

BRIEF COMMUNICATION

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Fingerprint Forgery—A Survey

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ABSTRACT: The article describes and analyzes the international survey of fingerprint and laboratory personnel about fingerprint forgery, conducted in four countries during the years 1998 through 1999. The awareness and the attitude of the professionals to the problem of fingerprint forgery was tested.

KEYWORDS: forensic science, fingerprints, fingerprint forgery, survey

“Disillusion comes only to the illusioned. One cannot be disillusioned of what one never put faith in.”

Dorothy Thompson, The Courage To Be Happy, 1957.

Fingerprints, together with DNA profiling, are universally recognized as the most important and reliable physical identification tools in law enforcement (1,2). It could be tempting to use fingerprints or DNA to mislead a police investigation. Planting or fabricating evidence can completely change police conclusions about the scenario of a crime. Documented cases of fingerprint forgery are known since the beginning of the twentieth century (3). There is an obvious resistance among professionals to admit the possibility of being fooled. Little research has been done to establish the extent of the phenomenon and how to detect it.

Some fingerprint experts consider the phenomenon of fingerprint forgery only as an annoying curiosity; others, however, see it as a serious potential problem. The cases that do exist are few and far between, and documentation is rarely comprehensive with many unsubstantiated allegations. When describing cases of this type of forgery, some sources omit important details, while the reliability of others sources raises questions. Information retrieval and evidence collection on this subject is not simple. Although the number of well-recorded and properly documented cases of fingerprint forgery is relatively small, there are reasons to believe that the real number of cases is higher and probably cannot be accurately estimated.

All this leaves forensic scientists no opportunity but to carry out “active” forms of research: surveys, interviews, imitations of real

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cases of forgery, etc. As a part of an ongoing research project, a survey was conducted from 1998 through 1999.

Survey

In 1998, Institut de Police Scientifique et de Criminologie, University of Lausanne, Switzerland, together with the Israel Police conducted a survey concerning fingerprint forgery. A questionnaire was circulated in the forensic science units of four countries: Estonia, France, Israel, and Switzerland. The purpose of the survey was to measure the awareness and the attitude of professionals to the phenomenon of fingerprint forgery. The total number of the participants was 152. Participation in the survey was voluntary and anonymous. All participants were police officers belonging to one of the following professions: field technicians, crime scene officers, fingerprint laboratory officers or fingerprint bureau experts, all with an average professional experience of ten years. Each participant received a questionnaire, translated into his/her mother tongue, that contained ten questions (Appendix). The questionnaire was checked and corrected during a pilot test with 25 Israeli participants; this pretesting did not yield serious surprises.

Results

In total, 240 questionnaires were sent to participants and 152 of them (63%) were completed and returned. The answers for substantive questions (from 6 to 10) are as follows.

- Question 6: Do you think that it is possible to forge a fingerprint?
Answers: Yes = 85% No = 8% Don't know = 7%
- Question 7: Do you think that the phenomenon of fingerprint forgery exists?
Answers: Yes = 57% No = 20% Don't know = 23%
- Question 8: Do you think you would be able to recognize a fingerprint forgery?
Answers: Yes = 20% No = 45% Don't know = 35%
- Question 9: Where would a forged fingerprint be most likely detected?
Answers: At the scene of crime = 17%
In the forensic science unit = 75%
In Court = 8%
- Question 10: Who in your opinion is most likely to forge a fingerprint?
Answers: Law enforcement officer = 37%
Criminal = 55%
Don't know = 8%

Many of the participants stated in their free comments that anyone who forges fingerprints needs some special skills and knowledge; alternatively, there is the possibility to hire someone who is qualified to do this job. The words "Organized Crime" and "Mafia" were used in this context in many of the answers.

It was found that 62% of the participants who think that fingerprint forgery is technically possible believe that the phenomenon does occur in practice; 26% of these respondents think that they will not be able to recognize a forgery.

Before answering Questions 2 to 10 the participants were asked to list forgeries with which they are familiar (e.g., currency, art objects, etc.). Twenty-five percent of the participants who think that it is possible to forge a fingerprint and that the phenomenon of fingerprint forgery exists included fingerprint forgery in their list. The distribution of the answers to this question in four countries is quite instructive, and probably reflects working realities in each country. Thus, most Israelis placed in the first position car forgery—a real epidemic in Israel; most of the participants from Estonia selected counterfeit currency in first place, while their colleagues from France and Switzerland gave precedence to forgery of art objects.

