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Polygraph examination studies at the University of Silesia

The Department of Criminalistics at the Faculty of Law and Administration of the University of Silesia in Katowice has been studying the polygraph examinations for exactly 30 years now. The Department has conducted many scientific studies in this area and the staff have also provided expert opinions for use by law enforcement agencies. The purpose of this article is to present the problems our staff currently encounter in working with the polygraph within Polish criminal procedures and to present practical examples illustrating some selected problems. The article begins with a brief description of the history of the polygraph examinations in the Department.

Studies on polygraph examinations in the Department of Criminalistics at the University of Silesia began in 1977 when Jan Widacki joined the Department and brought with him the first polygraph equipment from the Jagiellonian University in Krakow. The device was first hired and then donated to the Department (today,

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students from the Forensic Science Club frequently use it). In 1978, the Department organised a conference devoted to polygraph examinations (Widła, 1978).

From the very beginning Jan Widacki commenced studies on polygraph examinations for use by Silesian law enforcement agencies. It was noted at the time that Poland was the only country in the East where civilian experts were allowed to conduct examinations on behalf of law enforcement agencies. Obviously, these experts carried out examinations only in criminal cases. In other matters, e.g. political cases, law enforcement agencies did not use the services of civilian experts. Moreover, these experts were unwilling to take part in such cases. Nowadays, Poland is still the exception in Central and Eastern Europe because Polish civilian experts conduct examinations for law enforcement agencies in criminal cases. The results of these examinations may be used as evidence before the court.

Gordon H. Barland's visit and lecture in the late 1970s marked an important event in the Department of Criminalistics at the University of Silesia. Worth recalling is that this visit occurred during a time when the Soviet Union explicitly condemned the polygraph method. Despite the very intense debate about admissibility of the polygraph examination in court, none of the participants in the discussion referenced the opinion of the Soviet decision-makers.

One of the breakthrough moments in the history of polygraph use in Katowice was the case of serial killer Joachim Knychała (Widacki, 2006). His motives were sexual in nature and he committed a series of sexual offences from 1974 to 1982. When in custody, Jan Widacki administered a polygraph examination, which was connected with Knychała's involvement in the killing of his 17-year-old sister-in-law. The characteristic way that he reacted to the relevant questions was interesting. The relevant questions concerned the killing of his sister-in-law. Such a configuration of reactions happened despite the fact that he had committed other crimes; it did not affect the result of this particular research. Later on, the polygrapher asked him an 'open' relevant question whether he had killed anyone else. Knychała reacted very strongly to this question. Subsequently, his home was searched and some objects belonging to his victims were found in the cellar. Another important example was the case code-named "Lizak" ('Lollypop') – this name described the favourite sexual method used by the rapist (Leśniak, 2007a). The potential offender was nominated from a group of the other offenders who had committed similar sex crimes. Unfortunately, some of the victims recognised this person. The polygraph examination pointed to a conclusion that the suspect was not really involved. Later, it turned out that real offender was very similar to the suspect in appearance.

The polygraph examination in cases very similar to the aforementioned in Katowice caused a change in the attitude of law enforcement agencies. What had at first been rejected as useless became widely accepted in the next months. Police officers and prosecutors began to trust this method more. In the following days the method was routinely used in all serious offences. Before “polygraph examination era”, the police forces in Katowice were regarded as the most brutal in Poland. Polygraph examinations led to a change in police officers attitudes towards interrogated suspects because a maltreated person could not be tested using a polygraph (Leśniak, 2007 a).

In the years 1977–1978 polygraph examinations were conducted in 34 criminal cases (Widacki, Feluś, 1979) and were applied to 265 persons (one of these cases included 196 persons and it was excluded from the study). Eighteen of 69 persons (26%) were assigned as responding to relevant questions (11 expert conclusions were confirmed). Forty of 69 persons (58%) were assigned as non-responding to relevant questions (12 expert conclusions were confirmed). None of experts’ diagnoses turned out to be incorrect.

With respect to murder cases, from 1977 to 1978 the Department used the polygraph on 37 subjects (Widacki 1980), eleven of which (29.73%) were assigned as responding to relevant questions, 21 of which (56.76%) were assigned as non-responding to relevant questions, and three were deemed inconclusive (8.1%).

On the basis of the data taken from the Department for 1978–1979, all the criminal cases were chosen in which the polygraph examination result was verified by subsequent legal proceedings (Widacki, 1982). The cases involved 38 persons, 16 of which reacted in the way symptomatic to a perpetrator and this was confirmed before the court. The others (22) did not react in the way symptomatic to a perpetrator and this was confirmed during legal proceedings also.

