

### **PUBLISHED QUARTERLY**

Volume 7 2013 Number 3 (25)



Andrzej Frycz Modrzewski Krakow University





Volume 7 • 2013 • Number 3 (25)

## Contents

C	Cleve Backster (Grover Cleveland "Cleve" Backster Jr)	107
	Barry Cushman  Grover Cleveland Backster Jr - The Passing of a True Pioneer	109
	Charles A. Patton, The Integrated Zone Comparison Technique; a Field Utility Study in a Deceptive Population	113
	Nathan J. Gordon, William L. Fleisher, A Realistic Perspective of the Art and Science of Forensic Psychophysiology	121
	Vitas Saldžiūnas, Aleksandras Kovalenka Examination of Sexual Abuse Crimes	127
R	eport	
	Marcin Gołaszewski, Report from the International Polygraph Seminar – Waplewo, Poland, 25th–27th September 2013	139

106 CONTENTS

The Basic Information for Authors	145
Rules and regulations concerning publishing papers in European Polygraph	147
 Subscription: Terms and Conditions	1/19



Volume 7 • 2013 • Number 3 (25)



Cleve Backster (Grover Cleveland "Cleve" Backster Jr) (27th February 1924–24th June 2013)

Cleve Backster, the legend of polygraph examination died in San Diego (California) on 24th June 2013.

Born in Lafayette NJ on 27th February 1924, Cleve Backster began his job in CIA as an Interrogation Specialist. For many years he was the director of Backster School of Lie Detection in San Diego.

For specialists in detection of deception Backster is primarily the author of lie-detection technique based on special control question test (Backster Zone

Comparison Test), while for broader circles of readers all over the world he is famous as the author of the book entitled *Primary Perception: Biocommunication with Plants, Foods and Human Cells*.

We are very grieved to have heard of the death of Cleve Backster.

Editors of *European Polygraph* 



Volume 7 • 2013 • Number 3 (25)

Barry Cushman\* Board Chair, American Polygraph Association

# Grover Cleveland Backster Jr – The Passing of a True Pioneer

"The difference between ordinary and extraordinary is that little extra". – *James "Jimmy" Johnson*, American Football Coach, Player & Broadcaster

"In 100 years, who, if anybody, will know your name?" We have probably all been asked that question at some point in our lives, and the honest answer for me is, quite simply, nobody is going to know who I was. While that is true for the vast majority of us in this big world, I do not believe the same can be said for Grover Cleveland Backster, Jr, or, as most of us knew him, Cleve. Cleve is undeniably one of the greatest icons of our profession, and for that reason we take this opportunity to reflect upon, celebrate and honor the life of one of our most accomplished members.

Cleve gave more than that "little extra" that makes men extraordinary. There is nobody in the polygraph community whom he has not impacted in some way, and he will continue to do so for decades to come. Cleve gave more

<sup>\*</sup> This tribute was first published in the September–October 2013 issue of the APA Magazine, and is reprinted here with the permission of the American Polygraph Association.

than 50 years of his life to polygraph, training hundreds of examiners who later passed those teachings down to multiple generations of examiners. He was not formally trained as a psychologist or psychophysiologist, but that did not prevent him from great success in the field of applied forensic psychophysiological detection of deception. Cleve studied polygraph intensively, and his observations and experimentation in real field cases resulted in his recognition of the need for standardization and utilization of principles and practices that increase the accuracy and value of polygraph, and he worked tirelessly to impart that attitude to others.

That is not to say there have been no disagreements along the way. It is no secret that there has been a healthy tension in the polygraph community as we move from a tradition-based to a more science-based approach to polygraph. That tension is typical of any evolving field that begins with a model in which practitioners simply imitate or abide by the declarations of recognized experts in their fields. At times, the interpretation of the tension is, however, unfortunate. Cleve once told me that those who disagreed with him should wait until he died before criticizing him. I chuckled when he said it, and in response he chuckled too. I think now I better understand what he meant though.

Several years ago I sat in on one of Cleve's presentations on what he called his Exploratory Test. It was then that I began to realize and appreciate more fully that Cleve was clearly a man ahead of his time. Today you can take estimated error rates and do fancy (or not so fancy) statistical analysis to demonstrate that the larger the number of issues (relevant questions) appearing in a single test, the greater the probability of an error (particularly, a false positive). Thus, the scientifically responsible method known as "successive hurdles" is now the standard. Cleve may or may not have been able to compute the probabilities (I never asked), but he had so much experience and knew polygraph so well that he did not have to make the calculations to realize that examiners generally should not make final decisions based on the results of an exploratory (multiple-issue) test. We might say he knew that "intuitively," but I think that it is a word that diminishes the fact that Cleve came to his conclusion (and testing process) based on an evaluation of real data. The same can be said of how he developed numerical scoring and even the concept of "psychological set".

As is the case with anybody who has done so much in any field, there is reason for skepticism regarding some of Cleve's teachings. For example, data seems to support that symptomatic (or outside issue) questions do not do

what they were intended to do. That is acceptable. What is important as we remember Cleve's life and his accomplishments is that he was willing to take risks – and that is what true leaders do. What would polygraph look like today if Cleve had taken no risks, choosing to remain silent rather than sharing his thoughts and findings? Nobody can be right about everything, but even those teachings that do not pass the test of scientific scrutiny tell a lot about the man behind them.

Why did Cleve put so much effort into cataloging and standardizing the techniques he taught? It certainly was not for fame and fortune. After all, the polygraph community is barely a dot on the population graph. He must have seen a purpose in what he did — a purpose that was greater than his legacy. Even a cursory look at Cleve's life reveals he was a patriot. Moreover, he believed in justness and fairness, and he knew that in some circumstances expertise in polygraph was necessary to see justice prevail in the lives of many individuals who otherwise had little hope. Why else would anybody put so much effort into developing a tool designed to separate truth from falsehood, and why else would anybody put so much effort into training others to this work?

I said I think I better understand Cleve's comments regarding the postponement of criticism of any of his teachings, and I mention that here for others to contemplate. To me, what stands out about Cleve is that he was a man looking out for those of us with our "boots on the ground". That is, he was interested in theory and experimentation, but that interest was motivated by a desire to be more effective in the field. In all he did, he never lost sight of the purpose of polygraph. Let's examine the issue of a "psychological set" for example. While it has been criticized as being an incomplete model of the psychological construct it seeks to explain, it again emphasizes Cleve's insight regarding the CQT.

If you boil it all down, his point with the concept of psychological set was simply that the truthful and deceptive react to CQs and RQs differently, and they do so in a highly predictable fashion – a fact that has been demonstrated time and again in many different studies, in many different labs, and by many different investigators. Despite the use of terms that may have inadvertently confused some in the scientific community, Cleve had a firm grasp of many facets of applied polygraph science long before there was an emphasis on science.

On behalf of the board of directors, we hope you will take the time to read all of this special edition honoring Cleve Backster and his many contributions.

