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**METAPHORS ABOUT TEACHERS' ROLE AND DIDACTIC
INTERACTIONS IN PRIMARY SCHOOL**

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Abstract

In a major book in cognitive linguistics, *Metaphors We Live By*, Lakoff and Johnson (1980/2008) argue that metaphors are a common presence in every-day language, as well as fundamental mechanisms of the mind, shaping our understanding of experience and giving sense to the word. Arguing for the metaphorical nature of our conceptual system, the authors point out that our ordinary language is filled with metaphors even if we are not aware of their use and these metaphors shape the way we perceive the surrounding reality, the way we think, the way in which we relate to others and the way we act. Metaphors about education are present in the didactic discourse in schools and in the discourse about education in various contexts (teacher-parent interactions, media, literature). The presence of metaphors in classroom discourse, as well as their socio-cognitive functions and educational implications, have been illustrated by Badley and Brummelen (2012) in a book entitled, by analogy: *Metaphors We Teach By: How Metaphors Shape What We Do in Classrooms*. Starting from this theoretical background, the present study aims to investigate the presence of metaphors, as mental representations of primary school teachers, on two dimensions: teachers' role and teacher-student classroom interactions. The study sample includes 105 primary school teachers, selected on a voluntary participation basis from Romanian public schools (Alba and Hunedoara counties). The results are discussed in relation to their potential relevance for creating more reflexive teachers and for the optimization of the teaching practice.

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1. Introduction

According to the traditional view in linguistics and language studies, metaphors are mental constructs used mostly in poetry and creative writing for artistic and aesthetic purposes. Probably this perspective is still prevalent today outside the linguistic domain: most of us tend to view metaphors

primarily as figures of speech, elements of poetic imagination, contributing to the aesthetic force of the text and discourse. The seminal work entitled *Metaphors We Live By*, published in 1980 by G. Lakoff and M. Johnson, challenged this traditional view, founding the *cognitive metaphor theory* or *conceptual metaphor theory*.

In the main corpus of cognitive linguistics, language is viewed as a part of human cognition and as an expression of thinking, embedded and situated in the external environment. Thus, from a cognitive point of view, metaphors are primarily a matter of thinking and secondarily a matter of language. Lakoff and Johnson (1980; 1980/2008) argue that metaphors are primarily units of every-day thought, not only elements of figurative language. "Primarily on the basis of linguistic evidence we have found that most of our conceptual system is metaphorical in nature", claim the two authors (p. 92/124). Mental concepts are basic units of thinking, fundamental knowledge structures that shape the way we perceive the surrounding reality, reasoning and understanding, the way we act and relate to the others. Assuming that our conceptual system is largely metaphorical, then we must agree that metaphors are "pervasive in every-day life" and "the way we think, what we experience, and what we do every day is very much a matter of metaphor" (Lakoff & Johnson, 1980/2008: p. 92/124). Abstract concepts we use in everyday life - like time, change or beliefs - are understood metaphorically (e.g. time is space or resource, change is motion, beliefs are possessions or loved objects).

Conceptual metaphors allow us to express and understand an idea or a conceptual domain, usually one that is more abstract and ill-structured (*the target domain*), on the basis of another which is more familiar (*the source domain*). A conceptual domain can be any coherent organisation of knowledge. Conceptual metaphors involve a set of correspondences between features or constitutive elements of the source to the target domain. Conceptual or metaphorical *mapping* refers to the systematic set of correspondences established between constituents elements of the source and the target domain. Metaphorical mapping preserves "the cognitive topology of the source domain [...] in a way consistent with the inherent structure of the target domain" (Lakoff, 1993). All metaphors highlight some aspects of the target domain and they hide or elude other aspects. A number of elements of the target concepts are not pre-existing, they are imported from the source domain through metaphoric construction (Deignan, 2005). For example, if we metaphorically conceptualise the learning *aims* (target domain) as *targets* (source domain) we will tend to focus primarily on the results and secondarily on the process itself (including here methods, obstacles, social interaction, etc.). If we conceptualise the learning *aims/goals* as final *destinations to be pursued*, the main focus will be on the process. In the first case, we tend to import to the target domain the idea that academic success is mostly a matter of abilities (as when we try to reach a real target) and, in the second case, we tend to import the idea that academic success is mostly a matter of determination, perseverance and personal implication.

