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Toward a Shared Metaphoric Meaning in Children's Discourse: The Role of Argumentation

The text deals with the phenomenon of understanding and interpreting metaphoric expressions in children. Of the many metaphoric figures, one type was selected: the 'so-called' psychological-physical metaphors that illuminate a psychological experience by appealing to an event in the physical domain. The data consist of children's discussions in pairs, in which they make a joint interpretation of metaphors including a dual-function adjective, e.g., a hard person, a sweet person, an empty person. A hundred and forty-four dialogues between peer dyads were recorded from three age groups (48 dialogues from each group): 6;6-7;6, 8;6-9;6, and 10;6-11;6. The children's task was to prepare an interpretation of metaphorical expressions for two television quiz shows, one for peers and one for young preschoolers. The research design was balanced for age, gender, and order of metaphoric interpretation in the two experimental variants. Following Quignard's model (2005), we analyzed children's argumentation as a particular case of dialogical problem solving, whereby children had to understand the metaphoric meaning and convey it to the potential addressee. The results show an interesting dynamic in the argumentative orientation of the pro and the contra type, depending on the age of interlocutors. The frequency of metaphoric interpretations in opposition to those presented by the partner decreases with the children's age, but the frequency of compound proposals with the use of the partner's contribution increases. For the younger addressee, children most frequently interpret metaphors as descriptions of magical situations.

Key words: metaphor, metaphoric meaning, children's argumentation, types of argument

Discourse as a Process of Reaching Shared Meanings

Discourse is more than just an exchange of information by the speaking subjects (Mey, 2001). According to Tannen, it is a process of creating meanings by participants of interactive events (Tannen, 1982). Discourse as an escalating phenomenon in the process of creating meaning is the product of both speakers and listeners (Shugar, 1995). Bakhtin (1994 [1926]) speaks of dialogicity, which manifests itself in the fact that one utterance always constitutes the context for the next utterance (any utterance is addressed to somebody, every utterance is 'dialogic'). Each time, the utterance of another person enriches, modifies, and supplements the meaning of the following and pre-

ceding utterance of the partner. Meaning arises in a dialogical confrontation of the utterance with the context, i.e. other utterances (Bobryk, 1992, p. 92/93) and other minds (Givón, 2005).

Dialogue is a special form of discourse. By inputs made to dialogue, every participant contributes the meanings they possess to the discourse. An exchange of meanings is the most important source of cognizance for a person (Shields & Duveen, 1986; Tomasello, 1999). It can lead to a complete change, partial modification, development, or enrichment of the meaning they themselves possess.

The process of jointly creating meanings during discourse – or, in actual fact, through discourse – can be viewed from two perspectives:

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- a broader one: developmental, concerning the development of children's language as a potential of meanings, a development taking place thanks to the child's participation in different types of communication events (cf. the four types of so-called critical contexts: regulative, instructional, ideational, and interpersonal (Bernstein, in relation to the theory of Halliday));
- a narrower one: coming to a mutual understanding in each discourse. The achievement of understanding is a peculiar sharing of meanings contributed by the discourse partners (in the field of shared attention).

The present paper investigates the process by which children reach mutual understanding in the process of metaphor interpretation.

It is assumed that the tendency to establish explicit meanings and interpretations of events can be increased when the verbal and situational context is unobvious, unclear, ambiguous, and/or when there is pressure, a need or necessity to obtain an unambiguous, relatively precise, interpretation. Such a situation can arise when children are given a task which involves agreeing on a shared interpretation (paraphrase) of a metaphoric meaning.

Umberto Eco (2007, p. 74) writes "A metaphor that stirs up our mind to take flight from one Type to another allows us to reach in one Word something more than the Subject". It is precisely a lack of obviousness, and the non-literality of the meaning of metaphors, that can enable the process of reaching shared meanings during discourse to be revealed, the means used for this purpose to be analyzed, and the process of PRO and CONTRA argumentation to be followed.

Metaphor

A metaphor consists of a topic and a vehicle between which a certain relationship exists, which is referred to as the ground of the metaphor (see Grounds for metaphor comprehension, End, 1986). The standard meanings of words are transformed in a metaphor into a so-called projection of one meaning onto another. The meaning of the vehicle (the term used metaphorically) is projected onto the topic (the subject of the metaphoric term). "In formal terms, a **metaphor** is a figurative statement expressed by means of the copula, taking the form *An X is a Y*. A simile is a figurative statement using a comparative term such as like or as, taking the form *An X is like a Y*. For example, one can say both *The mind is a computer* and *The mind is like a computer*" (Bowdle & Gentner, 2005, p. 200).