He has certainly earned his place as a luminary in the field; his work helped to build the foundation on which we stand today. There is no doubt that his vision, leadership and many decades of giving for the betterment of the profession will continue to influence our work for generations of examiners to come.

Let me close with a poem often wrongly attributed to Robert Louis Stevenson or Ralph Waldo Emerson. I believe it summarizes the sentiments of those who knew Cleve and his work in the field of polygraph science. He truly did achieve success, and for his many accomplishments, he will be remembered for a long, long time to come.

He has achieved success who has lived well, laughed often and loved much; who has enjoyed the trust of pure women, the respect of intelligent men and the love of little children; who has filled his niche and accomplished his task; who has left the world better than he found it, whether by an improved poppy, a perfect poem, or a rescued soul; who has never lacked appreciation of earth's beauty or failed to express it; who has always looked for the best in others and given them the best he had; whose life was an inspiration; whose memory is a benediction.

— Author unknown

Grover Cleveland Backster, Jr., may he rest in peace. He is and will be greatly missed, but his passion for truth will certainly live on; that is a fire that even death itself cannot quench.



Volume 7 • 2013 • Number 3 (25)

Charles A. Patton\* Newton Township Bucks County Pennsylvania, USA

# The Integrated Zone Comparison Technique; a Field Utility Study in a Deceptive Population

**Key Words:** Integrated Zone Comparison Technique, Forensic Assessment Interview Technique, Horizontal Scoring System, Field Utility Study, Sensitivity.

This field study is the fifth published research study [Gordon 2000] on the Integrated Zone Comparison Technique (IZCT). Its theory and philosophy were first published in 1996, in the textbook *Forensic Psychophysiology; Use of the Polygraph* [Matte 1996].

The IZCT has been taught at the Academy for Scientific Investigative Training since 1987 [Gordon 2000]. It is currently being used in the fields of law enforcement, intelligence, and private security in numerous countries around the world. It is a modification of the Backster Zone Comparison Technique

<sup>\*</sup>c patton1@yahoo.com

[Backster 1969] format, in a structure that closely resembles the zone technique validated at the University of Utah [Matte 1996]. It is a flexible technique format allowing it to be used for single-issue, multi-faceted and multi issue investigations. In addition, the IZCT uses a global approach to credibility assessment by using the Forensic Assessment Interview Technique [Gordon 2004] as the pre-test interview of the polygraph examination.

The IZCT format is a thirteen-question test consisting of four irrelevant questions, a symptomatic question, two weak relevant questions, three probable lie comparison questions and three flexible relevant questions:

IRRELEVANT Is it Sunday today? (No)

SYMPTOMATIC Do you understand I will only ask the questions I

reviewed?

WEAK RELEVANT Do you intend to lie to any test question?

IRRELEVANT Is it [actual day] today? (Yes)

COMPARISON During the first \_\_ years of your life, .....?

FLEXIBLE RELEVANT Primary or secondary relevant question, depend-

ing on type and facts of case

IRRELEVANT Right now are you in the US? (Yes)

COMPARISON In your entire life did you ever ......?

FLEXIBLE RELEVANT Primary or secondary relevant question, depend-

ing on type and facts of case

IRRELEVANT Are you in Switzerland right now? (No)

COMPARISON Exclusive or inclusive

FLEXIBLE RELEVANT Primary or secondary relevant question, depend-

ing on type and facts of case

WEAK RELEVANT Have you deliberately done anything to try and

beat this test?

An examinee is first given his/her rights concerning the examination and asked to sign a consent form if he/she voluntarily wishes to proceed with the examination. Background information is then ascertained, which allows

the examiner the opportunity to establish rapport with the examinee. Medical and physical questions are asked to ensure if the examinee is capable of undergoing the examination. A FAINT pre-test interview is then conducted. The interview allows for the assessment of non-verbal behavior and projective analysis of unwitting verbal cues, which are scored numerically. Several questions are then asked to assess whether the examinee has any prior knowledge concerning the polygraph process: "How did you prepare for this examination?" "What do you know about the polygraph and how it works?"

The examinee is then informed, "Not everyone can take a polygraph examination. A small percentage of the population cannot be tested because there are no apparent physiological changes which can be detected when they lie. So first, we have to make sure that if you lie it is clearly identifiable, and just as importantly, when you tell the truth it is clearly evident." A known demonstration test, with the examinee being requested to circle a number between 2 and 5, is then conducted. The examiner then adds the numbers 1 and 6 as "padding" questions. The examinee is tested as to which number he or she circled, with the instructions to answer all questions, including the question concerning the number they circled, "No."

The thirteen questions in the IZCT structure are then reviewed with the examinee in the following order: (1, 4, 7, 10), (6, 9, 12), (5, 8, 11), 13, 3 and 2. The examiner then explains how the polygraph instrument works and as an anti-countermeasure procedure during this presentation surreptitiously records the examinee's respiration on a separate chart.

The first IZCT chart is collected as a Silent Answer Test, with the examinee being given the following instructions, "In this first test I will ask you the questions I just reviewed, however they will be in a different order. I will repeat questions and mix up the whole sequence to ensure that whatever is, or is not happening, is consistent. During this first test I do not want you to answer any of the questions out loud. I want you to sit there silently, get used to the process, and listen to the questions carefully. Make sure you understand them; make sure you feel comfortable with them; and most importantly, this will be your last opportunity to make changes in the questions before I start recording your answers. Make sure you have answered every question truthfully. If you remember anything you haven't told me about and need me to change any of the questions before I record your answers you can tell me at the end of the test."

Chart one consists of the following sequence: 1, 2, 3, 4, C5, R6, C8, R9, C11, R12, 13. Irrelevant questions 7 and 10 are not used, unless they are needed to re-establish a norm during the examination, or used due to an artifact during the examination. At the completion of the chart, the examinee is asked if he/she remembered anything and therefore need any of the questions to be reworded or changed.

During the second IZCT chart the examinee is instructed to answer each question truthfully out loud. The examinee is also instructed that the data will be numerically evaluated and if they lie to any question, regardless of what the question is about, they could fail the entire examination. The relevant questions in the sequence are rotated by moving the last relevant question into the first relevant position. The sequence is: 10, 2, C5, R12, C8, R6, C11, R9, 3 (did you lie to any test question?), 13.

The third IZCT chart is administered with the relevant questions being asked before the comparison questions, and the relevant questions being rotated in the same manner. The sequence is: 1, 2, 3, R9, C5, R12, C8, R6, C11, 13.

If there appears a need for additional data to be collected to reach a clear decision, or if there appears to be deliberate distortions, chart 4 of the IZCT is used where all of the questions – from 1 to 13 – are asked.

