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Metaphors and their relevance to special education

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In this article, metaphor as a phenomenon in figurative language will be examined from the perspective of special education. The article will show how the use of metaphor can be associated with contextual understanding. The first part of this article addresses the place of metaphor in interaction and as interaction. The point of departure is the interaction theories of Richards and Black, which were later criticized by Davidson. By bringing in a number of symptom markers from various diagnosis-related groups, I will show in the second part of the article that Black's theories may still have validity. The third part of the article is based on interviews with an adolescent with an acquired brain injury who employs figurative language to a greater extent after the injury. The metaphors used by the adolescent are analyzed in relation to their value in the interaction between the participants in the interview. Metaphor is a key component of our communication, and it is therefore important – including in the field of special education – to note how the impact of metaphors on the communicative abilities of different people can vary.

Keywords: metaphor; special education; traumatic brain injury; communication; language disorder; aphasia; Asperger syndrome

Introduction

This article stems from the early stage of a research project. The project is designed as a holistic single-case study (Yin 2003), i.e. a study of one case with one unit of analysis. I examine in depth the life history of an adolescent with traumatic brain injury, and elicit his narrative on the theme of the project – inclusion. The project is thus a thematic life history study (Numan 2006). The accident occurred when he had just started at lower secondary school, where he is still a pupil. This means that he has school experience both before and after the brain injury. Prior to the accident he was an extremely gifted pupil and was very talented in both his particular fields of sport and art. The brain injury has made it necessary for him to use a wheelchair. As a result of hand tremors he no longer masters the art of drawing and painting as well as he did previously. He has put a lot of effort into improving his speech abilities. His speech is monotonous and at times somewhat unclear, but he is able to communicate his thoughts. He appears to be philosophical regarding his situation and his everyday life. Those around him reported that soon after the accident he was playing with language – they called him an artist with words. Now he uses figurative language very widely to communicate, something which was not as noticeable prior to the

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accident. I became curious about this phenomenon and wished to explore it in greater depth.

It has therefore been necessary to explore what metaphors are, and what their function is in interaction between people with different life circumstances. The issue addressed in the first part of this article is: *How can metaphors facilitate or impede communication?* In the second part of the article I will examine the boy's metaphors.[1] The issue to be addressed in the second part of the article is: *How does an adolescent with traumatic brain injury use metaphors to express his inclusion?* These two issues must be considered in close association with each other and will be discussed in parallel.

Strømstad, Nes and Skogen (2004) associate inclusion with three main areas: social, academic and cultural. Pupils must have a social affiliation with one group or class. They must receive an educational programme that is adapted to their abilities, interests and requirements. They must experience that their culture and origin is safeguarded and that they have the same opportunities to participate in school activities. This article directs focus on academic inclusion, and is limited to a discussion of the requirements for understanding figurative language. Inclusion as a phenomenon will not be discussed here, but schools will have a better platform for facilitating academic inclusion through a greater understanding of the pupil's prerequisites in this respect. Such adaptation will also impact on social and cultural inclusion, since these do not operate independently of each other (Olsen 2009).

Different theories are applied to how metaphor is employed and understood. Lakoff and Johnson (1980) have a broad, cognitive approach to metaphor. They maintain that metaphor is universal, existing not only in language but also in human thoughts and actions. Although their theories on how metaphor can disseminate meaning as a communicative tool are interesting, I intend to adopt a narrower point of departure in this article. I will put special emphasis on an interaction theory of metaphor and discuss parts of it in light of the criticism it has received. The main focus is on the place of metaphor in the interchange between people, and in this study special emphasis will be placed on situations in which the use of metaphors can facilitate or impede such interaction. My focus is not on why some metaphors function well in communication while others do not, but rather on what groups of people either have or do not have the potential to understand and construct metaphors.

By focusing on the metaphor I will highlight figurative language rather than literal language. Figurative language consists of tropes and figures of speech. I will focus on what Nordahl (1994) describes as rhetorical tropes. He gives three examples: simile, metaphor and metonymy. Metonymy is a form of substitution in which the words selected are closely associated with the term that is replaced. A simile is a comparison of two parts which are joined by 'as' or 'like'. For example 'A teacher is like a gardener'. A very simple definition of a metaphor is that it is a comparison without the use of 'like' or 'as': 'A teacher is a gardener'. Before leaving the simile, I would assert that the metaphor is more than a compressed simile. This is backed up by the theory of interaction presented by Richards (1950), which was further elaborated by Black (1962). I will consider this in light of the apparently strong criticism of Black's theories put forward by Davidson (2001) in an essay.

