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Faculdade de Letras da UFMG

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***Metaphors we live by in Brazil: anthropophagic notes on classic and contemporary approaches to metaphor in the Brazilian scientific-academic context***

***Metáforas da Vida Cotidiana no Brasil: notas antropofágicas sobre abordagens clássicas e contemporâneas da metáfora no contexto acadêmico-científico brasileiro***

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In his “Anthropophagic Manifesto”<sup>1</sup> (1928/1991), one of the most famous Brazilian literary texts, the renowned poet Oswald de Andrade poses the polemic and ironic question: “Tupi or not Tupi? That’s the question”.<sup>2</sup> Opening this introduction with this metaphoric

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<sup>1</sup> Translated into English by Leslie Bary (1991), and also named by the translator as “Cannibalist Manifesto”. The original text is emblematic of a Modernist proposition that influences from abroad should be subsumed, but also should be turned into a uniquely Brazilian art form.

<sup>2</sup> At the same time that the question is a parody of Shakespeare’s “Hamlet” opening question, it also makes a reference to the cannibal (anthropophagic) rituals performed by the Tupi [tu’pi] Indigenous Populations that lived in the Brazilian territory before the massive genocide (comprising ethno- and glottocide) of the Brazilian Indigenous Populations by the European colonizers.

and provocative question, we intend to present some of the most important theoretical lines of investigation on Metaphor Studies, and their repercussion, adaptation and transformation in the Brazilian research context. In the last forty years since the publication of *Metaphors We Live By* (LAKOFF; JOHNSON, 1980), we have witnessed the development of classic Conceptual Metaphor Theory (CMT) and its applications in various fields. In addition to many remarks made about Lakoff and Johnson's proposals, it is also worth bringing up the development of the Contemporary Theories of Metaphor worldwide.

It is worth noting that the notion that metaphor is not just a poetic device, but has underpinnings in how understand one idea in terms of another, has roots that can be traced back to several scholars from the 19<sup>th</sup> century (JÄKEL, 1999; MÜLLER, 2008a), and as they and others have argued, to Aristotle himself. However, the big boon to metaphor studies in the late 20<sup>th</sup> century came with the publication of Lakoff and Johnson's small book in 1980 that had big implications.

The work was the beginning of a number of publications by the two authors in the two decades that followed (e.g. JOHNSON, 1987; LAKOFF, 1987, 1993; LAKOFF; JOHNSON, 1999) which established one of the cornerstones of what developed into the field now known as Cognitive Linguistics. Basic principles espoused in these works concern how human embodied experience provides a fundamental basis for many aspects not only of how we understand how the physical world works, but also for how we understand abstract concepts, via metaphoric mappings from patterns in our physical experience to properties of the abstract. Patterns that Johnson (1987) and Lakoff (1987) characterized as "image schemas" can be cited here as one set of experiential structures that provide reference points by which we make sense of many aspects of our experience.

To provide a more concise state of the art of Metaphor Studies in Brazil, we can turn to the history of the International Conferences on Metaphor in Language and Thought (CMLT), the most important Brazilian conference in the field. As the conference organizers are relevant Brazilian researchers in the field, tracking down their production, as well as the issues dedicated to each conference, can offer a good overview of the scope of Brazilian academic work, including both classic and contemporary developments, adaptations and transformations of Metaphor Studies in the country. Comprising six (and a forthcoming

seventh) editions, the CMLT assembles researchers from all over the country, and also all over the world, as well as the most important national and international figures of reference in the field.

The first edition of the conference was held at PUC São Paulo in 2002, jointly promoted by the Graduate Program in Applied Linguistics and Language Studies and by GEIM – The Indeterminacy-of-Metaphor Research Group, under the supervision of Mara Sophia Zanotto. The conference enabled highly relevant discussions about metaphor in language and thought in Brazil and abroad. After the discussions that took place at the 1<sup>st</sup> CMLT, many Brazilian scholars turned to the development of research, as well as to participating in expanding, deepening and improving the research interest in the topic. In the same year, translation of Lakoff and Johnson's (1980) seminal book was named, entitled *Metáforas da Vida Cotidiana* ["Metaphors of Everyday Life"]. The book translation, and its huge success all over the country, made possible the dissemination of the CMT in Brazil.

GEIM, the research group headed by Zanotto and Heronides Moura (Federal University of Santa Catarina), and also formally registered in the Research Group Directory of the Brazilian National Scientific and Technological Council (CNPq),<sup>3</sup> has produced a large amount of academic-scientific research. In a thesis dedicated to mapping the different perspectives adopted by Brazilian scholars devoted to Contemporary Theories of Metaphor, Giacomo (2010) analyzed 305 studies published between 1998 and March 2010. As concluded by the author, GEIM was the research group that made the most significant contributions in the field. Giacomo (2010) also states that: "As a matter of fact, the members of this group are many of the most important researchers dealing with metaphor studies in Brazil by far" (GIACOMO, 2010, p. 74).

Regarding international dialogues, the Conference had Lynne Cameron, Raymond Gibbs Jr., Gerard Steen and Jacob Mey as keynote speakers. An unprecedented debate took place among the first three researchers, revealing theoretical differences and specificities about these researcher's approaches: Cameron defended her thesis of systematic metaphors in discourse, while Gibbs and Steen advocated for a more cognitive and experimental approach to the subject. It is worthy to note

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<sup>3</sup> One of the two Brazilian governmental agencies that regulate and fund research (including research scholarships and grants) in the country.

that all three researchers had a high impact on Brazilian Contemporary Theories of Metaphor.

Focusing on Cameron's contributions, her work has offered metaphor scholars a different perspective on metaphor analysis, focusing on how groups of metaphors used in discourse by particular individuals or on a particular topic can constitute recurrent patterns, what Cameron calls systematic metaphors (CAMERON, 2003; CAMERON; MASLEN, 2010). This approach highlights larger patterns used in reasoning about the abstract domains under discussion. It has proven particularly fruitful in analyzing, for example, talk used by teachers and students (CAMERON, 2003, CAMERON; LOW, 2004), and discourse entailed in reconciliation talks (CAMERON, 2007, 2011).

In the years that followed the I CIMLP, there was an increasing focus in research on socio-interactional and socio-cognitive aspects of metaphor, related to cultural, ideological and social contexts. The social dimension of language and thought was the central theme chosen for the second conference, held in 2005 at Federal Fluminense University (UFF), and Cameron was one of the keynote speakers again, which demonstrate the relevance and the further developments of her approach in Brazil. Three other international researchers were invited as keynote speakers: Alice Deignan, Zoltán Kövecses and Andrew Goatley. The 2<sup>nd</sup> CMLT was organized by the Indeterminacy of Metaphor in Discourse Research Group (GEID), led by Solange Vereza, a very relevant researcher in Brazilian Metaphor Studies. Founded in 2004, GEID investigates issues related to the indeterminacy of meaning in speech and metalanguage, following proposals by Kövecses' (2005).

More specifically, the group's work presents a methodological variety of empirical studies, providing further articulation to the fields of Metaphor Studies and Applied Linguistics in Brazil. Vereza became especially famous for developing the so-called "metaphoric niche" (VEREZA, 2010, p. 708). This proposition "aims at establishing, theoretically and methodologically, the articulation between the discursive and cognitive dimensions of metaphor in argumentative texts" (VEREZA, 2010, p. 708). In short, Vereza (2010) proposes that a metaphoric niche is a unit of analysis that can formally be identified as figurative chains or networks, textually composed by a group of metaphoric expressions. When analyzed in a systematic way, one can see that a superordinate metaphoric expression can be cognitively and

discursively entailed, which can be identified co-textually from the grouped metaphoric expressions.

CMT was further popularized and disseminated through a number of books by Kövecses (1986, 2003, 2005, 2010, 2015). His work gives particular attention to the importance of cultural factors in accounting for the diversity of metaphors in different languages, and more generally, to the role of context, and not just cognition, in how metaphors arise and how they are understood. The Metaphor in Culture Approach, developed by Kövecses (2005) influenced many Brazilian academic-scientific works. The researcher also has been a prominent guest at a number of metaphor conferences in Brazil over the years, including three editions of the CMLT conference.

The 3<sup>rd</sup> CMLT was held in Ceará, a state located in the Northeast of Brazil. The conference was formally approved during RaAM 6, in Leeds – England, in 2006, with the commitment of holding a conference every three years. Since then, the conference has had RaAM endorsement, being announced in the Association's newsletter. The conference was promoted by both the Academic Master's Course in Applied Linguistics from the State University of Ceará (UECE) and the Postgraduate Program in Linguistics (PPGL) at the Federal University of Ceará (UFC). This conference's third edition was coordinated by Paula Lenz da Costa Lima (UECE) and Dr. Ana Cristina Pelosi (UFC). As keynote speakers, the following researchers were invited: Francisco José Ruiz de Mendoza, Zoltan Kövecses, Raymond Gibbs Jr., both invited for the second time, and Lynne Cameron, invited for the third time.

Paula Lenz Costa Lima heads the Cognition and Metaphor Research Group (COMETA), founded in 2004. The group investigates the relationship between language and thought within studies in translation, lexicology and language processing. Corpus materials are gathered for metaphor research in the field of Applied Linguistics, produced in real contexts of use, such as transcriptions of classes and didactic materials. Gibbs is one of the group's fellow researchers. Lenz is also a very important promotor of the diffusion of Cognitive Linguistics in Brazilian Portuguese, in manuals devoted to Semantics (LENZ, 2013).

Since 1998, the researcher, as well as a large number of Brazilian metaphor senior scholars, also developed studies about Primary Metaphors, initially developed in the international scene by J. Grady, whose PhD thesis (1997a) set forth a distinction that some metaphors

are built on more basic facets of our physical experience than others are. The mappings that he called ‘primary metaphors’ (e.g., similarity is proximity, causes are forces, etc.) were found to also be ones which are instantiated across a wide variety of languages and cultures. These ideas were further developed in other works by Grady (1997b, 2005b) and were tied to a distinction between different types of schemas: ones which are directly based in our sensory experience, and ones which have to do with our interpretation of and response to the world. On this view, primary metaphors involve ‘response schemas’ being understood and experienced in terms of sensory image schemas (e.g., DIFFICULTY IS HEAVINESS). The overarching shared structure between source and target in primary metaphors Grady (2005a) calls a superschema. In the case of DIFFICULTY IS HEAVINESS, for example, the superschema is that of scalar property. The superschema is then comparable to the generic space in blending theory (described below).

Regarding the articulation between Metaphor Studies and Translation and Language Processing Studies, like the ones developed by Lenz’s group, since 2007, a corpus-based approach to automatically (or semi-manually) identify metaphors became greatly prominent in Brazil. Tony Sardinha (PUC-SP) developed online software for identifying possible metaphors in large digital corpora. In short, the author (2011) proposes the inter-relation among the following parameters of identification of: (1) linguistic metaphoric expressions (the lexicogrammar) pattern, revealed by corpus analysis; (2) metaphor probabilities, derived from frequency-based studies of metaphor; (3) the parameters of variation systematization in metaphor use across different registers; and (4) automated metaphor retrieval, related to the development of software to help identifying metaphors in corpora.

Opposed to this quantitative approach proposed by Sardinha (2007, 2011), that guided many studies in Brazil, there was also a growing interest on the inter-relation between Metaphor Studies and Discourse Analysis and Conversational Analysis fields. Ana Pelosi and Emília Farias (both from UFC) have headed the Linguistics and Cognition Research Group (COLIN) since 2000. With a broad scope, the group investigates a range of topics, encompassing different approaches to metaphor in use. Both Lenz’s and Pelosi’s groups work in collaboration made Ceará “a major research center on metaphor, being recognized both nationally and internationally” (GIACOMO, 2010, p. 75).



Cameron played an instrumental role in advising senior researchers in metaphor studies in Brazil. As reported by Cameron herself (2010, p. 9), in the context of a broader project set up by Ana Pelosi and Heloísa Feltes, named “Sociocognitive representations of Violence in Brazilian Urban Centers” [“Representações Sócio-cognitivas de Violência em Centros Urbanos Brasileiros”], a joint UK-Brazil research project was carried out, analyzing responses to violence and uncertainty. Later, Luciane Corrêa Ferreira, from Federal University of Minas Gerais (UFMG) also joined the project. The study gathered together focal groups composed of Brazilian adults to discuss the high levels of urban violence experienced in some fast-growing cities in Brazil; this work resulting in a number of publications (e.g. CAMERON 2012; CAMERON *et al.*, 2014; PELOSI *et al.*, 2014), as well as in theses and dissertations that focused on specific aspects of the broader results, such as the issue of domestic violence against women (e.g. CARNEIRO, 2014).

Since 2008, scholars in Brazil, in line with those elsewhere in the world, have picked up on several developments in the field of metaphor studies, moving beyond the foundational work of Lakoff and Johnson (translated into Brazilian Portuguese in 2002). The Metaphor Identification Procedure “MIP”, by the Pragglejaz Group (2007, 2009) has increasingly been cited in empirical studies on metaphor, reflecting a trend to pay greater attention to the use of replicable methods in metaphor analysis. The procedure was translated in a special issue of UFRGS’s Translation Studies Journals [*Cadernos de Tradução*] dedicated to Cognitive Linguistics, under the organization of Maity Siqueira. The professor, along with her Research Group “Discussion Forum on Cognitive Semantics” (SEMÁFORO), and with the support of the Postgraduate Program in Letters, organized the fourth edition of CMLT in 2008 at the Federal University of Rio Grande do Sul (UFRGS), in the south of Brazil.

The theme chosen for the 2011 edition was “Metaphor: Culture and Nature”, and the international invited keynote speakers were Solange Vereza, Zoltán Kövecses, Daniel Casasanto and Dirk Geeraerts. Mainly devoted to experimental research in Psycholinguistics, the METAFOLIA – Cognitive Semantics and Pragmatics Studies (former SEMÁFORO) Research Group focus on: figurative language acquisition and comprehension (for clinical and non-clinical populations); Brazilian idioms and proverbs, metaphor and metonymy comprehension. Advised

by Raymod Gibbs both on her PhD and on her post-doctoral studies, Siqueira published two very relevant papers with her advisor: “Children’s acquisition of Primary Metaphors: a cross-linguistic study” (SIQUEIRA; GIBBS, 2007) and “Metaphor-related figurative language comprehension in clinical populations: a critical review” (SIQUEIRA; MARQUES; GIBBS, 2016).

In the first paper, the authors reported the results of experiments conducted with young children and also with adults about the understanding of primary metaphors by American English and Brazilian Portuguese speakers. As a result obtained from one verbal and one non-verbal task, the authors identified several common patterns in primary metaphor comprehension in both languages, coming to the conclusion that primary metaphors, such as MORE IS UP and KNOWING IS SEEING demonstrate that these metaphors may be good candidates for universal cognitive patterns of embodied experience. In the second paper, the authors proposed a critical review of literature about experimental studies on the comprehension of metaphor, metonymy, proverbs and idioms, comprising clinical populations with cognitive impairments, such as: Alzheimer’s disease, aphasia, brain injuries and William’s syndrome.

In short, experimental approaches, particularly ones grounded in theories on the embodied basis of meaning became an influential line of research involved in metaphor studies. A key figure (and perhaps the key figure) here is R. Gibbs, the author of an influential overview of experimental and theoretical research on metaphor (1994), and a central book on embodiment and cognitive science (2005) as well as editor of the *Cambridge Handbook of Metaphor and Thought* (2008). As noted above, Gibbs spoke at three editions of CMLT and it is no exaggeration to say that he has advised half of the important Brazilian PhD advisors/publishers in metaphor studies in the country. One other researcher advised by Gibbs, both on her PhD and in her post-doctoral research, was Luciane Corrêa Ferreira, which organized the CMLT 5<sup>th</sup> edition, with Ulrike Schröder (both from UFMG). The conference was promoted, and endorsed, by the Graduation Program in Linguistic Studies (POSLIN) and the Extension Center (CENEX-FALE), and also by RaAM and John Benjamins Publishing Company.

The 5<sup>th</sup> CMLT theme was “Metaphor and Language Teaching”, as both organizers work at the Department of Applied Linguistics from the Faculty of Letters of UFMG. The invited keynote speakers were

Maity Siqueira, Jeannette Littlemore, Cornelia Müller, and Gerard Steen. The MIP (2007), which grew out of work by Steen (1999a, 1999b), was subsequently adapted to involve greater reliance on a dictionary for the semantic analysis of metaphors, based on a study of different registers of discourse in a portion of the British National Corpus. This project, conducted at the Vrije Universiteit Amsterdam, led to the MIPVU procedure (STEEN *et al.*, 2010). At the 2015 conference, Steen offered a course about MIPVU, a method which has been used in recent theses and dissertations in Brazil (specially at UFRGS and UFF).

In addition, after the conference, a formal partnership was established between the ICMC (former NUCOI) Research Group, headed by Schröder, and the Language Use and Multimodal Communication group in Europa Viadrina Universität, whose chair is Cornelia Müller, a well-known researcher in Metaphor and Gestures. Müller (2008a, 2008b) has promoted the importance of studying metaphoricity as a phenomenon not inherently tied to the modality in which it is expressed. In line with this, her work has extended beyond research on spoken language and gesture to the analysis of metaphor in television news items and film (MÜLLER; KAPPELHOFF, 2018).

Taking up the increasing concern about the inter-relation between Metaphor and Gesture, the 6<sup>th</sup> CMLT theme was “Metaphor and Multimodality”. The conference’s sixth edition was held at Federal University of Bahia (UFBA) in Salvador and was organized by the Cognition and Language Studies Lab (LeCogLing) headed by Maíra Avelar, from the State University of Southwest Bahia (UESB). The conference was endorsed by three Graduation Programs from Bahia: the Graduation Program in Linguistics (PPGLin/UESB), the Graduation Program in Language and Culture (UFBA), and the Graduation Program in Cultural Critics (State University of Bahia – UNEB Alagoinhas), and also by RaAM and John Benjamins Publishing Company.

The invited plenary speakers were Lilian Ferrari (Federal University of Rio de Janeiro – UFRJ), Mark Turner, Eve Sweetser and Alan Cienki. The first two researchers, together with Gustavo Guedes (Federal Center of Technological and Scientific Development of Rio de Janeiro – CEFET-MG), Francis Steen and Maíra Avelar (UESB) developed the Brazilian capture station of the Distributed Little Red Hen Lab, an international Big Database composed of a library of TV news broadcasts from all over the world. In Brazil, broadcasts from Globo,

Record and Band are capture with closed captions in Brazilian Portuguese. Red Hen is open to the entire scientific-academic community, who can submit a simple access request, and all its technology is developed with open-source tools and codes. The first thesis using Brazilian Red Hen data was concluded three years ago (PINHEIRO, 2017), and other theses, dissertations and post-doctoral studies are also using Red Hen as a source of research in Cognitive Linguistics and Multimodality.

The move to researching metaphor as expressed not just in words, but multimodally, is one that has grown quite extensively over the past 20 years. The roots of multimodal metaphor research can actually be traced back to Lakoff and Johnson's (1980) original ideas, as they claim at the beginning of their book (p. 5) that, "*The essence of metaphor is understanding and experiencing one kind of thing in terms of another*" (italics in original). The value of researching metaphor from a multimodal perspective has long been endorsed by Forceville (1996, 2006). His early work distinguished the different ways in which metaphor can play out in combinations of words and images in print advertisements. Subsequent work highlighted the variety of contexts and media in which metaphor is expressed in more than one modality (FORCEVILLE; URIOS-APARISI, 2009), including in images, forms, and sounds.

One prominent way in which metaphor appears multimodally in spoken interaction is in combinations of words and gestures (see early research applying CMT to gesture in McNEILL; LEVY, 1982; CIENKI, 1998; MÜLLER, 1998; SWEETSER, 1998; CIENKI; MÜLLER, 2008). In the Brazilian academic-scientific research context, specially in the last five years, further focus on methods in metaphor research can be seen in work on this topic. The Linguistic Annotation System for Gesture (BRESSEM *et al.*, 2013) provides an important starting point for this research by offering a framework of categories for more objectively identifying the forms of speakers' manual gestures. This then can serve as a basis for interpreting the functions of gestures in light of the speech being produced together with them. One such function is the representation of physical entities, relations, or actions which can serve as the means (the Source Domain) for characterizing another idea (the Target Domain) via a form of comparison. This is what is elaborated in the Metaphor Identification Guidelines for Gesture (MIG-G) (CIENKI, 2017) that is increasingly being used in gestural analysis by researchers in Brazil.

In addition to general issues of metaphoric expression in relation to gesture use (CIENKI, 2008, 2013), Cienki (2005) has investigated the realization of image schemas in gestures. The topics of metaphor identification and the study of image schemas in gesture are ones which have been further pursued by scholars in Brazil (e.g. AVELAR; BARBOSA; LIMA, to appear). For that purpose, Cienki is one of Avelar's collaborators in the project named "Towards a Grammar of Gesture in Brazilian Portuguese: applications of LASG and MIG-G in Brazilian Portuguese big data". More recent research has developed the investigation of verbal tuning devices (CAMERON; DEIGNAN 2003) and co-verbal behaviors (MÜLLER, 2008b; MÜLLER; TAG, 2010) as cues that highlight metaphor use; Cienki (2020) considers how these and other cues can be used to study speakers' potential meta-communicative awareness (more conscious awareness of how they are expressing an idea) of metaphor use.

The six editions of CMLT provide served as the basis for many relevant publications in the Metaphor Studies field in Brazil. Three publications bring together the academic talks presented at the 1<sup>st</sup> CMLT: the book "Confronting Metaphor in Use: An Applied Linguistic Approach", published by John Benjamins (ZANOTTO; CAMERON; CAVALCANTI, 2008) and an special issue named "Essays on Metaphor in Language and Thought" published on *D.E.L.T.A* (ZANOTTO; NARDI; VEREZA, 2006), a high-impact Brazilian journal indexed in SciELO. The issue focused on the relationship between metaphor, language and thought. Two relevant journal issues resulted from the 2<sup>nd</sup> CMLT: An issue with selected papers presented at the conference, "Metáfora e Contexto" ("Metaphor and Context"), published on *Linguagem em (Dis)curso* (MOURA; VIEIRA; NARDI, 2007), also indexed in SciELO, and "Metaphor in language and thought: Contemporary perspectives" published on *Ilha do Desterro* (VIEIRA; VEREZA, 2007) another high-impact Brazilian journal, indexed in SciELO, SCOPUS and several other international research index bases.

A special issue of *D.E.L.T.A*. (LIMA; MACEDO; FARIAS, 2010) assembled papers produced from the plenary talks and panel sessions and oral presentations that occurred during the 3<sup>rd</sup> CMLT. In addition to assembling the talks, sessions, and presentations, the 4<sup>th</sup> CMLT published the conference proceedings in an online version. A special issue with selected papers, "Metáfora: diferentes perspectivas" ("Metaphor: various

perspectives”), was published in the journal *Scripta* (CAVALCANTE; FERREIRA; GUALDA, 2016). The conference proceedings online version was also published on the 5<sup>th</sup> CMLT website. Three special issues, including the current one, were dedicated to the 6<sup>th</sup> CMLT. The first issue was published the journal *Linguagem em Foco* (LIMA; AVELAR, 2018) and assembled papers for all over Brazil, addressing Metaphor and Multimodality (and also named as “Metáfora e Multimodalidade”), whereas the second issue, published by *Signo* assembled papers, both in Brazilian Portuguese and in American English, about multimodal metaphors (named “Metáforas multimodais”) (AVELAR; FERRARI; SWEETSER, 2019).

The current special issue, with papers written in English, is dedicated to investigating Multimodal Metaphors from the perspective of Cognitive Linguistics, and, secondarily, from a (social)semiotic perspective. The papers that comprise this issue have the Conceptual Metaphor Theory (CMT) as a departure point, but all of them discuss its contemporary implications, incorporating its theoretical and methodological developments over the last forty years. The book organized by Forceville and Urios-Aparisi (2009), also cited in most of this issue’s papers, constitutes a very relevant research source, as the authors establish the definition of modes, as well as the scope of multimodality, in terms of a cognitive-linguistic approach.

In that sense, the papers that comprise the issue discuss recent developments concerning verbal, pictorial, verbo-visual and verbo-gestural metaphors. A dynamic approach to metaphor emergence is highlighted, bringing into light the metaphorical gradation, and also the creative potential of metaphors, when the correlation between modes is taken into account. The first two papers approach the matter of verbal metaphors extracted from video data. The first paper addresses the correlation between conceptual metaphor and metonymy in proper names given to Brazilian Federal Police operations, demonstrating how features of conceptual metonomies work as prominent contributors to several cognitive actions for naming. The second paper analyzes the emergence of – and the relationship between – conventional and novel/creative metaphors in Biology video lessons. The data consist of YouTube video subtitles, and the methodology applies the MIP as a resourceful way to identify metaphors in speech.

The next four papers discuss the matter of modality inter-relation. Based on Kövecses' proposition for analyzing advertisement pieces (2002), the third paper proposes a cognitive mapping between verbal and pictorial domains, resulting in multimodal conceptual metaphors that socially represents women through stereotypes. The fourth paper deals with the Fake News category in editorial cartoons, analyzing how different semiotic modes—the verbal and the visual ones—are inter-related in the construction of metaphors. The author validates Forceville and Urios-Aparisi's proposition (2009) of analyzing metaphor (and, more generally, the meaning-making process) in more than one modality at the same time. The fifth paper discuss a typology of articulation between verbal and pictorial modalities in metaphors from governmental health campaigns in Brazil. As a result, the author proposes three modes of articulation between modalities: autonomy, correlation and interdependence, as well as some pragmatic and semantic effects for each mode, such as increasing metaphoricity, inducing reframing and refining referentiality.

Based on Forceville and Urios-Aparisi's (2009) multimodal metaphor approach, the sixth paper proposes the concept of "metaphor re-performance", as well as discusses the inter-relation between modalities in the illustrated book bilingual (English-Portuguese) "Imagine", a written and illustrated version of John Lennon's song, published under the sponsorship of Amnesty International. The next two papers bring up matters related to the text as a modality and as a concept. The seventh paper explores metaphor use in life-simulation games for smartphones. The author argues that metaphors in life simulation games start off as text-dominant, but become image-dominant after some time, asserting the dynamic and continuous nature of metaphors in this kind of game. Based on the social semiotic notion of text (KRESS, 2010), the authors explore the memes' constitution as well as their qualities and potential meaning as visual textures, a semiotic resource for text production and its metaphors.

The last two papers deal with iconicity in different perspectives. The ninth paper discusses the interactive construction of multimodal metaphors, specifically analyzing the inter-relation between speech and gestures in videotaped conversations. The author proposes the term "intercultureality" (interculturality + intercorporeality) to describe the multimodal metaphors and concludes that the metaphorical content is

constructed sequentially, referring to preceding metaphors used by the interlocutors and associated with metaphorical blends. The tenth paper is a theoretical semiotic proposition based on the articulation between Peirce's (1930/1958) broad philosophic and semiotic conceptual tools and his concept of metaphor as a hypo-icon and its subdivisions. According to the author, this articulation constitutes an original and dynamic theory of metaphor, capable of operationalizing integrated analyses of multimodal aspects of metaphor.

Using a metaphor ourselves, we could say that the papers presented on this issue are a microcosm of the immense universe of metaphoric intellectual production in Brazil in the last 30 years, emphasizing research that takes into account the challenges and perspectives posed by Multimodality for Metaphor Studies developed in the last 5 years in the country. The present volume brings together authors from public institutions<sup>4</sup> all over the country, as well as foreign researchers concerned about discussing metaphors produced in the Portuguese language. Through an Anthropophagic *savoir-faire*, Brazilian Contemporary Theories of Metaphor blend the old with the new, swallowing and digesting, in a decolonial way, the European and North-American concepts and methods of reference into fertile discussions and applications. In a nutshell, Metaphor Studies developed in Brazil can be summarized in one of Andrade's (1928, 1991, p. 40) aphorisms: "Science, the codification of Magic. Cannibalism."

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<sup>4</sup> It is worth noting that all research funding in Brazil comes entirely from public Foundations, as does the authorization for Graduate Programs; all the research scholarships for both students and professors, even for private universities, are granted by governmental agencies. In this scenario, public universities constitute major research centers all over the country. "Public, high-quality, and free education" is a very well-known principle that guides the Brazilian public universities' fight against their closure and against the under-funded reality they have been enduring in recent years.



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## The correlation between the conceptual metonymy and the process of generating proper names

### *A correlação entre a metonímia conceptual e o processo de geração dos nomes próprios*

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**Abstract:** Proper names can be considered lexical traces that identify a specific society and time as they enable us to better understand its *modus vivendi*, from its social-historical-cultural context. This study selects police operations proper names as subject study, and it is guided by the hypothesis that the generation of proper names configures as a cognitive process, which makes use of conceptual metonymy as a prominent contributor for several cognitive actions for naming. Thus, the focus is to demonstrate the conceptual metonymy role in the generation process of police operations proper names manifested by its typological features. The *corpus* for this analysis is composed of Brazilian Federal Police operations that were triggered in 2018 and can be obtained on its official website. The adopted methodology consists of mapping the proper names taxonomies according to Eccles' three worlds (ECCLES, 1979) and metonymy typology,

based on the proposal by Radden and Kovecses (2007); Blanco-Carrión, Barcelona and Pannain (2018); in addition to the theoretical foundations proposed by Lakoff and Johnson (1980), Lakoff (1987), Silva (1997) and Biderman (1998).

**Keywords:** proper name; conceptual metonymy; cognitive linguistics.

**Resumo:** Nomes próprios podem ser considerados marcas lexicais que identificam uma sociedade em determinada época, à medida que possibilitam a compreensão do *modus vivendi* dessa sociedade a partir do contexto sócio-histórico-cultural. Esta proposta elege nomes próprios de operações policiais para objeto de estudo e é guiada pela hipótese de que a geração desses nomes se configura como um processo cognitivo que faz uso de metonímias conceptuais, as quais oferecem uma contribuição de destaque na série de ações cognitivas para a nomeação. Assim, este trabalho tem como objetivo demonstrar o papel da metonímia conceptual no processo de geração dos nomes próprios das operações policiais manifestadas pelos traços tipológicos. O *corpus* para esta análise constitui-se de nomes de operações da Polícia Federal do Brasil desencadeadas no ano de 2018 e obtidos por meio de consulta ao site oficial dessa categoria de polícia. A metodologia adotada consiste no mapeamento das taxonomias dos nomes próprios de acordo com a natureza dos mundos (ECCLES, 1979) a que se reportam e no levantamento dos tipos de metonímias, baseada na proposta de Radden e Kovecses (2007) e de Blanco-Carrión, Barcelona, Pannain (2018), além da fundamentação teórica de Lakoff e Johnson (1980), Lakoff (1987), Silva (1997) e Biderman (1998).

**Palavras-chave:** nomes próprios; metonímia conceptual; Linguística Cognitiva.

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## 1 Introduction

Proper names have been the subject of research from different perspectives owing to the invaluable contributions to linguistic meaning clarification. By the end of the nineteenth century, Bréal (1992) already discussed the perspective of meaning, more specifically, the strength of the meaning of lexical units. For this author, “once they are created and endowed with a certain meaning, are induced to restrict, to extend, to transfer this meaning from one order of ideas to another, to raise or to lower its dignity, in short, to change it.” (BRÉAL, 1992, p. 77). Bréal explains that the extension of meaning has an external cause as

a result of historical events; therefore, the meaning transformation is slow, involuntary, and imperceptible. However, metaphors change the meaning of words instantly by suddenly creating new expressions. They are born because of the similarity between two objects or acts and for the vocabulary gap-filling.

Geeraerts (2010, p. 277) correlates the position of cognitive semantics that emerged in the 1980s and the traditional historical conception. The author highlights the similarities on the following points: a) the psychological conception of meaning; b) lexical meaning is tied to the individual, cultural, social, and historical experience; c) interest in the flexibility and polysemy of meaning and the influencing mechanisms. However, cognitive semantics regards polysemy and flexibility from a synchronic perspective, in contrast to the traditional historical diachronic view.

Considering the broad linguistic panorama, it enables us to recognize the lexicon of a social group as a mirror that projects a society, with its unique world perspective, its history, and its *modus vivendi*, as Isquerdo (2012) describes:

[...] regardless of the theoretical perspective and the trend adopted for the study of a lexical language system, the lexicon function in the cognition process and the reality categorization cannot be denied, given its function of substantiating, materializing the knowledge produced by a society. Thus, as there are several societies and cultures, the vocabulary conveyed by people throughout history also has different facets, which is singled out according to the historical moment of the language, the geographical reality, the profile of the speakers, the objectives of communication, the circumstances of the act of enunciation (ISQUERDO, 2012, p. 115)

A society is made up of various elements that constitute its *modus vivendi* – places, people, organizations, product brands, business strategies, policy, and military operations. Therefore, for this study, one of these elements is isolated, and a discussion is here proposed over police operations proper names.<sup>1</sup>

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<sup>1</sup> This study is the partial data of the doctoral thesis in development, and its research subject is police operations proper names.

Since this study highlights the cognitive aspects of language in interaction with social and cultural experiences that shape the reality conceptualization, the research is based on the theoretical foundation of cognitive linguistics. According to Silva (1997), one of the guiding principles of this approach is the assumption that language structure and units are not autonomous entities, but they are a manifestation of cognitive capacities. Another worthy view on cognitive base is that “cognitive linguistics embodies a fully contextualized conception of meaning.” (GEERAERTS; CUCYCKENS, 2007, p. 14).

This way, cognitive linguistics contributes to the understanding of meaning relations, which are dynamically configured within and through the cognition domain and enable linguistics constructions to generate proper names. Based on the premise of meaning relations, interactional experiences and cognition, the hypothesis for this study is that the metonymic process is the main mechanism for the generation of police operations proper names.

The semantic aspects analysis of proper names presented here is based on the notion of conceptual metaphor and metonymy proposed by Lakoff and Johnson (1980) and Lakoff (1987). From this perspective, Silva (1997, p. 74) points out that, for cognitive linguistics, metaphors and metonymies are conceptual phenomena and relevant cognitive models. Also, Geeraerts (2010, p. 206) explains the perspective of metaphor as a cognitive phenomenon that has to be analyzed by mapping two domains in a relation of similarity based on experiences. Considered as a cognitive phenomenon, the notion of conceptual metonymy allows people to think about one thing in terms of its contiguity relation, creates patterns that can be applied to more than one individual lexical item, and structures thoughts, attitudes and actions.

Broadening the scope of two cognitive phenomena, Dirven (2002, p. 8) points out the distinction between metaphoric and metonymic poles by demonstrating deeper possibilities. It is proposed the notion of a continuum on which the metaphoric and the metonymic strategies of conceptualization are situated.

The author sets some basic facts that determine the difference between metaphor and metonymy: a) distinct nature of relationships, the paradigmatic equation for metaphors, and syntagmatic equations for metonymy; b) in metonymy, two domains or subdomains as one domain matrix are related, and in metaphor, one domain is removed in the

mapping operation; c) the notions of conceptual distance and closeness indicate different levels of figurativity. Dirven (2002) also describes the equation of the metonymic pole with the syntagmatic principle, in which there are three types of syntagma: linear (subject-predicate relation), conjunctive (various elements of a word), and inclusive (a metonymic chain), the last one is compared to metaphor due to the figurative nature (DIRVEN, 2002, p.92).

This study is based on the analysis of 56 names of police operations triggered from January to April 2018, *corpus* collected on the official site of Federal Police - Ministry of Justice and Public Security. The research aims to demonstrate the role of conceptual metonymy in the generation process of police operations proper names. It fulfills the specific objectives: identify the typology of the most frequent metonymies contained in the proper names generation process and map the proper names taxonomies according to the nature of the worlds, based on Eccles (1979) and Biderman (1998).

For the taxonomies mapping, three tables were elaborated containing the fifty-six proper names and their accordingly classification in physical, sociocultural, and mental worlds. This visualization demonstrates the human interaction with the surrounding environment and cognitive dynamics. It is founded on Biderman (1998), in which the author presents the three worlds suggested by Eccles (1979), aiming the comprehension of human existences and experiences.

Following the three tables presented, the analysis is targeted to evince the typology of metonymies identified in the selected *corpus*. Afterward, it is presented the description and the discussion of metonymic types based on the theoretical principles of Lakoff and Johnson (1980), Radden and Kovecses (1998, 2007) and Blanco-Carrión, Barcelona, Pannain (2018).

## 1 Naming

As a linguistic phenomenon, the meaning of a word becomes flexible due to the context of its origin. In the naming act, the word and its meaning used as proper names are influenced by surrounding elements. Biderman (1998, p. 89) considers that categorization and naming activities are based on more abstract things since they are cognitive processes. Words designate concepts rather than material

things, so conceptualization is a cognitive process itself. Principles that rule the categorization process, cognitive economy, and world structure perception elucidate cognitive trajectory, which substantiates naming.

For naming process analysis, Biderman (1998, p. 116) discusses the Ogden and Richard Semiotic Triangle (1989) and suggests her adaptation to the original model. In the graphic model of Biderman's version (1998, p. 116), the left vertex represents name, word, signifier and the second vertex, at the top of the pyramid, lies meaning, concept, signified, and the right vertex, represents thing, referent, extralinguistic object directly connected to the reality. The author highlights the importance of considering the referent as an essential part of the linguistic sign. The interpretation of reality data does not coincide with the physical structures of reality since they were abstracted from it, went through human interpretation, and were given back to the real world. From this reasoning line, Biderman (1998, p. 116) emphasizes that referent is not an extralinguistic reality; however, it has its representation, besides having a direct connection with linguistic meaning. The signifier (word) originates from reality preceding concept (meaning), the context.

It becomes a referent when reality passes through human perception, when people's details and actions are noticed, decomposed, and classified to, eventually, be given a name.

As already pointed out, this study discusses naming as a result of a cognitive process that makes a proper name emerge. This way, proper names are configured as language products that represent conceptualization within specific contexts.

## **2 Cognitive perspective**

As previously stated, this study is grounded on the theoretical contributions of cognitive linguistics, which assumes that mental structures mediate individual's interaction with the world; in this case, the structure in use is the language. Silva (1997, p. 64) explains that it is through systematic analysis and linguistic use that cognitive linguistics finds human cognition contents, which justify the psychological reality expressed by language. The cognitive language investigation highlights the correspondence in conceptual thought, embodied experience, and linguistic structure; consequently, the actual cognition contents.

Reiterating the explanation given by Silva (1997), Geeraerts and Cuyckens (2007, p. 5) explain that cognitive linguistics adopts the principle that mental informational structures and language mediate our encounter with the world, which is why language is seen as world knowledge archive that is meaningfully categorized. This knowledge heritage provides support to manage new experiences and store old information.

To sum up, the main ideas of the cognitive language conception consists in “a belief in the contextual, pragmatic flexibility of meaning, the conviction that meaning is a cognitive phenomenon that exceeds the boundaries of the word, and the principle that meaning involves perspectivation” (GEERAERTS, 2010, p. 182).<sup>2</sup>

### **3 Conceptualization process**

The conceptualization process is directly connected to embodiment; in other words, the concept construction emerges from several internalized, categorized and named experiences. Adding to the bases of connection between experientialism and conceptualization, Lakoff and Johnson (1980), in their research on the constitution of basic experience domains, propose the experiential gestalt, which “are ways of organizing experiences into structured wholes” (LAKOFF; JOHNSON, 1980, p. 81). The experiences domains are organized as natural dimensions since they are more concrete experiences that can be used metaphorically to represent more complex concepts. According to these authors, the most concrete concepts, which are the foundations from where cognitive phenomena arise, originate from three sources, comprised as natural experiences types: body experiences, interaction with physical environment and encounters with people and culture.

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<sup>2</sup> Graumann and Kallmeyer (2002) explain that in linguistics, the concepts perspective and perspectivation present two lines: perspectivity is deeply incorporated in language structure stemming from the anthropomorphism of language, and practices speakers use to reproduce their own and other’s perspectives. The concept of perspectivation “is used to grasp the selective character of any representation of a state of affairs, depending on actor roles and the respective viewpoints. Schemata of perspectivation are grammaticalized in the case structure and in the semantic of verbs, adverbs, and other categories” (GRAUMANN; KALLMEYER, 2002, p. 4).

Lakoff (1987, p. xv) defined *experientialism* or *experiential realism* as a contrast to the philosophical concept that accounts for human reasoning within an objective view. From this perspective, a conceptual framework corresponds to the objective reality, and it is unrelated to real experiences. The emerging term experientialism considers that reason and body form only one organism and reflects the idea that reason comes from body experience.

The notion of experience is broad since it includes everything that constitutes actual and potential experiences of either individual or collective organisms. Besides perception acts, motor movements, the view also entails the constitution of organisms developed genetically and the nature of interaction in physical and social environments.

The experientialist view proposed by Lakoff (1987) provides meaning comprehension as a result of an interactive experiential process with cognitive and sensorial-motor framework, context and other people. It concerns the perspective in which meaning originates not only from internal or external structures but also from the genetically acquired constitution and the nature of physical and social settings.

Biderman (1998, p. 93), discusses the Sapir-Whorf hypothesis foundation, or the linguistic relativity hypothesis, reiterates that each language translates the world according to its culture and reveals the whole linguistic system that manifests an organized categorization of reality. As stated by this theory, the world conveys a myriad of impressions according to speakers' mind organization. Impressions that become concepts under the cultural lens of each community; thus, they may vary due to different representations for each concept in a given community. Under each community cultural prism, it is created a linguistic matrix that portrays the reality through the lexicon, that is, the lexical asset of this community. This lexical archive indeed results from a categorization process that has been developed over time, for thousands of years, an outcome of human experience that has been recognized and categorized through the interaction with physical and cultural contexts.

Experience settings and interactions with different contexts are essential factors for a conceptualization process. Eccles's view (1979, p. 202) supports Karl Popper's three worlds concept (1972), which points to the existence and relationship between worlds and experiences that go beyond the dualist-interactionism status, assuming this way, the trialist interactionist position. According to Eccles (1979, p. 202-205), Karl



Popper's three worlds representations (1972) are characterized as follows: World 1 represents objects and physical states, physical entities, human-made artifacts, organic and inorganic matter, namely, the material world; World 2 is classified by conscience states that arise from sense organs perceptions (touch, tasting, smell, hearing, sight), subjective knowledge, inner reality (thoughts, feelings, dreams, imagination, intention); World 3 represents the cultural world, the world where humans are part of the human gender heritage constitution.

It is possible to grasp the continuous interaction that flows intensively in the three worlds since necessary conditions are provided. Eccles (1979, p. 205) explains the dynamics of the three worlds, considering that the cultural world (World 3) is decoded by material things (World 1), for example, through art objects. In turn, activities are experienced when perceptions, enabled by receptor organs, provoke more subtle internal experiences (World 2), such as comprehension, memory, emotions, aesthetic appreciation.

Biderman (1981) discusses the interaction in these three worlds, naming them as 1) the physical world, 2) the conscience state world, and 3) the cultural universe world. The author calls attention to the fact that in the "continuous interaction in these three worlds, the individual had and has been withdrawing perceptions, sensations, experiences, and information that are linguistically categorized and durably recorded in the memory." (BIDERMAN, 1981, p. 134).

By expanding memory notion, Biderman (1981, p. 138) defends the existence of a "lexical memory" in the brain, in which all vocabulary supply of a specific language would be stored. In this perspective, the social interaction with other individuals in the same society, the speakers' lexicon archive will be constituted by the share and the similarity existing in every individual's memory from the same linguistic community. The whole composed archive is always available for individuals to codify and decode messages during an interaction.

To understand how individuals of a community access this lexical archive, it is assumed here that some familiar concepts are so entrenched in our conscience that require minimal effort to access names for specific entities' designation. Schmid (2007, p. 118), in turn, argues that the notion of entrenchment in cognitive linguistics is used to explain that concepts expressed in words were fossilized by convention in a linguistic community. When we need, for example, activate the concept of *dog*, an

automatic cognitive process occurs because a knowledge package already formatted was activated, being available in memory for the frequency of use of a specific meaning.

This author presents the concept of entrenchment by “ready-made format” and explains that a large volume of vocabulary used in a community is available in memory. To identify and categorize a more exotic animal, for example, a *meerkat* or a *bison*, takes more time since the process starts from the animal more remarkable traits identification and goes towards the word search that fits in a category in the mental lexicon.

Another aspect adopted by this author is the fact that concepts manifest in a community since its entrenchment does not only depend on the individual’s activation frequency since “[...] the frequency of occurrence of concepts or constructions in a speech community has an effect on the frequency with which its members are exposed to them” (SCHMID, 2007, p. 119).