Apart from Jan Widacki, the polygraph examination was started by Jerzy Konieczny. Both men conducted studies using the polygraph method. In the late 1980s, Jan Widacki left Katowice and began working at the Catholic University in Lublin. Jerzy Konieczny continued his work in the Department of Criminalistics in Katowice, which lasted until 1989 when he began his official duties in the service of the government. The last examination by Jerzy Konieczny in the Department was carried out in 1991 (Leśniak, 2007b). The examination concerned a murder of two children. Then there was a break in the application of the polygraph in the Department because successors had to be trained.

At present, Tadeusz Widła is the head of the Department and currently two experts – Michał Gramatyka i Marek Leśniak – administer polygraph examinations at the

Silesian University of Silesia. The latter is the author of a PhD dissertation about evidentiary value of polygraph examinations. They have three Lafayette polygraphs (one computer polygraph) with supplementary equipment (Lafayette's microphone voice countermeasure, heart rate monitors and others) and a separate voice analyser made by the Israeli firm Nemesysco (system LVA). Both are court experts on the list managed by the chairperson of the court in the Katowice district.

The Department deals with empirical and theoretical research on polygraph examinations. Nowadays, the staff are completing some empirical research on estimating the accuracy of the directed-lie test regarding the population of Poland. A very similar study is being conducted in reference to Nemesysco's system. These studies are financed by the State Committee for Scientific Research. During polygraph examinations, experts use both different variants of the control question test and the 'peak of tension' test. The Department does not deal with personal screening using the polygraph. Its activity focuses on examining subjects in criminal cases only. On average, the experts carry out polygraph examinations in two to four criminal cases per month, usually including two to ten subjects. The Department's polygraph laboratory is among the best-equipped in Poland. The laboratory has a special sound-proof studio with cameras and a projector. It is possible to transmit images and sounds from cameras to the neighbouring lecture room. In this manner, a polygraph examination may be observed from the outside (by students, police officers, barristers, prosecutors and others).

In the years 2003–2006, Department experts administered polygraph examinations in 30 criminal cases. The cases included 61 persons who were examined using a polygraph. Fourteen of 61 persons (23%) were assigned as responding to relevant questions in a manner symptomatic for the perpetrator. Thirty-nine persons (64%) responded in a manner symptomatic for non-involved persons. For eight persons (13%), the results were inconclusive. The police forces used polygraph examinations in 15 cases, prosecutors in 8 cases, and judges applied it in 7 cases.

A typical problem for co-operation between the University of Silesia experts and the Silesian police officers and prosecutors is the fact that many of the law enforcement agencies' workers do not know the fundamental conditions of making polygraph examinations. Much time has passed since Jan Widacki and Jerzy Konieczny left the University of Silesia. A long break ensued before new experts began issuing opinions in this area. In the meantime, new generations of police officers and prosecutors began working in Silesia. They did not have a chance to learn about the principles and advantages of the polygraph examination. At present the polygraph examination does not belong to the current sources of evidence in more serious cases, but it is treated as a last resort. Thus, often much time has passed since the occurrence and until the polygraph test is administered. Indeed, it often happened that suspects had been interrogated many times before the poly-

graph is used. The author was disconcerted when a prosecutor turned to him for such an opinion after having used the services of a clairvoyant. This was a murder case in an old tenement house in Bytom (the murder of Anna Gruszka in 2001).

The clairvoyant said that there was an object connected with this crime inside a rubbish bin at the rear of the building. The police officers searched two large bins full of waste, but it was very difficult to confirm what rubbish was connected with the case.

In different kinds of cases in which the prosecutors and police officers use the Department experts' help, they usually get (often categorical) opinions. The problem is when such evidence is insufficiently supported by different proofs. Despite this, prosecutors bring charges against a suspect and the judges have to make a decision on the validity of the evidence. Then the result of a polygraph examination is insufficient to sentence the accused and it may be very difficult (or even impossible) to check the accuracy of such tests.