The analogical mapping between domains involved in metaphoric construction is mainly an implicit/automatic process and metaphors are integral parts of our ordinary thought and language. *Metaphors we live by* shape our basic understanding of the world: perceptions, reasoning, language and social interactions, emotions and actions, beliefs about life and death. "Metaphors are so commonplace we often fail to notice them" said Lakoff and Turner (1989). The proponents of the conceptual metaphors theory argue that metaphoric thought is not a peripheral form of thought since "few or even no abstract

notions can be talked about without metaphor" and the only option to understand them is "through the filter of directly experienced, concrete notions" (Deignan, 2005).

By metaphoric construction we ground abstract concepts in meaning indirectly through more concrete mental representations or units of knowledge, mostly derived from experience. In a frequently cited example, the *Life is a journey* metaphor (Lakoff & Johnson, 1980/2008) our understanding of *life* comes from our knowledge about *journeys*, a conceptual domain more accessible to direct exploration. Conceptual metaphors typically involve an abstract concept as target and a more concrete concept as their source. Lakoff and Johnson (1980; 1980/2008; Johnson, 1987; Lakoff, 1987) adopt an embodied cognition perspective in cognitive linguistics, arguing that our complex and most abstract conceptual system comes - at an ultimate level of analysis - from *image schemata*, derived from our bodily interactions with the world. For the two authors "concrete" experience in the world means sensory, perceptual and motor experience as we interact and move through the world. Image schemata are multimodal, dynamic, pre-linguistic and pre-conceptual structures, consisting of recurrent patterns of experience structured in our mind, providing the basis for understanding and reasoning at more abstract levels. Image schemata are pervasive in language and the socio-cultural context (Johnson, 1987). For example, at the origin of the *Life is a journey* metaphor we find a basic kinaesthetic image schema: *the source-path* schema. This is a basic structural unit of human experience, involving a source, a destination, a path and a direction (Lakoff & Johnson, 1980/2008, Lakoff, 1987; Johnson, 1987). *The container* schema is another basic common image schema and it consists of a boundary distinguishing an interior from an exterior. When we say "I have many ideas in mind" or "I have an empty mind", when we advise somebody to "keep in mind" something or when we declare "I don't know what is in her/his mind", we conceptualise the human mind through a container schema.

Metaphoric construction means much more than transferring knowledge from one domain to another; in fact metaphors play a central role in defining our everyday realities (Lakoff & Johnson, 1980/2008). Metaphors are a common presence at all levels of discourse - even in the educational discourse - and people, students and teachers as well, use them almost automatically. The presence of metaphors in the educational discourse and their influence on teaching, learning and related processes - including here didactic communication, classroom interactions and affective climate, teacher's values, attitude and actions, learning strategies, etc. - have been illustrated by Badley and Brummelen (2012) in a book entitled: *Metaphors We Teach By: How Metaphors Shape What We Do in Classrooms*. For example, a teacher who views the student mostly as a *beneficiary* of teaching and learning will try to focus primarily on the *efficacy* of his/her didactic activity. If the student is metaphorically considered as a *partner* in the learning process the teacher will be more oriented towards the use of interactive learning strategies/methods. Teachers who conceptualise classroom communication according to the Shannon-Weaver model - as a process of sending and receiving information - are prone to view the teaching process mostly as a process of transmitting knowledge to the students. Metaphors, present at all levels of the educational discourse (Block, 1992; Ben-Peretz, Mendelson & Kron, 2003; Chen, 2003) can help teachers to articulate and construct their professional experiences (Kramsh, 2003; Nikitina & Furuoka, 2008) and guide their teaching practice (Cortazzi & Jin, 1999; Tăușan, 2011; Cook-Sather, 2003; Badley & Van Brummelen, 2012).