The series of factors that lead to the degree of entrenchment originate from the salience level. Schmid (2007, p. 119) clarifies that salience is viewed by two distinct forms: cognitive salience and ontological salience. Cognitive salience activates cognitive units when required for speech actions, that is, the activation of a concept may occur through a conscious selection mechanism or through a spreading activation, which happens when a concept facilitates activation of another concept. When a concept is activated, it is loaded in working memory and starts to be the center of attention, becoming salient. The author clarifies that some entities are better qualified, which is why they call attention. Therefore, cognitive salience is related to ease activation, and non-salience binds inactive concepts.

Conversely, according to Schmid (2007, p. 120), ontological salience relates to the stability of world entities’ properties. This way, the connection point between cognitive and ontological salience is the high potential that mental concepts have to become the center of our attention. The author exemplifies with dog image that runs across a field. The dog draws more attention than other elements; it is more salient than the field, the trees, and plants in the scenario. From this setting, it is noticeable that ontologically salient entities overlap the non-salient ones.

The different patterns of attention distribution illustrated by the dog scene, as the most salient element, is related to the terminology of Gestalt psychology – Figure and Ground. Schmid (2007) explains that

“the Figure is regarded as the most salient entity in a given configuration, while the Ground has secondary prominence” (SCHMID, 2007, p. 128).

In brief, the author emphasizes that salience can point to cognitive salience, occurring a temporary activation state of mental concepts, and to ontological salience, through properties of inherited entities that are more stable in the world.

The link between entrenchment and salience is demonstrated by ontological entities’ frequency occurrence, which leads to concept entrenchment. Entities with great potential to call attention, namely, more salient, are noticeable in the early stages of language acquisition. Entities as people and animals, objects with more mobility, colorful, and noisy are more salient for children; therefore, salience determines concepts entrenchment.

#### **4 Idealized Cognitive Model (ICM) and Conceptual Metonymy**

Considering the perspective of human knowledge structure organization, Lakoff (1987, p.68) underpins that knowledge is organized through constructs called Idealized Cognitive Models (henceforth ICMs). The author defends that categorization structures and prototypical effects are phenomena originated from these models; thus, they are sub-products of this complex cognitive organization.

ICMs stress three important facts of these cognitive constructs: they are idealized, cognitive and models. Therefore, they are defined as follows: “idealized cognitive models are simplified mental constructs that organize various domains of human experience, both practical and theoretical” (MCCAULEY, 1987, p. 292).

The enlightenment on the models suggested by Lakoff (1987) is obtained by ICMs aspects comprehension. According to Geeraerts (2010, p. 224), ICMs are called *idealized* because they are abstractions of the actual world. The complexity of reality is not captured as a whole but through ICMs. The models provide a matrix to cope complexity with flexibility; with such possibility, these models simplify the world.

In a broad universe of stimuli that comprises each context, McCauley (1987, p. 293) explains that these constructs are idealized since selection takes place based on efficacy and meaning. In other words, we choose more productive and meaningful stimuli in theoretical and practical domains. When something is idealized, the one underemphasizes

or ignores a wide range of possibilities through *ceteris paribus*. The possibilities that were disregarded are bearers of a relative lack of importance. ICMs define a series of keys for the environment, which can determine a situation, and set expectations for change and for appropriate replies to contexts.

Besides being idealized, ICMs are cognitive for the fact that they depend on imaginative skills to elect a model for a specific domain. Among various members of a category, some are selected as best examples, depending on the applied model for a specific situation. ICMs are models about the world, which means that the sum of all these models constitute a superstructure of human knowledge about the world.

Geeraerts (2010) highlights ICM relevance for cognitive semantics for the fact that

[...] our knowledge of language is intimately related to our knowledge of the world, and that such knowledge of the world takes the form of cognitive models: structured sets of beliefs and expectations that direct cognitive processing, including the use of language (GEERAERTS, 2010, p. 245).

Conceptual metonymy is regarded as a relevant cognitive characteristic since people tend to use a well-understood aspect to represent the whole of it or some other facet. Lakoff and Johnson (1980, p. 35) recognize that conceptual metonymy is based on the contiguity relation, establishing a referential function when an entity is used to refer to another one, with which has a relation. Besides the referential function, conceptual metonymy also has the function of providing comprehension; the most highlighted part of a whole is used to precisely determine the expected aspect to be focused. For instance, a part of a whole is chosen to represent a person whose main trait is *intelligence*, with which *head* is related. This way, the common expression *we need the best heads* means that the requisite *intelligence* is the need at hand.

Lakoff (1987, p.78) indicates that conceptual metonymy emerges from an Idealized Cognitive Model, which holds a stand-for relation between A and B. One element of the ICM, B, symbolizes another element A. Metonymies occur wherever there exist ICMs; so, it is claimed that metonymies are conceptual phenomena based on domains. Radden and Kovecses (1998, p. 41) consider that “we have ICMs of everything that is conceptualized, which includes the conceptualization of things and events, words and their meanings, and categories of things and events.”

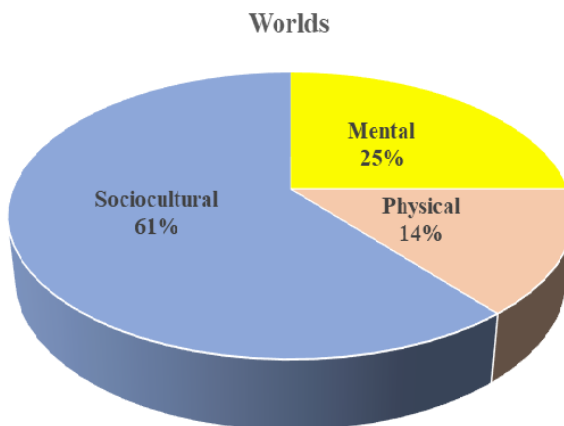
The following topic shows the data analysis according to the principles of the cognitive perspective for the theoretical studies here highlighted.

### 5 Mapping of proper names taxonomies according to the nature and domains of the worlds

This research considered the lexical origin perspective of proper names based on the interaction of the three worlds, proposed by Eccles (1979), from where it is possible to understand human existences and experiences. Analysis results demonstrate a range of linguistic elements currently present in the speakers' lexical memory that points to a more influential world that materialized in the linguistic codification of experiences.

The analysis of proper names mapping provided a visualization of the distribution of names according to the nature of the worlds. Graphic 1 shows the following results: out of 56 names, 34 names (61%) come from the universe of culture world (named here as sociocultural); 14 names (25%) come from the physical world, and eight names (14%) come from the conscience state world (named here as mental).

GRAPHIC 1 – Map of police operation proper names according to the nature of the worlds (ECCLES, 1979)



Source: Own elaboration.

The categorization for world domains was mostly based on the classification provided by the project result *Mapping Metaphor with the Historical Thesaurus*<sup>3</sup> conducted from 2012 to 2015 by Glasgow University – School of Critical Studies. The study culminated in 257 domains categorized in the external world, 83 in the mental world, and 75 in the social world. Although the tool offers a wide range of categories, for this study, there were some changes in the social world domains: *drugs and expressions* were added, and domain *literature* substituted *communication*.

Chart 1 presents the sociocultural world, made up of 34 proper names, corresponding to 61%. The most significant highlight domains were *occupation/ work* with six names; *literature, morality/ immorality* with four names; *authority, leisure/ sports* with three names. The categories with two names are: *drugs, faith, expressions*. The other categories present only one name: *transportation, law, constructions, education, finance, society, symbols* and *signs, others*.

The highest incidence of proper names stemming from the sociocultural world reflects the relevance that its various elements take over in Brazilian society. This result indicates that social domains highly influence the surrounding environment because of the constant interaction, leading to concept entrenchment (SCHMID, 2007).

Based on the groups that showed the highest incidence, *occupation/ work, morality/ immorality, literature*, it is assumed that they represent a competitive society. They also typify a society that expresses judicial deficiency concerning ordering and social respect. Similarly, the group *literature* can also be contemplated as a society depiction that brings several social theme representations, serving as a community mirror portrayed by language. Hence, the social world domains *occupation/ work, morality/immorality, and literature* show a noticeable index of word usage for interactive settings, generating the necessity of specific lexical archive use considering the frequency, salience, and entrenchment of concepts.

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<sup>3</sup> It is available online as *Metaphor Map of English*: <https://mappingmetaphor.arts.gla.ac.uk>.

CHART 1 – Distribution of police operations proper names according to domains of sociocultural world (Metaphor Map of English, 2015)

OCCUPATION/ WORK	MORALITY/ IMMORALITY	LITERATURE	AUTHORITY
<i>EDITOR</i>	<i>CAPILÉ</i>	<i>APATE</i>	ACERTO DE CONTA
<i>COURIER</i>	<i>LOOTERS</i>	<i>CURUPIRA</i>	<i>CANTINHO DO PENSAMENTO</i>
<i>DESCARTE</i>	<i>TERRA PROMETIDA</i>	<i>PENATES</i>	<i>OUTORGA</i>
<i>FALSUM VIRTUAL</i>	<i>TRAPAÇA</i>	<i>SOLOMON</i>	
<i>REEMBOLSO</i>			
<i>REBOOT</i>			
LEISURE/ SPORTS	DRUGS	FAITH	EXPRESSIONS
<i>XEQUE MATE</i>	<i>ECSTASY</i>	<i>CANAÃ - A COLHEITA FINAL</i>	<i>MÃOS À OBRA</i>
<i>PRENDA-ME SE FOR CAPAZ</i>	<i>DESIGNER DRUG</i>	<i>ERÊ</i>	<i>VISTA GROSSA</i>
<i>CARTÃO VERMELHO</i>			
CONSTRUCTIONS	LAW	EDUCATION	FINANCE
<i>PONTES DE PAPEL</i>	<i>LEX TALINOIS</i>	<i>MERENDA SEGURA</i>	<i>PARALELO</i>
SYMBOLS AND SIGNS	TRANSPORTATION	SOCIETY	OTHERS
<i>ELEMENTO 79</i>	<i>PONTE AÉREA</i>	<i>FRATER</i>	<i>VOTO LIVRE</i>

Source: own elaboration

Chart 2 presents data concerning the physical world, which is constituted by 14 names (21%) with the following highlighted domains: *animal* with seven names; *action* and *health/ disease* with two names and three other groups with only one name: *colors*, *mineral*, *existence*.

The proper names analyzed refer to the current time in Brazil. However, considering 519 years of the country’s existence, the referential points that determine the Brazilian reality, for example, the physical aspects originated from nature, are already distant from the majority of the population everyday contact. Consequently, this factor influences

the decrease of lexicon use that designates the elements of the physical world reality, or the elements of the human being and the environment.

However, the group *animal* had the highest record of proper names in the physical world; thus, the presupposition for such index is the motivation for cultural relations established with animals. Different from past times, when relation was hunting and survival-oriented, the relation is established for extinction threat reasons or animal disrespect. The animal behavior itself or animal characteristics are linked with this cultural relation, which can portray human beings' actions, in a metonymic relation of objectivity for subjectivity.

CHART 2 – Distribution of police operations proper names according to domains of physical world (Metaphor Map of English, 2015)

ANIMAL	ACTION	HEALTH/ DISEASE	MINERAL	EXISTENCE	COLORS
AMPHIBIA	MANIGÂNCIA	CARDIOPATAS	PEDRA BRUTA	VENTURA	YELLOW
CORRUPÇÃO	PAUSARE	EFEITO COLATERAL			
JABUTI					
MIMETISMO					
PEIXE-MOSQUITO					
JACUTINGA					
RAMPHASTOS					

Source: Own elaboration

The mental world was constituted by seven names, corresponding to 14%, distributed almost exclusively in *language* group, and only one name in *feelings* group. In order to have the status of proper names, the names were conceptualized and transformed according to different contexts and took on distinct meanings, such as *14-BIS*, *EM NOME DA MÃE*, *SAPATINHO*. The other reason to be categorized in this group is the existence of well crystallized concepts for word-forms, as *ZULU*, coming from *BRAVO-ZULU*, which means that a mission was accomplished in the naval universe, the cognitive processing influenced in the transformation process of a form (word) into a concept.



CHART 3 – Distribution of police operations proper names according to domains of mental world (Metaphor Map of English, 2015)

LANGUAGE	FEELINGS
<i>ARQUIMEDES</i>	<i>TRISTITIA</i>
<i>BEBEL</i>	
<i>EM NOME DA MÃE</i>	
<i>14-BIS</i>	
<i>PÃO NOSSO</i>	
<i>SAPATINHO</i>	
<i>ZULU</i>	

Source: Own elaboration

## 6 Types of metonymies with higher indexes in proper names of police operations

Data analysis was based on the concepts of the Ogden and Richards (1989) Triangle of Meaning, adapted by Biderman (1998, p. 116). This author proposes that the phenomenon of meaning is generated from the referent and the universe from which it comes. Therefore, it was necessary to analyze, in a sequential manner, the context, the referent, and the concept formed to understand the meaning of police operations proper names. From this concept, it was possible to identify the Idealized Cognitive Model and location of the metonymic source and target, and then, classify metonymies according to the typology.

The classification of metonymies was based on the typology of Radden and Kovecses (1998, 2007) and Blanco Carrión, Barcelona, Pannain (2018). Radden and Kovecses (1998; 2007) present a typology of 63 metonymies and suggest a metonymy classification that establish conceptual relationships based on the relations between the whole of the ICM and its parts, with 20 types and the parts of the ICM, with 43 types in the categories *action, perception, production, control, possession, location, sign and reference, alteration*. Nevertheless, Blanco Carrión, Barcelona, Pannain (2018) provide 117 types, but they basically present the same typology proposed by Radden and Kovecses (1998, 2007).

It is also noteworthy that, for this study, it was necessary to create new types of metonymies due to the non-existence and non-correspondence to the sources suggested by the previously mentioned authors. Thus, for this analysis, two types of metonymies were created: *symbology for event* and *product for event*. The type *symbology for event* encompasses mythological or folkloric characters that typify images of human needs or emotions, and the type *product for event* includes physical substances or services that is produced, extracted or done by an organization.

The following are the most common metonymy types and name analysis of some police operations belonging to each group.

### (1) ACTION FOR RESULTS

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Names of police operations: AMPHIBIA, EDITOR, DESCARTE, MIMETISMO, MANIGÂNCIA, PONTE AÉREA, PRENDA-ME SE FOR CAPAZ, SAPATINHO, TRAPAÇA, VISTA GROSSA.

Belonging to the group parts of an ICM, specifically, the action of the ICM, it is a type of metonymy in which conceptual entities function as parts of an ICM. They involve several participants, in this case, an action and a consequent result.

The concept for the name *Amphibia* (Amphibious) is a correlation with amphibious life cycle and employees that shifted jobs either working for the government or for private companies. In the civil servants ICM, the source is the actions they took for different professional settings and the target is the illicit actions. The name *Editor* (Editor), despite assuming the agent's name, the conceptualization originates from the action of editing documents to justify contractual changes in bidding frauds. Considering the bidding company ICM, the source is proceeding unlawfully to have as result, the fraud. The concept for *Descarte* (Disposal) is the correlation between fake companies and the mission of the authorized company to collect public waste. The source is the action of getting rid of something, and the target is money laundering in waste collection ICM. The act of using false documents to make the location challenging as an attitude of defense generated the name *Mimetismo* (Mimicry), within the preservation of life ICM, the result of this action is the attitude of escaping of those involved in the benefits fraud of the elderly legal protection. The name

*Manigância* (Trick) originates from the civil servant ICM, which source is the professional behavior to reach the target of embezzlement and fraud.

The concept for the name *Ponte Aérea* (Air Bridge) correlates with strategic flights, places and drug trafficking. The *modus operandi* involved drug acquisition in the north of the country and shipping to the south; in air transportation MCI, the source is the air service. To avoid being caught, the criminal takes on the same attitude as the main character of the movie *Prenda-me se for Capaz* (Arrest Me If You Are Able To); the name of the movie is the source in criminal movie MCI. The name *Sapatinho* (Little Shoe) refers to a police jargon used to describe the situation in which employees and relatives of a bank branch are taken hostage. Within robbery ICM, the source is the action of the criminals in a post office where they took relatives as hostages, i.e., this was the vehicle used to reach the target, resulting in the robbery. The name *Trapaça* (Deception) refers to frauds committed by a group of food companies whose purpose was to cheat health inspection service. Within inspection ICM, the source is the action that aims to deceive these authorities and the target is the fraud system, as a result. The name *Vista Grossa* (Overlook) is an action within smuggling ICM that its source is the attitude of facilitation by the IRS (Internal Revenue Service/ *Receita Federal*) officials, resulting in the entry of materials in Brazilian territory without due payment.

Within an ICM, we have access to the target by a specific vehicle and not by others. Also, some vehicles are so ingrained and more natural than others, Langacker (1993, *apud* RADDEN; KOVECSES, 2007, p. 350-351) points out that cognitive principles are the motivators for vehicle choice for metonymies, and proposes three determinants for the conceptual ICM organization: human experience, perceptual selectivity and cultural preference. The human experience is considered to be the body interaction with people and objects and the anthropocentric worldview: human over nonhuman, subjective over objective, concrete over abstract, interactional over non-interactional, functional by nonfunctional.

For this kind of metonymy, human experience responds as the motivating cognitive principle for selecting the vehicle that goes to the target. Within the ICMs of the names analyzed, the principle for the selection of the entities that served as source were human actions, more specifically, the interactional over the non-interactional.

## (2) POTENTIAL FOR ACTUAL

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Names of police operations: CANAÃ – A COLHEITA FINAL, CANTINHO DO PENSAMENTO, MÃOS À OBRA, MERENDA SEGURA, PAUSARE, TERRA PROMETIDA, VOTO LIVRE

Belonging to the whole thing ICM and its parts, events in ICM, this metonymic type refers to the status of an event that focuses on potentiality and reality. The names associated with this category portray a state of the desired ideal in the face of reality, regarding the context need. The ideal state is always present in the source, which represents the associative trait that is sufficient to describe the target. The potential element status can come from different ways: victims, police, community, criminals.

The strength of association between source and target comes from the vehicle that triggers the claim for some punishment, as in the name *Cantinho do Pensamento* (Reflection Corner) for child pornography crime, which was ironically given to the operation. The name indicates a kind of punishment referring to a way of disciplining school-aged children. Within child pornography ICM, the source is a type of punishment within a context where the accused ones are academically educated, and one is a university professor. Within paradise ICM, the name *Canaã – a Colheita Final* (Canaan – the Final Harvest) refers to an idealized place for people in similar conditions of slavery, human trafficking committed by leaders of a religious sect. The concept connects the idealized place promised by fake religious leaders and the reference is the promised land, as described in the Bible. The name *Mãos à Obra* (Hands On) indicates a desired potential in the context of misappropriation of funds within construction ICM. The vehicle is the unfinished constructions, which has constructions that did not happen due to the misappropriation of funds as target. The name *Merenda Segura* (Safe Snack) refers to misappropriations of funds dedicated to education. Within education system ICM, the target is intended for school meals, that is potentially ensured for students. However, the target is the reality of funds misuse that would be destined for meals.

The concept for *Pausare* (Pause) is the correlation between the word meaning and the investigated institution mission. In retirement ICM, the source is the institution's mission, and the target is embezzlement of

public funds. For rural contracts ICM, the source is promises to reach benefits fraud in the target. The concept is the link between promises and the rural area. It indicates the potential for actual in the name *Terra Prometida (Promised Land)*. The name *Voto Livre (Free Vote)* has the right to vote as referent leading to the concept, which correlates fake news dissemination and the right to vote freely. The source is social rights, and the target is fake and negative influence in election ICM.

Concerning the three determinants for the conceptual ICM organization: human experience, perceptual selectivity and cultural preference. Radden and Kovecses (2007, p. 354) state that cultural preferences are dimensions determined within each culture; in this case, cultural preference has served as the vehicle selection within the ICM, for this type of metonymy. They assume different levels of preference, depending on the dimensions determined within each culture. The cases of concepts selected by linking with culture: stereotyped over non-stereotyped, ideal over non-ideal, typical over non-typical, central over peripheral, initial or final over medium, basic over non-basic, important over unimportant, common over less common, rare over less rare.

For this metonymic group, precedence is the ideal over non-ideal. Metonymy uses the source as a vehicle to talk about the target indirectly. The sources clearly reproduce the desired potential in the context. This type of metonymy portrays, through the proper names, a strong indication for the elements of ICMs, which points to justice and rights protection of crime victims in a chaotic context.

### (3) WORDS FOR THE CONCEPTS THEY EXPRESS

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Names of police operations: CAPILÉ, ELEMENTO 79, EM NOME DA MÃE, LEX TALINOIS, OUTORGA, ZULU

Belonging to the group parts of an ICM, subgroup *signs and reference ICMs*, the group applies to situations in which individuals speak of events happening in the world using referential expressions. It is possible because an expression, form-concept unity, carries the conventional sense of a set. However, “the thing referred to need not to extensionally belong to class of things that are conventionally described by the term” (RADDEN; KOVECSES, 1998, p. 43).

The name *Capilé* (Chip), which means chips that one partner gives to another when gambling, correlates to the bribe paid to public servers for tax crimes within the public service ICM. It means that the form-concept unit *capilé*,<sup>4</sup> which belongs to the categorization of games, describes a fiscal crime that falls into another category of things. In the periodic table, gold is element number 79. Using this form-concept within gold mining ICM, the name *Elemento 79* (Element 79) serves as the source and gold smuggling, tax relief, and crime against nature as the target. The name *Em Nome da Mãe* (In the Name of the Mother) results from a pun of the Christian blessing The Sign of the Cross (in the name of the Father...), changing Father for Mother. In genealogic ICM, the source is the respectful words directing to the target, frauds of maternity leave benefits.

Actions of retaliation coming from a criminal association of miners and politicians that destroyed some government buildings as a reaction of a previous police operation served as referent for the name *Lex Talinous* (Law of Retaliation). Having this concept in the source, the target is public property damage within public institution ICM. The concept for the name *Outorga* (Consent) is the correlation between the word concept of consent and a nominated proxy of 29 people who obtained agricultural credits irregularly. The name *Zulu* (Zulu) has a concept coming from a crystalized word-form Bravo Zulu, a naval signal to convey “Well Done”. Within military and police operations ICM, the source used the expression meaning success, and the source is the result of operation against drug trafficking.

In this group, we perceive the connections made with words or expressions, and concepts in an automatic and quite to the point process, as this is defined by social and cultural context. Schmid’s (2007, p. 118) explanation for this automaticity in the cognitive process applies to situations in which we access these words or expressions. In fact, what happens is that doors open for knowledge that has been formatted by entrenchment, stored, and made available in the lexical memory of a particular community.

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<sup>4</sup> Brazilian term used for bribes paid for civil servants.

#### (4) SALIENT PARTICIPANT FOR THE WHOLE EVENT

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Names of police operations: CARDIOPATAS, CORRUPIÃO, JABUTI, PEIXE-MOSQUITO, YELLOW

This metonymy is part of the typology of Blanco Carrión, Barcelona, Pannain (2018). According to Radden and Kovecses (2007, p. 353), perceptual selectivity is one of the cognitive principles that responds to entity selection for the source. This fact brings out the representations of the different investigated people and their characteristics provoked by the perception of the most evident participant in the crime space and time, triggering a quick association with people or things involved.

The name *Cardiopatas* (Cardiac Disease) concept connects the medical field under investigation and one of the diseases treated by these professionals. Within health system ICM, the most salient participant, heart diseases, serves as the source that directs to the target, fraud. *Corrupião* (*Icterus jamacaii*) is the name of a bird whose habitat is the *caatinga* (the semi-arid region in Brazil) and open dry landscapes, and it turns the element that stands out in the context of corruption crime attributed to IBAMA<sup>5</sup> (*Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis*) in Rio Grande do Norte. Within investigated institution ICM, the source is one of the evident participants of nature that leads to the target, the corruption installed in the institution in charge of preserving nature. The name *Jabuti* (Red-footed tortoise) correlates with the nickname given to *fantasma* (ghost) government officials of investigated agency for misappropriation and money laundering. In this case, the evident participant refers to all *fantasma* employees within the institution ICM.

In the fishing ICM, the source is a kind of fish and the target is fraud. Being the highlighted participant in the event, the concept for the name Peixe-Mosquito (*Gambusia affinis*) is the correlation between fishermen's illicit activity and a kind of fish that eat mosquito larvae. Another name that had its source oriented by perceptual selectivity was the operation *Yellow*. The context is extortion and kidnapping crimes, attacks on air transport safety, and others. During the chase, the accused

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<sup>5</sup> Environmental and Renewable Natural Resources Brazilian Institute.

used a yellow pickup truck with Infraero (*Empresa Brasileira de Infraestrutura Aeroportuária*)<sup>6</sup> stickers. Within sequenced crimes ICM, the source is the color of the truck. The cognitive motivating principle for source selection is related to good Gestalt over poor Gestalt, serving as the most striking feature that leads to the target, which is a set of criminal acts.

For this group, it is understood that the cognitive principle that organizes the vehicle within the ICM is related to perceptual salience. Among the various competing stimuli, factors of proximity and immediacy are taken into account. The stimuli can be applied to the following situations, according to classification Radden and Kovecses (2007, p. 353), immediate over non-immediate, occurrent over non-occurrent, more over less, dominant over less dominant, good Gestalt over poor Gestalt, bounded over unbounded, specific over generic.

In the analysis of proper names, the most salient stimuli served as keys for the ICM configuration, and for the triggering of metonymic process.

#### (5) SYMBOLOGY FOR EVENT

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Names of police operations: APÁTE, CURUPIRA, ERÊ, PENAPES, SOLOMON

The names of this group were classified according to the new kind of metonymy created by the author, as explained earlier. The names of police operations correlate with representative creatures of protection such as *Curupira*, *Penapes*, *Solomon*, and symbols of human nature traits such as *Apáte* and *Erê*.

The name *Apáte* (Apate), derived from the Greek mythology that represents the spirit of falsehood that comes out of Pandora's Box, represents the frauds for land tenure regularization. Within document forgery ICM, the source is the entity representing deceit, and the target is fraud action. A creature from the Brazilian folklore, which is known to be the protector of Amazonian fauna and flora, names the operation *Curupira* (Curupira). Within hunting and fishing ICM, this folk figure is used as the source that leads to the target, the repeated practice of illegal hunting and fishing.

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<sup>6</sup> Airport Infrastructure Brazilian Company.



From the African symbology, *Erê* (Ere) represents the purity and spirit of innocence as a source within the human abuse ICM contextualized by action against pedophilia and the dissemination of child pornography. Having this entity as a source, the child victims used as target, is reached. Another protection symbol is represented by the name *Penapes* (Penapes), a group of Roman gods that took care of houses. In the human abuse ICM, the source is the group of gods, and the target is the children's sexual abuse. In children abuse ICM, the source is the character that fights against the evil and names the operation *Solomon* (Solomon). The concept correlates children's abuse and the fictional character Solomon Kane in Marvel Comics, who vanquishes evil in all its forms.

#### (6) MEMBER OF A CATEGORY FOR A CATEGORY

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Names of police operations: DESIGNER DRUG, ECSTASY, FRATER

Belonging to the group whole ICM and its parts, this type presents the characteristic of the contiguity relationship being a part with characteristics included in the whole. The names *Designer Drug* and *Ecstasy* trigger an automatic association with drug trafficking crimes. The name of the operation *Frater*, which derives from Latin, brother. It has the referent a person who is part of an Order within the brotherhood ICM, and the target is a criminal organization specialized in drug trafficking. The member of this category is a social fraternity prototype of the category drug trafficking.

#### (7) PRODUCT FOR EVENT

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Names of police operations: PÃO NOSSO, PEDRA BRUTA, REEMBOLSO

It was necessary to create this kind of metonymy for the study, as explained earlier. The name of the operation *Pão Nosso* (Our Father) comes from food company ICM, which has the product as its source and the misappropriation of public resources for food companies as the target. A pun was made with the prayer *Pai Nosso*, popular in Brazilian culture, by using the product *pão* (bread) instead of *pai* (father). This selection configures as a cognitive determinant principle for a conceptual

organization, according to Radden and Kovecses (2007, p. 354). The name *Pedra Bruta* (Raw Stone) has illegal granite mining as the target, the source within the mineral extraction ICM is the product itself, the raw stone. Reducing the name of the product marketed by the Post Office, postal refund, the name of the operation *Reembolso* (Cash On Delivery) has one of the services provided as its source within Mail Services ICM. This vehicle leads to the metonymic target, robbery, and thefts in several places, having a post office as the first victim.

#### (8) PLACE FOR EVENT

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Names of police operations: JACUTINGA, 14-BIS, RAMPHASTOS

Belonging to the *whole ICM and its parts*, ICM place – for this type of metonymy, places are often associated with locals, the region's fauna, flora and local products, institutions and salient events of the place. The concept for the name *Jacutinga* (Pipile jacutinga) is the correlation between the typical regional bird in Paraná region and the place where the investigated ones have a property, and where the police searched for drugs. Within the drug trafficking ICM, the source is the place for search represented by the name of the typical bird from the region. Similarly, the name *14BIS*<sup>7</sup> (14 BIS), which at first glance is associated with Santos Dumont's invention, becomes a place within public bidding ICM. Despite being associated with the name of the first plane, this name is used as a source and has a different use from expected, since it is the name of the company that one of the investigated individuals owned to facilitate funds misappropriation. The referent for the name *Ramphastos* (*Ramphastos tucanus*) is the place known as Tucano, where there was fraud in authorization concerning deforestation and gold exploitation. This way, the place becomes the motivating element for the police operation name.

#### (9) SUB EVENT FOR THE WHOLE EVENT

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Names of police operations: CARTÃO VERMELHO, COURIER, XEQUE MATE

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<sup>7</sup> A pioneer biplane designed and built by Brazilian aviation Alberto Santos Dumont.

Belonging to the group *thing and part ICM*, *subgroup event ICM*, the group applies to a subevent that stands for the whole event.

The name *Cartão Vermelho* (Red Card), meaning the expulsion of the player when there is serious misconduct or disrespect for authority, is an element of soccer game that serves as a source. Within soccer industry ICM, the vehicle addresses the target of bidding fraud, overpricing and misappropriation of funds for demolition, and reconstruction of a soccer stadium. For each event in the ICMs, there is a salient subevent that becomes the source. For *Courier* (Courier), within drug trafficking ICM, the source is the function of one of the investigated persons, the express delivery. For the name *Xeque Mate* (Checkmate), the target in corruption ICM is reached by the metonymic source, office removal, as in a chess move that the opponent cannot continue.

#### (10) MEANS FOR ACTION

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Names of police operations: PARALELO, REBOOT, VENTURA

In this group, the names are present in the sources in a physical or abstract dimension like in *Paralelo* (Parallel), the source is the technical term used in the exchange market to represent crime. In *Reboot* (Reboot), the referent is tactics to start something again and again, the source is bidding data manipulation to reach the target, fraud, in bidding ICM. The source in *Ventura* (Expedient) is job position to obtain illicit favors and social security benefits.

#### (11) AGENT FOR ACTION

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Names of police operations: BEBEL, LOOTERS

This group concerns parts of an ICM, which includes relationships between action and people. The use of the agent's nickname for the name *Bebel* (Bebel) shows this kind of relation in the ICM. The referent is the main suspect for transnational drug trafficking, who becomes the agent for the source in drug trafficking ICM. For the name *Looters* (*Saqueadores*), the concept is the correlation between the supposed criminal and the looters from the past in Europe, when crimes happened in large scale and with violence. In looting ICM, the source is the specific kind of criminal to represent cargo transport attacks.

## (12) INSTRUMENT FOR ACTION

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Names of police operations: ARQUIMEDES

For the name *Arquimedes* (Archimedes), the concept is the allusion to the measurement technique used to weigh the crime product. In timber extraction ICM, the source is Archimedes' principle and the target is Amazon illegal wood extraction.

## (13) EFFECT FOR CAUSE

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Names of police operations: ACERTO DE CONTA

The name *Acerto de Conta* (Settle a Score) is the result of standardized fraudulent withdrawals having infiltrators in bank agencies to catch criminals in the act. The source is the retaliation attitude to stand for frauds. The criminals' attitude effect is the cause of the police act.

## (14) ACTUAL FOR POTENTIAL

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Names of police operations: PONTES DE PAPEL

The name *Pontes de Papel* (Paper Bridge), the source is uncompleted bridges and roads, and the target is fraud in public works ICM.

## (15) EMOTION FOR CAUSE OF THE EMOTION

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Names of police operations: TRISTITIA

The referent of the name *Tristitia* is (Sorrow) the misappropriation of public funds aimed to education, the concept is the allusion to sadness that this kind of crime causes jeopardizing education. The source is sadness feeling and the target is embezzlement in education ICM.

It was demonstrated the taxonomies of proper names according to the nature of the worlds, and the categorization of 56 proper names in 14 types of metonymies and the analysis of each name

## 7 Final comments

In this study, the main goal was to discuss the role that conceptual metonymy can play in the generation of police operations proper names in Brazil. It is understood that different types of contiguity relationships are established within an ICM and are responsible for structuring our thoughts, attitudes, and actions. Adding the cognitive relationships to the interaction process with the surrounding sociocultural environment and the individuals' embodied experiences, language assumes the perspective of being a cognition and embodiment product. This study isolated one of the cognitive products of language, proper names, and presented the typology of the most frequent metonymies that motivate the generation of these names.

Besides, taxonomies were mapped based on their belonging within the nature of the worlds, which allowed visualization and discussion of the sources of more considerable influence on human existence and experience. The sociocultural world has massive participation in the representation and conceptualization of facts. The results obtained through the metonymic typology and mapping of worlds provided the proof of the structuring that metonymy, as a cognitive mechanism, can assume in the process of generating proper names by different relationships established within the ICMs. The most frequent types of *action for result*, *potential for actual*, *words for the concepts they express*, *salient participant for event*, and *symbology for event* demonstrated that cognitive principles of human experience, perceptual selectivity, and cultural preference are factors of significant influence in selecting vehicles preference within ICMs.

Thus, this work has confirmed that conceptual metonymies are present in our daily lives in constant interaction with socio-cultural, physical and mental environments. Various concepts, which manifest themselves through words, are the result of a net of threads that carry human experience and individual knowledge, besides having social, historical and cultural contexts as a casing that involves this intertwining.

This study is expected to broaden and deepen the knowledge about the relationship between cognitive mechanisms and proper names.

### Authorship Statement

I, Tânia Mara Miyashiro Sasaki, professor of Basic Technical and Technological Education at IFMS, declare to have developed the article that originated from the research carried out for my doctoral thesis. I participated directly in the writing of the article in partnership with Aparecida Negri Isquerdo, visiting researcher at UFMS / FAALC / Postgraduate Program in Language Studies and supervisor of the developing thesis of the Postgraduate Program in Letters at UFMS. I, Aparecida Negri Isquerdo, declare that I have guided and jointly participated in the process of developing the article and the reviews in response to the requirements for submission.

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## Creative metaphors in video lessons: the relationship between the novel and the conventional

### *Metáforas criativas em videoaulas: a relação entre o novo e o convencional*

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**Abstract:** The metaphors used in non-poetic contexts are mostly conventional. This study, which is part of a broader research, analyzes the emergence of – and the relationship between – conventional and novel/creative metaphors in Biology video lessons.<sup>2</sup> The theoretical basis is composed of the Theory of Conceptual Metaphor (LAKOFF; JOHNSON, 2002; LAKOFF; TURNER, 1989) and the Perspective of Metaphor in Discourse (SEMINO, 2008). Thus, the general objective of this paper is to verify the emergence of conceptual and linguistic metaphors produced by teachers in Biology video lessons, as well as to analyze their degree of novelty and/or conventionality. The data analyzed came from YouTube video subtitles, and the methodology used to identify metaphors in speech was the MIP (PRAGGLEJAZ GROUP, 2007). The results indicate that creative metaphors are present in the discourse of these teachers and play a relevant role in the presentation of scientific content.

**Keywords:** metaphor; creativity; conventionality; video lessons; textual patterns.

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<sup>2</sup> This research has resulted in a master's dissertation in Applied Linguistics.

**Resumo:** As metáforas empregadas em contextos não poéticos apresentam-se majoritariamente de forma convencional. O presente estudo, que faz parte de uma pesquisa mais abrangente, trata da análise da emergência de – e da relação entre – metáforas convencionais e novas/criativas em videoaulas de Biologia. O aporte teórico é composto pela Teoria da Metáfora Conceptual (LAKOFF; JOHNSON, 2002; LAKOFF; TURNER, 1989) e pela Perspectiva da Metáfora no Discurso (SEMINO, 2008). Desse modo, o objetivo geral deste artigo é verificar a emergência de metáforas conceptuais e linguísticas produzidas por professores em videoaulas de Biologia, assim como analisar seu grau de novidade e/ou convencionalidade. Os dados analisados são provenientes de legendas de videoaulas do *YouTube*, e a metodologia empregada na identificação de metáforas no discurso foi o MIP (PRAGGLEJAZ GROUP, 2007). Os resultados indicam que metáforas criativas estão presentes no discurso desses professores e desempenham um papel relevante na apresentação de conteúdos científicos.

**Palavras-chave:** metáfora; criatividade; convencionalidade; videoaulas; padrões textuais.

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## 1 Introduction

In the 1980s, following the wave of advances in the field of Cognitive Linguistics, the pioneering studies by Lakoff and Johnson (2002) demonstrated that, in opposition to what literate, rhetorical, and some philosophers postulated, metaphor is not only restricted to the literary scope. According to Lakoff and Johnson (2002 [1980]), metaphors are present in our daily lives. This position can be verified by looking at the amount of metaphors we use in our most ordinary interactions. Given the common use we make of some metaphors, Lakoff and Turner (1989) classify them as conventional. However, according to these authors, there is a special group of metaphors that, because of their novel and creative character, are used in a more restricted way, especially in literary contexts. Authors such as Semino (2008), on the other hand, argue that metaphors considered creative are not restricted to poetic contexts, but disagree with the idea that the metaphorical locus is only the speaker's mind, a position advocated by Lakoff and Johnson

(2002) and Lakoff and Turner (1989). Furthermore, Semino (2008), as well as others (CAMERON, 2003, 2010), argues that creative metaphors have often been employed for pedagogical purposes.

After this brief contextualization, we present the basis of this research, starting with the following guiding question: is there any conventional and especially creative metaphorical emergence in non-literary contexts, such as in Biology classes? Therefore, the main goal of this study is to verify the occurrence(s) of conventional metaphors and, especially, the creative ones in non-literary contexts – in this case, in Biology video lessons. This research has the following specific goals: (a) to verify the nature of this emergence(s), in other words, to examine which textual and/or cognitive patterns are involved in the emergence of these metaphors, (b) to propose discursive metaphors that can potentially be conceptual (cognitive), not yet described in the current literature; and (c) to find out the extent to which metaphors, especially creative ones, are used as tools in the explanation of scientific concepts.

## **2 From cognition to discourse: a two-way process for the emergence of creative metaphors**

Lakoff and Johnson (2002) argue that metaphors are the result of a series of unidirectional mental mappings that shift from one mental/conceptual domain to another. Conceptual domains are background knowledge constructs in our conceptual system, that is to say, they are stable, experiential, and cultural knowledge structures that are part of our mental life, situated in long-term memory, and thus responsible for conceptualizations (LAKOFF, 1987, 1993, 1994; LAKOFF; JOHNSON, 2002; LANGACKER, 1987; FAUCONNIER, 1999). Although Lakoff and Johnson (2002) and Lakoff (1993) recognize the role of language in the metaphorical emergence process, they establish a distinction between metaphorical expressions (linguistic metaphors) and conceptual metaphors. For these authors, metaphor is, in essence, a cognitive phenomenon.

As an example of how unidirectional domain mappings work, one can cite the conceptual metaphor ARGUMENT IS WAR.<sup>3</sup>

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<sup>3</sup> It is conventional in Cognitive Linguistic studies to write metaphors considered as conceptual in capital letters.

According to Lakoff and Johnson (2002), this metaphor can be inferred from the observation of metaphorical expressions that we employ in everyday interactions such as, for example, *it destroyed my arguments, I lost the discussion, I won the debate*. As stated by the authors, the presence of these expressions indicates the realization of a conceptual metaphor, consisting of set mappings or projections between the elements of two domains – from the target domain to the source domain. Thus, based on this evidence and on these theoretical assumptions, the foundations for the Conceptual Metaphor Theory were laid.

Although the impact of the postulates of Conceptual Metaphor Theory can still be strongly felt to the present day, there are researchers, such as Cameron (2003, 2010), who are critical of some of its points. The author's main criticisms refer to the fact that, in the Conceptual Metaphor Theory (hereafter CMT), the linguistic dimension is relegated to the background, while the cognitive facet is in excessive evidence. According to Cameron (2003; 2010), although it is consensual that cognition participates in the metaphorical emergence, in her view, not all metaphors can be explained by the occurrence of conceptual mappings or projections. In this author's view, the flow and the dynamics of discourse play a decisive role in explaining the functioning of this phenomenon.

Thus, amid this disagreement between theoretical positions, the perspective of Discourse Metaphor, proposed by Semino (2008), emerges as a more moderate perspective, as it is placed between the cognitive view and the discursive view of metaphor functioning. Semino (2008, p. 1) defines the metaphorical phenomenon as follows: "by 'metaphor' I mean the phenomenon whereby we talk and, potentially, think about something in terms of something else". In addition to this definition, the author argues that the assumptions of Lakoff and Johnson (2002) and Lakoff (1987, 1993, 1994) should be taken into account, but, at the same time, the findings of authors such as Cameron (2003, 2010), Charteris-Black (2004), Musolff (2004) and Deignan (2005), who studied metaphor in authentic discourses, should also be considered. This, by the way, is one of the points on which Semino (2008) criticizes CMT. According to the author, the results of CMT research are questionable because they do not consider linguistic data from authentic interactions or discourses. In addition, Lakoff and Johnson (2002) have proposed conceptual metaphors based on fictitious or invented examples to

support their positions. Moreover, in their pioneering work, they did not make clear the methodological procedures by which they departed from metaphorical expressions toward the deduction of underlying conceptual metaphors. Therefore, Semino (2008) states that, in his view, the notions of conceptual domains and image schemas are not always sufficient to explain the behavior of metaphor in language contexts of use; thus, other aspects such as discursive/textual ones have to be considered to satisfactorily understand the functioning of the phenomenon. In other words, although the author does not deny the importance of the cognitive facet of metaphor, she argues that the phenomenon has to be studied taking into account both cognitive and linguistic factors in order to enable researchers to provide a satisfactory description.

Moreover, according to Semino (2008), one of the most salient aspects of the nature of metaphors is that they can present themselves in two ways: conventionally or creatively. By conventional metaphors, Semino (2008) defines them as those whose occurrence is usual in our discourse; they can be conceptual or linguistic. If they are conceptual, they tend to have stable mappings between domains, whereby, according to Lakoff and Turner (1989), and Lakoff and Johnson (2002), speakers usually conceptualize one concept in terms of another. In the hypothesis that they are linguistic, one of the criteria to classify them as such is to verify whether they are registered in dictionary entries; if so, this would prove its prominent level of recurrence, thus indicating a use already crystallized in the community of speakers. On the other hand, novel or creative conceptual metaphors do not perform the same fixed and stable mappings but modify them through some cognitive strategies. (LAKOFF; TURNER, 1989; SEMINO, 2008). To Lakoff and Turner (1989), conventional, conceptual metaphors are a kind of basis upon which poetic (novel/creative) metaphors are created. Briefly, the typology of mental/cognitive operations proposed by Lakoff and Turner (1989) to explain conceptual metaphorical creativity consists of extension, elaboration, questioning, composition, and image metaphors.

The extension comes down to the use of additional mappings to those already conventionally employed. As an example, we can take the conventional metaphor DEATH IS SLEEPING. If one wants to extend it, not only the conventional elements of the SLEEP domain can be mapped, such as *inactivity* or *horizontal position*, but it is also possible, for example, to map the *dream* element, which is not conventionally mapped in this metaphor.

In turn, the elaboration process, as advocated by Lakoff and Turner (1989, p. 67), results in the filling of domain elements in unusual ways. Lakoff and Turner (1989) cite a passage from the poet Horace in which he refers to death as the eternal exile of the raft with the purpose of exemplifying this mental strategy. Thus, in the metaphor DEATH IS DEPARTURE, the target domain is understood as a journey typically with no return, but by filling up the domain DEPARTURE with the element *exile*, it can be understood that there is a possibility that the deceased may, one day, return from the this state; thus, the conceptualization of DEATH becomes distinct from the conventional one.

The cognitive strategy of questioning is equivalent to pointing out the limitations or inadequacies of a conventional metaphor in a given use. As an example, Lakoff and Turner (1989) present an excerpt from a Catullus poem in which the LIFE TIME IS A DAY conceptual metaphor is used. However, while conceptualizing LIFE as a DAY, this metaphor's validity is questioned. The limitation of this metaphor has to do with the conceptualization of mortality. In other words, if one day consists of sunrise and sunset successively, and if, through this metaphor, our lifetime is conceived in terms of the length of a day, consequently, following these metaphorical mappings, our lives should start over/be reborn every morning. That is not what happens here with these metaphors; therefore, we have an inadequacy/limitation that gives rise to the strategy of questioning.