Various theories of metaphor have tried to describe the essence of metaphoric interpretation (Steen, 2007). The pragmatic approach to metaphor assumes that communication competence, constituting a system of different types of knowledge serving to regulate communication behaviors,

also includes knowledge on the use of language in a nonliteral manner, e.g. metaphorically and ironically. According to Winner (1988, p. 10), understanding nonliteral language requires from the listener:

- firstly, detection of nonliteral intent (i.e. that the speaker saying something is thinking something different);
- secondly, detection of the relation between sentence and speaker meanings, i.e. between that which has been uttered (but not meant in this way) and that which was meant (but not uttered literally). In the case of irony this is a relation of opposition, while in the case of a metaphor it is a relation of similarity between that which was uttered and that which was thought;
- thirdly, detection of speaker meaning (i.e. discovering what the speakers wanted to say when they said what they said). In the case of a metaphor, this means determining the ground of the metaphor, going beyond understanding just the vehicle and the topic itself.

The standard pragmatic view – metaphors are not interpreted directly – has largely fallen out of favour (Bowdle & Gentner, 2005). Glucksberg (2008) discussed theories on metaphor comprehension in the recent literature and reached three important conclusions:

- "Literal meaning does not have unconditional priority. Metaphor comprehension, like language in general, is automatic and mandatory (...);"
- "Metaphors are not generally understood as comparisons, but comparisons may well be understood as categorizations, whether they are literal or figurative (...);"
- "(...) both comparison and categorization processes can be employed for understanding metaphors" (Glucksberg, 2008, p. 80).

Explaining children's capacity to understand and use metaphors, researchers stress that, already in the second year of life, children intentionally transfer the names of objects from one to another, and symbolic play can be considered the prototype of metaphorizing processes (Verbrugge, 1979). Keil (1986, 1989) tested in developmental studies the proposal that metaphors emerge on a domain-by-domain basis (see also Haman, 2002). According to Keil, the capacity to understand and interpret metaphoric expressions is determined by: a) the properties of knowledge organization in the areas from which the topic and vehicle of the metaphors are derived, and b) the ontological distance between those areas. Understanding a metaphor based on a given pair of domains is connected with comprehending other metaphors that are conceptually similar (because they belong to the same domains as previously juxtaposed concepts (see Kelly &

Keil, 1987). However, the ability to interpret metaphors combining certain knowledge domains is not an indicator of the ability to interpret metaphors combining other domains. According to Tendahl and Gibbs Jr. (2008), “a particular word can evoke a conceptual metaphor that gives us a mapping between two domains” (ibid, p. 1842). The authors argue that “mappings are responsible for the connection between, for example, physical and psychological senses of concept attributes...” (ibid, p. 1839).

Metaphors have a special importance in the construction of a conceptual system (Lakoff & Johnson, 1988). Thanks to the use of metaphors in research, we can offer a better description of the argumentation used to build shared meanings in discourse, reaching the so-called children’s theory of mind (e.g. Haman, 2002; Białecka-Pikul, 2003). On the other hand, the use of discourse allows for a better description of the development of metaphorization processes in children, or what has been called metaphoric competence (Kubicka, 2005; Dryll, 2006).

Argumentation as a Strategy of Reaching Shared Metaphoric Meaning

This paper deals with the phenomenon of understanding and interpreting metaphoric expressions. Metaphoric meanings are open and need to be clarified and supported by argument. According to van Eemeren et al. (1996, p. 5), “argumentation is a verbal and social activity of reason aiming at increasing (or decreasing) the acceptability of a controversial standpoint”. In the present research, the controversial standpoints concern children’s interpretations of metaphors. Of the many metaphoric figures, one type was selected: “psychological-physical” metaphors that explain a psychological experience by appealing to an event in the physical domain. The data consist of children’s discussions in dyads, in which they made a joint interpretation of metaphors including a dual-function adjective, e.g. *a hard person, a sweet person, an empty person*. We analyzed the process of arguing for one or another interpretation of the metaphor (PRO), or against one or another interpretation (CONTRA).

