COGNITIVE TOOLS IN THE DESCRIPTION OF CHILDREN WITH DEVELOPMENTAL DISORDERS

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A child with developmental disorders as a subject of research work is an object of interest to many fields. Different specialists create their own descriptions taking into consideration the specific aspects of the given area of knowledge. We might suppose that the synthesis of these diagnoses will contribute to a holistic picture of a child with developmental disorders. However, we should bear in mind that different approaches to the problem put no limits on the list of possible approaches. What particularly interests us is also how the child itself approaches the problems, which is one more perspective from we observe the problems.

Key words: development disorders; direct and indirect discorders; cognitive linguistics; a picture of a child.

A child with developmental disorders as a subject of research work is an object of interest to many fields such as medicine, psychology, pedagogy and speech therapy. Each of these disciplines creates its own description of a child taking into consideration specific aspects of a given area of knowledge. E.g. the doctor deals with anatomical and functional disturbances; the psychologist describes child's emotional and cognitive problems; and the speech therapist describes those aspects which are connected with speaking. It might be supposed that the synthesis of these specialized diagnoses creates a holistic picture/representation of a child with developmental disorders, e.g. a child with speech disorders. However, if to bear in mind Langacker's concept of the creation of meaning, different frames/formulations of scenes [7, 8], which we encounter in specialized descriptions, set no limit to the list of possible frames. One more perspective, namely the perspective of a child itself, may be found.

Developmental disturbances may be observed in different areas, in speech in particular. Speech, this extraordinary human skill developed during phylogenesis not only makes man distinguishable in the world but it becomes his "sign"/"phenomenon", which is reflected in the notion *homo loquens.* In his work "On the Soul" Aristotle wrote, "breath is used (…) for uttering a sound and in this way for ensuring higher happiness for our being" [1, p. 99]. Is it right to paraphrase the above sentence in the following way: **a speaking man is a happy man?** At this stage of my article I mean not only speech but also the quality of speech as well as the involvement of speaking in communication and cognitive development.

OPERATIONAL NOTIONS OF COGNITIVE LINGUISTICS AS TOOLS OF ANALYSES OF SPEECH MALFUNCTIONS (DYSLOGIA)

Cognitive linguistics provides a good basis for the presentation of the cognitive picture that is **the representation** of a child with developmental disorders. The term *picture/portrait of a child* when understood literally draws our attention to painting a picture of a child. On the other hand, we may pay our attention to the fact that the metaphor – believed by cognitivists to be one more sense (apart from the sense of vision, the sense of hearing, the sense of touch etc.) – plays a meaningful role in the process of learning about reality [6].

Thus the term created by means of metaphor refers to circumstances, processes, conditions of creation, construction of a notion/ picture, a cognitive domain of *a child with developmental disorders*. Thus when one says *a portrait/a picture of a child with developmental disorders*, he or she means not only the depiction of a physical appearance of a child but also a psychomotor picture, a manifold context, particularly a social context in which a child lives.

The term *picture* refers to picturing, which is one of the most important branches of one of the areas of cognitive linguistics. While learning about reality, man **constructs** meanings of created names, phrases and expressions. It is well expressed by R. Langacker: " the meaning of the phrase is not only an array of conceptual content, but what it also involves is conventional picturing, which means the way of formulating of conceptual content delivered by recalled domain" [7, p. 18]. Thus the meaning of the phrase is not only the conceptual content of the domain or domains but also of the so-called conventional picturing or construal. In his comment on this phenomenon, Langacker writes: "… we are able to formulate the given situation in different ways, even when we have to do with the identical conceptual content. These various formulations of the scene take different semantic values. This means that semantics of the natural language which is based on the criterion of objective truth is not possible" [7, p. 19–20]. One of the elements of picturing of the scene is its ground (or background). In order to explain the idea, Langacker indicates the fact that what is meant is the connection of one structure with another where the first structure is highlighted and the other becomes its background [7, p. 20].

