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Metaphor and education: Reaching business training goals through multimodal metaphor

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Abstract

Metaphor facilitates education by allowing for new perspectives or in aiding categorization and memorization. This study looks into the use of metaphor in a business training talk. The results show that the speaker repeatedly used words and gestures to express the journey metaphor. The project was also conceptualized as a physical object and managing a project as conducting an orchestra, both verbally and in the co-speech gesture. Other verbal war and sports metaphors were supported by either co-speech gestures or metaphoric images. Metaphors in business training settings seem to actively assist in persuading the business practitioners of the need to acquire a particular management ability.

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1. Introduction

Metaphor is approached in this study not only as a matter of language, but also as a cognitive phenomenon that structures thought and action (Lakoff and Johnson, 1980; Ortony, 1993). The human mind uses the metaphor to perceive an abstract entity in terms of another more concrete one. The process through which this happens has been theorized as the creation of mappings from a source domain to a target domain. The source domain is usually concrete and reflects the physical experience; the target domain, in turn, tends to be abstract and takes its structure from the source domain through mappings or through the conceptual metaphor (Deignan, 2010). For instance, in the conceptual metaphor DOING BUSINESS IS PLAYING A GAME, the source domain of playing a game is mapped into the target domain of doing business.

As a cognitive construct, metaphor has for long been used to facilitate education, and a number of scholarly studies approached the use of metaphor in educational contexts with a special focus on oral discourse and oral interaction (Cameron, 2003; Cameron & Low, 2004; Corts, 1999; 2006; Corts & Pollio, 1999; Littlemore, 2001, 2003; Low, Littlemore & Koester, 2008). However, there have been no attempts to analyze the use of metaphor in business training talks or presentations, where business practitioners are instructed to acquire business management knowledge and skills. This research focuses on the form and functions of multimodal metaphors in an introductory talk on project management. Metaphor in a business training talk can replicate the uses already identified in other

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oral educational contexts, but can also be used for other purposes related with business communication in corporate contexts.

2. Metaphor in education

Metaphor has for long been used to successfully facilitate education, fulfilling a number of functions such as creating new perspectives, enabling categorization or aiding memorization (Low, 2008; Mayer, 1993; Sticht, 1993). The use of metaphoric analogies has been pointed out as an essential aspect of academic discourse and practice, especially in the creation of theories (Boyd, 1993; Gentner & Jeziorski, 1993; Holyoak & Thagard, 1995; Sutton, 1993). Metaphors can help teachers communicate with learners who need to understand a theory (Lawson, 1993) or abstract concepts (Duit, 1991); they allow learners to generate inferences and test predictions (Dagher, 1995; Duit, 1991; Gentner & Holyoak, 1997; Holyoak & Thaggard, 1995; Lawson, 1993; Sutton, 1993); and they enable teachers to individualize teaching approaches to different learners and their level of understanding (Duit, 1991). The salience of a metaphor in a particular context can reinforce the learner's recall of information (Cameron, 2003), especially in the case of more concrete metaphoric constructs and expressions (Harris et al., 1999). From a more critical perspective, Spiro and colleagues (1989) warned about the oversimplification and falsification of concepts arising from the use of single metaphors. Multiple metaphors seem to be more suitable, as each metaphor could compensate for what might be explained through others. The use of metaphor in educational contexts is especially beneficial for learners actively involved in generating their own analogies. Several studies reported that such learners improved their critical thinking, questioning and problem-solving skills, and the ability to apply those skills to scientific texts and ideas (Middleton, 1991; Wittrock & Alesandrini, 1990; Wong, 1993).

The research on metaphor in oral educational contexts focused on the school classroom interaction (Cameron, 2003; Cameron & Low, 2004), and the university lecture (Corts, 1999; 2006; Corts & Pollio, 1999; Littlemore, 2001, 2003; Low, Littlemore & Koester, 2008), and paid a special attention to the metaphor's pedagogic functions, its discourse-structuring role, its systematic and also more spontaneous local uses combined with gestures.

