

FP IDENTIFICATION - OPINION OR FACT

Circulated by Euan Innes head of the Scottish Fingerprint Service

Over the past few years, arising primarily from discussions on the change to the National Standard and the media exposure of the McKie case it is evident that a majority of the experts within the SFS believe that they do not present expert opinion on identification but in fact present the identification as fact. It would seem that a majority of our FP experts agree that fingerprint identification properly carried out & verified is an absolute fact not an opinion.

The expert witness institute which advises technical experts on court procedures has stated that many fingerprint experts regard their comparisons as facts and that "it is essential they see their evidence as opinion and expect to be cross examined"

Experts are allowed to give opinionative evidence in court because they have specialist knowledge which the court does not readily possess. The defence have the opportunity of testing the evidence and the witness by cross examination of the expert witness. It is up to the court whether or not they accept or discard the evidence which is presented. If as our experts claim FP identifications were a statement of fact then the necessity for the expert and any cross examination of his findings would be irrelevant and any challenge by the defence pointless - the identification is a fact.. Patently this is an untenable position - the FP expert gives his expert opinion of an identification.

A fingerprint expert is able through adequate training, scientific knowledge and understanding as well as structured practice and experience in friction ridge comparison and identification to give a professional/expert opinion in relation to their findings in court.

The expert offers interpretation, based on scientific principles (Ace - V), which should be reproducible (verifiable) by other experts. The scientific basis for identification should be utilized for explaining the reasoning behind the opinion. The ability to arrive at the correct conclusion is affected by the quality/quantity of the impression and the skill of the expert.

Fingerprint comparison is a series of decisions made by the expert requiring skilled judgment. This judgment is determined by past experience it is therefore possible for different experts to arrive at different conclusions following their examination thus differing in their opinions

The expert is speaking in court to their conclusion (ident; nonident; insufficient) which is based on expert opinion, supported by their knowledge of the subject, training, experience and qualifications. One can only speak to ones own conclusions given as opinions. The defence will have had the opportunity, had they so decided, to have an independent expert examine, compare and read their conclusions which are based on their expert opinion.

This debate has been accentuated in recent years by the McKie case whereby any reference to expert opinion has been loudly attacked by the McKie camp since any insinuation that it is expert opinion that is given by FP experts would automatically abort their case for monetary compensation. They have thus understandably immediately decried any suggestion that FP experts are giving expert opinion.

The following is quoted in the International Association for identification (IAI - the US fingerprint expert's Society) code of ethics :-

"Having made factual determinations the examiner must then interpret and evaluate the findings. In this way they will be guided by experience and knowledge which, coupled with a serious consideration of their analytical findings and application of sound judgments, may enable them to arrive at opinions and conclusions pertaining to the matters under study"

Again to quote David R Ashbough's book "Quantative - Qualitative Friction Ridge Anlysis" - a seminal treatise on the scientific basis of fingerprint examination -

"An opinion is then formed as to whether the prints are in agreement and if there is sufficient uniqueness to eliminate all possible donors except this one. The opinion of individualization is expressed in various terms which basically mean elimination, individualization and not sufficient uniqueness to individualize or eliminate. The opinion of individualization is subjective as it is based on ones knowledge and ability"

In essence individualisation carried out by a fingerprint expert consists of observations of the shape, positioning and orientation of features in marks and tenprints which is a subjective activity and hence the conclusions drawn of these shapes and their positions are his opinion. Due to the technicalities such as the crucial "coincident sequence and the fact that because marks are not of copy book standard, fingerprint marks and print comparison is a series of decisions requiring skilled judgment an backed up by appropriate training, experience, qualifications and knowledge which are expert opinions.

In 1988/89 Evett and Williams carried out a collaborative study in which fingerprint experts from many different bureaux in Britain and abroad examined 10 different sets of comparisons (mark vs tenprint) 9 of the labeled pairs were from past casework at new Scotland Yard with the experts there agreeing that 6 comparisons should result in full identifications and 3 should be non-provable identifications. The fast mark was the thumb print belonging to an expert at NSY with an AFR search done and the top scoring candidate used as the tenprint.

