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Fear is near the ear or on the locus of emotions in the human body – based on the utterances of six-year-old children

SUMMARY

The paper presents the ideas of six-year-old children concerning the location of selected emotions in the human body from the standpoint of cognitive methodology.

The collected material shows that children at this age are not only efficient language users and they build their utterances in accordance with the "conventional usage of words". It also shows their unique verbal expression and emotional attitude to their spoken texts. This confirms E. Tabakowska's thesis that "cognitive linguistics is a proposal for people with imagination".

Keywords: emotions, cognitivism, guided conversation, 'container' for emotions, metaphors

Children get to know the world in an extremely active way. This activity is manifested not only in behavior but also in language. Children's utterances and texts present their genuine expression and creative attitude towards the surrounding reality. By acquiring language, they learn values and rules to be followed when perceiving the world. "While acquiring language, he (the child – U. J.) takes over a huge treasure trove of experiences and traditions that a given nation has collected in its languages over millennia" (Tschirch 1954: 68, cited after Niesporek-Szamburska 2004: 7).

Linguistic constructions formed by children are characterized by originality and freedom of utterance. The texts show their knowledge and experiencing towards the portion of reality that they are talking about. Their linguistic activity and naïve way of categorizing reality end with time as a result of school education

and under the influence of the language of adults. We should therefore examine the texts spoken by children who have turned six years of age because "it follows from (psychological, pedagogical and linguistic) studies on the development of the child's speech that the natural acquisition of a linguistic code at the age of six is already completed in a certain sense of the word. (...) language – the interpreter of the world and the tool for its cognition – helps the child to become familiar with it and to have it structured, presenting in words the effects of the child's experience. That is why it is important to know how the child describes the reality with words, thereby expressing his knowledge of the world" (Borowiec 2014: 12).

The article presents the ideas of six-year-old children on the locus of selected emotions. The analysis of the material is based on the adoption of cognitive methodology because it was cognitivists who used psychological procedures in their investigations in order to show how a person thinks and how the mechanisms of thinking impact the meaning and understanding of linguistic expressions (cf. Wiśniewska-Kin 2007: 15).

The collected material demonstrates that children of this age are not only efficient language users and build their utterances in accordance with the "conventional usage of words" (ibid, 13). It shows, I believe, their unique verbal expression and the emotional attitude to the texts they speak. The fact confirms the thesis of E. Tabakowska, who said, when writing on the assumptions of cognitivism, that "cognitive linguistics is a proposal for imaginative people (...). People who view the language producer and user not only as a brilliant mechanism for generating words and sentences but also the quintessence of his humanity: the uniqueness of reactions, original look at the world, in a word – everything that, combined with cultural and social determinants, decides the way a person uses his language: a brilliant tool of which he is both a creator and slave" (1995: 5).

Polish linguistic studies based on the cognitive theory have coined the term "the *linguistic picture* (or image) of the world", or "the interpretation of reality contained in the language" (Bartmiński 1999: 104). In this interpretation, man "judges about the features and modes of existence of objects in the extra-linguistic world" (Bartmiński, Tokarski 1986: 7) not "from the bird's eye view" but from a specific, subjective point of view (Maćkiewicz 1999: 12), since the picture of the world established in language (...) is always the picture seen, organized, and hierarchized by man" (Tokarski 1991: 136). "In this sense, language is not the mirror of the world but the mirror of the human mind" (Maćkiewicz: ibid).

This study will therefore present the ways of understanding emotions, and first of all the ideas concerning their location in the human body and outside it,

¹ These discussions were presented in the volume *Język a kultura* and in studies: *Językowy obraz świata*, ed. J. Bartmiński, Lublin 1990; *Językowy obraz świata dzieci i młodzieży*, ed. J. Ożdżyński, Kraków 1995; *Kreowanie świata w tekstach*, eds. A. M. Lewicki, R. Tokarski, Lublin 1995; *Językowa kategoryzacja świata*, eds. R. Grzegorczykowa, A. Pajdzińska, Lublin 1996.

from children's point of view. The article does not deal with the expression of emotions in general or the symptoms of emotional states being experienced, it discusses exclusively the judgments of six-year-old children about the role of certain organs of the human body in experiencing emotions. Owing to these utterances, it will be possible to present a somewhat different way of children's thinking, resulting from their spontaneity, "popular cognitive base" (cf. Wiśniewska-Kin 2009: 152) and their own, original interpretations.

In general, the investigations covered problems related to the problems of understanding names of emotions in several age groups: six-year-olds, ten-year-olds, and children with Down syndrome.