Teachers, who adopt the position of an expert in a school classroom context, use metaphor to reduce conceptual alterity or differences in understanding a new perspective. They do so by offering smaller-scale metaphors between the known and the new concept, and by explicitly unpacking metaphorical meaning to explain it and then repacking it. Metaphor also plays an affective function when it is by used by teachers to express solidarity with students and for evaluation of power relations in the classroom (Cameron, 2003). A more detailed description of metaphor's role in the school classroom interaction in comparison to written educational discourse (Cameron & Low, 2004) showed that a greater variation in the use of metaphor in the classroom interaction was due to the fact that the teacher had a more accurate perception of students' existing knowledge and of the cognitive challenge of the topic than the authors of the popular science articles with regard to their readers. In a school science class interaction, metaphor was more frequent and its use more varied than in popular science articles, and this was related with the teacher's pedagogic goals: to make information more accessible, to ensure the appropriate level of complex understanding, and to motivate learners by affectively aligning themselves with the non-expert audience and by avoiding the position of an expert.

The metaphor in the classroom interaction was especially frequent in framing, that is, in the preceding and following episodes of the core sections, which introduced new information (Cameron, 2003; Cameron & Low, 2004). Framing involved organizational and agenda management talk in the classroom, and the metaphor was used there for alignment and summarizing. In the core sections, metaphors were used again to summarize, but only in order to provide further explanations, while the literal language was used for the introduction of new ideas. Metaphors also played an affective role in mitigating pragmatic difficulty and face-saving occurring in the classroom interaction when learners seemed to be unable to overcome cognitive obstacles. In popular science articles, on the other hand, the authors used metaphors to signal changes in argumentation, and tended to use the metaphor at the beginning of an explanation, unlike the teachers who used it at the end.

Metaphor in university lectures is a recurrent language feature that fulfills a number of discourse functions. Corts and Pollio (1999), and Corts and Meyers (2002) showed that US lecturers used metaphor in highly structured ways in order to organize the lecture and indicate the opinions of the speaker. Different results were reported in Low, Littlemore and Koester (2008), who analyzed the use of metaphor in three UK lectures. Metaphors were repeatedly used there, but to solve local problems in discourse, rather than to organize it more globally. The non-recurrent metaphors were found in the lectures examined, but with more occurrences in the conversational type of lecture, where students were allowed to participate, than in the formal one. Metaphors were not used to signal the start and end of major parts of the lecture in a clear and elaborated way, however there were cases of metaphors used to create end boundaries. On the whole, more active and creative metaphors were used in the conversational type of lecture than in the formal one.

The research on the use of metaphor combined with the gesture (Corts, 1999) revealed that gestures occurred with novel metaphors in bursts, and were concerned with the central topic of the lecture. They were also used when the topic was unfamiliar to students or when a familiar topic was presented from a different perspective. When the bursts of figurative language and gesture overlapped in the lecture, the gesture served to enhance the metaphor. On the whole, metaphors and gestures were reported to fulfill two functions: to orient the audience to the structure and flow of the lecture, and to present and emphasize novel perspectives on significant lecture contents. A more detailed study of the figurative language used in bursts with gestures (Corts, 2006), showed that analogies and metaphors representing a concept were more likely to be used on such occasions, whereas other figures, such as hyperbole were used in descriptive phrases outside the bursts. The regularity of such bursts was reported to have a significant cognitive role and was referred to as independent of the lecturer's personal style or the demands of the academic field.

3. Multimodal metaphor

In a multimodal metaphor the target and the source domains are expressed exclusively or predominantly in two different modes, of which one of the most frequent is the verbal one. The modes that are taken into account are two or more of the following: written language, verbal sound, static and moving images, music, non-verbal sound and gestures (Forceville, 2009). The choice that the writer or speaker makes for one mode over another or others in using a multimodal metaphor will affect its overall meaning, as the meaning expressed through one mode cannot be directly translated by another.

The volume edited by Forceville and Urios-Aparisi (2009) shows a broad panorama of research on multimodal metaphor, which looks at different contexts of metaphor use: advertising, political cartoons, comics, and film; and a variety of modes involved: image and word, music and non-verbal sound, or gesture and speech. Advertising discourse with its persuasive goals is a fertile field for multimodal metaphor, and has become especially attractive for metaphor scholars. Caballero (2009) reported that in wine advertising, verbal and visual multimodal metaphors tended to be of anthropomorphic kind and involved cultural perceptions. Yu (2009) pointed to three modes: image, word and sound in the multimodal metaphors identified in an educational TV commercial. Many of the multimodal metaphors identified in TV commercials by Urios-Aparisi (2009) were created through metonymical extensions and relied on a number of different modes, which as a result contributed to the fulfillment of the communicative goals of the genre.