For R. Langacker, whose opinions have been briefly presented here, **meaning is identified with conceptualization** [7, p. 30], which occurs in cognitive processing. It may be stated that while commenting on the notion "a picture of a child with speech disorders not only the final result of the process of creation of the notion should be taken into account but also the process itself and the conditions in which it is created, which is connected with conceptualization. In other words, the quality of the formulated notion, in this case the notion of *a child with developmental disorders,* depends on how the process of conceptualization runs. Conceptualization may be interpreted as "both new and old notions; sensual feelings; kinesthetic, emotional experiences; recognition of the direct context (social, physical and linguistic context)" [8, p. 30]. Thus while speaking about *a picture/portrait of a child with developmental disorders*, I mean the construction of the notion by different means, both linguistic and non-linguistic ones. It is worth noticing that while taking advantage of the theory of prototypes of E. Rosch [13, 14, 15], which is also connected with cognitive linguistics, we may look for prototypical features of a child with developmental disorders, and particularly of a child with speaking disorders, a child who stutters, is deaf, has a cleft palate [11, 12] etc.

DIFFERENT "FRAMES OF A SCENE"-THE CATEGORIES OF PICTURING

A peculiar and common way of characterizing a child with developmental disorders is a description as a linguistic category. Among other possibilities of creating a picture of a child with disorders, there may be an analysis of his or her works such as drawings or poems.

Depending on the perspective from which we examine the disorders (e.g. the disorders connected with verbal communication and, more widely, in communication), we may distinguish, speaking generally and operationally, two ways of depicting a portrait of a child with developmental disorders, namely **direct and indirect picturing.** The former has the characteristics of manifold expression of inner difficulties and experiences, which are rooted in actual disorders of a child. Here, from this perspective, we have to do with accounts, e.g. poems or drawings – works with different forms- which reflect and illustrate experiences of a child. Among them, we may find linguistic texts created by a child. Within them, there are

written texts which we may call operationally direct linguistic representations because their authors are children who are active objects and subjects of such pictures.

The other kind of constructing a picture of a child refers to indirect or outer picturing, i.e. when the picture of a child is constructed by those people who are in different relations with this child. Those may be the child's parents, specialists who treat the child, painters, writers, journalists or scholars. This particular form of creating a picture of a child includes the description of difficulties and experiences which are expressed by parents, but it may also include parents' own experiences from which a picture of a child emerges. In this category of picturing, there are also descriptions created by specialists who deal with children with developmental disorders and deal with their therapy. If they take a linguistic form, they can be called indirect or outer linguistic pictures/ representations.

Each of the above-mentioned classes of picturing allows us to see a child from different perspectives, and these different products have different goals. The question may be asked which picture is true. If we make a hypothesis about a linguistic picture of the world, which is the result of our acceptance of Langacker's concept, then we will also state that those two ways of linguistic picturing are created by different "frames of scenes". Thus they may hold different semantic values. However, they may be values which complement each other and, as a result, they all have a chance to create a holistic representation.

A DIRECT LINGUISTIC PICTURE

What is particularly important for our learning about problems of children with disorders is a direct picture. Descriptions of experiences are often created in privacy at home either when subjects pour out their troubles to friends or to the psychologist in the psychologist's surgery. They are intimate in character, often painful and rarely accessible to a wider group of receivers. On the other hand, the quality of these experiences may be difficult to describe by linguistic means and, therefore, it is a non-linguistic form of expression, such as artistic or movement expression, that is applied in the psychological therapy of children with difficulties. Exceptional forms of a direct picture are a poem, the author of which is a person who suffers problems connected with communicating, and drama. It should be added that what is meant here is not only the technique of drama used during therapeutic meetings but also the activity of writing a drama which may show us a piercing picture of a stuttering person.