2. Rationale and aims of the study

The language in the educational field is rich in metaphors (Badley & Van Bummelen, 2012). There are metaphors *in education* and metaphors *of education* (Lukes, 2006). Students, teachers and other professionals *in education* use metaphors as "vehicles for thought" (after Nikitina & Furuoka, 2008) in most cases automatically, without being aware of their use, and deliberately when they want to express in a vivid and condensed form an idea which is difficult to explain in detail. Teachers use metaphors as instructional tools, with the intent to: facilitate conceptual understanding in mathematics or science, express complex knowledge, construct alternative interpretations of events, promote critical thinking and inquiry in order to find personal meaning, organize and make sense of a large amount of data (Lakoff & Nunez, 2000; Beger & Jäkel, 2015). Metaphors are sometimes used as tools for enhancing creative expression, with the intent to facilitate social and emotional communication, to obtain dramatic effects or to enhance the persuasive force of the message (Cortazzi & Jin, 1999; Deignan, 2005). Several popular generative metaphors *of education* are: *the market* metaphor (school managers and policy makers talk about the "educational offer", "educational costs", learning is "acquisition" of knowledge), *the growth* metaphor (schools are "greenhouses", teachers are "gardeners", students are "fragile plants"), *the family* metaphor (schools are "families", teachers are "parents"), *the building* metaphor, *the engineering/scientific* metaphor or *the society* metaphor (Lukes, 2006).

Metaphors in/of education are pervasive outside and inside the classroom: in official documents and textbooks, in the instructional discourse, in the parents' and students' personal reflections, in students' creative writing and drawings, in dedicated and popular media. Even if people use them mostly at the implicit level, these metaphors exert a significant influence on the learning process, teaching practice, classroom climate, teachers' attitudes and students' behavior, assessment policies, curriculum development, educational ideal, parental values and social expectations. Part of the school/classroom culture, some of the most prevalent educational metaphors are desirable - for example "learning as a knowledge construction" is an adequate mental representation in a constructivist classroom or "teacher as conductor for an orchestra" is a good illustration for an efficient classroom management. Some other metaphors are undesirable, implicit and probably difficult to overcome - the "container" metaphor for the human mind or the "teacher as an absolute knowledge owner" - and others are simply overused - a book as a symbol of knowledge, learning as a light bulb or the primary teacher as a mother (Duggan-Schwartzbech, 2014).

Metaphors we teach by can serve as *an important instrument of analysis* (Oxford et al., 1998) for classroom practices, teachers' beliefs and educational ideologies, classroom climate, students' experiences and expectations, and learning strategies (Nikitina & Furuoka, 2008). If the teachers are aware of the conceptual metaphors they use in/of education, they will be able to structure and to give signification to their classroom experiences and to ameliorate their classroom practice (Bowman, 1996-1997; Nikitina & Furuoka, 2008).

Using cognitive metaphor analysis, this study aims to investigate the mental representations of teachers' role and teacher-student classroom interactions in primary school. The study focuses on the education-related metaphors produced by a sample of primary school teachers selected from Romanian

public schools. The results are discussed in relation to their potential relevance for creating more reflexive teachers and for the optimization of the teaching practice.

3. Methodology

3.1 Participants

The study sample consisted of 105 primary school teachers, selected on a voluntary participation basis from Romanian public schools (Alba and Hunedoara counties). The age of the participants was between 25 and 59 years, all of them being females, all having a BSc degree in Preschool and Primary School Education and the majority having, or pursuing, a MSc degree in Education. The majority of the participants (N = 86) teach in public schools situated in urban areas.

