



ARE POLYGRAPH EXAMINATIONS HELPFUL IN CRIMINAL INVESTIGATION CASES?



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INTRODUCTION

In 2012–13 police organisations of European countries started discussing whether polygraph examinations are needed in crime investigations. There are many who find polygraph examinations useless and outdated.

Lithuanian experts working with polygraph examination have accumulated sufficient experience in this field; but we discovered that EU Member States have a different experience and regulations in this area. For this reason, we have prepared a questionnaire (Council of the European Union Draft Note No 18030/12) which was distributed among the Member States. The main purpose of the questionnaire was to find the best ways and practices to use polygraphs and other unconventional tools in the investigation of criminal cases, to combat serious organised crime and other offences. The first results of the questionnaire were presented in the summer of 2013 in the Council's Working Party on General Matters including Evaluation (GENVAL) meeting and the final results will be disclosed at the end of 2013.

BACKGROUND

When answers to the questionnaire (Draft Note No 18030/12) were submitted, we found out

that not all EU Member States were informed that two methodologies — the comparison question test (CQT) and the concealed information test (CIT) — can be used in criminal investigation. At the moment, most universities and scientists agree that the CQT does not have sufficient scientific background, so we will not consider it in this paper.

Most countries have little information about the CIT and think or suppose that it is impossible to use the CIT in criminal cases. However, we are not aware of any article or scientific research that would prove that the CIT is a non-scientific method or test. So we decided not to wait for the final results of the draft to briefly explain the capabilities of the CIT and the CIT-EKT.

We decided to give a concrete example of how the court could pass the ruling only on the basis of polygraph examination findings. First and foremost, we would like to draw your attention to the fact that the results of polygraph examination could not be achieved utilising the globally most popular methodology — the comparison question test (CQT). The authors and Japanese police experts are convinced that reliable and informative results are obtainable only with the help of the concealed information test (CIT) and the CIT-event knowledge test (EKT) (Osugi, 2011).

CIT-type tests were more widely used in North America only in the times of L. Keeler. Since



CQT-type tests were developed, they have become more popular than CIT tests. The American Polygraph Association (APA), bringing together the largest number of polygraph specialists from all over the world, also recommends using the CQT. The CIT is typically used in an adjunct capacity, though examiners may use it as a primary technique. It can provide additional support for decisions based on a CQT and can serve as a powerful tool in the post-test interrogation. We are of the same opinion as R. Suzuki (2004), that this sort of polygraphic examination can distinguish, from the measurement results alone, whether an individual is telling the truth or being deceptive, and hence whether the examinee is guilty or innocent.

Japanese police polygraph examiners use the CIT exclusively in actual criminal investigations, and consider it to be of greater value than the CQT (Nakajama, 2002). Police polygraphers are particularly keen to avoid making wrong positive decisions. The examiner's goal in the pre-test interview is to confirm the subject's alleged unawareness of the criminal details and reduce the subject's anxiety for examination. If the subject learns of some critical items from the media or from other sources of information, questions referring to them are excluded or are replaced with others. Japanese examiners repeat the same series of questions two, three or four times. They only engage in polygraphic examination as researchers and do not investigate criminal cases as detectives.

The event knowledge test technologies are being further improved, but they are still incomplete. Everything that has been discussed here has been partially covered in our articles (Saldžiūnas & Kovalenka, 2008, 2009). We will illustrate the EKT application with a specific example of criminal investigation. The examination did not include all EKT technologies.

In 2006, two men raped a young woman, K, near a shopping centre in the city of Kaunas (the woman's version). The crime was committed around midnight. K said that two men grabbed her at the entrance to the Molas shopping centre and carried her to the square, where she was raped. K reported it to the police. The police found male suspect B, who had the woman's Samsung mobile phone in his possession. Suspect B said that he was at home at the time the crime was being committed and explained that he got the phone from a man nicknamed L. It turned out that L was abroad. After several years the police asked us to conduct a polygraph examination. Having read the material submitted by the police, we asked them to provide us with a map of the location with the indicated place of the woman's abduction and the plan of the location where the woman had been raped. We asked criminal investigators to submit several photographs of the men, including the photographs of both suspects B and L. We formulated questions and answer options for the woman and man B. Table 1 contains questions and answers for B.

Table 1: Questions, answers and suspect B's symptomatic responses

Possible answer options provided to the examinee by the specialist		Examinee's answer to the answer option provided	Symptomatic responses recorded in the examinee
3. Do you know how many people raped K at that time?			
0.	Five	no	
1.	Four	no	
2.	Three	no	
3.	Two	no	Response
4.	One	no	
5.	Don't know	no	Response
4. Do you know at what time K was raped that day?			
0.	At 19.00	no	
1.	At 21.00	no	
2.	At 23.00	no	
3.	At 1.00	no	Response
4.	At 3.00	no	
5.	At another time	no	





5. Do you know in what way you obtained K's Samsung mobile phone?			
0.	You found it	no	
1.	You bought it in a shop	no	
2.	You bought it from the Pope	no	
3.	You bought it from L	yes	Response
4.	Inga gave it to you	no	
5.	You took it away from K	no	Response
6.	Renata gave it to you	no	
7.	In some other way	no	

