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Ян Відацкі, *Історія поліграфологічних досліджень*, translation Olga Hlívniuk, Колегія поліграфологів України (The Association of Ukrainian Polygraphers), Kyiv, 2023 (in Ukrainian)

The Association of Ukrainian Polygraphers has published *Історія поліграфологічних досліджень*. It is the second translation of *Historia badań poligraficznych*, originally published in Polish by Oficyna Wydawnicza AFM in 2017 (Widacki, 2017). Entitled *History of Polygraph Examination*, the English translation by Piotr Krasnowolski was published by Polskie Towarzystwo Kryminalistyczne in 2021 (Widacki, 2021).

The English edition was reviewed and recommended by expert polygraphers and representatives of the forensic sciences in the academia. In his review, James Allan Matte

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mentioned that "the major contribution of this book is in its comprehensive presentation of the innovative developments made by European and Asian pioneers in the field of polygraph examinations, now known as Forensic psychophysiology" (Matte, 2021). Referring to the author, Roy Ortiz (Ortiz, 2022), President of American Polygraph Association, noticed that "his background includes attorney, historian, essayist, professor, diplomat and politician. He has published twenty books in his career. We exchanged a few emails, discussing our countries, polygraph and the APA".

In 2023 this monographic work reached the Ukrainian-speaking readers. It must be emphasised that this beautifully crafted book on the history of polygraph examination was prepared, edited, and published during the Russian aggression on Ukraine. In the preface, the publisher points out that the author of the work presented the timeline of the significant stages in the development of polygraph examinations, and that many of the facts presented are novel and thought-provoking for the Ukrainian reader. The publishers of Ukrainian translation recognise the work an important source of knowledge for Ukrainian experts, and one that will improve the quality of the professional performance by expert polygraph examiners. Moreover, practitioners of the polygraph should cooperate with representatives of the academia at all times and consistently enhance their professional skills, thereby minimising the potential for error in issuing expert opinions.

The history of research on the detection of deception had frequently been discussed earlier (Abrams, 1977: 11–39; Lykken, 1981: 23–47; Widacki, 1981: 14–53; Abrams, 1989: 1–46; Alder 2007; Wilcox & Madsen 2009: 31–48; Widacki, 2014: 15–80; Krapohl & Shaw, 2015: 1–60; Gordon, 2017: 1–42), yet none of the previous works was such a complex and expanded study in the area of instrumental lie detection. It is therefore worthwhile to present its content.

The book consists of seven chapters, bibliography, names index, and a subject index. The first chapter introduces the reader to the questions concerning deception. The author describes the earliest attempts at recognising deception, and methods of assessing the behaviour and facial expressions of the interrogated and participants in searches.

The second chapter is devoted to the scientific foundations for the detection of deception. The author opened it with the works of pioneers in experimental psychology such as Hermann von Helmholtz, Gustav Theodor Fechner, and Wilhelm Wundt (pp. 30–31), to move on to the works and research on physiology – of fundamental significance for polygraph research – describing the mechanism of breathing, the operation of the first pneumographs recording that activity, works by cardiologists on the functioning of the circulatory system, and sphygmographs observing and – in conjunction with kymographs – also recording the beats of the pulse, up to experi-

ments dedicated to electrophysiology. Of key importance for polygraph research is the understanding of the issues of emotional changes. The second chapter also presents the physiological mechanism of emotions, as well as the first attempts at observing and recording the physiological correlates of emotions for purposes other than medical. Worth emphasising is the contribution of Polish physiologists Napoleon Cybulski and Władysław Szymonowicz, who, simultaneously with the Englishmen – Sharpey-Scheffer and Olivier – discovered adrenaline, which facilitated the understanding of the physiological mechanism of emotions (Widacki, 2017: 53). Observation of emotional changes in the body, and of the somatic changes (physiological correlates of emotions) accompanying them made it possible to investigate the latter using specialised devices, while the first attempts at instrumental lie detection arrived with the advent of the 20th century.

Re-tracing the history of the studies that have made instrumental detection of deception possible, the author presents the readers with an array of facts, for example, the use of the term "polygraph" by Napoleon Cybulski (already in 1895) and somewhat later by Leon Zbyszewski (in 1914), that is much earlier than the official adoption of the term polygraph by James Mackenzie, officially recognised its creator.

The first attempts at the detection of deception that had scientific foundations are described in the third chapter, beginning with the verbal association test and going on to the first methods of instrumental lie detection (using pletysmography, changes in breathing patterns and in the functioning of the circulatory system, observation of muscular tension, and using the skin-galvanic response). "*History* carefully documents the problem of how scientific research is often conducted in parallel in different parts of the world but unknown to the various parties simply because of publication language and availability. Just one of many examples is description of how Edward Abramowski's work in Warsaw and Vittorio Benussi's nearly identical research in Graz, Austria both used Etienne-Jules Marey's pneumograph and sphygmograph instrumentation during the same period to study polygraph recorded physiology. But for publications such as *History*, the findings of Abramowski's and many other Central and Eastern European researchers would remain virtually unknown to anyone outside of Poland" (Slovik, 2021: 57).

Stanley Slovik (2021) also noted that "Widacki does a superior job describing the evolution of polygraph instrumentation and how each of the standard physiological parameters were eventually determined to be associated with emotions that correlate to the detection of deception".