3.2 Instruments

In order to investigate the teachers' conceptual metaphors about their roles and about classroom interaction with the students, I used a quantitative method, a questionnaire. The questionnaire listed 32 metaphors organized around several conceptual domains (Table 1). The participants were asked to express their agreement or disagreement with each of these metaphors on a 5-point Likert-type scale (possible ratings ranging from 1 - "strongly disagree" to 5 - "strongly agree"). The participants provided some socio-demographical data (age, years of experience in teaching, education, urban/rural location of the school) and they completed the questionnaire anonymously.

In the first phase of the construction of the questionnaire I selected an initial list of 40 metaphors based on a literature review (Ben-Peretz, Mendelson & Kron, 2003; Block, 1992; De Guerrero & Villamil, 2001; Oxford et al., 1998; Nikitina & Furuoka, 2008). In a second phase, a group of 30 students in Primary and Preschool Education were asked to finish the sentence "The teacher is like" with their own metaphor and to provide a very short explanation for the given metaphor (procedure adapted after Nikitina & Furuoka, 2008). As a result, 3 other metaphors were added to the initial list (only 3 because most of the metaphors generated by the students were already recorded in the first list). In a third phase, the 30 participants were asked to analyze the whole list of metaphors (43) and to rate them on a 10-point scale (0 - irrelevant/inadequate, 10 - relevant/adequate). 32 metaphors were maintained in the final list, after the exclusion of those with very low mean score (below 2-points).

4. Results

The collected data are centralized in Table 1. The mean score indicates the participants' agreement with the metaphoric description of the teacher's role and her/his classroom status/activity (including here teacher-student interaction). The conceptual metaphor analysis has been used as an instrument to investigate the primary school teachers' perceptions about their role/status in the classroom context.

Table 1. Mean scores(*) for each metaphor included in the questionnaire

Domain (**)	METAPHORS	Mean score (N=105)	
Authoritarian leader	The teacher as ...		
	Court judge	2.33	
	Boss	2.04	
	Policeman	2.14	
	Captain (on a ship)	3.19	2.85
	Lighthouse	3.28	
	The brain (gives commands to the other "parts" of the classroom body) (***)	3.66	
Trusted authority	The sun (the teacher is the central planet in the "classroom" system)	3.33	
	Doctor ("prescribes" the students what to do)	3.61	3.68
Cooperative leader	Legal advisor (the students must faithfully follow the teacher's instruction)	3.76	
	Orchestra conductor	4	3.92
Provider of knowledge	Coach	3.85	
	Encyclopedia	4.23	4.35
Innovator or agent of change	Expedition guide (the teacher leads students around the new territory)	4.47	
	A window to the world	4.61	
	Hero	3.28	3.83
Nurturer	Candle	3.61	
	Mother/Parent	4.47	
	Gardener	4.04	
	Sunshine (the teacher gives warmth and facilitates the students' growth)	4.61	4.34
	Older brother/sister	4.09	
Constructivist pedagogy	Friend	4.52	
	Constructor of knowledge/competences	4.33	
	Manager of the learning process	4.61	
	Provider of tools for learning	4.42	4.49
	Facilitator	4.52	
Artist	Mentor	4.57	
	Potter	4.09	
	Sculptor	3.85	3.91
Other roles	Designer	3.80	
	Learning partner	4.80	
	Counsellor	4.66	
	Entertainer	4	

(*) Sum of all ratings/number of respondents

(**) These domains were added after the data was collected with the intent to organize metaphoric representations in conceptual categories or around the dominant perspective on learning

(***) The explanations in brackets circumscribe the meaning of some metaphors considered to be too vague or having multiple meanings

