The Role of Memory in Penal Sciences

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The ancient Greeks believed that memory was a gift from the beautiful goddess Mnemosine, daughter of Uranus and Gaia, belonging to the first generation of titans and a titanide. Nowadays, memory is understood and defined in many different ways. Memory is a multi-stage process consisting of the ability to register and recall data information. Memory processes are undoubtedly very closely related to emotions. They differ depending on the duration of the memory trace, as well as the type of information and the degree to which we are consciously involved in the process of remembering and recreating information. Due to the durability of the memory trace, ultra-short-term, sensory, short-term, and long-term memory are distinguished.[1] The type of remembered information tells us whether we are dealing with event memory, procedural memory, skills, or norms. The temporal properties, on the other hand, divide memory processes into the memory of current or past events and memory related to our intentions and the date of their execution. Among the processes of memory, conscious and unconscious memory is also distinguished. In my work, I would like to present a correlation between memory and penal science, focusing on interrogation techniques, the problem of child testimony and memory disorders.

According to social psychology, an interview is a process of interpersonal communication in which we deal with a two-way transfer of information and mutual interaction between people participating in it. The hearing is an activity carried out by a procedural authority, which is of an evidence nature. The main goal is to obtain information from the witness about the event, people, objects, and other phenomena that may help the judiciary find the way to the truth. The procedural authority conducting the hearing may not apply any pressure to the witness, nor may it influence the content of his/her statement. During the interview, it is also forbidden to use measures aimed at controlling the unconscious reactions of

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[1] B. Bielski, „Gdy Sąd słyszy «nie pamiętam»", *Prawo i Prokuratura*, 2 (2005), p. 130.

the body without the consent of the interviewee or asking questions in a manner suggesting a specific answer.[2] The organization of the examination of a witness is included in the Code of Criminal Procedure. One of the newest techniques used in questioning a witness is so-called Cognitive Interview (CI).[3] Mnemonic techniques are techniques by which more information can be extracted from a witness' memory without increasing the number of errors. The basic principle of CI is to reverse the roles of the interviewees. In such a structured conversation, the interrogated person should not perceive the interrogator as the only one controlling the interrogation. The purpose of the cognitive interview is to improve the recall process and to improve the quality and quantity of information obtained from the witness. Currently, the cognitive interview uses four mnemonic techniques:

1. Recreating the context of the incident. This technique is intended to motivate the witness to recall all the circumstances of the incident and is directly related to the specific coding hypothesis. This point includes what concerns the witness's activity on the day of the event, his/her mood, thoughts, and emotions. The interviewed person is asked to remember not only the appearance of the place of the event, but also the sounds or smells associated with the situation, which leads to a significant improvement in the recall process.[4]

2. Full coverage. This technique allows the interviewee to recall as many details as possible. The aim is for the witness to play the role of the narrator in the story of the incident, encouraging him/her to continue his/her story from start to finish.[5]

3. Change of perspective. In this technique, the interviewee is also asked to describe what he/she thinks other witnesses of the incident or even the perpetrator himself/herself may have seen. This technique, however, is somewhat controversial and raises procedural doubts, because the witness ceases to report his/her own experiences and instead of his/her own observations, he/she cites likely descriptions of other people.[6]

4. Change of chronology. This is a way for a witness to respond too superficially. The use of chronology change causes the witness to look at each stage of the event as a separate part. This causes the recall of certain elements and circumstances that were not recalled in the original reconstruction of the context. This technique also verifies the truthfulness of the witness. Changing the chronology of events requires greater effort, which also causes greater difficulty in lying convincingly.[7]

During the cognitive interview, a witness is encouraged to report every detail, even if it does not seem relevant to him/her in any way. This detail can be a key information about the event that has occurred. It should be remembered that the effectiveness of the method applies to witnesses who are sincerely focused on cooperation and a witness present at the crime scene. Otherwise, the use of this method appears to be very limited. Research has shown

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[2] D. Wilk, *Kryminalistyka – Przewodnik* (Toruń: TNOiK, 2013), p. 138.

[3] R.E. Geiselman et al., "Eyewitness Memory Enhancement in the Police Interview: Cognitive Retrieval Mnemonics versus Hypnosis," *Journal of Applied Psychology*, 70 (2) (1985), p. 401.

[4] M. Jagodzińska, *Psychologia pamięci. Badania, teorie, zastosowania* (Gliwice: Sensus, 2008), p. 454.

[5] V. Grudzień, W. Jasińska, *Przesłuchanie poznawcze* (Katowice: Wydawnictwo Szkoły Policji w Katowicach, 2010), p. 8.

[6] A. Biederman- Zaręba „Wywiad poznawczy a przesłuchanie świadka w podeszłym wieku", *Prokuratura i Prawo*, 7–8 (2011), p. 36.