Methodology

At this stage of the project I have conducted a comparative text analysis of the theories of Black and Davidson, and have noted how they can be used to understand parts of the data acquired in the interview with the adolescent. Theoretical research will thus form the main methodological basis of this article. Moreover, a key method in a life history study is the qualitative research interview aimed at in-depth exploration of the case (Numan 2006; Kvale 1997).

I have had two topic-based conversations with the boy at a three-month interval. Each conversation was spread over two days. The questions were intended to be open, so that the boy's narrative remained the focus of attention. I have also spoken to those around him to acquire an overall picture of the background context. The life history that emerged from these conversations with the boy is analyzed in order to investigate some of the main topics in even greater depth. Further conversations with the boy will be based on these analyses. Excerpts from the first conversations are presented towards the end of the article. However, metaphors do not necessarily always strengthen communication. This is elucidated by considering the comprehension of metaphors by people with a variety of problems such as semantic-pragmatic language disorders, aphasia and Asperger syndrome. The significance of metaphor in communication between people with different cultural competence is also examined. Through these examples – in addition to the excerpts from conversations with the adolescent – I intend to demonstrate that a knowledge of metaphors is of major significance in work aimed at people with special needs.

Ethical considerations

In general, conducting research on people in vulnerable groups demands special considerations in terms of research ethics, particularly as regards self-determination and securing the private life of the informant. Ensuring the complete anonymity of the informant may be difficult, since he belongs to a very marginal group. The type of in-depth interview conducted in this project may give the adolescent insight into his own situation that he might have preferred not to have gained. The informant was aware of this when he gave his consent. Since the informant is under-age and also belongs to a vulnerable group, his parents have also given their consent. The interview sessions have been short and have been spread over several days. This has had the positive effect of giving the informant the opportunity to reflect on the topic and on his own narrative, allowing him to select what he wanted to share. He has also been able to give feedback on my interpretation of his narrative. This is an integral element of a topical life history study.

Metaphor when language is disturbed

In the theoretical exploration of metaphor, I start by considering how metaphor verges on metonymy. This close association is significant for understanding certain language difficulties and brain damage or disease, as I will demonstrate in this section. Eide (1990) believes that metonymy assumes a genuine link between the original and the figurative meaning. This may be by association or may be related to the action, the object, time and so on. Metonymy is a phenomenon employed for example by children with expressive language disorders. Such children struggle to

find the correct semantic concept. They may use words like *cat* for *tiger*, or create new words like 'windowcloth' (*curtain*), 'nailhitter' (*hammer*) and 'sleepie' *(to yawn*). The children choose a noun and verb on the basis of the concrete features of the concept – cloth at the window, hitting a nail – or they verbalize an adjective: sleepie. In this manner they create new words by basing them on analogies – a characteristic of metonymy. In comparison, metaphor can be built on sources that are not naturally associated with the target area. The metonymy for drinking spirits can be 'He knocks back a glass or two'. The corresponding metaphor might be 'He's plastered' or 'He's on a long weekend bender'. At the same time these examples show how closely intertwined metonymy and metaphor are. The expression 'He's on a long weekend bender' can be a metonymy based on time, but it can also be a metaphor derived from holidays and travel where the concept of the long weekend is well-known. What the source area and the target area have in common is the extension of the weekend or the party over and above Saturday and Sunday.

