

Legality and Weight of Genetic Fingerprint as Evidence in Jordanian Law

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Abstract

This study examined the topic of genetic fingerprint, which is a modern technique that helps to detect many crimes, informs the identity of the accused in a short time, contributes to the discovery of the identity of victims who have been subjected to total or partial mutilation, and has a significant role to play and is strong evidence of proof and credibility that the likelihood of error or suspicion is minimal. The study used the descriptive and analytical curriculum by describing the footprint, describing its most important characteristics and features, and analyzing the relevant legal texts this study has reached several conclusions, the main findings of which are that only twins are similar when they are similar. Every person has his own biological system that gives him independence and distinction from others, which makes the footprint, and Jordan's penal legislation does not provide for it as a means of proof, and it has the advantage of stability whether in cold or high temperatures. It has reached several recommendations, the most important of which was that the Jordanian legislature promulgate legislation on the genetic footprint.

Keywords: Genetic fingerprint, proof, DNA, crimes, Jordanian law.

Introduction

One of the most important discoveries of modern times is the so-called genetic fingerprint, the genetic material that is located in the nucleus of the cells of all organisms, which is expressed in DNA, where man's body gives its own qualities such as length and colour. In terms of man's body, DNA is regarded as a combination of father and pain (Al-Thunaibat, 2003).

The use of fingerprints as evidence gives it great importance to criminals, since they are suitable for both humans and animals, and their source may be skin, hair and other body organs, and this fingerprint is not similar to two except for twins when it is similar (Hosni, 1998).

Attention to footprint has become a priority in shaping the judge's conscientious conviction, and his role in civil matters has not been limited to proof of descent but has extended to the identification of the assets of individuals in order

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to be granted the nationality of their State of origin and to know the identity of the dead in accidents or disasters (Aqida, 2004).

Genetic footprint plays an important role in detecting and identifying crimes if scientific and legal safeguards exist. Its penal laws are considered as legal evidence used through DNA analysis at the crime scene and comparison with the person suspected of committing the crime. And although the genetic footprint has taken an important place in the legislation's attention as a modern and sophisticated technique and conclusive proof of crime, or refute it, but sometimes it is subject to the Court's discretion and is considered relative evidence (Al-Zaabi, 2014).

The problem raised by the study is whether the genetic footprint is authentic in establishing crimes, determining their legal nature, the reliability on which it is authoritative, whether it is regarded as independent evidence as calm in and testimony or as a legal presumption.

This study aims to identify the concept of genetic fingerprint, its means of use, the requirements for its adoption, its authenticity in the persistence of crimes and the position of Jordanian law thereon, and its role in proof

The importance of the topic lay in the evidence, particularly as crimes were so widespread that they needed to be used as evidence. In particular, it affirms the fact that everyone has a biological system of his own that gives him independence and distinction from others, which gives it importance to researchers and interested jurists and sharia law. This debate rages on the place of this role from other evidence (such as acknowledgement, bedding, flair, recognition and testimony). Researchers used the descriptive approach by describing the genetic footprint, demonstrating its characteristics and features, and the analytical approach through the analysis of legal texts and the statement of judicial applications (Bin Younis, 2004).

The Concept of Genetic Fingerprint

The footprint and the extent to which it is adopted as a means of proof requires highlighting the biological cell and the way it is formed as the vessel for this type of fingerprint, clarifying the technique used in its extraction and processing, and thus defining the legal framework that gives it legitimacy in the field of research. Requires a study start Definition of genetic fingerprint and their characteristics and Use of fingerprint Genetic footprint features and Requirements to rely on footprint as evidence (Abdel Muttalib & Zubaida & Abdel Aziz, 2003).

Definition of Genetic Fingerprint and Their Characteristics

The legislation does not define genetic fingerprinting in its texts, although the courts take it as evidence in civil and criminal fields. In French jurisprudence, it considers that fingerprinting is: "enduring original genetic features and is defined

through genetic examination of the definitive knowledge of individuals” (Al-Zaabi, 2014; Bin Younis, 2004; Al-Billeh, 2022a).

The genetic footprint is conclusive evidence in identifying persons; In spite of the similarity between them, they are more often than 100%, and this is the basis for the scientific and applied field. "Another team considers the fingerprint to be the synthesis of D.N.A. DNA, which contains human genetic traits" (Othman, 1964; Al-Billeh, 2022b).

The footprint is the genetic composition that indicates an individual's own identity in terms of the proper matters resulting from DNA testing, in a way that hardly goes wrong in scientific terms, and relied on scientific proof as s parents equally at the moment of fertilization and gives them a genetic system that is distinct from others, which helps to prove and not as final evidence"(Hosni, 1998; Al-Billeh, 2022c).

The genetic footprint has a range of characteristics, the most important of which are:

It is applied to all parts of the body on hair, blood, bone and skin, and here it highlights its importance especially in the absence of fingerprints for perpetrators of criminality and the existence of such traces, which leads to their identification in crimes such as theft, rape, adultery or murder (Aqida, 2004; Al-Billeh, 2022d).

