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ENVIRONMENT OF NON-VERBAL COMMUNICATION – SECURITY AND THREATS

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ABSTRACT

The subject of the work is the issue of analysis and interpretation of non-verbal behavior referenced to the security context and its threats. The fundamental thesis of the work is to prove the crucial role of knowledge and practical skills in the recognition and presentation of nonverbal behavior in crisis situations and emergencies. The author also points out the possibility of preparing and carrying out training in dealing with non-verbal messages for members of dispositional groups. In the analysis, the issue of the difference between the non-verbal and verbal behavior is discussed. Then the environmental issues of communication are analyzed in the form of importance of factors such as perception of situation, perception of time, presence of other people and architectural elements. In the same area dimensions of relations, knowledge on environment and people are located. The scope of non-verbal communication also includes close surroundings of a person and things possessed by him/her. Other important elements of the communication environment analysis are territory and personal space. Distinction is made between types of territory. In connection with the issue of space the author also introduced categorization of distance to the partner. In conclusion the need and usefulness of communication behavior model constructing, and conducting empirical research in this area are pointed out.

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The issues of a key role for a human in the 21st century undoubtedly concerns security and threats that undermine the ability of maintaining it. Risks associated with daily living conditions affect each person, the same is true with the threats that are related to modern civilization and the controversy in interpersonal relationships and in particular in intercultural relations. These issues inevitably lead to the issues of terrorist threats and crime, where clearly appear the problems concerning a moral dimension of human activities involved in the context of lies, crime, ethical standards and honesty. In the interpretation it raises a number of challenges, opportunities, risks and controversy associated with the security context¹.

In this context the key question turns out to be efficient functioning of a subject both at the level of intrapersonal as well as interpersonal relationships. It is well conveyed by thought of Frederick Perls, the founder of the school of Gestalt therapy, who stated that both suffering because of someone's death and being born again is not easy².

A problem of the same importance concerns the arrangement of constructive relations between these two planes of functioning of a person. The efficiency of the insight into one's functioning usually leads to more efficient functioning of a subject in social relations³.

Therefore, a real issue having significant implications for an average person is a conversation, a dialogue between people, participation in which is for a person a source of most of the experiences gained in the course of their life. So, the issue of psychological mechanisms regulating behaviour of an individual in interaction with other people where security and threat to it is one of essential conditions for its functioning. Thus, it is worth raising the problem of the impact of factors causing coordinated and sequenced process of interaction with other people. Direct analysis and interpretation of the interaction is involved in security issues and threats to it. Daily functioning of a person in social relations may lead to a situation of threat to individual and personal security. It can result from the activities undertaken by others aiming at benefiting at the expense of a partner in interpersonal relation. Such context

¹ Compare J. Piwowarski, *Fenomen bezpieczeństwa*, Wyższa Szkoła Bezpieczeństwa Publicznego i Indywidualnego APEIRON, Kraków 2014.

² F. Perls, *Gestalt therapy verbatim*, Lafayette, Real People Press, 1969, p. V.

³ Compare W. Czajkowski, *Psychologiczne mechanizmy działania w warunkach zagrożenia bezpieczeństwa*, Cracow Research Institute for Security and Defence APEIRON, Katowice 2014.

is usually described using the concept of manipulating⁴. In addition to daily situations you can expect arising of emergencies and critical situations in which security threats are associated with criminal activities and terrorism in which psychological issues of communication mechanisms is essential to the ability to avoid or combat these threats. An excellent example of this interpretation is the work of John Horgan looking into the issues of psychology of terrorism in which questions of personal and social context of terrorism are concerned. It is also remembered that the issues involve individual, social and cultural factors that require a high level of competence of people taking up efforts aimed at prevention of and fighting terrorist threats⁵.

Analysing the structure of the communication process we should indicate basic ways of information transfer. The meanings contained in communication are available for a person through knowledge of the rules of interpretation and rules of language usage. A study of the relationship between verbal and non-verbal behaviour in the context of their relevance to the regulatory meaning for the course of a conversation is significant for a full interpretation of the communication process. At this point I would like to further address the non-verbal behaviour by describing their types and functions performed by them. Clarification of the issues of non-verbal behaviour is an essential block of information of theoretical and practical importance for making decisions on relevant issues concerning safety and threats. The main issue that deserves our attention concerns automation of a large part of non-verbal behaviours that are expressed unwittingly. Having knowledge in this field as well as practical competences resulting from the experience in interactions involved with context of a threat allows for much more efficient and effective to elimination of the negative consequences that usually arise in situations of emergency.