The partner (discourse co-participant) already has an opinion on the subject before becoming familiar with such argumentation. The task of the sender is usually not so much to create a completely new attitude in the recipient regarding the interpretation of the metaphor, but rather to change an earlier attitude (Tokarz, 2006). Before listening to the arguments, the recipient’s degree of conviction as to the accuracy of thesis T presented by the sender can vary from absolute conviction regarding its falsity, through moderate distrust, to absolute conviction of the veracity of thesis T.

Types of Argument

Every argument consists of two parts: that which is being proven, and that with the aid of which it is being proven. The object with which something is proven is called reason. The basic components of argumentation are judgments (Walton, 1989, p. 108). The simplest situation occurs when the sender provides only one judgment P as a premise which, according to them, sufficiently supports thesis T (see Figure 1). We call this simple argumentation.



Figure 1. Simple (single) argumentation

When two or more premises P_1, P_2, \dots are used to prove the correctness of thesis T, two types of multiple argument can be distinguished (see Conway, 1991; Tokarz, 2006):

- convergent (parallel);
- linked (analogous).

In convergent argumentation (Figure 2), each premise separately, independently of the rest, supports the conclusion to some extent. In this case, undermining any of the premises does not overthrow the entire argumentation. It is only the falsification of all of them that completely overthrows the argumentation.

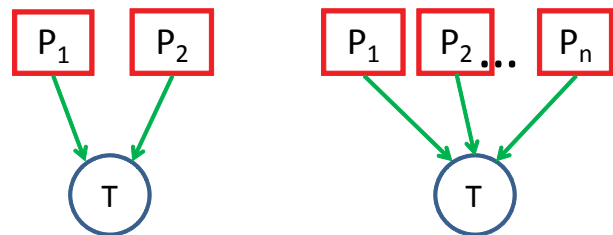


Figure 2. Convergent (parallel) argumentations

In linked argumentation (Figure 3), only all the premises together can be treated as justification for the conclusion. Undermining even one of the premises completely overthrows the entire evidence.

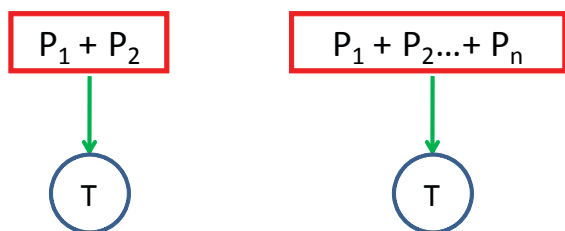


Figure 3. Linked (analogous) argumentations

Many arguments are mixed in nature.

In all these types, the conclusion is justified directly, i.e. there are no additional passages between the premise and the conclusion. However, complex argumentation (Figure 4) also occurs, where there is also supportive argumentation (S) in favour of one of the main premises (Snoeck Henkemans, 2003).

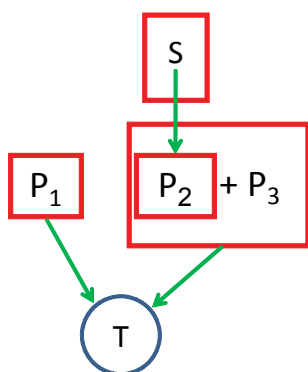


Figure 4. Complex argumentation

Research Questions

1. How does the process of building shared metaphoric meanings proceed depending on age?
2. How do children use argumentation in sharing metaphoric meanings?
3. What type of shared metaphoric meanings do children create for different types of addressees – peer and younger addressees?¹

The Subjects

A total of 144 discourses were recorded in peer dyads (half boy-boy pairs, and half girl-girl pairs) from three age groups (48 discourses from each group): 6;6-7;6, 8;6-9;6, and 10;6-11;6. The children's task was to prepare an interpretation of metaphorical expressions for two television quiz shows, one for peers and one for young preschoolers. The children were informed that the competition was

¹ Does differentiation observed, for example, in narrative discourse (Bokus, 2009) occur in an argumentative discourse as well?

“about different words”. The children in each dyad together had to come up with an explanation which best fitted a “word pair”. The research design was balanced for age, gender, and order of metaphoric interpretation in the two experimental variants (preparing interpretations of metaphors [A, B, or C] for a younger [y] or peer [p] addressee):

Series I: Ay Ay / By By / Cy Cy / Ap Ap / Bp Bp / Cp Cp / after one week

Series II: Bp Cp / Ap Cp / Ap Bp / By Cy / Ay Cy / Ay By /

Two girl-girl pairs and two boy-boy pairs took part in each of the 12 subgroups listed above, at each of the 3 age levels.