5. Discussions

The data presented in Table 1 offer a sketch of "a hidden image" of the teacher in primary school. Cognitive metaphor analysis allows us to obtain information from the teachers about their perceived roles, status and relations with the students involved in the learning activity. At a first glance, this emergent "image" of the teacher appears somehow contradictory - a mixture of *constructivism-inspired figure* (the mean score for the items designating metaphoric roles inspired by constructivist pedagogy is 4.49), *provider of knowledge* (mean score 4.35) and *nurturer* (mean score 4.35). As leaders of the classroom, the primary school teachers view themselves mostly as *cooperative leaders* (mean score 3.92),

sometimes as *trusted leaders* (mean score 3.68) and rarely as *authoritarian leaders* (mean score 2.85). Data indicate a progressive transition from the traditional role of the teacher as "the owner" or "depository" of knowledge and wisdom (the mean score for the "teacher as an Encyclopaedia" metaphor being considerably high = 4.23) to more complex roles promoted by the constructivist perspective in education (manager of the learning process, mean score = 4.61; mentor, mean score = 4.57; facilitator, mean score = 4.52; constructor of knowledge/competences, mean score = 4.42; provider of tools for learning, mean score = 4.33). The view of the teacher as a *trusted leader* seems to be outdated, the mean score for *cooperative leader* being slightly higher (3.92 compared to 3.68).

Items/metaphors with the highest scores (mean scores between 4 to 5, the possible scores ranging in the interval 1-5) are in this order: learning partner (4.80), counsellor (4.66), manager of the learning process (4.61), window to the world (4.61), sunshine (4.61), mentor (4.57), facilitator (4.52), friend (4.52), expedition guide (4.47), mother/parent (4.47), provider of tools for learning (4.42), constructor of knowledge/competences (4.33), encyclopaedia (4.23), potter (4.09), old brother/sister (4.09), gardener (4.04), orchestra conductor (4), entertainer (4). Most of these metaphors reflect the roles for teachers prescribed by the *constructivist approach* in education (learning partner, counsellor, manager of the learning process, mentor, facilitator, provider of tools for learning, constructor of knowledge/competences) and roles related to *nurture* and *care* (friend, mother/parent, old brother/sister, gardener). The high scores assigned to metaphoric constructions like *a window to the world* and *an expedition guide* suggest that the learning process is conceptualised as a process of discovery - less guided, an opportunity explored out of curiosity, in the former case, and more guided in the latter one. Authoritarian classroom roles such as court judge (2.33), policeman (2.14) or boss (2.04) had the lowest rating scores, being avoided by the respondents.

This study offers a sketch of the primary school teachers' perceptions, beliefs and intuitions about their roles in the classroom and about their didactic rapports and interactions with the students. Because of the small size and demographic heterogeneity of the study sample, this investigation should be considered rather as a preliminary pilot study, a starting point for further in-deep investigations of the topic, but it is hoped it successfully illustrates the utility of the conceptual metaphor analysis as an investigation tool for the teaching and learning processes.

Some of the metaphors that teachers use in describing their roles and activities in the classroom could be considered "good" metaphors (i.e. in accordance with the dominant educational theories; for example: facilitator, manager of the learning process or orchestra conductor). These metaphors should be emphasized, explained in detail, brought to the teachers' attention and eventually used as didactic tools in the teacher training programmes. Other metaphors are simply reminiscent reflections of older perspectives on education and usually they are "imported" from the school culture (e. g. the teacher as an encyclopaedia). They should probably be acknowledged and overcome. And others are, although pervasive, rather overused (e. g. the teacher as a mother). For in-service teachers, metaphor analysis could contribute to a better understanding of their beliefs and behavioral patterns in the classroom and as an instrument of reflection and progress towards more efficient teaching practices.

6. Conclusions

The conceptual metaphor theory developed by Lakoff and Johnson (1980/2008) offers a valuable frame of analysis of educational processes. Conceptual metaphors could be valuable didactic tools and instruments of investigation in the educational field. By conceptual metaphor analysis researchers gain access to the implicit perceptions, beliefs and cognitive representation of the teaching, learning and classroom processes. The results and conclusions of the conceptual metaphor analysis could become starting points for enabling teachers to become more reflexive and for optimizing the teaching practice in primary school.

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