Therefore metonymy and metaphor are not dichotomies but are partly overlapping concepts. This becomes clearer when the distinction between denotation and connotation is brought in. One way of understanding the two concepts is that denotation relates to the *extent* of a concept, almost the lexical meaning of the concept. A cat is a tiger or a Persian or a Siamese or . . . Connotation refers to the associations, the feelings and impressions the word gives over and above the exact meaning (Kunnskapsforlaget 1991). Such associations are often conditioned by culture and experience. In the example of the cat, the characteristics of the cat are of significance rather than the species or the taxonomy. This is what metaphor plays on – what is contained in the concept above and beyond the lexical meaning. Metonymy is closer to denotation than connotation, but as mentioned above it cannot be understood as the equivalent of metaphor. Jakobson (1997) described these two concepts as markers of two opposite poles of aphasia. Aphasia is a designation of language impairment that occurs after illness or brain injury. At one end of the scale Jakobson describes people with a similarity disorder. For them metalanguage usage is difficult. They are completely dependent on context to understand and use language. Jakobson describes an exaggerated use of metonymy in their speech and a lack of understanding of metaphor. At the other end of the scale are people with contiguity disorder. In their case the hierarchy of the linguistic units is affected. These patients have a lack of understanding of context. They do not necessarily find the words that are closely linked to the phenomenon, as required when using metonymy. Instead they use metaphors to a noticeable extent. It is important to clarify what is meant by contextual independence. A person with a similarity disorder is completely dependent on the context of the object to elicit the concept of the object. Thus a knife is not called a knife but is given a name according to its function, for example an apple peeler, knife and fork etc. These are metonyms. Such patients will be unable to detect similarities in two different contexts, and this makes metaphors difficult for them. The other group, with contiguity disorder, has a deficient understanding of context. They see similarities and can therefore make metaphorical identifications. It is assumed that this is not a conscious transfer of meaning, and the metaphors are therefore described as pseudo-metaphors (Jakobson 1997). Jakobson presented this theory as far back as 1956, which demonstrates that there was an early focus on the discovery that changes in the brain can lead to changes in the use of figurative language.

Other authors have also been interested in how figurative language functions after brain injury (see for instance Winner and Gardner 1977; Bottini et al. 1994; Brownell 2000). There is a significant difference between how those with acquired brain injury understand metaphors, depending on whether the injury is in the right or left hemisphere. Brownell et al. (2000) found that people with brain injury in the right hemisphere preferred denotative relationships such as associative and semantic similarity. People with injury in the left hemisphere were more focused on connotative aspects such as the content or the emotional tone. They explained this by pointing out that the right hemisphere controls many of the functions necessary to understand metaphor. One example is the ability to link together multiple semantic associations (Bottini et al. 1994), which, as we will see, has great significance for the understanding and use of metaphors.

To some extent figurative language can be paraphrased, i.e. rewritten in more literal language, but it is doubtful whether this is possible in all connections. Like Black (1962) I believe that many metaphors include elements that cannot be rewritten. This will be dealt with later in this study. First it is necessary to examine what is incorporated in the interaction theory's understanding of metaphor as a phenomenon.

Metaphor in communicative interaction – interaction theory

In 1936 Richards gave a series of lectures on 'The Philosophy of Rhetoric'. He defined metaphor as more than simply transferring words or phrases: 'When we use a metaphor we have two thoughts of different things active together and supported by a single word, or phrase, whose meaning is a resultant of their interaction' (Richards 1950, 93). Here Richards introduces the idea of metaphor as an interaction. He also describes metaphor as a borrowing of thoughts, as a kind of transaction between contexts (Richards 1950, 94). The core of Richards' theory can be seen as a discussion of metaphor on two levels: linguistic and cognitive. On the linguistic level, words are transferred from one context to another. On the cognitive level, meaning is created by the interaction of the two ideas. Richards asserts that a metaphor consists of two elements that it should be possible to describe. This had not been done at the time Richards gave his series of lectures. He proposed therefore the concepts of tenor (tendency, main content) and vehicle (means of expression) whereby the metaphor is the meaning created in the interaction between these two ideas. In the metaphor 'The young girl is a lily' the metaphor is neither the young girl nor the lily, but the lily is employed as a means of conveying a description of the target area – the girl in this case. The juxtaposition of these two concepts creates meaning such as innocence and beauty. Another example is 'The teacher is a gardener'. The metaphor is the unity between the two concepts which together invoke associations with cultivation, the supply of nourishment and so on.

Richards' theory that the metaphor is an interaction is further developed by Black (1962). Black regards the metaphor as a projection between two subjects, one principal and one subsidiary (Lavik 2004). It is the subsidiary subject (vehicle) that is projected via association with a principal subject (tenor). The metaphorical meaning arises when the interpreter 'sees' the principal subject through the lens of the subsidiary subject – when it is projected. The projection may be regarded as central to the understanding of the interaction theory. In the example 'The young girl is a lily', the characteristics of the lily and the feelings we experience in relation to the lily

are projected to the young girl. An associative understanding of the girl is created through the interaction of these concepts. At the same time the characteristics of the lily are projected. The metaphor gives a reciprocal influence, an understanding. This makes the metaphor more than a mere comparison. Classical metaphor theory is focused on the similarity of the source area and the target area. Interaction theory is based on the creation of similarity between the two areas. Drawing on this theory, the metaphor cannot therefore be defined as a compressed simile but as an interplay between tenor and vehicle.