[7] M. Ciosek, *Psychologia sądowa i penitencjarna* (Warszawa: LexisNexis, 2001), p. 99.

that CI is generally not effective in improving memory in terms of identifying suspects in photos. Each person is unique, which is caused not only by an individual personality, but most of all by individual features of the body – especially the face.[8] Research shows that it is impossible to find fourteen people in the population, each of whom would be similar to each other. A human being is individualized by both inborn features and signs acquired during life – tattoos, scars, and sometimes even some pathological changes such as deformities, missing limbs, or humps.[9] Memorial portraits are widely used in the activities of law enforcement agencies – to identify and detain persons suspected of criminal activity. The police use memory portraits to select perpetrators of crimes, in cases, suspects' observations, excluding people from the circle of suspects, as well as for arrest warrants and registration in files.[10] These portraits are often posted in public places and in the media in the hope that someone will identify the perpetrators. Unfortunately, this is an extremely laborious process and does not always lead to the capture of suspects. Identifying people based on their faces is – apart from identification based on the characteristic features of the voice and the way they walk – one of the oldest and most basic methods. Nowadays, the memory portrait takes two forms – descriptive (drawing) and pictorial. The first one is a description of a person's appearance which includes a description of the features and proportions of the anatomical structure of the body – the type of figure, the shape of the head, face, and its individual elements, way of moving, etc. The description should therefore contain static features (e.g., age, sex, height, and silhouette), as well as dynamics (gait, facial expressions) and specifity (birthmarks, tattoos, or scars). A pictorial portrait is the most effective and the most refined form of a memory portrait. It is the transformation of a description (descriptive form) into a visual form.[11] Preparing a portrait based on a description given by a witness is an activity for detective purposes (sometimes also as evidence), but it is only possible if the witness remembers many details related to the appearance of the person. Compared to the expertise in other fields of forensics, a memory portrait is performed a few hours after the event due to the passage of time, which has a significant impact on memory traces. "Memorandum on the description of a person's appearance" includes two categories of information:

1. Concerning the conditions of observation: distance from the object, time of observation of the face and the time elapsed since then, place, and circumstances of the event (weather conditions).

2. Concerning the descriptive features: sex, age, height, body type, face shape, hair, eyes, eyebrows, nose, mouth, facial hair, and characteristic features.[12] At the end of the form, there is a witness statement that he/she is able to identify the person sought. However, experts point out that sometimes even listing all the required features is not a guarantee for the creation of a portrait, because there are people who, at the time of direct contact with the described perpetrators, were not able to recognize them. In practice, there are also many errors – the most serious one is showing the witnesses the photos just before taking the portrait, which makes

[8] K. Finger, K. Pezdek, "The Effect of the Cognitive Interview on Face Identification Accuracy: Release from Verbal Overshadowing," *Journal of Applied Psychology*, 84 (3) (1999), p. 340.

[9] E. Lewandowska, R. Wiśniewski, „Metodyka realizacji zleceń w Pracowni Odtwarzania Wyglądu Osób i Przedmiotów LK KSP", *Problemy Kryminalistyki*, 257 (2007), p. 39.

[10] S. Zubański, „Odtwarzanie wyglądu osób", w: *Kryminalistyka. Wybrane zagadnienia techniki*, red. G. Kędzierska, W. Kędzierski (Szczytno: Wyższa Szkoła Policji w Szczytnie, 2011), p. 164.

[11] Ibidem, p. 161.

[12] E. Lewandowska, R. Wiśniewski, op. cit., p. 44.

it much more difficult, and sometimes impossible (the witness is thus able to unconsciously describe one of the people he/she saw in the photos). Another mistake is to brainstorm a portrait in which all witnesses are involved simultaneously. In cases where there are several witnesses to the event, the image of the wanted person should be analyzed separately in order to eliminate suggestions of the others. In order to obtain as much useful information as possible, it is important to create appropriate conditions for witnesses – peace and a sense of security, sometimes ensuring the presence of a psychologist. However, you should not allow the presence of bystanders. In forensics, there are three methods of visualizing a descriptive portrait – drawing, editing, and computer. The drawing method is the oldest among them but still significant despite the huge technological progress.[13] It is based on the drawing by a cartoonist (the skill of a portraitist is required) of a face sketch on the basis of information provided by the witness during the creation of the portrait. This method does not require complicated technical measures – sketches are made with a pencil, crayon, or charcoal. A variation of the drawing method is the form of a shortened portrait, which does not focus on the details of the face, but only outlines its similarity. It is very often compared to caricatures (it consists of several lines). However, the negative side related to this method of visualization should be noted – it concerns the subjectivism of the cartoonist, who sometimes unconsciously imposes his/her own vision of the person at a time when the witness has doubts as to the details.[14] In Poland, this method is used quite rarely – it usually applies to cases where technical devices do not give the right results.