The children were asked to help prepare a competition for their peers or younger preschoolers. The children's conversations (in Polish) were recorded, with their consent, and excerpts from these recordings were later used in the competition. The contestants had to guess “what kind of person the children were talking about”².

The Material

The material for interpretation in the study comprised three metaphoric expressions (see Winner, Rosentiel, & Gardner, 1976):

- A. a hard person
- B. a sweet person
- C. an empty person

All three sensory adjectives used in the expressions are dual-function adjectives. In the metaphors, each adjective refers to a different sensory modality: touch, taste, sight.

Analyses and Main Results

The research questions concerned the organizational process of dialogic discourse towards a shared interpretation of the metaphor (for example, “a hard person is like a stone”, “a sweet person is like a cake everybody likes”, “an empty person has no knowledge, s/he is a little stupid like a sheep”). Following Quignard's model (2005), we analyzed the children's argumentation as a particular case of dialogical problem-solving, here:

not only

- how to understand the metaphoric meaning

but also

- how to present it to the potential addressee.

² We have adopted as a pilot study the data from research carried out as part of the MA thesis of Tomasz Garstka, “Dochodzenie do wspólnych znaczeń w dyskursie dziecięcym (na przykładzie procesu interpretacji wyrażań metaforycznych w diadzie rówieśniczej)” [Reaching shared meanings in children's discourse (on the example of the process of interpreting metaphoric expressions in a peer dyad)], prepared in 1998 under the supervision of Barbara Bokus (Faculty of Psychology, University of Warsaw).

The universe of metaphorical reference in argumentation was treated as a composition of the theses of the proponents (my thesis - MT, or your thesis -YT). The second criterion was the type of argumentative orientation in favour of a thesis or against it. The third criterion was the type of context in which a metaphoric description was presented to the addressee.

How to Understand the Metaphoric Meaning How Children Use Argumentation in Sharing Metaphoric Meanings

We analyzed the children's contributions in different steps of metaphoric interpretation. These were:

a) a new interpretation proposal, e.g.:

*Słodki człowiek to łakomy
jest. Łakomy na słodycze.*

*Mi się wydaje, że słodki
człowiek, to wiesz, taki że
wszyscy go lubią.*

A sweet person is greedy.
Greedy for sweet things.

I think a sweet person is,
you know, [MT] someone
everybody likes.

b) asking the partner to support this proposal [MT], e.g.:

*Słodki to że jest taki mały,
że jest ładny. Mówią, ale ty
masz słodkiego synka czy
córeczkę. No nie?*

Yhm. Chyba tak.

Sweet means s/he's so little,
and pretty. They say, what
a sweet son you've got or
daughter, don't they?

Mhm. I think so.

c) requesting an explanation of the partner's own proposal [YT], e.g.

*Jest to słodki człowiek, że na
przykład, pomaga ludziom.
Jest dobroczynny.*

*A co to w ogóle znaczy?
Dlaczego dobroczynny?*

*Dobroczynny to są, na przy-
kład, jak byś nie miał gumki,
a ja bym ci pożyczył. Bym
był słodkim człowiekiem dla
ciebie.*

This is a sweet person, for
instance because/he helps
people. S/he's charitable.

What does that [YT]
even mean? Why charita-
ble?

Charitable, it's like, for ex-
ample, if you didn't have a
rubber and I lent you mine.
I would be a sweet person
to you.

d) operations on the partner's contribution (negation or re-
jection, confirmation, elaboration, modification)

*Twardy to z kamienia albo
zły.*

No.

Z kamienia.

No, albo z ziemi.

*Z ziemi nie. Ziemia jest
mięka.*

*No tak, ale z ziemi z kamie-
niami. Już może być, no nie?*

*No, z takiego żwiru grube-
go?*

No, może być.

Hard means of stone or bad.

Yeah.

Of stone.

Yeah, or earth.

Not earth. Earth is soft.

Yeah, but stony earth would
work.

Yeah, like coarse gravel.