Should metaphors be taken literally or should it be accepted that not all the characteristics of the rose are appropriate to the woman described in such floral figures of speech? A rose has thorns. Is this included in poetry on women? Black (1962) claims that a metaphor is like a filter – it highlights and conceals the qualities that the metaphor is intended to depict. This emerges clearly in the teacher/gardener metaphor which emphasizes the solicitude the teacher shall have for his/her pupils. At the same time it conceals much of the actual everyday job of the teacher: the profession is idealized. The metaphor can also create unintended associations. An important part of the gardener's job is to cut and prune, and to weed. These are not appropriate associations in the context of inclusion and in the comprehensive school. What a metaphor highlights and what it conceals presumably changes in line with the context in which the metaphor is used and with the cultural competence of the person constructing it and the person interpreting it. What is projected from the subsidiary subject to the principal subject will depend on the participants. It is important to keep this in mind when reading this study, since it is of significance in the question of the metaphor's function in communicative interplay.

The interaction theory in general and Black (1962) in particular are apparently strongly criticized by Davidson (2001). Davidson's hypothesis is that the metaphor's meaning is the literal interpretation of the meaning of the words. In contrast to Richards, who believes that metaphor lies in the interaction between vehicle and tenor, Davidson has the view that what characterizes metaphor is not its meaning but its use, pointing out that he is for the most part in agreement with Black and other experts on *what* metaphor does. His critique is of their theories on *how* metaphor does this (Davidson 2001, 247). He makes a distinction between what a word means and what a word usually does; in other words he differentiates semantics and pragmatics. Davidson understands metaphor as a pragmatic phenomenon and reserves it for language use. He criticizes Black, who in his view is more interested in the semantic part of the language and metaphor in its literal meaning. He clarifies this as follows:

> It is no help in explaining how words work in metaphor to posit metaphorical or figurative meanings, or special kinds of poetic or metaphorical truth. These ideas don't explain metaphor, metaphor explains them. (Davidson 2001, 247)

The concept of metaphoric truth will not be discussed in this study, but the quotation expresses Davidson's view that explaining how words function in a metaphor is not helpful in eliciting metaphorical or figurative meaning. By understanding the metaphor we gain access to its meaning. Like Richards and Black, Davidson distinguishes between ordinary similarity found in classical metaphor theory and metaphoric similarity. But while Richards is of the opinion that the metaphor creates similarity, Davidson is interested in additive similarity. By comparing common

characteristics of members of the class of the subsidiary subject and adding the principal subject, a metaphorical similarity arises. In this way words can acquire a new meaning in a metaphorical context. In Davidson's view there are no clear distinctions between a literal and a metaphorical meaning. It is the context that decides the meaning. This functions in the same way as an ambiguous word, for example light, whose meaning is decided by the context in which it is used.

Lavik (2004) points out that Black and Davidson agree in respect of interaction, the filter theory and the fact that the metaphor helps to detect similarities. He claims that their disagreement is primarily based on Davidson's view that Black has confused the question of the sentence's meaning with the effect the sentence has on us – in other words, a mixture of semantics and pragmatics. Lavik regards Davidson's essay not as an expression of genuine disagreement but rather as an extension of Black's theories. I disagree with Lavik. I have already pointed out Davidson's disagreement with Richards and Black on similarities. They also disagree on interaction. Davidson writes specifically, 'I do not think, as Richards does, that metaphor produces its result by having a meaning which results from the interaction of two ideas' (Davidson 2001, 262). The core of Richards' theory is that the metaphor's meaning arises in the interaction whereas Davidson believes that the meaning is already present in the literal understanding of the metaphor, supplemented by the additive similarity between the source and the target area. On this basis Davidson also disagrees with Black on the paraphrasing of the metaphor. Black's view is that in many cases the metaphor says something new, something that cannot be said literally or paraphrased, while Davidson feels that paraphrasing is superfluous because there will be nothing to transfer. Davidson claims that 'a metaphor *says* only what shows on its face – usually a patent falsehood or an absurd truth. And this plain truth or falsehood needs no paraphrase – its meaning is given in the literal meaning of the words' (Davidson 2001, 259). Thus they are in disagreement on several issues, but in my view Lavik does make a valid point about Davidson's distinction between pragmatics and semantics.