1. VERBAL COMMUNICATION AND NON-VERBAL COMMUNICATION

In studies of many authors we can notice reluctance to separate these two categories of behaviour, separating words from gestures and therefore

⁴ W. Czajkowski, *Bezpieczeństwo a relacje społeczne i manipulacja*, [in:] *Bezpečne Slovensko a Európska Unia. Zborník príspevkov 5. Medzinárodnej vedeckej konferencie, 10-11 November 2011*, Košice, Košice: Vysoká škola bezpečnostného manažerstva.

⁵ J. Horgan, *Psychologia terroryzmu*, PWN, Warszawa 2008.

studies conducted by them concern communication in a broad sense or “face to face” interactions⁶. In this context noteworthy is the interpretation of M. L. Knapp who in his opinions goes further than most authors. He quotes F. E. Dance’s beliefs who claims that there is no such phenomenon as human non-verbal communication. According to Dance the basic function of communication is not regulation of communication between people but use of language and communication to create higher forms of knowledge as a result of taking action on symbolic material varying from simple perceptual material⁷. The author assumes that all the symbols are verbal in their nature and therefore communication is defined as answering through verbal symbols. It can not be denied that we are able to express non-verbal behaviour but that behaviour is interpreted by others by means of words attaining verbal character. Such interpretation inclines to particular attention when distinguishing a non-verbal signal shown by its sender and a code that interprets the signal. It is also worth mentioning that a code is often verbal in its nature. Specifying characteristics of a verbal sign Dance states that its essence is presenting many specific cases abstractly by means of one sign⁸. Such interpretation is debatable, however, in the analysis of verbal behaviour issues performed in a broad context of communication related to relations between participants of an interaction deserves attention. It also appears that M. L. Knapp in his contemporary published works more definitely presents a certain separation of the two forms of communication still taking into consideration relevant relationships between them⁹. It is also worth citing the definition of non-verbal communication by J. Burgoon which well orders the issue of the essence of this form of human activities. So according to her:

Any human behaviour or an object used by people becomes a non-verbal signal and communicates a non-verbal message when a sender, recipient or social group intentionally attributes a meaning to it¹⁰.

⁶ Compare M. L. Knapp, *Nonverbal...*; J. Ruesch, *Principles of human communication*, [in:] *Semiotic approaches to human relations*, Mouton, The Hague, Paris 1972c; A. Kendon, *Organization...*; A. Sheflen, *Models...*; Kando, *Social...*

⁷ F. E. Dance, *The functions...*, p. 68.

⁸ Compare F. E. Dance, *The functions of human communication*, [in:] *Human communication theory*, F. E. Dance (ed.), Holt, Rinehart, Winston, New York 1967.

⁹ Compare M. L. Knapp, J. A. Hall, *Komunikacja...*

¹⁰ S. P. Morreale, B. H. Spitzberg, J. K. Barge, *Komunikacja między ludźmi. Motywacja, wiedza i umiejętności*, PWN, Warszawa 2012, p. 175.

Some authors pay attention to some key differences between verbal and non-verbal communication. The first of these differences is continuity of non-verbal communication. Non-verbal messages are sent in a permanent way, regardless of whether someone says something or not. Entering a room, where already are other people, we intentionally and unintentionally send non-verbal messages. Continuity of verbal communication allows a person to send many non-verbal messages from multiple channels at the same time. These messages will be related to clothing, facial expression, a way and direction of looking, body movement, distance to others and gestures. In case of language messages they are not continuous, they are usually much more explicit than non-verbal messages which are characterised by ambiguity connected with multiple communication channels. The ambiguity partly results from cultural determinants of meaning of non-verbal signals. Non-verbal messages are usually realised automatically, unconsciously. Conscious, controlled realisation of behaviour is typical for verbal messages. Frequent use of non-verbal behaviour for expressing emotions and messages that are essential for building and development of interpersonal relations is also an important feature of it. In turn, verbal communication is commonly used for conveying thoughts, opinions and facts¹¹.

The indicated difficulties of interpretation related to the dichotomy of verbal - non-verbal prompts to accept the assumptions about overlapping of ranges of these concepts recognizing their essential distinctness. For example, works of A. Mehrabian show that information about emotional relation or partner's attitudes to the subject come from at least three sources in which the information is not distributed evenly. In studies of his team Mehrabian came out of analysis of relationship between words previously assessed as positive, negative or neutral and vocal behaviours (by tone of voice) of positive or negative colouring. He was particularly interested in cases of discrepancies between verbal and non-verbal channels. Therefore in experimental procedures the focus was on creating of such a discrepancy. A recipient of information conveyed in a verbal channel (words) and non-verbal channel (tone of voice) evaluated attitude of a sender mainly on the basis of non-verbal variables in the form of non-verbal tone of voice¹². In further experiments a variable of facial expression was included

¹¹ Compare *ibidem*, p. 175–176. 1.