Yeah, coarse gravel works.

e) new compound (multiple/complex) interpretation pro-
posals - adding a new interpretation to the partner's pro-
posal (merging the meanings offered in one's own and the
partner's proposals), e.g.:

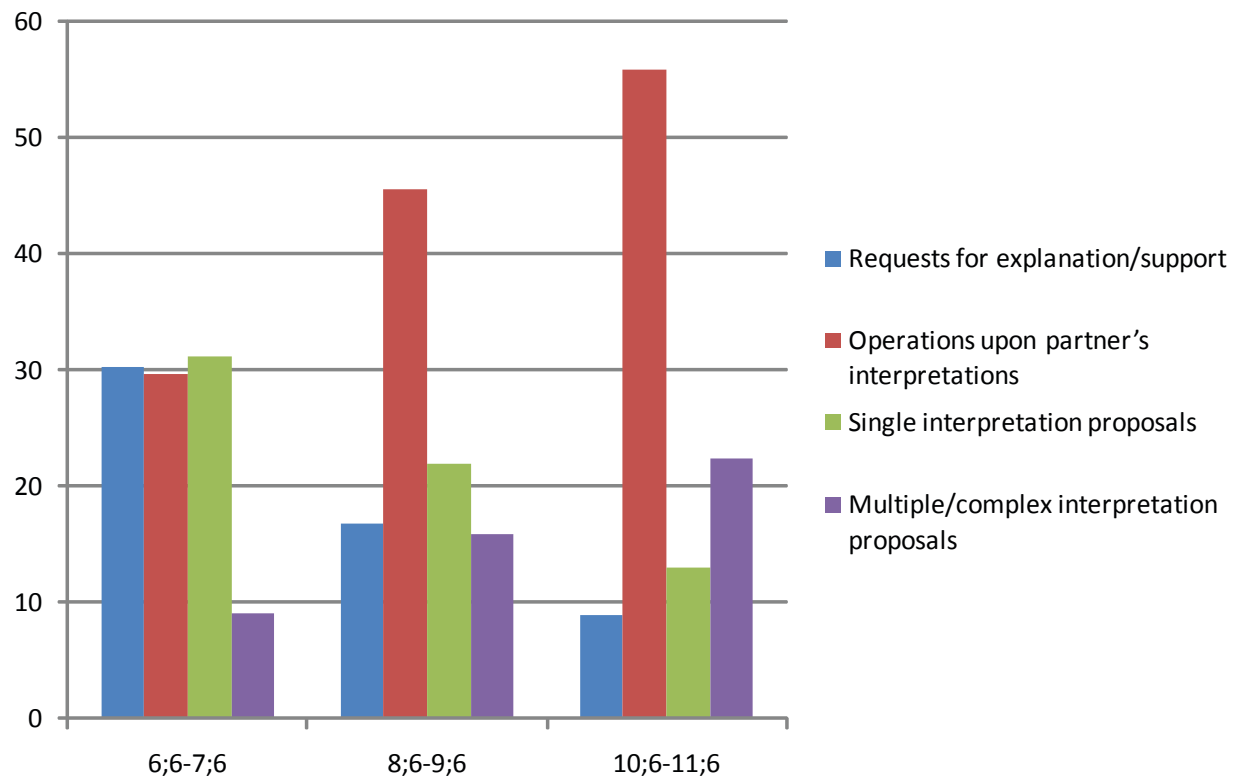
*Słodki człowiek to jest ...
ktoś co jest grzeczny.*

*No dobra. Słodki człowiek,
no to ten, co bardzo dużo
je słodyczy i jest grzeczny
oczywiście...*

A sweet person is... someone
who's well-behaved.

Okay. A sweet person,
that's someone who eats
lots of sweeties and is well-
behaved of course...

Figure 5. Children's contributions to sharing metaphoric meanings



The obtained data showed that, in children aged 6;6-7;6, the frequency of operations referring to the partner's interpretations is maintained at a level similar (29.56%) to the rate of requests for explanation or support (30.22%), but in the older groups (aged 8;6-9;6 and 10;6-11;6) the frequency of operations is higher (45.45% versus 16.84% and 55.77% versus 8.95%, respectively). With age, the children much more often made use of the partner's contributions. There was a significant increase in the frequency of operations which referred to what the partner had said and made use of the partner's contribution in the discourse of children from the different age groups: 29.56%, 45.45%, and 55.77%. The test of proportions shows that these increases are statistically significant (respectively: $z = 5.36$ for the first increase, $p < 0.0001$, and $z = 3.80$ for the second, $p < 0.005$). The changes (with age) in the participants' use of confirmation, negation, elaboration, and modification in discourse show a complex pattern: the role of elaboration and modification increases with age, the role of negation decreases, while the frequency of confirmation remains at about the same level (see Bokus & Garstka, 2009).