The use of multimodal metaphors in corporate discourse has also been associated with persuasiveness. Koller (2009), for instance, found that the verbal and visual multimodal metaphors in different corporate genres served to increase its persuasiveness in communicating brand values both to external stakeholders and employees. In the visual and verbal multimodal metaphor, the target domain (eg. brand) tended to be encoded verbally, while the source domain (eg. person) was expressed through an image. In this context, it was the visual mode that reinforced the persuasiveness of the message transmitted.

Spoken interaction or face-to-face encounters are an inherently multimodal type of communication (Clark, 1973), involving speech, sound, or bodily motion, and therefore multimodal metaphor is a highly probable phenomenon to occur in such a context. Müller and Cienki (2009) in referring to the verbo-gestural metaphor, define the gesture as

positions, orientations and movements of the hands and forearms, and argue that the gestures whose primary function is abstract can be considered as metaphoric, unlike the referential gestures that refer either to physical objects, properties, actions, or relations, or to abstract notions in terms of such physical means (Müller, 1998). There are two main types of verbo-gestural metaphor occurring in spoken interaction. The first in which the source domain of a conceptual metaphor appears simultaneously in the verbal form and the co-speech gesture, and the second type in which the target domain is verbalized and the source domain is either expressed through the gesture or both through the gesture and in the verbal form (Cienki, 2008; Müller and Cienki, 2009).

In a speech, for instance in the business training talk, the audience receives the speaker's verbal message, but also perceives his/her intonation, body movements, as well as the visual contents of the PowerPoint presentation. In order to deliver a talk of this type, speakers intentionally combine different modes such as speech, written text, images and gestures. This type of context lends itself suitable for multimodal metaphor, especially of the verbo-pictorial and verbo-gestural types, even though metaphors relying on one mode can also occur. The multimodal approach to the metaphor's functions in the educational context examined in this study cannot but provide a thorough description of its use.

4. Materials and method

A videotaped talk delivered by Rita Mulcahy, who was a best-selling author of books on project management and a well-known business trainer, has been analyzed in this study. The talk was intended for business practitioners with practical experience of managing projects, but lacking a systematic training in this field. The 30-minute talk included the following topical points: introduction, project charter, project plan, work breakdown structure, risk management, and project control. The speaker showed a PowerPoint presentation including images and text, but also used different objects (books, CD-ROMs, a helmet, a shield,) in a theatre-like manner. It is not the purpose of this study to analyze the use of these objects, but what the speaker does with them sometimes reinforces the verbo-pictorial metaphors, and this aspect of the talk will be discussed.

The recording was first analyzed with reference to the verbal metaphors used, taking into account that building, journey and nautical metaphors are especially frequent in written project management discourse (Skorczynska, 2012). After that, the metaphoric images shown in the PowerPoint presentation, as well as the speaker's hand and forearm gestures were examined with regard to the verbal metaphors in order to identify the possible use of multimodal metaphors. Finally, the functions that the metaphors fulfilled in the talk were defined in view of the previous research on metaphor in education.

5. Results and discussion

The speaker used a number of metaphoric conceptualizations, of which some have been reported as frequent in written project management discourse (Skorczynska, 2012). For instance, she systematically referred to managing a project as making a journey in referring to choosing the right direction and following the right path. The building metaphors were not used except for one indirect reference made through a metaphoric image in which a group of people were trying to fit together gigantic puzzle pieces in a building-like manner. However, the project was on some occasions conceptualized as a physical object that can be broken down into different parts and that could remotely remind of activities involved in construction. The speaker did not use any nautical metaphor, but other one-off metaphors, which were not found in written project management discourse, were identified: a race metaphor, emphasising the idea of winning a race when successfully accomplishing a project; an orchestra metaphor making reference to the project leader as the orchestra conductor; and a war metaphor implying that a project manager is a warrior. The talk includes other one-off metaphors, which will be commented in the following sections.

5.1. Verbo-pictorial metaphors

The verbo-pictorial metaphor was the most common in the business training talk examined. It usually consisted of a short text on a PowerPoint slide, expressing the target domain, a metaphoric image depicting the source domain, and the speaker's words developing the text on the slide, and so expanding on the target domain. Six slides shown during the talk systematically used this combination of text, image and spoken word. For instance, in the topical point about the project charter, the text saying "Next Mistake. Project Managers do not have a plan" was shown together with an image depicting a man in a car, lost off the road, looking at a road sign indicating the right direction. The speaker also verbalized the target domain, already expressed through the written text, by saying: " we get going without a plan…".