¹² A. Mehrabian, M. Wiener, *Decoding of inconsistent communication*, "Journal of Personality and Social Psychology", 1967, No. 6, p. 109–114.

contrasting it with vocal and verbal data¹³. Based on carried out experimental research Mehrabian formulated the following equation illustrating the degree of impact of individual signals on perception of attitudes:

$$\text{PERCEPTION} = \text{VERBAL} (0,07) + \text{VOCAL} (0,38) + \text{VISUAL} (0,55)^{14}$$

On this occasion it's worth to draw attention to the issue of time limits. So, in his equation Mehrabian shows crucial importance of facial expression for settlement of differences in communication. It seems that it is appropriate to use in this case a wider category regarding mimic defined as facial expression. Perceiving a partner's face in a situation of assessment of his attitudes to a subject in a typical situation of perceiving differences between verbal and non-verbal signals cannot concern only facial expression. A face is usually perceived as some kind of a whole comprising a game of mimic muscles. An equally important element which is hard to isolate from a face is the area of eyes and what is going on with them, how someone is looking at us and whether a person establishes an eye contact and how he/she regulates its duration. It is also important to draw attention to the quite common, imprecise comments on to the Mehrabian's equation. So in those comments the results of his research are cited incorrectly substituting the category of mimic with the category of so called body language. In the semantic area of this category apart of mimic we can locate a wide range of signals, such as gestures, posture, haptic behaviours, visual behaviours, vocal behaviours. In addition, it is often forgotten that the research conducted by Mehrabian concerned the meaning of indicated non-verbal behaviours in a situation of discrepancy of verbal and non-verbal signals of a sender of a message.

A similar issue was brought up by M. Argyle in his studies describing non-verbal factors responsible for maintenance of an appropriate level of intimacy in a relationship. In literature we can find an entry Argyle's equation of intimacy, which concerns this problem. Argyle stated that controlling and modifying a level of intimacy depend on four behaviours: number of smiles, duration of mutual looks, physical distance and intimacy of a subject. Partners wishing to modify the degree of intimacy of a relationship will unconsciously manipulate particular variables obtaining appropriate at a time level of intimacy. In the comments on interpretation of the usefulness of

¹³ A. Mehrabian, S. R. Ferris, *Wnioskowanie postaw z komunikacji niewerbalnej w dwa kanały*, „Poradnictwo psychologii”, 1967, No. 31, p. 248–252.

¹⁴ A. Mehrabian, *Communication without words*, [in:] *Messages: a reader in human communication*, J. M. Civikly (ed.), Random House, New York 1974, p. 87.

this model conceptualisation of a relationship attention is drawn to lack of consideration of the touch and distinction between different types of looks in an interaction. M. L. Patterson tried to develop Argyle's interpretations wanting to deepen the question of the relation between the level of intimacy and non-verbal behaviours¹⁵. Argyle also interprets in an interesting way the main objectives and the role performed by non-verbal behaviours in interpersonal communication by highlighting in them:

- Expressing emotions (this can involve interpersonal attitudes and emotions),
- Providing information about the type of interpersonal relationships (sympathy/antipathy, domination/submission),
- Presenting one's own personality traits,
- Subsidiary functions in the course of a conversation (giving the floor to a partner, reinforcing speech, getting attention of a listener),
- Performing rituals (e.g. greetings and goodbyes in non-verbal form, gestures; mimic expression, touch)¹⁶.

The context of non-compliance of signals has a specific meaning related to a situation of security threats. Lack of coherence between verbal and non-verbal behaviours of a sender attracts attention of a receiver and disposes him/her to mindfulness. This usually results from receiver's experience who may know that this state suggests likelihood of a lie of a sender¹⁷ or an attempt of manipulative activities aimed against a recipient of a message. Taking actions serving to capture possible discrepancies between verbal and non-verbal messages can work as a useful strategy in training people operating professionally in emergencies and in situations of increased probability of being subject to manipulations. Facial Action Coding System allowing to measure facial mimic expressions and thus detect a lie turns out to be useful as well. Studies carried out in this field allowed to identify accurately 78% of people telling the truth and those lying¹⁸.

¹⁵ Z. Nęcki, *Komunikowanie interpersonalne*, Zakład Narodowy im. Ossolińskich, Wrocław 1992, p. 195–196; compare M. L. Patterson, *Nonverbal exchange: Past, present and future*, "Journal of Nonverbal Behavior", 1984, No. 8, p. 350–359.