Discussion

The fact that not all potential participants returned questionnaires precludes a complete and totally satisfactory statistical analysis of the results, but it is believed that those responses received still allow a reasonable discussion and conclusions. According to the results, the great majority of participants (85%) think that it is technically possible to forge a fingerprint. This percentage is not surprising, but it is also not meaningful out of context. ". . . In the present state of the graphic arts, almost anything can be faithfully reproduced. The intricate designs on paper currency have often been counterfeit and have fooled many "experts." Those details are more complex than fingerprint ridge structure" (4).

It is even more interesting that more than 50% of the participants think that the phenomenon of fingerprint forgery exists, and another 23% do not reject this possibility. It would be interesting to research the basis of this conclusion. The question, "Have you ever seen a forged fingerprint in a real case, and if "yes," under what circumstances?" was unfortunately removed from the final version of the questionnaire as a result of preliminary discussions and pilot testing. Many police officers thought that this question was too leading. Although the survey was anonymous, the shadow of the threat of possible investigation (if you have seen such forgery, why did not you report it?) was too intimidating. Here, the authors agree with Professor Andre Moessense that "inquiry into this subject is not stimulated among fingerprint technicians" (4).

Relying on the results of the survey it is reasonable to suppose that the phenomenon of fingerprint forgery is not a phantom; it not only exists, but is well known to professionals. At the same time, according to the same results, most professionals feel that they are not able to detect a fingerprint forgery. This visible gap between the confidence about the phenomenon of forgery, and the lack of preparation to detect it, reflects deficiencies of training programs in the field of fingerprint detection and identification. "Textbooks do not warn or advise the latent print searcher to check for possible forgeries. When discussing the subject at all, such texts give the impression that there is no need to consider the possibility that a forgery will slip by them. In other words, if it is a forgery, it will be so obvious that the technician will recognize it without special inquiry. Yet, scientists and researchers unequivocally state that fingerprints can be forged and that the forgery may easily be overlooked unless a deliberate attempt is made to investigate the print for genuineness" (4).

During internal discussion in the Division of Identification & Forensic Science (Israel), the results of the survey were analyzed with the help of specialists from the Behavioral Science Section of the Division. It was suggested that the authors continue the study by using similar questionnaires with prosecutors, defense lawyers, and retired judges in at least one country. This continuation would give the opportunity to compare earlier results with those from three other groups, thus imparting the whole project essential depth and unity. The authors found this suggestion valid, and a new version of the questionnaire was prepared, but the Attorney General of Israel expressed deep reservations about circulating information related to the phenomenon of fingerprint forgery. It was decided not to carry out the advanced stage of the survey given the extreme sensitivity of the problem.

Conclusion

As Professor David Stoney emphasizes, "Although the study of fingerprint variation is founded on scientific observations, the process of comparison and the conclusion is explicitly a subjective process" (5). It is possible to add to this statement that any subjective process is not free from mistakes. One of the worst possible mistakes that can be made in the field of fingerprint examination is to overlook a forgery. Professionally produced forgeries are not easy to detect, especially when most technicians have never seen, nor claim that they ever have seen a forged fingerprint. The authors see the role of forensic scientists to research comprehensively the phenomenon of fingerprint forgery, together with its sociological, technical and legal aspects, and to prepare the ground for wide professional discussion.

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APPENDIX

The questionnaire

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1. What kind of forgery do you know about?

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2. Years of experience in fingerprint expertise or scene of crime work
3. Describe your place of work: office lab crime scene
4. Do you supervise other people? yes no
5. Are you personally involved in:
 - comparison of prints detection of prints both
6. Do you think that it is possible to forge a fingerprint?
 - yes no don't know comment

7. Do you think that the phenomenon of fingerprint forgery exists?
yes no don't know comment
8. Do you think you would be able to recognize a fingerprint forgery?
yes no don't know comment
9. Where would a forged fingerprint be most likely detected?
at scene of crime in forensic science unit in court comment
10. Who in your opinion is most likely to forge a fingerprint?
law enforcement officer criminal comment

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