The frame of the scene created by a deaf child. The exciting poems by the deaf patient – Paweł T. [16, p. 59–60], at present an adult man with whom I had the pleasure to work for a few years, may be given as illustrative examples of indirect linguistic picturing. In 2005 four of his poems were published; they were written by him when he was an adolescent. They were entitled "Deafness"; "My hearing", "But why?", "To hear from anyone" [16, pp. 59-60]. The titles are highly characteristic if we know that their author is deaf. The hearing aid does not make it possible to hear sounds, and among them sounds of speech, in the same way as in the case of a healthy person. We may even say that hearing by means of the aid is a certain interpretation of verbal and nonverbal sounds which reach our ears. The phrases and questions of the deaf person such as "I'm hungry! I need sounds!", "Throughout all my life I am wandering through the desert of sound…", "The singing of different birds is the same to me", "I cannot distinguish music from normal talking", "I want to know what my desire is" (desire to understand what sounds mean)" [16, p. 59–60] sound strange to us.

The characteristic feature of the mentioned poems is their emotional charge which is hidden behind the particular verses of the poems, and among the means of expression which were used in these poems metaphor holds a special place. It may be clearly seen that the author of this poetry suffers a great personal tragedy which is rooted in his hearing impairment. What I was able to learn about Pawel during our meetings is the fact that his present

experiences connected with his deafness are not as turbulent as they were when he was an adolescent. However, he clearly states that when he was a teenage boy the writing of poems was his means of showing other people what problems he experienced and how he experienced them.

Frames of scenes created by stuttering adolescents. The unusual representation of a stuttering person emerges while reading the published memoirs of stuttering people [3, 9]. Their titles also use metaphors, which may indicate the fact that the patients distance themselves from their problems at present in the context of successful speech therapy. The title of the first work by Jan B. published in the collection "In My Eyes" is entitled "My Adventure with Stuttering" [3, p. 55] and the title of the second one by Rafał M. is "My Climb to the Top of Fluent Speaking" [9, p. 56–58]. The texts and the introduction (the author of which is a logopedist), suggest that works of stuttering people are "a means of catharsis" for them. The reader may watch a kind of a film where a man's fight against stuttering plays a significant role. Jan B. compares his fight against stuttering with the adventure which, according to the texts, was not only successful but also allowed him to get a new perspective on his success and failure. On the other hand, Rafał M. in his descriptions of overcoming difficulties uses the metaphor of a climb and fight. He writes: "My fight against stuttering can be compared with a climb to the top of a huge steep mountain overgrown with thicket when it is possible to travel vast distances one day and only go a few steps the next day." [9, p. 58].

One more representation of a stuttering man can be observed in the script entitled "A Drama in Three Acts" written by Grzegorz G. [4, p. 66–69]. The title is connected with the film where the great power called Matrix is in charge of a fascinating world. The people in this world are controlled and steered by this power. The metaphor used in the drama shows how big the problem the stuttering people encounter may be. The story unfolds among stuttering people who experience numerous difficulties connected with communication with others and resign from speaking, which is symbolized by sealed mouths. The vision of the world in which people pass one another silently reflects their experiences in a new dimension. The narrator notices "none of the people knew that on the outskirts of a silent reality an enclave had started to exist, a small society of freed people speaking fluently who were led by Morpheus – an enlightened logopedist." The following scenes present, in a metaphorical way, a moment of taking decisions about logopedic therapy, the liberation from Matrix, here understood as some kind of imprisonment by stuttering. The impressive scene of tearing plasters from mouths tells us not only about the moment of taking a decision but also shows us a new perspective on life and communication [4, pp. 66-69].

The question may be asked: can we achieve such a picture of a man with problems with communication by means of a scholarly description? It is possible to name the described kind of experiences of a stuttering man by means of special notions. But is it enough for getting a complete picture?