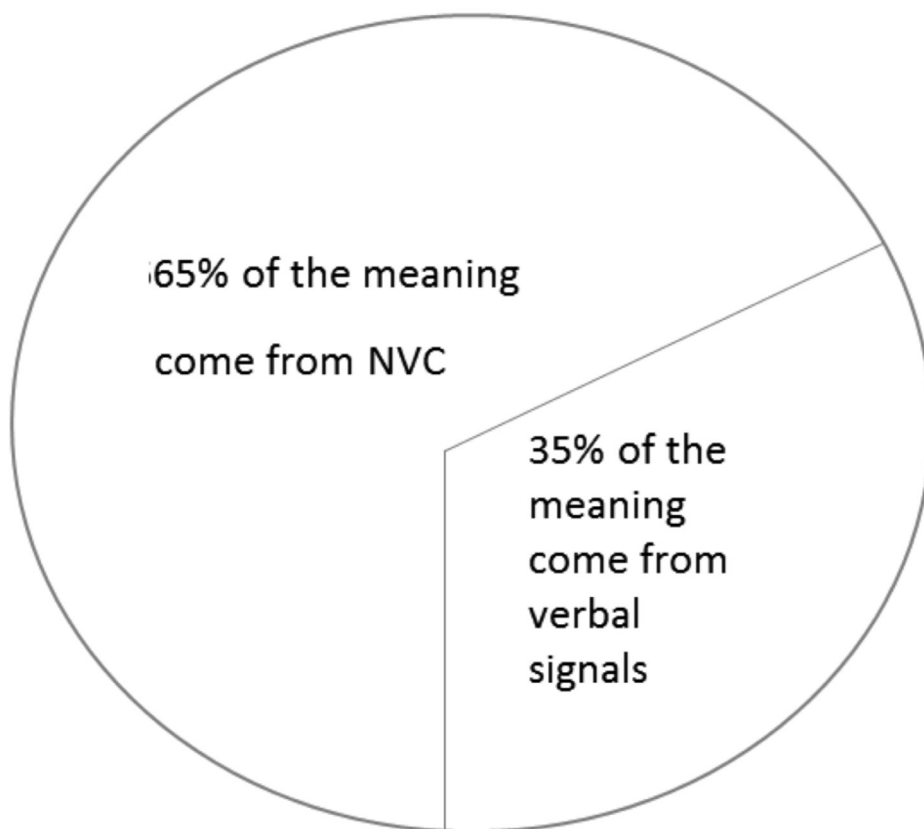
¹⁶ M. Argyle, *Psychologia stosunków międzyludzkich*, PWN, Warszawa 1991, p. 53–60; M. L. Knapp, J. A. Hall, *Komunikacja...*, p. 33.

¹⁷ P. Ekman, *Kłamstwo i jego wykrywanie w biznesie, polityce i małżeństwie*, PWN, Warszawa 2003, p. 261.

¹⁸ S. E. Draheim, *System Kodowania Ruchów Twarzy (FACS) jako metoda mierzenia zachowań mimicznych: procedura-rzetelność-zastosowania*, „Psychologia-Etologia-Genetyka”, 2001, 3–4, p. 91–113.

The equity defines how emotional attitude of a partner to a subject is estimated. It turns out that expressing emotional attitude in the dimension of acceptance-non-acceptance and dominance-submission is realised in more than half by facial expressions. Using this medium you can send basic emotions such as joy, sadness, anger, fear, disgust and surprise. P. Ekman's and W. Anthoni's studies prove that the ability to recognize these six emotions is an intercultural ability but not a product of cultural experience¹⁹.

PICTURE 1. DOMINATION OF NON-VERBAL COMMUNICATION²⁰



NVC– nonverbal communication

¹⁹ P. Ekman, W. Friesen, *The repertoire of nonverbal behaviour: categories, origins, usage, and coding*, „Semiotica”, 1978, 1, p. 49–98; P. Trower, B. Bryant, M. Argyle, *Social skills and mental health*, Methuen & Co. Ltd. London 1978, p. 18.

²⁰ J. S. Philpot, *The relative contribution to meaning of verbal and nonverbal channels of communication: A meta-analysis*. Unpublished master's thesis. University of Nebraska 1983, quote after S.P. Morreale et al., *Komunikacija...*, p. 177.

In summaries of many studies on the comparison of the meaning of non-verbal behaviours and verbal behaviours it was ascertained that we can recognise that approximately 65% of the meaning of a message in the course of conversation comes from non-verbal signals and verbal signals convey the remaining 35%.