The metaphor as a facilitating or impeding element in communication

Aristotle points out in his work *Rhetoric* (2006, 1405a10) how the metaphor can be used to praise or to censure, using the beggar and the priest as examples. Both make requests. In order to praise, a word from a higher class is employed: the beggar entreats. A word from a lower class is used to censure: the priest begs. Today these examples would not necessarily be termed metaphors, but a metaphor can still help to strengthen and weaken, conceal and highlight. The metaphor may have a facilitating function in scientific and educational communication.

Selbekk (2007) writes that the metaphor's message is decided by the recipient. Only when the message and the recipient fit, does a new meaning emerge. Aristotle formulates this somewhat differently, claiming that metaphor is a sign of a natural gift since metaphor cannot be acquired from others. He also asserts that finding good metaphors is an ability to see similarity (Aristotle 1997, 71). With the interaction theory as the point of departure, Aristotle's expression 'see similarity' must be rewritten as an ability to 'create similarity'. In my view this must apply both to the person constructing the metaphor and to the person interpreting it. There is much to indicate that the use and understanding of metaphors is to a lesser degree an acquired skill but rather a linguistic skill that is controlled by specific parts of the

brain (see for example Bottini et al. 1994). Tetzchner et al. (2007) discuss this when describing figurative language in respect of people with Asperger syndrome. I will now turn to some areas that may make the interpretation of metaphors difficult, thereby leading to a breakdown in communication; this applies in the case of people with language disorders and/or when cultural competence varies.

Various language disorders can result in many breakdowns in communication if metaphors are used in communicative interaction. I have specialized in language disorders, and in my work I have met children with a semantic-pragmatic language disorder (SPLD). This is a complex diagnosis, but one of the symptoms is of particular interest in relation to the topic of metaphor. These children understand language very literally. The expression 'hop over dinner' would for them mean literally to get ready to hop over the dinner plate. 'Shooting a photograph' as a metaphor for taking photographs will also be understood literally. The child expects that a gun will be pointed at a photograph. As mentioned previously, the metaphor's linguistic dimension is controlled by special areas of the brain. This is probably the reason why disease or brain injury can lead to overuse of metaphors or to the converse – that metaphors are not understood. Creating a metaphor demands a specific cognitive process both by the creator of the metaphor and the person who interprets it. Asperger syndrome is a diagnosis group that has received increasing focus in recent years. One of the diagnosis markers is problems of understanding (Gillberg 1998; Martinsen et al. 2006). This applies *inter alia* to the understanding of contextual relationships, which, as we have seen, is of great importance in the understanding of metaphors. If Davidson is correct in his assertion that the metaphor's meaning is the literal interpretation of the word's meaning, children with Asperger syndrome should have an advantage because they understand literally. But Davidson adds that *context* decides the meaning of the metaphor. Here he is in complete agreement with Black who also sees the significance of context in understanding the metaphor, but as shown earlier in this study they follow different paths in reaching this conclusion and in applying it further. But context poses difficulties for people with Asperger syndrome. They struggle to decode figurative language and interpret it literally. Often they do not understand the intended meaning. Kaland (2003) adopts this as the starting point of his research project. He discovers that only one third of figurative expressions are understood by children and adolescents with Asperger syndrome, as against over 90% in the control group. In particular he points out that metaphorical expressions are interpreted literally (Kaland 2003, 105).

In addition, the ability to find meaning in a metaphor is to a considerable degree based on cultural competence. The Norwegian expression 'to jump after Wirkola' has no meaning if it is not known who Wirkola is, or if a person has not come across this expression in other connections. A metaphor based on dance will not be appropriate in circles where dance is regarded as sinful. If the person constructing the metaphor and the recipient do not have a common cultural competence, and if their understanding of the context differs, this may give rise to communication problems. On the one hand metaphors require knowledge of the culture and can thus impede communication, while on the other they can create understanding in cases where language would otherwise have been inadequate because of cultural differences. Explaining the metaphor 'to jump after Wirkola' by relating that Wirkola was a very good ski jumper and that it was difficult for other ski jumpers to emulate him and to improve on his performance can create an understanding of a linguistic nuance

related to the feeling that you have to exceed expectations. Metaphors can thus have a pedagogical function in that they simplify and explain difficult phenomena and words. Metaphors can also have a creative language function and facilitate the understanding of cultural phenomena for which there are no common terms. This requires the recipient to have – or to acquire – an understanding of the subsidiary subject employed.