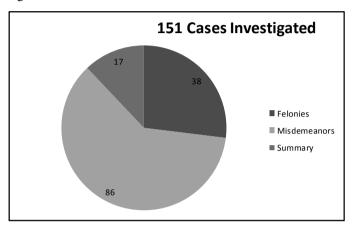
All data was analyzed using the Academy's Horizontal Scoring System [Gordon 1982], with cut offs of a  $\pm 1.5$  for each relevant question, for each chart administered. For three charts of data in a single issue examination a  $\pm 13$  was used, and for spot decisions a  $\pm 4.5$  was used. For four charts of data in a single issue examination a  $\pm 18$  was used, and for spot decisions a  $\pm 6$  was used. Data in each parameter is ranked from greatest to least based on the Academy's Algorithm for Manual Chart Interpretation [Gordon 1999].

### RESULTS

A total of 151 cases (Figure 1) were investigated using the IZCT from July 2004 to December 2009. Thirty-eight (38) of these cases were felonies, involving arson, armed robbery, rape, criminal mischief, theft, attempted theft, credit card fraud, burglary, attempted burglary, and criminal trespass. Eighty-six (86) were misdemeanors, involving criminal mischief, indecent assault, indecent exposure, open lewdness, possession of illegal substances, possession

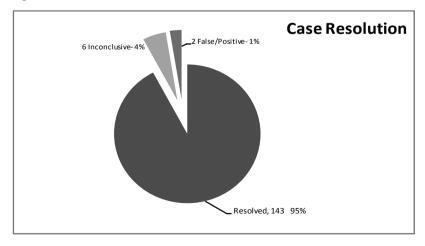
with the intent to deliver, identity theft, counterfeit documents, and false reports to law enforcement. Seventeen (17) were summary cases, involving hit and run, possession of illegal drugs, simple assault and writing bad checks.

Figure 1:



Of these 151 cases, 143 were resolved by confessions (Figure 2), resulting in 95% accurate decisions including "inconclusives", and 98% excluding "inconclusives." There were six (6) "inconclusives," two (2) false positives (truthful suspects wrongly determined to be deceptive), and 0 false negatives (deceptive suspects wrongly identified as truthful).

Figure 2:



### CONCLUSION

The result of this independent field study clearly demonstrates the efficacy and sensitivity of the IZCT for deceptive suspects in law enforcement field investigations where the polygraph is employed as an investigative tool.

It should be noted that this study was consistent with the accuracy demonstrated in previous five studies on the IZCT. All studies performed to date have shown sensitivity to properly identify deceptive examines at 90%, or higher.

#### **Abstract**

This field study tested the validity of the Integrated Zone Comparison Technique (IZCT) designed for specific issue testing in a law enforcement environment from July 2004 to December 2009, at the Newtown Township Police Department, Newtown, Pennsylvania. In this time, the IZCT and the Academy for Scientific Investigative Training's Horizontal Scoring System (HSS) and Algorithm for Data Analysis were used on suspects and alleged victims in 151 cases, which resulted in an overall accuracy rate of 95%, including "inconclusives", and 98% excluding them in the identification of deceptive subjects. Of the eight (8) unresolved cases, six (6) were "inconclusive" (4%), and two (2) were "false positive" (1%). There were no false negatives.

### Running head: Integrated Zone Comparison Technique

### References

Backster, C. *Technique fundamentals of the Tri-Zone Polygraph Test.* New York, Backster Research Foundation, 1969.

Gordon, N. et. al. *A Field Study of the Integrated Zone Comparison Technique*. Polygraph, 2000, Volume 29, Number 3, pp. 220–225.

Gordon, N. et.al *Integrated zone comparison technique accuracy with scoring algorithms*. Physiology & Behavior, 2005.

Gordon, N. *The Academy for Scientific Investigative Training's Horizontal Scoring System and Examiner's Algorithm for Chart Interpretation*. Polygraph, 1999, Volume 28, Number 1, pp. 56–64.

Gordon, N. *Validation of the Forensic Assessment Interview Technique*. Master's dissertation, 2004, University of South Africa.

Gordon, N., et.al. *The Horizontal Scoring System.* Polygraph, 1987, Volume 16, Number 2, 1982, pp. 116–125.

Matte, J. Forensic Psychophysiology Use of the Polygraph. JAM Publications, 1996, Buffalo, NY.





Volume 7 • 2013 • Number 3 (25)

Nathan J. Gordon\* William L. Fleisher Academy for Scientific Investigative Training

## A Realistic Perspective of the Art and Science of Forensic Psychophysiology

**Key Words:** forensic psychophysiology, IZCT, polygraph examination, Zone Comparison Technique, Federal Zone of Comparison

In the early 1960s, Cleve Backster – perhaps the most brilliant polygraph innovator our profession has known – developed major changes in technique structure and introduced many intensely needed psychological concepts to advance our profession. One of the major changes he introduced in technique development was the change in question sequence format from a traditional Relevant – Comparison question sequence, to a structure that introduced placing the Comparison before the Relevant, or a Comparison – Relevant sequence.

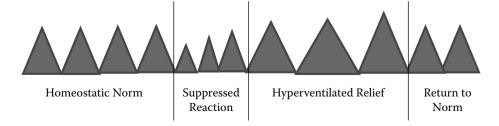
<sup>\*</sup> truthdoctor@polygraph-training.com

Backster, maintained – in our opinion correctly – that a major problem in our profession were False Positives, i.e. truthful examinees being wrongly diagnosed as deceptive. He reasoned that by allowing the truthful examinee to hear first their most salient question, i.e. the Comparison question, the number of false positives would be reduced.

Backster's early appreciation of physiology and recognition of how the body maintains a homeostatic balance supported his belief. Homeostasis, an organism's need to maintain an ideal internal physiological environment, what all living things need to thrive, as later redescribed by Handler et.al. as allostasis. Allostasis is the process of achieving stability, or homeostasis, through physiologic or behavioral change. By design, our brain ensures that our internal functions remain in balance.

Wikipedia says that "the concept of allostasis was proposed by Sterling and Eyer in 1988 to describe an additional process of reestablishing homeostasis, but one that responds to a challenge instead of to subtle ebb and flow. This theory suggests that both homeostasis and allostasis are endogenous systems responsible for maintaining the internal stability of an organism. Homeostasis, from the Greek *homeo*, means "similar", while stasis means "stand"; thus, "standing at about the same level". (The term was not coined as "homeostasis" or "standing the same" because internal states are frequently being disturbed and corrected, thus rarely perfectly constant.) Allostasis was coined similarly, from the Greek *allo*, which means "variable"; thus, "remaining stable by being variable". Allostatic regulation reflects, at least partly, cephalic involvement in primary regulatory events, in that it is anticipatory to systemic physiological regulation (Sterling and Eyer, 1988; Schulkin 2003)."

