

THE USE OF TRUTH BY POLYGRAPH

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Abstract:

Simulated behavior (dissimulated) stands for one's refuse to confess and admit a real attitude towards a certain person or the attempt to hide from himself a certain desire he feels.

Simulation is the action in which someone imitates or consciously provokes himself physical or psychic changes in order to obtain certain advantages. Simulation is the specific form of deviant behavior that stands between normal and pathological, with psychopathological substance or without it.

The intention of misleading is done, on anxious persons, usually by three ways:

*a) by **rationalization**, in which the person offers the most plausible reasons to justify certain acts that he himself blames.*

*b) others try projecting (**projection**) their personal attitudes in someone else's tab.*

*c) the opposite of this kind of misleading is **identification**, in which the person is willingly taking upon himself other people's behavior.*

*The main feature of simulated behavior is **intentionality**, where lie is an intentional mistake.*

Keywords: *attempt, identification, projection, the intention of misleading.*

The polygraph, usually known as „the lie detector” is a mechanic or electronic recorder, which pneumatically takes over the modifications of the blood pressure, pulse, respiration, powered with a system for recording the electromagnetic resistance and of muscle's micromovements.

The polygraph does not record the lie as it is, but the physiological modifications of the organism during the multiple emotional states that associate with the simulation. The polygraph is simultaneous recording on a diagram the changes of five psychophysiological parameters: the thorax respiration, the abdominal respiration, the electrodermal reaction, the blood pressure-pulse and the neuromuscular motion. Each graphic recorded psychophysiological parameter, on the polygraph's diagram, represents certain specific features which the examiner will put to analysis and will interpret, and so, the examiner will formulate conclusions regarding the authenticity, or the absence of honesty of the subject, conclusions which will be noted in the expert's psychological report of ascertained technical and scientific fact.

The examination will only take place in a phonic isolated room, especially made and furnished. The room must be as austere as possible, without any ornaments, paintings, or any other objects that may distract the attention of the subject, and so to deform the psychophysiological recordings. The room's temperature must be a normal one, and also a proper lighting. There must be a second room also, the so called „room of observation”, that must be proper equipped for this intent.

Before any examination with the polygraph technique, must take place a pre-test interview with the subject, and also the examination is finalized with a post-test interview. The examiner will have to obtain the exact data, regarding the facts and the circumstances that make the hard-core of the suspicion or the charge of the subject which is to be examined. In the case of the examination with the polygraph it is grave to round up the cause that is amplifying the emotional state of the subject (the instability of his psych behavior, his criminal past, his health state, the delicate problem of the cause for which the subject is suspected or accused, etc.).

The pre-test interview requires an emotion of mutual confidence and trust, and also an open and free dialogue. The absence of this ambiance can influence in a bad way the psychoemotional reactivity of the subject and implicit the result of the polygraph test.

During the test, the examiner's voice must be under absolute control.

The examiner's attitude must be objective and reserved, and to manifest impartial regarding the frankness or the absence of authenticity of the individual which is examined.

The examiner must make sure that is a convenient atmosphere, disposing of any causes which may affect the polygraph technique inquiry.

The questionnaire used in the polygraph examination, has on average 10 questions numbered by the examiner from 1 to 10, order which coincides with the polygraph diagram. The questions that are asked will refer only to one aspect, and will have a short enunciate, in order to get a spontaneous response. The questions regularly, contain the most colloquial terms for the questioning. The questions are answered only with „YES” or „NO”. The examiner notes down on the polygraph diagram, the number of the questions, adding, according to the affirmative or the negative answer, the mark „+” or „-”. In the questionnaire are included 3 sorts of questions: relevant questions (charging, accusing, critical ones), neutral questions and control questions (psychological discomfort etc.).

Ex. Test.

1.	Your name is A.G.?	YES
2.	Do you have a license to carry a gun?	NO
3.	Do you know how your wife caught fire?	NO
4.	Do you wear glasses when you read?	YES
5.	Did you torch your wife by throwing gas on her?	NO
6.	Have you ever thought of killing someone?	NO
7.	Were you born in Bucharest?	YES
8.	Did you set your wife on fire?	NO
9.	Did you throw on your wife gas from a can?	NO
10.	Have you answered with the truth to all the questions?	YES

There is in every man the normal drive to meet one's eye, in the best way that they can, in the best light, even more, if it is possible (more intelligent, more important etc.). This leads to some willed exacerbation of some features or to hiding some of them (even more to individuals who committed crimes). As a general rule, a reaction is far faster, more close to the edge of spontaneity, as it is true.

