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Linguistic Bases for the Logopaedic Therapy of People Who Lack Speech and People Who Do Not Speak

ABSTRACT

The article outlines the linguistic and logopaedic bases for the therapy of people who lack speech and people who do not speak, with the use of augmentative and alternative communication (AAC). From the methodological perspective, the author refers to the theory of linguistic competence (language, communicative, and cognitive) and tries to adapt it to the needs of the developing linguistics of AAC. The following general parameters have been distinguished for the creation of the theory of AAC linguistics: syntactic competence as the main element of language competence, flexional competence as a prerequisite for proper grammar and sentence structure, lexical competence as a link between language, communicative, and cultural competences, the aims and intentions of the sender, the process of understanding and receiving information by the participants of the communicative act, the effects of the message on the receiver, the influence of the cultural and external conditions on the understanding of message, general knowledge, context, exploring and interpreting the world, conveying the interpretation to others, cultural rules and values. *Non-speaking* and *speechlessness* have been chosen as supportive parameters.

Key words: linguistic competence, *speechlessness*, *non-speaking*, logopaedic therapy

INTRODUCTION

There are two elements which can be distinguished within the framework of the presented study: the reflection on the notions of *speechlessness* and *non-speaking*, and the usage of applied linguistics methodology (mainly of speech therapy). With such framework in mind, it becomes necessary to mention the methodology of augmentative and alternative communication (AAC), even though it does not

constitute the main subject of the study (see also: Michalik, Przebinda, 2017). In other words, the article can be regarded as a study of methodological character which aims at devising new methods and solutions (see: Puzio, Ziółkowska, 1998: 14). Its purpose is also to enhance the scientific and theoretical perspective on AAC and on lack of speech, as opposed to the purely practical approach which has dominated the Polish field of speech therapy for patients who have lost their ability to speak or who have not acquired it yet.¹

The line of reasoning which is present within the article begins with the linguistic-logopaedic perspective of the methodological reflection as a starting point and consequently advocates the general direction of “linguistics – logopaedic linguistics – AAC” as a possible route to the creation of a new sub-discipline of applied linguistics with the working name of “the linguistics of augmentative and alternative communication”. Such a type of linguistics, with a strong methodological base, would employ and develop a strong set of theoretically ordered notions (parameters) which could be used in the description of the linguistic competence acquisition by the people who are mute. It is the linguistic competence which constitutes the focal parameter of AAC, with *speechlessness* and *non-speaking* being the supportive parameters which are deeply engrained within the theory of logopaedics as a science of biological foundations of speech (see: Michalik, 2018).

SPEECHLESSNESS AND NON-SPEAKING – DEFINITION

From the point of view of speech therapy, *non-speaking* is an ambiguous and therefore controversial term. The most predominant Polish school of logopaedics – influenced by Kaczmarkowska and Grabiasowa – associates *non-speaking* with selective mutism or anarthria. With the former considered to be a psychological or psychiatric problem (see: Skoczek, 2015) and the latter seen as a terminologically vague notion (see: Michalik 2012).

From the point of view of linguistics, *non-speaking* is most often associated with silence, remaining silent, and pause (Śniatkowski, 2002). The second term – *speechlessness* – is non-existent in linguistics and in logopaedic discourse, and has been coined from the descriptive phrase “of speech (verbose)”.²

The phrase “of speech” is directly connected to the notion of speech, which is defined by logopaedics as “a set of actions performed by humans with the use of language in the act of perceiving the reality and transmitting its interpreta-

¹ There are several methodologically advanced works in the English language devoted to AAC (Beukelman, Mirenda, 2016; Light, McNaughton, 2014; Soto, Zangari, 2009). However, contrary to the article which makes use of the theory of *integrated* linguistic competence, they employ the theory of communicative competence.

² *verbose* – “containing more words than necessary; wordy” (Surowaniec, 2012: 333).

tion to other participants of the social life” (Grabias, 2001: 11; see also: Grabias, 2015: 19). With such a definition in mind, the author of the article created the term *speechlessness* as a noun to denote the lack of speech in person which prevents him/her from using speech as a means of perceiving the reality and transmitting its interpretation to other participants of the social life.

The phrase “transmitting its interpretation to other(s)” involves the process of speaking, which, according to R. Grzegorzczkova, should be understood as the individual’s act of sending and receiving the information by means of a) vocabulary and structures selected from the particular code, b) speech organs which realise linguistic units and produce acoustic sounds, c) receptive organs which receive the sound and mentally interpret it (Grzegorzczkova, 2007: 14). With such a linguistic concept of speaking, the author suggest the following definition of non-speaking: the sender, (not)³ intending to transmit certain information, does not select any vocabulary and structures from the particular code and, consequently, does not produce any acoustic sounds which could be received and mentally interpreted (see: Grzegorzczkova, 2007; Michalik, 2017).