As a result, if something causes a change in our normal physiological functions in one direction, there will be a countervailing change to return us to a homeostatic norm. We refer to this as reaction and relief or compensation. Consider the following respiratory patterns:



If we present a truthful (as later verified) examinee with a Comparison question first, which should be the most salient stimulus to a truthful individual, a physiological response mediated by the autonomic branch of the peripheral nervous system (PNS) should occur. According to Backster's published theory of psychological set, the subject is then less likely to react physiologically to the adjacent Relevant question. This phenomenon will occur even though there is still some saliency to the Relevant question because of the body's need to regain a homeostatic normalcy and compensate for the subject's previous reaction to the Comparison question. In other words, for the examinee later verified as truthful, reacting to the Comparison question actually reduces their ability to react physiologically to the following Relevant question, even though the Relevant question still may hold some degree of saliency due to the emotionality of the relevant issue, fear of error, accusatory interrogation prior to the test, and a plethora of other reasons. Allowing the truthful examinee to respond first to the Comparison guestion therefore may reduce false positive outcomes. We can envision the need to maintain an allostasis or homeostatic normality almost like the "push-pull" motion in a game of Tug of War where each opposing team is trying to pull the other past the point of no return. When one team pulls harder, the other team pulls back trying to regain control. If we have two evenly matched opponents, even though there is back and forth movement, we would expect eventually each team to end up equidistant from the center. In human psychophysiology this is what the sympathetic and parasympathetic systems do so the body maintains its balance.

One of the concerns this positioning of the Relevant versus the Comparison question in the traditional Backster Zone Comparison Technique creates is the employment of the "Sacrifice Relevant" question (#39). If we ask a person, "Regarding whether *you did the crime*, do you intend to answer each question truthfully about that?" In the subject's mind, they have just been asked a Relevant question. This Sacrifice Relevant is asked to allow the examinee to first hear the "relevant" words, which will be asked later in the test per the Relevant questions, and at a spot in the test which will not be evaluated. This question is often referred to as an "ice-breaker", and usually creates a physiological reaction in both the truthful as later verified and the deceptive as later verified.

If a more serious problem in the search for truth is how to have truthful people produce truthful data, why would one want to start the test only by directing them to the relevant issue? More importantly, if Backster's concept that allowing the truthful examinee to hear their threat first is correct, it

makes sense to see what this question does psychophysiologically. It creates a reaction in almost all examinees, whether truthful and deceptive. If the body has an autonomic nervous system mediated reaction, it now wants to compensate, and the immediately following question, which in the Zone format is the first Comparison question, has less potential to show reaction.

The original Backster sequence, still used by the Federal Government, actually corrects this problem. By following the Sacrifice Relevant with the Symptomatic question which thus acts as a buffer, allowing homeostatic norm to be recovered prior to the first Comparison question being asked. In both the Utah and Integrated Zone Comparison Techniques the Sacrifice or Weak relevant questions are followed by an Irrelevant question to serve this purpose.

When we look at evidence-based techniques we have to ask whether we should be searching for validated techniques or principles? Validated principles maintain that if techniques employ the same principles, then what works for one must work for the other. Validated techniques maintain that a minor difference in techniques requires each technique to have its own independent research to support it. The American Polygraph Association, in its metanalysis report elected the latter path for validation.

What the current position fails to recognize are the variations that may individually occur between different examiners, even though they use the same technique format. A polygraph test is much more than just a technique/format structure. A polygraph test encompasses everything that happens to an examinee and everything that is said from the moment he or she arrives for the examination until the data has been collected.

For example the Federal Zone of Comparison has been shown to have a certain degree of accuracy based on research. What happens to that accuracy if the examiner decides to place the victim's name in the Comparison question? We expect a reaction to take place in the Sacrifice Relevant question for both the truthful and deceptive examinee: "Regarding whether you had sexual intercourse with little Suzie, do you intend to answer each question truthfully about that?" For the deceptive it is obviously a lie when they respond "Yes". For the innocent there is still the emotionality of being accused of such a repulsive act. In 2008, Dino and Fowles researched and reported in *Psychophysiology* that the semantics of a word can in itself cause arousal.

Following the Sacrifice Relevant question, the Symptomatic question is then asked: "Do you believe me when I promise not to ask a question I have not

gone over word for word?" and allostasis or homeostatic norm is now returned.

The first Comparison question is now asked, "Not related to Suzie, during the first \_\_\_ years of your life, did you ever ......?" We expect the truthful suspect to react to the question because their "No" answer is a probable lie, and psychologically they are uncertain as to whether or not lying to this question may cause them to fail the test, which has been implied to them by the examiner. However, for the deceptive suspect, who molested the little girl, he now hears the victim's name in the question, which most likely will produce reaction, as was illustrated in the previously referenced research of Dindo and Fowles. Consequently, we have started the physiological tug of war, and have reduced the person's ability to react to the next question, which is the Relevant question, "Did you have sexual intercourse with Suzie?"

How can the research on the Federal Zone – when used without the victim's name in the Comparison question – support the validation of the Federal Zone when the Comparison question contains the victim's name? In our opinion, it cannot and would need individual research to validate this significant change in test question construction.

How can research on a specific Zone Comparison Technique test where the interview is conducted in an unbiased manner support the same technique is the pre-test interview is biased toward obtaining a confession? After a combined career of well over 70 years of polygraph testing, teaching and quality controlling polygraph examinations, it is our opinion that it cannot.

As we attempt to move our profession from an anecdotal craft to an evidence-based science supported by research validated techniques, we should not lose the perspective and reality that there are numerous variables that positively or negatively affect the outcome of an examination regardless of the scientific research supporting any given technique. In our opinion we must be mindful that regardless of the validity of the technique the accuracy of the outcome is directly correlated by the training, experience and natural talent of the individual forensic psychophysiologist applying the technique. Perhaps this is the paradox of our profession?

### Bibliography

Backster C., *Technique Fundamentals of the Tri-Zone Polygraph Test*, Backster Research Foundation, New York 1969.

Gordon N. et.al., *A Field Study of the Integrated Zone Comparison Technique*, Polygraph 2000, Vol. 29, No. 3, pp. 220–225.

Gougler M. et al., *Meta-Analytic Survey of Criterion Accuracy of Validated Polygraph Techniques*, Polygraph 2011, Vol. 40, No. 4.

Matte J., Forensic Psychophysiology using the Polygraph, JAM Publications, Buffalo NY 1996.

Schulkin J., Rethinking Homeostasis. Allostatic Regulation in Physiology and Pathophysiology, MIT Press, London 2003.

Sterling P., Eyer J., *Allostatic. A New Paradigm to Explain Arousal Pathology*, [in:] *Handbook of Life Stress: Cognition and Health*, eds. S. Fisher, J. Reason, John Wiley & Sons, New York 1988.