Ylvisaker and Feeney (2000) dismiss the claim that understanding metaphor demands considerable cognitive abilities. They describe an empirical study based on rehabilitating young people with traumatic brain injury (TBI) after an external trauma. These young men and women had dysfunctional behaviour after the injury took place and were resistant to supervision and guidance. Ylvisaker and Feeney used metaphors as a route to rehabilitation. They found metaphors to which the individual could relate their current behaviour, based on that individual's earlier occupational or leisure experience. For example the metaphors might be based on the journalist's profession, on the yellow and red cards issued during a football game or on a trainer figure. Ylvisaker and Feeney explain this as follows:

> To help people with TBI organize their thinking and direct their actions, it is often helpful to bring together a potentially complex set of thoughts, procedures or behaviours as one compelling image or metaphor that at the same time serves as a beacon of incentive and as a compensation for cognitive impairment. (Ylvisaker and Feeney 2000, 417)

The establishment of metaphors led to the creation of mental self-regulatory signals for behaviour as a kind of guiding star. Ylvisaker and Feeney emphasize that the metaphors are particularly helpful when well-known and concrete words are used, and when the metaphors are based on subjects the individual is familiar with and experiences as meaningful. The article does not state whether the injury is to the right or left hemisphere, or is damage of a more complex nature. Nor do they discuss how these people would understand and acquire metaphors based on new contexts. On the other hand, life after a traumatic brain injury represents a new context in which the individual must find a new place in life and must relate to brain damage that has major consequences for interaction with others. By describing new situations with metaphors culled from life experiences prior to the injury, these young people achieve progress in their rehabilitation. This indicates that metaphors help to facilitate communication and interaction for these individuals, or as Ylvisaker and Feeney conclude: 'Comprehension of metaphors that are specifically tied to their pretrauma experiences and values is perhaps easier than comprehension of the same content presented without metaphorical support' (Ylvisaker and Feeney 2000, 420). So even if the metaphors employed do not make major cognitive demands, they help to create a similarity between the target area and the source area which enables the individual to communicate with his/her inner self. In my assessment, this use of metaphor can be described both *as* an interaction and *in* an interaction, and functions as a facilitator of communication.

Data on the informant

The adolescent I am working with has a traumatic brain injury that has affected several areas of the brain in both hemispheres. This has led *inter alia* to changes in

behaviour. People who knew him prior to the accident have observed increased use of figurative language after this occurred. Since no linguistic tests were available from the time before the accident, it is not possible to establish this other than through these observations. In all the conversations I have had with the boy he has employed a number of figurative images – sequences in which he played with words and showed highly associative language behaviour. These are functions that for the most part are carried out by the right hemisphere of the brain. He was thoughtful, and expressed himself well as regards content. In some instances he had to search for words, and he made a few grammatical errors, but not to the extent that it led to a conversational breakdown.

I have selected a few excerpts from the conversations I had with the boy. The first two excerpts show how metaphor can facilitate communicative interchange and help to improve the exploration of the topic. The occasion giving rise to the first extract was a conversation we had about how he experienced his academic inclusion. We talked at length about what he was doing at school, what he got help with, and how he thought things were going. The extract is taken from the part of the conversation when we were talking about his grades before and after the accident. He said that his grade in mathematics had fallen noticeably after the accident because he did not remember things so well. I attempted to elicit whether this affected him in any way:

Interviewer:	You used to be good at mathematics and now you think maths is difficult. How do you react to that?
Boy:	Sour. I'm chewing a sour apple from a Russian apple tree . . .
Interviewer:	Is it the case that you really want to eat the apple, but it's too sour, is that what you think?
Boy:	Yes, I suppose I'll have to wait a bit longer, it's probably not really ripe.

A literal interpretation of this excerpt has no meaning. Here there is communication alongside ordinary communication, a phenomenon rejected by Davidson in relation to the metaphor. In this excerpt I tried to elicit how the boy regards the change from being a gifted pupil with top marks to having to struggle to keep up with a subject that was earlier his favourite. The boy immediately resorted to a metaphor in his answer. In this manner he transferred an abstract feeling of which I have no personal experience to something we can both recognize – a kind of pedagogical metaphor. It is not the apple that is the metaphor, cf. interaction theory, but the experience of eating this sour apple versus the experience of not mastering something he had previously mastered well. By posing a follow-up question using the metaphor we were able to explore this feeling further. This gave the boy the opportunity to elaborate on the metaphor of the sour apple by using it as a symbol of how he regarded mathematics. This can be interpreted as showing that he is struggling with mathematics but that he sees it as a passing phase. This also agrees with the experiences that I know he has had following the accident: he is becoming less and less easily fatigued and is able to maintain his concentration for longer periods of time. In the period immediately after the accident he was not able to learn new things; anything new had to be linked to long-term memory. This has become measurably better and has also had an impact on his school subjects. In all likelihood it is what he is referring to when he mentions the ripening process.