The process of composition consists in employing two or more conceptual metaphors to refer to the same concept, in the same passage or in the same sentence, as pointed out by Lakoff and Turner (1989); in this way, there is a mixture of metaphors, in which one metaphor influences the other.

The last mental strategy pointed out by Lakoff and Turner (1989) concerns image metaphors. These metaphors do not involve systematic mappings from one domain to another to generate other inferential patterns, but function through an instantaneous superposition of images. This is mainly due to the similarity between the shapes/images represented by each domain. The metaphor *your body is a guitar* is an example of this type.

On the other hand, according to Semino (2008), the emergence of creative linguistic metaphors cannot be only explained based on the mental operations described by Lakoff and Turner (1989); on the contrary, since

metaphors are also a linguistic phenomenon, one must take into account the discursive/textual processes involved. In other words, although she takes into account the position of Lakoff and Turner (1989) to explain the emergence of novel/creative conceptual metaphors, as she advocates a cognitive-discursive view to study the phenomenon, Semino (2008) proposes that metaphorical creativity should be explained by joining the typology of mental processes assumed by Lakoff and Turner (1989) to a typology of its own, in which textual patterns influence this emergence. The textual patterns postulated by Semino (2008) are: repetition, recurrence, grouping, extension, combination, mixing, opposition between metaphorical and literal, signaling and intertextual relations.

The repetition consists of, as its name implies, repetition patterns of metaphorical expressions throughout the text/discourse.

The recurrence is a phenomenon remarkably similar to repetition; however, instead of repeating the same metaphorical expression in discourse, different expressions or lexical items recur. In other words, they belong to or are related to the same source domain; they are not in a cluster, but along the body of the text/discourse.

The grouping consists of a pattern of metaphor presentation through clusters in the text. Semino (2008) argues that there are parts of the text that have a higher density of metaphors. In other words, the distribution of metaphors in discourse is often uneven, with certain portions of the text where there are more metaphors than others.

The extension, which is also considered a subtype of cluster, occurs when multiple metaphorical expressions linked to the same source domain are used very close to each other with respect to the same topic or elements of the same target domain (SEMINO, 2008). For practical purposes, Semino (2008) defines an extension as follows: “I use the term when at least two metaphorically used words belonging to different phrases describe the same target domain/scenario in terms of the same source domain/scenario” (SEMINO, 2008, p. 25). In order to illustrate this strategy of textual organization of metaphors, we reproduce an excerpt from Semino’s own research data, in which this operation is noticeably clear.

The Tories start their conference... desperately sick - and tired. Leading lights in the party are crippled by life-threatening anemia, loss of appetite and delusions of grandeur. Troops have been laid low by the Ukip superbug, which devastated the Hartlepool by elections and threatens to spread its spores nationwide”. (SEMINO, 2008, p. 25).

As it can be seen from the above excerpt, the highlighted lexical items or expressions belong to the same source domain, in this case, DISEASE, and are clustered in two sentences.

The interaction is a process that occurs between different metaphorical expressions, coming from different source domains. Semino (2008) explains that such a process can occur in two ways: by combination or by mixing. In order to explain the combination, the author presents as an example the same excerpt that we cited earlier. Lexical items like *troop* and *devastated* are being used in conjunction with lexical items that represent the metaphor of the DISEASE domain, which have already been extended. In other words, there is a combination of metaphors from the WAR domain with the DISEASE domain or scenario, representing the party members as soldiers who are falling ill; in other words, losing the war.<sup>4</sup> Therefore, in order to have a combination, metaphors must be able to, in this interaction, produce a more complex metaphorical scenario. In this same excerpt, there is a kind of interaction that is different from the combination called mixture. More specifically, the lexical item *lights*, which is used metaphorically to represent party leaders cited in the previous excerpt, and given its metaphorical meaning, is not compatible with metaphors from the domains of WAR and DISEASE to create a more complex metaphorical scenario; consequently, it demonstrates an incongruous interaction. Therefore, the process of combining does not occur in this case; instead, such is a mixing process.

The opposition between the use of the literal meaning and the metaphorical meaning, according to Semino (2008), consists in evoking both the literal meaning (most basic sense of the lexical item) and the metaphorical meaning simultaneously in a given textual excerpt, through the same lexical item or expression. As an example, the author cites the metaphor *a diplomatic desert* used in a newspaper article that addresses the conflict between South Africa and Morocco over control of the western side of the Sahara Desert. Obviously, considering the metaphor, the diplomatic meeting between the leaders did not bear fruits.

The signaling is described as another pattern through which the metaphors appear in text/discourse. It consists of the use of certain expressions in the immediate co-text, in order to guide the reader, or listener, to possible metaphorical interpretations, such as “[...]”

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<sup>4</sup> The party of the Tories.



metaphorically speaking, literally, as it were, so to speak, sort of, imagine” (SEMINO, 2008, p. 27).

The last textual pattern of metaphor emergence in discourse mentioned by Semino (2008) in her typology is the intertextual relations. Metaphors can demonstrate intertextual relationships in diverse ways, as well as be linked to the original producer of a given metaphor or to a specific subject/topic. Regardless of the way in which they relate through different texts, they are often explored later by other writers or speakers, just to refer to either the producer or the topic. As an example, Kövecses (2010) cites the metaphors JESUS IS A SHEPHERD and PEOPLE ARE SHEEPS, from the Bible, stating that they are historically recycled and explored by other authors.

### **3 Metaphors as a pedagogical tool**

According to Semino (2008), metaphors are used in scientific discourse, mainly for two reasons: in the first place, she argues that the observed phenomena which are studied by scientists, in many cases, are not available to our perceptual system, that is, to our senses, such as sight, touch or hearing. In other words, they cannot be observed directly. In some cases, the use of instruments for indirect observation is required, and the results of this observation still require, to some extent, interpretation. This, of course, happens when the instrumental observation of phenomena does not occur partially and yet it is necessary to make inferences, in order to fill in the gaps involved in explaining the phenomenon; some examples are the behavior of subatomic particles, black holes, big bang, genetic code and the greenhouse effect. The second reason is that, to report the observed (or partially observed) phenomenon, scientific knowledge or “scientific facts” are constructed via language use and social interactions, which involve negotiation, argumentation, persuasion and compromise.

Still, in this regard, Temmerman (2012) also argues that the emergence of metaphors seems to be, in some scientific fields, very necessary, as, for example, in Genetics, in which the use of metaphors is necessarily included in the terminology of the area, a process which this author defines as metaphorical lexicalization; and, in our view, these ones are especially conventional metaphors.

Cameron’s research (2003), which deals with the systematic presence of metaphors in interactions between students and teachers in

schools, also points to the importance of the role that metaphors play in teaching and didactic materials, as they present themselves as a valuable pedagogical tool to teach and explain different subjects. Analyzing the accuracy of the explanations and representations that each metaphor provides for scientific concept, she proposed a classification or distinction among them.

Thus, based on the review of the literature, it can be said that metaphors can play a relevant role in teaching, understanding and conceptualizing scientific concepts, especially in Biology.

#### **4 Methodological procedures**

The data that constitutes our research corpus was collected from two YouTube video lessons, specifically in the tab that gives access to subtitle transcripts automatically generated by a platform's speech recognition software. The chosen area was Biology, more specifically the subareas that address the immune system and Virology. We have selected the Biology field for the following reasons: in the first place, we had the intention to confront the claimed sharp distinction made between the objectivity of the scientific discourse, especially in sciences considered to be "harder" than Human, Social or Language sciences, and metaphorical subjectivity. Secondly, while we were in the stage of literature review, we have found only a few researches on metaphors in areas such as Chemistry and Physics, and only one research was found in Biology (TEMMERMAN, 2012). Thus, as we have once identified a gap in research that covers this field, Biology has been chosen as our research's field for the study of metaphors. The selection of subjects or subfields in Biology was based on the following criteria: relevance to school curriculum, compliance with the new BNCC, and number of classes available on the topic.<sup>5</sup>

After that, the transcriptions were copied and pasted into *.doc* files for the subsequent corpus compilation step, which consisted of checking the transcriptions with the audios.<sup>6</sup> The transcriptions were formatted

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<sup>5</sup> BNCC are the initials in Portuguese for National Common Curriculum Base. It is a document, approved on December 20, 2017, which regulates 60% of the content that should compose the curriculum of each subject of elementary schools across Brazil.

<sup>6</sup> It is a file format that allows text editing on computer application programs such as Microsoft Word.

in Courier New font and size 10. We decided to do so for the following reasons: (a) by opting for this format, we are following the tradition in the presentation of this type of data, as it happens in research fields that routinely present talk data, such as Conversation Analysis; (b) by choosing this font and size, the distinction between text and transcripts is clearer, which, in our opinion, helps the reader to follow the text easily.

Regarding the methodological procedures for analysis, we performed the following procedures: (i) identification of linguistic metaphors through the use of MIP (PRAGGLEJAZ GROUP, 2007), signaling them in the transcription through bold and underlined formatting; (ii) inference of conceptual metaphors through the linguistic metaphors identified (metaphorical expressions), based on the relation of conceptual metaphors pointed by cognitive semanticists, such as Grady (1997, 2007), Grady; Oakley; Coulson (1999), Kövecses (1986, 1990, 2010, 2015), Lakoff (1993, 1994), Lakoff and Johnson (2002), Lakoff, Espenson and Schwartz (1991), and Lakoff and Turner (1989); (iii) classification of conceptual metaphors found in conventional or novel/creative metaphors, taking into account the cognitive processes pointed out by Lakoff and Turner (1989), as well as the textual patterns that are possibly involved in the process; (iv) proposition of more general discursive/linguistic metaphors, with conceptual potential, inferred through the metaphorical expressions used throughout the text and based on Semino's (2008) works; (v) submission of linguistic and discursive metaphors underlying to them (potentially conceptual) to the procedure (iii); and (vi) analysis of the relationship between the metaphors employed by teachers in the video lessons and the scientific concepts presented in class, especially with regard to the creative ones.

The MIP procedure (PRAGGLEJAZ GROUP, 2007), which we referred to earlier, consists of the steps that are described below:

1. Read the entire text-discourse to establish a general understanding of the meaning.
2. Determine the lexical units in the text-discourse.
3. (a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit.  
(b) For each lexical unit, determine whether it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be:

- More concrete (what they evoke is easier to imagine, see, hear, feel, smell and taste);
- Related to bodily action;
- More precise (as opposed to vague);
- Historically older.

Basic meanings are not necessarily the most frequent meanings of the lexical unit.

(c) If the lexical unit has a more basic current-contemporary meaning in other contexts than in the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.

4. If yes, mark the lexical unit as metaphorical”. (PRAGGLEJAZ GROUP, 2007, p. 3; SEMINO, 2008, p. 12).

## 5 Results and data analysis

In this section, we deal with the analysis of two video lessons about the immune system and viruses.

The video lesson that addresses the immune system is taught by a teacher called Beth, from the *Beth Biologia* channel, which had, on October 25<sup>th</sup>, 2019, 5.462 subscribers. In addition, on that same date, this video lesson had 60,930 views.<sup>7</sup>

We have identified the following underlying conceptual metaphors described in the literature, which are shown on chart 1.

CHART 1 – Conceptual Metaphors in the Immune System Video Lesson

PEOPLE ARE MACHINES (LAKOFF; TURNER, 1989).
HUMAN BODY IS A BATTLEFIELD (LAKOFF; ESPENSON; SCHWARTZ, 1991; LAKOFF, 1994).
DISEASE IS AN ENEMY (LAKOFF; ESPENSON; SCHWARTZ, 1991; LAKOFF, 1994).
EASE IS LIGHT/DIFFICULTY IS WEIGHT (GRADY, 1997).

Source: produced by the authors.

<sup>7</sup>This video lesson is fully available at: <https://www.youtube.com/watch?v=mSFy3GINMjs>. Access on: Oct. 25, 2019.

Regarding the type of metaphors we found, we consider that all are conventional and emerged mainly through textual patterns of repetition, recurrence, and extension. The conceptual metaphor that has most licensed linguistic metaphors in this video lesson is HUMAN BODY IS A BATTLEFIELD (LAKOFF; ESPENSON; SCHWARTZ, 1991; LAKOFF, 1994). Nevertheless, the conceptual metaphor DISEASE IS AN ENEMY (LAKOFF, ESPENSON; SCHWARTZ, 1991; LAKOFF, 1994) also seems to motivate, according to our analysis, some of these linguistic metaphors. Excerpt 1 shows the occurrence of these metaphors, as well as their form of organization through textual patterns.

EXCERPT 1<sup>8</sup>

75: So, my beloved ones<sup>9</sup>  
 76: we have two types of active immunity  
 77: natural: the humoral immunity that is  
 78: one that acts as if it were  
 79: an elite battalion like the Bope<sup>10</sup>, the Bope  
 80: look guys look Bope's little song  
 81: so, in reality this song this process of action  
 82: of little soldiers right as if  
 83: you had really been hit  
 84: by an enemy that you will really  
 85: fight a war, fire guns,  
 86: machine guns at the invaders  
 87: they characterize our humoral immunity

<sup>8</sup> The subtitles that compose the corpus of this research were originally collected in Portuguese; however, because this publication is in English, subtitles have been translated and adapted to this language.

<sup>9</sup> As stated in the section presenting the methodological procedures, the linguistic metaphors identified in the video lessons are presented both in bold and underlined on the excerpts.

<sup>10</sup> BOPE are the initials in Portuguese for Special Police Operations Battalion, which is as specialized police squad from Rio de Janeiro city. On the excerpts, we decided to maintain the original initials.

88: it is the great defender  
 89: the Bope's general  
 90: it's called Helper T lymphocyte  
 91: the Helper T lymphocyte, my beloved ones, is who  
 92: first sees the presence of a  
 93: microorganism of an allergic or  
 94: even a toxin in your body  
 95: so, what is he going to do?  
 96: He will call the guys, the folks  
 97: who will go to work because he remains sitting at his desk  
 98: answering the phone only watching  
 99: on the screen of his monitor where the invaders are  
 100: in your body but he doesn't leave his place  
 101: this T lymphocyte, the helper  
 102: then he calls the folks who are going  
 103: for combat rat-at-at-at-at-at  
 104: they are the guys called B lymphocyte  
 105: What is B lymphocyte going to do?  
 106: If you have been hit by  
 107: an artificial antigen we call a vaccine

Source: adapted from Profa. Beth (2016).<sup>11</sup>

As it can be seen in excerpt 1, although there are repetitions and recurrences, linguistic metaphors are eminently emerging through textual (SEMINO, 2008) or cognitive (LAKOFF; TURNER, 1989) extensions of the WAR domain. In the metaphor THE HUMAN BODY IS A BATTLEFIELD (LAKOFF; ESPENSON; SCHWARTZ, 1991; LAKOFF, 1994), we can highlight the extensions *have been hit by an enemy, fire guns and fire machine guns at the invaders*.

Regarding the presence of more general discursive metaphors with conceptual/cognitive potential, we identified the following in chart 2.

<sup>11</sup> “Profa.” is the abbreviation of the word “*professora*”, which in Portuguese, means “teacher”. We decided to maintain it in Portuguese because of the original references are on this language.

CHART 2 – Discursive Metaphors in the Immune System Video Lesson

SUBJECT/CLASS CONTENT IS A SUBSTANCE/RAW MATERIAL TO BE HANDLED.
LYMPHOCYTES ARE SOLDIERS THAT DEFEND OUR ORGANISM.
LYMPHOCYTES ARE WEAPONS/GUN MACHINES.
ANTIGENS ARE ENEMY SOLDIERS /INVADERS.
LYMPHOCYTE T IS FEARLESS/CUTTHROAT.

Source: produced by the authors.

The most productive discursive metaphors in the video lecture in question are LYMPHOCYTES ARE SOLDIERS THAT DEFEND OUR ORGANISM, ANTIGENS ARE ENEMY SOLDIERS /INVADERS, and LYMPHOCYTE T IS FEARLESS/CUTTHROAT. Most of the linguistic metaphors licensed by these metaphors above are organized into discourse via textual extension. Excerpt 2 illustrates an occurrence of the functioning of the extensions involved in the metaphor LYMPHOCYTE T IS FEARLESS/CUTTHROAT.

EXCERPT 2

138: the <b><u>beast</u></b> , the <b><u>strength</u></b> , the <b><u>killer</u></b> T lymphocyte
139: the cytotoxic, the <b><u>guy</u></b> who is the really the <b><u>guy</u></b>
140: he is <b><u>Superman</u></b>
143: <b><u>warned</u></b> by interleukin and phagocyte
144: the macrophage it kills the virus, <b><u>babies</u></b> , that is
141: he is a <b><u>superhero</u></b>
142: <b><u>he will get</u></b> where the virus is
145: in there and viral infection is over

Source: adapted from Profa. Beth (2016).

The lexical items *beast* and *strength* are elements from the ANIMAL domain. On the other hand, the *superman* and *superhero* metaphors are elements from the HERO domain. Thus, there are extensions in both domains, either conceptual (LAKOFF; TURNER, 1989) or textual (SEMINO, 2008). We also verified that there is another

textual and potentially cognitive pattern responsible for the emergence of the metaphor LYMPHOCYTE T IS FEARLESS/CUTTHROAT, which is an interaction by combination. In other words, the linguistic metaphors *T lymphocyte is a beast* and *T lymphocyte is a superhero* combined gave rise to this more complex discursive metaphor which, unlike the other discursive metaphors above, can be considered, according to Lakoff and Turner (1989) and Semino (2008), as relatively novel.

In addition to these, we verified the occurrence of linguistic metaphors that we consider novel or imaginative according to Semino (2008). Among them, there are two similes arranged in excerpt 1: *as if it were an elite battalion* and *like the Bope*, which can be understood as unconventional forms and, therefore, as extensions that give rise to new ways of conceptualizing the lymphocytes. The same imaginative or novel extension process for conceiving the lymphocytes occurs through the use of the linguistic metaphors *Bope*, *Bope's general* and *fire machine guns*. Thus, although they are cognitive and textual extensions of the WAR domain, the metaphorical simile *like the Bope* also seems to be influenced by the textual pattern of intertextuality, as it refers to elements of a sequence of two movies called *Elite Squad*.<sup>12</sup> Concerning similes, Semino (2008) states that when a simile is used to understand one concept in terms of another, and if it is possible to recognize elements as well as the correspondence between them, then one can consider, beyond its most basic sense, also the metaphorical one. Therefore, according to the author, similes also perform the function of metaphors, even though they may vary from those in the formal aspect for which they are presented.

Another simile we find acting with a novel or creative metaphor function is *as if it were some flashing lights*. Excerpt 3 demonstrates its occurrence.

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<sup>12</sup> They are Brazilian movies from 2007 and 2010. The first one, in Portuguese, is called *Tropa de Elite* (in English, *Elite Squad*), and the last one is called *Tropa de Elite: o inimigo agora é outro* (in English, *Elite Squad: the enemy within*). These movies have been submitted for consideration to the Academy Award for Best Foreign Language Film.



## EXCERPT 3

132: macrophage the macrophage arrives and phagocytes the virus  
 133: And what does it do?  
 133: it starts to  
 134: release, people, **as if it were some flashing lights,**  
 135: a protein called  
 136: interleukin exiting on macrophage membrane

Source: adapted from Profa. Beth (2016).

According to our analysis, when using the concept of flashing lights to represent interleukin, teacher Beth intends to demonstrate that the interleukin released by the macrophage acts as a kind of signal for lymphocytes to attack the antigen. Keeping this in mind, this simile seems to be a textual (SEMINO, 2008) and potentially a conceptual (LAKOFF; TURNER, 1989) creative extension of the WAR domain, similar to the soldiers, when they mark the target to be bombarded with a laser light signal during military conflicts.

Therefore, the data points to a close relationship between extensions and creative similes in this video lesson. In addition, in excerpt 2, we identified two more creative novel metaphors, the *beast* and *strength* lexical items, also being considered extensions of the ANIMAL domain, as we already mentioned.

By analyzing the relationship of conventional and creative/novel metaphors with the scientific concepts presented by teacher Beth in her video lesson about the immune system, we came to some results: the first one is that both conventional and creative metaphors are used as an explanatory pedagogical tool, which confirms Semino's (2008) and Cameron's (2003) positions, although the conventional ones are more numerous (given their nature, it is perfectly reasonable). Thus, our analysis of the results also indicates that the use of metaphors as a pedagogical tool for the explanation of scientific concepts confirms Semino's (2008) view: metaphors are used for pedagogical purposes in classes, especially to fill in the gaps involved in explanation of concepts related to phenomena that are not easily accessible to our perceptual system.

Our analysis suggests that the novel/creative metaphors, besides being used as an explanatory pedagogical tool like the conventional ones, seem to be used for other purposes such as drawing the student's attention to a particular concept.

The second video lesson, which we analyze here, is taught by teacher Guerra from *Mundo Biologia* channel, which had, on November 15th, 2019, 392.543 subscribers.<sup>13</sup> This video lesson, at that same date, had 120.233 views.<sup>14</sup>

After applying the methodological procedures, we had, as a result, the conceptual metaphors expressed in chart 3.

CHART 3 – Conceptual Metaphors in the Virus Video Lesson

KNOWING/UNDERSTANDING IS SEEING (LAKOFF; JOHNSON, 2002; LAKOFF; ESPENSON; SCHWARTZ, 1991; LAKOFF; TURNER, 1989; LAKOFF, 1994; GRADY, 1997).
THEMES/SUBJECTS ARE AREAS (LAKOFF; ESPENSON; SCHWARTZ, 1991; LAKOFF, 1994).
IMPORTANCE IS SIZE (GRADY, 1997, 1999, 2007).
ACTIVITY IS WAKEFULNESS/INACTIVITY IS SLEEP (GRADY, 1997).
TIME IS A LANDSCAPE WE MOVE THROUGH/TIME IS SPACE (LAKOFF; ESPENSON; SCHWARTZ, 1991; KÖVECSES, 2015).
EMOTIONAL INTIMACY IS PROXIMITY (GRADY, 1997).
PURPOSES ARE DESTINATIONS – ACHIEVING A PURPOSE IS TO GET TO A DESTINATION (GRADY, 1997; LAKOFF; TURNER, 1989; LAKOFF; ESPENSON; SCHWARTZ, 1991; LAKOFF, 1994; KÖVECSES, 2010).

Source: produced by the authors.

It was not possible to determine which of the above conceptual metaphors is in evidence because they motivated very equivalent amounts

<sup>13</sup> This is the original name of the channel in Portuguese, which, in English, means Biology World.

<sup>14</sup> This video lesson is fully available at: [https://www.youtube.com/watch?v=oFHH-Ss7FnA&list=PLh1nSI6Y-RoMkTa357\\_rh0J2xO7MJE29T&index=8&t=3s](https://www.youtube.com/watch?v=oFHH-Ss7FnA&list=PLh1nSI6Y-RoMkTa357_rh0J2xO7MJE29T&index=8&t=3s). Access on: Nov. 15, 2019.

of linguistic metaphors throughout the discourse. Moreover, it can be said that the above conceptual metaphors are conventional; at the same time, we found that the linguistic metaphors licensed by them emerge in the discourse of this video lesson through the textual strategies of metaphorical repetition and recurrence.

Regarding the emergence of discursive metaphors that are potentially conceptual, the following were identified:

CHART 4 – Discursive Metaphors in the Virus Video Lesson

CLASS IS A PLACE.
VIRUS IS A MACHINE.
VIRUS IS AN AGENT INFILTRATED IN THE CELL.
VIRUS IS AN ENEMY/INVADER SOLDIER.
MANIPULATING A VIRUS DNA IS EDITING A PHOTO.
FACTS/EVENTS ARE NEWS.

Source: produced by the authors.

The discursive metaphor VIRUS IS A MACHINE, which we consider as potentially cognitive/conceptual, has presented the largest number of linguistic metaphors linked to it and can be considered novel/creative. Its emergence in teacher Guerra’s discourse occurred through linguistic metaphors that were presented mainly by means of the textual strategy of recurrence. The other discursive metaphors proposed above emerged through different strategies; the most productive one was the extension. As an example of the productivity of the extension process, whether conceptual (LAKOFF; TURNER, 1989) or textual (SEMINO, 2008), we present the following excerpt for the class in question, demonstrating the emergence of the novel/creative discursive metaphor VIRUS IS AN AGENT INFILTRATED IN THE CELL.

## EXCERPT 4

78: the virus enters in the host dismounts  
 79: capsid and infiltrates its genetic  
 80: material in the middle of host's genetic material  
 81: but doesn't break anything  
 82: in this case, the genetic material of the virus  
 83: stays there, hidden, clandestine, sneaky,  
 84: illegally infiltrated in the genetic material  
 85: of the host, the host cell  
 86: will divide will multiply  
 87: but multiply several times  
 88: multiplying with it the genetic  
 89: material of the virus that stays quiet there,  
 90: silent, keeping a low profile, until conditions  
 91: are favorable, when everything is  
 92: ready the virus will be activated all of them at  
 93: same time, as if it was a conspiracy...

Source: adapted from Prof. Guerra (2017).

In addition, we have identified novel/creative/imaginative linguistic metaphors or metaphorical expressions as *a virus is a molecular machine*, presented in the excerpt, and its metaphorical expressions *assembled*, *parts*, *disassemble*, *assemble*, and *box*, emerging through textual recurrence, which together make up the MACHINE domain. The metaphor VIRUS IS AN AGENT INFILTRATED IN THE CELL is also motivated by textual extension through metaphorical expressions such as *hidden*, *clandestine*, *sneaky*, *quiet*, *illegally infiltrated* and *keeping a low profile* in excerpt 4. We also consider that the metaphorical simile *as if it were a cursed hidden inheritance* used by that same teacher in this video lesson also fits this classification. We have come to the conclusion that the simile is used metaphorically to refer to viral DNA; however, at the same time, it establishes an intertextual relationship (SEMINO, 2008) with a horror movie originally called *Hellraiser*. In Portuguese, which is the teacher's mother tongue, the title of this movie that has been chosen by Brazilian producers and translators is *Herança Maldita*, which,

when freely translated to English, means *Cursed Inheritance*. Therefore, from our analytical point of view, there is an elaboration of the metaphor VIRAL DNA IS INHERITANCE to form a novel metaphor, in which, due to the interrelationship and mappings between the different domains and its elements, such as VIRAL DNA (virus, genetic inheritance, attacks the cells) and CURSED INHERITANCE (mother, sequelae of postpartum depression, causes trauma in her progeny), a whole novel metaphor emerges; in this case DNA IS CURSED INHERITANCE.

Another linguistic metaphor that emerges in the transcription of this video lesson is the lexical item *hacking*, as can be seen in excerpt 5. Therefore, it is evident that teacher Guerra describes the biological virus in terms of a computer virus.

#### EXCERPT 5

106: the damage the virus causes to us,
107: multicellular organisms, and exists in the
108: it Consumes our resources
109: to produce its own <b><u>parts</u></b>
110: it is <b><u>hacking</u></b> your cell to
111: produce its own proteins

Source: adapted from Prof. Guerra (2017).

In this excerpt, teacher Guerra employs the *hacking* metaphor for viral functioning. Although it is known that the term virus is used in the computer field and that its origin is from the metaphorical meaning of biological virus, it is no longer prudent to analyze this occurrence as the result of the relation between the literal and the figurative, as explained by Semino (2008), since two Brazilian Portuguese dictionaries, CaAu (2019) and DPLP (2019), already accept the second sense as not figurative. Thus, the most that can be said is that, in addition to the relationship between literal and figurative meanings, according to this excerpt, there is evidence that a metaphor producer can also use the semantic ambivalence strategy to create novel or creative metaphors.

In addition to what we have already pointed out, it is worth mentioning that, in the video lesson in question, the novel/creative metaphors are very relevant to explain the concept of virus. Thus, our analysis of this video lesson's data, as well as occurred in teacher Beth's

video lesson, suggests that the use of novel metaphors by teacher Guerra seems to be a strategy to draw the student's attention and explain scientific concepts efficiently, as it happens in the case of the concept of virus, which is also not immediately available to our perceptual system. By using novel metaphors, he aims to explain that concept in an unprecedented way, in comparison to the use of conventional metaphors to teach the same concept. Furthermore, the results also have shown us that teacher Guerra makes use of different metaphors to explain the same concept; for example, when he teaches about the concept of virus, he employs two different metaphors – VIRUS IS A MACHINE and VIRUS IS AN AGENT INFILTRATED IN THE CELL. Our analysis of that specific result suggests that the teacher consciously makes a choice among different possible metaphors to talk about the same concept, in this case, virus. In our opinion, he proceeds like that taking into account his pedagogical goals, as well as aiming to explain the same concept through different angles or perspectives. He possibly chose that sort of metaphor considering the different elements of each domain (source and target domains); in other words, he takes into account the possible correspondences between them, which, in our view, can be considered as a criterion for the explanatory capacity of a metaphor.

## **6 Conclusion**

In conclusion, a first aspect to consider concerns the entire fulfillment of the main goal of this research, which is to verify the occurrence of conventional metaphors and, especially, the creative ones in non-literary contexts – in this case, in Biology video lessons. We found that there is a fruitful emergence of both conventional and novel/creative metaphors, which answers our research question in the same way.

Concerning the secondary goals of this research, we can say that they were also reached. Regarding the purpose of verifying the emergence of metaphors, we conclude that the conventional conceptual metaphors were, to a larger extent, under the influence of repetition and recurrence textual patterns, and, to a smaller extent, under the influence of extension textual and cognitive patterns. In respect of the proposed discursive metaphors, some of them with cognitive potential, they emerged as follows: those that behaved as conventional were more influenced by repetition, recurrence, and extension patterns. Those that presented themselves as novel/creative were mainly organized through extension and, on a smaller extent, through recurrence combination, elaboration, and intertextual relations.

In this sense, the results of our analyses suggest that extension is the most useful textual (SEMINO, 2008) and/or cognitive pattern (LAKOFF; TURNER, 1989) for the emergence of novel/creative metaphors, although this pattern can also be involved in the emergence of some conventional metaphors. At the same time, the results suggested that repetition was the most commonly employed textual pattern in the emergence of conventional metaphors; and the recurrence was the pattern involved, on a smaller scale, to the emergence of both types of metaphors: the conventional and the creative ones. Based on these results, we raise the hypothesis that the pattern of recurrence is possibly a transition pattern between the emergence of conventional and creative metaphors.

Regarding the proposition of discursive metaphors, we realize that some of them can potentially be cognitive conventional metaphors. Some of the ones that mobilized the most linguistic metaphors, mainly through repetition and recurrence patterns, are SUBJECT/CLASS CONTENT IS A SUBSTANCE/RAW MATERIAL TO BE HANDLED, LYMPHOCYTES ARE SOLDIERS THAT DEFEND OUR ORGANISM, ANTIGENS ARE ENEMY SOLDIERS/INVADERS, CLASS IS A PLACE, and VIRUS IS AN ENEMY/INVADER SOLDIER.

In respect of the relationship between metaphors and scientific concepts, the results suggest that both conventional and creative metaphors play a relevant role in explaining scientific concepts, serving as a pedagogical tool for teachers who decide to use them in their classes; however, creative metaphors, given their imaginative and original nature, can provide different angles, both to teach scientific concepts and to learn them. Our analysis of the data led us to conclude that these different ways or perspectives that teachers provide to explain some scientific concepts are, probably, choices concerning which metaphor to employ, especially the new/creative ones. In our opinion, there is a possibility that teachers also take into account the elements of each domain, in other words, the amount of correspondences between the elements of the source domain and the target domain to accomplish their pedagogical goals, which can impact, for example, on the degree of accuracy or the degree of creativity of their explanations.

Finally, the results of this research meet the theoretical positions of Semino (2008), for whom the cognitive phenomenon described by Lakoff and Turner (1989), although valid, does not seem to be sufficient to account for the richness of the processes of emergence of novel/creative metaphors that, considering that they never occur out of context, must necessarily go through the influence and pressures of discourse dynamics.

### Authorship Statement

This article was produced collaboratively by the authors John Richart Schabarum and Rove Luiza de Oliveira Chishman. Firstly, the conception and planning of the research were elaborated by both. Secondly, the summary and introduction were likewise prepared by both authors. Thirdly, the theoretical foundation section on the researched phenomenon (the metaphor) was written by John Richart Schabarum. The video lessons used for analysis are part of the data of the Master's research in Applied Linguistics, entitled *The Metaphor in Video Lessons: a study about the pedagogical, discursive and cognitive aspects*, written by John Richart Schabarum under the advisorship of Doctor Rove Luiza de Oliveira Chishman. The methodological aspects were planned and improved jointly by the authors. The results section and data analysis on metaphor in video lessons was planned and written by John Richart Schabarum. The conclusion and references were prepared by both authors.

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## Women's representations in advertisements: conceptual explorations

### *As representações das mulheres em propagandas: explorações conceituais*

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**Abstract:** Unlike traditional visions show, metaphors are present not only in literary language, but also in everyday, scientific and philosophical languages. It is through the metaphors that we conceptualize the world and understand the most abstract concepts that we have. Based on this premise, this study investigates the conceptual metaphors found in advertisements of women's magazines, based on the theories: the theory of conceptual metaphor proposed by Lakoff and Johnson (2002), considerations of Kovecses (2002) about this theory and particular character of metaphors in advertisements, as proposed by Velasco-Sacristán (2010) and Ungerer (2003). The purposes of this research are to examine how the metaphors conceptualize the product advertised and how they reveal the social representation of women. The research was done through analysis of four advertisements taken from the magazines: *Nova* (Dec. 2008), *Marie Claire* (Oct. 2008), *Cláudia* (July 2009) and one advertisement taken from a website, published in 2020. The results show that conceptual metaphors are tools used by propagandists in the creation of advertisements based on stereotypes, representations and ideologies of particular group to which the advertisement is intended. Such resources tend to persuade the reader to purchase the product released.

**Keywords:** metaphor; conceptual metaphor; advertisements.

**Resumo:** Ao contrário do que mostram visões tradicionais, a metáfora não está presente somente na linguagem literária, mas também nas linguagens: cotidiana, científica e filosófica. É por meio das metáforas que nós conceptualizamos o mundo e compreendemos a maioria dos conceitos abstratos que temos. Com base nesse postulado,

o presente estudo investiga as metáforas conceituais presentes em propagandas de revistas femininas, tendo como pressupostos teóricos: a teoria da Metáfora Conceptual, proposta por Lakoff e Johnson (2002), as considerações de Kovecses (2002) acerca dessa teoria e o caráter particular das metáforas em propagandas, como proposto por Velasco-Sacristán (2010) e Ungerer (2003). Os objetivos dessa investigação são verificar o modo como as metáforas conceitualizam o produto divulgado e em que medida elas revelam a representação social da mulher. A pesquisa foi realizada através da análise de duas propagandas, retiradas das revistas: *Nova* (dez. 2008) e *Marie Claire* (out. 2008). Os resultados mostram que as metáforas conceituais são ferramentas utilizadas pelos propagandistas na elaboração das propagandas, com base em estereótipos, representações e ideologias de determinado público-alvo ao qual a propaganda é destinada. Tais recursos tendem a persuadir o leitor a adquirir o produto divulgado.

**Palavras-chave:** metáfora; metáfora conceitual; propagandas.

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## 1. Introduction

This research investigates the conceptual metaphors present in women's magazine advertisements in order to verify how they conceptualize the product, whose domain is correlated to other domains, and to what extent they reveal the social representation of women, their stereotypes, and underlying ideology. In modern advertising, the role of metaphor cannot be underestimated because products are never conceptualized within just one domain; this conceptualization is established by pictorial elements – instantiations of conceptual metaphors – and by linguistic elements with which such metaphors often interact.

The choice of the conceptual metaphor, inserted in the cognitivist paradigm, is due to the fact that, in this perspective, the metaphor is not seen as a linguistic phenomenon, but as a thought process; not being an exclusive attribute of verbal language, metaphor can manifest itself in nonverbal language, which is clearly the case with advertising. With its own organization, the message of advertising imposes, in lines and between lines, ideologies and values; presents a speech you wish to persuade and seduce. To achieve its communicative purpose, it makes use of numerous resources and strategies, being the metaphor one of the most effective.

Metaphor, as this research understands it, reveals our conceptualization of the world and is present in everyday discourses to philosophical and scientific discourses. It is omnipresent in our communications, reflecting the ideology of a particular group of people, which attests to its cultural character and is therefore rooted in social practices and discourses; It is a mental and abstract representation that takes place not only in verbal language but also in many other areas of human experience, since the system that governs our way of experiencing the world, our way of thinking and acting is metaphorical.

## **2. Theoretical assumptions**

### **2.1 Cognitive perspective of metaphor: Theory of conceptual metaphor**

In 1980, George Lakoff and Mark Johnson presented a new paradigm in the work entitled “Metaphors We Live By,” translated as “Metáforas da vida cotidiana” (2002). In this new paradigm the metaphor ceases to have the status of a simple figure of language and has its cognitive value recognized.

The new paradigm proposed by Lakoff and Johnson presents metaphor as a central phenomenon in language and thought, being present in all types of language, including scientific language, which was considered impossible within the logical-positivist current. For them, we understand the world, culture, and ourselves through metaphors, for beyond emotional concepts such as love or anger, basic concepts such as time, quantity, etc., are understood metaphorically. The central thesis of this theory is that metaphors exist in our mind, and most abstract concepts are metaphorical. The language is secondary. Thought and reason are superior to language.

According to Sardinha (2007), the main concepts of this theory are:

- Conceptual metaphor: a way of conceptualizing something in the world. Example: GOOD IS UP.
- Metaphorical expression: linguistic expression that shows a conceptual metaphor. Example: He got high marks. It is an expression that comes from the conceptual metaphor: GOOD IS UP.
- Domain: related to people’s knowledge and experience. There are two types of domain: source and target. The source domain

is the concrete domain from which we conceptualize something metaphorically. The target domain is abstract, that is, the one we wish to conceptualize. “The same source domain can serve multiple target domains” (SARDINHA, 2007, p.31).

- Mappings: the relationships established between domains.
- Splits: the various inferences that can be made based on a conceptual metaphor.

The types of conceptual metaphors are:

- Structural: those that are products of complex mappings.  
Example: TIME IS MONEY.  
Don't waste any more time on this subject.  
I can't invest more time in this project.
- Orientational: These are those that give a concept a spatial orientation.  
Example: GOOD IS AHEAD.  
He is ahead of business.  
We have to move on.
- Ontological: are those that make abstract concepts concrete, but without establishing mappings. This embodiment manifests itself in terms of an entity (something countable).  
Example: TIME IS A CONTAINER.  
I'm back in three days.  
You finished the job in a short time.
- Personification: These are ontological metaphors whose entity must necessarily be a person.  
Example: A THEORY IS A PERSON.  
The theory says that...
- Primary: Metaphors related to physical aspects of the human body, present in many cultures.  
Example: INTIMACY IS NEARBY.

We can also highlight other important aspects of this theory. The theory of conceptual metaphor postulates that there are no absolute truths, because metaphors are cultural, that is, a reflection of the ideology of a certain group of people built on a given culture. Even basic metaphors,

such as primary and orientational metaphors, may differ from one culture to another. Another important factor, which we have already highlighted above, is that metaphor is a mental and abstract representation that materializes in speech and writing through metaphorical expressions. Conceptual metaphors are still conventional, that is, unconscious, for they are so pervaded in our culture that we do not realize our use of them.

According to Kövecses (2002) the conceptual metaphor consists of two conceptual domains where one domain is understood in terms of another. This understanding of one domain in terms of another involves a series of mappings (matches) between the target domain and the source domain. These mappings derive from a central mapping, which is responsible for the main meaning of source domains and target domains. About the source and target domains, Kövecses (2002) states that each source domain is designed to fulfill a specific function in characterizing multiple target domains, that is, each source domain is associated with a particular meaning that is mapped toward a target domain. This meaning is conventionally fixed and accepted within the discourse of a particular linguistic community. The target domain receives the main meaning of the source domain. Usually, the source domain is an intense situation, such as actions, events, or states.

Another important point to note is that conceptual metaphors can be realized not only in verbal language, but in many other areas of human experience, after all, the system that governs our way of experiencing the world, our way of life, thinking and acting is metaphorical. Kövecses (2002) calls these manifestations achievements of conceptual metaphors. Some examples of these achievements are:

- Drawings, paintings, sculptures and constructions: According to Kövecses (2002), children often make drawings where it is possible to perceive an embodied conceptual metaphor. A common metaphor made by children is INANIMATED OBJECTS ARE PEOPLE.
- Advertisements: The main manifestation of conceptual metaphors is in advertisements. Part of the selling power of an advertisement depends on the effective choice of a conceptual metaphor that the photo and / or words used in the advertisement evoke in people. An appropriately selected metaphor can positively affect the disclosure of a particular product. Kövecses (2007) cites as an example of the metaphor: ITEMS FOR SELLING ARE PEOPLE, the way

washing machines are generally presented in advertisements: as good friends, which is a kind of personification. The metaphor A WASHING MACHINE IS A FRIEND evokes in people the same attitudes and feelings they have with their good friends.

- Foreign policy: The use of conceptual metaphors is very common in politics. According to Kövecses (2002), in American politics, for example, both political thought and its discourse are, in most cases, structured by the following metaphors: Politics is War, Politics is Negotiation, Society is a Person, Society is a Person and PRESIDENTIAL ELECTION IS A RACE.

As we have stated, many conceptual metaphors correlate with human experiences. However, correlations are not necessarily similarities, as the traditional view of metaphor explained. According to Kövecses (2002), the selection of source domains depends on human factors that reflect non-objective, non-literal and non-pre-existing similarities between a source domain and a target domain. This process is called the experiential basis of the metaphor or motivation of the conceptual metaphor. Thus, conceptual metaphors can be motivated but not predicted, as they were in the traditional view of metaphor.

We consider that the theory of conceptual metaphor has brought great innovations to the study of metaphor, mainly because it includes the importance of context, culture and, above all, of cognition, in the understanding of metaphorical expressions. Everyday language often uses metaphorical expressions that are understood as signs of the thinking of a person who often uses metaphors unconsciously, after all, this process is inherent in his own thinking. Thus, the analysis of metaphorical expressions present in everyday discourse allows us to realize that we rely on models of the concrete world to conceptualize abstract phenomena and that the linguistic metaphor is only realized because there are metaphors in our conceptual system, which demonstrates the centrality of these metaphors in everyday life and their influence on the way we think and act in the world.

Kövecses (2002) also makes an important contribution to the theory of conceptual metaphor when considering conceptual metonymy. According to him, metonymy, like metaphor, also has a conceptual nature, and conceptual metonymies are revealed by metonymic linguistic expressions. Lakoff and Johnson (2002) understand metaphor and metonymy as ways of conceptualizing our experiences and they state



that both have a cognitive mapping, although in different levels. In metaphor, there is a mapping between two domains: the target and the source domain. In metonymy, instead, there is a mapping in the same domain, among items of this domain.

According to Kövecses (2002), some metaphorical relationships may be motivated by metonymies such as EFFECT by the CAUSE or metonymies such as The WHOLE by the PART. Kövecses (2002, p. 157) justifies this statement by presenting the following example: in the metaphor ANGER IS HEAT the source domain of HEAT comes from the metonymic relationship EFFECT BY CAUSE. The body heat produced by anger can be viewed as a metonymy. Thus, we have the following conceptualization: ANGER produces BODY HEAT (metonymy); BODY HEAT becomes HEAT (generalization); HEAT is used to understand ANGER (metaphor).

Espíndola (2011) cites as examples of metaphor and metonymy, based on Lakoff and Johnson's (2002) conception, the following situation: if we use the linguistic expression "I read Lakoff and Johnson" meaning that I read the book of these two authors, it is instaurated a situation in which this linguistic expression updates the metonymy AUTHOR BY THE WORK, with the mapping in the same domain as there is a relation between the author and his work. Thus, a linguistic element (author) is used to refer to another linguistic element (work) from the same domain. On the other hand, when we use the expression "The trip of life", which updates the conceptual metaphor "LIFE IS A TRIP", we are approaching life (target domain) by using the cognitive mapping of some aspects of the source domain (trip).

According to Kövecses (2002), studying metonymy becomes important within the study of metaphor by the fact that many conceptual metaphors have a metonymic base, as we saw above. However, metaphor and metonymy differ in several respects, such as: metonymy is based on proximity, while metaphor is based on similarity; metonymy involves a single domain while metaphor involves two distant domains; while metonymy is widely used to provide mental access to a single target with a single domain, metaphor is used to understand a complete system of entities in terms of another system. Lakoff and Johnson (2002) state that metonymy is especially similar to metaphor when considering both as a matter of language and not only as a poetic or rhetorical feature.