The presented in the picture data correspond quite well with the above-mentioned Mehrabian's equation indicating a basic source of an emotional attitude to a sender of messages which comes from non-verbal signals.

In communication by means of language and communication by non-verbal signals however some difference occurs. Language can be used to communicate almost everything. While non-verbal behaviours have a limited scope of application. According to Mehrabian these behaviours are used mainly to communicate feelings, preferences as well as to enhance or deny feelings communicated verbally. The number of quantity indicators of emotions coming from non-verbal behaviours is quite large. These can be: a touch, facial expression, tone of voice, posture, spatial distance, pace of speech, the number of mistakes in statements²¹, which can be particularly important in interpretation of non-compliance of a verbal message with a verbal one. If, for example, someone says "I hate you" laughing at the same time, we can presume that either a verbal content is inconsistent with the truth and results from interpersonal context or the role of the laughter is to make information less painful. Accurate assessment of the actual state will be determined by to the tone of voice and facial expression of a person speaking and his/her experience level in the interpretation of emotions in interpersonal relationships.

In communication process verbal communication and non-verbal communication seem to be equally important means of transmission of information. Verbal transmission can significantly change its meaning influenced by non-verbal signals. Similarly, non-verbal signals are more accurately interpreted when participants of the interaction make interpretation in the context of prior statements and current conditions of the exchange.

1.2 CLASSIFICATION OF NON-VERBAL BEHAVIOURS

A growing number of theoretical studies and empirical research concerning verbal communication makes it necessary to systemize this broad

²¹ A. Mehrabian, *Communication...*, p. 88.

class of behaviours serving multiple functions in communication of people. I am going to start presentation of this issue from pointing out after M. L. Knapp a general taxonomy of elements which make up non-verbal communication proposed by J. Ruesch and W. Kees²². This classification comprises the following categories of behaviours:

- Language of signs – consists of gestures replacing words (for example, the gesture of a hitchhiker or the whole system of sign language of the deaf.
- Language of actions - comprising movements which are not only used as signals, for example, drinking can serve to slake our thirst, but also serve as some information for an observer.
- Language of objects – comprising intentional and unintentional use of objects such as tools, machines, pieces of art, a human body and things covering it²³.

Basing on the used elsewhere²⁴ definition of communication we can perceive non-verbal communication as a process of summoning meanings by non-verbal symbols. Non-verbal symbols, i.e. the ones that are not words can be used either separately from verbal symbols or interact with them in some way. In the latter case the term “non-verbal” context is used. Within that context the interpretation of non-verbal messages is made²⁵. Non-verbal messages can serve a variety of functions toward verbal communication. So non-verbal communication can serve towards verbal communication functions of repetition, replacing, amending, accentuation/mitigation, regulation, expansion and denial to what is contained in the text of a message.

Apart from that functional classification engaging the relation between non-verbal signals toward verbal communication an interesting proposal is classification of non-verbal behaviours developed by P. Ekman and W. Friesen²⁶. The authors point out five categories of behaviours:

²² J. Ruesch, W. Kees, *Nonverbal Communication: Notes on the Visual Perception of Human Relations*, University of California Press, Berkeley 1956.

²³ M. L. Knapp, *Nonverbal...*, p. 12.

²⁴ W. Czajkowski, *Analiza warunków wstępnych nawiązania kontaktu*, „Rocznik Naukowo-Dydaktyczny WSP w Krakowie”, No. 141, p. 25–42.

²⁵ Compare W. Domachowaki, *Psychologia społeczna komunikacji niewerbalnej*, Wydawnictwo „Edytor”, Toruń 1993.

²⁶ P. Ekman, W. Friesen, *The repertoire of nonverbal behaviour: categories, origins, usage, and coding*, „Semiotica”, 1978, 1, p. 49–98.

- Emblems – these are non-verbal activities having precise language definition or a reference usually consisting of one or two words or one phrase. Such definition is commonly accepted in a particular group or culture. However, we can find significant cultural differences in sign presentation of the same content (e.g. the sign of suicide in the USA is formed by touching a head with an index finger pointed at a temple, thus in Japan the sign is formed by touching a stomach with a clenched fist). These signs are usually used in situations when verbal channel is blocked out, the use is intentional.
- Illustrative behaviours – these are non-verbal activities related to or accompanying language and serving to illustrate what has been said. They are usually expressed unintentionally with great emotional engagement, in “face-to-face” context.
- Showing emotions – most commonly related to facial expression, expressing basic emotions, although the information about someone’s emotions are also in an observable body posture²⁷. Expressions of emotions can be either intentional or unintentional.
- Regulative behaviours – they allow to establish and maintain contact between participants of a conversation by an organised exchange of conversational activities (ending, perpetuation and willingness to start conversation).
- Adaptive behaviours - they are called “adaptive” as it is believed that they are acquired in the childhood as a result of adaptive activities aimed at serving the need, taking up activities, dealing with emotions, developing social contacts. Three categories of these behaviours have been distinguished: adaptive behaviours toward oneself, toward objects, toward others. Examples of such behaviours can be accordingly: rubbing the corner of an eye when you are sad; manipulating the cigarette which expresses tension; leg movements as a manifestation of aggression to a partner²⁸.

