevant and admissible but what will be the criteria for selection of experts should have been elaborated or at least judiciary should explain the role and criteria of qualification for digital forensic experts. Qualification of experts was discussed in Abdul Ahad v. The State; ⁵¹

"The most essential requirement of the law is that an expert on the particular subject whether Science, Art or Law including Muhammadan Law must be a master in the relevant field because of special duty, training, experience and extensive research work carried out. The opinion of such an expert alone would be relevant and admissible."

But here the criteria for training and experience are not mentioned. These lacunas and empty holes need to be filled by Pakistani as well as by Pakistan judiciary. But unfortunately, Pakistani legal system does not have their own jurisprudence. If the judges are confronted with any problem, all they do is consult western law books judgments and Indian judgement.⁵² So, Islamic principles lag even more behind. There becomes no difference between a Muslim state of Pakistan, who believe in Quran Sunnah and non-Muslim state.

Circumstantial Evidence

Status of circumstantial evidence in Quran, Sunnah and life of Companion of Prophet, is evident. Qur'an says, "So they both raced each other to the door, and she tore his shirt form the back. They both found her lord near the door. She said: "What is the (fitting) punishment for one who formed an evil design against your wife, but prison or a grievous chastisement? He said: "It was she that sought to seduce me-from my (true) self" And one of her house hold saw (this) and bore witness, (thus)-"If it be that his shirt is rent from the front, then her tale is true and he is a liar. But if it be that his shirt is torn from the back then she is the liar, and he is telling the truth!" So when he saw his shirt that it was torn at the back-(Her husband) said: "Behold! It is a snare of you women. Truly, mighty is your snare!" O Yūsuf, pass this over! (O wife), ask forgiveness for your sin, for truly you are at a fault (Al-Qur'an 12:25-29; also in, Al-Qur'an, 12:18)." There were two women who had small sons. A wolf came and took away the son of one of them; one of them said to other, "it was your son". The other said, "No, it was your son". They brought their dispute to Prophet David A.S and he decided in favour of the elder. Then they went to Prophet Solomon A.S and rendered to him their dispute for decision. He ordered to provide him a knife to make two pieces of the child so as to give one piece to each one of them. On this the younger one of them said, "Don't cut him into pieces; this is the son of elder one". Hearing this Prophet Solomon (PBUH) decided in favor of the younger one (Saḥīḥ al-Bukhāri, Hadīth no.6769, 156). Above mentioned verses from Holy Quran and hadīth circumstantial evidence was considered relevant while adjudicating the disputes between the litigants in cases where direct evidence is lacking.

Similarly, there are large number of examples which are present in the life of Companions and other scholars where they used their investigative skills to reach the truth. Such as, when 'Ali (God be pleased with him) convinced Caliph 'Umar about a case which required an expert testimony. There was a woman in Madina, who fell in love with a man who rejected her wooing. She wanted to take revenge on him. She made a plan of making him liable for punishment. She spilled the egg white on her clothes and thighs and then complained to Caliph 'Umar b. al-Khattab that the man had raped her. 'Umar was about to pass judgment against that person, 'Ali b. Abi Talib intervened. After putting boiling water on the liquid, which according to plaintiff was the semen of the defendant. He identified the real source of liquid and urged the plaintiff to confess, which she eventually did (Al-Dār Quṭnī, vol.4, 2011). Even Muslim jurists relied heavily on circumstantial evidence. Principles regarding circumstantial evidence (Qarīna) are well defined and elaborated in Islamic law books.

Purpose of discussing circumstantial evidence here for electronic evidence is that there is a very strong bonding between electronic evidence and circumstantial evidence. There are a number of modern scholars who consider that modern pieces of electronic evidence of medical forensic are nothing more than circumstantial evidence. It has been recognized both by modern Muslim jurists and Western jurists.

Importance of circumstantial evidence in classical Islamic courts is no doubt immense and in proving or disproving of an offence. Modern scholars like Dabur,⁵³ Wahbah al-Zuhaili,⁵⁴ states that modern pieces of evidence are not different from of circumstantial evidence. These forms are admissible in court and should be considered as strong circumstantial evidence.