## 2.2 Metaphor and metonymy in advertisements

For Ungerer (2003), a discursive genre where it is possible to perceive the interaction between metaphors and metonymies is the advertisement. In advertising, advertised products are usually metonymically represented by an image or brand of the product itself. Imperative verbs are often used to convince or induce the consumer to purchase the product.

In advertising the metaphor can be identified by the link between the product domain and other domains. More sophisticated and up-to-date advertisements, while not using imperative verbs to persuade consumers and are more indirect, also fulfill the purpose of the discursive genre of selling the advertised product, making links between domains established by the images in the advertisements. According to Ungerer (2003), this link between the product and the provocation of consumer desire is established by what he calls “grasping metonymy”.

The grasping metonymy is related to DESIRE, which is a basic emotion of the human being. The movement of capturing (grasping), in this sense, is a physiological movement that accompanies the DESIRE, that is, when something is desired, especially by children, the automatic movement of grasping or putting the hand on the desired object happens, as if with this gesture it would be possible to capture it and carry out that desire. Ungerer (2003) states that this action of capturing can be placed in the set of psychological manifestations of emotions. Thus, grasping metonymy can be considered a physiological metonymy, broadening the concept of metonymy adopted by more traditional views.

Ungerer (2003) explains that DESIRE has an inherent potential action that is proposed as the last element of the AIDA form (Attention – Interest – Desire – Action). This formula is recommended to advertisers as a practical guide in creating advertisements, and it may also be used in their interpretation. Grasping metonymy is an essential component of advertising, but it is often implicit, expressed neither linguistically nor visually.

According to Ungerer (2003) this metonymy is linked to the value metaphor which is a metaphor capable of providing many advantages in terms of conceptual support. One of these advantages is the range of source domains it offers to target domain mappings, and these source domains are usually made up of positive aspects that can be naturally brought to the target domain without requiring any effort.

Value metaphor and grasping metonymy are the basis of advertising. In any advertisement the primary metonymy is: THE

DESIRED OBJECT FOR DESIRE. This metonymy becomes one of the elements of the value metaphor: THE DESIRED OBJECT IS A VALUABLE OBJECT, which summarizes all the metaphorical links established by a value metaphor. As stated by Ungerer (2003), the grasping metonymy, which represents our desire to take something, creates the need to justify this desire, and this justification lies in the value metaphor. Thus, the value metaphor is conceptually motivated by the grasping metonymy, which in turn makes the object in question attractive, thereby activating the grasping metonymy, even though this metonymy is not explicitly presented.

Velasco-Sacristán (2010) states that there are metaphors of different types in advertisements and presents the ideological metaphor as the most suitable for the analysis of interaction between metaphor and metonymy. According to the author, the ideological metaphor can be defined as one that considers social processes and determines interpretation, being found in various types of influential discourses, such as advertisement. There is a specific kind of ideological metaphor: the gender metaphor. Gender metaphors take place in speech in a verbal, nonverbal or multimodal manner, and can provide insights into discriminatory discourses against men and especially women, usually implicitly. Such metaphors can also give rise to sexist interpretations. They are used by propagandists to introduce a gender value system that often activates and reinforces negative 'sexist' values. In so doing, the advertiser does not abandon the interpretation process, having a degree of control over the reader / listener's interpretation and shifting to him/her the responsibility for interpreting the advertisement. Velasco-Sacristán (2010), researchers argue that the use of metaphor as disguise or concealment, especially to mislead or avoid responsibility for what is said in persuasive types of speech, may be an indicator of so-called 'implicit communication'.

Velasco-Sacristán (2010) and Ungerer (2003) share the idea that metaphor and metonymy are conceptual resources of extreme importance in the creation of advertisements. Both consider the value of grasping metonymy and present definitions of metaphors that are directly related to the context of advertising. Since the value metaphor is the base metaphor of all advertisement and ideological metaphors directly related to gender advertising, in our work we will consider the contribution of both researchers, establishing a relationship between gender metaphor and social representation of women.

### **2.3 Discourse, ideology and social representation**

Social organizations have always been maintained and established through the process of communication, because it is where knowledge and values are transmitted. The human being participates in these social organizations playing the role of an agent of the cultural communication process and building himself, and his own subjectivity.

Communicating, then, implies establishing a relationship between two interacting elements, making use of the different existing languages: verbal and nonverbal. Verbal and nonverbal languages are marked by people's way of being and worldview. Thus, we can say that language is then the product of ideology.

Fiorin (2007) states that reflection on language is a complex process, since language should be considered a social institution through which ideologies circulate, as well as being the most effective mediation instrument between people and nature and among people themselves. It is through discourse that speakers express their thoughts and act upon the world. According to Fiorin (2007), discourse is related to linguistic elements while speech is the externalization of discourse. More than the junction of many words, discourse is structured, consisting of syntax and semantics.

According to Fiorin (2007), syntax is more autonomous with respect to social formations, unlike semantics, which is more dependent on social factors. Thus, it can be said that "there is in the discourse the field of conscious manipulation and that of unconscious determination" (FIORIN, 2007, p. 18). Syntax is then part of the field of conscious manipulation, whereas semantics is part of the field of unconscious determination, that is, the ideological determination.

The concept of ideology is extremely important in the work of Bakhtin and his Circle. According to Miotelo (2008), Bakhtin goes against the perspective defended by Marxists, linguists, psychologists and theorists in general, who address ideology in a mechanistic, subjective, idealistic way. For him, ideology is a living and dialogical event that lives not only in the individual consciousness of men but is built on concreteness. He builds a conception of ideology that brings the official ideology closer to the ideology of everyday life. The official ideology is that considered by Marx as false consciousness, because it conceals social reality. Already the ideology of everyday life is born in chance, in social proximity, and is relatively unstable. For Bakhtin and his Circle, both ideologies will form a complete and unique ideological context, in a dialectical and concrete relation.

Bakhtin also states that all language is made up of signs and every sign is ideological because it reflects the worldview of a particular person or social group, and it is a concrete part of reality. For him, the sign is ideological because it has dual materiality, that is, it is physical-material and socio-historical at the same time. The word functions as an agent and a social memory; it is a neutral sign that can fulfill any kind of ideological function. Thus, Miotello (2008, p. 171) states that ideology, for Bakhtin, could be characterized “as the expression, organization and regulation of the historical-material relations of men”.<sup>1</sup>

According to Van Dijk (2003), ideological discourse has a general basic strategy that is nothing more than a polarization that applies semantically by contrast, that is, discourse tends to speak of our positive and negative aspects of others, making use of style figures and coherence to make this approach possible. Therefore, it is always necessary to examine the meanings that the figures of language organize in order to know their ideological implications. And here lays the focus of the present paper: on the use and function of metaphors.

Still considering this ideological principle, another important factor to note is the way information is presented: the positive information regarding us, the group itself, tends to be topicalized and explicit, as well as the negative aspects of the other group, while negative information relating to our group or positive information related to the other group tends to be implicit, not topicalized, hidden and diffuse. Other aspects must also be considered in the marking and emphasis of ideological meanings, such as accentuation, intonation and nonverbal languages, in addition to the general schematic forms of discourse, such as narrative or argumentative structures.

Van Dijk (2003) recalls that ideologies influence what and how we say something, but we also modify them with the information we receive all the time. The social function of ideologies is to control and coordinate the social practices of a group, forming the basis of the social representations of that group. They operate indirectly in the production and composition of discourse, “first through group attitudes and knowledge in the face of special social domains, and then through

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<sup>1</sup> In the citation, the word “men” was used to refer to humanity as a generic term that considers both women and men as human beings part of a society. In our point of view, we consider the use of this generic term as a lexical choice that brings a gender ideology. Thus, we optioned to use the term “people” to refer to humanity.

the group members' individual discourses through mental models of social events and situations" (VAN DIJK, 2003, p. 77).

Van Dijk (2003, p. 80) states that "discourse is the most important social practice, the only one that expresses itself directly and, therefore, has the capacity to disseminate ideologies. A theory of ideology without a theory of discourse is incomplete."

In the language approach proposed in this paper we will adopt the definitions of ideology proposed by Van Dijk and Bakhtin, since both have points in common. Van Dijk, like Bakhtin, argues that ideology is embodied in discourse. Both propose a study of ideologies that consider discourse, cognition and society, with ideology having a socio-historical and physical-material existence at the same time.

Since discourse is a social practice that disseminates ideologies, we can say that it is also responsible for disseminating and constructing social representations that guide the way we act in the world.

According to Jodelet (2001, p. 23), social representation "is a form of knowledge, socially elaborated and shared, with a practical objective, that contributes to the construction of a common reality to a social group". For the author, social representation is practical knowledge.

Social representations are present in speeches and are brought through mediatic words and images, "crystallized in conduct and material and spatial organizations" (JODELET, 2001, p. 18). Institutional organizations and the media interfere with the making of representations, influencing and even manipulating society at large. Representations rely on varying values and are linked to more complex systems of thought (ideological, cultural or scientific) as well as to the particular and affective experience of individuals. They give specific definitions to the objects they represent, and these definitions are those that will be shared by the members of the same group, thus, creating a vision that will guide daily actions and exchanges within that group and may meet the vision of other groups. These are the functions and social dynamics of representations.

Moscovici (2005) states that discourse is the main vector of social representations, because it is through it that the phenomenon of social representations is perceived and elaborated. According to him, there are no social representations without language, just as there is no society without social representations. Language is the highest way to modulate human adventures.

Thinking about women's representation nowadays we can say that it has changed a lot, considering women's role and representations in the last centuries. In the 21s, women have conquered more space and respect in society, occupying high professional positions and playing different roles. However, there is still prejudice against them and social representations people build can be influenced by sexist stereotypes. In addition, the media also plays a fundamental role in building women's representations. What was done, in the 20s, through cinema, is now done through advertisements, which influences people's subjectivity. So, according to Moreno (2008, p. 30), "women are being subtly and effectively colonized. Not by force, nor with repression, but with the production of this infinity of images that seduce, occupy and shape our imagination".

In women's magazines we see pages and pages approaching beauty, diet and fashion, whose purpose is to attract the reader and, at the same time, justify the advertisements for cosmetics and the various products advertised for the production and maintenance of beauty. The products are always advertised by beautiful and famous women, which gives credibility to the product and arouses the desire to identify the woman-consumer with the ideal woman accepted by society.

Moita Lopes (2003, p. 19) points out that "all discourse comes from someone who has his specific identity marks that locate him in social life and that position him in the discourse in a unique way as well as his interlocutors". Thus, the social identity of each person is defined in and by the speeches in which he/she is inserted or in which he participates, being built on discursive practices. Vieira (2005, p. 235) affirms that "the feminine identity is a social product and a reflection of the look of the other", that is, the identity of the woman is not only constituted of the image that she makes of herself, but it is also constituted in the image that — other women have of her. After all, as Vieira (2005, p. 235) explains, "identity is socially constructed by discursive practices, whose discourse is the product of the culture that built it". Moreno (2008, p.45) then suggests the following social representation for the current woman:

The woman portrayed in the media has to be married or aspire to marriage, have children or aspire to motherhood, be or look young, be vain, cared for. Be white, heterosexual, monogamous, faithful, behaved, decide more with emotion than with reason, be sensitive and delicate, be more concerned with taking care of others than with any other issue, even if you work and have great professional responsibilities or policies.

The worst result of all this is that today we have thousands of unhappy and low self-esteem Brazilian women, who do everything to become beautiful and seductive, buying products, acquiring attitudes and appearances; products and models where the submission of women is understood and implicitly recommended. Moreno (2008) states that today we live in a potentially abundant society, due to technological advances and the phenomenon of globalization. However, this society privileged by technology presents serious aggravating factors, such as inequality and social exclusion. If the person does not fit the molds and parameters proposed by this modern society, he/she finds himself/herself excluded, devalued.

The advertising industry is effective, powerful; assisted by artists and researchers at the service of consumer society. It creates a scenario that sells relief and happiness. It pasteurizes tastes, destroying cultures and diversity. It is not an easy task to resist its calls...

### **3. Corpus analysis**

For the analysis, we work with the concept of conceptual metaphor, theorized by Lakoff and Johnson (2002), and re-studied by other researchers, notably Kövecses (2002). In addition, we focus on the particular character of advertising metaphors and on issues of value and gender, according to Ungerer (2003) and Velasco-Sacristán (2010).

Considering that metaphor is part of a mental process that precedes linguistic or visual manifestation, being inherently conceptual; considering also that the relationship between a source domain and a target domain occurs in a systematic mapping correlation, Santibáñez (2009), based on Lakoff and Johnson (1980) and Kövecses (2002), proposes a basic methodological model to distinguish how mapping works in the linguistic expressions of conceptual metaphors. We adopted this model for the analysis of advertisements, warning that, in our case, we work mainly with nonverbal metaphors, often supported by linguistic material. The author's model has six steps:

- (1) obtaining language expressions;
- (2) distinction of conceptual domains;
- (3) elaboration of the conceptual metaphor;
- (4) description of the situational logic of the source domain;
- (5) characterization of source domain aspects;
- (6) matching or mapping between domains.



The first three steps encompass the steps of identifying the conceptual metaphor; the last three, their interpretation. Step (4) concerns the observable characteristics of the source in the linguistic or visual occurrence of the analyzed object; step (5) covers the basic characteristics of the source domain among possible others; step (6), the last one is perhaps the most important, because it seeks to understand how the conceptual metaphor is obtained and to map this interpretation between the domains.

Our analysis model will contain only steps (2) – (5), which we renumbered because, in advertising, metaphors are more often expressed visually than linguistically. Eventually, we will focus on metaphorical linguistic expressions.

Since there is the presence of more than one metaphor in advertisements, we will raise only the central metaphor present in pictorial language, and, if appropriate, also examine the secondary metaphor (s) manifested in verbal language. Since these are advertisements for women's magazines that, according to our hypothesis, have gender metaphors, we will observe the presence or absence of such metaphors. Finally, we will interpret the metaphors in relation to social representation of women.

We also consider that all advertisements always have a metaphor and a base metonymy, which are the value metaphor and the grasping metonymy, as proposed by Ungerer (2003). According to the author, all metaphorical links in advertising can be subsumed by:

- a) Value metaphor: THE DESIRED OBJECT IS A VALUABLE OBJECT;
- b) Grasping metonymy: GRASP THE DESIRED OBJECT BY DESIRE.

It is important to state, before presenting the analysis of the advertisements, that this article is part of our Master's thesis, in which we analyzed six advertisements taken from three different Brazilian women's magazine: *Nova*, *Marie Claire* and *Claudia*. Here we presented three from these six advertisements analyzed in the dissertation and a new one that was not taken from these magazines but is an advertisement produced for women in the current year. By presenting these four analyzes we intend to approach how the woman is represented in society, considering the advertisement genre and its social role and the use of conceptual metaphor and metonymy as linguistic resources.

In such a vast universe of women's magazines, we chose *Cláudia* magazine for its long standing in the market and for having been a

pioneer in the women's press; *Nova* magazine for including, among other themes common to most magazines, controversial themes related to women's behavior, especially in the field of sexuality, and *Marie Claire* for bringing, through her slogan: "Elegant is to be smart", a proposal that, at first view, tries to subvert the standard concept that prevails in most women's magazines. However, we can say that what happens is that *Marie Claire* presents structure and themes that are very common to any women's magazine, maintaining a very similar relationship with the other magazines in terms of the subjects covered (with emphasis on beauty, health, consumption); the slogan "Elegant is being smart" is legitimized only by interviews and reports.

Thus, we can point out some similarities among the magazines:

- The three magazines present on their covers perfect and, generally, famous women, to attract the attention of men, as an object of desire, but mainly to hold the attention of women, who seek to match the image they see on the cover and, thus, become the object of men's desire and be envied by many other women.
- The predominant profile, both in the covers and in the advertisements, is white women, with light eyes and blond hair, if not blond, at least straight hair, in the age group ranging from 25 to 35 years old, heterosexual, beautiful, sensual, thin, famous, contemporary, financially successful and happy.
- All transmit the ideologies of consumption, offering advice through "booklets" or "manuals" that guide the behavior regarding beauty, sexual and professional success, among others.
- The three magazines contain, in general, advertisements for fashion, perfumery, shampoos and conditioners, creams in general, absorbents and deodorants, cars, watches and jewelry, nail polish, clothes and lingerie, cell phones, makeup, shoes and bags and sometimes, food products and household appliances. These advertisements are rooted in values such as happiness, love, youth, fame, individualism, beauty and sensuality. Most advertisements demonstrate that there is no happiness out of comfort, prompting the reader to consume.

However, we can also point out some divergent points:

- Although the three magazines are, in general, aimed at women in today's society, in specific terms they are aimed at different women, for example, *Nova* magazine is more focused on single women, who work outside the home and worry a lot with their professional life and sexuality. *Claudia* magazine is more focused on adult women, usually married, as it emphasizes issues such as family, children and home. *Marie Claire* magazine is more comprehensive and is aimed at women – single or married – with a certain financial stability, which allows for certain luxuries, such as culinary refinements, designer clothes and trips abroad.
- Since these magazines are aimed at different women, often the advertisements shown in one and the other are different. And the difference is not so much in the product disclosed itself, but in the way it is disclosed. The lingerie advertisements in *Nova*, for example, are much more daring than in *Claudia* and *Marie Claire*.

Thus, we can conclude that these three magazines have converging and diverging features. What they have in common is the fact that they all try to convince the reader to seek and assume the image of the ideal woman that is proposed to her. The different ideologies are directly related to the magazine's target audience, as mentioned above. *Nova* magazine, for being aimed, in general, at young and single women, brings the ideology of free women. And this freedom is directly related to sex, which is the central concern of women's lives. *Claudia* and *Marie Claire*, while also addressing issues related to sex, do so in a more subtle way, for an older woman, who is more mature or simply, more discreet. *Claudia* brings the ideology of women realized personally and professionally. And that personal side implies beauty, love, happiness and family, an aspect that is not focused on *Nova*. As for *Marie Claire*, it has characteristics and target audience similar to *Claudia*, bringing, however, some reports on current topics, which are of general interest. It brings the ideology of a woman being personally and professionally fulfilled, as in *Claudia*. However, this woman belongs to a high social class, and is an elegant and intellectual woman. This can be confirmed in detail by means of first quality paper, excellent photos, advertisements for imported products and brands, cultured language and the absence of invasion of artists' privacy. But what we see is that, in general, magazines tend to be restricted to fashion, beauty, behavior and sex.

These common and different characteristics from the magazines are also reflected in advertisements. Although it is not uncommon to find the same advertisements in the analyzed magazines, there is a tendency for product diversity. For example, it is unlikely that an advertisement involving “family” nucleus will be found in *Nova*. In addition, we also noticed a different treatment when presenting the same product depending on the magazine. For example, a food product advertisement in *Nova* may be linked to sensuality, while in *Claudia* it is associated with the health of family and children.

### ADVERTISEMENT 1

TV LCD 32" 142" 107" LG60F8

**ELA É ATRAENTE.**

A nova Scarlet LG 60 é bonita de frente, de costas, por dentro e por fora. Afinal, foi projetada para surpreender você em todos os sentidos. Ela vem com máxima resolução de imagem Full HD, alto-falante invisível, desenvolvido pelo projetista Mark Levinson, e auto-ajuste de imagem, que se adapta à luz do ambiente, reduzindo o consumo de energia. E tudo isso com a menor espessura do mercado. Ou seja, a união perfeita entre beleza e conteúdo. Visite a loja mais próxima e confira a Scarlet LG 60.

Ou acesse o site [www.lg.com.br/scarlet](http://www.lg.com.br/scarlet).

**scarlet**

**LG**  
Life's Good

Para obter a máxima qualidade de imagem sem distorção é necessário usar digital de alta qualidade em formato widescreen. O uso de equipamentos em potência inferior ao do fabricante e o uso inadequado pode prejudicar a imagem. O mesmo vale para a ilustrativa. SAC: 0800 5410 para capitais e regiões metropolitanas e 0800 787 5454 para outras localidades.

Marie Claire Magazine, Oct. 2008.

### 1 CONCEPTUAL METAPHOR: SCARLET LG 60 TV IS A WOMAN

Conceptual domains	Situational logic of the source domain	Aspectual characterization of the source domain for basic properties
<p><b>Scarlet LG 60 TV</b> (target)</p> <p><b>Woman</b> (source)</p>	<ul style="list-style-type: none"> <li>• the prettier a woman, the more attractive she is;</li> <li>• the more attractive a woman, the more desirable she is;</li> <li>• the thinner a woman, the prettier she is;</li> <li>• the desirable woman is beautiful from every angle;</li> <li>• the desirable woman is beautiful inside and out.</li> </ul>	<ul style="list-style-type: none"> <li>• Woman is beauty;</li> <li>• Woman is attraction;</li> <li>• Woman is desire;</li> <li>• Woman is thin;</li> <li>• Woman is central;</li> <li>• Woman is an admiration object.</li> </ul>

Mapping between the two domains
<p>(a) Just as a beautiful woman from every angle attracts and arouses men’s desire, the Scarlet LG 60 TV, being beautiful from every angle, attracts and arouses consumers’ desire.</p> <p>(b) Just as a beautiful woman inside and out is an ideal woman, the Scarlet LG 60 TV is the ideal and perfect TV.</p>

### 2 GENRE METAPHOR

- WOMAN IS A PERSON IN THE FOREGROUND.
- PHYSICAL APPEARANCE IS A PHYSICAL FORCE WOMEN EXERT ON MEN.
- WOMAN IS A SEXUAL OBJECT THAT CAN BE OWNED.

### 3 VALUE METAPHOR: THE DESIRED OBJECT IS A BEAUTIFUL OBJECT

This metaphorical combination activates the grasping metonymy:  
SCARLET TV BY DESIRE.

By making use of women’s image, the advertiser uses features such as beauty, charm and attractiveness to configure the identity of the product, the TV set. They relate to the stereotype of the innovative woman, who is above all seductive. Visually, the woman is in focus and surrounded by men, as if with her seductive power attracting the attention

and eyes of the opposite sex. Thus, like TV, which is presented in five angles, which practically exhausts the possibilities of vision, the woman is also observed from front and back by the two male figures that surround her. Choosing to feature women prominently in advertising is justified for two reasons: for the male audience it calls their attention because it shows how desirable and beautiful a woman is as a quality TV, with the same properties, what seems to be the intention of the propagandist, who seeks to lead the consumer to do such mapping; for the female audience, it draws attention by presenting a beautiful, desirable woman who occupies a central position, exercising her power of seduction.

The slogan SHE IS ATTRACTIVE brings a purposeful ambiguity – present in the pronoun “she” – in which both woman and TV can (and should) have the characteristic of being attractive. The attractiveness of women and TV is enhanced by the red color of the dress, the TV and the slogan letters and TV name, which serves as an identifying appeal as foreseen in the metaphor. As Dondis (2007, p. 64) states, “red means danger, love, warmth and life”. Red catches the reader’s eye, mesmerizes him, highlights the most important thing in advertising.

#### ADVERTISEMENT 2



*Nova Magazine*, Dec. 2008.

### 1 CONCEPTUAL METAPHOR: THE SEX TOYS ACCESSORIES ARE A DOMINATING WOMAN

Conceptual domains	Situational logic of the source domain	Aspectual characterization of the source domain for basic properties
<p><b>Sex Toys accessories</b> (target)</p> <p><b>Woman</b> (source)</p>	<ul style="list-style-type: none"> <li>• A sensual woman is a dominating woman;</li> <li>• A dominating woman subdues the man;</li> <li>• A dominating woman plays the role of police;</li> <li>• A sensual and dominating woman makes your sexual fantasies come true;</li> <li>• A woman who fulfills your sexual fantasies wears accessories for doing it.</li> </ul>	<ul style="list-style-type: none"> <li>• Woman is desire;</li> <li>• Woman is sexual fantasy;</li> <li>• Woman is domination.</li> </ul>

Mapping between the two domains
<p>Just as in a relationship between police (woman) and thief (man) the dominator is the one who uses strategies, in a sexual relation the dominator is the woman (police) who wears sexual accessories.</p>

### 2 GENRE METAPHOR

- WOMAN IS A PERSON IN THE FOREGROUND.
- WOMAN IS AN ATTRACTIVE AND DOMINATING OBJECT.

### 3 VALUE METAPHOR: THE DESIRED OBJECT IS AN EXOTIC AND SENSUAL OBJECT

This metaphorical combination activates the grasping metonymy:  
 THE SEX TOYS ACCESSORIES BY DESIRE.

In this advertisement, the woman is attractive, provocative and sensual, only exalted by her body. The extreme appreciation of physical characteristics, the search for the perfect body and sensuality are also characteristics of the current woman. The advertisement shows how women can dominate the situation, that is, the sexual relationship, if they wear the advertised product.

The women's, identities are negated as evidenced by the erasure of her face; buttocks, arm and legs are the focus. She is an object that can bring pleasure to men, but, first of all, it gives pleasure to herself through sexual fantasies, embodied in police and thief "jokes". In this scenario, the woman plays the role of the police: standing with her legs slightly apart in a safe position, completely dominating the scene, she has the tools of domination, such as whip and handcuffs, but mainly her body. The man has the role of thief, since he is imprisoned, totally dominated by the handcuffs that bind him to the bed, playing the role of the one who is subdued. The text "*Police and thief. You grow up. The games continue*" establishes a relationship with the name of the online store "Sex Toys", in colorful letters, format and layout that refer to children's universe, in a clear dialogue with "the games", although they are sexual games. In this regard, it should be emphasized that the verb "play" is used in Brazil also to mean "*to practice copulation or to have another kind of libidinous relationship*" (cf. HOUAISS, electronic document) and the man, the accessories and the bed, near the dim light of the room, reinforce the sensuality, because it highlights mainly the semi-naked bodies, which attract the reader's eye. The computer, which also gets some prominence for visibility, suggests modernity and perhaps internet-loving relationships; in a way, it invites the reader to access the store's website, whose address appears on the bottom right, with the advantage of "*being the store closest to your bed*".

### ADVERTISEMENT 3

The advertisement features a young girl with curly hair and green bows, smiling and holding two chicken nuggets. In front of her is a white plate filled with several golden-brown chicken nuggets. To the right, there are several boxes of Chikenitos Superitos products, including 'Salsinha', 'Molho de Alho', 'Molho de Pimenta', 'Kibitos', 'Pizzetas', and 'Chikenitos Original'. Above the products, the text reads: 'Chikenitos apresenta a linha Superitos. Um jeito gostoso e nutritivo de alimentar o seu super-herói.' Below this, it says: '500 calorias saborosas. Simples de preparar e do tamanho ideal, além de manterem a linha Superitos com alto valor nutricional. Forno e panela. Experimente! Assim Superitos comê-lo e veja como esse mundo vai ficar mais divertido para o seu filho.'

Revista *Claudia*, July 2009.



### 1 CONCEPTUAL METAPHOR: THE SUPERITOS LINE IS A DEDICATED MOTHER

Conceptual domains	Situational logic of the source domain	Aspectual characterization of the source domain for basic properties
<p><b>Superitos line</b> (target)</p> <p><b>Mother</b> (source)</p>	<ul style="list-style-type: none"> <li>• A good mother is dedicated to her children;</li> <li>• The more a mother is dedicated to her children, the better the children are;</li> <li>• A dedicated mother provides her children with healthy food;</li> <li>• A dedicated mother makes her children happy.</li> </ul>	<ul style="list-style-type: none"> <li>• A mother knows her children’s needs;</li> <li>• A mother is attentive to her children’s needs;</li> <li>• A mother is worried about feeding her children well;</li> <li>• A mother is worried about the quality of the food her children eat.</li> </ul>

Mapping between the two domains
<p>(a) Just as a good mother is dedicated to her children, Superitos is a food aimed at children;</p> <p>(b) Just as dedicated mother seeks to offer her children nutritious food, Superitos offer children a nutritious food option;</p> <p>(c) Just as a dedicated mother makes her children happy, Superitos makes children happy because they are funny.</p>

### 2 GENRE METAPHOR

Although the advertisement does not seem to present any gender metaphor, due to the fact that it brings the image of a child, we can affirm that there is a sexist discourse that underlies it, where there is prevalence of the male gender. There is a prejudice against the social representation of women as the only responsible for the care of the children.

### 3 VALUE METAPHOR: THE DESIRED OBJECT IS A GOOD OBJECT

This metaphorical combination activates the grasping metonymy:  
 SUPERITOS BY THE DESIRE

In this advertisement, the expressions “your superhero” and “your son” insert the woman-mother into the context by means of the possessive pronoun; it is this woman that the message is aimed at. It is a case in which the (visual) image of the woman is absent, although she keeps present by indirect means.

Taking two pages, the advertisement presents a significantly larger figure in the first, compared to the images in the second. It is a girl, between 4 and 6 years old, with healthy and happy appearance, confirming the text on the next page. The shiny skin, healthy teeth, pink mouth, the girl's balanced weight reveal a healthy being; added to this is the air of happiness that dominates her face, manifested by the look and open smile. In the foreground and making a semicircle, Superitos stands out crisp and golden, dominating the scene and the girl's two hands. The scene leads the reader to identify the food with the physical and emotional state of the character. An interesting piece of information is the other foods: rice, beans (the base of the Brazilian menu) and tomatoes, natural foods, which Superitos approach, valuing this aspect of the product, naturalness, an increasingly strong value in the discourse of health professionals. Thus, although industrialized, the product gains this positive trait. It is not mentioned, for example, that this food can be fried or contains preservatives, which would contradict the positive image that one wants to build. This obscuration of negative aspects is one of the characteristic features of advertisements. After all, to seduce the consumer – function of an advertisement – to alert to the negative points of a product would be a disastrous strategy.

On the second page, the images also validate the text, as the figures represent children linked to sports and characters from the children's world. Dialoging with the expression "superhero", the images of the boys present in their clothes an S inserted in a red circle, in a clear allusion to the clothes of Superman, an American character from the 1940s, associated with positive values, such as strength, justice, ethics, among others. Just like Superman, all the characters that are shown in the product packing can fly and for this, they use, respectively, boots, backpack, skates and snowboard. They are also superheroes. And everyone, like the girl in the photo, smiles healthily. In this way, an identification is built with the values HEALTH and HAPPINESS, which the product provides. It is this game of seduction and convincing that should lead the mother reader to purchase the product, a game manifested in the basic conceptual metaphor as presented above.

**ADVERTISEMENT 4**



Available at: [www.instagram.com/dakotacalçados](http://www.instagram.com/dakotacalçados). Access on: Jan. 30, 2020.

**1 CONCEPTUAL METAPHOR: DAKOTA SHOES ARE A WOMAN**

Conceptual domains	Situational logic of the source domain	Aspectual characterization of the source domain for basic properties
<p><b>Dakota Shoes</b> (target)</p> <p><b>Woman</b> (source)</p>	<ul style="list-style-type: none"> <li>• the prettier a woman, the happier she is;</li> <li>• the thinner a woman, the prettier she is;</li> <li>• the more famous a woman, the more desirable she is;</li> <li>• the more attractive a woman; the upper she is;</li> <li>• a desirable woman is beautiful and smiling;</li> <li>• a desirable woman is happy and famous.</li> </ul>	<ul style="list-style-type: none"> <li>• Woman is beauty;</li> <li>• Woman is attraction;</li> <li>• Woman is desire;</li> <li>• Woman is thin;</li> <li>• Woman is famous;</li> <li>• Woman is smiling;</li> <li>• Woman is an admiration object.</li> </ul>

<b>Mapping between the two domains</b>
<p>(a) Just as a beautiful and famous woman is happy, Dakota shoes can make women feel themselves more beautiful and happier</p> <p>(b) Just as a beautiful, happy and famous woman is up, Dakota shoes are the ideal and perfect shoes, capable of letting women up.</p>

## **2 GENRE METAPHOR**

- WOMAN IS A PERSON IN THE FOREGROUND.
- WOMAN IS AN ATTRACTIVE AND BEAUTIFUL OBJECT THAT CAN BE OWNED.

## **3 VALUE METAPHOR: THE DESIRED OBJECT IS A PRETTY OBJECT**

This metaphorical combination activates the grasping metonymy:  
**DAKOTA SHOES BY DESIRE.**

As we observed in the first analyzed advertisement, the image of a beautiful, famous and attractive woman is used as a tool to configure the identity of the product, the Dakota Shoes. They relate to the stereotype of the happy woman, who is seductive, smiling, beautiful, young, thin and famous, as if these were the essential features to achieve happiness. Visually, the woman is in focus, in a high position (on top of a building). Thus, just like high heel shoes can make a woman taller and consequently more elegant and seductive, being a famous and beautiful woman, by wearing these shoes, is something good (up) that will make women feel happy. This advertisement was mainly produced to call women's attention, as it discloses female shoes. For this, it brings the image of an "ideal" woman; a desirable woman that attracts (men, people in general) not only because of her physical characteristics but also because of her psychological ones. She is the kind of woman that all the women want to be: beautiful and happy. But, as expressed in the advertisement slogan **BEING PRETTY IS BEING HAPPY**, happiness is completely related to beauty – as if it was not possible to be happy without being beautiful – and Dakota Shoes are part of this beauty package.

The analysis of our corpus confirmed the hypothesis that advertising is a discursive genre rooted in conceptual metaphors that create and maintain social representations. As our corpus consists of three advertisements taken from women's magazines and another one produced for women – although not taken from women's magazines, we can state that the four selected advertisements have gender metaphors, which relate to women and their stereotypes. We also find, in all advertisements, value metaphors and grasping metonyms, which are directly related to the advertisement's purpose that is selling a product, presenting the

advertised product as an object of value and desire. The analysis was made considering the verbal and nonverbal language and the underlying metaphors of these languages having as main objective to offer a new reading proposal of advertisement discursive genre.

#### **4. Final considerations**

Based on the analysis, we can conclude that metaphors are powerful tools used by advertisers to promote their product and achieve the main purpose of an advertisement: selling the product. The use of these metaphors is often based on stereotypes, social representations, and ideologies of a particular target audience. Such features tend to persuade the reader to purchase the advertised product.

Regarding the analyzed corpus, we found common characteristics in the advertisements:

- Use of indirect seduction strategies to lead to consumption. As stated by Ungerer (2003), more sophisticated advertisements make use of this type of strategy, working more effectively than advertisements that use direct persuasion strategies.
- Regarding the discourse of the analyzed advertisements, we see that it creates and maintains social representations. Advertisements build the identity of an innovative and laid-back woman and add to her ideological values such as power, seduction, independence; but these values can only be fully achieved by consumption. Thus, a circular relationship is established: the product is intended for a woman with this profile, while, in order to achieve this profile, the woman must acquire the product. Ultimately, the product is the guarantee of female fulfillment, according to the constructed social representations.
- All advertisements, especially the first, second and fourth ones – point to a woman whose profile deviates from the traditional woman who incorporates values instituted by a patriarchal system, especially submission.
- In all of them, the woman appears in focus, in the foreground. However, in the first and second advertisements, the man appears in the background. Women dominate the situation

by attracting the attention and eyes of everyone around them, especially men. In the second advertisement, for example, sexual power is assumed by women, subverting a role that has traditionally been attributed to men. She wields the power of seduction, of sexuality. In this case there is a hyperbolization of female attributes.

Each advertisement has its own style, which is marked by the advertiser's verb-visual choices. However, all propose to the reader a responsive attitude, that is, the reader needs to understand the ambiguities and associations present in the advertisement. He/She is called to this metaphorical game to create a product image. The style of an advertisement reflects a world view, relating to the ideology that permeates the subject. In the case of women's magazines from which we draw our corpus, they reflect the time, context, and social representation of contemporary women. A time marked by the incessant pursuit of beauty and the perfect body, in a context of consumerism and sensuality, in which women turn more to care for themselves, their bodies, their personal and professional lives and their sexuality.

The theory of conceptual metaphor, proposed by Lakoff and Johnson (2002), brought us great contributions. First, the understanding of metaphors within a cognitive paradigm that places them as present in thought and everyday life. Then, the realization of the importance of these metaphors in the understanding of abstract concepts and cultural and universal manifestations, since, being rooted in the cultural context of the participants of the interaction, they weave the threads that interweave individual, society, culture, language, cognition and emotion. Finally, this theory provides a reflection on the metaphor in its different contexts of use and its relation to the ideologies and representations of a given social group. Understanding metaphors within a cognitive paradigm is to realize their importance and existence in verbal and nonverbal contexts, in language and mind, in daily life and in various contexts where their use is necessary. Therefore, it is to understand our own nature and the social space in which we live.

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## The role of multimodal metaphors in the creation of the fake news category: a proposal for analysis

### *A atuação das metáforas multimodais na criação da categoria fake news: uma proposta de análise*

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**Abstract:** Almost forty years ago, the proposal of the Conceptual Metaphor Theory represented a milestone for Cognitive Linguistics studies. From this point, many pieces of research were developed around the analytical category of metaphor. However, the majority of these papers are still in the monomodal field, intending to build a concept resulting from the source and target domains that come specifically from the verbal structures. Taking this into consideration, this paper intends to focus on the metaphorical occurrence in diverse semiotic modes that constitute multimodal texts. In order to fulfill this aim, we outlined a *corpus* of five editorial cartoons about “fake news”. Our specific objective is to, making use of the concept of multimodal metaphors proposed by Forceville (1996, 2009), presented how the different semiotic modes, in this case the verbal and the visual ones, are interwoven in the building of these metaphors. In this way, in our study, besides validating the thesis proposed by Forceville (2009) about the occurrence of metaphors not only in the verbal mode, it was also possible to verify the importance of multimodal metaphors for the meaning construction process in the analyzed genre.

**Keywords:** metaphors; multimodal metaphors; fake news.

**Resumo:** Há quase quarenta anos atrás um marco nos estudos da Linguística Cognitiva, em especial em sua semântica, ocorreu: a proposta da Teoria da Metáfora Conceitual. A partir desse trabalho, muitas pesquisas foram desenvolvidas em torno da categoria

analítica da metáfora. Porém, grande parte desses trabalhos ainda encontra-se no campo dos denominados textos monomodais, visando apenas a construção conceitual resultante de domínios fonte e alvo oriundos especificamente do modo verbal. Diante disso, o presente artigo propõe-se a promover um trabalho dedicado à ocorrência metafórica nos diferentes modos semióticos que constituem os textos multimodais. Para cumprirmos tal objetivo, delimitamos como *corpus* cinco charges que versam sobre o conceito *fake news*. Nosso objetivo específico consiste em apresentar, através do conceito de metáforas multimodais, proposto por Forceville (1996, 2009), a forma pela qual diferentes modos semióticos, nesse caso em especial o verbal e o imagético, imbricaram-se na construção dessas metáforas. Assim, em nosso estudo, além de vislumbrarmos a validação da proposição de Forceville (2009) sobre a não ocorrência do processo metafórico apenas no modo verbal, foi possível a verificação da importância das metáforas multimodais para a construção dos sentidos do gênero em análise.

**Palavras-chave:** metáforas; metáfora multimodal; *fake news*.

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## 1. Introduction

We have been experiencing a culture increasingly surrounded by multimodal texts. This fact has been influencing the research produced in the Linguistics Studies field, which happens as well to the studies dedicated to the metaphorical processes. This issue was made evident by the rise of investigations, in Brazil and abroad, directed to analyzing the meaning resulting from multimodal metaphors.

However, in spite of this interference, when we look at the studies dedicated to the metaphorical process, we observe that most papers are dedicated to building the concept originated from a single semiotic mode: the verbal mode. When compared to the context of Cognitive Semantics studies, little has been discussed about the possibilities of different semiotic modes act on the construction of source and target domains of a specific metaphor and, consequently, on the sense derived from it.

Based on this proposition, this paper intends to promote an investigation about the different semiotic modes that work on the conceptual construction of the categories that surround our daily life. In order to achieve our aim, we are going to analyze the category of

multimodal metaphors. As a way of applying the theory, we chose as *corpus* five editorial cartoons produced on the internet context. These editorial cartoons are focused on representing the concept of *fake news*. In this manner, we are going to focus our studies on the way in which multimodal metaphors act on the conceptual construction of the term *fake news*.

Our paper is going to be developed through qualitative and bibliographical research methods. For this, we used the teachings of Forceville (1996, 2009), about multimodal metaphors. To demonstrate the classifications postulated by the author, we are going to borrow the analysis developed by Sperandio (2010, 2014). Besides this, our discussion is going to be guided by the concepts of metaphor, proposed by Lakoff and Johnson (1980), and of multimodality, presented by Kress and Van Leeuwen (1996, 2001).

In our studies, it was possible to observe that the meanings aroused by the editorial cartoons analyzed stem from different domains activated by their producers. That is, the domains “person, weapon and war” (activated by the visual mode) and fake news (activated by the verbal mode). In this way, we notice the importance that these mode acquired during the construction of the term fake news, showing us, not only the articulation between the verbal and visual modes, but also the fact that the multimodality is present in analysis categories that, before now, were majorly built by the verbal mode, as the metaphorical process.

To accomplish our aim, we are going to divide our paper in three sections. In the first section we are going to develop a theoretical survey that is going to help us during the analysis procedures. We are going to start with the work by Kress and Van Leeuwen (1996, 2001) since we believe it is fundamental to understand what multimodality and semiotic modes are. The second section is going to be about multimodal metaphors. Firstly, we are going to work on the concept of metaphor, based on the work by Lakoff and Johnson (1980), so that we are going to be able to discuss about multimodal metaphors, through research developed by Forceville (1996, 2008). The third section is going to be dedicated to the thorough exam of the metaphors chosen as research object.

## **2. The work of multimodality**

We begin our paper with the postulates of the multimodal theory developed by Kress and Van Leeuwen (1996, 2001). In this work, the

authors work from the perspective of “practice” and base their findings in the idea of a variety of semiotic resources being used to produce the sign in concrete social contexts. Being these signs based on signifiers such as colors, perspectives and lines; used in the material representation of the signified. According to the authors, different from what is proposed by the traditional semiology, that conceived the signs from a dyadic perspective, that is the bi-relation between signifier (the sound pattern) and signified (the concept); this relation is not enough to comprehend satisfactorily how the signs are constituted. In this manner, the authors claim that the signs would be a motivated conjunction of signifiers (form) and signified (meaning), related to the compositional act, that is, there would not be an intrinsic relation between them.

Kress and Van Leeuwen (2001) have been claiming that in the technology era and in the western culture texts are becoming more and more multimodal. The authors call this moment the “New Writing”. From this perspective, they affirm that diverse semiotic modes are articulated simultaneously during the elaboration procedure, what attributes to them specific meanings. According to the authors, the semiotic landscape of communication has been changing and these changes have been affecting the text forms and their features. So, texts are becoming more and more multimodal, dealing with the coexistence of different semiotic levels as, for instance, the visual, audio, gestural, etc.

According to Kress and Van Leeuwen (1996) the two last decades witnessed a thorough change in media and ways of communication. However, we can also understand from these authors’ teachings that communication has always been multimodal and, what is happening nowadays, although not new, is a relevant change, since today there seem to be an instance of a new text code and image, in which information is disclosed by the two modes. In this way, verbal and non-verbal elements of a text articulate themselves while building their meaning, being important to say that the visual element is not dependent on the verbal one, they coexist in an independent structure and organization.

That being said, we can infer that, with the broad circulation of multimodal texts, many fields of work, that focused solely on the monomodal texts, had to adapt themselves to this new reality, producing tools to help the multimodal analysis. It would not be different in what concerns to metaphors, because these figures of speech are not only present on the verbal level of language, but also on other semiotic modes. We are going to present now the multimodal metaphors.

### 3. Research on multimodal metaphors

Before working on the studies dedicated to multimodal metaphors, we believe it is necessary to present the concept of metaphor, because this is the concept that is going to guide our analytical section. Because of this, we begin this part of our paper with a brief presentation of this trope, focusing on the concept built by Lakoff and Johnson (1980). The study dedicated to the metaphorical process is not new. Its origin, in the occident, is related to works proposed by Aristotle. The philosopher explained the metaphor as “giving the thing a name that belongs to something else; the transference being either from genus to species, or from species to genus, or from species to species, or on grounds of analogy” (ARISTOTLE, 1991, p. 273). Besides Aristotle, according to Schröder (2008), research on metaphor was present on philosophical reflections of thinkers such as John Locke, Giambattista Vico, Immanuel Kant, Johann Gottfried Herder, Friedrich Nietzsche, Fritz Mauthner, Ernst Cassirer and Arnold Gehlen.

However, it is in the work by Lakoff and Johnson, published in 1980 and entitled *Metaphor we live by*, that we can notice a big revolution in this research area. In this book, metaphor is seen as omnipresent in our thoughts and language, associated to our daily life, language, thought and action. From this study, the understanding about the world starts to be related to the concept of metaphor, since a great number of basic concepts, as time, quantity, state, action, etc; besides emotional concepts as anger and love, are metaphorically understood. This makes clear the importance of metaphor role in the understanding of the world, of the culture and even of ourselves.