Some individuals manifest a delay, a bigger or smaller lack of superposition, between the real structure and the one presented through „the masker picture”, which triggers a hidden and forced behavior.

We can well observe the way the subject reacts in a given situation with a determinant character.

Next, the sources of important elements are analyzed in the labile symptomatic and some conclusions can be drawn:

The expressive conduct includes the dynamic manifestations of the human body: pantomime, the vegetative changes and the speech. The systematic observations, the accumulated experience, have led to mixtures between the features of expressive conduct and some outpourings of the mental life. In other words, the expressive conduct can be „critic” and it is worth to puzzle out because it gives us clues of the intern psychic life.

The pantomime represents the set of resections to which participates the whole human body: through walking, gestures, figure, pose, etc.

The Pose or Attitude – most often, the position of the body is illuminating for the psychic feeling of the individual at a certain moment. The attitude in which: the shoulders are „fallen”, the body is leaned towards the front, the head is leaned, the hand are stretched along the body, denotes either the fact that the individual is tired, either depressed. Similar body aspects may indicate: modesty, lack of opposition or resistance, defensive attitude, a low level of energetic vibe, sadness.

Firm shoulders, a head high, hands evolving along the body, and legs spread a little, denote self confidence, strong spirit, a „martial” and provocative attitude. For a right interpretation of the meaning of the several general attitudes you must correlate them with the objective situation and with some other conduct elements.

The walk – gives us some clues of the psychic features of individuals. The most important features are speed, flexibility, and backbone. Are to be signalized some of the walking types: slow and barmy, slow, shy, rapid, active, firm and graceful. The speedy walk denotes very big neuropsychic mobility. Good mood, optimism, self confidence are denoted by a firm, fast walk with long steps, and sadness, depressive moods determine a slow walk with small steps.

Gestures – represent along walking, one of the oldest ways to examine the reaction of the organism to changes occurred in the extern or intern environment.

Gestures can be classified in 3 classes:

a) Instrumental gestures, which are made when it is made a certain action. In this case, the most important role comes to the hand, which now has diversified anatomophysiological features (to take hold of, pulling, pushing, pulling up, punching, pulling down, etc.)

Therefore, fast gestures, but with little precision, denote, a mood of hyper-excitability (a characteristic to the choleric temper)

Prompt gestures, accurate precise denote a calm nature, self control, self confidence, sharpness (sanguineous temper)

Slow gestures, but accurate and precise, denote meticulousity, a special care for details (phlegmatic/irresponsive temper and melancholic/somber temper)

b) Rhetoric gestures, taking place for the speech – have the purpose to determine the companion to make him feel a certain feeling, emotion.

Rare gestures, of little amplitude (close to the body) can denote: defensive attitude, fear, a low level of energetic mobility, indifference, boredom, drive to isolation.

Very rich gestures denote a very good mood, happiness, a very high level of energetic mobility, openness towards an ideal or a cause.

Rapid and violent gestures, when they come along with a speech with a high tone, represent: irritability, a hot temper, nervousness, will for domination, a will to exercise authority.

c) Reactive gestures are those movements of the body and of the hands and legs, as a response to different unexpected situations, that the individual is confronted with, and most of the time it has a defensive role.

C. Nierenberg and H. Calero, in a consistent papper regarding the movement of the hands, underlined the fact that if the friction of the hands denotes a negative attitude, hands in a helmet shape suggest confidence

(if the helmet is directed towards up, it means that it is an individual self confidence, if the helmet is towards down characterizes good listeners).

Taking your hand to your face, to your mouth, eyes, ears, or even the collar, has negative connotations, characterizing lie, fear, etc. Using the whole hand to support your head, denotes boredom, lack of attention, and the position that expresses the most lack of attention is the one with the head put on the table.