In some criminal cases, law enforcement agencies turn to the Department for a polygraph examination when the list of suspects is closed and it is obvious that one of the suspects has committed a specific crime. The reason for using the polygraph examination is that it is impossible to find the offender because the people involved were intoxicated at the time of the examination. The physiological traces recorded by the polygraph are very subtle and are strictly connected to memory traces. In such cases, the polygraph examination may prove inconclusive. The expert may find another impediment because those involved are often mentally handicapped apart from being inebriated during the occurrence. It is often very difficult to have the opportunity to review a psychiatric or psychological opinion before the polygraph examination when such an examination is made prior to the psychiatric (psychological) examination. At that time the evaluation of the mental state of the subject largely depends on the polygraph expert. It also occurs that a psychologist diagnoses the subject as mentally handicapped on the basis of the verbal scales of the Intelligence Tests. This subject, however, can fully understand and respond to the questions of the polygraph test and in the expert's opinion it is possible for the subject to undertake the polygraph examination.

The situations described earlier often make the polygraph test inconclusive. It often happens when the polygraph examination takes place too late or in improper conditions. Mainly, it is caused by the lack of knowledge of law enforcement employees. The employees obtain an inconclusive opinion and become convinced that the method is not useful. This leads to a vicious circle and it is nearly impossible to change this attitude.

The Department staff have often encountered outdated views that a very upset person may react in the same manner as someone involved in the act. A similar cliché is that if the subject is a police officer he can deceive the polygraph expert.

As far as giving opinions for courts is concerned, the Department encounters the following problems. In a typical case, there is a very long period between the time of occurrence and the time of the examination. The examination should be made immediately after the occurrence, but police officers and prosecutors neglect it. They believe that the body of evidence is sufficient. It often happens that their assumption proves to be wrong. In such cases and in many others, the accused and his barrister demand to have access to the results of the examination during the trial. It may also occur that the evidence seems to be strong, but is questioned by the accused and his counsel. According to the principles of such examination, the expert tries to discourage the court from carrying out such an examination. The expert informs the court that the potential for an inconclusive opinion is high. In spite of expert's information, the court usually enforces the polygraph examination because the judges want to avoid the situation in which the accused can file a complaint about it when he makes an appeal against the sentence.

Practice has proven that law enforcement agencies do not treat polygraph examination either as a common source of information, or a standard proof. The underlying reasons behind such attitudes are as follows.

First, law enforcement agency employees often do not know the method well:

- Forensic sciences are not compulsory courses in the majority of the Law faculties in Poland.
- Few law enforcement agency employees are graduates of Law faculties.
- Legal trainees (future prosecutors and judges) are It seldom (if ever) taught about the polygraph examination in a professional manner. While they can become familiar with the legal aspects of using the polygraph, they are unable to get to know the practical possibilities of using it.

Once during a trial in Katowice, when the author was submitting his oral opinion, the accused complained to the court about the prosecutor's attitude. After the accused had petitioned the prosecutor to subject him to a polygraph examination, the prosecutors answered that such examinations are only acceptable in China (XVI K 211/06).

There is still a dispute about different aspects of using the polygraph examination in Poland. One of the bones of contention is the acceptability of the control questions in the polygraph tests. Both parties stick firmly to their opinions. The prob-

lem is that the opponents of control question tests often train police investigators. Many police officers are sceptical about the use of the control question tests because they are taught about the inadmissibility of such tests.

More empirical research on polygraph examinations in Poland is necessary. At present, the number of such examinations in criminal and business cases is rising. At the same time, there are very few empirical Polish reports in which the authors attempt to estimate the accuracy of different variants of this method in reference to Polish population using a proper methodology. Data from foreign studies cannot replace such research. The Department has the task of dealing with empirical research in this area. Additionally, the staff should make the effort to teach students (future police officers, judges, barristers, and prosecutors) on how to use polygraph examinations and under what conditions can conclusive results be achieved. Much work remains to be done in Poland.

References

Leśniak M.a (2007, June 1), Conversation with T. Widła.

Leśniak M.b (2007, June 21), Telephone conversation with J. Konieczny.

Widacki J., Feluś A. (1979), *Działalność Zakładu Kryminalistyki Uniwersytetu Śląskiego*, Problemy Kryminalistyki, 138, 339–343.

Widacki J. (1980), *Polygraph Examinations in Poland*, Act. Crim. Japon., 46 (3), 111–114.

Widacki J. (1982), *Analiza przesłanek diagnozowania w badaniach poligraficznych*, Wydawnictwo Uniwersytetu Śląskiego.

Widacki J. (2007), *Zabójca z motywów seksualnych. Studium przypadku*, Oficyna AFM, Kraków.

Widła T. (1979), *Wykorzystanie badań poligraficznych w sprawach karnych. Konferencja w Katowicach*, Państwo i Prawo, 5, 157–159.