The early 20th century brought the first attempts at the practical use of the polygraph: investigating criminal cases, William Marston observed changes in the blood pressure,

and early in the 1930s, John Larson – "an unquestioned pioneer of using polygraph in criminal investigations" (Widacki, 2020: 10) constructed an improved version of the polygraph, hailed as the greatest invention ever, also refining the technique of examination. Larson popularised polygraph examinations, yet their extensive use in the United States, detached from their academic standards, had Larson disillusioned and developing a sense of regret for his part in the development of instrumental lie detection. Jan Widacki, the author of the book, opens it with the words of Larson, while Vitalii Shapovalov and Diana Alyeksyeyeva-Protsyuk further develop the thought in their introduction. They emphasise the significant role of science in the practical polygraph examinations, of the lifelong learning and enhancement of professional skills by the experts, respect for the international standards of practice, supreme ethical standards, and numerical assessment methods – all to avoid subscribing to Larson's gloomy reflections in future.

The author invites the reader to the cradle of the polygraph – Berkely in California, where August Vollmer (the first police chief in Berkely, and a leading figure in the development of the system of criminal justice in the US early in the 20th century, a protector of John Larson referred to as "the father of modern policing") was the first to use polygraph for policing. Larson's work was continued and developed by Clarence D. Lee (the name behind the "psychograph") and also by Leonard Keeler, one of the creators of the contemporary polygraph, the founder of the world's first school of polygraphy, whose graduates held the posts of polygraphers at US federal institutions. Further, the author investigates the process of academic research devoted to the polygraph, as conducted at various US universities since the 1930s.

After the Second World War, the polygraph was applied not only in the United States but also in China, Japan, India, and in Europe, where it was chiefly used for the internal purposes of the special services. In the US, John Reid made a significant contribution to the development of polygraph examinations by introducing the control question technique (CQT), which marked a major watershed in the methodology of polygraph examinations. Moreover, Reid was the first to use motion sensors for detecting all movement during the examination. Following Larson's suggestion that practitioners and academics work together, Reid cooperated with Professor Fred Inbau. Their partnership resulted not only in publications, today forming the classical canon of professional literature, but also an improvement of the CQT technique. It was criticised in the 1980s by David Lykken, professor of the University of Minnesota, who introduced the new technique of examination: the Guilty Knowledge Test.

Chapter 6 presents the further development of the CQT technique: the Backster Zone Comparison Technique (BZCT), being a control questions technique developed by

Cleve Backster, introduction of the numerical assessment of reactions with the simultaneous rejection of the qualitative method, and the process of unifying the standards of polygraph examinations (Widacki, 2017:124 and ff.).

The last of the seven chapters provides an insight into the history of polygraph examinations in Poland and other selected countries. It is also worthwhile to browse through the author's other works on the history and circumstances of polygraph examinations in Poland (notably Widacki, 2014, 2018, 2017a, 2017b; Widacki & Szuba-Boroń, 2016).

The whole study ends in an impressive bibliography, and names and subjects indexes. Certainly, the author's work filled a gap in the publishing market, not only in Poland but also, as proven by the opinions of American Polygraph Association experts, abroad.

Reflecting on Jan Widacki's *History of Polygraph Research*, one can confidently quote the opinion of Stanley Slovik "I strongly recommend every examiner try to obtain and carefully read Jan Widacki's *History of Polygraph Examination* and use his many revelations to challenge your own polygraph beliefs. (...) What polygraph practitioners learn from *History's* contribution to the canon of polygraph knowledge can only benefit the profession worldwide" (Slovik, 2021: 62–63). A fascinating work, whose author, closely following the timeline, consistently leads the reader through the successive discoveries and achievements that finally made instrumental detection of deception possible, as. The scientific value of the book as well as its practical use for experts and interested practitioners are evident.

It is not the first time that the circles of polygraph examination experts represented by the Association of Ukrainian Polygraphers prove that their knowledge and experience stem from valuable sources, as they aim at providing all Ukrainian polygraphers with access to the international research and standards of the American Polygraph Association. The proof of the above are the numerous publications (developed despite the war raging in the territory of Ukraine!) focused on the improvement of professional skills of polygraph examination experts. Their number includes L. Udalova, S. Chernyavs'kyy, D. Alyeksyeyeva-Protsyuk, *Polygraphy: basic terms and concepts*, Kyiv 2022; *Assessment of credibility: scientific research and practice*, Kyiv 2020, No. 3; the Ukrainian translation of *Meta-Analytic Survey of Criterion Accuracy of Validated Polygraph Techniques – Report Prepared for the American Polygraph Association Board of Directors Nate Gordon, President (2010–2011) by the Ad-Hoc Committee on Validated Techniques Mike Gougler, Committee Chair Raymond Nelson, Principal Investigator Mark Handler Donald Krapohl, Pam Shaw, Leonard Bierman*, Kiev 2022; V. Shapovalov, D. Alieksieieva-Protsiuk, D. Zubovskyi, O. Alieksieiev (2020), *The Technique of Using RI, POT, and CIT methods in Polygraph Examinations*, Kyiv: National Academy of Internal Affairs.

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