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Interrogations using a polygraph in Russia: 15 years of legal application

The method of psychophysiological detection of deception (PDD) has a long history in Russia. This history can be divided into six stages.

The first stage – the early history of the PDD method – ran from 1925 to 1930. The pioneer of the development of the PDD method in the Soviet Union was Alexander Luria, who later became a world-famous scientist. He investigated the psychological mechanisms of the PDD applied this method in practice in the Moscow district public prosecutor's office.

Alexander Luria discovered and formulated **the general principle of the PDD method using a polygraph** and all forms of the psychophysiological method of disclosure of hidden information. In the 1920s he wrote: “the only opportunity to research internal, ‘hidden’ psychological processes is to connect these ‘hidden’ processes with any physiological processes working simultaneously, observed from outside ... and these physiological processes should be chosen

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in such a way that psychological processes could affect them” (1). In the early 1930s the second stage of the history of PDD in Russia began. All scientific investigations in this field were brought to a halt in the USSR. Soviet official jurisprudence declared that the PDD method was pseudoscientific and it was practically prohibited. The second stage lasted till 1993.

Though the PDD method was declared pseudoscientific, US achievements in polygraph application attracted the attention of specialists in the USSR, and the KGB leader Yuri Andropov (later the head of the USSR) approved the use of polygraphs. Today it is no secret that the main user of polygraph examinations in the Soviet Union was the KGB.

In the middle of the 1970s the third stage of the history began. This was the time of serious scientific investigations of the PDD method and its practical uses. These scientific studies and other works demonstrated the high effectiveness of the employment of polygraphs in law enforcement practice. The beginning of the employment of polygraphs in the USSR could not be concealed. During hearings in 1979 the US Congress discussed the appearance of polygraph examinations in the Soviet Union.

The second and third stages finished at the same time, and in the early 1990s the history entered its fourth stage – the stage of legal polygraph application. In spring 1993 the Ministry of Justice (MJ) awarded legal status to polygraph examinations in Russia. The Federal Security Service (FSS) of the Russian Federation was the first government department to employ the polygraph legally. That year marked the beginning of the broad spread of polygraphs in the country. The Ministry of Internal Affairs (MIA) and private commercial organizations began to use polygraphs in 1994. In the next six years the Ministry of Defense (MD), MJ and some other departments started to use polygraphs, including screening examinations.

In 1996 IUP were used only in Moscow and four other cities in Russia. Now polygraphs are used in more than a hundred large and small towns, from Kaliningrad (on the Baltic coast) to Petropavlovsk-Kamchatsky (on the Pacific Ocean coast).

During the 1990s in Russia a paradoxical situation surrounded polygraphs. On the one hand, several government departments were employing them in law enforcement practice. Polygraph use increased annually. But on the other hand, Russian criminalistic science (or – in English – forensic sciences) could not give the right scientific explanation of polygraph examinations or – in Russian – of the **interrogations using a polygraph (IUP)**.

That is why, according to Russian legal tradition, IUP could not be employed in law enforcement practice. This contradiction was successfully eliminated at the beginning of the new century.

The fifth stage of the history of the PDD method is the entry of the polygraph into criminalistics. Russian forensic sciences accepted IUP as a criminalistic method, and this step paved the way for a wide application of the polygraph in the everyday life of the state. A new branch of criminalistic science has the name “criminalistic diagnostic investigation using a polygraph”(2) (or “criminalistic polygraphology”) and under this name it entered modern Russian criminalistics textbooks (3).

The sixth stage of the PDD method history is developing now: it is a time of recognition of IUP as forensic psychophysiological expertise.

Before discussing current polygraph use in Russia, it is necessary to make some preliminary remarks.

Polygraph examinations began to develop in the Soviet Union in the years when any contacts with polygraphers of other countries were impossible. To develop polygraph technology, Russian specialists read books and articles of American polygraphers, trying to understand and to accept their experience in this field. The negative side of this process was a lack of information, which hampered development and use of the polygraph method. But the absence of the practical information was the positive side of that period too, because the lack of information forced specialists to study the PDD method more carefully. This has given the opportunity to develop an independent opinion about this method. That is why Russian IUP technology has some differences and novelties.

This year polygraphers are observing the 15-year anniversary of the first legal application of a polygraph in Russia, and during these years Russian polygraphers obtained some significant results.

So, what level have we achieved in Russia in the field of polygraph examination in the early 21st century?

Polygraph examinations or IUP

The exact number of interrogations using polygraphs conducted in Russia this year or in previous years is unknown.

In 2005 state and police polygraphers carried out approximately 26,000–27,000 polygraph examinations. And at least 30,000 examinations were performed by commercial polygraphers.

According to expert opinions, polygraph examinations are increasing annually by 10–15%. Nowadays 60% of IUP are screenings, and 40% are examinations during state, police or private investigations. But these estimations

are very approximate. The main users of IUP are commercial organizations of Russia, MIA and FSS. IUP are actively used for investigations of crimes. Police officers and prosecutors are often the initiators of polygraph examinations.