He also uses metaphor to describe his feeling in another part of the conversation in particular. The conversation focused on how he experienced his social inclusion. He had described his leisure time prior to the accident, mentioning what he used to do together with his friends. After the accident the friends disappeared, no one visited him.

Interviewer:	Why did you like snowboarding, what was it that appealed to you . . .?
Boy:	You could jump really high, and then – one guy, a buddy of mine, could even do back-flips. Now he's a 'buddy' in inverted commas. Now he's not – well, now he says he's my buddy but does he visit me? No . . .
Interviewer:	Does that mean that you rank your friends according to how much you see of them in your leisure time?
Boy:	Now I rate them with the rubbish bin – compare, do some maths with the calculator, reach a conclusion, think, hmm, yes, yes, actually . . . Yes, and then . . . [pause]
Interviewer:	So when they don't visit you at home, they come down on the minus side of the calculator?
Boy:	Yes, they go straight in the bin.

Here too he tried to find words to express the feelings he had in connection with this, and selected metaphor as the mechanism. The boy's favourite subject is mathematics, and the metaphor is built on an area he is familiar with. This appeared to facilitate the communicative interchange between us and we could explore the metaphor together, thus eliciting how the situation affected him.

The language and speech disorders of this adolescent may lie at the intersection with aphasia although there is no aphasia diagnosis. The accident has led to damage in several areas of the brain. However, he does not clearly fall into the category of either similarity disorder or contiguity disorder (Jakobson 1997). Those around him observe a certain measure of searching for words, and problems explaining the meaning of words – features of similarity disorder. He is also described as an artist with words and has increased his use of metaphor – features of contiguity disorder. They are not pseudo-metaphors, as can usually be observed in the case of contiguity disorder. His ability to create context is good, while linguistically he can operate independently of context. His metaphors are poetic and combine two different contexts. There is much to indicate that the changes in the brain have led to an increased use of figurative language. The metaphors give depth and space to his conversations. Sometimes the use of metaphor is clearly an attempt to be humorous, as in the following excerpt:

Boy:	Yes, because I'm trying to say things that are witty, but they're not.
Interviewer:	You try to be humorous?
Boy:	Yes, I try and then I get too eager and start to speak too fast, and then the words are a bit tumble dryer [laughter], they dry out, the words.

He describes how he tries to be funny when he meets friends, but he feels that the joke falls flat. He laughs when he uses the tumble dryer metaphor. At other times his words have a more serious tone as in the example of the Russian apple metaphor. Those around him still describe him as bright. His ability to express himself clearly and to choose descriptions and images that sum up the essential meaning probably strengthens others' perception of him as possessing a high intellect. The metaphors

he employs lift communication to another level, but require his conversational partner to have the ability to follow his contributions.

Finally I will present an excerpt from the conversation in which I can see in hindsight that I was unable to follow his metaphor. During the conversation with the boy we touched on his personality and his relationship to his circle of friends prior to the accident. He had been described before the accident as a shy, quiet boy. The accident changed his personality and he became more outgoing. In his narrative he makes little reference to himself as shy and quiet earlier. He says 'Then I was a bit like Superman', meaning that he was one of the popular boys in the class. I tried to explore this breach between his own description and that of others and asked several follow-up questions. In the end the metaphor he gave was as follows: 'Yes, I used to raise hell, I was a devil. But inside I was good-natured, I was good at heart. I tried to take it out once, it was burning hot!' When assessing the conversation, the metaphor appears to me to be a last attempt to get me to understand how he regarded himself. He had tried in ordinary turns of speech first. At the time the metaphor seemed to me to be a contributory element in our conversation. In hindsight I see that what he said was not necessarily the same as what I had understood. Based on what those around him had said beforehand, I believed that I recognized the target area in what he said. Looking back at his narrative, I see that his target area may have been different from mine. I should have explored what he meant to a greater degree than I did. Afterwards his mother told me that the boy had been very shy and reserved before the accident, but was well liked by his friends. She thought that was because he was very creative in play and activities, he came up with a lot of exciting things to do, but never anything dangerous or unlawful. The examples show that metaphor can highlight, and it can conceal. Metaphor can help to describe difficult feelings, and it can shed light on an area the conversational partner is unable to understand in a literal description. Metaphor can also conceal, with the result that two people may be talking at cross purposes while thinking that they are talking about the same thing.