Speaking has a narrower meaning range than speech. Consequently, *speechlessness* is the term which is superior to *non-speaking* – it has a broader meaning. Generally speaking, a person with speechlessness does not perform the usual set of actions which are performed by a speaking person with the use of language (speaking). Consequently, he/she does not perceive reality on the level of people with speech and does not transmit its interpretation (as a result of non-speaking) to other participants of social life (see: Grabias 2001: 11).

Using the terminology of *langage*, *langue*, and *parole* (de Saussure, 2007, see also: Heinz, 1978: 240), it is possible to compare *speechlessness* to the phenomenon of *langage*, which denotes the global group of linguistic actions as performed on the level of society, while *non-speaking* – due to its being individual, specific, idiolectic, actual, and physical – can be attributed to the sphere of *parole* (Grzegorzczkova, 2007: 55; Heinz, 1978: 240).⁴

Summing up, there are two types of people which can be distinguished within the group of those who do not communicate verbally: 1) persons with *speechlessness*, who lack speech (*langage* sphere) and who do not perform the usual set of actions which are performed by a speaking person with the use of language, who

³ It is often impossible to tell if the non-speaking person wants or does not want to send the message to the receiver.

⁴ With the present level of methodological reflection, it is difficult to suggest a term that would include all attributes of *langue* – abstract, potential, physical, and social. When we consider the fact that there is no language (as a system of signs) of *non-speaking* people that would have all the essential attributes (conventional, phonic, abstract, polisemic, universal, featuring grammar and lexicon, featuring signs and diacritics) (Grzegorzczkova, 2007: 22–33) and functions (generative, cognitive, socialising, culture-creating) (Łuczyński, 2011: 17; 2015: 21) of natural languages, such task seems to be impossible (see: Michalik, 2017).

do not perceive reality on the level of people with speech and who do not transmit its interpretation to other participants of social life; 2) *non-speaking* persons, who possess the linguistic system (*langue*) but do not transmit any meaning, select any vocabulary or structures from the linguistic system (*langue*), use any speech organs, or emit any acoustic signals to the ears of the receiver.

LINGUISTIC COMPETENCE AS A METHODOLOGICAL FRAME FOR AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

Augmentative and alternative communication, being a set of methods itself and awaiting the development of its own methodology,⁵ is defined as

(...) a cluster of various methods which enable people with complex communicative needs to send and receive messages. [It] includes the processes which complement and/or substitute natural speech and/or writing in order to maximize communicative skills that are necessary to communicate effectively and to function socially in everyday life (Grycman, Kaczmarek, 2014: 347–348).

Similar approach has been suggested by S. von Tetzchner and H. Martinsen:

(...) augmentative and alternative communication constitutes an addition or a substitute of speech through the use of non-verbal methods of communication; *alternative* communication is used when a person participates in face-to-face communication but not by means of speech (...), *augmentative* communication denotes complementary or substitutional communication. The word “augmentative” emphasizes the fact that the implementation of alternative means of communication has two purposes: to augment and complement speech and to guarantee substitutional means of communication if the person does not start speaking (Tetzchner, Martinsen, 2002: 7).

The deduction, as a scientific method, has been chosen as a linguistic base for the augmentative and alternative communication, with the notion of linguis-

⁵ When looking at methodology from the perspective of linguistics, one can quote the words of I. Bobrowski, who claims that “Linguistic theory constitutes a cluster of notions which consists of two sub-clusters: a sub-cluster of mutually connected notions about language, and the cluster of mutually connected notions about the previous cluster. The latter is based around »the theory of theory« and is grounded in the *meta-theory*, or more broadly speaking, in the *meta-science*. The former is built around the rational notions of reality – briefly speaking, on science” (Bobrowski, 1993: 16). In our case, the communication of people with *speechlessness* and *non-speaking* people constitutes the “reality”, the attempt to adapt the theory of linguistic competence to such people constitutes the “science”, and the evaluation of the effectiveness of such adaptation constitutes the “meta-science”. In other words, the theory of linguistic competence applied to the phenomena of *speechlessness* and *non-speaking* is considered to be a *scientific method* which allows the selection, the study, and the description of the AAC linguistics, while hypothesis making, the analysis, and the deduction are close to what we describe as the *methods of scientific research*.