At the end of 2005 the Prosecutor General's Office of the Russian Federation made a review of the practice of polygraph application during crime detections. This review came to the conclusion that the effectiveness of IUP was indisputable. And the Prosecutor General's Office recommended that all public prosecution bodies use polygraphs more actively in crime detection. The main achievement of recent years in polygraph application is the use of IUP as forensic psychophysiological expertise. The first precedent when the results of psychophysiological expertise were accepted as evidence in court took place in Russia in 2002. The law of criminal procedure of the Russian Federation allows the admissibility of the results of IUP in court as evidence. Since 2002 more than a hundred examples of such forensic expertise have been executed in different regions of Russia. The results of forensic psychophysiological expertise have been accepted by courts as evidence, including the Supreme Court of the Russian Federation. The Prosecutor General's Office believes that forensic psychophysiological expertise is the most persuasive way to use polygraph examination results in court.

Examiners (polygraphers)

The exact number of polygraphers in Russia now is unknown. At least 300 polygraphers work in state and police organizations. And at least 200 specialists work in the private sector. Approximately 50% of Russian polygraphers are women.

In the recent past Russian polygraphers were police officers, government employees, psychologists, military men, students and so on and so forth. To be successful the polygrapher should have a good knowledge of the Russian language and national mentality. This is why there are no polygraphers in Russia who reside outside of this country.

Training of polygraphers

In the USSR there was no polygraph training course, because the application of polygraph techniques was limited. Russian polygraphers of the first gener-

ation (the author of this article belongs to these polygraphers) are self-taught specialists. The first polygraph training course in Russia was commercial. It was opened in 1994. But the educational level was too weak and soon this course was closed. The MIA polygraph training course was founded in 1994 in Moscow, but in 1997 this training course left the capital for Krasnodar, and at the beginning the new century this MIA polygraph school started to work irregularly.

The polygraph training school of FSS was founded by the author of this article in the Institute of Criminalistics (IC FSS) in spring 1996, when polygraphers of the Institute had had more than two decades of experience in this field.

In 1998 Bill Thompson and his colleagues from Maryland Institute of Criminal Justice conducted the first polygraph training course in Russia. The course had been organized in the scope of the bilateral (Russia and USA) Cooperative Threat Reduction Program. This training course provided the opportunity to become acquainted with the educational technology of the American Polygraph Association. It was very pleasant for Russian polygraphers to find out what the technology of a Russian training course looked like compared to an American one.

The polygraph training school of the IC FSS is the only training school of federal standing in Russia, having functioned for 12 years on a regular basis and trained specialists for FSS, for other state departments, for commercial organizations in Russia and in some countries of the Commonwealth of Independent States (CIS) – Armenia, Belarus, Kyrgyzstan and Ukraine). Now commercial graduates of the school are working in more than 20 cities of the Russian Federation and Ukraine. The duration of formal training in the school of the IC FSS is about 500 hours. This training consists of lectures, laboratory training and an “internship” with professional polygraphers – schoolmasters or supervisors. Besides the polygraph training school of the IC FSS, which offers training courses regularly, there are three state (non-commercial) training schools – in MIA, in MD and Federal Penal Service.

Furthermore, there are about ten commercial polygraph training schools. Three of them hold training courses regularly, others from time to time. One of the commercial polygraph training schools is situated in Saint Petersburg, the second in Krasnodar, and all others (state and commercial) in Moscow.

The best known commercial polygraph training school in Russia is the National School of Lie Detection (NSLD), which was founded four years ago. The duration of the training course in the NSDL is about 500 hours.

Moscow State Technical University n.a. N.E. Bauman (BMSTU) – the first technical university in Russia and the CIS – begins this year a complex educational program concerning polygraphs. Its purposes are preparing polyg-

raphers, confirming the professional skills of polygraphers and teaching them to fulfill forensic psychophysiological expertise.

Polygraphs

Like the specialists of other countries, Russian polygraphers have for a long time used the American “lie detectors”, produced by the Keeler, Lafayette and Stoelting companies, and medical polygraphs too.

It may be interesting to know that Russian polygraphers were the first to begin regularly to record a human voice on polygraph diagram paper. For this purpose a voice channel was added to American ink “lie detectors”. In the early 1980s Russian polygraphers stopped using sphygmography during polygraph testing, and for more than two decades used plethysmography. The information abilities of a plethysmography are the same, but it does not create the well known negative influence of a sphygmography on a person during testing.

The first computerized polygraph system was created in the Soviet Union in the middle of the 1980s. It was a predecessor of a computer polygraph.

In 1993 “INEX-company” created the first Russian commercial computer polygraph. The first “INEX”-polygraph had only 3 traditional channels.

Now, fifteen years later, at least 97 % of polygraphs in the country are Russian-made instrumentation. Besides these there are about two dozen American computerized and analog polygraphs of Lafayette and Stoelting.

Computerized polygraphs are manufactured by six companies, and none of them makes analog polygraphs for lie detection. These companies manufacture more than ten models of computerized polygraphs. All Russian polygraphs (like Americans) have 7, 8 or 9 channels and software-based scoring algorithms. Since 2004 the best models of Russian computer polygraphs had extra-channels of video and audio recording. Russian computer polygraphs give wide opportunities for fulfillment of an examination and are comparatively inexpensive. This is why Russian polygraphs have been bought by the polygraphers of Armenia, Belarus, Kazakhstan, Kyrgyzstan and Ukraine.