Figure 5 shows the frequencies of:

- requests for explanation/support,
- operations upon the partner's interpretations,
- new single (simple) interpretation proposals

- new compound (multiple/complex) interpretation proposals.

The frequencies of both types of new interpretation proposals (single and compound proposals treated together) are similar in the three age groups (40.22% in 6-7-year-olds, 37.71% in 8-9-year-olds, and 35.28% in children aged 10-11 years – statistically insignificant differences). Though the frequency of introducing new interpretation proposals remains similar in all the groups, the frequency of single proposals in opposition to those presented by the partner decreases with the children's age (31.11%, 21.89%, and 12.97% respectively – statistically significant differences³), while the proportion of compound proposals making use of the partner's contribution increases (more frequent merging of meanings from the two co-participants: 9.11%, 15.82%, and 22.31% – statistically significant differences⁴).

Below we follow the dynamics of changes in the process of reaching shared meaning. We also show how combinations of simple arguments form multiple or complex arguments.

³ The test of proportions shows these differences as statistically significant: $z = 3.33$ for the first decrease and $z = 4.34$ for the second, $p < 0.0001$.

⁴ Statistically significant differences are shown in the test of proportions by $z = 3.29$ for the first increase and $z = 3.03$ for the second, $p < 0.005$.

Example (Polish version of children's discourse is presented in Appendix 1)

KAMIL (7; 6)	MICHAŁ (6;11)	
(whispering) <i>A sweet person is a nice person</i>		interpretation proposal ("nice")
	<i>No</i>	negation
	<i>A sweet person, of course, is someone who eats lots of sweets</i>	new interpretation proposal ("eats lots of sweets")
<i>A sweet person is a nice person</i>		interpretation proposal (renewed first proposal)
	<i>No</i>	negation
	<i>It's someone who gorges themselves... Who is... Yeah, someone who eats sweets. Lots, of course. So s/he is sweet.</i>	interpretation proposal (renewed second proposal)
<i>A sweet, nice person is... someone who eats sweets. A sweet, nice person can be... someone who doesn't drink vodka.</i>		new interpretation proposal (a multiple [convergent] argument)
	<i>Okay</i>	assent (confirmation)
	<i>A sweet person, that's someone who eats lots of sweets, chocolate, sweeties, and always is well-behaved of course.</i>	merging of meanings offered in two interpretation proposals - "eats sweets and is well-behaved" (building a multiple [linked] argument)
<i>A sweet person doesn't beat up anyone.</i>		elaboration of the part of previous proposal
	<i>A sweet person doesn't beat up anyone... A sweet person can also be someone who brings sweets for others.</i>	merging of proposals (building a multiple [convergent] argument)
<i>A sweet person is very nice, because s/he doesn't stir up trouble. When s/he goes outside with sweets, s/he offers them to others. S/he won't... S/he won't say "I won't give you any because I don't like you". S/he likes everyone. We'll say that to children from another school.</i>		merging of proposals – "nice, because s/he doesn't stir up trouble + (when s/he goes with sweets) offers sweets to others, because s/he likes everyone" (building a complex argument)

The analysis reveals an interesting dynamic in the argumentative orientation of the PRO and the CONTRA type in the process of discourse. At the start of the argumentative discourse we observe a situation in which the position of one participant (metaphor interpreter) is accompanied by the opposite position of the other participant – a new interpretation proposal is offered. As we have shown in the cited example, the children aim to bring their positions closer together by performing operations on their partner's text. Not only that, they merge the previous interpretation proposals and build multiple or complex arguments.

As the interpreters' age increases, the frequency of merging of co-participants' proposals grows, while the frequency of single (opposite) interpretation proposals decreases.

Analysis of Shared Interpretations of Metaphors in Children's Dyads: How to Present the Metaphoric Meaning to the Potential Addressee

Our analyses show that the interpretations of metaphors were different when they were being prepared for young preschoolers or for peers. The contributions containing interpretations of metaphors have been categorized.