Lakoff and Johnson (1980) see the metaphor as a tool to understand and experience something from another thing's perspective. According to researchers, there is a systematic mapping between two conceptual domains: the source domain, seen as an inference source, and the target domain, the domain in which the inference will be applied. As an example we can point out the metaphor “TIME IS MONEY”. From this metaphor we can understand the target domain, time, based on the systematically organized knowledge we have about the source domain, money. Because of this systematicity we are able to understand a specific aspect of a term according to other term, concealing other aspects.

Other issue about the works by Lakoff and Johnson (2003) that deserves to be highlighted is the one that postulates that the metaphorical mapping should be considered multiple, since two or more elements from one domain will be mapped to two or more elements of the other domain. According to Kövecses (2002), the conceptual metaphor is constituted by a group of mappings between the source domain and the target domain, being this mapping a partial one. In this way, only part of the source domain is mapped on the target domain, and only part of the target domain is present in the mapping of the source domain. According to the author, we can recognize metaphorical highlighting in the target domain, bringing only some elements of this domain to focus; and the metaphorical utilization in the source domain, since only some elements are mapped on the target domain. According to the researcher, the emphasizing implies hiding because as the target domain has many aspects, and the metaphor focus on one, maximum three, the other aspects are going to be hidden or out of focus.

However, in the Conceptual Metaphor Theory presented, although the authors affirm that the metaphorical process is omnipresent in our lives, not only in language, but also in thought and action; the authors dedicated to the study of the verbal manifestation of this process, leaving the diverse semiotic modes of a multimodal text aside. We believe that a metaphor theory that focus only on the metaphors verbally built works with a partial notion of what constitutes a metaphor. As said by Cienke (2008), words are only one of the ways in which metaphors can be produced, in this way, metaphorical expressions can be found in many human behavior aspects, not only language.

In a study dedicated to visual metaphors in advertisement, Forceville (1996), based on the interaction theory developed by Black (1993), offers a pattern for visual metaphors, these metaphors being identified by the replacement of a visual element for another.

Black (1993) affirms that in a metaphorical statement we can find two subjects, named by the author as primary subject and secondary subject. In this statement there is the projection of an implication field present on the secondary subject over the primary subject. According to Black, in this context there will be interaction between the two fields, since the primary subject incites the receptor to select some features from the secondary subject and leads them to build a parallel implication consonant with the context, in the same way, features from the primary

subject change the implicative complex of the secondary subject. In this sense, the receptor builds a properties correspondence complex between both terms. As Black (1993) affirms, the similarity in the metaphorical process is built, not inherent.

Forceville (1996) articulates Black's proposal (1993) to the Relevance Theory develop by Sperber and Wilson (2001). In this way, his analysis consider that an advertisement receptor expects that something relevant and positive about the product will be communicated, restricting, in a way, the interpretation.

Forceville (1996) also highlights the context role in the interpretation of the analyzed advertisements. From his perspective, taking into consideration internal aspects o the text is not enough, that is, external aspects such as cultural background, the immediate physical environment and the genre should also be considered.

Besides the mentioned authors, Forceville (1996) bases his writings on works by Lakoff and Johnson (1980). In this way, the author promotes a study about the multimodal metaphors, having publicity as his research object. Throughout his research, Forceville (1996) offers us a series of analysis of print ads and billboards, identifying four subtypes of visual metaphors: a) visual metaphors with one term visually presented, b) visual metaphors with both terms presented, c) visual similes and d) verbal-visual metaphors.

However, in a new piece of research, he started to name the metaphors with one term presented as contextual metaphor, and the one with both terms presented as hybrid metaphors. Besides these new terminologies, the author introduced a new category, the integrated metaphors. He also categorized the verbal-visual metaphors as a subtype of multimodal metaphors. We are going to discuss each of these metaphors, using the analysis developed by Sperandio (2014) as example.

In the contextual metaphor, an object is metaphorized because of the visual context in which it is placed. One of the domains of this metaphor is not visible, as suggested by the visual context. Consequently, this context is indispensable, because out of this context, there is no possibility to visualize the absent term.

IMAGE 1 – Unimed Anti-Smoking Campaign



Available at: [http://www.unimed.coop.br/pct/index.jsp?cd\\_canal=52880&cd\\_secao=52854&cd\\_materia=311306](http://www.unimed.coop.br/pct/index.jsp?cd_canal=52880&cd_secao=52854&cd_materia=311306). Retrieved on: 20 Feb. 2014

In the anti-smoking advertisement we can see the picture of a burning cigarette, smoking, with a building on the background. If the visual context was removed, we could not build the metaphor CIGARETTE IS A CHIMNEY. Taking into consideration the internal context, together with the verbal register that is constituted by an anti-smoking campaign, we can observe that we are before a metaphor that has only its target domain visually present, while its source domain is suggested by the visual context.

In hybrid metaphors, both domains are fused into a unique gestalt. In this model, parts of both domains of this metaphor are visually present, in this way, even if taken out of the visual context, the objects can still be visualized.



IMAGE 2 – DKNY Perfume Advertisement



Available at: <http://rickway.blogspot.com.br/2011/05/ultimos-lancamentos-de-perfumes-parte3.html>. Retrieved on: 15 Mar. 2014.

DKNY perfume advertisement exemplifies this model. In this advertisement, we can see the package of the perfume hybridized with a green apple, making both objects being seen as a single shape. With the hybridization of these images we produce the metaphor **PERFUME DKNY IS AN APPLE**, with both domains visually presented. The metaphorical concept produced is that the scent of this perfume is similar to the scent and the flavor of a beautiful green apple.

In the visual similes, both domains are presented in their totality, unlike hybridization, in which only part of the domains are presented. In the advertisement of the car Hyundai i30, we have this type of metaphor. In this advertisement, there is the picture of the product juxtaposed to a chessboard and chess pieces, together with the words: “Hyundai

I30, be part of this game”. We can consider the visual metaphor of this advertisement, a simile, as HYUNDAI I30 IS A CHESS PIECE.

IMAGE 3 – Hyundai i30 Advertisement

**Hyundai i30**  
**Entre nesse jogo!**



Available at: <http://alinegsantos.blogspot.com.br/2010/06/propaganda-carro-ps.html>. Retrieved on: 1 Feb. 2014.

The integrated metaphor is a subtype of the visual metaphor. In this type of metaphor we have a unified object or a gestalt presented integrally and this object reminds us of another object, without visual cues. In the anti-smoking advertisement below, we have an example of an integrated metaphor. In this advertisement, there are two cigarettes that form a gun shape, leading us to build the metaphor CIGARETTE IS A WEAPON. We would like to highlight that only the target domain cigarette is fully presented and it refers us to the source domain. That is, the source domain is suggested by the pictorial context: the way in which the cigarettes are positioned and split. With this integrated metaphor we can infer that, in the same way that a gun can take a life away, the continuous usage of cigarettes can kill us.

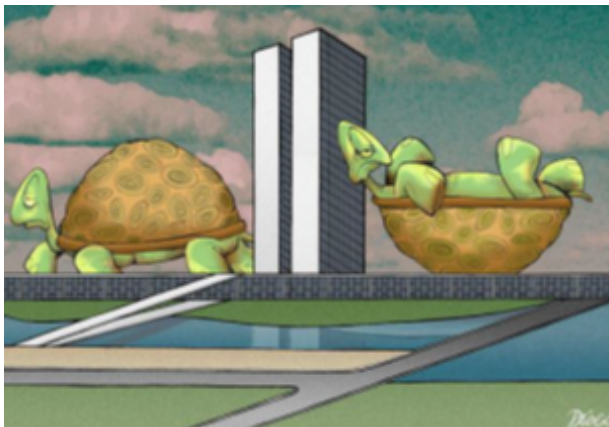
IMAGE 4 – Anti-Smoking Advertisement



Available at: <http://comunicacaochapabranca.com.br/?p=15146>.  
Retrieved on: 10 Jan. 2014.

According to Forceville (2009), the visual metaphor has been grasping researchers' attention lately. Below we present an analysis made by Sperandio (2014) from this type of metaphor.

IMAGE 5 – Turtle Editorial Cartoon exemplifying the monomodal metaphor



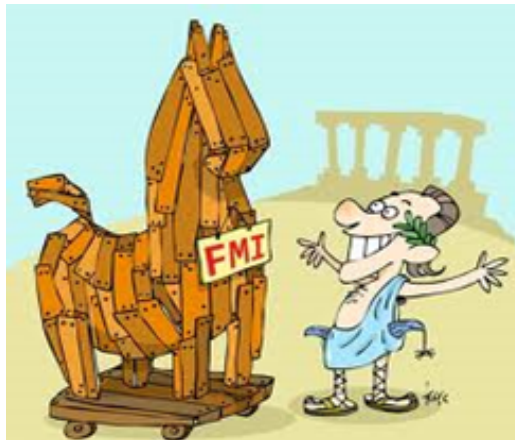
Available at: <https://diogosalles.wordpress.com/>. Retrieved on: 15 Jan. 2013.

This editorial cartoon builds its meaning from the metaphor **BRAZILIAN POLITICS IS A TURTLE**, with its domains built solely from the pictorial mode. In this way, we have the source domain, the

turtle, and the target domain, the politics, represented by the images of a turtle and the national congress building, respectively. With this metaphor there is the personification of a domain, the politics, attributing to it the feature of other domain, the turtle that, in this case, means slowness.

The last model proposed by the author is the verbal-visual metaphor. In this case, one domain is visually represented and the other domain is verbally represented, being important to say that the removal of the verbal context would affect the metaphor understanding.

IMAGE 6 – IMF Editorial Cartoon



Available at: <https://fmiminionu.files.wordpress.com/2011/08/charge-29061.jpg>. Retrieved on: 15 Jan. 2013.

In this editorial cartoon, we have the metaphor **IMF IS A CURSE IN DISGUISE**, with the source domain, curse in disguise, built from the pictorial mode (the image of a horse, that takes us back to the history of Troy; the clothing, accessories and background representing Greece) and the target domain, IMF, built through written mode (the word IMF).

In his recent research, Forceville (2009) approaches three concepts: mode, monomodality and multimodality. According to the author, at first, mode is considered a system of signs that can be interpreted because of a specific perception process, in this approach, modes are related to the five senses. In this manner, we would have: 1) pictorial or visual mode, 2) auditory mode, 3) olfactory mode, 4) taste mode and 5) touch mode. However, according to the author, this is a

crude categorization, because in the auditory mode we have grouped, simultaneously, spoken language, music and other non-verbal utterances. From this perspective, the author proposes nine modes: 1) pictorial sign, 2) written sign, 3) spoken sign, 4) gestures, 5) sounds, 6) music, 7) scent, 8) taste and 9) touch.

Monomodal metaphors are seen as having both source and target domains constituted exclusively by a mode, being the prototypical monomodal metaphor the verbal one. We may take the analysis developed by Sperandio (2010, p. 53) as an example:

“The average landless person that signs up in the ranks of the Landless Movement is a person with no professional perspective and no missionary instinct”.

The sentence above, that is part of the report entitled “Landless and lawless”, produced by *Veja* magazine, in 2000, can be considered a metaphorical expression of the conceptual metaphor AGRARIAN REFORM IS WAR. In this metaphor, both source domain, war, and target domain are produced exclusively by the written mode.

On the other hand, multimodal metaphors are considered by the author as the ones that have source and target domains represented solely, or mostly, by different modes. An example of a multimodal metaphor can be seen in the analysis of image 6, in which the metaphor IMF IS A PRESENT IN DISGUISE has its source domain activated by the visual mode while the target domain is activated by the verbal mode.

It is based on this last stage of Forceville’s works (2009) that we will analyze our *corpus*. For this, we are going to take the aforesaid concept of multimodal metaphor to analyze the category *fake news*.

Before ending this section dedicated to the metaphorical processes, we think it is necessary to highlight that there are other researchers who work beyond the verbal modes in the activation of the metaphorical processes. We can give as example, the research developed by Cienke e Müller (2008) that work with the relation between metaphors and gestures. According to the authors, a thorough analysis of gestures offers support to a thesis sustaining that the metaphor is the general cognitive principle with mappings processed on-line. Consequently, with this presupposition, the metaphorical thought starts to be seen as creative, dynamic, flexible and culturally variable.

#### 4. Fake news is...

We dedicate this section to the analysis of multimodal metaphors responsible for the construction of the term *fake news*. For this, as said before, we are going to take the metaphor concept proposed by Lakoff and Johnson (1980), and the proposition of multimodal metaphor presented by Forceville (1996, 2009) as our foundation.

Before starting the analysis, we think it is extremely important to discuss a little bit about our corpus, the editorial cartoon genre and the choice of the theme to be metaphorically analyzed: *fake news*.

The study of textual / discursive genres has been earning a place in the sun in the context of studies dedicated to language. Among the huge number of genres that are present in our society, we highlight the editorial cartoon genre. This genre is defined as a graphic element with the ability to approach day-to-day affairs in a condensed and humorous way, with criticism that expresses an opinion. According to Miani (2001), an editorial cartoon should be considered as a political, humorous, caricatural representation that aims to satirize a specific fact. According to the author, the editorial cartoon, as well as caricatures and comic books, are part of the iconographic language modality, because all of them constitute ways of expressing ideas by means of the art of representation produced through images made from human features.

Vasconcelos (2009) states that the importance of this genre can be noticed when we look at its historical path and, from this perspective, we can understand how it conquered its place in the means of communication nowadays. According to the author, in the beginning, the drawings in the editorial cartoon intended to grasp the reader's attention, aiming at selling. With the proliferation of illustrated magazines in Brazil, in the 19<sup>th</sup> Century, we witnessed the emergence of caricatures and editorial cartoons, being the first decades of the 20<sup>th</sup> century, the golden age of caricatures, characterized by the humor present in the Brazilian magazines. It is important to highlight that, even with the censorship imposed by the New State and the dictatorship period, as stated by the author, editorial cartoons were part of magazines and newspapers.

Consequently, we notice the importance acquired by this genre in our society. But, on the other side, why choosing *fake news* as the concept to be analyzed? Our choice for this conceptual category results from the

huge discussion that has been established about it. This discussion became a lively discussion during the electoral period and in the post-electoral period, in 2018. Taking these circumstances into consideration, it is necessary to ask: what we understand by *fake news*, how this concept is built, in the context of metaphorical studies, what are the source domains used by its conceptualization, what are the semiotic modes acting in its construction. We believe that our analysis helped us to better understand these questions. Thinking about this, we are going to start the analysis of the editorial cartoons chosen as our *corpus*.

The first editorial cartoon to be analyzed is “image seven”. In this editorial cartoon, we can observe the use of two conceptual domains: the source domain, person and the target domain, *fake news*. When bringing to the conceptualization of *fake news* the domain person we have the personification of *fake news*, being this personification activated by the visual mode (a hand coming out of a mobile phone holding an object that, in this context, functions as a pendulum). In this way, with this personification, the term fake news acquires characteristics typical of people, allowing, in this way, the *fake news* to act upon people.

An interesting aspect of this conceptual construction is that according to this multimodal metaphor, FAKE NEWS IS A PERSON, activated by the verbal signs (the written words *fake news*) and the visual signs (the image of part of a person, that can also be seen as a metonymical process, that is, A PART FOR THE WHOLE), there is the manipulation of meaning perpetrated by *fake news*, as we observe the pendulum, held by *fake news*, personified by the arm, as well as by the eyes of the character depicted in the editorial cartoon, eyes in a frenzy, thrilled. Besides this, it is important to notice that the occurrence of this manipulation did not happen in any environment, but by means of a technological tool, that may be recovered by the image of the mobile.

IMAGE 7 – *Fake news*

FAKE NEWS



Available at: <https://imirante.com/oestadoma/noticias/2016/07/18/charge-cabalau/>. Retrieved on: 20 Nov. 2019

In the second editorial cartoon analyzed, image number eight, we have again two semiotic modes acting on the conceptual construction of *fake news*, the verbal mode and the visual mode. In the verbal mode, the written word *fake news* activates the target domain, while the visual mode leads us to the activation of the source domain of this multimodal metaphor, that is, a weapon. In this way, the red hands of the characters depicted in the editorial cartoon lead us to associate the hands color with blood, so we can infer that, as a weapon, *fake news* can seriously damage people. Therefore, people who share this kind of information are left with blood on their hands, in the same way that people who commit crimes, above all, murderers. With these domains activated, we build the metaphor **FAKE NEWS IS A WEAPON**.

Another point to be highlighted in this editorial cartoon is the fact that the depicted characters look like sick people, colorless, lifeless, completely alienated, with their eyes stuck on the gadgets they are holding. Thus, we can associate these characters to society itself, allowing us to think of it as sick and alienated. In the concrete case, a society corrupted by the *fake news* that surround the reality, and the information are again shared through electronic devices.



IMAGE 8 – Fake news editorial cartoon



Available at: <https://twitter.com/georgmarques/status/975687979330097154>.  
Retrieved on: 20 Nov. 2019.

The third analysis presented was based on the image number nine. In this editorial cartoon, again, the multimodal metaphor is presented by the association of the verbal and the visual domains. And, once more, we have the personification in the conceptual construction of fake news. But this time, differently from the first editorial cartoon presented, the personification present in the source domain of this metaphor is activated not only by part of a person's body (as it happened in the first one that the depiction of an arm was enough to activate this domain), but by the complete representation of a human being. It is interesting to point out that it is not any human being, but a liar, as indicated by the long nose of the depicted character. This nose allows us to remind of a children's novel, *Pinocchio*. As we know, *Pinocchio* is a character identified by his lies.

Furthermore, the editorial cartoon in question also allows us to outline another category: ethics. In this manner, the ethics was restrained by fake news during the electoral period that happened in Brazil, in 2018. Thus, we can understand that in this election, according to the person who created this editorial cartoon, was characterized by the lack of ethics and by the presence of deceptive, misleading information.

Another point that draws our attention in this editorial cartoon is the color of the clothing worn by the personified categories. While

ethics wears white, that in our culture represents peace, hope; *fake news* wears yellow and blue, colors present in our flag.

IMAGE 9 – Fake news editorial cartoon



Available at: <http://jboscocartuns.blogspot.com/2018/04/fake-news.html>.  
Retrieved on: 20 Nov. 2019.

In picture number ten we can observe two metaphors: a multimodal one and a monomodal one, as pointed out by Forceville (2009). In the monomodal metaphor, fake news is conceptualized as an illness, caused by epidemics. In this way, we have the source domain illness and the target domain fake news, that activate the metaphor **FAKE NEWS IS AN ILLNESS**, built through the expression: “fake news epidemics”.

With this metaphor we can understand fake news as a rise in the number of a certain illness that exceeds the number expected during a specific period. In this manner, the rise of *fake news* surpassed the expected average, affecting great part of the population.

In this cartoon, we can also observe the multimodal metaphor **FAKE NEWS IS STRAY BULLETS**. Metaphor build by the visual mode (image of stoppers that are conceptualized in analogy to the vest) and the verbal mode (with the expression “and the stoppers are meant to protect me from fake news). With this metaphor we can conceptualize fake news as an object that can harm people, in this case, a bullet. It is crucial to say that they are not random bullets, they are stray bullets. In

this way, as stray bullets they can harm any people, so, fake news can also harm people indistinctively, not selecting social class, gender, race, level of education and so on.

IMAGE 10 – Fake news editorial cartoon



Available at: <http://blogdoafm.web2419.uni5.net/charge-epidemia-de-noticias-falsas/>. Retrieved on: 20 Nov. 2019.

To sum up, we present the analysis of the editorial cartoon in image number eleven. In this editorial cartoon, we activate in the construction of its meaning, once again, the multimodal metaphor **FAKE NEWS IS WAR**, what makes us infer the need of fighting it. This fact is reinforced by the image, because we can see two opponents, on one side a ballot box and on the other side WhatsApp icon. With the personification of these two elements, we can understand that fake news should be tackled, in the electoral context of 2018. However, we notice that in this fight, fake news – represented by a mean of communication (WhatsApp) – won. As depicted by the image, the ballot box is knocked out, with bruised purple eyes and without some teeth.

Other elements that help us in this analysis are the gestures presented by these characters. As stated by Cienke and Müller (2008), in metaphorical gestures, the target domain of metaphors is seen as abstract, that is, the gesture enacts or describes the concrete fundamentals of an abstract

concept. These gestures are characterized independently of the context in which they occur (sign, or spoken language), as voluntary body movements that use mappings between domains to express thoughts and feelings.

In the editorial cartoon below, the gesture of raising the hands can be seen, metaphorically, as victory, because as it happens in our culture, and other western cultures, everything that is good is meant to be up and everything that is bad is meant to be down. So, the gesture of putting the hands up means the victory of Whatsapp and the gesture of putting the hands down means the defeat of the ballot box.

Bringing the gestures to our analysis, we meet the postulates of some researches who claim that gestures can be conceived as an articulatory mode independent of the used expression, not only expressing the semantic content verbally expressed. In this way, the authors consider metaphors as processes that should be analyzed independently of a specific modality, being seen as multimodal, not having instances only in the gestures, images, spoken or written language; but also in the combination of these instances.

In this manner, the gestures presented cannot be seen as a mere replica of the senses activated by the verbal and the visual modes, but as additional evidence of the mapping between the domains.

IMAGE 11 – Fake news charge



Available at: <https://www.humorpolitico.com.br/tag/fake/page/2/>.

Retrieved on: 20 Nov 2019.

## **5. Final remarks**

As highlighted in our introductory section, this paper intended to analyze the concept of fake news according to the category of multimodal metaphors. For this, we presented in the first sections concepts that guided the discussions proposed on the third section – dedicated to the actual analysis of this concept.

Based on the works by Lakoff and Johnson (1980) we classified the metaphors present in the editorial cartoons chosen to be analyzed. In this way, we considered the source domains (person, weapon, illness and war) as sources of inference used to understand the target domain fake news. So, as we can notice the use of a domain in the conceptualization of the other, we can consider them metaphors.

However, as our research intended to go beyond verbal modes, we turned to Forceville's work (2009) on multimodal metaphors, so that we could not only postulate the existence of these metaphors but could also understand the meaning resulting from them. Thus, taking this concept into consideration, we worked on the different semiotic modes present in the editorial cartoons, focusing on the role they played in their construction. In this way, we identified the importance of multimodal metaphors in the creation of the concept fake news, as intended by their creators and, consequently, present in the meanings resulting from them.

A matter that deserves attention concerning the analysis is the presence, in all metaphors, of negative aspects in the source domains. That is, all the features activated in the source domains and mapped to the target domains are negative. As a result, we have a unfavorable representation of the term fake news. Because of this, this term is seen and represented either as a person who can inflict harm to other beings around or as stray bullets, illness or war.

Another point that drew our attention during the research is concerning the source domains presented being activated by the visual mode. This can make us consider that this use is an argumentative element used by the producers of the editorial cartoons analyzed. That is, as the image is a mode easily processed by our cognition, when using these images as the main source for their metaphors, the receptors activate their visual domains faster and doubtlessly, since the images are already ready, totally built for the reader. With this, a bigger commotion is caused in the people who access the editorial cartoons analyzed.

We firmly believe that research, as presented here, shows not only the possibility of occurrence of metaphorical processes in diverse semiotic modes (matter broadly accepted by the academy), but also the importance that these metaphors have in the conceptual construction, importance that should be truly valued when we look at the technological context, since in these contexts we observe the increasing possibility of these modes being fused together while building the meanings of their genres.

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## **Multimodal metaphors and practical argumentation: discussing rhetorical effects and modes of articulation between modalities**

### ***Metáforas multimodais e argumentação prática: discutindo efeitos retóricos e modos de articulação entre modalidades***

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**Abstract:** This paper aims to discuss both a typology of articulation between verbal and pictorial modalities in the construal of metaphors and the potential pragmatic and rhetorical effects of the activation of multimodal metaphors in practical argumentation. To do so, we analyze six texts from governmental health campaigns in Brazil oriented towards the elimination of *Aedes aegypti* breeding grounds, the mosquito mainly responsible for the transmission of dengue fever, chikungunya and zika in the country. In terms of the expression of metaphorical vehicles and topics in each modality, we could identify, as a result, three main modes of articulation: autonomy, correlation and interdependence. For each mode, we showed some pragmatic and semantic effects, such as increasing metaphoricality, inducing reframing and refining referentiality. We frame this discussion by critically considering a series of different frameworks on metaphor studies, such as Lakoff and Johnson (1980), Forceville (2007), Müller (2008), Vereza (2007, 2017, 2018), Gonçalves-Segundo and Zelic (2016) and Steen (2017). In terms of argumentative roles, we concluded that multimodal metaphors were relevant in construing the Negative Consequences of inaction in regard to the elimination of breeding grounds, hyperbolizing the lethal potential of the infections; in inducing the reader's readiness and tendency towards working collectively to achieve the campaign's intended Goals; and, finally, in generating humor in the construal of the campaign's Motivating Circumstances, in order to draw the reader's attention and identification towards this necessary social action. To support this debate, we drew mainly on Fairclough and Fairclough (2012), Macagno and Walton (2019) and Gonçalves-Segundo (2019).

**Keywords:** multimodal metaphor; multimodality; metaphor; argumentation; practical argumentation.

**Resumo:** Nosso objetivo, neste artigo, é discutir tanto uma tipologia de articulação entre as modalidades verbal e imagética na construção de metáforas quanto os potenciais efeitos pragmáticos e retóricos da ativação de metáforas multimodais na argumentação prática. Para isso, analisamos seis textos de campanhas governamentais de saúde brasileiras orientadas à eliminação de focos de reprodução do mosquito *Aedes aegypti*, o principal responsável pela transmissão da dengue, da chikungunya e da zika no país. No que diz respeito à expressão de veículos e tópicos metafóricos em cada modalidade, identificamos, como resultado, três principais formas de articulação: autonomia, correlação e interdependência. Para cada uma dessas formas, mostramos alguns efeitos semântico-pragmáticos, como aumento de metaforicidade, indução de reenquadramento e refinamento de referencialidade. Tecemos essa discussão a partir de um diálogo crítico com diversas perspectivas, em especial Lakoff e Johnson (1980), Forceville (2007), Müller (2008), Vereza (2007, 2017, 2018), Gonçalves-Segundo e Zelic (2016) e Steen (2017). Em termos de funções argumentativas, concluímos que as metáforas multimodais foram relevantes na construção das Consequências Negativas da inação no tocante à eliminação dos focos de reprodução do mosquito, hiperbolizando o potencial letal das infecções; na indução de um estado de prontidão e de trabalho coletivo no sentido de atingir os Objetivos da campanha; e, finalmente, em gerar humor na construção das Circunstâncias Motivadoras da campanha, para obter a atenção e a identificação do leitor em relação a essa ação social necessária. Para enquadrar esse debate, valemo-nos especialmente de Fairclough e Fairclough (2012), Macagno e Walton (2019) e Gonçalves-Segundo (2019).

**Palavras-chave:** metáfora multimodal; multimodalidade; metáfora; argumentação; argumentação prática.

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## Introduction

Multimodal figuration has been a topic of heated debate among researchers in the cognitive linguistic approach interested in the study of textual production and interpretation and in the comprehension of the complex interaction between discourse, experience and cognition in meaning making (BENEDEK; NYÍRI, 2019; FORCEVILLE, 2007, 2008; GONÇALVES-SEGUNDO; ISOLA-LANZONI; WEISS, 2019; HART, 2014; PÉREZ SOBRINO, 2017; SPERANDIO, 2015; STEEN, 2017; VEREZA, 2018). Even with the more or less explicit dialogues

with different perspectives and traditions (such as Semiotics or Systemic-Functional Linguistics, especially through Kress and van Leeuwen's (2006) *Grammar of Visual Design*), in an effort to increase the analytical potential and to refine its descriptive, interpretive and explanatory power, there is much yet to be examined and theorized in the field in terms of how different modalities interact to achieve pragmatic effects, how they are cognitively processed and how they are socially and discursively constrained.

Descriptively speaking, it seems that it is still necessary to analyze the possible interactions and their effects in a wide plethora of texts, taking into account different genres and distinct discursive and ideological affiliations, in order to understand how these multimodal figures – and, among them, particularly metaphors – construe meaning. To do that, we still need to invest in description, propose coherent typologies and examine their limits and potentials.

For this reason, this paper aims at tackling this problem in a two-fold way: first, we will discuss a typology of multimodal articulation in the construal of metaphors and examine some of its pragmatic effects; second, we will debate the role of multimodal metaphors in argumentation; more specifically, in practical argumentation as instantiated in a certain genre: governmental health campaigns.

Although the articulation between figuration and argumentation has its roots in Classical Studies, such as Aristotle, the cognitive linguistic approach to figuration – and especially to metaphor – has not yet developed a consistent approach to the role of cross-domain mappings in the process of persuasion; more so, in terms of practical argumentation and multimodality.

Practical argumentation, according to Fairclough and Fairclough (2012), Macagno and Walton (2019) and Gonçalves-Segundo (2019), concerns the process of construing arguments in support of a Claim for Action, derived from an argumentative activity oriented towards leading the audience to make a decision of altering the current state of affairs; in other terms, deciding to exert power to change the course of events in the direction of an envisaged Goal, coherent, in a lesser or greater degree, to their upheld Values.

We already know from a series of studies (CHARTERIS-BLACK, 2004, 2019; CHILTON, 2004; GONÇALVES-SEGUNDO, 2014; HART, 2010, 2014; RESENDE, 2020) the importance of metaphor not only

for maintaining hegemony through ideology, but also for ideological resistance. What we must start knowing is its role in persuasion, considering it as a tool to orient decision-making processes, in a way that does not reduce it to a stylistic device.

In order to approach the issue, we composed a *corpus* of approximately 50 multimodal texts from governmental campaigns against *Aedes aegypti*, the mosquito responsible for the transmission of three serious diseases in Brazilian territory: dengue fever, chikungunya and zika. The texts were collected online and encompass productions distributed to the population of different cities across the five geographical regions of Brazil (North, Northeast, Center-West, Southeast and South) from the year 2000 to 2019. For this paper, we selected six texts of our sample in order to illustrate the main conclusions of the study concerning the role of multimodal metaphors in the structuring of practical reasoning arguments and the types of multimodal articulation instantiated in the construal of the metaphors.

In the first section, we will discuss the concept of metaphor that we draw on in this research, discussing matters of its nature, social distribution and expression. In the second section, we will focus on practical reasoning, defining its functioning and defending why the selected campaigns constitute an instance – although not prototypical – of this type of argumentation. Then, in the following section, we will analyze a sample of the *corpus* in order to discuss: (i) the roles multimodal metaphors played in the process of persuasion in the selected health campaigns; (ii) their semantic-pragmatic effects; and (iii) the ways through which the modalities were articulated in the process of activating metaphoricality. Finally, in the last section, we will summarize our findings and the theoretical discussion.

## **1. Metaphors: reflections about their nature and expression**

The contemporary metaphor studies stress its cognitive, discursive and textual nature, drawing attention to its expression in distinct modalities and to its functioning as a product or as a process, as we can see by contrasting different approaches, such as Cameron; Low (1999), Fauconnier and Turner (2002), Forceville (2008), Hart (2014), Kövecses (2010), Lakoff; Johnson (1980), Müller (2008), Steen (2017), Vereza (2017, 2018), among many others.

Our objective, in this section, is not to present an overview of the different perspectives or even to debate their limitations and potentials. Our focus is to discuss three dimensions we consider relevant to understand the functioning of verbo-pictorial metaphors in discourse. Thus, we will briefly address: (i) the nature of metaphor as a process or a product, its different levels of schematicity and its social distribution; and (ii) the expression of metaphor, taking into account its configuration in terms of mono or multimodality, the role of construal in activating metaphoricality in each modality and between modalities, and the different forms of articulation between modalities in terms of cuing concepts and relations between concepts in source and target domains.

### 1.1 Metaphor as product and/or process: an open question

Lakoff and Johnson's (1980) seminal work has impacted the academic view on metaphor by proposing to conceive it not as a linguistic, but as a cognitive phenomenon. Far from being understood as a creative resource typical of literature and rhetoric, metaphors were understood as products, i.e., as relatively stable, culturally shared, highly entrenched, deeply embodied and schematic cognitive correspondences between domains, characteristics that made **conceptual metaphors** productive enough to be hypothesized as one of the engines for grammatical and lexical stabilization and change (considering the *continuum* between them) and to be proposed as basic building blocks of cognition, insofar as the authors propose that we think metaphorically – abstract reasoning is understood as being scaffolded metaphorically from our socioculturally situated and embodied experience.<sup>1</sup> Thus, metaphors could not be conceived anymore as mere stylistic figures, but as a phenomenon of our daily lives.

This view, although still influential – and valid in many points –, has been challenged to a greater or lesser extent by several researches interested in studying metaphor in discourse. By expanding the radius of research, many new questions arose,<sup>2</sup> such as: (i) how do metaphors

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<sup>1</sup> This last line of thought is radicalized, for example, in Grady's (2005) notion of **primary metaphor**.

<sup>2</sup> These questions were not necessarily framed as such in the papers or books we indicate in parentheses, but we understand that the research therein answers to a certain extent the proposed questions. Among our questions, we will not include psycholinguistic ones, for they are only marginal to the research we have been developing.

emerge in interaction and are developed in the course of a conversation (CAMERON; DEIGNAN, 2006)?; (ii) how do we account for metaphors that seem not to be recognized as such by speakers and metaphors that apparently need to be recognized as such in order to achieve the effects potentially intended by the producer (MÜLLER, 2008; STEEN, 2017; VEREZA, 2017, 2018)?; (iii) what is the role of experience and culture in the consolidation of metaphors and which notion of embodiment is relevant for this account (KÖVECSES, 2010)?; how are metaphors and metaphoricity related to the ordering of discourse, i.e., the construal of discourses, genres and styles (CHARTERIS-BLACK, 2004, 2019; DIENSTBACH, 2017; GONÇALVES-SEGUNDO, 2014; GONÇALVES-SEGUNDO; ZELIC, 2016; HART, 2014; MORAIS, 2015)?; and (v) how are metaphors semiotically expressed and how do the modalities involved in cuing or activating concepts in source and target domains interact with each other (FORCEVILLE, 2008; GONÇALVES-SEGUNDO; ISOLA-LANZONI; WEISS, 2019; PÉREZ SOBRINO, 2017; SPERANDIO, 2015)?

A consequence of the research into all this network of related issues was a conflict on the conception of metaphor itself, especially in terms of its nature. Are metaphors a stabilized product of (offline) cognition, a highly entrenched cross-domain correspondence recovered in actual usage for thinking and communicating, as proposed by Conceptual Metaphor Theory, or are metaphors activated through a series of cognitive processes, in an interaction between online cognition and offline cognition (VEREZA, 2017), cued by different modalities, in such a way that construal operations serve a determining role in the actual framing of the relevant correspondences?

In our view, both accounts seem plausible, a position also shared by Vereza (2007, 2017, 2018, among others). Conceptual metaphors seem, in fact, to be stabilized and part of our offline cognition with minimal metaphoricity – we could even say that many of them are (potentially) dead, following Müller (2008). It does not mean, however, that they cannot be expanded or further developed in discourse.<sup>3</sup> Conceptual

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<sup>3</sup> Müller (2008) advances a similar argument, when she proposed the categories of sleeping and waking metaphors, considering a triadic structure for the activation of metaphoricity, instead of a dyadic one, as it seems to be proposed in Conceptual Metaphor Theory.

Metaphors are schematic in nature and, as such, allow for different instantiations in concrete usage, not only through verbal language, but also through other modalities, such as images. This interplay between schematicity (in cognition) and specificity (in discourse) in the actual production and interpretation of a text is one important factor in the activation of metaphoricality and it is what lies behind the notion of **metaphorical niche**, as proposed by Vereza (2007, 2018), a theoretical construct that aims at articulating textual, pragmatic and cognitive studies in the research on metaphor. Thus, it is not a matter of *or*, but *and*.

We agree with Vereza since **conceptual metaphors** can, in fact, scaffold and support the emergence of **situated metaphors** (VEREZA, 2017, 2018) in a text,<sup>4</sup> contributing to its aptitude and to its effectiveness in terms of achieving different effects, such a criticism and humor.<sup>5</sup> This interaction opens a space for further discursive development, constituting a niche that is deliberately<sup>6</sup> construed in interface with the relevant ordering of discourse, i.e, the relevant genre, the styles derived from the social roles of the interactants and the ideologies with which the participants are affiliated.<sup>7</sup> All these relations cannot be accounted for by considering only the established products of offline cognition;

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<sup>4</sup> Vereza (2018, p. 15) summarizes the relations between these concepts as follows: “Situated metaphors can be implicit or explicit, that is, linguistically evident or not. Cognitive mappings (source domain elements mapped upon target domain elements) that emerge from situated metaphors can be textually developed in short texts or metaphorical niches, that is, longer passages inserted in a text (usually in the form of paragraphs), or even constituting an entire text. A metaphor niche [...] would be an example of a text that is constructed metaphorically by exploring a situated metaphor through the development of local mappings”.

<sup>5</sup> We find important to stress that, although the interplay between conceptual and situated metaphor is common, situated metaphors do not need an underlying conceptual metaphor to manifest. Thus, we contend that they can be products of online cognition only, supported by our capacity to construe analogies aimed at reframing. This discussion, however, seems to require a focused research with a wide corpus. The reader should interpret this assertion, then, as a hypothesis.

<sup>6</sup> The notion of deliberation in the construal of metaphor stems from Steen (2017).

<sup>7</sup> For a detailed account of orders of discourse and their three components – discourses (sociosemiotic ways of representing), genres (sociosemiotic ways of acting) and styles (sociosemiotic ways of being) –, see Fairclough (2003) and Gonçalves-Segundo (2018a).

they emerge during the processing of the text (in production and interpretation).

For this same reason, we do not interpret **situated metaphors** as products, akin to **conceptual metaphors**. **Situated metaphors** guide the interpreter, insofar as the relevant correspondences between domains are textually construed in sequence, inviting a reframing of the target domain by providing an alternative perspective to a certain entity, event, property or circumstance, a process that is usually tied to specific rhetorical projects in daily or institutional practices. This reframing seems to be a relevant aspect of this sort of metaphor, since it is related to an often-neglected topic in Cognitive Linguistics: schema formation or revision. By construing a situated metaphor, the inferences derived from our experience with the source concepts and relations may reconceptualize our understanding of the target domain concepts and relations, thus leading to another perspective – that is, in our view, the cognitive relevant aspect that ties this kind of metaphor to argumentation.

Thus, we propose that **situated metaphors**<sup>8</sup> should be conceived not as products already structured in cognition, but as metaphors emergent from complex cognitive operations derived not only from offline cognition (domains), but also from the pragmatic (situational context) and discursive forces (orders of discourse) actively processed by (online) cognition during meaning making. These metaphors are cued and activated by language and other modalities, are oriented towards the reframing of the target domain and are associated with different rhetorical effects.

Until this moment, we discussed two sorts of metaphors that seem opposing in terms of social distribution. On the one hand, **conceptual metaphors** are seen as embodied, highly entrenched and socially distributed, being even an organizational component of a language as such, as it is productive in terms of grammatical and lexical stabilization and change; for this reason, conceptual metaphors are even hard to be avoided in language use and are not easily susceptible to pragmatic and

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<sup>8</sup> This redefinition does not distance us from the original formulations from Vereza (2007, 2017, 2018). The main difference, perhaps, is our explicit adherence to a conception of situated metaphor as a process and to the inclusion of orders of discourse in the framework. The idea of reframing, although not exactly the same, is also present in her framework. See also Steen (2017). Thus, what we aim is a theoretical complementation.



discursive forces with respect to their instantiation. On the other hand, **situated metaphors** are only minimally – or not even – entrenched, they are restricted to a single text or a reduced network of texts, are not productive in grammatical or lexical stabilization or change and emerge from the interplay between offline cognition and pragmatic and discursive forces in online cognition. Nonetheless, there seems to be an intermediary type of metaphor, a schematic metaphor that is tied to the ordering of discourse. We call them **distributed metaphors**<sup>9</sup> (GONÇALVES-SEGUNDO; ZELIC, 2016; GONÇALVES-SEGUNDO; ISOLA-LANZONI; WEISS, 2019).

**Distributed metaphors** arise from highly shared **situated metaphors**. The success of a situated metaphor can be seen, as a network of intertextual relations starts to unfold around it, through the expansion and consolidation of the cross-domain correspondences it structures. This process may provoke the stabilization of a certain perspective towards an object of conception (an event, an entity, a circumstance or a property) in the target domain. As such, **distributed metaphors** are a relevant component of discourses as representations, a central dimension in the orders of discourses, and can be, thus, instantiated ideologically, in order to promote hegemonic, alternative or counter-hegemonic perspectives on reality.

On the one hand, just as **conceptual metaphors**, **distributed metaphors** may also form **metaphorical niches** and enable the instantiation of **situated metaphors**, as we will see in section 3.3. On the other hand, as having historically emerged from **situated metaphors**, they can inherit their relation to schematic **conceptual metaphors**. Differently from **conceptual metaphors**, however, their degree of schematicity is not that high, thus reducing its potential of changing grammar; additionally, its metaphoricity is not necessarily low. For they are discursively biased, especially in politics, this kind of metaphor may be readily contested by opposing groups; however, for the groups that endorse the same view, they might not be perceived as such, due to naturalization. Cognitively

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<sup>9</sup> We borrow the term from Morais (2015). In his doctorate thesis, the author proposed the concept of **emergent distributed metaphor** through a dialogue between Discourse Analysis, Experiential Realism and Cognitivist Empiricism. We do not filiate ourselves with the author's conception of discourse, subject and context, but we acknowledge the inspiration on his work to design our own notion of **distributed metaphor**.

speaking, we could hypothesize that **naturalization** of a **distributed metaphor** is the result of the incorporation of entailments and inferences from the source domain into the target domain in such a way that the conceptualizer loses sight of the original cross-domain mappings and attributes the attitude towards the source to the target, as if the target domain would “naturally” be that way. In this process, the **distributed metaphor** may seem to be sleeping or even dead to these groups. Therefore, we can argue that their functioning as process or product is largely dependent on the reference group, their actual social distribution and on the degree of entrenchment and conventionalization caused by ideological bias.

## 1.2 The expression of metaphors: discussing a typology of multimodal articulation

Although metaphor studies have focused on language as the primary modality of expression since Aristotle, it is undeniable, especially today, with the technological advances that enabled pictorial, musical and multimodal texts to be mass produced, distributed, accessed and consumed, that other modalities play a considerable role in the construal of metaphors in daily and institutional life. In this paper, since our focus is on verbo-pictorial campaigns against *Aedes aegypti*, we will restrict our discussion to this kind of interaction.

We start by quoting Forceville (2008, p. 469), who proposed the following criteria for the definition of a multimodal metaphor:

1. Given the context in which they occur, the two phenomena belong to different categories.
2. The two phenomena can be slotted as target and source, respectively, and captured in an A IS B format that forces or invites an addressee to map one or more features, connotations, or affordances (Gibson, 1979: chap. 8) from source to target.
3. The two phenomena are cued in more than one sign system, sensory mode, or both.

Even though we assume this view in this paper, we would initially like to clarify some specific aspects of the approach we will assume for the analysis. First, we will reserve the terms **vehicle** and **topic** to refer to the linguistic or pictorial segments that cue concepts and relations in the

source and the target domain, respectively. Second, we contend that the ways by which cohesive relations are established between the modalities exert a coercive role in terms of delimiting the possible correspondences between domains and its entailments. Third, we take for granted – as it has already been verified by several researchers, such as Forceville (2008, 2009), Pérez-Sobrinó (2017) and Dienstbach (2017) – that genres not only constrain the degree of metaphoricity allowed in a text, but also limit the kind, the frequency and the role of multimodal and verbal metaphors instantiated. Fourth, we do also assume that the ways modalities interact in the activation of metaphoricity (MÜLLER, 2008) are fairly complex and varied and that it is still necessary to establish a typology that tries to, at least, minimally organize the possibilities and its meaning making properties. In Brazil, Sperandio (2015) has dedicated some efforts in this direction and it is on this last aspect that we will focus our attention on this section.

Through the analysis, we were able to deduce three major articulation strategies between modalities in the construal of a metaphor:<sup>10</sup>

1. **Autonomy**: in **autonomous** articulation, both modalities express, through their own resources, both the vehicle and the topic, therefore cuing the relevant source and target domains in such a way that they provide us with enough information for the interpretation of the metaphor, independently of the multimodal combination. **Autonomous** articulation may be based on **metaphorical equivalence**, when both modalities construe the same metaphor with the same vehicles and topics; **metaphorical complementarity**, when they construe the same metaphor, but utilizing and highlighting different aspects of the relevant domains; **metaphorical divergence**,<sup>11</sup> when they mix different metaphors. In this paper, we will show and discuss an example of **metaphorical equivalence**.

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<sup>10</sup> All these modes of articulation will be detailed and further discussed during the analysis in section 3.

<sup>11</sup> It seems reasonable to admit that, in these cases, for the sake of coherence, the target domain would tend to be the same or similar. We did not find any example of this category in our corpus; therefore, its occurrence is only hypothetical, although it seems plausible from a theoretical point of view.