tic competence being the main parameter and the phenomena of *non-speaking* and *speechlessness* being the supportive parameters. According to T. Rittel, the main elements of linguistic competence include: grammatical knowledge, functional ability, and cultural knowledge considered as an ability to partake in culture (Rittel, 1994: 27). Consequently, we can distinguish the basic components of linguistic competence: language competence (grammatical and lexical), communicative competence (sociolinguistic, communicative, pragmatic), and cultural competence, known as “cognitive” (Rittel, 1994: 27–28). The above-mentioned components are in accordance with the contemporary logopaedic theoretical stance which claims that:

1. Language is the component of human mind which is conditioned by the same biological processes within the brain that underline any other mental activities;
2. Language is simultaneously the component and the creator of mind and shapes the cognitive processes through the structure of notions which it forces upon them (Grabias, 2015: 17).

In an attempt to create the theory and methodology of AAC, the linguistic and logopaedic approach to the phenomenon of linguistic competence ascribes to AAC the anthropological and biological function as the primary ones (Prechtl, 2007: 9).⁶ These functions are the result of the fact that language, in case of *non-speaking* (*speechlessness*), has a typically human dimension (anthropologic) and is the result of biological process (determinism) (see: Merleau-Ponty, 1976).

LANGUAGE COMPETENCE AND THE THEORY OF AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

According to its creator, N. Chomsky, linguistic competence denotes the biological knowledge of the ideal speaker-listener which enables him to understand and create grammatical sentences in his language. This knowledge is intuitive, implicit, and connected to the linguistic system which underlines the linguistic functioning (Chomsky, 1965: 63).⁷ While the author will not go into the details of the definition (see: Michalik, 2018), he points out several of its components which are crucial for the linguistics of AAC: syntactic competence as the main element of language competence, flexional competence as a prerequisite for proper grammar and sentence structure, and lexical competence as a link between linguistic,

⁶ Such an approach, originating from the philosophical interest in humans as creatures who possess language and mind, is tied to the view of language as the medium for: expression of soul, the ability of auto-reflection and creating opinions, the ability to create symbols which ease the burden of overabundance of stimuli (in: Prechtl, 2007: 9).

⁷ Polish publication appeared in 1982 under the title *Zagadnienia teorii składni*.

communicative, and cultural competences. The main parameters for the creation of the linguistic theory of AAC are: grammatical competence of the first degree, the power of subcompetence and temporary competence, the power of the grammatical, semantic, and pragmatic spheres, language system as a means of realisation of AAC code, incorporation, neutral situation, creativity, internal *I-language*, internal *I-grammar*, syntactisation, syntactic structure, connotation, accommodation, concrete and abstract vocabulary, mental lexicon, the anchoring of verbs in the mental lexicon, the minimal lexical range of language, the basic range of necessary vocabulary, extended basic range, intercode translation, subordination of communicativeness (see: Michalik, 2018).

COMMUNICATIVE COMPETENCE AS THE MOST IMPORTANT COMPONENT OF THE THEORY OF AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

The theory of communicative competence, as the most important from the point of view of communicative processes of people who lack speech or who do not speak, was originated by the opposition of J.L. Austin to the theory of linguistic competence created by Chomsky. According to Austin, language is a part of social functioning which consists of the aims and intentions of the sender, the process of understanding and interpretation of the information by the participants of the communicative act, the influence of the utterance of the receiver, the influence of the external and cultural factors on the understanding of the utterance – the communicative and psychological aspects of speaking (in: Grzegorzczkova, 2007: 63; Paveau, Sarfati, 2009: 245–246). However, the earliest research into the competence which goes beyond the level of grammar is associated with D. Hymes – an American sociolinguist, who advocated abandoning what is possible for the human nature and grammar, and moving on to what is actually doable and done (Hymes, 1980: 47).

According to S. Grabias, logopaedics considers communicative competence to be “the knowledge about the patterns of interactional behaviour, obtained in the process of socialisation” (Grabias, 2012a: 29). Furthermore, it can be said that communicative competence is a part of linguistic knowledge and constitutes a coordinative control process for the linguistic behaviour of an individual, i.e. production and understanding of speech which can function on many levels – from speech acts, through language variants, discourse, personal styles of speaking (see: Kurcz, 1995: 245–260). It can also be added that from the perspective of mental linguistics “communicative competence does not only allow for the proper use of language from the point of view of social situation but also for the proper interpretation of the utterance” (Mazurkiewicz-Sokołowska, 2010: 180).