Another functional classification of non-verbal behaviours is presented by J. Burgoon. The author defines the following function of these behaviours:

- Signals of affiliation – e.g. a touch and smile, gestures of openness and friendship.
- Signals of trust – open posture, broad gestures.

²⁷ Compare Trower et al., *Social skills...*, p. 18

²⁸ L. M. Knapp, *Nonverbal communication...*, p. 13–18.

- Signals of dominance and supremacy – invasion of intimate space of a partner, determined, imperative tone of voice, nasty facial expression.
- Signals of threat and readiness to fight – ready-to-fight posture, menacing facial expression, aggressive shouts.
- Sexual arousal signals – flirty looks, presentation of charm, erotic looks, sighs, shaking voice.
- Signals of excessive emotional arousal or shock – positive elation, ecstasy and negative stimulation, horror, terror have many common non-verbal signals.
- Signals of willingness to deepen or lighten an interpersonal contact – using non-verbal activities at the beginning of a contact (looking for the partner's sight, physical contact) or at the ending of a contact avoiding an eye contact with a partner, keeping silent, rejecting a physical contact.
- Non-verbal behaviours of direct positive or negative reinforcement nature – e.g. it may be a corporal punishment of a child or a hugging²⁹.

The presented functional classification of non-verbal behaviours concerns the behaviours which are often defined by the term “body language”³⁰. Concerning this term the following behaviours as: gestures, body posture, movements of the head, raising arms, movements and position of legs. Apart from these behaviours we can point out as well other behaviours differentiated by many authors. For example, M. L. Knapp³¹ also points out tactile behaviour, voice quality, vocalization, use of personal and social space and physical features of a person. P. Trower distinguishes physical distance, location regarding a partner, appearance, facial expressions, eye contact, posture, gestures and autistic gestures³².

Taking into consideration the above-mentioned proposals and others presented in works of A. Kendon, A Mehrabian, D. Efron and R. Bird-whistell³³ we can presume that classification of non-verbal behaviours should take into account the influence of the following factors on communication:

- Surroundings/environment
- Personal space, territoriality and distance

²⁹ Compare J. Burgoon, *Nonverbal signals*, [in:] *Handbook of interpersonal communication*, M. L. Knapp, G.R. Miller (ed.), Sage, Beverly Hills 1994.

³⁰ L. Heun, R. Heun, *Developing skills...*, p. 47.

³¹ M. L. Knapp, *Nonverbal communication...*, p. 380–387.

³² P. Trower, B. Bryant, M. Argyle, *Social skills and mental health*, Methuen & Co. Ltd. London, p. 148–150.

³³ M. L. Knapp, *Nonverbal...*, p. 380–387.

- Appearance
- Gestures and body movements
- Tactile behaviours and touching oneself
- Facial expression
- Eye contact
- Vocalization³⁴.

The issue of classification of non-verbal behaviours determines, depending on the accepted solutions, a specific ways of coding expressions of particular categories. For example, D. Efron by making analysis and categorisation of gestures distinguished three main basic dimensions of these behaviours can be transcribed in detailed characteristics:

- Spatial and temporal measures – a gesture regarded as a movement, regardless of its interactional or referential aspect
- Interpersonal aspects – a gesture comprises communicative or interactional sense beyond referential sense
- Language aspects – a gesture as a medium of referential sense. In this case two groups of gestures are taken into account: the ones which have independent meaning and the ones which meaning combines with speech³⁵.

The system proposed by R. Birdwhistell consists of eight broad categories transcribed in a very broad and complete way, which resulted from the effort of the author to denote every movement or position of a body, which are likely to evoke meaning in an interaction. The system is not used very often due to its complexity but provides a lot of useful information describing the relationship between spoken words and motor behaviour. Let us confine to distinguishing eight areas in which movements are performed. These are the following areas: the whole head and face; a torso and shoulders; an arm, forearm and wrist; activity of a hand and fingers; a hip and thigh; a lower leg and ankle; a foot; a neck³⁶.