The genetic footprint is not similar to two strangers, and only matches. In identical twins, "Every person has his own biological system that gives him independence and distinction over others, which makes it a strong and unequivocal presumption (Rostom, 1994; Al-Billeh, 2022e; Bin Younis, 2006).

One of the most important characteristics of the genetic footprint is that it has a constant strength in various weather conditions such as high heat, cold or moisture (Al-Husseini, 2012; Corrias, 2023; Abdel Muttalib & Zubaida & Abdel Aziz, 2003).

Use of Fingerprint

Genetic fingerprints are used to identify who is meant to prove identity when finding bodies, parts or pieces, and to prove filiation or descent. The genetic footprint in criminal matters helps to identify the perpetrator, such as homicides, in which the perpetrator often has a biological impact on his victim such as: (hair, skin related to the victim's fingernails as a result of resistance...). They are also used in crimes of rape and harassment to establish the existence of the act and to identify the true perpetrator (Bin Younis, 2006; Al-Thunaibat, 2003).

In some countries, footprint is used as a means of fighting illegal transit. For example, England requires fingerprinting when applying for a visa to its territory to combat forgery offences in cases of illegal immigration, it also plays an

important role in differentiating between natural and intentional deaths, and the coroner uses them for some sudden deaths and raises doubts about the real cause of these deaths. When the coroner arrives at the laboratory's findings declaring the mutation in the DNA of the heart muscle, where the death is found to be normal (Al-Feki, 2013; Al-Ghaferi, 2007; Fox & Yamagata, 2022).

Genetic Footprint Features

The fingerprint is important in the knowledge of unknown persons or victims, as by which bodies are identified in the event of natural disasters such as: (earthquakes, landslides, floods, fires and storms), as well as in serious incidents, including aircraft accidents, as well as in cases where mass graves were found formed as a result of ethnic cleansing, genocide or dissident liquidation, and in explosions that turn people into scattered parts (Al-Zaabi, 2014; Al-Ghayathin, 2013; Freitas, 2017).

Fingerprints are also used in matters of parentage or exile, as well as in cases of confusion of newborns in maternity hospitals as a result of disrespect for maternity wards (Al-Thunaibat, 2003; Alkhseilat et al., 2022).

Human fingerprints are of great importance as we identify perpetrators of crimes when they have their fingerprints on tools and surfaces at the crime scene, and medical discoveries have discovered many characteristics and the extent to which they have a genetic impact. Medical discoveries have shown that within the nucleus of a human cell a number of chromosomes consist of genetic material, symbolized by genetic genes. Each chromosome contains a number of genes that may reach up to 100,000. They control human qualities, as well as other organizational functions of genes (Al-Thunaibat, 2003; AL-KHAWAJAH et al., 2022).

The genetic footprint is a great discovery and we have to take it into account in our legislation because of its severing power in solving problems and differences, its use in the field of proof as evidence, and in the United States the footprint is used as conclusive evidence and cannot be questioned in establishing or denying the crimes committed, one of the leading claims is the issue of Bill Clinton and Monica Lonisky have a physical relationship with the footprint evidence (Hosni, 1998; Alshible et al., 2023; Al-Billeh et al., 2023; Longo & Lorubbio, 2023).

The phrase "genetic fingerprint" indicates that every individual in the composition of his genetic cell contains a group of chromosomes, inherited from his mother and father. The person inherits from his father and from his mother, consisting of chromosomes of his own that do not correspond to his father's chromosomes or his mother's chromosomes and that they came together (Al-Thunaibat, 2003; ALMANASRA et al., 2022).

And knowing that a human sample is taken from urine or blood or..... Examining them and describing the child's genetic characteristics, and we can establish these genetic qualities of the child from his or her inheritance, will then be judged by his or her paternity, otherwise severing his or her paternity (Al-Thunaibat, 2003; Isa et al., 2022; Al-Billeh & Al-Qheiw, 2023).

Requirements to Rely on Footprint as Evidence

The fingerprint is a separate proof of parentage if the necessary conditions exist and is invoked in the event of a conflict of parentage. This must be ordered by the judge. If the results of the examination prove a person's parentage or lack thereof, they must be applied, even if they conflict with other evidence (Abu Issa, 2014; Al-Thunaibat, 2003; Al-Billeh & Abu Issa, 2022).

The importance of genetic fingerprint requires that the credibility of the outcome of the analysis be ascertained and that the sample be obtained from the accused by legitimate means.

1- DNA testing has been done in an accurate manner because this analysis needs great expertise and a highly efficient coefficient, it is necessary to observe the method and work of the examiner (Hosni, 1998).

2- The sample was lawfully taken because the result of the inspection of the sample taken was acceptable and weighed in proof. The procedures used to obtain this Guide must also be in conformity with the Law's provisions (Hosni, 1998; Khashashneh et al., 2022; AL-Hammouri et al., 2023; Al-Billeh, 2023).