6. Where were you on the day K was raped?			
0.	At the Norfa store	no	
1.	At the Neste petrol station	no	
2.	At home	yes	Response
3.	At the billiards club	no	
4.	Near Molas	no	Response
5.	At the cinema	no	
6.	In some other place	no	

7. Do you know where at Molas the woman was abducted and taken from that day? Showing Figure 1			
0.	(0)	no	
1.	(1)	no	
2.	(2)	no	
3.	(3)	no	
4.	(4) <i>relevant</i>	no	Response
5.	(5)	no	

8. Do you know where at Molas K was raped that day? Showing Figure 2			
0.	(0)	no	
1.	(1)	no	
2.	(2)	no	
3.	(3) <i>relevant</i>	no	Response
4.	(4)	no	
5.	(5)	no	

11. Do you know which people raped the woman that day? Photos are shown			
0.	(photo of man X)	no	
1.	(photo of man Y)	no	
2.	(photo of man Z)	no	
3.	(photo of suspect L) <i>relevant</i>	no	Response
4.	(photo of man W)	no	
5.	You don't know who <i>relevant</i>	no	Response
6.	Someone else <i>relevant</i>	no	Response

The table does not contain questions 1 and 2 nor their answers. In accordance with the EKT tactics (Saldziunas & Kovalenka, 2008), the first questions (1 or 2) may be aimed at getting the examinee accustomed to the equipment and the procedure of examination. Therefore, for the sake of brevity, we have not provided them here as they are insignificant to the conclusion of the examination.



Figure 1: Plan of the location at the shopping centre Molas and the highlighted places from where the woman was allegedly abducted

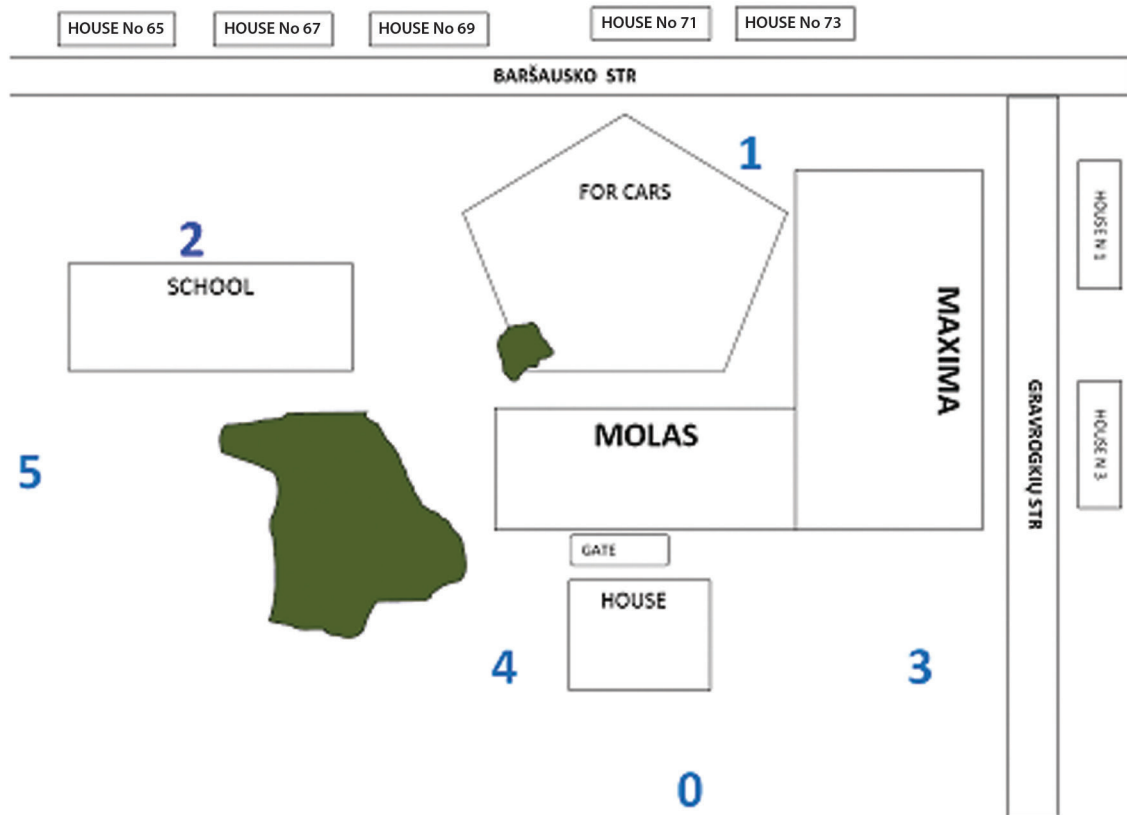
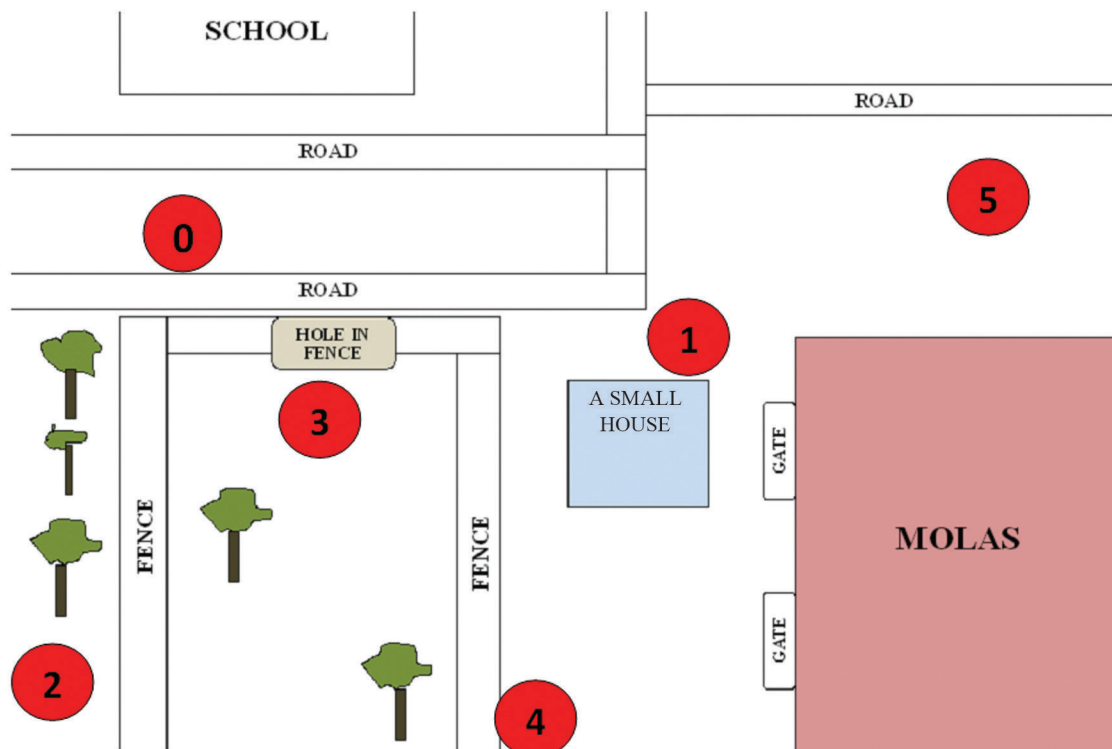