M. L. Knapp suggests to divide the process of analysing of non-verbal behaviour into two stages. At the first initial stage the diagnosis of the environment which makes up a situational context of communication is made and analysis of the first impression made by participants of an interaction is performed. At the second interactional stage tactile behaviours,

³⁴ Ibidem.

³⁵ Compare Knapp, J. A. Hall, *Komunikacja niewerbalna...*, p. 337.

³⁶ Compare M. L. Knapp, *Nonverbal Communication in Human Interaction*, Holt, Rinehart and Winston, New York 1978, p. 199–200.

facial expression, eye contact, posture, vocal behaviours, body movements and verbal behaviours are examined³⁷.

The Knapp's interpretation was extended by pointing out three major groups of questions on which theoretical and research activities are focused in the area of non-verbal communication issues. These are the following issues:

1. Environmental conditions of communication
 - a) Physical environment
 - b) Spatial environment
2. Physical characteristic of participants of communication
3. Body movements and gestures
 - a) Gestures
 - Gestures independent of speech
 - Gestures dependent on speech
 - b) Posture
 - c) Tactile behaviours
 - d) Mimics
 - e) Visual behaviours
 - f) Vocal behaviours
 - g) Physiological indicators of emotions³⁸.

The last element added to presented classification of non-verbal behaviours seems to be an important complement regardless of the fact that in the above-mentioned classification of non-verbal behaviours by Ekman and Friesen there is a category of "expressing emotions". This category is usually interpreted according to the authors' intention as the one concerning facial expression and posture. However apart from those two body areas expressing emotions we can suggest a few interesting elements playing a key role in interpretation of emotions of a participant of an interaction.

Performance of the mentioned classification of non-verbal behaviour issues by M. L. Knapp and J. A. Hall also allows to order behaviours and contexts concerning non-verbal communication systematically.

1.3 COMMUNICATION ENVIRONMENT

When analysing the issues of non-verbal communication, communication environment is pointed out searching for the factors contained in the en-

³⁷ Ibidem, p. 27–30.

³⁸ M. L. Knapp, J. A. Hall, *Komunikacija...*, p. 27–32.

vironment that affect non-verbal communication. A person perceives the environment by identifying the level of formality of relationship, warmth, privacy, knowledge of the environment and people. Likewise he/she also perceives time, natural environment, presence of other people in the environment and elements of architecture. In this broad categorization of factors related to the communication environment, consideration should be given to the perception of time. In the research on communication intentional and unintentional use of time in interaction is called *chronemics*. *In culturally different societies the way of understanding time may be represented differently*³⁹. In Western civilization the attention is devoted to taking into account the time of a partner in the interaction, which implies punctuality. The way of understanding and using time of one's own others also largely depends on the status and the power someone holds.

The issues of communication environment also refers to the method of *arranging the closest surrounding of a subject. The way of organization of filling the space we function in makes a non-verbal communication referring to the identity of a person who made the arrangement. It makes a peculiar message signaling preferences, values, attitudes and the way of understanding oneself and your own relation with other people. It can be also applied to the so-called accessories or objects placed in a specific space. Those can be pictures on the walls, a library with its resources, electronic equipment and other objects playing utilitarian or decorative roles. Of course, accessories apart from the above mentioned roles can indicate the material status of a person possessing them*⁴⁰.

1.4 PERSONAL SPACE AND TERRITORY

In further analysis of communication environment the significance of territory and space is interpreted. In the matter of interpersonal communication the term *proxemics* is used in reference to the research, in which the subject of measurement is how people use space in communication. It is worth introducing the term of *territoriality* in respect of how people demarcate their own borders and what territory is treated by them as their own. The concept of territory refers to the fixed space, it can applied to one's own desk, room, house, city and country. Three categories of the concept of territory are usually used

³⁹ Compare R. Levine, *A geography of time*, Basic Books, New York 1997.

⁴⁰ Compare S. P. Morreale, B. H. Spitzberg, J. K. Barge, *Komunikacja między ludźmi. Motywacja, wiedza i umiejętności*, PWN, Warszawa 2012, p. 190.

*when talking about private, indirect and public territory*⁴¹. Private territory is the exclusive domain of its owner. Therefore, it is usually heavily protected against interference from outside. Examples of private territory may be homes or bedrooms.