2. **Correlation:** in **correlation**, one modality construes the metaphor, usually by the expression of both vehicle and topic, while the other modality only reiterates an element of the source or the target domain. Usually, this last modality has low metaphorical potential and their content tends to function as a means of increasing the degree of metaphoricity of the metaphor construed in the other modality. Instances of **correlation** will be discussed in detail in section 3.3.
3. **Interdependence:** prototypically, in an **interdependent** articulation, one modality cues the source domain, by expressing the vehicle, while the other modality cues the target domain, by expressing the topic, in such a way that is only through the mapping between elements from both modalities that the metaphor is activated. We are labeling this possibility as **simple interdependence**. As we will show, however, in sections 3.2 and 3.4, an **interdependent** relation may also occur between a fully construed (mono or multimodal) metaphor and a monomodal (or multimodal) segment whose metaphorical potential is minimal. By construing a cohesive link between these two segments, either through predication or reference, a new metaphor emerges from the interaction. We will call this mode of articulation **complex interdependence**. In our analysis, we will discuss how **complex interdependence** can be associated with the **reframing** of a target domain, in terms of hyperbolic or humorous effects.

That said, we move to the discussion about practical argumentation.

## 2 Practical Argumentation

It is traditional in argumentation theory to recognize two main functions of argumentation: we argue to make someone believe in a certain state of affairs, i.e., conception of reality, an activity that is cognitively tied to the processes of belief formation and revision, or to make someone decide to take a certain course of action and, thus, to intervene in reality itself, an activity that is cognitively associated with the processes of decision-making and belief defensibility. The first kind of argumentation is often labeled **epistemic argumentation**, whereas the second one is termed **practical argumentation**.

In the multidimensional model of argumentative analysis<sup>12</sup> we've been developing recently (GONÇALVES-SEGUNDO, 2018b, 2019; in press), we draw on a reframing of Toulmin's layout of arguments to deconstruct epistemic reasoning arguments in order to describe its functioning, evaluate its consistency and understand their convincing power in terms of *logos*. However, to account for practical arguments, we draw on an expansion of Fairclough and Fairclough (2012) layout, discussed in detail in Gonçalves-Segundo (2019). As our *corpus* is composed by texts which instantiate practical reasoning, we will focus our discussion on this subject.

Practical arguments are grounded on decision-making processes that can be described and interpreted through a set of six functional components.

The central component is the **Claim for Action**, usually the target of the argumentation, since the texts – either written, oral or multimodal, with or without the possibility of reciprocal and immediate interaction – are usually aimed at persuading audiences towards supporting and implementing a certain course of action in order to change the present state of affairs, conceived as undesirable, unacceptable or upgradeable (GONÇALVES-SEGUNDO, 2019).

**Claims for Action** are usually expressed through commands, realized by the imperative mood, non-finite clauses in infinitive or deontic modals; in a less prototypical way, they may be construed by volitive modals or even propriety judgements (MARTIN; WHITE, 2005) which assess if a proposal is good or bad, right or wrong, pertinent or not.

It is relevant to stress that **Claims for Action** are grounded on a practical problem. Gonçalves-Segundo (2019), setting up a dialogue with

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<sup>12</sup> The multidimensional model of argumentative analysis (MMAA) is a multidisciplinary approach to argumentation aimed at describing, interpreting, explaining and evaluating arguments in authentic sociosemiotic practices. It is not a theory of argumentation itself; we would rather refer to it as a methodological device that draws on a set of theoretical assumptions from different fields, especially Critical Discourse Studies, Cognitive and Functional Linguistics, Argumentation Theory and Rhetoric, in order to refine the analytical procedure involved in the examination of argumentative texts, expressed through verbal or multimodal means. The model is multidimensional since it proposes five dimensions of argumentative analysis: functional configuration, macrostructure, schematization, socio-affective grounding and argumentative orientation.

the French tradition of Rhetoric and Argumentation Theory (PLANTIN, 2008; GRÁCIO, 2010) contends that

argumentation is founded on dissension and, thus, emerges from interactive situations in which we conceive as reasonable to entertain different answers to an argumentative question. Argumentative questions, as Grácio (2010) rightfully emphasizes, are the result of a confrontation between perspectives derived from the affiliation of authorial voices to distinct discursivities (GONÇALVES-SEGUNDO, 2019, p. 116, translation ours).

A practical problem, then, concerns a dissension whose center is the need to act to solve a present problem construed as real: in our *corpus*, it could be framed as “What needs to be done in order to prevent or to end the massive infection from dengue fever, chikungunya and zika among the population?”. Usually, there is more than one alternative to achieve the solution. Therefore, we are often faced with several possible courses of action, discussed and assessed in the public (physical or virtual) arena before a decision is taken and a proposal is implemented. We could say, thus, that there are always a set of **Claims for Action** competing in a practical problem in terms of resisting scrutiny. As Fairclough and Fairclough (2012) states, the winning proposal is usually the one that resists criticism and skepticism best.

The second relevant component are the **Circumstances**, conceived by Fairclough and Fairclough (2012, p. 46) as a set of present states of affair that represent “a *problem* to be resolved, and are therefore negatively evaluated from the point of view of the agent’s goals”. In Gonçalves-Segundo’s (2019) expansion of the *layout*, Circumstances are divided into five subcategories. The first one, the **Motivating Circumstances**, corresponds exactly to Fairclough and Fairclough’s (2012) definition, as it concerns the framing of the practical problem. The other four – **Enabling Circumstances**, **Impeding Circumstances**, **Adverse Circumstances** and **Catalytic Circumstances** – are relevant in terms of supporting or rebutting a Claim for Action, because they provide arguments based on the present state of affairs for evaluating a proposal.<sup>13</sup>

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<sup>13</sup> Although important, these four subtypes of **Circumstances** will not be detailed in this paper, as they are prototypically not instantiated in our *corpus*. Briefly, we can say that **Enabling Circumstances** are present states of affair that delimit the viability of a course

We consider important to highlight that **Motivating Circumstances**, since they frame the practical problem, are conceived “in relation to the agent’s [orator’s] concerns or values; for a different agent, with different concerns, the situation might call for a totally different type of action or no action at all” (FAIRCLOUGH; FAIRCLOUGH, 2012, p. 46, brackets ours). This is the case due to the fact that the evaluation of the present situation as undesirable, unacceptable or upgradeable is tied to the discursive affiliations of the social actors involved in the interaction or of the text’s authorial voice, considering the roles they perform in the relevant social practice. Thus, we consider vital to stress the importance of Values in the construal of both **Motivating Circumstances** and **Objectives** – Fairclough and Fairclough (2012) recognize this, but, oddly, just associate the **Value** component to the **Objectives/Goals**. Macagno and Walton (2019), in turn, highlight the relevance of the linguistic categories employed by orators in this process, since they frame how the present situation is to be conceptualized.

The **Objective** (or **Goal**) can be defined as the future state of affairs envisaged as a result of the implementation of the new course of action. This future situation is, of course, conceived as having at least reduced the problematic present situation or even eliminated the problem at all. Analogously to the **Motivating Circumstances**, **Objectives** are also coerced by the **Values** derived from the discursive affiliations of the orator(s).

Fairclough and Fairclough (2012) also proposes a **Value** component in their layout. It is an important addition, since **Claims for Action** may also be supported or rebutted in terms of how they are adherent to a certain set of Values assumed by the opposing parts of a discussion (MACAGNO; WALTON, 2019). We should stress, though, that when the authors refer to **Values**, they are not talking about desires or individual attitudes. **Values** encompass the institutional and the

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of action, i.e., if there are conditions to implement it; **Impeding Circumstances** are present states of affair that show that there are no conditions to apply the proposed action; **Adverse Circumstances** are those that show the difficulties in the implementation of the action; and **Catalytic Circumstances** are those that show the potential of the present state of affairs to favor the attainment of the envisaged future state of affairs. For a detailed account of these **Circumstances**, their relation to assessment criteria in argumentation and its application in textual analysis, see Gonçalves-Segundo (2019).

normative concerns social actors are tied to in regard to their position in social practices. In this sense, the same individual may argue based on different values, whether they change positions during their daily and institutional lives, assuming distinct roles at work, at home, at the church, among other possibilities.

Moreover, Fairclough and Fairclough (2012) draw attention to the role **Consequences** play in the (un)acceptance of the **Claim for Action**. In general, **Positive Consequences** tend to move the audience towards the proposed action, whereas **Negative Consequences** do the opposite, steering the audience towards an alternative **Claim for Action**. Differently from the other components, however, **Consequences** are not necessarily implied in a practical reasoning argument, for they are only one of the possible ways to argue for or against a proposal.

Finally, the authors also propose a **Means-End** premise, usually implicit, that enables the inferential step necessary to understand the connection between the **Claim for Action** and the **Goals**. We don't understand it exactly as a premise, but as a rule of inference, similarly to Toulmin's Warrant (TOULMIN, 2006; TOULMIN; RIEKE; JANIK, 1984; GONÇALVES-SEGUNDO, 2016). Therefore, we propose that it always has the form of a generalized proposition, which can be expressed verbally, if necessary or strategic, as follows: "Performing A (Action) leads to O (Objectives)"; in other terms, by applying the course of action proposed in the Claim, we are able to achieve the future state of affairs expressed in the Objectives.

That said, we pose the following question: are the texts pertaining to the campaign against *Aedes aegypti* instances of practical argumentation? Our answer is yes, albeit not prototypically.

First, the campaign does not aim at persuading the population to adhere to a certain **Claim for Action** in face of a set of alternatives. There is a schematic **Claim for Action** that pervades every text, which may be expressed as: "Eliminate the mosquito breeding grounds in your house and in your neighborhood". The level of variation encompasses, on the one hand, its linguistic or pictorial realization (metaphorical or not) and, on the other hand, the exposition of different examples on how to eliminate breeding grounds. Thus, the focus of the campaign is not about convincing people that this is the best solution, but about driving people to actually do it. This leads us to hypothesize that the texts will not focus on presenting arguments in favor of doing so, but will employ



a set of rhetorical devices aiming at generating identification and, therewith, readying people in terms of preventing the accumulation of stagnant water.

Second, the campaigns do not open space for dissension regarding the undesirability or unacceptability of the present (**Motivating Circumstances**). The same can be said about the **Objectives**. There is no different framing of the present state of affairs – the campaigns construe the risk of an epidemic as real and the inaction of the population as a relevant factor for the proliferation of the mosquitoes. This does not even need to be said, since it is a highly distributed information across the country, especially during summer. Analogously, the **Objectives** are almost never discussed: it is assumed that the envisaged state of affairs is the reduction of the infections or even its elimination.

Third, since the campaigns are usually financed and commissioned by the government, the **Values** assumed are tied to the institutional positions of the State, especially the Ministry and the Departments of Health. Thus, the variation is also insignificant, as the concerns towards public health (and its financing), mortality and so on are usually the same. The frequency of expression of this argumentative role is also fairly low in our corpus. We will show an instance in section 3.4.

That said, we can assume that the campaigns from our corpus do not constitute an argumentative interaction – in Gracio's (2010) terms –, since there are no conflicting perspectives on reality being discussed with the possibility of turn exchange in defense of different epistemic or practical claims. Thus, the decision-making property that is typical of practical argumentation is not constitutive of the genre. What we do see in these texts is the reinforcement of a discourse on dengue fever, chikungunya and zika, oriented towards making people aware of the need for collective action to actually eliminate the breeding grounds. It is, then, practical argumentation, since the aimed outcome is the implementation of actions that will bring about the desired future, but it is not about deliberating; it is about making people do what they already know that must be done. Thus, it is less *logos*-oriented and more *pathos*-oriented.

### 3 The persuasive potential of multimodal metaphors: textual analysis

#### 3.1 Methodological procedures

As we stated in the introduction, from our corpus of approximately 50 texts, we selected six instances to discuss in this paper. The following criteria were considered in the selection:

- (i) the variability in the roles played by the metaphors in the practical argumentation layout;
- (ii) the consistency of the source-domain utilization across the *corpus*;
- (iii) the instantiation of different multimodal articulation patterns.

The analysis followed the steps below:

- (i) the text<sup>14</sup> was deconstructed in terms of the practical argumentation layout. In this process, we first determined the role of the explicit utterances in the layout; afterwards, we inferred the implicit relevant components.
- (ii) the metaphor(s) was(were) identified and analyzed in terms of its multimodal articulation and its semantic and discursive potential. We directed special attention to the cross-domain mappings that are not instances of conceptual metaphors, since it was likely that they only filled a secondary role in terms of both argumentation and rhetorical effects. Nonetheless, metaphorical niches (VEREZA, 2007) were deemed relevant, since they articulated conceptual metaphors to situated or distributed metaphors, on the one hand, and distributed metaphors to situated metaphors, on the other;
- (iii) the role of the metaphor in the practical argumentation layout was determined, the semantic-discursive combination between visual and verbal modalities was examined and its rhetorical effects, considering the objective of the campaign as a role, were

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<sup>14</sup> We are using the term ‘text’ to refer to the whole instance of usage. Thus, we are not applying the term restrictively, considering only the verbal segments; we are assuming the whole multimodal composition. Throughout the analysis, we will use the terms ‘verbal segment or utterance’ and ‘pictorial segment’ to refer to aspects pertaining to each of the considered modalities.

hypothesized. In this stage, cultural and discursive considerations were deemed relevant in order to enhance the interpretation of their effect.

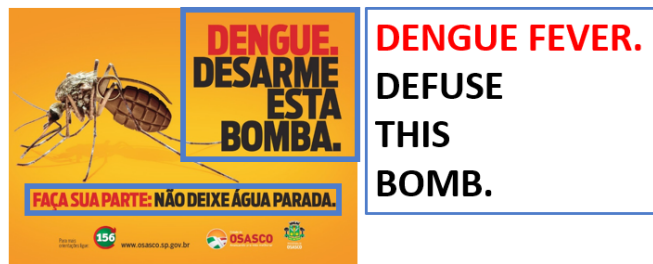
That said, we will divide the analysis in three subsections: in subsection 3.2, we will discuss how multimodal metaphors construe the **Negative Consequences** of inaction against the mosquitoes; in 3.3, we will analyze their role in attracting people and inducing readiness towards the necessary collective action; finally, in 3.4, we will show how multimodal metaphors are employed humorously in the construal of **Motivating Circumstances**.

### 3.2 Multimodal metaphors as hyperboles: the construal of Negative Consequences

As we already explained, the campaigns against *Aedes aegypti* are aimed, in a schematic level, at persuading readers to eliminate, in their houses and neighborhoods, the different mosquito breeding grounds. This **Claim for Action**, which is often implicit, considering that it is assumed that this sort of knowledge is already distributed throughout the population, is oriented towards the (usually implicit) **Goal/Objective** of impeding the transmission of the disease.

Although there are many instances of the campaign which focus on the power of mobilization, on the positive aspects of the actions potentially executed by the population and on their success, there is a set of campaigns which aim to persuade through the conjecture of a scenario where nothing was, in fact, done to stop the breeding of the mosquitoes and, thus, the transmission of the diseases. In this set, the **Negative Consequences** of the inaction are highlighted and become salient (GONÇALVES-SEGUNDO, 2017; KRESS; VAN LEEUWEN, 2006; TENUTA DE AZEVEDO; LEPESQUEUR, 2011) not only in terms of textual display, but also of argumentative functioning, as we can observe in the following example:

FIGURE 1 – Osasco’s (2015) campaign



**DO YOUR PART: DO NO LET STAGNANT WATER [ACCUMULATE]**

Source: <http://www.osasco.sp.gov.br/InternaNot.aspx?id=9401>.

Retrieved on: Dec. 10, 2019.

We can observe that the verbal utterances focus solely on the **Claim for Action**, which is construed in every clause, although through different construals. The command “Faça sua parte/Do your part” highlights the role of every reader (and citizen) in the fight against the disease and their importance in achieving the implicit **Objective**. The command “Não deixe água parada/Do not let stagnant water (accumulate)”, in turn, expresses what should be concretely done in order to avoid the formation of breeding grounds; thus, we can assume that it is in equivalence with the metaphorical command “Desarme essa bomba/Defuse this bomb”. We will deconstrue the process in detail below.

The metaphor itself is construed in both modalities. The pictorial segment presents a hybrid metaphor (GONÇALVES-SEGUNDO; ISOLA-LANZONI; WEISS, 2019; FORCEVILLE, 2007), in which a mosquito and a bomb (more specifically, a grenade) constitute a single *Gestalt*. Considering the genre and the objectives of the campaign, it is easy to establish that the target domain is MOSQUITO (*Aedes Aegypti*), whereas the source domain BOMB. Another factor that seems relevant for the interpretation of the MOSQUITO as target – and not as source – is the composition of the image. Since the bomb occupies a less distinctive part of the insect (its rear), it allows the reader to discern – through the pattern of coloring (black and white stripes), the head and the proboscis – that the mosquito on display is *Aedes aegypti*, in a process that favors inferring it as target domain.

Therefore, it is likely that what is mapped from the source to the target domain is the destructive potential of a bomb. Just as a bomb has the potential to explode and cause massive death, so can mosquitoes infect people and provoke an epidemic that may cause massive death. Thus, we can analyze the pictorial metaphor as an instance of the situated metaphor *AEDES AEGYPTI IS A BOMB*.<sup>15</sup>

The verbal segment in the upper right also presents a metaphor: “Dengue. Disarme esta bomba/Dengue Fever. Defuse this bomb”. Differently from the pictorial metaphor, the verbal metaphor seems to invite us to map the bomb as the disease itself, since the referential chain does not include the mosquito and it is the last Noun Phrase with potential for coreferentiality. The effect does not seem to be that different: it is likely that the destructive potential of the bomb is mapped directly into the disease’s potential of bringing about massive death. The situated metaphor is, then, *DENGUE FEVER IS A BOMB*.

What we can infer, then, is that both modalities construe both domains internally. As we exposed in section 1, this kind of articulation is called **autonomy**. **Autonomy** does not mean that the pictorial and the verbal segments do not construe meaning together – **autonomy** in the construal of a multimodal metaphor concerns only the sufficiency of each modality in terms of establishing, by itself, the necessary elements for

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<sup>15</sup> We will identify all metaphors through the formula *TARGET DOMAIN IS SOURCE DOMAIN*, regardless of its status as conceptual, distributed or situated metaphor. We will, then, specify their nature in the preceding text, just as we did here.

the emergence of a metaphor. The combination of pictorial and verbal utterances always implies a certain kind of semantic and discursive interaction, which is constrained by the different ways through which the components of each modality are cohesively tied to each other. In this case, the cohesion is established through the metonymy *DISEASE FOR VECTOR* and through the reiteration of the **vehicle** “bomb” in both modalities.

Thus, the global effect of the combination seems to be the drawing of attention to the destructibility of the disease (enabled by the mosquitoes). To this end, the image seems to play an important role, since it enhances the metaphoricity of the metaphorical verbal segment (DIENSTBACH, 2017; MÜLLER, 2008).<sup>16</sup>

In terms of rhetorical effects, the multimodal metaphor acts as a **hyperbole** of the **Negative Consequences**, drawing on our conceptual knowledge about bombings to instill fear of the consequences of inaction. It is, then, a variant of the **appeal to fear** argument (WALTON, 1996): the audience is steered towards a certain course of action due to the fear instilled by the authorial voice towards the consequences of the alternative.<sup>17</sup>

The following text adopts the same strategy, although in a more explicit and intensified way:

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<sup>16</sup> We could say, thus, that multimodal metaphors articulated through autonomous relations constitute the limit of the category. Some could argue that there is a verbal metaphor, on the one hand, and a pictorial metaphor, on the other hand, that are displayed and strung together through cohesive links and/or through spatial closeness; in this line of thought, one would reserve the term ‘multimodal’ metaphor to the combinations in which at least one modality does not construe the metaphor as a whole. We, however, prefer to consider both scenarios as instantiating multimodal metaphors, although with different degrees of sufficiency in the construal of a metaphor. The copresence of verbal and pictorial segments which establish discursive, pragmatic and semantic relations with one another, contributing – in any possible degree – to the emergence of a metaphor, is, for us, enough for considering the combination as an example of multimodal metaphor.

<sup>17</sup> Walton (1996, p. 304) states that this kind of argument is used “to threaten a target audience with a fearful outcome (most typically that outcome is the likelihood of death) in order to get the audience to adopt a recommended response”.

FIGURE 2 – Uberlândia’s (2019) campaign



OR THE MOSQUITO  
FINISHES WITH YOU.



[OR] YOU FINISH WITH  
THE DENGUE FEVER  
MOSQUITO

Source: <https://www.aciub.org.br/2019/01/29/dengue-populacao-deve-redobrar-cuidados-para-combater-o-aedes/>. Retrieved on: Dec. 10, 2019.

Differently from the first campaign, we can see, in this one, that the verbal utterances fulfill two different roles in the practical argumentation layout: the clause “Você acaba com o mosquito da dengue/ [Or] you finish with the dengue fever mosquito” functions as the **Claim for Action**, while the clause “Ou o mosquito acaba com você/Or the mosquito finishes with you” conveys the **Negative Consequences** of

inaction. It stands to reason, then, that the verbal segment expresses a threat speech act, based on an appeal to fear.

The main distinction between the two campaigns lies in the fact that, in this one, the actual scenario derived from inaction is portrayed in the image through a contextual pictorial metaphor (FORCEVILLE, 2007), i.e., a metaphor in which the background constitutes a setting that changes the way we conceptualize the Figure – in this case, the mosquito –, understanding it through a cross-domain mapping. The dystopian background, which shows a destructed city, allied with the black and yellow plate behind the first clause, associated with “Danger” signs, construe a (possible) world where the lack of attention to stopping the proliferation of the mosquitoes led to an apocalypse – the **hyperbole** here is undeniable!

Thus, the authorial voice seems to invoke an apocalyptic source domain, where giant beasts destroy humanity.<sup>18</sup> The concept of a giant beast is mapped onto *Aedes aegypti* through its size, taller than a building. The height is an important strategy to construe the **hyperbole**, since it portrays the mosquito as a real threat: the non-containment of the breeding grounds will lead to an epidemy that will be impossible to contain, leading to death and devastation (seen in the damage on the physical structure of the city). Thus, there seems to be two situated metaphors working simultaneously in the construal of the pictorial segment: *Aedes aegypti* IS A GIANT, APOCALYPTIC BEAST AND COLLECTIVE HEALTH IS CITY’S PHYSICAL STRUCTURE.

It is relevant to assert that interpreting the second situated metaphor highly depends on the verbal segment and the genre, since they constrain the way we understand the image, i.e., as a possible (hyperbolic) future derived from our decision to do nothing. In itself, the clausal complex (“Você acaba com o mosquito da dengue ou o mosquito acaba com você/ [Or] you finish with the dengue fever mosquito or it finishes with you”) does not express a rhetorically relevant situated metaphor – it does contain, however, a conceptual metaphor, probably the *LIFE IS A JOURNEY* metaphor, which licenses the concept of *BIRTH AS ORIGIN* and *DEATH AS END*.

Despite that, when it is construed in a campaign with that specific layout and background, it combines with the image to build a metaphor in an **interdependent** way. Differently from the autonomous relation, **interdependence** concerns either construals in which each modality contributes with inputs from different domains or construals in which

<sup>18</sup> A possible intertext with the fictitious character Godzilla is far from unreasonable.



one metaphor, construed by one modality, is reframed by the segment in the other modality, leading to the emergence of a new metaphor, which is closely tied to the text discursive coercions and to the goals of the genre. It is exactly this last possibility, which we named **complex interdependence**, that occurs in the above text: a dystopian scenario with a gigantic *Aedes aegypti* is embedded within a specific genre with a particular clausal complex that invites reader to understand the devastation of the physical structure as a metaphor for the massive death caused by an epidemic of dengue fever, enabled by people's inaction. Thus, it is the verbal segment that **rhetorically frames** the pictorial metaphor as the **Negative Consequences** of a practical reasoning argument and enables understanding the **vehicle** physical structure as our collective health. On the other hand, the pictorial metaphor expands the referential potential of the pronoun "você/you" in the verbal segment, derestricting the set of referents – it is not only the reader that will be affected, but the whole city.

We may argue, then, that, just as the first campaign analyzed, the construal cues a WAR scenario, where the readers are construed as the endogroup ("we") who fights against the mosquitoes, the exogroup ("they"), in a life or death situation. The main difference between the texts lies in the fact that, in the first one, the **Negative Consequences** are to be inferred, since the grenade has not yet exploded, and its destructive potential is not pictorially shown. The construal invites the readers to simulate the results of the explosion to incite them to leave the inactive state in order to thwart the potential damages. In the second one, though, the background already shows, albeit in a hyperbolic way, the results of the war we did not prepare accordingly for. The act of directly showing the destruction to the reader, through the pictorial modality, intensifies the **appeal to fear**, since it does not leave to the readers the task of simulating the **Negative Consequences**; the consequences are presented visually as a plausible future state of affairs derived from the inaction. The strategy seems, then, to incite action in order to avert the anticipated future.

That said, we move to the analysis of multimodal metaphors oriented towards inducing readiness and promoting collective participation in the elimination of breeding ground.

### 3.3 Multimodal metaphors as strategies to induce readiness and to promote collective action

An important aspect of practical reasoning concerns the selection of the social actors deemed capable of implementing the **Claim for Action**, in order to achieve the state of affairs envisaged in the **Goal/Objective** premise. In our corpus, the relevant social actors are the readers themselves, citizens of the city, the state or the country that, as an institution, assumes authorship of the text. Therefore, it is especially relevant that the campaigns instantiate strategies to attract the readers, to construe adherence and to make them act accordingly in their homes and neighborhoods.

It is irrefutable that every campaign text aims at this adherence, but some of them use multimodal metaphors in such a way that their main focus seems to be attracting people to the task at hand; in our case, eliminating breeding grounds. The following text employs this strategy:

FIGURE 3 – São José dos Campos' (2014) campaign



ASSEMBLE YOUR TEAM  
AND TAKE THE OFFENSIVE  
AGAINST DENGUE FEVER

STAY ALERT TO THE PLACES THAT  
MAY ACCUMULATE WATER, KEEPING  
THEM ALWAYS CLEAN AND CLOSED



DENGUE  
FEVER KILLS

Source: [http://www.sjc.sp.gov.br/noticias/noticia.aspx?noticia\\_id=15854](http://www.sjc.sp.gov.br/noticias/noticia.aspx?noticia_id=15854).  
Retrieved on: Dec. 10, 2019.

In terms of the practical argumentation *layout*, the upper-right clause “Dengue mata/Dengue fever kills” acts as **Motivating Circumstances** for the **Claim for Action**, elaborated both by the verbal metaphor “Monte seu time e vá ao ataque contra a dengue/Assemble your team and take the offensive against dengue fever” and by the command “Fique atento aos locais que podem acumular água, mantendo-os sempre limpos e fechados/Stay alert to the places that may accumulate water, keeping them always clean and closed”, which represents how the team should go on the offensive against the mosquitoes, revealing, then, a possible way of implementing the metaphorical command. We can say, thus, that the verbal segment of the text contains both the **vehicle** and the **topic** of the metaphor, cuing aspects of the source and the target domain of the following metaphor: TO FIGHT AGAINST DENGUE FEVER IS TO PLAY A COLLECTIVE SPORT.

If we look at the pictorial segment, it is hard to propose a metaphorical reading. Taking as background a square in the city of São José dos Campos, the image portrays the local basketball team, acknowledged in the country for its high performance, and a governmental agent responsible for the control of breeding grounds. There appears to be nothing cuing a metaphorical interpretation; it could be only a fan photo, for example.

Nonetheless, when articulated with the verbal metaphor, the image enhances the metaphoricity of the verbal segment, inciting an identification of the reader to the public health agent and the neighborhood to the successful team that will eliminate the breeding grounds. There are two interesting aspects in this metaphor: the first one is the construal of the reader as the team’s coach, the one responsible for assembling the best players and for taking strategic decisions on the team’s performance in order to guarantee victories. By doing so, the campaigns valorize the reader’s intellect and subtracts them from a mere “pawn” position, stimulating readiness and awareness towards the problem at hand. Second, the construal highlights the necessity of a collective work in order to be successful against the dissemination of the disease. It is inferable that the victory, i.e., the control of the epidemy, won’t be achieved as an individual endeavor, but only as a collective enterprise: a group of people working together, always alert and always checking for signs of breeding grounds.

Insofar as the verbal metaphor construes the metaphor by itself and the image only enhances its metaphoricality and amplifies the identification with the public, with possible consequences towards their adherence to the campaign, we may say that we are dealing with an instance of **correlation** between modalities. Differently from the previous example, where the verbal segment was responsible for framing the interpretation of the image, turning its high metaphorical potential into an effective metaphor that represented a hyperbole of the **Negative Consequences** of inaction, in this metaphor the pictorial segment seems to have minimal metaphorical potential. Through a dialogue with the verbal segment, it becomes possible, then, to view, on the one hand, the reader (topic/target domain) as the public health agent (vehicle/source domain), considering the coach function (property that allows the projection) and, on the other hand, the neighborhood (topic/target domain) as the basketball players (vehicle/source domain), considering the labor function (property that allows the mapping). What happens, then, is that the verbal metaphor constrains the pictorial components that will be selected for cross-domain mappings, in a process that renders the projection coherent to the metaphor at play and to the campaign practice as a whole. Rhetorically speaking, the identification of the population with a successful (and close) team is a relevant strategy for drawing attention to the campaign and attracting people to participate.

The next campaign is composed of three texts which also draw on SPORTS as a source domain. In the following analysis, we will only consider as verbal segments the ones who functions as Figure (KRESS; VAN LEEUWEN, 2006). Their status as Figure may be inferred from their localization in the layout, from their expression in capital letters and from the size of the fonts:

FIGURE 4 – Mato Grosso’s (2009) campaign



IN THIS MATCH, VICTORY DEPENDS ON YOU.

DENGUE FEVER KILLS



YOU WERE CHOSEN TO PLAY AGAINST DENGUE FEVER.

JOIN THIS TEAM: YOUR SCHOOL MAY WIN A COMPUTER LAB

BE A PART OF THIS TEAM.



IT IS TIME TO WIN THIS MATCH.

DENGUE FEVER KILLS



Source: <http://casadeimagens.blogspot.com.br/2009/11/campanha-mt-contra-dengue.html>. Retrieved on: Dec. 10, 2019.

We can observe that, just as the previous example, the metaphor TO FIGHT AGAINST DENGUE FEVER IS TO PLAY A COLLECTIVE SPORT is also structuring of the campaign. This reiteration – that does not end with the four examples we are analyzing in this paper – enables us to hypothesize that this metaphor transcends the situated status; it is probably already a **distributed metaphor**. As we discussed in section 1, **distributed metaphors** are shared metaphors that structure a set of texts that converge in terms of discourse (sociosemiotic ways of representing), genre (sociosemiotic ways of acting) or style (sociosemiotic ways of being). In this case, it seems that the cross-domain mapping between collective sports and actions against the reproduction of the mosquito is productive in the genre, in the sense of inducing a certain stance regarding the need for an unified effort to eliminate the breeding grounds. Thus, it stabilizes a perspective (discourse as representation) over the problem, that contributes in achieving the goal of the campaign.

We want to stress the fact that the **distributed metaphor** lies in a schematic level – the former campaign utilized basketball as an instance of collective sport and construed the reader as the coach, whereas the latter utilized soccer as an example of collective sport and construed the reader as a decisive player in achieving victory. Therefore, it is important to keep in mind that there is a creative space within the distributed metaphor to generate further meanings and to incite different reactions on the readers. This characteristic shows us, as we discussed in section 1.1, that distributed metaphors are akin to conceptual metaphors insofar as both may constitute **metaphorical niches** (VEREZA, 2007; 2018) to the elaboration of situated metaphors, such as TO FIGHT AGAINST DENGUE FEVER IS TO PLAY BASKETBALL OR TO FIGHT AGAINST DENGUE FEVER IS TO PLAY SOCCER.

The articulation between both modalities to activate metaphoricity is also relevant to discuss. In the three texts, the pictorial segment contains **vehicles** that cue the SOCCER source domain (a soccer ball, soccer fields and a scoreboard); in spite of that, it is hard to say that the images alone are able to activate the metaphor.<sup>19</sup> Thus, the verbal segments are crucial for the emergence of the metaphor.

The first two texts have verbal segments that not only present **vehicles**, but also **topics**. In the first one, “Cuiabá x Dengue” is written over a typical scoreboard, in a way that maps dengue fever as the away team playing against the home team, Cuiabá, capital of the state of

<sup>19</sup> Perhaps some readers could establish the mappings in the third text, since it shows a mosquito apparently crushed by the soccer ball.

Mato Grosso. This already prompts the reader to conceive winning as eliminating breeding grounds and, therewith, the disease. The second one explicitly mentions the readers as being chosen to play in the home team against dengue fever.<sup>20</sup> To be a part of that team is, then, projected as being part of a collective that acts to prevent the reproduction of the mosquito. The third one, on the other hand, does not unpack the metaphorical correspondences as the other two. They need to be inferred by the **Motivating Circumstances**, expressed by the clause “Dengue mata/Dengue fever kills”. Therefore, these metaphors fit, once more, the category of **correlation**, since one modality (in this case, the verbal one) construes the metaphor, whereas the other enhances metaphoricity by reinforcing the source domain. The third case, however, presents a slight difference, since the pictorial modality presents both **vehicle** and **topic**, thus raising its metaphorical potential, although it does not seem to activate the metaphor itself. The verbal segment is still fundamental in instructing the reader that winning the match means eliminating the mosquitoes (correspondence cued by the image of the insect crushed by the ball).

The main rhetorical effect of the campaign is, then, to mobilize people to act by drawing on the Brazilian passion for soccer and the rivalry between teams, a strategy that is deeply grounded on *pathos*.

That said, we will discuss the last set of texts chosen for this analysis. The source domain utilized is POPULAR MUSIC.

### 3.4 Multimodal metaphors and humor in the construal of Motivating Circumstances

The following text is more verbally loaded than the usual in terms of the campaign against *Aedes aegypti*. Although we will focus

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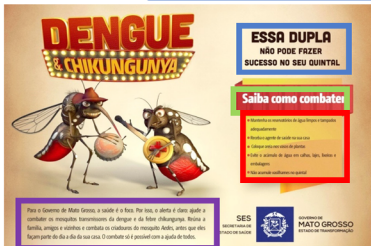
<sup>20</sup> This construal is fairly interesting, for it is related to sports practices in Brazilian schools. The main target of the second campaign seems to be teenagers, as we can infer from a proposition that construes a **Positive Consequence** of adhering to the campaign: “Sua escola pode ganhar 1 laboratório de informática/Your school may win a computer lab”. The social actor portrayed pictorially is looking directly to the reader and pointing his finger at him, simulating the process, typically instantiated at schools, of choosing teammates from their own class. The first ones to be chosen tend to be those considered the best players, with potential impact on the outcome of the future match. We could say, then, that the image may be strategically construed to improve identification with teenagers, drawing their attention towards a social health problem that may impact everyone and that can be minimized with their awareness and participation.

our attention to the most salient verbal segments, we want to discuss some aspects of the verbal segment as a whole in relation to practical argumentation, for it contains a more complex structure:

FIGURE 5 – Mato Grosso’s (2015) campaign



**THIS DUO  
CANNOT BE SUCCESSFUL IN  
YOUR BACKYARD.**



**Know how to fight!**

- Keep the water reservoirs clean and adequately closed
- Receive the health agent at home
- Put sand in the vases
- Avoid the accumulation of water in gutters, slabs, bins and packages
- Do not amass containers in the backyard

To the government of Mato Grosso, health is the focus. Therefore, the alert is clear: help fighting against the mosquitos that transmit dengue fever and chikungunya. Gather your family, friends and neighbors and fight the breeding grounds of *Aedes*, before they are part of your home’s daily life. The fight is only possible with everyone’s help.

Source: <http://www.paginaunica.com.br/conteudo.php?sid=188&cid=13780>. Retrieved on: Dec. 10, 2019.



The first aspect that separates this instance from the prototypical is the expression of a **Value** commitment, as we can observe in the utterance “Para o Governo do Mato Grosso, a saúde é o foco/ To the government of Mato Grosso, health is the focus”.

An important second aspect involves the construal of the **Motivating Circumstances**. Usually, as we have seen, this component is either implicit or summarized in utterances, such as “Dengue mata/ Dengue kills”. In this one, however, it is expressed in the form of an interdiction, drawing on a force-dynamic (GONÇALVES-SEGUNDO, 2015; TALMY, 2000) structure: “Essa dupla não pode fazer sucesso no seu quintal/This duo cannot be successful in your backyard”.

By drawing on our experiences of movement and restraint, the authorial voice cues a conceptualization that the duo – coreferentially linked to the mosquitoes and the diseases they transmit (we will return to that further on) – tends to be successful in their proliferation in backyards, in a way that the prevention of this situation requires the reader’s external intervention. It may even lead to a conceptualization that there are other backyards in which the mosquitoes have already spread. It is this present risk that constitutes, then, the **Motivating Circumstances**.

Besides that, the campaign introduces a **Catalytic Circumstance** “O combate só é possível com a ajuda de todos/The fight is only possible with everyone’s help”, which determines the conditions under which the **Claims for Action** will be successful.<sup>21</sup> That is even one more argument for our initial hypothesis that the aim of the campaign is not deliberation, but drawing people to actually do what they are supposed to and probably already know.

Despite that, this is one of the campaigns that explicitly exposed several different ways of preventing the proliferation of mosquitoes, as we can see in the sequence of five imperatives under the label “Saiba como combater!/Know how to fight!”. These more specific **Claims for**

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<sup>21</sup> We are interpreting that the noun phrase “o combate/the fight” is metonymic with its consequence, the victory. It is with the help of everyone that the combat can be won, and the infections reduced or eliminated. For us, it does not make sense to say the combat is only possible with the help of everyone, since it includes actions that individuals can exert in their own homes. That rules out the interpretation of this utterance as an **Enabling Circumstance**. The victory, nonetheless, lies on a collective action, since one mere breeding ground can be the origin of several infections.

**Action** are accompanied by a group of more schematic ones, which draw attention to the need of collective work, as we can see in the lower-left: “ajude a combater os mosquitos transmissores da dengue e da febre chikungunya. Reúna a família, amigos e vizinhos e combata os criadouros do mosquito *Aedes*/help fighting against the mosquitoes that transmit dengue fever and chikungunya. Gather your family, friends and neighbors and fight the breeding grounds of *Aedes*”.

Complementing these Claims, we can also detect an instance of **Negative Consequences** regarding inaction: “antes que eles façam parte do dia a dia da sua casa/before they are part of your home’s daily life”. We can see, thus, that this text is one of the richest, among the instances of the campaign, in regard to the fulfillment of different components in a practical argumentation layout.

The metaphor we will discuss, nonetheless, is tied to the **Motivating Circumstances**. First, we should examine the multimodal figurative complex on the left of the campaign. This complex includes a hybrid pictorial metaphor (FORCEVILLE, 2007), in which (i) the bodies of human singers/artists are blended with mosquitoes’ bodies and (ii) bottle caps and buttons are blended with musical instruments. Alongside this metaphor, the sign above the insects contains the verbal segment “Dengue & Chikungunya”. The sign functions as a context for interpreting the mosquitoes as a musical duo named “Dengue & Chikungunya”, which is probably performing a concert, an indication of possible success. Thus, we can also say that the image instantiates a contextual metaphor (FORCEVILLE, 2007), since it is the background that gives us one more cue that the mosquitoes are a musical duo; possibly, singers. The complex has still one more component: a metonymy. It is the metonymy DISEASE FOR VECTOR - besides the positioning of the verbal and the pictorial segments – that activates a coreferential link between the names of the diseases and the mosquitoes, creating coherence.

Our main point of interest lies, though, in the relation between this multimodal figurative complex and the verbal segment “Essa dupla não pode fazer sucesso no seu quintal/This duo cannot be successful in your backyard”. The verbal utterance itself exhibits metaphorical potential, but does not seem to provide enough cues for the emergence of rich cross-domain mappings. The main reason for this is the lack of sufficient referential information, that must be found elsewhere. The determiner “essa/this” acts, then, as an instruction for the readers: it invites them

to establish a coreferential link with the image, turning the noun phrase “essa dupla/this duo” in a multimodal direct anaphora. It is through this referential strategy that the verbal segment acquires clear metaphoricity, since the cross-domain mappings are activated by the anaphora: the success of the musical duo is, then, understood as the reproduction of the mosquitoes and, possibly, an increase in the number of infections.

In terms of articulation, we can observe that the verbal segment, on the one hand, does not present a **situated metaphor** relevant to the campaign; the figurative complex in the left, on the other hand, instantiates the **situated metaphor** DENGUE AND CHIKUNGUNYA ARE A MUSICAL DUO and the **metonymy** DENGUE AND CHIKUNGUNYA FOR AEDES AEGYPTI. The metaphor is probably hard to understand, since it seems to have low aptitude. What possible concepts of the POPULAR MUSIC OR MUSICAL DUO domains could be mapped on the AEDES AEGYPTI, DENGUE FEVER OR CHIKUNGUNYA domains? It is only through the textual process of coreferentiality and the discursive grounding promoted by the genre (health campaign) that a coherent metaphor emerges: THE REPRODUCTION OF MOSQUITOES IS THE SUCCESS OF A MUSICAL DUO OR AN INCREASE IN DENGUE FEVER AND CHIKUNGUNYA INFECTIONS IS THE SUCCESS OF A MUSICAL DUO. Thus, just as successful duos have their songs played in every home, catching everyone’s ears, so will the infections proliferate in every home, if people do not commit themselves in preventing the accumulation of stagnant water.

In this sense, we can see that the relevant metaphor only emerges in the interplay between modalities, even though there was another metaphor construed as an ingredient of this last one. This case is, then, an instance **complex interdependence**, an articulation type in which each modality or multimodal segment contributes differently to the activation of a new metaphor. In our example, a multimodal metaphor becomes **topic** of a verbal segment containing potential **vehicles**, a correspondence that is only activated by a coreferential link. It is then the referential process that gives rise to the relevant concepts and relations to be mapped from the source to the target domain.

The effect of the metaphor is probably to introduce humor in the construal of **Motivating Circumstances** and, thus, to generate identification with the situation in order to promote adherence to an interindividual task. It is a totally different strategy than the one construed in the first two texts, which drew on fear.

Finally, the last text to be analyzed also draws on humor and the POPULAR MUSIC domain. The main difference is that intertextuality is an integral part of its constitution and persuasive appeal:

FIGURE 6 – Xinguara’s (2013) campaign

**DENGUE**  
ASSIM VOCÊ ME  
**MATA**

AI, SE EU  
TE PEGO!

NÃO DEIXE A DENGUE  
FAZER SUCESSO NA SUA CASA

INQUARA

**DENGUE**  
ASSIM YOU'RE  
**MATA**

AI, SE EU  
TE PEGO!

NÃO DEIXE A DENGUE  
FAZER SUCESSO NA SUA CASA

INQUARA

**DENGUE**  
**THIS WAY YOU'RE**  
**GONNA KILL ME**

**DO NOT LET DENGUE**  
**FEVER BE SUCCESSFUL**  
**IN YOUR HOME**

**OH, IF I**  
**CATCH YOU!**

Source: <http://www.pontovips.com.br/noticias/contra-a-dengue-nossa-cidade-pode-mais-xinguara-para/273>. Retrieved on: Dec. 10, 2019.

Just as the last text, the multimodal metaphor fills the **Motivating Circumstances** component of the layout, whereas the lower verbal segment expresses the **Claim for Action** (“Não deixe a dengue fazer sucesso na sua casa/Do not let dengue fever be successful in your home”).

The **Motivating Circumstances** are once more tied to the lethal potential of the disease, whose cause is the mosquito bite. Both these aspects are cued through verbal **vehicles** (“Assim você me mata/This way you’re gonna kill me” and “Ai, se eu te pego/Oh, if I catch you!”), while the **topic** is construed both in the verbal – “Dengue/Dengue fever”, in the upper part of the text – and in the pictorial segments. In this last case, the hybrid pictorial metaphor (FORCEVILLE, 2007) blends the mosquito with a singer, by construing it with arms, a microphone and a speech balloon containing part of the chorus of a famous Brazilian country song,<sup>22</sup> translated to several languages, including English.

The recontextualization of the song’s lyrics operates a reframing: the SEX domain, which is the target domain of the aforementioned song, is substituted by the DENGUE FEVER domain, the new target domain. The process seems to involve a series of cognitive operations that we will discuss below.