Figure 2: Plan of the location at the Molas shopping centre and the highlighted places where the woman was allegedly raped





RESULTS

We have not provided the questions and answers prepared for the woman nor her answers. The woman's questions and answers were the same as for suspect B. Only answers to question No 11 were different: suspect B's photo was added. No symptomatic (Konecny, 2009) responses were recorded for the woman; therefore, it was assumed that she was open in her answers, i.e. was not lying (P.S. we avoid using terms 'is lying' and 'is not lying'). Therefore, we think that, based on the formulated questions, the woman's version is true.

The polygraphers were clearly more interested in suspect B's symptomatic responses to the following answer options:

- In answers 3 and 5 to the third question, symptomatic responses were recorded, although, according to the suspect he was not at the Molas supermarket and did not know anything about what was going on there. On the basis of the recorded responses it can be assumed that he knows how many men raped Woman K.
- In answer 3 to the fourth question, a symptomatic response was recorded. It can be assumed that he knows that the woman was raped between 11pm and 1 am. The woman said that she was raped at around midnight.
- In answers 3 and 5 to the fifth question, symptomatic responses were recorded. Most probably his version that he had bought the telephone from L is not true. Most probably suspect B stole the telephone from the woman.
- In answers 2 and 4 to the sixth question, symptomatic responses were recorded. Most probably his version that at that time he was at home is not true. It may be assumed that he was at the Molas supermarket.
- In answer 4 to the seventh question, a symptomatic response was recorded. The woman also said that the men had grabbed her in point (4) on the scheme and carried her to another place.
- In answer 3 to the eighth question, a symptomatic response was recorded. The woman also said that the men had raped her in point (3) on the scheme.
- In answers 3, 5 and 6 to the ninth question, symptomatic responses were recorded. Suspect L was on photo No 3. No photo of suspect B was shown as it would have certainly caused a response which would be hard to assess correctly. It is worth noting that answers 'you don't know who' and 'somebody else' were followed by a response. It may be assumed that apart from L the woman was raped by someone else (the version that it was him is not dismissed).

CONCLUSIONS

After this polygraph examination, criminal investigators received a chart of responses and, having compared it with other results of the criminal investigation, a decision was taken concerning further course of the case. Thus, in Lithuania, polygraphers do not indicate in their conclusion whether the examinee was lying or not lying during the examination, whether he/she is guilty or innocent.

In relation to the forthcoming Lithuanian Presidency of the Council of the European Union (second half of 2013), we intend to scrutinise and analyse this topic in greater detail and consider promoting this method as a non-traditional investigative/administrative instrument to combat serious organised crimes. Reports and other findings will be presented at appropriate meetings, most probably at the Council's Working Party on General Matters, including Evaluations (GENVAL) and Network on Administrative Approach to Combat Organised Crime.



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