Volume 7 • 2013 • Number 3 (25)

### Vitas Saldžiūnas\*

VIP Protection Department Ministry of the Interior of the Republic of Lithuania Vilnius, LITHUANIA

#### Aleksandras Kovalenko\*\*

Police Department Ministry of the Interior of the Republic of Lithuania Vilnius, LITHUANIA

### Examination of Sexual Abuse Crimes

Key Words: polygraph examination of sexual offenders, sexual abuse crime

There is a specific type of criminal crimes: sexual abuse crimes. When the victim is raped without any previous encounters, the investigation of the crime is usually started from medical examination of the victim and the investigation takes a certain course hereon depending on whether the rapist (suspect) is known. In this case, police investigators may have at least minimum material evidence.

Criminal investigation becomes very complicated as far as determining whether sexual abuse took place if partners had sexual intercourse(s) im-

<sup>\*</sup> vitas.saldziunas@vad.lt

<sup>\*\*</sup> aleksandras.kovalenka@policija.lt

mediately before the investigated event, and e.g. left a public place, went to someone's private apartment to listen to music, watch movies, and consume alcoholic drinks, and the incriminated sexual intercourse followed. Determining whether a minor child was molested is also very complicated when the genitals are not damaged. The investigators usually do not have any material (objective) evidence in such cases. In classic cases, psychologists communicate with the child and try to interpret the child's stories.

When a delayed investigation of suspicion of sexual abuse of a minor girl was initiated in Lithuania, four persons died tragically afterwards and the investigation continued for over two years. This received a broad community and mass media response. The community and even the politicians were divided into two opposite camps. Such public attention made police investigators and prosecutors very careful when making decisions in subsequent investigations regarding sexual abuse.

Below, we discuss the aforementioned event. It is possible that some people, whether intentionally or not, might exploit the incapacity of law enforcement authorities to investigate an event of such nature.

Grandparents A and B turned to law enforcement authorities. They informed that, after the death of their daughter after a grave illness, their son-in-law Z molested his minor daughter D three times at his new wife's home and by a lake. They maintained that their granddaughter D told them about that. As the aforementioned scandal was not over yet, the police and the prosecutor's office very cautiously started investigating a possible case of paedophilia. The police investigators questioned the grandparents A and B and their son-in-law Z; children's specialists examined the minor girl D and communicated with her. They did not succeed in obtaining evidence confirming or denying the statement of the grandparents. Police investigators turned to us asking whether we would polygraph examine the suspect Z. Having familiarized ourselves with the material gathered by the investigators more thoroughly, we agreed to perform the tests. We only requested to obtain consent to be examined by a polygraph from the suspect Z and the grandparents A and B.

We have used only Event Knowledge Test (EKT, Saldžiūnas & Kovalenka 2008a; 2008b; 2008c; 2009a; 2009b; 2009c; 2010; 2012a; 2012b) for many years of performing polygraph tests. In EKT tests, questions and groups of alternative answers (Saldžiūnas,& Kovalenka 2012b) are drawn up with regard to the versions.

We started from the following versions. **The first version (suggested by the grandparents A and B):** their son-in-law Z demonstrated his genitals to his minor daughter or perhaps went further at least three times at his home and near the lake. **The second version (upheld by the suspect Z):** he has never molested his minor daughter D. While analyzing the material gathered by police investigators, we found that an additional version should be investigated as well. **The additional version (the version of the examiners and the police investigators):** the grandparents A and B invented the charges against Z aiming to take their granddaughter away from their son-in-law.

Table 1. Generalized data for polygraph examination in a potential paedophilia case.

1. Have you ever done something for which you had to be punished by the police?					
		Examinee B (grandparent)	Examinee A (grandparent)	Examinee Z (son-in-law)	
0.	for counterfeiting money	no	no	no	
1.	for smuggling	no	no	no	
2.	for robbery	no	no	no	
3.	for hooliganism	no	no	no	
4.	for fraud	no	no	no	
5.	for illegal distribution of alcohol	no	no	no	
6.	for embezzlement	NO	no	no	

2. I	2. Have you ever done something for which you had to be tried?						
0.	for shoplifting	no	no	no			
1.	for theft from cars	no	no	no			
2.	for possessing drugs	no	no	no			
3.	for a car accident	no	no	no			
4.	for larceny	no	no	no			
5.	for possessing a gun	no	no	no			

# 3. How many times, according to your granddaughter D, did your ex-son-in-law Z sexually coerce her (a question for the examinees A and B)?/ How many times did you sexually coerce your daughter D (a question for the examinee Z)?

0.	more than 20 times	no	no	no
1.	more than 15 times	no	no	no
2.	more than 10 times	no	no	no
3.	three times	3 TIMES	YES	no
4.	once	3 TIMES	no	no
5.	not a single time	3 TIMES	no	no
6.	you do not know how many times she was sexually coerced	3 TIMES		no
7.	only three times	3 TIMES	I DON'T KNOW EXACTLY	no

## 4. How or in what way, according to your granddaughter D, did your son-in-law Z sexually coerce her? / In what way did you sexually coerce D?

0.	showed pornographic films to her	no	no	no
1.	licked D's body	no	no	no
2.	thrust his penis to D's lips	YES	YES	no
3.	Z masturbated his penis in front of D	I don't know	I don't know	no
4.	Z thrust his penis between D's legs	no	I don't know	no
5.	Z masturbated his penis with D's hand	YES, NO	I don't know	no
6.	Z bathed naked D in the bath	no	I don't know	no
7.	Z showed his naked body to D	yes	yes	no
8.	Z actually did not do anything wrong to D	NO	NO	no
9.	Z actually did not rape D	YES	RAPED	no

	5. When, according to your granddaughter D, did your ex-son-in-law Z sexually coerce her? / When did you sexually coerce your daughter D?					
0.	in April, 2008	no	no			
1.	in May, 2008	no	no			
2.	in June, 2008	no	no			
3.	in July, 2008	YES	no			
4.	in August, 2008	no	no			
5.	D was molested at another time	no	no			
6.	last year	no	no			
7.	someone invented that D was molested	YES	maybe			

**Note:** Examinee A didn't know when her ex-son-in-law Z sexually coerced the daughter D.

1	6. Where, according to your granddaughter D, did your ex-son-in-law Z sexually coerce her? / Where did you sexually coerce your daughter D?					
0.	D was raped in the forest	no	no	no		
1.	D was raped in the car	no	no	no		
2.	D was raped in son-in-law's home	YES	YES	no		
3.	D was raped abroad	no	no	no		
4.	D was raped by the lake	YES	YES	no		
5.	D was raped in your home	no	no	no		
6.	D was raped at some other place as well	IN THE NEW WIFE'S HOME	I don't know	no		
7.	D was not raped by the ex-son- in-law at all	RAPED	RAPED	no		
8.	rape of D was invented	NO	NO	no		
9.	D really told about the place where she was raped by Z	YES	YES	no		