Conclusion

In this article I have discussed how metaphor can facilitate or impede communication. As a starting point I have used a comparative text analysis of two theories. I have included a wide range of examples from the field of special education and from my own interview material. Davidson does not touch on aspects of special education or culture in his essay. The closest he approaches this is when he links metaphor to context. Perhaps my background as an educationalist specializing in language and communication disorders makes it difficult for me to be in complete agreement with Davidson's critique of the interaction theory. As shown in this study, there are several diagnosis groups where metaphor impedes communication. People in these groups will interpret metaphors literally or will regard them as meaningless. For those with SPLD there is no question of paraphrasing. They will not comprehend that something must be rewritten but will understand – or misunderstand – exactly what has been said. Perhaps this is what Davidson alludes to when he says that an understanding of metaphor gives access to its meaning. If we look at this from a different angle, it means that the person who does not understand the metaphor as a metaphor does not have access to its meaning. Thus Davidson may be closer to the interaction theory than he admits.

Metaphor is one of a number of pedagogical tools in school. The pedagogical function of metaphor for simplifying and explaining makes it frequently employed in schools, both in textbooks and in the teacher's oral performance. Via metaphor the teacher can use contexts that are familiar to the pupils as a starting point, and can lead them to an understanding of new contexts. As I have shown earlier, a number of school pupils will have difficulty in understanding figurative language. These pupils will in all likelihood struggle to decode some of the academic texts. In addition, part of what is said by teachers and fellow pupils will be misunderstood. For these pupils the language used should be as concrete as possible. Those in the pupil's learning environment must pay attention to their own use of language and must explain the images that are used.

I have also attempted to shed light on the small group of pupils with special needs for whom communication can be strengthened by using metaphor. Ylvisaker and Feeney (2000) showed how metaphor based on experiences prior to the brain damage can assist in adjusting difficult behaviour after the injury. To succeed with this, helpers must be familiar with the person's life before the occurrence of brain damage, so that they know appropriate contexts on which to build metaphors. My informant demonstrates that even after a severe head trauma he can construct and understand metaphors. Metaphors assumed a communicative value in our conversations, which for the most part focused on his experience of his own situation, particularly when expressing feelings. If metaphors are intended to promote communication, it is vital that the conversational partner is responsive to input. Knowledge of source area context is also an advantage for the complete understanding of what the pupil wants to communicate through figurative images. I have attempted to show this by describing my interpretation of the heart metaphor. This interpretation was revised after conversations with the boy's mother, who outlined a different source context than the one I was aware of originally.

By presenting examples from an adolescent who I work with, I have shown that in some connections metaphor can facilitate communication. I feel that the metaphors he used gave depth to the conversations. It would be difficult for him to express in literal language the feelings he had relating to how he experienced inclusion in school. He could not find the words he needed and instead played on the meaning created in the interaction between source and target area. Metaphor is created by people for people in interaction between people. In this manner the interaction theory provides an essential contribution to what metaphor does, not only what it is, as Davidson claims. Metaphor can help to surmount and bypass language barriers, and also to clarify theory. The examples given in this study indicate that the use of metaphor opens channels of communication other than the purely linguistic. Language acquires a new dimension and, at the same time, a new depth. However, the manner in which metaphor conceals and highlights allows for different interpretations by the creator of the metaphor and by the person interpreting it. As I showed in the example on mathematics and the apple, this aspect can be exploited in conversation to provide depth to the topic and to explore the meaning of the person who has something to narrate. But this demands a willingness to make use of knowledge of the pupil's language abilities to accommodate the concept of inclusion.

Academic inclusion is based on exactly this: knowledge of the pupil's abilities and prerequisites. As I have demonstrated in this study, abilities in relation to metaphors will vary widely in groups of pupils with special needs. Knowledge of the pupil's diagnosis can assist in predicting the pupil's abilities vis-à-vis figurative language.

However, academic inclusion relates primarily to the school's knowledge of the individual pupil and of the individual subject, as well as the ability to create good dialogues between the pupil and the subject. Metaphor is a key element in our communication, but has different effects on different people's potential to communicate.

Note

1. The interviews were made in Norwegian, and have been translated in the best way into equivalent English. Sometimes it is difficult to find equivalent expressions in another language, especially for metaphors. Interested readers are invited to contact the author for access to the original text.

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