The first one is the **demetaphorization** of the clause “Assim você me mata/This way you’re gonna kill me”. In the original song, the verb “to kill” is a vehicle of the DEATH source domain, which hyperbolizes the affective impact of a woman’s beauty on the masculine authorial voice; thus, TO FEEL INTENSE AROUSAL IS TO DIE. However, the recontextualization, by replacing woman for dengue fever, subtracts the metaphorical potential of the segment, in favor of a literal comprehension, a comprehension that is consistent with DENGUE FEVER’s frame, since the disease can actually kill – and if things continue “assim/this way”, i.e. with people letting mosquitoes freely reproduce, it becomes plausible to infer that this reality could reach the reader. It is an interesting construal, since it seems that the segment invites the readers to map themselves to the first person.

The second operation is a **remapping**: the vehicle “eu te pego/I catch you”, which, in the original song, cued a sexual intercourse in the

<sup>22</sup> It is the song “Ai se eu te pego”, interpreted by Michel Teló and composed by Aline Medeiros da Fonseca, Amanda Cruz, Antonio Dyggs, Karine Vinagre and Sharon. In fact, not only the text inside the balloon is part of the chorus, but also the verbal utterance “Assim você me mata/This way you’re gonna kill me”.

target domain, is now activating a mosquito bite, an action consistent within the DENGUE FEVER domain. The mosquito is projected as the first person; the reader, as the second person; and the verb “pegar/to catch”, as to bite. Recovering the sequence of the song may help understand the aptitude of the recontextualization: the adjectives “Delícia, delícia/Delicious, delicious” are instantiated in the original song as vehicles from the DIGESTION source domain, signaling the pleasure of eating good food. Since the female mosquitoes, the ones that actually transmit the disease, feed on blood to nurture their eggs, the pleasure of feeding can be coherently sustained in the target domain.

We contend that it is through the tension caused by the recontextualization of the lyrics – an intertextual strategy that produces demetaphorization and remapping, thus, construing a new metaphor which is coherent even with the non-expressed parts of the song – that humor is generated. Rhetorically speaking, it works once more as an appeal to *pathos*, aimed at inducing readiness and action in relation to the fight against the mosquito.

Thus, what we see, in this campaign, is also a case of **complex interdependence**. The pictorial segment construes a metaphor that provides enough information to allow the remapping of the verbal segment “Ai, se eu te pego/Oh, if I catch you”, backgrounding sexual attraction and foregrounding dengue fever infection, in a way that is consistent with the genre, the objectives of the campaigns and with the whole verbal segment.

## Final remarks

We aimed, in this paper, to discuss two relevant dimensions of multimodal metaphors in actual discursive activity: (i) the different strategies of multimodal articulation in the construal of a metaphor and (ii) the rhetorical potential of these metaphors in terms of practical argumentation in a given genre.

As a first step, we provided a theoretical discussion on the nature of metaphors, focusing on the distinction between metaphor as product and metaphor as process. We contended that **Conceptual Metaphors** should be understood as **products**, whereas **Situated Metaphors** should be conceived as **processes**. In this discussion, we stressed the role of pragmatic and discursive forces in the production and interpretation

of **Situated Metaphors**. Further on, we defended the necessity of an intermediate category, **Distributed Metaphors**, connecting it to the ordering of discourse, especially to discourses as representations and to ideologies. The relations between these three types of metaphors were also discussed and the role of **metaphorical niches** was highlighted as well.

As a second step, we discussed a typology of multimodal articulation concerning the construal of metaphors. We proposed three major strategies – **autonomy**, **correlation** and **interdependence** – and presented subcategories and potential effects, which were detailed in the analysis.

As a third step, we presented Fairclough and Fairclough's (2012) layout of practical argumentation, defining its main components and debating Gonçalves-Segundo (2019) expansion of the model. By the end of the section, we argued that our corpus, composed of governmental health campaigns against *Aedes aegypti*, constituted a marginal case of practical argumentation, since it was not oriented towards deliberation, but to the adherence of the audience in terms of collectively executing the already expected or known actions to eliminate the mosquito breeding grounds.

Finally, we conducted our analysis, discussing the roles metaphor filled in the constitution of a practical argumentation move, their rhetorical potential, the main types of multimodal articulation and their effects, such as increasing metaphoricity, refining referentiality, generating humor and identification, inducing readiness and fear.

In doing so, we hope to have stressed the necessity of amplifying the dialogue between Metaphor Studies, (Critical) Discourse Analysis, Argumentation Theory and Rhetoric, considering different corpora and multimodal possibilities for the construal of metaphor, in order to refine our understanding of such a pervasive phenomenon of human culture, thought and communication.

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## Imagined worldviews in John Lennon’s “Imagine”: a multimodal re-performance

### *Visões de mundo imaginadas no “Imagine” de John Lennon: uma re-performance multimodal*

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**Abstract:** This paper addresses the issue of multimodal re-performance, a concept developed by us, in view of the fact that the famous song “Imagine”, by John Lennon, was published in illustrated book format by Frances Lincoln Children’s books under the sponsorship of Amnesty International in 2017 and later in an English-Portuguese bilingual edition in 2018 by Edicare. From our point of view, the concept of multimodal re-performance builds on the “personal authorization” criterion, a prominent feature in the legitimization of discourse and communication (VAN LEEUWEN, 2007), which we address in the light of the Multimodal Metaphor approach (FORCEVILLE, 2009, 2017). In conformity, we advocate that multimodal metaphorical links of different kinds in this re-performed edition of “Imagine” are architected by a relevantly harmonious set of three communication modes: J. Lennon’s original song lyrics in the multimodal mode, the book’s preface by Yoko Ono in close connection to the book’s epilogue by Amnesty International, also in the written mode, and Jean Jullien’s brilliant illustrations in the visual mode. Last but not least, it is highlighted that this appealing re-performed multimodal cultural product “Imagine” is crafted with the purpose of both foregrounding the updated message of Imagine’s PEACE quest protagonized by the brown PEACE dove. Furthermore, in the epilogue, the reader is encouraged to visit the webpage <https://>

imaginepeacebook.com and leave a peace message behind, opening the possibility for extension of the written mode echoing the song's message in the future.

**Keywords:** multimodal re-performance; personal authorization; multimodal metaphor; *Imagine* by J. Lennon.

**Resumo:** O presente incide sobre a questão da re-performance multimodal, um conceito desenvolvido por nós, tendo em vista a publicação da famosa canção “Imagine” de John Lennon, em formato de livro ilustrado pela editora de livros infantis Frances Lincoln, com o patrocínio da Amnistia Internacional e posteriormente dado à estampa pela Edicare numa versão bilingue inglês-português. Na nossa perspectiva, o conceito de re-performance multimodal está ancorado no conceito de “autorização pessoal”, um parâmetro proeminente na legitimação do discurso e da comunicação (VAN LEEUWEN, 2007) que desenvolvemos à luz da abordagem da metáfora multimodal (FORCEVILLE, 2009, 2017). Em conformidade com a mesma, advogamos que as conexões metafóricas multimodais de diferentes tipos nesta edição re-performada do “Imagine” são arquitetadas na base da articulação harmoniosa de três modos de comunicação: a canção original da autoria de J. Lennon, já de si um produto multimodal, o prefácio do livro, elaborado por Yoko Ono, em estreita ligação com o epílogo da obra da autoria da Amnistia Internacional, sob a forma de modo escrito, e as brilhantes ilustrações de Jean Jullien, no modo visual. Por último, pretende-se sublinhar que este “Imagine” enquanto produto multimodal re-performado, muito apelativo, destina-se a pôr em destaque a atualidade da mensagem do “Imagine”, na sua versão original, enquanto apelo à PAZ, protagonizada por uma pomba castanha. Além do mais, no epílogo, o leitor é **encorajado a visitar a** página <https://imaginepeacebook.com> e a deixar escrita uma mensagem de paz, abrindo a possibilidade para uma extensão do modo escrito fazendo eco da mensagem da canção, no futuro.

**Palavras-chave:** re-performance multimodal; autorização pessoal; metáfora multimodal e *Imagine* de J. Lennon.

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## 1 A phenomenological-cognitive approach to the body in the world

The phenomenological approach to the body frames it conceptually as “visible and mobile”, and as such “(it) belongs to the number of things, in fact, it is one of them” (MERLEAU-PONTY, 2000, p. 4) (our translation). This statement is simply meant to signal that bodies can see and be seen and move in space, thus physically interacting

with other bodies and with probably different world environments when they move on in space. Hence, if we seek to understand the body-world interface and the body-body-world interface, we have to depart from the phenomenological concept of the body as a locus of perception and as a “thing” in motion, which interacts along its journey in space with other “things”, i.e. other bodies.

In the same line of thought, Johnson (1987, p. XIX) claims that: “Our reality is shaped by the patterns of our bodily movement, the contours of our spatial and temporal orientation, and the forms of our interaction with objects”. In fact, without patterns of movement to guide us in our travels in space, our bodies would be adrift and in permanent affliction. Hence, patterns of orientation in space, image-schemata, constitute a sort of GPS system which is incorporated in our minds. What we do with our bodies makes sense to us and must necessarily make sense to others for the sake of avoiding mental restlessness and turmoil.

In fact, in multimodal representation, the figures portrayed in the illustrations in the process of re-performance of Lennon’s lyrics are meant to endow “Imagine” with intersubjectively recognizable visual meaning, since it stems from the interface operation of a body making meaning in people’s minds. The creation of a multimodal version of “Imagine” in book format is accessible to our minds as readers because “imagination is tied to body processes” (JOHNSON, 1987, p. 13) and hence patterned in people’s minds. In fact, “Imagination is our capacity to organize mental representations (especially percepts, images and image schemata) into meaningful coherent units” (JOHNSON, 1987, p. 140).

Notice that our imagination ability can generate “novel order” (JOHNSON, 1987) but always restrained by experience-based conceptual coherence and, as we are going to see in the magnificent illustrations of “Imagine” in book format. This experience-based coherence, in case of acclaimed artworks, as is the case of the musical piece “Imagine”, can attain a cross-cultural dimension. In fact, “Human culture is a marketplace of ideas and images, feelings and impressions. Indeed, it is a vast cognitive network in its own right” (DONALD, 2006, p. 14).

As it happens, the dissemination of an artwork involves “The immersion in a cognitive collectivity” (DONALD, 2006), which means that it has attained the status of a collective cultural frame and this has been happening for decades. The impact of the launching of “Imagine” in the musical scene back in time has not been lost. Hence, due to the fact

that has been repeatedly replayed in the musical scene across decades, it has been consecrated as an iconic work of art worldwide.

## **2 “Personal Authorization” and multimodal re-performance**

We must address the complex issue of re-performance in the culture and communication field by identifying the the necessary conditions for an artwork to be eligible for a re-performance in general.

The multimodal version of “Imagine” can be accounted for as a re-performance, since it is meant to enhance the impacting message of the original multimodal product in illustrated book format. So, the message multimodally conveyed is foreseeably going to have a strong impact on the public, even today.

This, however, means that “Imagine” deserves to be transported into another time dimension, the 21<sup>st</sup> century, another medium, the multimodal book format and the website extension for future communicative interaction, and has another confessed purpose, to get Lennon’s peace message through to children. Moreover, in the case of the bilingual edition under analysis, it targets Portuguese or Portuguese-English speaking children.

Taking into account Mc Luhan’s claim that “The medium is the message”, in the sense that the medium format is decisive in the meaning-making of the message, we shall address the issue of the multimodal re-performance of “Imagine” as the making of a new cultural product departing from an old matrix. It results from the interplay of three different modes, the performed song lyrics, the complex written/musical mode, the illustrations of the song lyrics, the visual mode, the co-text modes of the preface by Yoko Ono and epilogue, also belonging to the written mode, elaborated by Amnesty International.

Moreover, by opening the possibility of gaining access to the website, the reader can gain access to the future online interaction , that is to the digital world, which means that the re-performance can be extended almost indefinitely in time. So, in Mchluhan’s terms, “Imagine” has been “replaced”, i.e., inscribed in another timeline, the 21<sup>st</sup> century, and furthermore potentially “re-replaced” in the digital world. So, there is no doubt that it has become a work of art since, according to MacLuhan “a medium becomes art and/or content when it is replaced” (LEVINSON, 1999, p. 146).



Furthermore, from our point of view, the multimodal re-performance of John Lennon's "Imagine" rests on the "personal authorization" criterion (VAN LEEUWEN, 2007), which claims that personal authority in all sorts of communicative settings is related to personal status or role in a particular institution. In fact, it is this sub-concept of expert authority of Imagine's author in the music scene that enables "Imagine" to be multimodally re-performed in text book format.

First, of course the personal authorization criterium relies upon John Lennon's undeniable status as a successful artist in the international musical scene for a long time now. Second, it also stems from the fact that the preface author, Yoko Ono, has performed prominent enactments in the American artistic scene for decades. Third, the fact that this re-performance in book format is sponsored by Amnesty International, whose invaluable credentials in maintaining world peace are acknowledged worldwide, is also of extreme importance to the creative multimodal reprise of "Imagine".

Moreover, it cannot be denied that Imagine's powerful lyrics play a decisive role in the multimodal re-performance itself. So, let us uncover the conceptual flows that have enabled Lennon's lyrics to be harmoniously translated into Jullien's illustrations under the lens of the multimodal metaphor approach. According to Forceville (2009, 2012, 2017) and Forceville e Jeulink (2011), multimodal metaphors are anchored in conceptual metaphors (including primary metaphors), whose source-target mappings come to life in conceptual mappings involving different modes, namely, the verbal mode, the visual mode, the gesture mode and the musical mode.

By targeting different objects of multimodal analysis from animation films (FORCEVILLE; JEULINK, 2011; FORCEVILLE, 2017) to billboards (FORCEVILLE, 2012), these multimodal analyses from a cognitive perspective constitute ground-breaking approaches that have paved the way for addressing the following multimodal meaning-making issues in several human cultural productions. In some cases, multimodal metaphorical mappings are sustained by the fact that source and target are present both in the verbal and in the visual modes and, in other cases, the source is indexed in the visual mode, and the target in the verbal mode or vice-versa. Moreover, Forceville's multimodal analysis methodology approach constitutes a comprehensive approach to meaning and cognition by addressing the panoply of meaning-making conceptual tools, with

special reference to metonymic processes and image-schema-oriented conceptualization forms.

Following Forceville's methodological approach for multimodal metaphor, several works were crafted targeting verbo-visual multimodal analyses of Portuguese sports newspapers covers (ALMEIDA; SOUSA, 2015; ALMEIDA, 2016). Our multimodal research agenda has also targeted Portuguese, and Portuguese versus German Rap video-clips by unveiling metaphorical mappings within verbo-visual-gestural modes (ALMEIDA; SOUSA, 2016; ALMEIDA; SOUSA, 2019-in print).

More recently, two developments in the domain of cognitive-oriented multimodal analysis of political artworks resorting to Forceville's multimodal metaphor approach have been published, namely, a cognitive-oriented visual-verbal multimodal analysis of some of Banksy's graffiti (ARANTES; ALMEIDA, 2019), and a verbal-visual cognitive-oriented multimodal approach to North Korean painted political panels, both in the written Portuguese media and in the international online media, (ALMEIDA, 2019 – in print).

Though it is not possible to discuss the conclusions on multimodal mappings arrived at in these previous analyses of two very different multimodal *corpora*, for space reasons, we claim that in the re-performed "Imagine" mappings between the written and the visual modes are of utmost interest to multimodal research, fundamentally in view of the fact that the visual mode was not there in the first place and, as such it, comes to life in illustrations as an interpretation of textual inferences in Lennon's lyrics.

In the case of "Imagine", the multimodal analysis in question focuses on metaphorical mappings between the verbal mode, i.e. the song lyrics, and the visual mode, Jean Jullien's illustrations of the song lyrics. It should be highlighted that despite the fact that the song is already a multimodal metaphorical performance piece by encompassing mappings between music and lyrics, the musical mode has proven to be pretty irrelevant to our multimodal analysis of the multimodal "Imagine" in this printed version. This is due to the fact that "Language is accomplished through symbolic units (...) within a shared referential frame. In the case of music, the basic formal unit is what I call a sonic analog, which represents through patterned sound the central features of some dynamic process" (ZBIBOWSKI, 2009, p. 363).

Last but not least, it must be taken into consideration that "Imagine" is dialogically structured. The imperative "Imagine" aims

at opening people's minds to metaphoric mental architecturings of alternative social-political frames. It is addressed to a "you", who is invited to pursue a mental journey through these metaphorically constructed scenarios in the text mode. When these "imagined" scenarios of *Imagine* are re-performed in multimodal scenarios in book format, the meaning-making agent is embodied by a brown dove. It goes at the beginning of the Quest on a lonely journey with the purpose of turning it into collective purposeful trajectory involving others, whose purpose/destination is the achievement of a new world order for PEACE.

### **3 The source-path-goal metaphor in the multimodal re-performance of "Imagine"**

In what regards the dynamic meaning-experience interface, two postulates must be taken into account. The first one is that "meaning emerges in our motor and sensory-motor and affective experiences" (JOHNSON, 2017, p. 99) that are selectively uploaded in our brain in image schemas. As it happens, according to the same author (JOHNSON, 2017, p. 99), "this body-based meaning is extended, via imaginative processes like conceptual metaphor, to structure our abstract concepts".

As also argued by Johnson (2007, p. 10), meaning is relational since "it is about how one thing relates or connects to other things" and this is precisely what we aim at in the dissecting of re-performanced "Imagine". Different meanings arise from different interactions of human creatures with animal creatures and, above all, among animals themselves in changing physical environments, as clearly illustrated in the visual mode. So, it is the multimodal re-performance in the visual mode that increases our awareness of the revolutionary social and political changes proposed in Lennon's song lyrics.

In fact, as claimed by Johnson (2017, p. 99) changes in the physical environment are never "just physical- not just earth, air bodily, fire and water- but are always social, economic, moral, political, and spiritual". Hence, he advocates that: "Experience is therefore never just bodily or just mental, but rather both at once." (JOHNSON, 2017, p. 99).

Moreover, it should be emphasized that meaning-making in this re-performed piece is not prone to misunderstandings of any sort since it is anchored in our body-world interactions. As an intentionally re-performed multimodal artwork, the visual mode must be precisely matched with the

original song lyrics to architecture not just a coherent multimodal artwork but also a rigorously constructed one, as in Dewey's view (JOHNSON, 2017, p. 47), "thinking in art is just as rigorous as thinking in any other discipline, such as science, mathematics or philosophy".

Bearing in mind that art attacks our minds "(...) more commonly through its senses, passions and anxieties" (DONALD, 2006, p. 13), one cannot stray away from the fact that cognition just like pragmatics is principle-governed but, of course, in a different way, in view of the fact that the former is experience-governed. The search for intentional meaning in cognition is facilitated by image-schema factor, which in our opinion deeply favours a cross-cultural understanding of any cultural product, which encompasses this "re-performed" multimodal artwork.

Like so many other written or audiovisual narratives, it is no wonder that the original "Imagine" but, above all, the re-performed multimodal "Imagine" feed on a Quest narrative anchored upon journey metaphors based upon the source-path-goal image schema (thereafter S-P-G) (cf. FORCEVILLE; JEULINK, 2011). The main feature of these narratives is the fact that they unfold in a sequential timeline, i.e. as a process (CIENKI, 1997, p. 7). So, the sequential travelling of physical entities through different physical environments are conceptualized as a PATH (CIENKI, 1997) in order to reach a purposeful destination/goal. As pinpointed by Johnson (1987, p. 28-29), Lakoff and Johnson (1999, p. 32-34) and also by Johnson (2017, p. 153), "it includes at least the following features:

- a starting point (source)
- an endpoint (destination or goal)
- an object that moves (the trajector)
- a path connecting the starting point to the destination
- the speed with which the object moves
- possible obstacles or hindrances to motion
- the location of the moving object at a given time
- the manner of motion of the object (e.g., smooth, jerky, bouncy)."

According to Cienki (1998), we do not just experience rectilinear motion but also draw inferences from it. So, it is our purpose to unveil what inferences do we draw from the rectilinear motion of the main

protagonist, the brown PEACE dove, in the re-performed multimodal version of “Imagine” here under study.

It should be noticed that the printed multimodal version is structured in a particular way by means of text-image framings in narrative format. Each of the stanza framings formulated in simple sentences, or sub-framings of the lyrics as parts of complex sentences, is translated, i.e. mapped metaphorically onto a specific illustration. In view of the S-P-G structure, the text-image framings unfold before the reader’s eyes as time-space-bound sequences of events portraying a Quest. Hence, this S-P-G text-image narrative flow of “Imagine” is pretty similar to narrative ways involved in the conceptualization of film animation products (cf. FORCEVILLE; JEULINK, 2011).

However, differently from Forceville and Jeulink (2011), the Quest enacted in “Imagine” is intended as a political statement for “imagining” a peaceful way of life, which is rendered both timeless and easier to understand by the re-performed book edition (intended as a multimodal illustrated cultural product for children).

In accordance with the peace frame culturally represented in our minds, in the re-performed multimodal text, the main protagonist is a plain brown dove carrying an olive branch in its beak, the symbol of peace from a Christian perspective. In fact, it can be viewed as a double-featured semiotic re-conceptualization of the peace frame since both the white dove (worldwide) and the olive branch (for Christians) constitute worldwide symbols for peace.

In this illustrated narrative, the peace dove as the agent promotes the PEACE Quest by travelling from an imagined old world order frame to a new world order frame. The imagined journey starts in the first stanza framing with “Imagine there’s no heaven” and comes to an end in the last stanza sub-framing “and the world will live as one” by suggesting the integration of all people in a new world order.

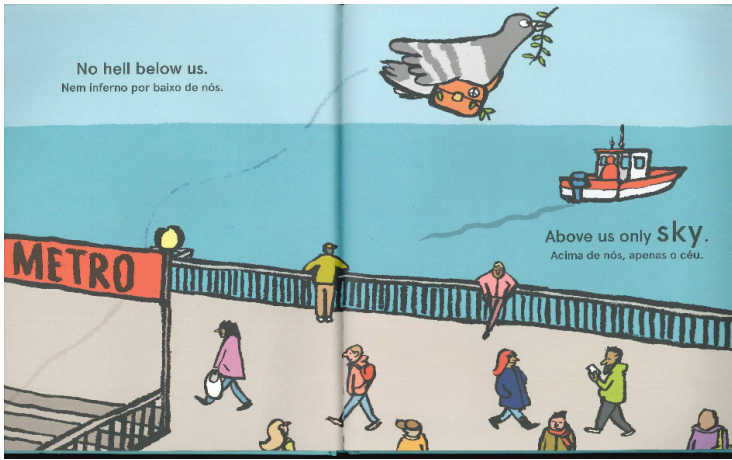
On a closer look, the dove’s journey is anchored upon an array of primary metaphors CHANGE IS MOVEMENT, ACTION IS SELF-PROPELLED MOTION and GOALS ARE DESTINATIONS (GRADY; JOHNSON, 2002; GRADY; ASCOLI, 2017, p. 37). So, the meaning-making process relies upon these primary metaphors defined as “(...) concepts that are grounded in universal (rather than cultural determined) aspects of human experience” (GRADY; ASCOLI, 2017, p. 29), which is decisive for a full understanding of the meaning of the PEACE Quest both in the original version and in re-performed multimodal version of “Imagine”.

#### 4 Multimodal Metaphors for HEAVEN, FREEDOM and PEACE (part I)

We have divided our multimodal analysis of the re-performed “Imagine” into two parts since J. Lennon’s original lyrics is structured in two conceptual cycles for a thorough portrayal of the quest. The first one begins with “Imagine there’s no heaven” and ends with “the world will be as one”. The second one begins with “Imagine so possessions” and ends with “the world will live as one”. Let us address the multimodal analysis in part I.



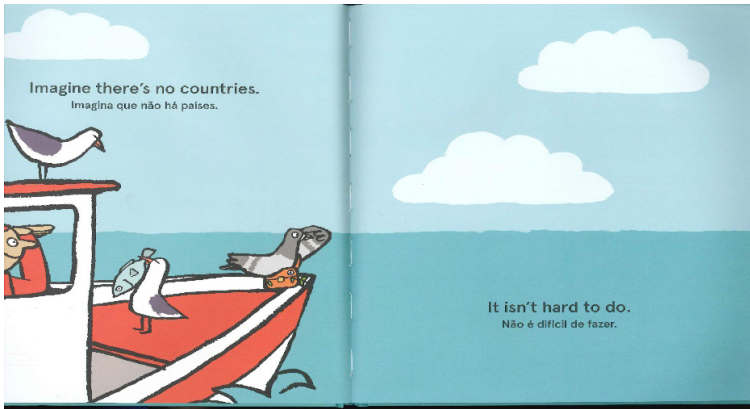
The first stanza framing “Image there’s no heaven” conveying the conceptual metaphor NO HEAVEN IS A CONTAINER is mapped visually onto a conglomerate of people with gloomy grey faces packed inside a dark subway carriage, therefore evoking the primary metaphor BAD IS DARK (FORCEVILLE; RECKENS, 2013; FORCEVILLE, 2017, p. 252), in this particular case, the visual mode is a metonymical-metaphorical representation of gloomy urban life experiences. Wanting to do with none of that, the brown dove with an olive branch walks away from the subway station, whose floor surface is painted in bright yellow, thus starting its Quest for freedom into the wild, away from a bounded space existence.



The second stanza framing “Imagine all the people living for today” is illustrated by the brown dove with the olive branch in its beak pursuing its quest-journey in the open air. It is flying along a waterfront scenario where people in a relaxed attitude are enjoying the seaview and, most strikingly, the dove pursuing its quest keeps pace with a boat trajectory sailing into the open sea. So, “living for today” in the verbal mode is mapped onto people enjoying themselves by looking at the open sea in the visual mode. So, this multimodal conceptualization emerges from the metaphor FREEDOM IS THE OPEN SEA.

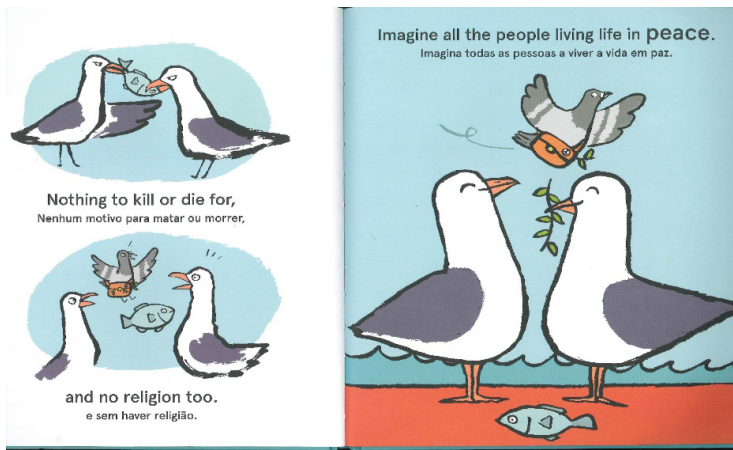


The third stanza framing “Imagine there’s no countries”, is depicted by a vast mass of water and a boundless sky surface that open up before a smiling human figure at the boat rudder. It also feeds on the conceptual metaphors FREEDOM IS THE OPEN SEA and FREEDOM IS THE OPEN SKY. Some entailments are clearly activated, namely, countries are bounded entities biased by cultural and political allegiances, as such, completely different from the open sea and the open sky, which are boundless natural sceneries accessible to everyone.

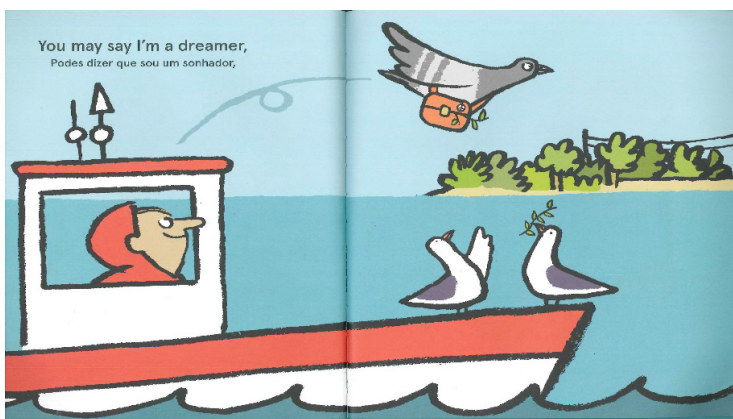


In the fourth stanza framing sub-divided into two sub-framings, the first one “Nothing to kill or die for” is illustrated by two seagulls fighting over a fish as a food resource. In the second one the text mode “no religion too” is mapped onto two seagulls having a verbal duel. So the travelling peace dove has to interrupt the peace Quest to stop the quarrel between the two seagulls. So, the following conceptual metaphors are represented FREEDOM IS NO WAR and FREEDOM IS NO RELIGIOUS THOUGHT, entailing that religion involves argumentative discourse and hende battling over antagonist points of view, as clearly evidenced in the conceptual metaphor ANTAGONIST COMMUNICATION IS PHYSICAL CONFLICT (SEMINO, 2006, 2008, p. 100).



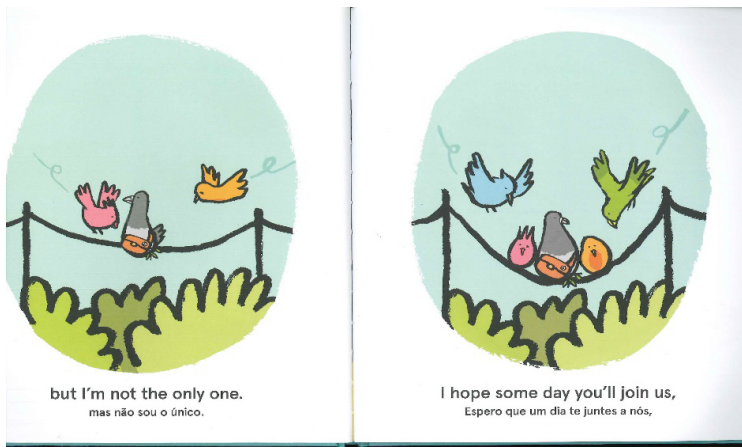


The fifth stanza framing, the text mode “Imagine all the people living life in peace” is mapped onto the visual mode by representing two seagulls enjoying each other’s company, one of them with an olive branch in its beak. This peaceful scenery is already a good sign that the peace Quest has already begun and so the brown dove with the olive branch on its beak flies happily by. In fact, the whole multimodal scenery emerges from the conceptual metaphor PEACE IS COOPERATIVE LIVING.

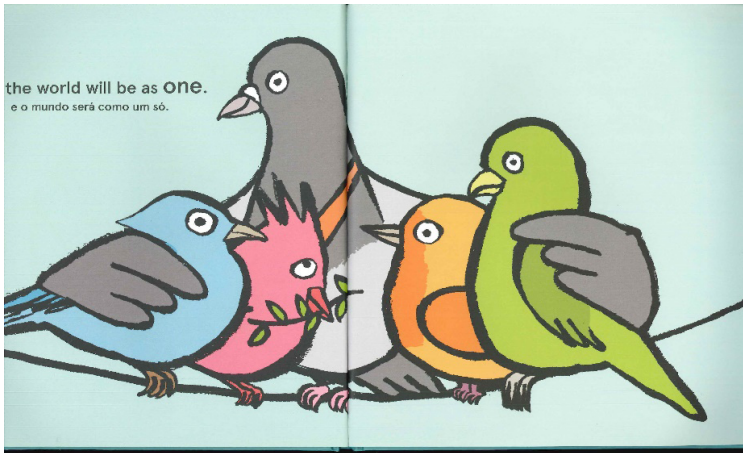


The text mode in the sixth stanza framing “you may say I’m a dreamer but I’m not the only one” is also mapped onto two distinctive visual layouts. In the first visual layout, the human being at the rudder is

sailing across the sea. Two seagulls, one of them carrying an olive branch in its beak, standing on the prow of that boat salute the peace dove flying by. So, we have the conflation of similar conceptual metaphors, namely PEACE IS A JOURNEY protagonized by the dove and PEACE IS A VOYAGE (onto the open sea surface) protagonized by the human figure at the rudder. In the second visual layout, in reference to "...but I'm not the only one" the peace dove with the olive branch in its beak is met by other birds that wish to join it on a perch, signalling a collective peace quest. Hence, this stanza framing draws on the conceptual metaphor PEACE IS A COLLECTIVE JOURNEY.



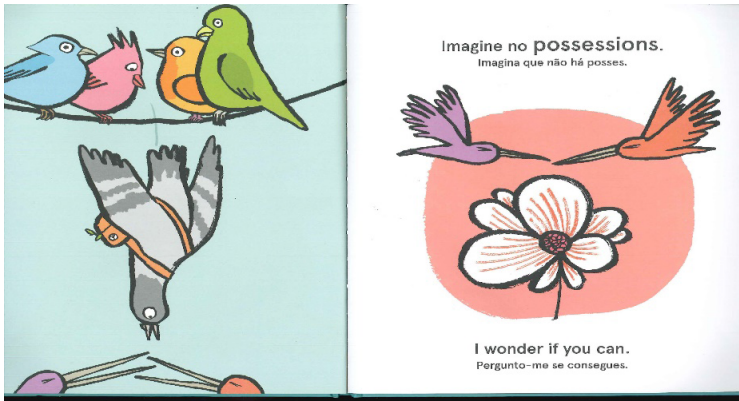
In the seventh stanza framing "I hope some day you'll join us" builds on the conceptual metaphor PEACE IS A (HIGHLY PARTICIPATED) COLLECTIVE JOURNEY, in that more and more birds join a group of peace loving birds. Then, the final goal of Imagine's quest "and the world will live as one" comes to life as a unity statement, in which the peace dove is warmly embracing a group of birds with varied sizes, morphologies and colours.



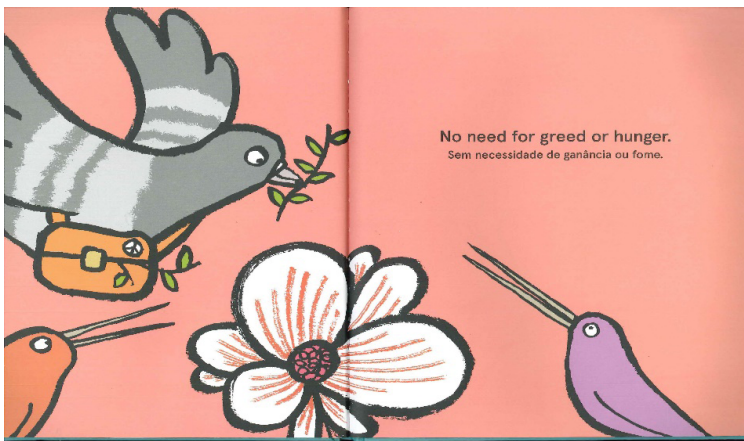
It should be pinpointed that the conceptual mappings between the verbo-visual modes version in this last stanza framing emerge from a conflation of two primary metaphors, namely, “AFFECTION IS WARMTH” and “SIMILARITY IS CLOSENESS” (GRADY; JOHNSON, 2002; GRADY; ASCOLI, 2017, p. 32). In the visual mode, the birds are affectionately packed together and so bound as one in their natural diversity. Although all of them belong to the bird category, this is not the main reason why they associated as one in this text-image construal. It is the fact that by joining the brown dove’s peace-and-love quest, they have become parts of the peace movement (PART-WHOLE structure), joined by the common goal of achieving world peace.

It is very interesting to notice that the last stanza sub-framing of the first part of this multimodal re-performance of *Imagine*, which, as the end point of the quest, operates textually as a sort of motto, is rooted in the above mentioned primary metaphors. This is motivated by the fact that primary metaphors “... are grounded in universal (rather than cultural determined) aspects of human experience (GRADY; ASCOLI, 2017, p. 29). So, the intended message is supposed to reach all living human creatures who can understand English and other multimodal re-performed translations, as is the case of the illustrated bilingual English-Portuguese edition published in 2018 by Edicare.

## 5 Further Multimodal Metaphors for PEACE (part II)

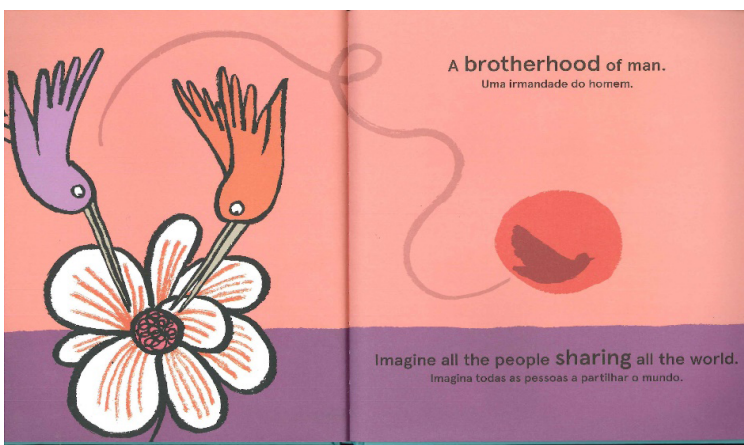


In the second part of the lyrics, multimodal metaphors are narrowed down to representations for PEACE since the PEACE Quest has not come to an end. In the first stanza framing in part II of *Imagine*, the quest construal rests upon the political statement “Imagine no possessions” mapped onto two flying creatures contemplating a big flower in the visual mode. While the big flower against a orange-rosa coloured background is staged at the center of the image, the smaller flying creatures are symmetrical, depicted to the left and right of the flower. So, taking into account the metaphors **IMPORTANT IS BIG** and **IMPORTANT IS CENTRAL** (GOATLY, 2007, p. 40), the most prominent conceptual entity in the visual mode is the flower, in detriment of the two smaller flying creatures. This is meant to convey the message that nature is meant to be shared and appreciated by all living creatures and thus the peace Quest has been partially achieved. So, this illustration draws on the conceptual metaphor **LIFE IN PEACE IS SHARING** (natural resources).



No need for greed or hunger.  
Sem necessidade de ganância ou fome.

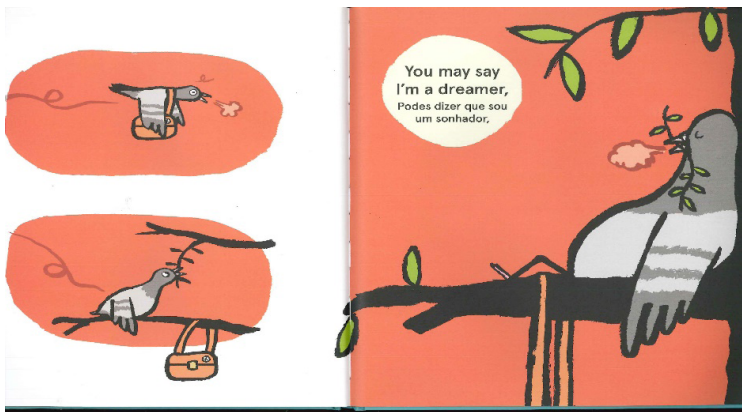
In the second stanza framing of part II, the text mode “No need for greed and hunger” is mapped onto the peace dove carrying an olive branch in its beak, in the visual mode. It must be stressed that the peace dove reappears in the visual mode as a “gate-keeper” of the ongoing peace quest, since two flying creatures are still in the candid act of contemplation of the big flower without trying to take possession of it. It is very striking that they are portrayed with their beaks open, as if discussing the non-possession issue with the peace dove. So, the quest LIFE IN PEACE IS SHARING (natural resources) finally prevails in the multimodal staged scenario.



A brotherhood of man.  
Uma irmandade do homem.

Imagine all the people sharing all the world.  
Imagina todas as pessoas a partilhar o mundo.

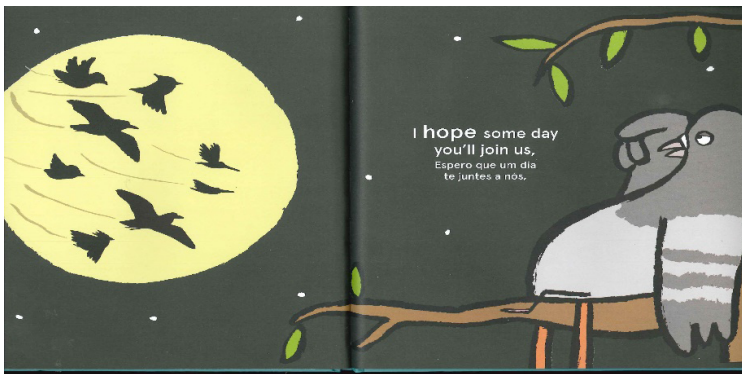
The third and fourth stanza framings of part II, namely, “a brotherhood of man” and “imagine all the people sharing all the world”, are grouped together in the same page. The former at the top of the page and the latter at the bottom of the page. So, in a coherent way, they are also mapped onto the very same image in the visual mode, as follows: the peace dove, having completed its mission to convey the peace message to these flying creatures, and having left the olive branch behind, flies quickly away, and leaves them in the company of the olive branch in serene contemplation of the flower in brotherly harmony. Thus, the metaphor LIFE IN PEACE IS SHARING (natural resources) turns out to be a socially accepted rule for this community of flying creatures.



The fifth stanza framing “you may say I’m a dreamer” is mapped onto a dream frame in the visual mode. It is visually depicted as a sequence of events taking place in different settings. As the brown dove travels further away, it stops to collect another olive branch and then falls asleep on a tree branch with the olive branch in its beak. In the next page, the sixth stanza framing “but I’m not the only one” refers to collective peaceful behaviour since the brown dove’s action of collecting an olive branch and of flying away to pursue the PEACE quest is imitated by an array of birds of all shapes and colours, which have decided to join the Quest for PEACE. Thus, the Quest for PEACE turns into a joint action, as evidenced in the next page, where all flying creatures are portrayed as flying within the boundaries of a yellow circle. This visual representation builds on the primary metaphor STATES ARE LOCATIONS (LAKOFF; JOHNSON, 1999, p. 52).



The sixth and seventh stanzas are meant as a mini-narrative of the Quest. In the former, “I hope some days you’ll join us” in the written mode is mapped onto the brown dove waking up from her dream in the visual mode. The PEACE quest is finally accomplished by the textual formulation “and the world will live as one” mapped onto a group of birds of different colours and shapes joined in a warm embrace, perched on an olive tree branch. Once more, the primary metaphor SIMILARITY IS CLOSENESS comes to life in the last multimodal metaphorical depiction.



However, more importantly, the visual representation of the birds with their upright bodies perched on a very same branch builds on the primary metaphor PERSISTENCE IS REMAINING ERECT (GRADY, 1997; GIBBS, 2017, p. 323). As so clearly put into words by Gibbs:

“(...) the existence of things in the world that persist is correlated to a significant, positive degree to the things that are capable of remaining upright”. Thus, this joint bird upright posture is a clear reflexion of how the birds’ bodies reflect the viability of the revolutionary proposal of peaceful coexistence in the world.



Moreover, our shared human minds can only interpret the birds’ upright body posture as a sign of morally virtuous behavior since GOOD IS UP and VIRTUE IS UP as well. Resting on the SOCIETY IS A PERSON metaphor, Lakoff and Johnson (1980, p. 17) claim that: “VIRTUE IS UP because virtuous actions correlate with social well-being from the society/person’s point of view. Since socially based metaphors are part of culture, it’s the society/person’s point of view that counts”.

In our opinion, the meaning of the birds’ upright persisting body posture is beyond virtuous since they have turned into morally irreprehensible creatures acting together in consonance. Thus, the upright body posture can be accounted for as a collective control position. In view of the metaphor CONTROL IS UP (LAKOFF; JOHNSON, 1980), they are meant to perform the role of gatekeepers of this new world order.

In fact, we cannot help viewing these birds as human entities, of course as enlightened human entities. So, BIRDS ARE ENLIGHTENED HUMAN ENTITIES which have gained moral control of the world order. As it happens, “CONTROL IS UP thus provides a basis for MAN IS UP and therefore RATIONAL IS UP (LAKOFF; JOHNSON, 1980). These



up-oriented metaphors build a cohesive metaphorical cluster, which is impossible to separate.

Hence, image-schemas as principles of cognition and culture lead us to believe that “Imagine” is not an utopian view of a new world order but a rational desideratum, governed by the principles of moral imagination deriving from our physical and also from our social and cultural experiences in the world.

## **6 Beyond the multimodal re-performance “imagine” in book format**

Arguing that “multimodal re-performance”, a concept deriving from an ulterior performance of a cultural artwork, coined by us, is anchored upon “the personal authorization” criterion (VAN LEEUWEN, 2007), which legitimizes it, we have pursued a multimodal analysis of “Imagine” in illustrated book format in the light of Forceville’s multimodal metaphor approach (FORCEVILLE, 2009, 2012, 2017; FORCEVILLE; JEULINK, 2011). It must be highlighted that “Imagine”’s multimodal re-performance in book format aims at challenging traditional worldviews by staging new interactional patterns in intercorporeal relationships conceptualized within an imagined bird’s community dynamics. In the visual mode, the imagined peace dove’s active quests for a new world order start in the precise moment that human beings and their traditional social interactions vanish from the illustrations in the book. Hence, at the end-point of the quest bird protagonists staging peaceful physical-social interactions give rise to metaphors for “imagined” future peace-loving man-to-man and man-environment interfaces.