Selected publications of the Department research staff

Widacki J., Horvath F. (1978), *An experimental investigation of the relative validity and utility of the polygraph technique and three other common methods of criminal identification*, Journal of Forensic Sciences, 23 (3), 215–222.

Widacki J. (1978), *Elementarne zasady wykorzystania poligrafu w sprawach karnych* (Elementary principles of using the polygraph in criminal cases), Wydawnictwo Uniwersytetu Śląskiego, Katowice.

Widacki J. (1978), *Przypadek wykorzystania tzw. wizualnego feedbacku w badaniach poligraficznych sprawcy zabójstw* (The case of using so-called visual feedback in the polygraph examination of the murderer), Archiwum Medycyny Sądowej i Kryminologii, XXVIII (4), 331–333.

Widacki J. (1979), *Badanie poligraficzne osób z organicznymi uszkodzeniami centralnego układu nerwowego* (The polygraph examination of people suffering from organic central nervous system damages), Archiwum Medycyny Sądowej i Kryminologii, XXIX (2), 121–126.

Widacki J. (1979), *Uwagi o lykkenowskiej koncepcji zastosowania poligrafu w śledztwie* (Remarks about Lykken's conception of using polygraph), Studia Kryminologii, Kryminalistyki i Penitencjarne, 10, 247–256.

Widacki J. (1980), *Analiza przesłanek diagnozowania w badaniach poligraficznych* (An analysis of diagnostic premises in polygraph examinations), Wydawnictwo Uniwersytetu Śląskiego, Katowice.

Widacki J. (1980), *Zagadnienia wartości diagnostycznej badania poligraficznego niektórych specjalnych kategorii osób* (Problems of the diagnostic value of polygraph examination in some special categories of people), Problemy Kryminalistyki, 144–145, 231–234.

Widacki J., Ciucias R. (1980), *Wykorzystanie poligrafu w sprawie o podwójne zabójstwo* (Using the polygraph in a double-murder case), Problemy Kryminalistyki, 143, 49–53.

Widacki J. (1981), *Wprowadzenie do problematyki badań poligraficznych* (An introduction into polygraph examination issues), Wydawnictwo MSW, Warszawa.

Feluś A., Widacki J. (1981), *Sprawcy zabójstw badani w Zakładzie Kryminalistyki Uniwersytetu* (Murder and killers examined in Department of Criminalistics of the University of Silesia), *Archiwum Medycyny Sądowej i Kryminologii*, XXXI (1), 41–46.

Widła T., Hubert J. (1982), *Badania wartości diagnostycznej ekspertyzy poligraficznej* (Research on the diagnostic value of the results of polygraph examinations), *Problemy Kryminalistyki*, 152, 420–430.

Konieczny J., Widła T. (1983), *Glossa do wyroku Sądu Najwyższego z 11 II 1982 r., (XI KR 6/82)* (Gloss on the decision of the Highest Court of the Polish People's Republic of 11 February 1982), *Nowe Prawo*, 5, 136–142.

Konieczny J., Fraś M., Widacki J. (1984), *The specificity of so-called emotional traces and certain features of personality in the polygraph examination*, *Journal of Forensic Medicine and Criminology*, 34 (1), 25–30.

Konieczny J. (1988), *Stosowanie poligrafu w praktyce organów ścigania* (Using polygraph in law enforcement bodies practice), *Problemy Praworządności*, 3, 39–46.

Leśniak M., Gramatyka M. (1998), *Dopuszczalność badań poligraficznych w świetle konstytucyjnych praw i wolności obywatelskich* (The admissibility of polygraph examination in the context of constitutional civil rights and freedoms), *Prawa Człowieka*, 5, 141–152.

Leśniak M. (2001), *Sytuacja badania poligraficznego jako sytuacja trudna* (The polygraph examination as a kind of psychologically difficult situation), in: *Psychologiczne i psychiatryczne opiniodawstwo sądowe w ramach nowych uregulowań prawnych*, (ed. J. M. Stanik), Wydawnictwo Anima, Katowice.

In the Department there were two PhD dissertations about the polygraph examination:

Krzyścin A. (1980), *Badania poligraficzne wykonane techniką Reida. Analiza doświadczeń polskich* (Polygraph examinations carried out by means of the Reid's technique. The analysis of Polish experiences), Unpublished.

Leśniak M. (1999), *Wartość dowodowa ekspertyzy poligraficznej* (The evidentiary value of polygraph examination results), Unpublished.