IUP (polygraph examination) technology

The first generation of polygraphers of the Soviet Union accepted international (or American) polygraph examination technology as the only correct

technology, and diffused their polygraph knowledge in Russia. This is why most sophisticated Russian polygraphologists are now using the control question technique (CQT) and conceal information technique (CIT).

Besides accepting this technology, Russian polygraphers have critically assessed it and, as a result, have created some novelties. For example, several polygraph tests have been constructed on the basis of CQT and CIT. These tests are successfully applied both in screening and in criminal investigations.

In the middle of the 1980s the expert quantitative metrical estimation of reactions was created for Russian tests. When polygraphers estimate the IUP result, they often employed both the expert quantitative estimation and computer analysis of reactions. It should be emphasized that the last word in the decision-making process belongs to the specialist (polygrapher), and not to the computer program.

Fifteen years of domestic experience have demonstrated that if the polygraph examination is fulfilled with all methodological requirements, if the polygrapher is in no hurry and if he has enough time for examination, the tested person is unprotected before the polygraph and has no chance to conceal the information required.

The foundation of the successful polygraph application is a well-trained polygrapher who knows the polygraph examination technology that is correct and accepted by practitioners worldwide.

But in Russia there are "specialists" who have refused some fundamental requirements of polygraph examination technology. The main test and, as a rule, the only test which these "specialists" use during an examination is the searching guilty knowledge test. Such "specialists" employ this test both in screening and criminal investigations. Polygraphers, of course, strongly criticize their ugly technology, but without legal regulations can do nothing about it. Unfortunately, in the Russian polygraph community there are different points of view on polygraph examination technology.

Legal Issues

As stated above, the first step of legal regulation of polygraph application in Russia was made in 1993. Now the use of polygraphs in federal departments is regulated by some special rules and regulations.

Russian labor legislation and federal law "Concerning a commercial secret" allows an employer to oblige an employee in some cases to take an IUP, but with the voluntary consent of employee, when commencing a job. So the

Russian legal system does not prohibit polygraph application in commercial practice. But there are no rules and regulations for application of polygraph examinations in the private sector.

Besides that nowadays there are no common standards for commercial polygraph training courses. This is why a significant percentage of persons using polygraphs in the private sector has poor training, and these “specialists” cannot be called polygraphers (professional polygraph examiners). The absence or imperfection of legal regulations for polygraph use inevitably leads to the breach of people’s human rights.

In 2007 the bill “Concerning use of a polygraph” was drawn up by experts of the Russian State Duma, and now this draft is being prepared for discussion. The law must enter for an employer two types of IUP – obligatory and voluntary. This law must guarantee the observance of the rights and liberties of a person in accordance with the Constitution of the Russian Federation. The use of a polygraph should be based on the principles of legality, humanism and confidentiality.

Association

There is no national organization of polygraphers in Russia. Last year local associations were created in the Far East and in the Ural region of Russia.

Political and Social Issues

IUP are developing in Russia very intensively in the state and private sectors. At present there are no public or political organizations which oppose polygraph application. And, in general, the Russian public understands the necessity of using polygraph examinations. Some Russian commercial organizations which manufacture polygraphs or train polygraph examiners have websites and advertise extensively their production. The number of articles about polygraphs in newspapers and magazines is increasing from year to year. But polygraph testing results in specific cases are not practically reported in the media.

Scientific researches

When speaking about polygraph examination, many specialists see it as a method of diagnostic emotional or psychic stress. Theoretical and experimental research of domestic scientists, conducted in the 1970s and 1980s, defined the psychological and neurophysiologic mechanisms of the disclosure information hidden by a person. In 1988-1989 it was proved that IUP is a complex psychological-psychophysiological method of the research of traces of the events which are kept in a human memory (4). The traces of events, kept in the emotional memory, practically cannot be destroyed during the lifetime of a person. It is very important that a person can do nothing about these traces.

Real polygraph examinations confirmed that the traces of such an event could be found in the human memory decades after this event has happened. For example, in the real practice of the author of this article, a polygraph helped to discover the traces of events which had happened about 20 years previously.

This achievement had a great importance for understanding the place and role of IUP in the system of modern Russian criminalistic science and opened the way to using the polygraph as psychophysiological expertise.

In the middle of the 1990s scientific research was made to develop screening IUP, and this kind of IUP has become widespread in the country.

Now there is no academic or private research work. But at the beginning of the 21st century the economic situation has flattened out in Russia and it is expected that in the nearest future some universities, institutes and, maybe, private companies will begin scientific research in the field of polygraphy.

In conclusion it is necessary to say that this article gives only a short review of polygraph application in Russia, which is developing very intensively. Some aspects of this subject area – such as Russian polygraphs, IUP technology, fulfillment IUP as psychophysiological expertise and so on – may be the subject of separate articles.

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