Three variations to this verbo-pictorial metaphor were identified in the talk. In the first, two of the slides shown contained metaphoric images, but did not include any text expressing the target domain. The speaker, however, made verbal references to the target domain. The slides were displayed at the beginning of the talk and one depicted a tired-looking woman sitting at a desk and buried under a pile of documents, and the other was an image of a group of men carrying a coffin. The questions "Do you feel like this?" and "How about this?" accompanied the two images. The speaker, after showing the images and asking the audience the questions mentioned, made a reference to the target domain by saying: "if there are projects that are driving you crazy….". The two multimodal metaphors expressed the frustration caused by unsuccessful project management practices.

In the second type of the verbo-pictorial metaphor, neither the source nor the target domain was verbalized in speech. The metaphor's multimodality of the text and the image on a PowerPoint slide. The slide contained the text: "Next Mistake. Projects managers do not break down the project into manageable pieces", and an image illustrating four manager-looking people holding four gigantic puzzle pieces and trying to fit them together. In this case, the text included a reference to the target domain (project) and the source domain (break down … into manageable pieces), according to which the project is viewed as a physical object. The image provided more references to the source domain, by showing puzzle pieces or project parts being put together.

Finally, the last variant of the verbo-pictorial metaphor consisted of a written text (target domain) with an image (source domain) and the speaker's references to both the source and the target domain. The slide in question contained the text: "Risk management. Determining what can go right and wrong and doing something about it while still in planning"; and an image of a woman looking into a magic crystal ball. The speaker described the image, and thus made a reference to the source domain, but also talked about the importance of risk prevention, and in this way expanded on the target domain: "… they (project managers) take out their magic crystal ball and look into the future. So part of planning a project is to look at what might go right, as well as wrong…".

The verbo-pictorial metaphors identified used at least two modes: the verbal consisting in a written text and the visual, in an image. The dynamics of the business training talk, in which the PowerPoint presentation serves as the guide for the audience and aids the presenter in delivering the speech, allowed the speaker to additionally make verbal references either to the source or the target domain.

5.2. Verbo-gestural metaphors

In most of the cases when the speaker used a gesture as a mode in a multimodal metaphor, it served to enact the source domain, which was also simultaneously expressed in speech. For instance, in the topical point about the project charter, the speaker moved her left hand with the open palm to the right, as if drawing a straight line from the left to the right, when she was saying: "… you get started in the right direction". Her gesture enacted the source domain of journey, also expressed in speech, when she referred to signing the project charter as the starting point of a project. Similarly, in the section dealing with the project plan, the speaker was moving her arms simultaneously, but alternating the left arm moving to the right, and the right arm moving to the left, as if drawing wavy lines in front of her chest. She was doing so when she was saying: "…which are those paths to go in?". In the same part of the talk, the speaker again used the journey metaphor and in stating: "… you're gonna have the chance to walk it through…", she enacted the action of moving forward by keeping the left hand with the open palm facing her chest,

and the right hand with the open palm moving away from the chest in an up and down movement. This multimodal metaphor occurred twice in the topical point mentioned.

Another type of the verbo-gestural metaphor identified in the business training talk consisted in mentioning the target and the source domain in speech, and enacting the source domain through a gesture. In the topical point about the project control, the speaker said: "So, a great project manager is what I'd like to think of is more like an orchestra leader, than a person whipping people into shape." When verbalizing "orchestra leader", she moved her arms up and down as if drawing a half-round object, which might remind of an orchestra conductor's movement of arms, and when saying "whipping people", she made a movement with her right arm to represent the action of whipping.

The speaker also used the gesture to represent the source domain, which was not articulated in the verbal mode, but simultaneously expressing the target domain in speech. This happened on two occasions when she stated: "We know all the components and we're channeling it all into this direction to get it finished". For the phrase "all the components", representing the metaphor target, the speaker moved her left and right arm, with the half-cupped hands pointing at the audience, as if she was indicating different places on an imaginary board in front of her, which represented the components as physical points randomly located on a surface. The speaker, in turn, straightened her arms with the open palms facing the floor in a repetitive movement up and down, as if she was pushing something down, at the same time that she said: "get it finished". The action of finishing something was, therefore, represented as pushing something down. Finally, the speaker on some occasions made a gesture of keeping a round object in her hands in order to enact an abstract concept, such as a problem or a project. When talking about risk management, she made this gesture at the same time that she pronounced the word "problem" in "Communication is going to be a problem on our project". In addition, in the topical point about the work breakdown structure, the speaker used the same gesture for "this thing", meaning a project, in "So you take this thing that is driving you crazy", in order to express the idea of the project as an object.