It should be added that in the early period of development of cognitive science, emotions did not appear in the current of discussions concerned with the "sciences of the mind" because they are traditionally treated as subjective states of consciousness. After adopting the assumption that emotional states can be treated as the extreme result of information processing taking place outside of consciousness, emotions began to be included in the cognitive line of research because "(...) minds without emotions are not really minds at all. They are souls on ice" (J. LeDoux 2000: 25–47, quotation p. 28).

An original method of studying thinking in children was proposed by J. Piaget (1929 [the names of terms after the English translation: The Child's Conception of the World, transl. Joan and Andrew Tomlinson, 1931], page nos. refer to the Polish version): a structured interview technique. When constructing the framework of such an interview, I tried to avoid asking questions using the questionnaire method because I would have probably obtained so-called "suggested convictions" (ibid: 14), in which children give answers without thinking independently. When asking questions, I allowed the child to answer them, and did not explain or correct anything at the beginning, while at the same time I tried to seek something definite in the child's answer, something that I would like to ask about again or ask the child to make the earlier given answer more specific.

I am fully aware that in the case of this type of interviews the linguistic activity of the investigated children depended on many factors connected for example with the child's good or bad mood/condition: then there respectively appeared signs of interest and linguistic reflection, or, on the contrary, signs of fatigue and reluctance. Some of the subjects 'looked for' answer to the questions asked, thought before they gave a specific answer, while others showed a complete lack of attention, answering "at random" (ibid).

According to J. Piaget, five types of reactions can be distinguished when questioning children:

- "answers at random"
- "romancing"

- "suggested convictions"
- "liberated convictions"
- "spontaneous convictions".

J. Piaget clearly emphasized that "suggestion" when asking questions is harder to avoid (ibid: 19). A way out is to form questions in the child's language and 'in-depth questioning' (ibid: 23), because "the suggested conviction is essentially momentary. A counter-suggestion made not necessarily at once but after a short lapse is sufficient to destroy it or it is enough merely to let the child talk for a few minutes and then to question it again indirectly on the same subject: the suggested conviction is like a parasite in the child's mind, which tends naturally to rid itself of the foreign matter" (ibid: 23).

When talking to the children I tried to elicit answers in the form of "spontaneous convictions" or "liberated convictions", which clearly indicate the dispositions of the mind before the question although they are systematized only under the influence of the question asked.

One of the questions enabling the reconstruction of the studied emotions was the question about their location, for example: *Gdzie jest umiejscowiony "strach" w tobie?* [Where is fear located in you?] *Gdzie on jest w tobie?* [Where is it in you?] *A może obok ciebie?* [Perhaps next to you?]

The lists of basic emotions proposed by scholars, inter alia P. Ekman (1972), S. Tomkins (1984), and C. Izard (1971) vary, and their selection is still a matter of dispute. In my research I used seven names of emotions listed by C. Izard and C. Z. Malatesta (1987):

joy (radość), sadness (smutek), anger (złość), fear (strach), disgust (wstręt), shame (wstyd), and interest (ciekawość), and added three "derivative emotions" that appear as a result of co-existence of basic emotions (e.g. R. Plutchik 1980): admiration (podziw), surprise (zdziwienie), longing (tęsknota).

The collected material will show whether six-year-old children perceive the heart "as a special container for emotions" (Pajdzińska 1999: 93), as is the case in language and in tradition, or whether they organize the "chaos of experiences" in a somewhat different way by making a characteristic categorization of emotional phenomena.

It follows explicitly from A. Pajdzińska's article that "the phraseological corpus of Polish provides irrefutable evidence that in our culture emotions are first of all associated with the heart, less often with the soul, liver or other body parts. There are tens of collocations whose component is the heart (*serce*); however, in none of them the heart is attributed with its actual function. From the linguistic point of view the heart is not a blood-pumping muscle but something that emotions depend on. This is already confirmed in the simple construction: *X ma serce* [X has the heart] 'X is capable of being motivated by emotions' (ibid: 91).