1	7. From whom did you first find out that your ex-son-in-law Z sex abused granddaughter D? (question for the examinees A and B)					
0.	you first found out from the police officers	no	no			
1.	you first found out from your daughter	no	no			
2.	you found out from your neighbours	no	no			
3.	you found out from your granddaughter	no	YES			
4.	you found out from the press	no	no			
5.	you found out from your ex-son-in-law	no	no			
6.	your granddaughter D did not tell about her rape at all	TOLD	TOLD			
7.	your husband A / wife B invented that D was raped	NO	NO			
8.	you found out from your granddaughter	artefacts	YES			

#### 8. How, in your opinion, a person who slanders innocent people and blames people of a fictitious crime, should be treated? (question for the examinees A and B) 0. rebuke strongly because of slander YES yes 1. leave such a person alone NO no 2. sentence such a person for slander YES yes 3. do not be angry at such a person for the calumny NO NO 4. imprison such a person for slander YES YES make such a person's act public via the press and to the 5. yes YES neighbours

1	8a. What, in your opinion, should be done to you when the results of the polygraph examination are known? (question for the examinee Z)					
0.	rebuke strongly			no		
1.	leave you alone			yes		
2.	make your act public via the press and to the neighbours			no		
3.	notify the employers			no		
4.	imprison you			no		
5.	end the police investigation			yes		

We included the results of the polygraph examination in Table 1. A total of eight questions with alternative answers (Saldžiūnas & Kovalenka, 2008a; 2008b; 2008c; 2009a; 2009b; 2009c; 2010; 2012a; 2012b) were prepared. Examinees' answers were entered into columns 3, 4, and 5. The questions N1 and N2 are of adaptive nature (Saldžiūnas & Kovalenka, 2008a; 2008b; 2008c; 2009a; 2009b; 2009c; 2010; 2012a; 2012b), they are not Demonstration Tests (DT) (Konieczny, 2009; Krapohl, 2010). The main difference between them and the DT is that these questions are not aimed at proving the high reliability of polygraph examination to the examinee. The examinees becomes used to the examination procedure during the first two questions. Using polygraph charts, examiners judge the psychophysiologic condition of the examinee. A response was registered only after the examinee's B answer "NO" to the answer N6 of the question N1. This response is not very important to the conclusions of the examination, but will be discussed later. The examinees' answers, after which symptomatic responses (Konieczny, 2009) were recorded, are marked in bold capital letters in Table 1: they may be NO, YES, **3 TIMES, I DON'T KNOW EXACTLY**, etc. The questions from N3 to N7 were drawn up in accordance with the versions. The question N5 was not presented to the examinee A during the polygraph examination. Having read the question N5 he told the examiner that he did not know when his granddaughter D had been raped. The question N7 was not presented to the examinee Z during the polygraph examination, as it was designed for checking the third version and the examinee could only guess how or where from the accusations against him originated. As we did not succeed in creating more questions with regard to the versions, we additionally included symptomaticcontrol questions N8 and N8a. The question N8 – for the examinees A and B, and N8a - for the examinee Z.

We would like to remind that, in accordance with EKT (Saldžiūnas & Kovalenka, 2008a; 2008b; 2008c; 2009a; 2009b; 2009c; 2010; 2012a; 2012b), if a response is recorded after any answer (NO, YES, 3 TIMES, I DON'T KNOW EXACTLY, etc.) of the examinee, this may mean that the examinee is not honest when answering or that the statement expressed by the examinee is not true.

The following were observed and determined during the polygraph examination:

Grandmother B presumably consumed strong sedatives before the examination. She admitted having taken medications for heart diseases, but denied having consumed any other medications before the examination. Such an as-

sumption is suggested by very large tonic electrodermal activity (250-500k $\Omega$ ) (Saldžiunas & Kovalenka, 2013; Varlamov & Varlamov, 2007)

Grandmother B tried imposing psychological suggestions on the examiner. She sometimes also chose "not to hear" answer options read by the examiner during the examination;

Although the adaptive questions N1 and N2 are not very important to the conclusions (assumptions) directly, the examinee's B response after the answer N6 of the question N1 may turn attention to her past, which is not completely innocent.

An additional conclusion (assumption) that examinees A and B are afraid of police investigation and of polygraph examination may be made on the grounds of their responses after the answers to the question N8. It may be considered (assumption) that examinee Z is almost confident of the results of the polygraph examination based on his responses to the answers to the question N8a.

Before the examination, the examinee A tried to persuade an examiner to work out conclusions of the examination that would be favourable to him.

When analysing the questions N3-7 from Table 1, and taking into account the recorded responses and evaluating the examinee's behavioural tactics before and after the polygraph examination which we described above, the following conclusions (assumptions) may be made:

The version that the son-in-law Z sexually exploited his daughter D does not prove to be true. This decision is confirmed by the statistical majority of responses. Some of the examinee's B answers may seem strange (after the answer N3 of the question N7 and the answer N7 of the question N5). This could have happened, as commented later, because the examinee B applied countermeasures during the examination (tried "not to hear" the answer options read by the examiner during the examination).

It seems that the majority of responses confirm the son-in-law's Z version that he did not abuse his daughter D sexually.

The version that one (or both) of the grandparents created false accusations to the son-in-law is possible as well with regard to the recorded responses.

A conclusion, whose content was roughly presented above, was included in the file and, as the prosecutor's office was cautious after the scandals that took place in the Republic of Lithuania, investigation of the evidence on this crime was handed over to the court. One of the examinees was questioned before the court. The court of first instance acknowledged that Z did not abuse sexually his daughter D. As A and B explained that the whole case was an account by their minor granddaughter D, the court could not prove that the accusations were invented. The police and the prosecutor's office believe that the court ruling will not be accepted and an appeal to a court of higher instance will be made. In our capacity of examiners, we were very glad we could help an innocent person defend himself before the court.

We wish to emphasize that testing (examination) of both victims and suspects is important when investigating cases related to sexual crimes. We had six similar investigations in our practice. Three suspects were sentenced by the court after the conclusions of three examinations. The prosecutor's office terminated the cases after the other three examinations. In one case, only the victim agreed to be polygraphed, while the suspect did not. The victim's version was proved to be true during the examination.

We apply the principle described above when investigating crimes with several suspects, also if they present contradicting versions. They usually maintain that the crime was not committed by them but other perpetrators. In such cases, the suspects provide plenty of detail which is not hard to examine during the polygraph examination. Such investigations are not difficult and their conclusions are highly intelligible in the court.

### References

Konieczny, J. (2009). Badania poligraficzne, Podręcznik dla zawodowców, Warszawa, Wydawnictwa Akademickie i Profesjonalne [in Polish].

Krapohl, D. (2010). Demonstration tests. Electronic publication.

Saldžiūnas V., Kovalenko A. (2008a), The event knowledge test, *European Polygraph*, 1(3), 21-29

Saldžiūnas V., Kovalenko A. (2008b), The event knowledge test (EKT) in Polygraph Examination (in a murder case), *European Polygraph*, 2(4), 137–142.