The knitted hands or legs suggest the fact that the subject thinks that he is placed in a hostile environment. This is a gesture underlining frustration, disallowance, defensive position. Experts say that it is a highly negative gesture if the hands are knitted.

As much as the knitting of the hands, or arms, gesture is difficult for the eye to see, these gestures are very popular among individuals very „exposed”.

Knowing what the gestures of the arms mean, is extremely useful regarding human relationships.

Movement of the hands as well as the eyes, seem to be made consciously. Therefore the movement of hand is not a very sure source of information about telling the truth or not. It seems those individuals who lie, focus their attention to hide their palms, hands, and even face, because they know that their companion would give a special attention to these parts of the body. They don't control the legs as much as the hands because the legs are not as exposed as the hands are when they are interacting with a companion. One of the gestures that give away a lie is „the covering of the mouth”. Actions that are made to cover the mouth with the hand are also notable when the palm supports the chin, and a finger touches the mouth, lips. By putting his hand on his mouth or next to it, the liar, acts like a murderer who can not resist the temptation of revisiting the crime scene. Like the outlaw, the hand is offered for detection – at any point those around him can observe, that covering or touching the mouth, is an attempt to hide a lie.

Even said that, there is a substitute for the touching of the mouth, when the subject lies, and that is touching his nose. It is an indicator of hiding, even though he touches his nose he actually wants to touch his mouth, but not doing that he thinks that he will not draw so much attention on to him.

The voice and the speech may concur in some cases, to expose criminals. In the act of speech may occur ample voices, crystal voices, but because of some disturbances they can present some characteristics (tubby voices)

Speech has its features: sonority (vocality) – intensity, the sounds average, fluency, debit or speed, intonation and pronunciation (articulation).

The pantomime – represents the entirety of expressive changes to which take part the noble parts of the face: the eyes, the eye brows, the mouth, the forehead, the cheeks, the chops.

In the act of pantomime, an essential role comes to the sight, which represents the key to any expression of the face. Depending on the way the eyes close and open, the direction of sight, the successive positions of the eye brows, the movement of the lips, the expression of the face are extremely varied, expressing: astonishment, perplexity, acceptance, sadness, happiness, anger, severity, boredom, caution, suspicion, surprise, confusion, etc.

Since immemorial time, the eyes have represented authentic windows for „the great insides” of the being, as Novalis would say. As E. Hess shows in his paper „The Teii-Tle Eyes” (The eyes which betrayal), the eyes have a very important place in the translation of the non-verbal communication, not only because they are placed in a central side of the face, but also because by this way we can accumulate 87% of the information from the environment. In addition, the size of the pupils changes unconsciously, and it is dependent, not only by the oscillation of the light, but also by the psychological moment of that individual (sadness or anger can make the pupils contract, the „snake eyes”, and joy and erotic emotions make the pupils expand, even 4 times as they were in the beginning).

The individuals that are shy, nervous, or those who lie a lot, they do not look into their companion eyes.

The course of looking eye into eye between two individuals influence the beginning of a good relation, generally, but for this to be possible, this action must take place with a duration of at least 2/3 of the time spent together by the two individuals.

Also there are places where looking directly to one's eyes is a sign of disrespect. In order to approach a formal sight, our sight, must remain „hung up” to the companion's forehead. If the sight is focused between the eyes and the lips, the climate begins to be friendly, and if the sight is focused between the eyes and the chest, that is a more informal look, we can say that this look is even an erotic one.

Opening the eyes is in a big part illuminating for the situation in which that person is. The eyes wide opened may denote: lack of knowledge, absence of guilt, or fear, an attitude very receptive, interest, trying to understand the new information that is provided.

The eyes not so wide opened may represent : an attitude of fortitude, objection towards the new information, suspicion, the drive of understanding and unlocking the hypothetical hidden thoughts, of the companion of speech, the drive to hide, his own thoughts, or intentions, fatigue, tiredness, boredom.

The direction of sight is very important in understanding the features of the face.

Sight represents the most dynamic element, the most expressive, and the most important, for the non-verbal communication. The degree eye opening represents a relevant indicator of the subject's attitude regarding the situation he is facing.