AN INDIRECT LINGUISTIC PICTURE

A scene framed by parents. Memoirs and reflections by parents of children with disorders can be illustrative examples of an indirect linguistic picture. Such kinds of works are intimate in character and have emotional charge. What emerges from them is not only the picture of a child's parents but also the picture of a child in the context of their joint difficulties. The example of this kind of work is the text entitled "On the Other Side of Therapy" by B. Zipper-Malina, a mother of a child with Down's syndrome [18, pp. 61-62]. It is worth paying attention to the extract describing how they follow the specialists' instructions: "Unfortunately, there is not enough time and energy to be simply a mother. There is no usual fun but stimulation. There are no caresses or hugging but massage or the

activities that aim at making the child sensitive and agile etc. To all these things we must add a terrible feeling of guilt – that it was too late for doing something or that it was done wrongly and a sense of responsibility for anything the child can or cannot do" [18, p. 61].

A scene framed by specialists. Another kind of a picture of a child with developmental malfunctions emerges from descriptions in specialized literature. These texts or their extracts, because of their aims, can be generally divided into texts which refer to: 1) descriptions of the condition of a child, i.e. the description of symptoms; 2) the search for the etiology of disorders; 3) establishing therapeutic prognoses and programmes.

The people dealing with treatment and therapy of children with developmental malfunctions and with speech disorders prepare longer or shorter descriptions of children's difficulties. Such descriptions are essential for taking decisions about diagnostic procedures and also later for taking decisions about prognostic and therapeutic procedures. In order to prepare such descriptions, specialists use the results of specialized tests, which allow for diagnoses based on etiology. Descriptions prepared in medical institutions are more or less shortened, depending on their aims.

The characteristic feature of the published works is their concentration on those aspects of life and activities of a child where deviations from norms are observed. The description usually follows the scheme according to which an author lists characteristic features of a child, e. g. his/her anatomical structure and functioning in different areas of life. Thus the main aim of descriptions is the presentation of child's main problems and malfunctions, e.g. at the cognitive, verbal or emotional stage etc. If the intention of an author is to explain the etiology, then descriptions are supplemented with results of tests, the main aim of which is to indicate the etiology of disorders. On the other hand, if the aim of the publication is to show means for helping a child, then there are recovery programmes with different kinds of exercises.

Descriptions of conditions of children and the etiology of disorders have a lower emotional charge and the language used in them contains specialized terminology which is not surprising since these elements are expected here. While reading this kind of literature connected with characteristics of disorders, what sometimes draws our attention is that its style bears no relation to a report or a classic description. Authors concentrate on those elements which are important from the point of view of a diagnosis and treated aspects. They take into account the description of symptoms, the typology of a disorder, the etiology, the prognosis and programmes of treatment and therapy of a child – i. e. the diagnosis and treatment or simply treatment. Linguistic pictures of a child with developmental disorders made in this way are medical, psychological, pedagogical or logopedic in nature, which depends on practical or scientific needs and the character of these needs.

While looking through specialized literature which considers scenes from various perspectives, it is possible to notice that the structure of the text is applied according to the subject; the application of specialized terminology; the usage of recognized theories, the reality. Works do not usually have a clear emotional charge, but are based on the cognitive side of a reader. On the other hand, although one may notice that an author's intention is to present facts connected with disorders, one can also see that his/her aim is to reach and influence the emotional side of a reader. It may seem that an author's goal is to present a child as the object and not only as the subject of their consideration. Such an effect is reached by means of different methods. Some of them may be the following: asking rhetorical questions; application of metaphors; usage of their own feelings; quoting child's words; describing dramatic situations; emotional titles etc. The examples of the above-mentioned means are as follows:

– The citation from a stutter's utterance: "…I was gripped with fear and confused and lapsed into silence with white, empty circles imprinted on my mind …"[5, p. 49].

– The citation from nanny's words which after some time contributed to the occurrence of stuttering of a little child: "lie down or a witch will come and eat you" [5, p. 60].

– The citation from the stuttering child mother's utterance: "she pushed the words out as if she had an obstacle in her mouth" [17, p. 134].

– Rhetoric questions: "…is it proper to compare the speech of a child with cleft palate with 'the norm'? Does it not happen that the cleft palate disorder makes children have articulation disorders? Thus their occurrence is the norm in the case of people with cleft palate?"[10, p. 200].