Saldžiūnas V., Kovalenko A. (2008c), The event knowledge test (EKT) in Polygraph Examination (common notice of tactics), *European Polygraph*, 3-4 (5-6), 209–220.

Saldžiūnas V., Kovalenko A. (2009a), Problems of questions in event knowledge test, *European Polygraph*, 3(2), 69–75.

Saldžiūnas V., Kovalenko A.,& Soshnikov A. (2009b), Probability assessment of the value of psyhophysiological stimuli, *European Polygraph*, 1(7), 25–31.

Saldžiūnas V., Kovalenko A., & Gaidarov K. (2009c), The problems of truth perception during psychophysiological examination, *European Polygraph*, 3–4 (9–10), 145–152.

Saldžiūnas, V., & Kovalenka, A. (2010). Field and Laboratory Polygraph Examinations, *European Polygraph*, 4 (14), 213–228.

Saldžiūnas, V., & Kovalenka, A. (2012a). Test with numbers, *European Polygraph*, 1 (19), 45–54.

Saldžiūnas ,V., & Kovalenka, A. (2012b). Alibi check by polygraph examination, *European Polygraph*, 2 (20), 117–127.

Saldžiūnas V., Kovalenko A. (2013), Field examination: certain phenomena of EDA, *Polygraph*, (in press).

Varlamov, V., & Varlamov, G. (2007). Protivodejstvije poligrafu i puti ich nejtrolizaciji (countermeasures to polygraph). Kartika: Krasnodar [text in Russian].

Report



Volume 7 • 2013 • Number 3 (25)

## Report from the International Polygraph Seminar - Waplewo, Poland, 25th-27th September 2013

An International Polygraph Seminar was held on the premises of the Warmia Military Leisure Centre in Waplewo from 25th to 27th September 2013. It was the sixth meeting organised by the Polish Military Police. Participating in the seminar were representatives of Polish police and special forces (Internal Security Agency (ABW), Central Anti-Corruption Bureau (CBA), Police, Border Guard, Military Counterintelligence Service (SKW), Military Intelligence Service (SWW) and Military Police), Ministry of Finance, and academic centres from Kraków, Poznań, and Wrocław.

The leading theme of the seminar, and the reason why a number of presentations were devoted to history, was the 50th anniversary of psychophysiological studies in Polish criminal procedures. Agnieszka Domin-Kuźma and Martyna Huszcza (AFM Kraków University) discussed the Polish contribution to the development of instrumental lie detection. Of major significance from the point of view of human physiology was the discovery of a substance known as adrenaline (*nadnerczyna*) made by Napoleon Cybulski. Another important discovery made by the same scientist (with his assistant Adolf Beck) was the world's first electroencephalogram. Moreover, Ivan Tarkhanoff was strongly associated with Poland, especially towards the end of his life. The endosomatic method he discovered (and named the Tarkhanoff method) made it possible to measure the electric activity of the skin in the galvanic skin response (GSR). Beyond doubt, also the experiments conducted by the psychologist

and pioneer of researching the subconscious, Edward Abramowski, had large impact on the development of polygraph research. He measured breathing rate as a physiological correlate of insincerity by analysing the impact of breathing ratio on deviations in galvanometric results.

Dr Piotr Herbowski (Poznań) School of Social Sciences and Humanities presented among others the evolution of perceiving expertise in polygraph is investigation by procesualists. The subject was complemented by a paper delivered by Aleksandra Cempura and Anna Kasolik (AFM Kraków University). The lecture was a review of Polish court verdicts (issued by the Supreme Court and courts of appeal) on the permissibility of polygraph examination in criminal cases in Poland. Discussed in the first part were the judgements governed by the Criminal Procedure Code from 1969, which lacked legal regulations concerning such examination. The speakers paid attention to the confusing understanding of the notion of a polygraph examination, and also to the problem of the moment when it is performed in the course of investigation. Presented further were justifications for individual judgements after coming of the Criminal Procedure Code of 1997 and its amendments of 1st January 2003 into force. The issued judgements were broken by the problems that the courts found material in relation to the Art. 192a and Art. 199a introduced into the Criminal Procedure Code. Wrapping up their presentation, the speakers remarked that the introduction of legislation regulating polygraph investigations in criminal procedures did not increase the concern of courts for this form of evidence, and quite to the contrary, the introduction of this regulation caused more legal problems in court judgements than would stem from its lack. Despite the diversity of judgements, it is obvious that evidence from a polygraph investigation in the form of expertise is permissible in the Polish law, both as incriminating and exculpating evidence, although in practice, it is in general treated at par with circumstantial evidence. On its own, however, such material can provide independent grounds for the application of preventive means. The divergence in lawyers' positions in the question of permissibility and value of evidence from polygraph investigation results primarily from the lack of understanding of its essence. This is a consequence of overlooking or insufficient inclusion of the question of polygraph investigation in education curricula for future judges, prosecutors, lawyers, and police officers.

In the following paper, Professor Ryszard Jaworski discussed the development of polygraph investigations at the University of Wrocław. The first session of the seminar ended in a lecture by Alicja Szatraj on the history of polygraph investigations at the Internal Security Agency (ABW). It is worth mentioning that next year marks the 25th anniversary of polygraph investigations in the Office for State Protection (UOP) and ABW.

The following thematic block of the seminar was devoted to the questions of methodology connected to the conducting of polygraph investigations and the post-examination reports. Sergeant Marcin Gołaszewski from the Internal Security Agency discussed selected practical problems in assessing polygrams and control of quality of polygraph investigations. He presented the results of own studies on the impact of modification of relevant questions during the tests and on results. The speaker discussed problems related to the assessment of tests in the case of incorrect annotations on polygrams, and suspicion of purposeful disruption of examinations.

In turn Anna Ibek and Małgorzata Wrońska (AFM Kraków University) discussed the frequent mistakes in expert conclusions in polygraph investigations. The authors followed the generally accepted assumption that a polygraph study serves pointing to one of the three possible results, namely DI (deception indicated), NDI (no deception indicated) or INC (inconclusive), to which, with certain accuracy, the polygrapher assigns the subject. The conclusions from polygraph investigation opinions performed in criminal cases in both general and military prosecution offices in 2003-2012 were investigated for logical and methodological correctness, focusing on whether the polygraph examination reached the goals assumed. A study of the files allowed the presentation of the mistakes committed most commonly while forming the opinions, and technical and tactical flaws that appeared while polygraph examinations were conducted. The need for more categorical phrasing of conclusions from the investigations, information about the diagnostic value of the tests used, and use of precise language adequate to the phenomena described were pointed to.