There are several parameters which should be mentioned to properly outline the complexity and the main topics connected with the notion of communicative competence that are necessary for the creation of the linguistic theory of AAC. These include: the universal rules of communicative interaction (here: situation, participants, topics and aims of conversation); four components of competence; utterance as a communicative unit, communicative act; the ability to use various semiotic systems; the ability to properly interpret the utterance; social communicative networks; linguistic situation; domains (situational classes); communicativeness/uncommunicativeness (here: contact which has its beginning and end), forced contact, contact in imagined reality, re-started contact, occasional contact, supposed contact, contextual contact; conglomerate of codes (specialized AAC code to the code of general language); illocution, perlocution; assertive, directive, expressive; direct speech acts; three types of presupposition: contextual, conventional, cultural, the rule and maxims of conversation; limited code; extra-linguistic communicative behaviours; pre-intentional/intentional communication; communicative skills: social, situational, pragmatic; intra-code paraphrasing, common attention (see: Michalik, 2018).

CULTURAL (COGNITIVE) COMPETENCE AND THE DESCRIPTION OF THE COMMUNICATIVE PROCESS OF PEOPLE WHO LACK SPEECH OR DO NOT SPEAK

The precursory logopaedic research described cultural competence as the knowledge about the phenomena of reality created by language. At the same time, it was emphasised that without cultural competence communication is impossible and that linguistic competence is primary to cultural competence (see: Grabias, 2001: 37). It was also pointed out that certain physical features are obligatory to acquire cultural competence from the social group. These biological abilities are: physical hearing, phonemic hearing, musical hearing, responsive brain, properly functioning memory, properly functioning peripheral nervous system, properly functioning skeletal and muscular systems (Grabias, 2001: 38).

The development of the theory of logopaedics has brought together the meanings of *cultural competence* and *cognitive competence*. They have been synonymous since 2012 (see: Grabias, 2012b: 52). The latest studies have linked cognitive competence to the process of logopaedic diagnosis, while the *cultural competence* have been used in the context of prognostic and therapeutic procedures (see e.g.: Grabias, 2012a: 58, 60).⁸ It must be noted that the evaluation of cognitive

⁸ For example, according to Grabias, “the researcher, while keeping the perspective determined by the relation of speaker’s utterance to his biological potential, can: evaluate the cognitive competence of the speaker (knowledge of the world and about himself – its range, structure and the

competence functioning should always be done in relation to normative standards of people within biological and mental norms who have acquired linguistic competence on a proper level (see: Rittel, 1994: 33–34; Śniatkowski, 2014: 35–36).

The most important notions/parameters emerging from the theory of cultural (cognitive) competence and vital for its description in people who do not speak and for the theory of AAC include: general knowledge, knowledge about the phenomena of reality, responsive brain, habits, world exploration, world interpretation, sharing the interpretation, cultural rules and values (see: Michalik, 2018).

If we are to assume that the “real sign of acquiring linguistic and communicative competence is the cultural competence” (Rittel, Rittel, 2015: 80), it can be said that the latter will influence the degree and the usage of the former (Rittel, 2017: 21). There is no reason to claim otherwise also in the case of people who lack speech or do not talk.

CONCLUSIONS

From the point of view of this article, communicative competence is the most important component of linguistic competence. It embraces the majority of notions which appear in the context of the theory and methodology of augmentative and alternative communication. Furthermore, already in its name, AAC emphasizes *communication* as its keyword. Logopaedics and educational linguistics consider linguistic competence (lexical and syntactic) as the primary one. The attempts to create the theory of AAC linguistics have been inspired by the claim of Rittel which states that

(...) even though there is a possibility of the non-verbal communicative competence occurring before the acquisition of verbal communicative competence, it is natural for the communicative competence to appear as a result of language development which includes all the linguistic actions enabled by the lexical and syntactic linguistic competence (Rittel, 1994: 29).

The implications of such thesis are not only theoretical but can also have methodological character.

The usage of the parameters enumerated in the article and connected to the linguistic competence has two purposes – firstly, to introduce more scientific background into the practical solutions of AAC; secondly, to improve the effectiveness of the therapeutic actions. Obviously, their choice depends on the level of the psycho-physical skills which determine the degree of communicative par-

ability to use its segments) and the ability to use it effectively in the process of sentence building (organisation of content, the method of verbal and non-verbal presentation); evaluate the biological foundations for the current state of the cognitive competence of the speaker” (Grabias, 2012a: 58).

ticipation, the moment at which the inability to verbally communicate manifested, and, what is crucial, the level of *speechlessness* and *non-speaking* to which they are supposed to be applied.

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