– The titles of chapters: "Stuttering as an iceberg", "The therapy for stuttering – melting the iceberg"[2, p. 465–469].

– Metaphorical names for describing disorders of children with cleft palate: for speech disorders – 'cleft speech', for facial deformation – 'a cleft face'.

A HOLISTIC PICTURE OF A SCENE?

The creation of a picture of a child with developmental disorders may be direct and indirect in character, which is connected with different functions of verbal and nonverbal utterances. The linguistic direct and indirect representation plays a special role in the representation of a child with developmental malfunctions and, within it, with speech development disorders. If to take it for granted that communication has a certain goal, then the indirect, direct and linguistic picturing responds to different needs and reflects intentions which are expressed in different ways and reached by means of different pictures of a scene. Pictures of a child created in this way do not compete but supplement each other.

A holistic approach to the research work on malfunctions of children draws our attention both to direct and indirect picturing. It may seem that what emerges from this kind of approach is a holistic picture of a child with developmental disorders, which not only makes it possible to describe prototypical features of a child from a specialist's point of view but also look into the world of his/her experiences, thoughts and intentions. Is it a complete representation? We know and understand as much information as we are able to gain from our conversation with a patient or read from results of specialized tests. Language plays a crucial role, but the meaning is only conceptualization. Various linguistic forms created by children, adolescents and adults with disorders and their parents should be compulsory literature for specialists in order to see the world of their patients, the world which is sometimes quiet different from the one they know…

Summary

A child with developmental disorders as a subject of research work is an object of interest to many fields. Different specialists create their own descriptions taking into consideration the specific aspects of the given area of knowledge. We might suppose that the synthesis of these diagnoses will contribute to a holistic picture of a child with developmental disorders. However, we should bear in mind that different approaches to the problem put no limits on the list of possible approaches. What particularly interests us is also how the child itself approaches the problems, which is one more perspective from we observe the problems.

Cognitive linguistics is a good basis which serves to present the cognitive bases of creation of picture, namely **the picture** of a child with developmental disorders. The term *picture/portrait of a child*, when understood literally, draws our attention to painting a picture of a child. On the other hand, we may pay our attention to the fact that the metaphor, believed to be one more sense by the cognitivists, plays a meaningful role in the process of learning about the reality. Thus, the term created by means of metaphor refers to circumstances, processes, conditions of creation, construction of notion/picture/ cognitive

domain – *a child with developmental disorders*. Thus, by saying *a portrait/a picture of a child with developmental disorders*, we mean not only the creation of a physical picture of a child but also its psycho-motor picture as well as the manifold context, and particularly the social context in which the child lives.

Depending on the perspective from which we examine the disorders, we may distinguish, speaking generally and operationally, two ways of painting a portrait of a child with developmental disorders, namely, **direct and indirect ones**. The former has the characteristics of manifold expression of the child's inner experiences, which are rooted in his disorders (e.g. poems, drawings). Among them we may find texts produced by the child, e.g. written texts which we may be called operationally *direct language picture*, because their author is a child who is an active object and subject of drawing a picture.

The other way of constructing a picture of a child refers to an indirect or outer way of painting a picture. We mean one when the picture of a child is constructed by those people who are in different relations with a child (the child's parents, specialists who treat the child, painters, writers, journalists or scholars).

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КОГНІТИВНІ ЗАСОБИ В ЗОБРАЖЕННІ ДІТЕЙ З ВАДАМИ РОЗВИТКУ

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Досліджують дітей з вадами розвитку багато наук. Попри особливості цієї галузі, фахівці створюють власні описи. Можливе припущення, що синтез цих опиисів/зображень допоможе створити цілісний портрет дитини з вадами розвитку. Однак, потрібно зважати на те, що окрім цих підходів існують ще інші – для нашого дослідження цікаво те, як сама дитина сприймає ці проблеми.

Ключові слова: вади розвитку, прямий та непрямий спосіб змалювання дитини з вадами розвитку, когнітивна лінгвістика, портрет дитини.

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