In the case of FEAR, seven children (out of 30 subjects) pointed to heart as the place where this emotion is stored. But there were also answers indicating the head/brain, e.g.: w głowie, bo głowa myśli i przypomina różne rzeczy; w mózgu koduje się te jakieś strachy;

Legs/hands, e.g.: w nogach, bo jak się czegoś wystraszę to nie mogę uciekać; bo jak się czegoś boję, to trzęsą mi się nogi i ręce i nie mogę się ruszyć;

Eyes, e.g.: bo czasami widzimy... tak jakby ... jakieś strachy; pod powiekami tam chowa się ten nasz strach:

Ear, e.g.: Koło ucha, bo u mnie na przykład są krótkie włosy, to diabeł tam sobie siedzi i straszy mnie,

Tam gdzie jest ciemno

Poza mną

When analyzing answers concerning JOY, some analogy is observable. Eight children indicated the heart, which, they feel, is "a container for emotions". These were answers like e.g.:

po prosu w serduszku; w sercu, bo w sercu są dobre wiadomości i wspomnienia chowane; radość jest w moim sercu, radości nie można zobaczyć, ona ma swoje własne boisko, takie miejsce w sercu, w którym przebywa, etc. Moreover:

Head, e.g.: w głowie, bo w głowie są myśli i myśli się właśnie o czymś radosnym; można mieć wesole sny, które przychodzą do nas z głowy, można sobie wyobrażać, w głowie tworzy coś wesolego;

Face, e.g.: na twarzy; w wesołej mince; w uśmiechu, na buzi;

Stomach, e.g.: u mnie w żołądku, bo jak jestem szczęśliwy, to nie jestem głodny

Soul, e.g.: w prawdziwej duszy mojej.

ANGER:

Heart, e.g.: w serduszku (7 answers);

Head/Mind, e.g.: u mnie w głowie; w moim umyśle, w głowie i wtedy musze o czymś pomyśleć i to mnie wkurzać zaczyna dopiero, tak nie od razu;

Nerves, e.g.: w nerwach

Face, e.g.: na twarzy, mam wtedy zdenerwowaną minę, wkurzoną, groźną minę; zezłoszczona mina i groźne brwi takie do dołu;

Ears, e.g.: w uszach. Why in the ears? Jak ktoś mi gada: "zrób to, nie rób tamtego" i jak ja to słyszę, to złość we mnie rośnie.

Inside the body, e.g.: Złość jest niewidzialna, jest w środku;

SADNESS

Heart, e.g.: w sercu, w serduszku (9 answers);

Head/FaceGłowa, e.g. w głowie, na smutnej twarzy, można dotknąć wtedy lezki płynącej po buzi, jak będę smutny i popatrzę w lusterko, to zobaczę mój smutek, buzia jest tak... skierowana w dół, ktoś ma wówczas uśmiech przewrócony na drugą stronę, skrzywiona mina, opuszczona głowa;

Table 1. List of emotions in respect to those body parts they are identified with*

| | | | | Emotions | tions | | | | | |
|---|---------------------------------------|-------|------------|----------|------------|--|--------------|-----------|---------|-------|
| positive – addressed to the person who is experiencing | ve – addressed to who is experienc | ~ 2 1 | the person | | negative - | negative – connected with a bad experience | with a bad e | xperience | | Total |
| joy interest | interest | | surprise | fear | anger | sadness | disqust | shame | longing | |
| 9 6 | 9 | | 5 | 7 | 11 | 12 | 6 | 7 | 4 | 70 |
| 8 10 | 10 | | 5 | 12 | 4 | 5 | | 5 | 9 | 55 |
| 2 8 | 8 | | 10 | 8 | 3 | 2 | 9 | 1 | 3 | 38 |
| 8 2 | 2 | | | 5 | L | 6 | 2 | 4 | 16 | 53 |
| 1 | | | | | | 2 | | 7 | 1 | 11 |
| 1 4 | 4 | | 3 | | | | 2 | 3 | | 13 |
| 1 | | | | 3 | | | | | | 4 |
| | | | | 1 | 2 | | | | | 3 |
| | | | | | 3 | | | | | 3 |
| | | | | 2 | | | | | | 2 |
| | | | 7 | | | | 10 | 3 | | 20 |

In case of fear the number of answers is higher than the number of respondents since some children gave more than one answer. * The table does not cover the derivative emotion determined as admiration since children's answers were limited.

Eyes, e.g.: w oczach, bo oczy płaczą, kiedy się smucimy, łatwo można rozpoznać smutne oczy, smutek w oczach,

Brain, e.g.: po lewej stronie mojego mózgu. What makes you think so? Bo moi rodzice zawsze mówią, że dobro jest po prawej stronie, a zło po prawej stronie, a jak się smucimy, to przecież jest nam źle, to i ja ... zacząłem tak myśleć.

DISGUST

Heart, e.g.: w sercu (3 answers)

Head/Brain, e.g.: do głowy nam przychodzą, takie jakby wspomnienia brzydkiego jedzenia, czegoś co brzydko pachnie, kiedy przypominamy sobie jakieś wstrętne, brzydkie rzeczy, w mózgu powstają takie obrazy, jakbyśmy oglądali film, w którym pokazują operacje, złamane nogi, jakieś blizny (6 answers)

Face, e.g.: wtedy mamy taką wstrętną minkę, brzydką, okropną, jak patrzymy na coś brzydkiego – rany... krew... flaki (6 answers)

Eyes, e.g.: w oczach, bo to widzimy, zamykamy oczy i zatykamy nos (4 answers)

Six-year-old children think that eyes play an important role in experiencing this emotion because to be disgusted by something, one ahs to see it first.