It is worth at this point, after M. L. Knapp and J. A. Hall⁴², provide the category of territory of possession highlighted by E. Goffman, who treated personal items (clothing, a bag) and dependent children as part of this territory⁴³. Another form of the territory is indirect territory, which is not the central function in the life of a person and is not perceived in terms of exclusivity. The items which are in possession of a person for a short period of time may belong to this group, for example, a book, newspaper, radio, crockery, and a restaurant where somebody likes to go to. Within that territory disputes and conflicts can arise due to the difficulty of determining the acute border between private, personal and public property. In addition to the three above mentioned, public territory is highlighted as an area that everyone can temporarily possess. It can pertain to, for example, a park, cinema, place in the reading room. In case of this category of territory the most important is the figure referring transience. The territory becomes “ours” for a definite period of time and in this period may appear reactions of the owner to possible interference in the area of their possession. Defence of the territory depending on its type can take various forms. They usually come down to a form of prevention and action. These actions will be tailored to the nature of the trespassing on one’s territory. It may be a *violation of someone’s territory, which is usually not a very intense form of interference. Taking two places on the tram can serve as an example. More intensive form of invasion is, for example, when a wife places her things in the private office of her husband. The third form is contamination which means defilement of someone’s territory with traces of your existence*⁴⁴. Personal space normally travels along with a person when he/she changes his/her place of residence. The territory does not change its position⁴⁵.

⁴¹ I. Altman, *The environment and social behavior*, Brooks/Cole, Monterey CA 1975, quoted after M. L. Knapp, J. A., Hall, *Komunikacja...*, p. 202.

⁴² M. L. Knapp, J. A. Hall, *Komunikacja niewerbalna...*, p. 202.

⁴³ E. Goffman, *Relation in public*, Basic Books, New York 1971.

⁴⁴ M. L. Knapp, J. A. Hall, *Komunikacja...*, p. 204.

⁴⁵ Compare R. B. Adler, L. B. Rosenfeld, R. F. Proctor II, *Relacje interpersonalne. Proces porozumiewania się*, REBIS, Poznań 2006, p. 164.

Personal space refers to special distance which are held by people toward others in certain interpersonal situations. It is usually regulated by feeling of comfort in the interaction and depends on the mood, situation and purpose of activities. E. T. Hall ordered the issue of spatial distance maintained by people by highlighting several categories including:

- Intimate space – it starts at the skin and stretches for 45 cm.
- Personal space – is usually intended for people whom we know well and lies within the territory between 45 cm to 1,2 m.
- Social space – extends to the area of 1,2 m to 3,5–4 m, in this area more formal conversations take place than in the area of personal space.
- Public space – starts from 3,5–4 m and reaches the limit of visibility or hearing regarding, for example, lecturers or those making public speeches⁴⁶.

The categorization of types of distance accepted in the interaction regulative importance is attached to individual preferences and cultural determinants leading to a specific form of interaction and communication. In the interpretation it should also be noted that E. T. Hall suggested being cautious when using this classification. This is due to the fact that his studies were conducted on a particular sample of adult population. They were usually white, employed men, belonging to the middle class and coming from the north-eastern regions of the USA. Therefore, there are generalizations in the case of other ethnic and racial groups require caution.

In the interpretation of the group of non-verbal behaviours there is the issue of the importance of the way of arranging one's own environment as a kind of non-verbal communication concerning the space, defined in terms of private territory and the territory of ownership, occupied by a person. The importance of the issue of concentration and its implications for communication and mental health is raised. These issues are also analysed in terms of conversational distance, which is regulated by accumulation of individual experiences being gained in social interactions and corrected by cultural and group standards.

The debated issue of importance of non-verbal communication in the context of sense and threat to safety has its practical and theoretical utility. In theoretical interpretations it is worth constructing models

⁴⁶ M. L. Knapp, J. A. Hall, *Komunikacja...*, p. 216; R. B. Adler, L. B. Rosenfeld, R. F. Proctor II, *Relacje interpersonalne...*, p. 164; E. T. Hall, *Ukryty wymiar*, Muza, Warszawa 2001.

covering by its scope the issues of ability to deal with challenges appearing in situations of emergency. For example, the question arises to what extent the efficiency of communication are useful for effective operation of dispositional group members. It seems that people who are well prepared in terms of communication training concerning knowledge and trained abilities to recognize and interpret non-verbal behaviours of the aggressor will significantly better and will more effectively prevent various adverse events significantly.

It is also worth pointing out the need and usefulness of raising such issues in the course of planning and implementation of research projects, in which communication instruments of social impact in the context of operation conditions of professionals operating in crisis situations and emergencies will be taken into account. Raising such issues is can also be applied in the process of selecting and training members of dispositional groups covering by its scope the mental pillar of a security culture⁴⁷.

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