Copies of the material were sent to FP bureaux and it was requested that experts with over ten years service carry out the comparisons and decide whether the comparisons resulted in:

- 1 Full Identification
- 2 A non provable identification
- 3 Not identical
- 4 Insufficient detail for an opinion.

The experts on the study then considered that there were 6or 7 full identifications yet 16% of the UK participants recorded 3 or less identifications.

Two officers from SCRO participated and found 6 full idents and 3 non provable idents.

4 experts at the FBI decided that 9 of the comparisons resulted in full identifications of court room quality.

3 members of the Dutch "standard setting committee" from Holland unanimously found that only one of the comparisons was a full identification, while the rest were insufficient.

So experts do form opinions on identifications.

Another case which clearly exemplifies this 'different opinions' position is the appeal case against Gilbert McNamee (The Hyde Park Bombing). In brief FP marks were found on a Duracell battery which was removed from an explosive device. McNamee was convicted and appealed but was turned down. After serving 12 years in prison McNamee's case was raised and heard by the Criminal Review Commission.

At the end of November 1998, 13 different experts including Heads and Deputy heads of bureaux in England, Senior fingerprint experts and Independent experts gave opinions at the Royal Court of Justice in London as to their findings. Opinions ranged from "not identical", "identical" and "insufficient." Opinions also ranged as to whether the mark had any movement in it. McNamee's appeal was successful.

Again a situation where experts gave their opinions ranging from identical to not identical. No one ever suggested that one side had to be wrong and must have therefore conspired to commit perjury.

Within the standard applied by experts for identification is the statement that an identification can be made providing there are no differences between the mark and the print which cannot be reasonably explained. So a difference in a comparison could be seen as explicable by one expert and inexplicable by another. A clear definition of opinion - an expert may see the differences are explicable (movement of the mark) while the other see it as inexplicable. Both experts have valid expert opinions on the identification.

The McKie mark is an excellent example of this "explicable/inexplicable differences" generating differences of opinion between experts. On the one side - those who opinion is that it is not an identification - observe a number of characteristics at 12 o'clock on the tip of the mark which do not appear on Shirley McKie's left thumb tenprint. They see this difference in characteristics as inexplicable and hence it is not an identification. They see no further need to examine any characteristics which are in agreement. On the other side those who are of the opinion that it is an identification - recognize the characteristics at the tip of the mark and explain this by rotation of the thumb on the door jam and if these characteristics seen at 12 o'clock in the mark are rotated through 66 degrees, anti clockwise they correspond with characteristics at 2 o'clock on the tenprint of Shirley McKie. Thus they find the differences explicable and go on to find in excess of 20 other characteristics in agreement in sequence and coincidence hence their opinion is that it is an identification.

A classic case of experts having different opinions on an identification generated by their opinions on whether differences can or cannot be reasonably explained.

Any public discussion of these legitimate differences of opinion between experts has of course, through a highly professional publicity campaign by McKie and her supporters been decried. Any hint that FP evidence is in fact expert opinion would in essence destroy the basis of her argument for monetary compensation. The foundation

of her civil action rested upon proving that malfeasance had taken place by the SCRO experts in that they knew it was not her mark and deliberately conspired to have her indicted for perjury. The thought that these experts could legitimately have come to their opinions, and that one of the experts she employed, could arrive at a differing opinions, both opinions being arrived at honestly would render her civil action null and void.

Fingerprint experts analyse the mark from a scene of crime by gathering all the information disclosed on the mark. This includes taking into account factors such as pressure, distortion and clarity of the print and mark as well as friction ridge formation.

In the comparison stage the ridge detail in the mark and tenprint is visually compared for configuration sequence and special relationship. This comparison is objective.

Following the comparison the expert evaluates the clarity of the print and ascertains the quantity and quality of the friction ridge formation which is in agreement/disagreement. Perception as to what is actually the same and what is different is dependant-eh past experience of analyzing similar abstract forms.

An opinion is then formed as to whether the prints are in agreement and if there is sufficient uniqueness to eliminate all possible donors except one.

The above is in fact the ACE process described by Ashbough which generates a definition of a FP expert.

A FP expert is one who has adequate training, scientific knowledge and understanding, as well as structured practice and experience in friction ridge comparison and identification allowing him/her to give professional opinion in relation to fingerprint, palm prints and foot prints in court.