Results and Discussion

The Jordanian Penal Code has not promulgated legislation that considers the hereditary footprint as evidence and does not contain the provisions of the Penal Code and the due process of criminal proceedings. and the competent courts' work as necessary expertise, Article 39 of the Code of Criminal Procedure provides the public prosecutor with the assistance of experts, including doctors, who carry out an analysis of suspected persons' genetic fingerprints.

Jordan, like the rest of the Arab Republic, acknowledged that fingerprinting has power as evidence to help detect many crimes such as murder and rape, informs about the accused's identity in a short time, and that fingerprinting also contributes to the discovery of the identity of victims who have been subjected to total or partial mutilation, and that fingerprinting plays a significant role (Al-Thunaibat, 2003; Al-Hammouri & Al-Billeh, 2023).

Jordanian legislation has given the judiciary considerable authority to use biological tests, such as analysis of the genetic footprint in criminal cases in terms

of expertise in technical and scientific matters or of legal importance to the means of scientific progress. The Court of Discrimination in this regard has considered the tests issued by forensic laboratories in honour-related offences. The Court of Cassation also considered that the medical reports supported the evidence available in the case, according to which "this detailed acknowledgement was reinforced. In one of its decisions, the Court of Cassation held that medical reports were not sufficient to convict the accused and did not indicate that he had committed the offence, stating that "the testimony to the hearing does not serve as evidence and forensic medical reports demonstrate the material element of the offence and does not indicate that the accused committed it" (Abu Issa, 2014; Al-Billeh et al., 2023).

As a result of the lack of specialized health institutions to analyse Jordan's genetic footprint, as in other Arab States, this situation has resulted in a weak genetic footprint. The legal provisions governing these areas require the presence of an expert. Article 39 of the Code of Criminal Procedure stipulates this (Code of Criminal Procedure No. 9 of 1961). The Jordanian legislature has drafted this law to regulate the work of experts hired in any case requiring an expert's consideration (Abu Issa, 2014; Al-Billeh & Al-Hammouri, 2023):

The position of the judiciary in the Arab States is similar to that of the judiciary in Jordan. The Jordanian Court of Cassation has established that the Court has the power to evaluate evidence, including the expert's opinion. In this regard, however, it has distinguished between technical, ordinary and scientific issues.

In the first case: the court had the right to neglect the expert's report and to rule on the basis of the other evidence available in the case.

Secondly, the Court may not neglect the expert's report wrongfully except on the basis of another scientific opinion. The Court is entitled to neglect the genetic test report if it is incompatible with another medical report in the same area. or was outside the legal safeguards established by law. that the first defendant" y "could not be the father of the girl (Sorour, 2014; Al-Billeh & Abu Issa, 2023; AL-KHALAILEH et al., 2023; Al-Khawajah et al., 2023; Reiling & Contini, 2022).

Conclusion

Through this study, we found that genetic fingerprints play an important role in the field of penal proving that they are considered to be a sophisticated scientific technical means of verifying perpetrators of crimes, where they are found by members of the justice officer at the place where the crime was committed and through which the distinctive genetic characteristics of each person are known by examining a sample of blood, hair, semen or saliva. The genetic footprint has been used as a serious and sophisticated technician, and to accept this technique as evidence to establish the accused's guilt and innocence is required under a number

of conditions.

Jordanian legislation in the field of criminal proof has used the principle of free proof. Crimes and misdemeanours are established by all means of proof, including genetic fingerprints and the granting of a broad authority to the judiciary to use biological tests. Offences ", such as the use of footprint analysis for criminal proceedings, especially as the means of committing offences have advanced in modern ways, In this regard, the Court of Cassation also considered the biological tests of specialized honour-related crimes laboratories to be operational.

As a result of the lack of specialized health institutions to analyse Jordan's genetic footprint, as in other Arab countries, this situation has resulted in a weakness in the field of genetic footprint, and the legal texts regulating these fields require the presence of an expert

. Through this study, the two researchers found important findings that the footprint has a significant role to play by knowing the perpetrators or acquitting the accused in the crimes, especially with progress in this regard. One of the most prominent material determinants obtained by the investigator at the crime scene, together with other fingerprints, that lead to the formation of a conviction at the judge breaks the doubt with certainty.

Jordan's legislature has not included provisions on fingerprint, nor has it kept pace with the development in this area. But it is used as a medical expertise that the genetic footprint has taken an important place in the legislation's attention as a modern and sophisticated technique and conclusive evidence in establishing or refuting the crime, but sometimes it is subject to the discretion of the court and is considered relative evidence.

The two researchers have found that Jordanian legislators should enact legislation governing the operation of the footprint and how it should be used as an argument for proof, stipulate that the footprint is conclusive by establishing the case, not merely a presumption that reinforces other evidence.

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