Between how much we open our eyes, and the mass of information receipted, there is a proportionally reverse rapport. Certain is the fact that sight incorporated with the other elements such as pantomime, features of the face, can suggest an extremely large variety of emotions, feelings, behaviors.

Another so called sign of recognize a lie, is the quickly blinking of the eyes. Even though a lie is often associated with quick blinking, some people blink very facts from their eyes because there are under a lot of tension, or stress.

Also, there are moments when liars have normal blinking.

An indicator of evaluating the sight is the direction of it. The sight towards nowhere suggests perplexity, the effort of remembering; sight toward down or aside, suggests humility, feeling of guilt, shame, sight towards up, above the companion's head represents lack of respect for him, and the firm sight directly towards the companion, represents honesty, an opened attitude, critic attitude, and also sometimes instigant attitude.

The sight's mobility can also give us a lot of clues about the subject. Excessive mobility of sight, , seems to be a sign of lack of determination, the drive of hiding his thoughts, his intentions or even his feelings of guilt, on the other hand the immobile sight denotes a lack of contact with reality, a lack o facing the companion.

Usually when two individuals are looking each other eye to eye, and one of them changes his sight that represents the fact that he is backing down, he is taking a defensive position.

Dissimulation, masking effect – when somebody tells a lie on purpose, he must hide two things: first the true, and second any track of emotions that could give him away, in his action to dissimulate the true. Emotions lived by persons who lie, are usually negative ones – guilt feelings, fear feelings, fear of being caught – but liars can get their rush from thinking that they succeed fooling someone, this phenomenon was named by Paul Ekman” the satisfaction of fooling”.

When a person tells harmless little lies, usually they don't feel any negative feelings.

Still, when he s telling a big important lie, the individual, lives strong, deep negative feelings, which must remain hidden in order to succeed his plan. A negative emotion, can be hidden by turning his head around or by covering his face with his palms, or even by masking the lie with some neutral or positive emotion.

People utilize a big number of non-verbal signs to underling their rank, their position in society.

A manager, for example, manifests his power through gestures, position of hands, chest etc. On the other hand, his inferiors lean their head.

In the judicial proceedings area, the utility of knowing extra verbal communication consists in the fact that through this channel is sent an over plus of information, and under pressured conditions, under which the hearing is taking place, these kind of reactions are not any more censored by the subject, he looses control consciously. The polygraph diagram or map, represents graphic expression of the physiologic parameters (the thorax respiration, the abdominal respiration, the electro dermal reaction, the blood pressure-pulse and the neuromuscular motion), at the same time as the subject is being questioned.

At the end of the examination, begin the analysis and interpreting the polygraph diagrams. After having interpreted both the polygraph diagram and the subject's behavior during the examination with the polygraph technique, the examiner can draw a conclusion, positive, negative or doubtful.

Any examination with the polygraph technique ends with a post-test interview.

Some say that using the polygraph is equal to derogation to the dignity of the person, they also say that the polygraph might be a way of intimidation that can trigger the person to confess facts that he would not have acknowledged.

All these charges against the polygraph are without a strong scientific fundament, they come into place only in those environments which know very little or even nothing about the polygraph technique.

In Romania the polygraph technique gives us data on which we can find out clues, allowing to:

- eliminate the suspects who prove out to be not implicated in the case, and so a lot of time and is spared;
- identify criminals, whatever their crime;
- determine the honesty of the persons using the polygraph and of their confessions;
- determine the circumstances that point to criminal facts;
- eliminate the contradictions between parties involved in a criminal law trial (suite)
- Detecting false charges etc.

The qualification of the examiner, and his personal attributes, are very important in the utility and in the accuracy of the results of using polygraph technique. It is a must for the examiner to be a highly intelligent person with a superior educational background, also to manifest interest in job. He also has to master the fundamentals of psychophysiology, behavior both in general, and particular.

Some of the qualities of the examiner are: empathy, brightness, sharpness, equilibrium both moral and affective etc.

The exceptional results obtained in the investigations, using the polygraph technique, brought them in the attention of jury courts and of judges from Romania.

The psychological report on the simulated behavior is subjected to free appreciation of those who work in the legal system.