SHAME

Face, e.g.: na twarzy, ktoś kto się wstydzi ma czerwone policzki, ma minkę taką wstydliwą, ma czerwoną twarz i uszy też czerwone (7 answers)

Eyes, e.g.: w oczach, wtedy opuszczamy wzrok, o tak w dół, oczy nas zdradzają, nie patrzymy w oczy mamy, czy taty (7 answers)

Heart, e.g.: w sercu mam swój wstyd (3 answers)

Sumienie/Środek ciała, e.g.: mój wstyd jest gdzieś w środku, we mnie, w sumieniu (4 answers)

Male dzieci to się nie wstydzą, ich wstyd jest daleeeko stąd [kids do not feel shame, their shame is faaar away] (the answer is enriched with a characteristic prosodic contour, in this case it is an "extended' form of the word to show spatial distance).

INTEREST

Heart, e.g.: w serduszku, w sercu? (3 answers)

Eyes, e.g.: duuuże oczy, wtedy się wpatrujemy, w oczach patrzymy na to coś co nas ciekawi (10 answers)

Voice, e.g.: w głosie, ktoś ma głos zaciekawiony, ciekawy głos (4 answers)

Face, e.g.: na twarzy, mamy zaciekawioną minę, otartą buzię taką (6 answers)

Head, e.g.: myśl się pojawia w mojej głowie, co to może być i jestem wtedy ciekawy, coś takiego w mojej głowie, myślenie i zastanawianie się (4 answers)

SURPRISE

Eyes, e.g.: zdziwienie jest w oczach, patrzymy na coś lub na kogoś się dziwimy (5 answers) Face, e.g.: na buzi, latwo poznać zdziwionego człowieka po jego wyrazie twarzy, taka minka zdziwiona (3 answers)

Head, e.g.: w głowie (5 answers)

Thought/mind, e.g.: w moich myślach, zastanawiam się nad czymś, myślę o czymś (6 answers)

I don't know, e.g.: opisze jak będę dorosły, nie będę zmyślał nie wiem tego (10 answers)

LONGING

Heart, e.g.: tęsknota jest zawsze w sercu, wtedy inaczej bije nasze serce, głęboko, głęboko w naszym sercu, (8 answers)

Eyes, e.g.: oczy są pełne lez, kiedy się z kimś żegnamy, kiedy ktoś umrze lub odjeżdża na dłużej, zapłakany ktoś ma oczy pełniutkie lez, w oczach jest tęsknota (6 answers)

Head, e.g.: w głowie, tam gdzie są nasze myśli (3 answers)

The whole body, e.g.: wewnatrz ciała, głeboko w nas (2 answers)

Everywhere/Air, e.g.: dookoła nas, kiedy tęsknimy wszystko wokół wydaje się smutne, tak jakby tęsknota była wszędzie (2 answers)

ADMIRATION

Head, e.g.: w głowie, w myślach,

Eyes, e.g.: kiedy na coś patrzymy, podziwiamy to, to pewnie w oczach.

The subjects spoke very little about admiration. They associate this emotion with "interest", "surprise", and "envy", but they do it with great caution. The vast majority admit that they do not know what "admiration" is.

In the presented dialogical situation the six-year-olds did not try to make things up or lie, "they also did not announce their reluctance to speak" (Boniecka 1995: 161), they simply admitted their ignorance in the matter. This ignorance appears to be justified because when we look at the frequency lists of the feelings and emotions vocabulary, which fourth-, fifth- and eighth-form pupils used in the studies by U. Kopeć (2000: 56–59), the word "podziw (admiration)" never appeared in it even once, and only eighth-form pupils used the word "zachwyt (rapture)".

The present results of the investigations explicitly confirm the words of Polish psychiatrist A. Kępiński, who wrote about the role of the face in the expression of emotions. "In the first contact with another man, it is the face that is most important. (...) It allows us not only to identify a person but also his emotional reaction. The face is the most important part of "the social mirror". (...) The face does not lie; it is easier to control motor reactions of other types - hand movements, movements of the whole body, or verbal reactions than facial expressions" (Kępiński 1977: 9–10).