In common law these kinds of evidence are considered as circumstantial evidence. Many judgments have endorsed this fact that circumstantial evidence. These cases are solved with the help of authentication of circumstantial evidence. ⁵⁵

But unfortunately, Pakistani law is silent about circumstantial evidence. There is no discussion about circumstantial in nature. Furthermore, the admissibility and criteria of selection of circumstantial evidence is not mentioned. This important factor must be given ample importance and some compact principles must be derived from the basic principles of modern laws of developed nations. But these rules however, must ensure in conformity with Islamic law.

Conclusion

The above detailed discussion concludes that law of Pakistan on electronic evidence is confined to permissibility stage till now, although, this is the age of procedural approach towards electronic evidence and how to deal with it. Stepping in the third decade of 20th century and having laws being legislated in 2002 is an alarming situation for Pakistan. Moreover, Qanun-e-Shahadat Order is based on old common law principles of evidence, which are obsolete in nature. These rules are neither in conformity with Islamic legal principles of evidence, nor do they represent latest changes from the technology perspective. Even the states who made these laws have updated their own legal rules for their own countries. It is right time for Pakistan to realize these needs and make their own principles which deal with both areas well. Rules regarding oral testimony are based purely on English law, ignoring completely injunctions from Quran and Sunnah. Same is the case with authentication of evidence, expert testimony and circumstantial evidence. Laws of Pakistan are totally silent about, principles pertaining to expert testimony. Similarly, circumstantial evidence is the area which is quite essential for solving the case of electronic evidence. Pakistan is not dealing with these methods of proofs.

References

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- 2 For details see Federal Rules of Evidence of USA, Canadian Evidence Act.
- 3 Ibid.
- 4 Munir, Muhammad. "Islamisation or De-Islamisation?: De-Islamisation of the Law of Evidence under the Disguise of Islamisation by General Zia-ul-haq in Pakistan." De-Islamisation of the Law of Evidence under the Disguise of Islamisation by General Ziaulhaq in Pakistan (March 23, 2014) (2014), 2.
- Purgation means Tazkīyah in Arabic. It is a formal procedure which is carried out by the judge in order to check out the character of witnesses. If he possesses a good reputation, which means his good deeds are dominated in his personality upon the bad deeds, it means he is able to testify. There is a difference between moral uprightness (Adālah) and Purgation. Moral uprightness is the apparent character of a witness while Purgation is a formal procedure as stated earlier.
- 6 Surah Al-Talaq 65:2
- Ibn Rushd. Abū al-walīd Muḥammad bin Aḥmad, Bidāyat al- Mujtahid wa nihāyat al-Muqtaṣid, 4 vols. (Cairo: Maktabah Ibn Taimiyah, 1987), 1037-1038
- Wahbah al-Zuhaīlī, "Al-Fiqh al-Islamī wa 'Adiltuhu" vol6. (Damascus: Dār al-fikr, 1985), 556.
- Metadata is commonly described as "data about data," and is defined as "information describing the history, tracking, or management of an electronic document.9 Appendix F to The Sedona Guidelines: Best Practice Guidelines & Commentary for Managing Information & Records in the Electronic Age defines metadata as "information about a particular data set which describes how, when and by whom it was collected, created, accessed, and how is it formatted (Including data, demographics such as size, location, storage requirements and media information)." Phillip J. Favro, A New Frontier In Electronic Discovery: Preserving And Obtaining Metadata, B.U. J. SCI. & TECH. L 13:1, 7. Also in, www.sedonaconference.org. Also see in Lorraine v. Markel, 241 F.R.D. 534 (D. Md. 2007) at 28.
- Records generated by computer that does not involve human intervention. Examples of these types of records are data logs, telephone connections, and ATM transactions. The main evidential problem with this type of records is to establish that the computer program was working properly at that time. A. Comment, A Reconsideration of the Admissibility of Computer-Generated Evidence, 126 U. PA. L. Rev. 425 (1977), Jerome J. Roberts, "A Practitioner's Primer on Computer-Generated Evidence." The University of Chicago Law Review 41, no. 2 (1974): 254-280.
- The records of activities that involve the written content by one or more people. For example, emails, word processing files and messages. From the evidential point of view, it would be necessary to establish that the content of the document is a reliable record of human statement. A. Comment, A