On some occasions during the talk, the speaker made gestures using objects. Even though these gestures could be considered as referential, they had an abstract meaning and served as the source domain for the metaphor of learning project management is throwing books and being a successful project manager is being a warrior. In the first case, the speaker was throwing books on the floor with her right hand at the same time that she was saying: "We can go to books, books, books, and more books about projects, and there are maybe a few good ones out there." The target domain is expressed in speech just after that: "But forget the books. Why are we gonna read the books necessarily to educate ourselves? How about we try to do it right now?". In the second case, the speaker puts on a helmet and takes a shield with her right hand, while she is saying the word "warrior" in the following statement: "I'd like to see you to have the guts to implement it because if you do it, you will really be a warrior…". This gesture enacts the source domain in the metaphor mentioned, and is additionally reinforced by an image of a warrior shown on a slide.

5.3. Functions of multimodal metaphor

The multimodal metaphors in the business training talk used a variety of source domains, such as journey, race, building, orchestra, or war. The metaphors conceptualized different aspects of project management. However the use of metaphors with so different source domains did not seem to be motivated by pedagogic goals, but rather looked to increase the audience's attention and reach a high level of persuasion. In addition, the multimodal metaphors fulfilled a number of functions, some of which could be associated with its type: verbo-pictorial and verbo-gestural.

The verbo-pictorial metaphor combining written text, image and speech in its different variants commented previously was systematically used to introduce a new topical point, as well as to introduce a sub-point. Like in school class interaction, the metaphors introduced new information (Cameron, 2003; Cameron & Low, 2004), and also fulfilled a discourse-structuring role in a similar way to the verbal metaphors used in university lectures (Corts, 1999; Corts & Pollio, 1999; Corts & Meyers, 2002).

The speaker used the verbo-pictorial metaphor for alignment with the audience, but not to avoid the position of an expert, as Cameron (2003) reported with regard to the school class interaction, but to play the role of a problem-

solver who is particularly emphatic with the difficulties experienced by the members of the audience. This was observed at the beginning of the talk when the speaker intended to establish the audience's level of frustration in managing projects and increase their motivation by promising to show simple, non-academic and real-world solutions of project management. In addition, all of the verbo-pictorial metaphors pointed to the common mistakes in managing projects, and the speaker used them to emotionally appeal to the audience, and in this way create a positive response to the solutions offered in the talk. The verbo-pictorial metaphors played a relevant affective role both in identifying the audience's feelings of frustration, and in creating an emotionally motivated need for immediate and practical solutions.

The verbo-pictorial metaphors also served to provide information in a compact form, which was later unpacked and commented in detail. However, unlike the metaphors used in classroom interaction, they did not fulfill a summarizing role for the topical points in the talk (Cameron, 2003; Cameron & Low, 2004), except for the final image of a warrior, which created a strong finish.

The verbo-gestural metaphors performed a clear pedagogic function. They helped make the information more accessible to the audience, especially in the case of abstract concepts, such as a project or a problem, by providing them with a physical entity and form. The co-speech gestures that enacted the metaphor's source domain enabled the physical representation of the abstract aspects, but also aid in transmitting metaphorical expressions (eg. orchestra metaphor), and in emotionally awakening the audience (eg. throwing books on the floor). On the whole, and in a similar way to the gestures in university lectures (Corts, 1999), they enhanced the metaphors used for the significant points of the talk.

6. Conclusions

The business training talk can be considered as a communicative event with clear educational goals aiming at improving business practitioners' abilities and skills. However, the example analyzed in this study, revealed that the training objectives are reached not only by adopting a particular pedagogic approach, but also by using strong persuasion. The persuasive strategy put into practice in the talk consisted in pointing to the common mistakes in business management and offering non-academic, real-life and easy to learn project management solutions. The multimodal metaphor played an important role in this persuasive strategy (Koller, 2009), as it aimed to emotionally involve the members of the audience in recognizing their frustration and in identifying the feelings of satisfaction that project management solutions offer to business managers. The affective role of the metaphors was enhanced by the multiple modes, which appealed to the different senses of the audience, and in this way, increased their impact. In this sense, the use of metaphor in this particular situation differs from other oral educational contexts studied previously: the school class interaction and the university lecture.

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