The utterances of six-year-old children enable one more interesting observation. In the opinions of the subjects, some emotions are explicitly associated with the heart. They are: *fear, anger, joy, sadness,* and *longing*. To paraphrase A. Pajdzińska's words, the heart is "a container" for these very emotions. The face is another important "site", on which almost all the experienced emotions are visible, including *disgust*. These convictions are consistent with the knowledge and experience of the subjects. A special "container" for many emotions is the eyes. This is the case with such emotional conditions as *interest, surprise*, *shame*, but also *longing, joy* and *sadness*. The head, in turn, is the location of such emotions

as *admiration* (although the answers of this type were not very many) as well as: *surprise, interest*. The present studies embrace a too small number of texts for us to draw far-reaching conclusions. Nevertheless, we can observe that children clearly divide emotions into those "felt and experienced" in the heart and those that can be" intellectualized": they are located in our head/mind/brain/thoughts.

When examining the utterances of the interviewed children, one more interesting phenomenon can be noticed: children's thinking is often metaphoric. In such situations, metaphors are a bridge between the well-known/familiar and the entirely alien (Petrie, Oshlag 1993: 584; cited after: Wiśniewska-Kin 2009: 29). Instead of a clear and precise argument, or coupled with logical thinking, the six-year-olds use metaphor allegedly to emphasize and stress certain features of emotional phenomena. This observation is largely due to cognitive methodology. Owing to the work by G. Lakoff and M. Johnson (1980), the concept of cognitive metaphor was introduced into linguistic research. The scholars regard metaphor as a fundamental conceptual category associated with human thinking and action in the world. It is not so much the way of speaking about phenomena as the way of comprehending, thinking about them. The metaphor expresses our individual attitude towards the world we are trying to know (cf. 30–31). "Thus, the metaphorical quality of language reflects the character of human thinking and action" (Tabakowska 1995: 9).

Here are some examples taken from children's metaphorical thinking on some emotions, e.g.:

Signs of "fear":

- Buzia mokra od łez
- Dostaję gęsiej skórki
- Widze strach przed oczami
- Pod powiekami chowa się ten nasz strach
- Strach ma wielkie oczy

Signs of "joy":

- Kwiaty zakwitają ze szczęścia
- Słońce do nas się uśmiecha
- Radość nic nie mówi, jest bezgłośna i niewidzialna
- Kleks uśmiechu na twarzy
- Radość ma własne boisko

Signs of "anger":

- Złe oczy
- Księżyc jest zły, kiedy dzieci nie chcą spać

Signs of "sadness":

- Popatrzę w lusterko i zobaczę mój smutek
- Smutek w oczach

Children create not only metaphors but also highly original comparisons. According to U. Mirecka (2004: 8) "differences between metaphor versus comparison and analogy are sometimes reduced to only formal difference: a comparative expression present in analogy and comparison, and absent from metaphor, i.e. as, like/similar to, as if, in the form of'. It should be observed that the ability to form comparisons is first of all related to the originality of perceiving similarities and differences between phenomena being described e.g.: radość jest jak uśmiechnięte słoneczko [joy is like the smiling Sun] strach jest jak kraina ciemności [fear is like a land of darkness] ptaki to takie kocie przekąski, [birds are cats' snacks] Słońce pływa po niebie jak ogromna ryba, [the Sun floats about the skies like a huge fish], Ksieżyc jest jak rogalik [the Moon is like a crescent roll], smutek jest jak Brzydkie Kaczątko [sadness is like the Ugly Duckling], ciekawość podobna jest do skrzatów, które wieczorem... jak dzieci śpią... przychodzą pobawić się ich zabawkami [interest/curiosity is like fairy-tale dwarfs who, when children are asleep in the evening, come to play with their toys], wstyd przypomina Pinokia, któremu wyrosły ośle uszy [shame resembles Pinocchio whose ears became donkey ears].²

Consequently, if the "minds of six-year-old children are full of metaphors and original comparisons" and their abilities to think in abstract terms are much higher than it is commonly believed, it is necessary to strengthen these abilities and enhance competencies by devising appropriate tasks that will help understand that which is difficult to explain. The explanation of the intricacies of the surrounding world can be achieved only through illustrating, combining objects with opposite features, explaining absurdities and discerning false situations: those mental operations will contribute to the formation of unusual metaphors and comparisons in children's utterances.

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² On the linguistic way of presentation of emotions see my article *Językowa projekcja emocji*. *Emocje w zachowaniach językowych dzieci upośledzonych umysłowo i dzieci w normie intelektualnej*, [in:] T. Woźniak, A. Domagała (eds.), *Język – Interakcja – Zaburzenia mowy. Metodologia badań*, Lublin 2007, p. 133–171.

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