It is important to remember that there are several factors that can limit memory capacity. Physical and mental impairments increase with age. When memory problems occur in older adults, short-term memory is affected first, while long-term memory areas may remain intact. Memory deterioration is a natural consequence of the physiological aging of the nervous system. The brain, like the rest of the body, is also subject to change. An older person may have difficulty understanding oral or written statements, may have difficulty finding words, keeping the thread of speech, and may have a decreased vocabulary. There are problems with spatial orientation, even in familiar places or when returning home, difficulty recognizing objects, solving problems, exercising judgment, making decisions, managing money, shopping, or assessing situations. This can make it difficult to interview an elderly person as a witness or victim. Research shows that factors that protect against neurodegenerative diseases, including Alzheimer's disease, include keeping the intellectual activity as high as possible. This can be done by performing specific exercises that increase cognitive function.[15] Questioning an elderly person as a witness, suspect, or victim of a crime involves the need for comfort. The interrogation should take place in early morning hours and as close to the time of the incident as possible. Adaptation to the individual characteristics of the person being interrogated is a very important element of conducting the interrogation, because it is the

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[13] J. Kabzińska, „Reprodukcja twarzy sprawców przestępstw na podstawie zeznań świadków – rysopis obrazowy i portret pamięciowy", *Palestra Świętokrzyska*, 5–6 (2008), p. 52.

[14] T. Kozieł, Z. Dębliński, „Portret obrazowy w identyfikacji i poszukiwaniu osób (stan i perspektywy)", *Problemy Kryminalistyki*, 197–198 (1992), p. 197.

[15] A. Bednorz, „Zaburzenia pamięci i funkcji poznawczych u osób starszych", http://www.zrozumiecstarosc.pl/artykul/zaburzenia-pamieci-i-funkcji-poznawczych-u-osob-starszych/ [access: 15.03. 2021].

way of directing the conversation and the ability to ask the right questions that determines the quality of the information obtained.[16]

On the other hand, interviewing a child can be a challenge. It is important to personalize the interview and establish a good rapport with the child, starting the interview with greeting the child by using his/her name, have an initial conversation about a topic that is not related to the possible conflict experienced by the child, e.g., questions about the child's interests or favourite leisure activities. Next step is explaining the purpose of the interview and also encouraging the child to describe anything that comes to mind when he/she thinks of it. This includes details that may seem trivial or repetitive. It is also helpful to remind your child not to guess or make up things that he/she does not remember. The context of the event can be reconstructed by directly asking the child to think about all the environmental and personal circumstances of the event or by asking specific questions that will make the child think about it. It is helpful to take brief notes and record topics that can be returned to when questions are asked. For a free-form narrative, ask the child to recount, in narrative fashion, his/her memories of the event. It is important not to interrupt the child during his/her free narrative, nor ask detailed questions at that time.[17] It is also a misconception that children do not have the same level of developed memory skills as adults. It is currently indicated that even a three-year-old can provide meaningful and complete information about past events. After a year, young children's memories are still accurate and, when asked in an appropriate way, can give a reasonably accurate description of events. It is also a proven fact that children, compared to adults, are more precise in remembering not only key facts but also details.[18] It cannot be assumed that a child is a less reliable witness than an adult. However, it is important to ensure that he/she is comfortable speaking up. If the child is a victim, he/she must feel safe, not afraid of the abuser, and importantly, not be interviewed in the presence of an offending parent.

Memory is inevitably accompanied by the process of forgetting. We all know that we sometimes forget facts, dates, or circumstances that are important to us. If we were not able to forget, our mind in a very short time would be cluttered with often useless information. Forgetting is a process as common as it is indispensable. Several theories of forgetting are mentioned in psychology. The oldest is the theory of trace fading, according to which each learned material leaves a trace in long-term memory, so-called engram. If we do not use such a trace, over time it will disappear, and the acquired information will 'escape' in the process of gradual decay of the engram. As a result, it is impossible to use such information because it is no longer in the memory resources. Undoubtedly, memory plays an important, if not the most important, role in the process of questioning a witness. It influences the perception of all correlative penal teachings.

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[16] J. Konopko, „Metodyka przesłuchania osób starszych i wykluczonych społecznie – wybrane zagadnienia", *Gerontologia Polska*, 24 (2016), p. 301.

[17] T. Jaśkiewicz-Obydzińska, E. Wach, „Przesłuchanie poznawcze dzieci", *Dziecko Krzywdzone*. Teoria, Badania, Praktyka, 4 (1) (2005), p. 3.

[18] K. MacFarlane et al., *Przesłuchanie i diagnoza małego dziecka* (Warszawa: Fundacja Dzieci Niczyje, 2002), p. 22.

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SUMMARY

The ancient Greeks believed that memory was a gift from the beautiful goddess Mnemosine, daughter of Uranus and Gaia, belonging to the first generation of titans and a titanide. Nowadays memory is understood and defined in many different ways, sucha as multi-stage process consisting of the ability to register and recall data information. Memory processes are undoubtedly very closely related to emotions. They differ depending on the duration of the memory trace, as well as the type of information and the degree to which we are consciously involved in the process of remembering and recreating information. The aim of this paper is to show the importance of human's memory in penal science. Memory allows to recreate a so-called memory portrait with the help of a qualified police cartoonist or a computer program, the perpetrator of which the witness or the aggrieved person saw only for seconds. Such portraits are published through various means of communication, such as the press, the Internet, and television. They often cause the quick identification and apprehension of the perpetrator.

KEYWORDS

memory, mind, penal science