According to Polish Dictionary, in a metaphorical sense a hard person, for example, is someone "resistant to adversity, who doesn't break down easily, inflexible, cold, without a heart". It has been assumed that the above-mentioned qualities form the core psychological reference for the adjective hard, and interpretations invoking other mental qualities are classified as inappropriate metaphoric interpretations.

Table 1. Frequencies of magical and other types of metaphoric interpretations shared in children's dyads

		For a peer addressee		
		MAGICAL	OTHERS	Total
For a younger addressee	MAGICAL	17	38	55
	OTHERS	7	10	17
	Total	24	48	72

McNemar's χ^2 (continuity corrected) = 20.00 ($p < 0.000$)

The analysis of interpretations of metaphors uses the classification proposed by Winner, Rosenstiel, and Gardner (1976, p. 293). Thus we distinguish:

- 1) **Literal, magical interpretations**, based on a literal understanding of the change occurring in a person (the topic of the metaphor), which is possible if natural laws are suspended and magic and fantasy are introduced. Examples of such interpretations of the hard person metaphor include: a person of stone, ... of cement, a witch who turned to stone, a robot which looks like a man and is made of steel, bullet-proof.
- 2) **Primitive metaphoric interpretations**, which contain references to the dual-function adjective's physical (sensory) reference. This means that children ascribe certain physical qualities from the vehicle of the metaphor to the person (the topic of the metaphor), e.g. s/he has hard teeth, a hard head or hard bones, s/he has such huge muscles, s/he is muscular and mighty.
- 3) **Inappropriate metaphoric interpretations** are those which invoke the adjective's psychological reference in the metaphor, e.g. hard, but with respect to an inappropriate mental quality. The most frequent interpretations of this kind include: strong, powerful, brave, not afraid, bad, not very good, envious, beats up people, but also thing like unfriendly, spreads gossip, helps people, well-behaved.
- 4) **Genuine metaphoric interpretations**, which invoke the core psychological reference. In the case of the adjective hard - qualities such as endurance, persistence, inflexibility, firmness. Examples of such interpretations include: very persistent; when you hit them they don't give in; always get their own way; when anything happens to them, they don't cry; endures all kinds of suffering.

For the younger addressee, the children in all the age groups (Bokus & Garstka, 2009) most frequently interpreted the metaphors as descriptions of magical situations (literal, magical interpretation). It was different when the addressee was meant to be a peer. Then, children in all the age groups most often offered other types of metaphoric interpretations.

We treated the final shared meanings in all discourses under analysis as children's agreements also to the world

in which the metaphor should be presented to the addressees (peers or younger addressees). It was observed that, for younger addressees, children placed interpretations of the metaphor in the world of fairy tales, e.g.:

Słodki człowiek to ten, co je dużo słodkiego.

No właśnie. Jest to taki brat Smerfетки, co lasuje na słodycze.

Może.

To jest Łasuch cukierkowy.

No chyba tak. Ale w bajce Łasuch lubił wszystko.

No, ale w naszej bajce dla przedszkolaków będzie lubił same słodycze, i dlatego będzie słodki.

No dobra.

A sweet person is someone who eats lots of sweets.

Exactly. It's like Smurfette's brother who's greedy for sweets.

Maybe.

It's like Greedy who loves sweets.

Maybe you're right. But in the story Greedy liked everything.

Yeah, but in our story for preschoolers he'll like only sweets, that's why he'll be sweet.

Okay.

The frequencies of magical and other types of shared metaphoric interpretations (primitive, inappropriate, genuine), depending on the addressee (younger, peer), are shown in Table 1.

The table shows that 38 dyads (of all 72 dyads) prepared magical interpretations for younger addressees and

other types of metaphoric interpretations addressed to peers. Only in the case of 7 dyads was the opposite shift observed.

Discussion

The above results clearly suggest that, as they grow older, children start to participate more fully in discursive exchanges. Their contributions increasingly refer to what their partner says. The content of the partner's contribution is elaborated upon and used to develop shared meanings. The increasing frequency of modifications/elaborations observed with age, as well as of compound new interpretational proposals (multiple/complex arguments), seems to prove that:

- the cohesiveness of discourse increases (also shown by the decreasing number of irrelevant utterances);
- there is increasing co-operation between the discourse participants on developing a shared interpretation of the metaphor;
- agreement between the partners is greater as to the metaphor's meaning reached in the course of the discourse (the area of shared meaning is expanded), and also agreement as to the world in which the metaphor should be presented to the addressees (peers or younger addressees). For the younger addressee, the children most frequently interpreted the metaphors as descriptions of magical situations (literal, magical interpretations).