The third session of the seminar discussed other techniques and methods that could support polygraph investigations. Renata Staszel, Małgorzata Wojtarowicz and Paweł Zając (AFM Kraków University) discussed the possibility of employing thermal vision in lie detection. The three authors conducted introductory experimental studies in the scope. Deputy Chief Przemysław Wrzosek of Police Academy in Szczytno presented an extensive lecture on discourse analysis and pointed to the fact that discourse analysis used as a tool in the process of discovering crime may be of major significance for its course and efficiency. It should serve researching and assessment

of the testimonies of witnesses and/or explanations of the suspects, and be also used e.g. in the process of building the investigation models. It is of special importance in the scope of supporting judicial procedures and investigations conducted by experts to support the criminal procedure. However, discourse analysis encounters certain obstacles. The speaker criticised the ways of documenting, and the form and content of entries in the interrogation reports, remarking that they are not a proper means for conducting this type of analysis. Moreover, he proposed that a clear separation is introduced between discourse analysis (from audio or audio-and-video recording) and the analysis of the content of the statement, and the analysis of trial documentation should be made. In this case, the speaker presented a proposal of proprietary methodology for conducting discourse analysis on audio and video recorded utterances, assuming separation of the video and sound streams in the investigation. He emphasised that the procedure was to allow objectification of discourse analysis and to avoid the mistakes resulting from excessive interpretation and drawing of unjustified conclusions from the mixing of verbal and non-verbal signals. The speaker emphasised that he believes that the discourse analysis should be based on discourse theory and context, and the method of analysis should operate on scientific grounds and use the achievements of logics, mathematics, law, criminal and forensic sciences, psychology, sociology, linguistics, pragmatics, anthropology, and culture sciences. For that the speaker proposed a term broader than analysis, namely "investigation of discourse".

Worth attention among the addresses closing the seminar was the initiative for polygraph examination of people applying for the status of state's evidence. The current legal status and previous experiences with the state's evidence were presented jointly by Dr Piotr Herbowski and Deputy Chief Dominika Słapczyńska from the Central Police Forensic Laboratory (CLKP); the latter proposed model questions that candidates for state's evidence could be asked.

At the close of the meeting, Professor Jan Widacki (AFM Kraków University) recapitulated the knowledge that Polish handbooks of criminalistics (criminal investigation) provide about polygraph investigations. Unfortunately the know-how presented in these books is as a rule, vestigial, and some information requires amending. For example, the Guilty Knowledge Test is not a method developed by Mariusz Kulicki, as some in Poland believe, as it is Lykken's method known in the world earlier.

The Waplewo seminar was also an opportunity for presentations of polygraph equipment producers: Axciton Systems and Limestone Technologies. Bruce White, CEO of Axciton Systems, explained the mathematical assumptions that make the foundation of the White Star polygram analysis software he developed.

Marcin Gołaszewski\*

<sup>\*</sup> marcin.golaszewski@wp.pl



### The basic information for Authors

To publication will be accepts unpublished research papers as well as review article, case reports, book reviews and reports connected with polygraph examinations.

Submitted manuscripts must be written in English.

All papers are assessed by referees (usually from Editorial Board), and after a positive opinion are published.

Texts for publication should be submitted in the form of normalized printout (1800 characters per page) and in electronic form (diskette, CD), or sent by e-mail to Editorial Office.

The total length of research papers and review article should not exceed 12 pages, case reports -6 pages, and other texts (book review, report) -5 pages.

The first page of paper should contain: the title, the full name of the author (authors), the name of institution where the paper was written, the town and country.

Figures should be submitted both in printed form (laser print, the best) and electronic form.

#### THE BASIC INFORMATION FOR AUTHORS

Tables should be numbered in Roman numerals and figures in Arabic ones.

Figures, tables, titles of figures and titles of tables should be included on a separate page. The places in the text where they are to be included should be indicated.

The references should be arranged in the alphabetical order according to the surnames of the authors.

The references should be after the text.

Each reference should include: the surname (surnames) of the author (authors), the first letter of author's first name, the title of the book, year and place of the publication, the name of publisher, or the title of the paper, the full title of the journal, the year, the volume, the number and the first page of the paper.

For example (in references):

Reid J., Inbau F. (1966), *Truth and Deception: the Polygraph ("Lie-detector") Techniques*, Williams & Wilkins, Baltimore.

Abrams S. (1973), *Polygraph Validity and Reliability – a Review*, Journal of Forensic Sciences, 18, 4, 313.

and (Reid, Inbau, 1966), (Abrams, 1973) inside text.

Texts for publication in "European Polygraph" should be mail to:

"European Polygraph" Andrzej Frycz Modrzewski Krakow University ul. Gustawa Herlinga-Grudzińskiego 1 30-705 Kraków (Poland)

Or e-mail: margerita.krasnowolska@kte.pl

# Rules and regulations concerning publishing papers in European Polygraph

- 1. All papers sent to European Polygraph by their respective authors undergo preliminary assessment by the Editor-in-Chief.
- 2. The initial assessment results in the decision whether to send the work for an independent review or return it to the author with the information that it will be not published.
- 3. Two independent reviewers for "internal reviews" are appointed by the Editor-in-Chief or by the Deputy Editor following consultation with the Editor-in-Chief.
- 4. The following cannot be independent reviewers: Editor-in-Chief, Deputy Editor-in-Chief, employees of Andrzej Frycz Modrzewski Krakow University, and people with papers published in the issue containing the reviewed paper.
- 5. The internal review should answer the question whether the reviewed paper is fit for printing and whether it requires any amendments, and if it does, state what they are, and must be in written form, and conclude in an unequivocal verdict concerning publication or rejection of an article.
- 6. If one of the reviewers provides comments and amendments, but does not disqualify the paper, the Editor pass the comments on to the author, asking for the author's opinion and any amendments.
- 7. Should the opinions of the author and reviewer diverge, the decision to print the paper or otherwise is made by the Editor.

- 8. In the case mentioned in 7 above, before making their decision, Editor-in-Chief can appoint another independent reviewer.
- 9. In exceptional cases, when there are significant circumstances justifying such a decision, and the Editors do not agree with the opinion of the reviewer, Editors may decide to publish a paper against the opinion of the reviewer.
- 10. The names of reviewers is not disclosed to the author, and the names of authors are not disclosed to reviewers.
- 11. Book reviews and reports are not reviewed, the decision to publish them is the responsibility of the Editors.

## Subscription: Terms and Conditions

Krakow Educational Society (Krakowskie Towarzystwo Edukacyjne sp. z o.o.), in its capacity of the distributor of Krakow University (Krakowska Akademia im. Andrzeja Frycza Modrzewskiego) publications, offers the subscription of European Polygraph, quarterly edited by Professor Jan Widacki, LL.D.

Please, send your orders by e-mail to: ksiegarnia@kte.pl, including:

- your full name (first and last in case of natural persons; registered business name in case of legal persons),
- address (permanent address or registered seat),
- tax identification number,
- address for delivery of your copies of European Polygraph,
- number of successive issues ordered (minimum 4), and
- number of copies of each issue.

The price of a single copy of European Polygraph is PLN 20 (USD 7.5,  $\leq$  5.5). Shipment costs will be added on top of the subscription price depending on your country of residence.