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- Federal Rules of Evidence, USA. Rule § 44926. https://www.law.cornell.edu/uscode/text/49/44926
- https://www.law.cornell.edu/uscode/text/49/44926
- 14 Lorraine v. Markel American Ins. Co. 241 F.R.D. 534 (D. Md. 2007)
- 15 Ibid.
- Abualfaraj, Maha. "Evidence in Islamic law: reforming the Islamic evidence law based on the federal rules of evidence." Journal of Islamic Law and Culture 13, no. 2-3 (2011): 163.
- 17 Federal Rules of Evidence, Rule 803, Exceptions to Hearsay Rules https://www.law.cornell.edu > Federal Rules of Evidence
- Abualfaraj, Maha. "Evidence in Islamic law: reforming the Islamic evidence law based on the federal rules of evidence." Journal of Islamic Law and Culture 13, no. 2-3 (2011): 163.
- The standards set by Imam Abū Ḥanīfa were bit stricter than his disciples. The reason given for this law was change in environment.
- 20 Marghīnānī, al-Hidāyah, vol. 3/118...
- 21 Ibid.
- Surah Al-Nisa 4:15---Surah Al-Baqarah 2:282
- The evidence of women is valid with respect to such things as is not fitting for man to behold". 23 The Hidayah or Guide: A commentary on the Mussalman Laws, Trans. Charles Hamilton, vol. 2 (London: T. Benslay, n.d),668. <a href="https://books.google.com.pk/books?id=Tq9CAAAAcAAJ&pg=PA668&lpg=PA668&dq=The+evidence+of+women+is+valid+with+respect+to+such+things+as+is+not+fitting+for+man+to+behold&source=bl&ots=0qwE6qEfe0&sig=BO3cBfegfjoysZxtz4sEMiWa9wU&hl=en&sa=X&ved=0ahUKEwjExraN2KrTAhUEVxQKHRY8BrAQ6AEIKTAC#v=onepage&q&f=false (acessed: 17th April, 2017)
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- Ibn Rushd, "Bidāyat al- Mujtahid wa nihāyat al-Muqtaşid", 4/247.
- 26 Oanun-e-Shahadat Order sec 46-A
- 27 Stephen Mason, Electronic Evidence, 137.
- Surah Al-Baqarah 2:282, Translated by Yousaf Ali.
- Germany, Belgium, Spain, Finland, France, Ireland, Italy. Luxembourg, Portugal, and Romania. The regulation of documentary evidence plays a relevant role in these countries when it comes to considering the regulation of electronic evidence. and also, Fredesvina Insa, "The Admissibility of Electronic Evidence in Court (AEEC): Fighting Against High-Tech Crime—Results of a European study." Journal of Digital Forensic Practice 1, no. 4 (2007): 285-289 and Murdoch Watney, "Admissibility of electronic evidence

- in criminal proceedings: an outline of the South African legal position." Journal of Information, Law & Technology 1 (2009): 3
- The 1996 Model Law of UNCITRAL defines electronic or computer information and includes information: —generated, sent, received or stored by electronic, optical or similar means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex.
- The Australian Uniform Law Commissioners, defines document as any —record of information, including: (a) anything on which there is writing; or (b) anything on which there are marks, figures, symbols or perforations having a meaning for persons qualified to interpret them; or (c) anything from which sounds, images or writings can be reproduced with or without the aid of anything else; or (d) a map, plan, drawing or photograph.
- Many narrations from the Prophet Muhammad (Peace and Blessings of Allah be Upon Him (p.b.u.h) also established the precedent, regarding the orders about drafting legal documents and their enforceability in the court of law. For instance, Prophet ordered his companion 'Ali to draw up a document in his name at Hudaibiyah.52 Another example is of Prophet Muhammad commanded his representative to draft a written agreement when he purchased a slave from one of his companions. Muḥammad bin Aḥmad bin abi Sahl shams al-'Aa'ema al- Sarakhsi, Al- Mabsut, Vol. 30 (Beirut: Dar al-Ma'rafa, 1993), 168.
- This record of the court was known as mahdadir and sijilat. These formularies contained the model documents for use of qadi and his clerical staff who were acting in the capacity of notary as well. More accurately mahadir were the minute of the court. These were the record of court proceeding which were written in form of qadi. While siillat were the actual written judgment of the qadi. The sajjalat means "drafting of a document". Jeanette Wakin wrote in her book that "it also meant to diploma of investiture of a qadi and a document drawn up by a qadi nominating a witness". See in Jeanette Wakin, The Function of Document in Islamic Law, 11
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- Foot note explain
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