The results presented in this paper show age-appropriate speech styles observed in metaphoric interpretations for peers and younger addressees. Let us try to explain this in the light of pragmatic knowledge of the speakers (here: of the metaphor co-interpreters). Pragmatic knowledge of argumentative discourse can be considered not only in terms of who is speaking to whom, and about what (topic), but also for whom (who is the addressee of the metaphor's meaning) and for what purpose (Bokus & Shugar, 1998; Bokus, 2009). We assume, after Psathas, that the perception of any situation is determined by the internal states of the participants in that situation, which include an interpretative structuring of the social context as experienced by each of the participants (Psathas, 1968, p.136). This determines the degree and kind of personal engagement, as well as the task the speakers (metaphor co-interpreters) set for themselves, and their expectations attributed to the addressees of their interpretations (see Ninio & Snow, 1996). Maureen Shields formulated this conception as follows. We quote: "A child's communicative skill is an index of his knowledge of other persons. When a child adjusts his communication to accommodate the social context, the child's image of the world is mirrored twice, once directly and again as a representation of the representations of others" (here: addressees). "Each image modifies and extends the other" (Shields, 1978, p. 556).

Referring to analyses of coordination of children's action lines in dyadic interaction units (Shugar, 1995; Bokus, 2008), we can say that children in the process of argumentative discourse achieve coordination of metaphoric interpretations in different ways.

Three major patterns were distinguished:

- OP (*Own Proposal*): whereby the proposal of the opener of the discourse (or unit of discourse) dominates, the partner being drawn into that proposal (suspending his/her own);
- PP (*Partner's Proposal*): whereby the speaker confirms, modifies, or elaborates the partner's proposal, thus making that proposal dominant;
- JP (*Joint Proposal*): whereby a new compound (multiple/complex) proposal is built jointly (merging of meanings offered in one's own and the partner's proposals).

Our study shows that the interpretation of metaphors, as any nonliteral meanings, is a process which takes place on-line and allows for continual reinterpretation. The discourse participants build (sometimes laboriously) shared meanings. As Bakhtin (1994) suggests, every contribution to a discourse is uttered from a certain point of view (and with the addressee in mind), it is a "voice". In this study we have listened to the polyphony of children's voices in the process of sharing meanings.

The discourse of participants seeking shared metaphoric meanings can be described through the metaphor of a *concert*, to invoke the idea of Hermans (1999). It is a complex composition of consonances and dissonances which is built by the musicians responding to one another in a precise, structured way. Instruments in an orchestra are organized in two dimensions: space and time. In the time dimension, a melody is created, developed separately by each instrument. In the spatial dimension, different instruments harmonize or contrast with one another, together building chords.

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Appendix 1. Original example of children's discourse (in Polish)

KAMIL (7; 6)	MICHAŁ (6;11)
(szepcem) <i>Słodki człowiek to jest miły człowiek</i>	
	<i>Nie</i>
	<i>Słodki człowiek to, oczywiście, co je dużo słodczy</i>
<i>Słodki człowiek to jest miły człowiek</i>	
	<i>Nie</i>
	<i>Ten, co się obżera ... Ten, co jest Ten, no właśnie, co je słodczy. Dużo, oczywiście. To jest słodki</i>
<i>Słodki, miły człowiek to jest ..., co je słodczy.</i> <i>Słodki, miły człowiek to może jest ..., co nie pije wódki</i>	
	<i>No dobra</i>
	<i>Słodki człowiek, no to ten, co bardzo dużo je słodczy, czekolad, cukierków i to właśnie Ale zawsze jest grzeczny, oczywiście</i>
<i>Słodki człowiek to nikogo nie bije.</i>	
	<i>Słodki człowiek nikogo nie bije. Słodki człowiek to taki, co może przynosi słodczy dla innych.</i>
<i>Słodki człowiek to jest miły bardzo, bo nie rozrabia.</i> <i>Jak wyjdzie na dwór z cukierkami, to kogoś poczęstuje.</i> <i>Nie będzie Nie powie tak „nie dam ci, bo ciebie nie lubię”. Tylko wszystkich lubi.</i> <i>Tak powiemy dzieciom z innej szkoły.</i>	