Since “There is no mind without a body”, as pinpointed by Johnson (2017, p. 100), bird bodies are best suited to pursue with this PEACE quest. Free from spatial constraints and moving fast in the air, they make use of their highly mobile flying bodies to get together fast to co-inhabit common territories by brotherly sharing a panoply of natural resources. However, by persisting upright in the tree branch, they impersonate human creatures with moral values as pillars of rational persistence in a changing world.

The flow of multimodal metaphors follows a sequence of creative metaphors for the creation of a new world order. From the idiosyncratic or creative metaphor NO HEAVEN IS A CONTAINER, through the idiosyncratic or creative metaphors FREEDOM IS THE OPEN SEA,

coupled with FREEDOM IS THE OPEN SKY, followed by the conceptual metaphor PEACE IS A JOURNEY, up to the idiosyncratic or creative metaphor PEACE IS (A HIGHLY PARTICIPATED) COLLECTIVE JOURNEY. But what lies at the end of the “Imagine” journey for peace is the primary metaphor SIMILARITY IS CLOSENESS intertwined with the conceptual metaphors GOOD IS UP and VIRTUE IS UP as crosscultural moral metaphorical conceptualizations of an ideal peaceful world.

Notice that the awakening of a new conscious awareness to alternative social and political worldviews is entirely crafted by these emotional-based metaphorical mappings, thus introducing the addressees (us all) to these newly crafted social-political worldviews. According to the journey metaphor of the peace dove in this imagined world multimodally architected in “Imagine” in illustrated book format, the peace bird in its interaction with other birds opens up our minds to the possibility both of a new world view and a new world order of living a (lasting) peaceful existence within an imagined community of similarly ranked creatures.

The natural environment as a stage of latent conflict episodes was transformed by the birds’ new way of life by harmoniously sharing the world’s resources in peaceful co-existence, shown by their mimetic peaceful bodily expressions and gaze, however, assuming an upright posture acknowledged as a fundamentally human body posture.

In fact, these “imagined” metaphorical bird/human engagements with the world are meant as a strong incentive to further communication but taking part of a network of people that think alike and breathe the same air. After all, in digital-governed societies we are network connected individuals and have to “write ourselves into being” online, as argued by Boyd (2008, p. 119), to be acknowledged as alive thinking creatures.

Hence, sequencing the book reading, future online written interactions to be made by the readers at the site [www.imaginepeacebook.com](http://www.imaginepeacebook.com) are encouraged, as mentioned in the last page of multimodal edition of “Imagine”, published by Edicare Editora Lda.. By being invited to leave a peace message behind in the aforementioned site, the readers of the re-performed “Imagine” can actively engage in the PEACE Quest in the future. Hence, the re-performed “Imagine” is not the end-point of the PEACE Quest but the starting point of other journeys for PEACE worldwide.

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## Playing through metaphors: an analysis of metaphor use in life simulation games

### *Jogando com metáforas: uma análise do uso de metáforas em jogos de simulação de vida*

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**Abstract:** From consistent narratives to cutting-edge graphic design, designers have been investing heavily in making their items competitive in the market. Given the high level of interaction between the players and the games they play, it is to be expected that much of how real-life representations are built in our minds will, in one way or another, influence how we interact with virtual reality, impacting on the playability of a game. Studies on the role of metaphors in (video)games are rather recent and much is yet to be investigated. Through simulations of family life and school routine, for example, these games imply human behavior as systematic and goal-oriented. For this study, we selected popular free life simulation games available at a popular *App Store* for smartphones. When listing the existing metaphors, we noticed a systematic difference: while conceptual metaphors were multimodal, consisting of a combination of verbal and visual information, primary metaphors showed to be intrinsically monomodal, consisting of visual information. In this study, we argue that metaphors in life simulation games start off as text-dominant, but become image-dominant after some time. That is, players rely on both images and verbal cues while learning how to play the games, but after some time they can just look at the symbolic cues for information. We therefore propose that the classification for metaphors in games should be continuous and as dynamic as the game itself, since there seems to be a movement from text-dominant to visual-dominant metaphors throughout the games.

**Keywords:** metaphor; games; simulation; multimodal metaphors; primary metaphors.

**Resumo:** De narrativas consistentes a design gráfico de ponta, designers têm investido em tornar seus produtos atrativos para o mercado. Dado o alto nível de interação entre jogadores e os jogos que usam, é esperado que muitas das representações das quais fazemos uso na vida real influenciem, até certo ponto, o modo como interagimos com a realidade virtual, o que impacta, portanto, sua jogabilidade. Estudos sobre o papel da metáfora em jogos são bastante recentes e muito ainda precisa ser investigado. Jogos de simulações de vida que envolvem relações familiares e rotinas escolares, por exemplo, parecem sugerir que o comportamento humano seja sistemático e orientado a objetivos específicos. Para o presente estudo, selecionamos jogos de simulação de vida populares em uma *App Store* para smartphones. Ao listar as metáforas encontradas, notamos uma sistemática diferença: enquanto metáforas conceituais eram multimodais (consistindo de combinações entre informações verbais e visuais), metáforas primárias se mostraram intrinsecamente multimodais (consistindo de informações visuais). Neste estudo, defendemos que metáforas em jogos de simulação de vida começam como texto-dominante, mas, à medida que o jogo se desenrola, tornam-se visualmente dominantes. Ou seja, jogadores dependem de ambos os tipos de informação ao aprender a jogar, mas depois de algum tempo, a informação pode ser obtida ao olhar para os símbolos na tela. Por esta razão, propomos que a classificação de metáforas em jogos se dê de forma contínua, ou seja, que seja tão dinâmica como os próprios jogos, uma vez que o movimento de texto-dominante para imagem-dominante parece se fazer presente no decorrer dos jogos.

**Palavras-chave:** metáfora; jogos; simulação; metáfora multimodal; metáforas primárias.

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## 1. Introduction

Technology has grown to be an integral part of our lives. Going out of grid is, for many, practically impossible, given the new social need to be always reachable and connected. According to the Pew Research Center website, about 91% of teenagers have access to the internet through a mobile device and about 72% of them play video games on a computer, game console or smartphone (LENHART, 2015).

Not only do teens play, but they also help the market to develop, since they are a big target of game designing companies. In the past few years, app companies have seen their revenues increase tremendously through investments in games. According to news website Newzoo, more



than 7 billion dollars were generated from game apps downloaded by phone users in 2017 (BALLARD, 2017). These numbers, however, are not restricted to teen smartphone users, but represent the popularity of game apps for the general public.

In order to attract new users, designers must pay attention to a series of elements that will be part of their final product. From consistent narratives to cutting-edge graphic design, they have been investing heavily in making their item competitive in the new market. Not only that, they have also been investing in recreating and adapting old game console classics to fit in the small screen, which can be downloaded easily from the store. Also, while trying to appeal to a range number of app users, it seems to be inevitable not to come across cultural aspects that surround the target players.

It is to be expected that much of how real-life representations are built in our minds will, in one way or another, influence how we interact with virtual reality, impacting, therefore, on the playability of a game. Studies in multimodal metaphors have been exploring the role metaphors have and how important they are for building meaning through one's playing experience (MÖRING, 2013). These studies show that metaphors not only allow the understanding of semiotic elements inside the games, but are also of fundamental relevance for the understanding of its mechanisms (see MÖRING, 2013).

The relationship between thought, language, and culture will be explored in the present paper through the analysis of multimodal metaphoric representations in life simulation games. Besides, our study will propose a classification for these metaphors in life simulation games, based on an existing classification of these metaphors in comic books.

## **2 Theoretical framework**

It is broadly accepted that metaphor use is not only frequent, but also indispensable for understanding and producing language (see LAKOFF; JOHNSON, 1980). Whereas much of what we want to say is highly abstract and therefore more clearly conveyed through the use of metaphoric language, its use is not limited to non-concrete contexts. They are often used in order to give more detailed information, as well as for stylistic purposes.

Metaphor and language are closely related, and so are language and culture. In terms of language and culture, the latter seems to work

as a border, which is used to group people according to their linguistic backgrounds. Culture is supposedly affected by economics and social aspects, which include the language a population uses, which is probably one of the reasons why countries have standard languages spoken by the majority of the population: speaking a language is a means of belonging to a culture. In terms of metaphor and language, however, there is no border, and its use is sometimes so conventionalized that people do not even notice its presence.

Metaphor use reflects to a great degree the culture people are inserted in. The target and source domains chosen when speaking metaphorically are not totally random, but dependent on a structured mapping that works logically in the speaker's language. This means that a metaphor is not necessarily meaningful in all languages, and even when it is, not necessarily must this metaphor have the same meaning in both of these languages. That is, culture plays a big role in metaphor understanding and creation and, depending on cultural aspects, structural mappings may be different or convey different meanings.

## **2.1 Metaphor and thought**

It is broadly accepted that language and thought are closely related. Sapir, for example, believed that the grammatical structure of one's language would influence their view of the world (PENN, 1972). In support to that, Whorf theorized not only that language structures influence environment understanding, but also shed light to the fact that more abstract thoughts are dependent on language (CARROLL, 1956). On a more production-related view, Clark proposes that language is not able to map all experience, since a schematic representation may not be present in all languages (CLARK, 2003). However, this absence of structurally conventionalized categories would not at all be sufficient to state that the concepts and ideas do not exist in such languages. What happens is simply a change of focus to which each language understands as crucial information to be said.

Additionally, human beings have an exceptional cognitive capability. Gentner (2003) proposes that our intelligence is due to our ability of learning by analogy, which makes it possible for us to perceive more abstract information as we get older, as compared to concrete perception in children. Besides, Gentner (2003) attributes to structure-mapping process our ability to make comparisons and learn grammar.

Even though the process of aligning and mapping seems to be central for the use of language, and, therefore, for metaphor use, speakers are not limited by well-established lexicalized relations (GENTNER, 2003).

Lakoff and Johnson (1980) also proposed a connection between language and thought. The authors understand that the human conceptual system is basically metaphorical (LAKOFF; JOHNSON, 1980). The impact of this affirmation lies on the fact that our ability to conceptualize and categorize things is what makes our interaction with the world possible. A metaphor such as LIFE IS A JOURNEY would, according to their understanding, map the relationship between a more concrete domain (JOURNEY) and a more abstract domain (LIFE). This mapping would account for the many licenced expressions through which we refer to life in terms of going on a journey (e.g. *He did not take the easy road, that's what brought him to this point.*).

However, not only concrete domains can be used to map abstract concepts. From the Conceptual Metaphor Theory (CMT) by Lakoff and Johnson (1980), Grady (1997) found that people also make use of their bodily experience to understand non concrete ideas. Since those metaphors depend on human basic senses, Grady called them *primary metaphors*. One example of a primary metaphor would be the understanding of a feeling such as anger in terms of heat sensation (e.g. *My blood boiled when I saw her at the party.*). Lakoff (2008) suggests that people around the world have similar daily physical experiences, which would lead to similar primary metaphors across languages.

Also, in our daily interactions, it is not uncommon for us to think of ideas and feelings, which would be harder to express through literal language. Gibbs (2017) believes that metaphors fill gaps in the available vocabulary and that, at times, people are not even able to identify such expressions as being metaphorical. This would mean that metaphors in natural language are also a means of providing details regarding the situation for which literal words and expressions do not convey the expected meaning.

In this paper we will argue that the same thing happens in games, since metaphors seem fill a gap between the semiotic elements on the screen and the reality they attempt to simulate. Their existence, however, is not always obvious.

## 2.2 Metaphors in life simulation games

Studies on the role of metaphors in (video)games are rather recent and much is yet to be investigated. One example is the discussion on whether life simulation games can be considered metaphorical (see MÖRING, 2013). Through simulations of family life and school routine, for example, these games imply human behavior as systematic and goal-oriented. Each step toward a greater objective comes with a prize, which instigates players to keep trying to win.

Such an understanding of LIFE AS A GAME is clearly a simplification, since real life behavior is motivated by much more than a series of punishments and reinforcements. Even though Skinner's operant-conditioning was influential in the first half of the twentieth century, we now know that human cognition plays a bigger role in the way we interact with the world (see DIAMOND, 2013).

Simplification, however, is not at all negative. Given the limited number of resources in human cognition (e.g. episodic memory and working memory), it is expected that our minds will search for ways to categorize and map the world that surrounds us. One of the many ways through which this is performed is by making use of well-known categorized elements in order to understand abstract ideas (GLUCKSBERG; KEYSAR, 1990). By this account, understanding *life as a game* allows the understanding of nuances as well as the systematization of the targeted concept.

As for the game itself, Galloway (2006) describes it as:

[...] an activity defined by rules in which players try to reach some sort of goal. Games can be whimsical and playful, or highly serious. They can be played alone or in complex social scenarios. (GALLOWAY, 2006, p. 1)

Such an understanding of games foreshadows a vast number of familiar elements, since humor can only be understood through a comparison to common ground knowledge, leading to incongruity (see MORREALL, 2016). The way each of those semiotic elements is represented in the screen may or may not be metaphoric.

## 2.3 Multimodal metaphor

In multimodal metaphor studies, this specific type of metaphor consists of mapping domains in different modalities (image and words, for example) in order to yield meaning. According to Urios-Aparisi, even

though we might be able to see the target or the source, either might be merely suggested (URIOS-APARISI, 2009). That is, a multimodal metaphor may be highly inferential, depending on the connections the reader makes in order to understand it.

Tasic and Stamenkovic (2015) analysed multimodal metaphors in comic books and graphic novels. The authors proposed a classification of these metaphors depending on the type of relationship between written and visual language: (i) image-dominant metaphors, (ii) text-dominant metaphors, (iii) complementary metaphor (TASIC; STAMENKOVIC, 2015). While image-dominant metaphors are the ones in which metaphor meaning relies mainly on the visual component, text-dominant metaphors find their meaning mainly on the verbal utterance. Symmetrically, complementary metaphors depend equally on both visual and verbal cues.

In this study, we argue that metaphors in life simulation games start off as mainly text-dominant, but as players develop, they become image-dominant. That is, players rely on both images and verbal cues while learning how to play the games, but after some time they can just look at the symbolic cues for information.

### 3 Method

For this study, we selected popular free life simulation games available at a popular *App Store* for smartphones. About twenty games were tested, in order to check whether they were in accordance to our requirements.

First of all, all games should feature a human-like element as main character, regardless of whether this character was featured in the game or simply mention in the contextualization stage. Even though it is completely possible (and not uncommon) to personify non-human elements in a game, there is the possibility that the human-non human transition may influence the player's perception and conceptual systems. That is, some metaphorical structural mappings, which are what we wished to observe, might be represented differently when characters are objects or animals. We, therefore, excluded games that did not correspond to this requirement.

Second, games should feature human habits and behavior through its characters. There are a vast number of games featuring human characters in the *App Store* we visited, but many of them feature wars and fantasized experiences that do not relate to our study. Our main goal was to observe how daily life metaphors are used in virtual interactions.

In order to reach our goal and establish the relationship between the two realities, games should include daily tasks to be accomplished by its characters, such as working, studying, and leading a healthy social life, for example. By doing them, other aspects of human life could be introduced to character's lives, such as needs and desires.

Lastly, Games should make use of verbal-cues and imagery in order to show players' progress through characters' current states. Since metaphors can be either monomodal or multimodal, this requirement increased the probability of finding more multimodal metaphors in our analysis. Multimodality in these games was showed mainly by combining (functional) symbols<sup>1</sup> and their subtitles.

Five games fit our requirements and were then analysed. Table 1 shows how often each of the games was downloaded at an *App Store*.

TABLE 1 – Number of downloads for each game and users' ratings

Game <sup>1</sup>	Number of downloads	Number of reviews	Ratings (out of 5 stars) <sup>2</sup>
#1	100.000	1.000	3.4
#2	500.000	9.000	3.6
#3	1.000.000	37.000	4.1
#4	100.000.000	5.000.000	4.0
#5	5.000.000	78.000	4.1

Source: material produced by the author for this research

As can be seen in Table 1, games with a higher number of downloads have, consequently, a higher number of reviews. Ratings, however, represent the means of all stars given by each player and range from 1 to 5 stars only. The higher the number of reviews, the less one single players' rating for a given game will influence its overall

<sup>1</sup> Symbols in games are not mere illustrations, they are purposefully inserted in a game and have informative function that is indispensable to the player.

<sup>2</sup> The games are as follows: #1: *Life Simulator 2*; #2: *Life Sim: simulador de vida, tycoon and casino slots*; #3: *Virtual villagers – origins*; #4: *The sim freeplay*; #5: *Life is a game*.

<sup>3</sup> These ratings, as well as the number of reviews, were accessed through the Play Store in October, 03rd, 2019. Future ratings might be higher or lower than our values

evaluation. That is, from a players' point of view, a game with more players will have more reviews, which will lead to a more reliable general impression of the game quality.

Initially, metaphors were listed regardless of their classification as conceptual or primary metaphors. They were then analysed through Tasic and Stamenkovic's (2015) classification of multimodal metaphors.

## **4 Data Presentation**

In order to understand how we extracted and analysed the metaphors, a brief description of each game is necessary, since the elements in the game are needed for the existence of metaphors.

### **4.1 Games description**

The first game simulation selected for this study consists of the image of a room with a bed and a fridge at the center of the screen. As the player opens the game, many buttons can be seen, each with their correspondent symbol. At the top there are three buttons: one for shopping, one for gambling, and another for game settings. Below these buttons there are buttons for upgrading and another for stats, which describes the buttons symbols and their meaning. Finally, at the bottom of the screen there are 6 buttons regarding life-related activities (education, work, household, shopping, money, and achievements).

The game progresses as the character, who is featured as the player himself, sleeps, eats and works at the right proportion, always aware of the vitality, stamina and resilience levels, measured through status bars that must be always full. These stats become stronger as the player becomes more successful in the game. A more advanced player has more money, a bigger house, practices sports, and reads more than a beginner.

As for the second game, players choose their avatars and profession before starting. A tutorial guides the player as he becomes familiarized with the symbols and buttons in the game as well as their meaning. There is a total of 4 status bars (energy, food, money and happiness), as well as four buttons for shopping, working, relationships and going to the city. At the top the player also sees a button related to their achievements.

In this game, the most important objective is to become professionally successful. The button to check on career-related accomplishments is represented by the image of a man who is going up

the stairs. The player's advances are shown through a bar, that is filled according to how players progress in the game.

The third game is different from the others as it is set on an island, with the player controlling five characters simultaneously. Characters' lives consist of solving problems and mysteries, while learning and improving their own skills. The button that shows development has the symbol of a puzzle. Success in the game is represented by bars that are filled as characters improve.

The fourth game is very similar to the third one, but more sophisticated. Avatars are chosen before starting the game. Characters start the game with no money, but become successful with time. They can build their own houses and have control over their activities throughout the game. A tutorial guides the player until he is familiarized with the buttons and necessities of their character.

Desires and necessities are shown at the left bottom of the screen through six different status bars (bladder, sleep, food, bath, social life and happiness). Players are responsible for keeping the bars full and green and should be aware when they start to get empty and red.

Lastly, the fifth game is simpler than the others, with fewer buttons on the screen. As the background images move, players have the impression that their characters are moving forward. The objective of the game is to make life choices by pressing the select-button. The character starts off as a baby and makes life choices until he is an old man. The 2 bars at the top show life and happiness status, which determine when the character will die. The tutorial in this game is optional.

In the next subsection we will present the twenty metaphors we found in these five life simulation games.

## 4.2 Metaphors List

Through interactions Among the context, the tutorials, the status descriptions, and the symbols presented in the games, we were able to observe a big number of metaphors. After grouping similar metaphors together, we found that there were at least 22 conceptual metaphors and 15 primary metaphors in them. Even though they were more numerous, conceptual metaphor types did not vary, with 96% of them categorizing elements *as containers*.

We noticed, however, a systematic difference between them. While conceptual metaphors were multimodal, consisting of a



combination of verbal and visual information, primary metaphors showed to be intrinsically monomodal, consisting of visual information. Table 2 shows the list of multimodal metaphors for each of the five games, as well as the visual and verbal forms in which they were presented.

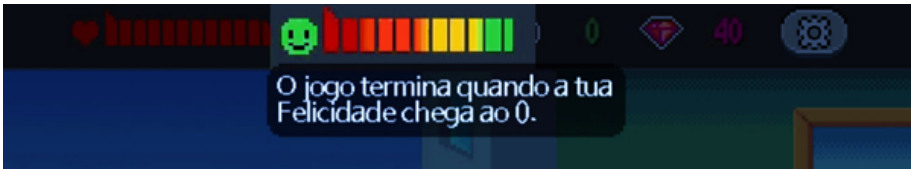
TABLE 2 – Conceptual metaphors

Game	Metaphor	Visual representation	Verbal information
#1	Stamina, resilience, and health are emptying containers.	Emptying bars.	After clicking on the <i>stats</i> button, players can see the description for each symbol. Tutorial explains each icon through text.
#2	A person’s energy, hunger, happiness, and money are emptying containers.	Emptying bars.	When clicking on the bars, a description of the element is shown. Tutorial explains each icon through text.
#3	Challenges are puzzles.	Puzzle symbol at the bottom of the screen. clicking on the button opens the fulfilled challenges screen.	When clicking on the symbol, a description of the completed challenges is shown.
#3	Every challenge, as well as planting, healing, building, researching, and collecting things are like containers.	Bars to be filled.	When clicking on the character’s picture, all their skills and personal information are shown. Tutorial explains each icon through text.
#4	Hunger, energy, social life, fun, hygiene and bathroom frequency are like containers.	Full bars show happy players.	Tutorial explains each icon through text.
#5	Life and happiness, creativity, friendship and family are containers.	Emptying bars that change depending on characters’ life choices.	Tutorial explains icons through text.

Source: material produced by the author for this research

As described in Table 2, verbal information on games are usually presented through tutorials. Figure 1 below shows an example of how tutorials associate symbols and their functionality.

FIGURE 1 – Tutorial for game #5 *Life is a Game* –  
“felicidade é um container/uma barra cheia”



Source: *App Store*

This game has yet another specificity: not only does it show the emptying bar (which, in Figure 1, represents *happiness*), it also adds an icon to it (a green smiley face, which also represent the same concept).<sup>4</sup> However, when players start their journey, metaphor-related verbal information is nowhere to be seen and gamers are left with only visual information, as shown in Figure 2.

FIGURE 2 – Game #5 *Life is a Game*



Source: *App Store*

<sup>4</sup> It is important to notice that the difference between icons and metaphors is quite significant. Whereas icons resemble the thing/person they represent (e.g. a smiley face resemble a smiley/happy person), conceptual metaphors are not as direct and represent concepts/ideas instead of materialized objects.

It should be noted that many games such as the one in Figures 1 and 2, combine conceptual metaphors and iconic information together in order to increase playability and make it easier for players to remember relevant information.

In a similar fashion, Table 3 illustrates the primary monomodal metaphors that appeared in each of the games, as well as the way they were presented.

TABLE 3 – Primary metaphors

Game	Metaphor	Representation in the game
#1	Important is big.	Houses become automatically larger to the right as players succeed in the game.
#1	Red is bad.	When stamina, resilience, and health bars are emptying.
#1	Yellow is alert.	When stamina, resilience, and health bars are getting low.
#1	More is up.	Stats bars should always be full.
#1	Green is good.	When stamina, resilience, and health bars are full.
#2	More is up.	Stats bars should always be full.
#2	Success in the career is going up a ladder.	An avatar going up the stairs at the bottom of the screen.
#3	More is up.	The island develops through the number of inhabitants and money.
#4	Green is good.	When necessities are fulfilled, bars stay green.
#4	Red is bad.	When necessities are not filled, bars stay red.
#4	More is up.	Full bars depict happier players.
#4	Important is big.	As the game progresses, participants get richer and are instructed to move to bigger houses.
#5	Down is bad.	Happiness increases depending on life events.
#5	More is up.	Happiness decreases depending on life events.
#5	Change is motion.	Character walks on the screen and makes choices throughout his life.

Source: material produced by the author for this research

As Tables 2 and 3 show, there is a bigger number of multimodal metaphors than there is of primary metaphors. In the next section we will analyze the reasons behind these numbers and attempt to classify the multimodal metaphors according to Tasic and Stamenkovic's (2015).

## **5 Data Analysis**

In order to fulfil our purpose of investigating and classifying metaphors in life simulation games, our analysis will be divided in two different parts. First, we will investigate the reasons behind the differences between primary and conceptual metaphors, regarding their frequency. Second, we will attempt to classify the games' multimodal metaphors.

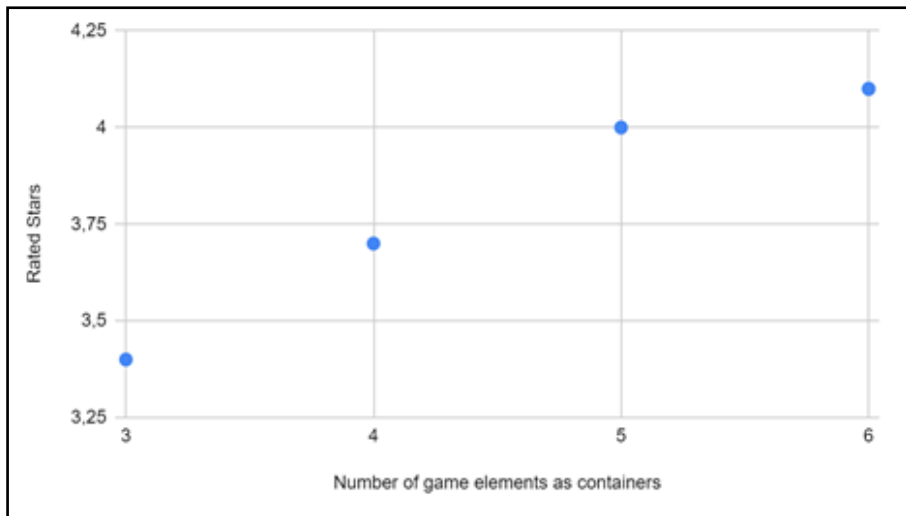
### **5.1 Conceptual and Primary Metaphors**

Conceptual metaphors found in our analysis have a big role in the playability of the games. Not only do they help players keep tab on their progress and current status, they are easy to recognize because of the user-friendly icons they use. This means players do not need to go back to the instructions or read the labels again in order to understand what is happening to their characters.

As shown in Table 1, out of 22 of the multimodal metaphors in the games, 21 can be represented through the form X IS A CONTAINER TO BE FULFILLED. This suggests that in a life simulation games almost everything could be X, from a player's more abstract needs (e.g. making friends or being close to the family) to their most physical urges (such as going to the bathroom). Additionally, those needs can be represented in a continuous bar that goes from good (always represented as a full bar) to bad (depicted as an empty bar).

When analysing the relationship between users' ratings of the game and the depiction of X AS A CONTAINER, we observed that the more this metaphor was used in a given game, the higher were its ratings. This correlation can be observed in Figure 3 below.

FIGURE 3 – Correlation between users’ ratings and container-like elements in the game

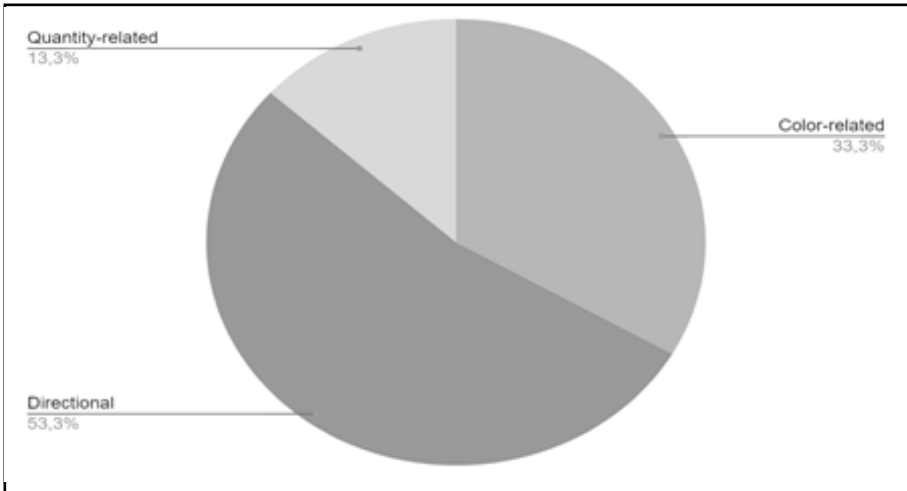


Source: material produced by the author for this research

As we see it, even though the number of games analyzed here is not big, it represents popular games and the types of metaphors they typically depict. Therefore, Figure 3 may as well be considered evidence to the idea that multimodal metaphors contribute to the playability of life simulation games. Moreover, the fact that a game is designed this way reflects the attempt to increase playability, since players can automatically connect the symbols to the concepts to which they relate.

In regards to the primary metaphors in the games, they basically varied among directional, quantity-, and color-related metaphors. Their total distribution can be observed in Figure 4.

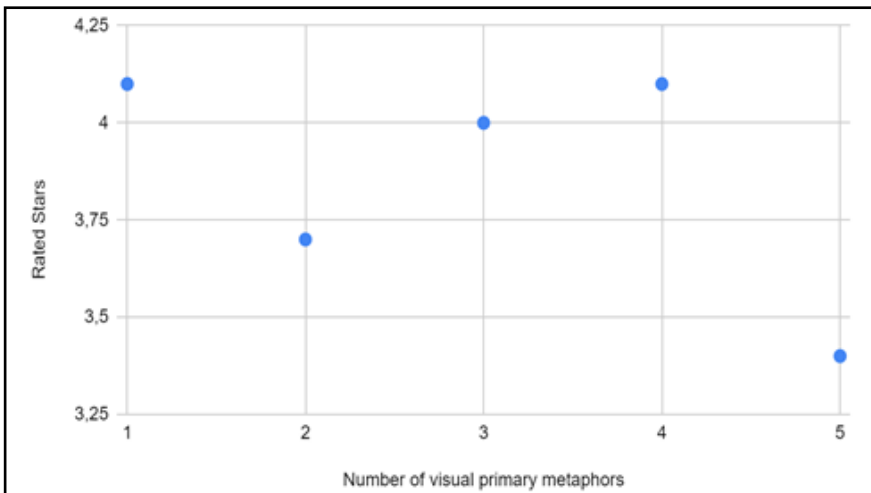
FIGURE 4 – Primary metaphors type distribution



Source: material produced by the author for this research

Differently from multimodal metaphors, however, neither the total number of primary metaphors nor their separation into types influenced users' ratings, as can be seen in Figure 5.

FIGURE 5 – Correlation between users' ratings and the number of visual primary metaphors



Source: material produced by the author for this research

As can be noticed when comparing Figures 3 and 5, the presence of multimodal metaphors seems to influence users’ opinions of the game and its playability more than primary metaphors. This difference is likely to reflect the fact that the multimodal metaphors used in the games play a big role in informing users of their progress. The same metaphor referring to progress in terms of containers is present in all the five games. Primary metaphors, in their many forms, nonetheless, seem to have a more stylistic role, instead of a functional one.

### 5.2 Multimodal Metaphors Classification

According to Tasic and Stamenkovic’s (2015) analysis, there are 3 types of multimodal metaphors. Since the authors studied language in comic books, the two modalities that contributed for their classification were the texts and the images that composed metaphorical meaning. As both texts and images are used with varying degrees of dominance, it is possible to infer that Tasic and Stamenkovic’s (2015) classification is based on a continuum. That is, if a metaphor is image-dominant, it is less text-dominant, and vice-versa. If, on the other hand, a metaphor is complementary, it cannot be text-dominant nor image-dominant. Figure 6 shows the authors’ proposal as a fixed continuum, as we understand it.

FIGURE 6 – Tasic and Stamenkovic’s classification illustrated as a continuum



Source: material produced by the author for this research

As we observed in the life simulation games we analyzed, this classification seems to work well. There are metaphors that are visually dominant, as well as games that rely heavily on text tutorials. In most games, text and image complement each other and give life to metaphors.

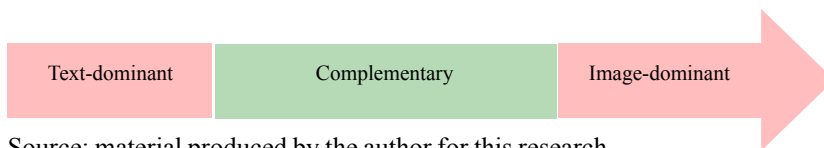
We argue, however, that the interaction between the two modalities (text and image) is not static in the metaphors of life simulation games. There seems to be an intrinsic movement from text to image dominance. As mentioned before, most games start with a tutorial in which the shown texts are crucial for the understanding of the images

and their functionality in the game. Even after the end of the tutorial, labels on the screen serve as a reminder of the role of each symbol and image in the game.

As players evolve and get more familiarized with the games, their need for the texts start diminishing and, eventually, disappear completely. While texts become less important to the player, their reliance on the symbols and images in the game increase, as these are the ones that show how the characters are progressing. Without these visual cues, players would not be able to automatize their moves and do what they need in order to keep their characters alive and well.

Figure 7 illustrates the movement of a multimodal metaphor in life simulation games, which starts as text dominant, but progresses until becoming image-dominant metaphors.

FIGURE 7 – Multimodal metaphors in games as a movement towards visual stimulus



Source: material produced by the author for this research

One might argue that our proposal of classifying multimodal metaphors as dynamic ends up erasing one of its components as the movement reaches its peak. Nonetheless, it is important to remember that even when players do not need the written stimulus in order to play a game anymore, they still exist and can be used when necessary. Besides, without the written stimulus, it would be a lot harder for players to recognize the function of each image, since most of them are not iconic.

## 6 Conclusion

As time goes by, downloading apps to one's phone has become a customary practice. And as interacting with phones and computers becomes part of people's routines, applications start developing into something more interactive. The same is true for smartphone game apps, which have been gaining a lot of popularity for the past few years.

State-of-the-art games are highly interactive. They present mechanisms of interactions with users that are highly developed and



poor in linguistic input. Images and symbols make up for the decreasing necessity of long explanations throughout the player's interaction with the interface. That is, language is only used during the contextualization stage of playing, which sets up the mood and the logic of the games, and as a reminder of symbols' meanings, when players need them.

This development of games into something more playable and user-friendly is closely related to the presence of multimodal metaphors. These could be understood as an extension of conceptual metaphors (such as not being hungry is an emptying container), combining, in the case of virtual games, both the imagery related to the vehicle of the conceptual metaphor (such as a full green bar as a positive indicator for not being hungry) and the word related to the source of that given metaphor (such as "hunger"). That is, the combination of a symbol and a word, which result in the vehicle and the source of the metaphor being expressed in different modalities, give meaning to the symbolism in the game. The important is: players can only recognize the meaning of such symbols and images because they are highly relatable to their own life experiences.

In our study with five popular smartphone gaming apps, we observed that the types of metaphors presented related to how players rate the game itself. Games that provide interactions through visual metaphors are usually better rated than their counterparts. We also noted that container-related metaphors are not only productive, but also contribute to higher ratings from players, since they help in making virtual interaction easier. This can be explained by the fact that container-metaphors are prolific in many languages and, therefore, are easier for speakers of many languages to relate to a great number of human experiences. Since they might be generalized, it is also practical for designers to make use of them and reach a bigger number of players throughout the world.

We also attempted to expand Tasic and Stamenkovic's (2015) classification of multimodal metaphors. While analysing the data we collected, we realized that, differently from cartoons, in which these metaphors can be categorized in one of the three types, their occurrence in games did not allow such categoric labelling. We therefore propose that the classification for metaphors in games should be as dynamic as the game itself, since there seems to be a movement from text-dominant to visual-dominant metaphors throughout the games.

Even though there has been a growth in the studies on multimodal metaphors, studies on multimodal metaphors in games are still scarce.

Such studies conducted by linguists are even rarer. The present study, therefore, contributes to this field of research, in a way that it attempts to explore games from a linguistic point of view, not focusing on the game designing strategies used to build the interfaces.

Besides showing the relationship between playability and the number of visual metaphors in games, this study innovates in proposing a classification for multimodal metaphor in games. From the expansion of an existing theory of classification for these metaphors in comic books, we suggest a new approach to the classification of this type of metaphor in virtual games.

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## **Multimodal metaphors: from language as a condition to text to the notion of texture as a meaning-making semiotic resource**

### ***Metáforas multimodais: da língua como condição para texto à noção de textura como recurso semiótico para produção de sentidos***

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**Abstract:** In this paper, we attempt to provide some ways of thinking about text, relating it to the concept of metaphors, multimodality and texture. Our aim is to develop new insights in meaning making and communication more generally, by bringing examples of memes; a relatively new genre, often seen on social media posts. To do so, we discuss the notion of text (HALLIDAY; HASAN, 2002; BEAUGRANDE, 1997; KRESS, 2010) and then, we discuss texture as a semiotic resource for the production of texts and its metaphors (DJONOV; VAN LEEUWEN, 2011). To exemplify some concepts

and categories, we explore memes, seeking to understand their constitution as well as their qualities and potential meanings of visual textures deployed in the text to make meaning material through multimodal metaphors.

**Keywords:** text; texture; social semiotics; multimodal metaphors.

**Resumo:** Neste artigo, pretendemos propor algumas maneiras para se pensar a noção de texto, relacionando-a aos conceitos de metáfora, multimodalidade e textura. Nosso objetivo é desenvolver novos *insights* a respeito da produção de sentido e da comunicação de forma geral. Como exemplo, trazemos memes com o bordão “*É verdade esse bilete*”. Como esse gênero é relativamente novo e frequentemente visto em *posts* nas redes sociais, discutimos a noção de texto (HALLIDAY; HASAN, 2002; BEAUGRANDE, 1997; KRESS, 2010) e de textura como um recurso semiótico para a produção de textos e suas metáforas (DJONOV; VAN LEEUWEN, 2011). Para exemplificar algumas noções e categorias, exploramos os memes, buscando compreender como eles se constituem, assim como suas qualidades e seus possíveis sentidos de texturas visuais utilizadas para produção de metáforas multimodais.

**Palavras-chave:** texto; textura; semiótica social; metáforas multimodais.

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## 1 The multimodal semiotic world: an introduction

This paper intends to expand the traditional notion of text – commonly tied to verbal mode (language). To achieve such purpose, we relate three important concepts: multimodality, texture and metaphor, exemplifying some categories and notions we present through a brief analysis of memes.

The main argument which underpins our study assumes that multimodality – the presence of more than one mode – is an inherent aspect of all texts. Therefore, there is no such a thing as “*monomodal texts*”. Even a text that seems to be “only verbal” (a formal document, for example), presents modes other than writing – it has color, a certain font-type (typography) and it is organized / displayed in a specific way (layout). With that being said, the expression “multimodal text” becomes reductant. In one hand, its use might be necessary to emphasize the presence of more than one mode in all texts. In the other hand, it

could imply that some texts are multimodal and others are not. So it is important to clarify that multimodality is a basic aspect of every single text we produce.

Another necessary clarification on multimodality is that it does not depend on the mix of verbal and visual to “*turn*” a text into a multimodal one. Texts may or not present the verbal or the imagery mode.

According to Halliday (1994), no one escapes language: “Neither of these exists without the other: there can be no social man without language, and no language without social man” (p. 12). Therefore, human existence cannot be mute. According to Freire (1993), dwelling is to communicate the world. Such pronunciation of the world occurs in dialogue with all *modes*, based on social and cultural work. Similarly, Bakhtin (2006b) argues that our existence is intrinsically related to dialogues in which we take part. In this dialogue, one participates with all his/her body: with eyes, lips, hands, soul, ears, head etc. Thus, the world we communicate reveals our existence; our place become material and concrete, and that is what we call text.

The term *text* holds a diversity of conceptions, which is a natural process – since it shows the theoretical renewal in a ceaseless development of linguistic studies. The notion of text has assumed prominence as a very comprehensive concept for many types of work such as novels, books, paintings, advertisements, electronic media, films and drama performances (COLLOW, 2005). The benefits of such *textual* approach, according to Kress (2002), are many, but at the same time, any approach to a field will privilege, by necessity, one way of thinking at the expense of other possibilities. Language, written or spoken, usually tends to be the focus of linguistic research. However, in this paper, we start from a broader perspective, drawing attention to communication in all its forms and modes; that is why our approach is multimodal. Essentially, multimodality is not a theory, but a domain of study. In our case, we look at multimodality through social semiotic lens (HODGE; KRESS, 1988; KRESS, 2010). Roughly speaking, this theory deals with action and interaction and meaning-making processes. Therefore, our main goal here is to discuss how the material resources for meaning production – which are diverse and are not limited to the use of verbal modes (speech and writing) – configure new textures for texts.

When we use terms such as *material* and *texture*, we refer to contributions of Kress (2015), by relating them to the engagement of

individuals with texts through human sensory aspects (e.g. touch or visual experiences). Meaning-making processes, in multiple articulations through material resources, have been affecting theories on speech and writing. An example of this is the study carried out by Cope and Kalantzis (2009), in which they state that language itself is invariably multimodal; writing is visually drawn, and orality has fundamentally important audio qualities.

Such argument brings to the fore the notion of *interest*, one fundamental concept of Social Semiotics, which deals with the motivations involved in meaning-making processes. Therefore, we seek to discuss notions of text and texture as motivated (non-arbitrary). To do so, we begin by relating language to text, and questioning their interdependent relation as conditions for communication. Likewise, we deal with the notion of texture as semiotic resource and some potential meanings it brings to visual and tactile surfaces. After that, we present examples of digital texts called “memes”, to exemplify semiotic modes, resources, the relation between them and their arrangement throughout the text. We also look at potential meanings produced by those texts, through the interplay of metaphors, visual and auditory modes expanding the traditional semiotic landscape.

## **2 The notion of text**

Our comprehension of *text* is mainly constituted by ideas from Beaugrande (1997), Cope and Kalantzis (2009), Halliday and Hasan (2002), Kress and van Leeuwen (2001) and Kress (2010). Overall, these studies see text as a communicative event in which cultural, social and cognitive actions converge, weaving through a mesh of motivated semiotic threads, enabling new designs, forms of interaction and representation in a communicative context. In other words, senses are constructed in increasingly multimodal forms – in which representational modes interact with spatial, tactile, gestural, auditory, and oral patterns of meaning.

When we focus on the diversity of cultural practices, we notice that it remains on a traditional notion of textual literacy, the concept of text still privileges language-based understandings. A social semiotic account on the definition of text considers images, movies, art exhibitions, music etc. as texts. Therefore, they can (and should) be analyzed with



the same consistency and complexity as traditional texts – where the verbal prevails. The study of target-audience project on those texts as well as their structure and grammar constitute means of understanding and critiquing them. We believe that there is a wide range of benefits and possibilities in using this paradigm.

When we turn to the etymology of the word text, we see it is derived from the Latin verb *texo*, which means interweave, weave, plait. Such definitions lead us to understand the term text as a unit whose parts are woven. Therefore, it is relevant to understand the intertwining of these parts and arrangements. An attempt to do that through multimodal sociosemiotic lens, implies that culture is understood as a set of semiotic systems, systems of meanings that are interrelated.

In a broad sense, Halliday and Hasan (2002, p. 4) argue that “there are many other ways of producing meaning in a culture that are outside the domain of language”, pointing to the notion of multimodality, the authors bring a simple, yet important definition about text: “We can define text, in the simplest way perhaps, by saying that it is language that is functional. By functional, we simply mean language that is doing some job in some context [...]” (HALLIDAY; HASAN, 2002, p. 10).

As we can see, the authors define text as a *metafunctional* construct, that is, language is determined by the function it serves to, whether to interact with (interpersonal function), represent (ideational function) or organize (textual function) information. Essentially, text is a semantic artefact, a social exchange of meanings, of interaction between speakers. Thus, it is taken as the main object of investigation and conceived as a social semiotic product which reveals interactional activities.

If we turn to the field of textual linguistics, Marcuschi (2008, p. 87) makes a crucial statement: “paraphrasing Kant, in a somewhat clumsy expression, that the language without context is empty and the context without language is blind”.<sup>1</sup> The linguist points out that one text cannot be produced or understood if language alone is considered. The concept of text includes notions of culture and mental processing as constitutively interconnected instances. Thus, we see an intrinsic relationship between text and context.

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<sup>1</sup> Our translation of: “Parafraseando Kant, numa expressão um tanto desajeitada, que a língua sem contexto é vazia e o contexto sem a língua é cego” (MARCUSCHI, 2008, p. 87).

Looking at contributions of Beaugrande (1997), we notice the author does not define text as a simple sum of sentences and words. Text is seen as “a system of connections between various elements: sounds, words, meanings, speech participants, actions in a plane. Since these elements clearly belong to different types, the text must be a multisystem composed of multiple interactive systems” (BEAUGRANDE, 1997, p. 16).

It is important to highlight the impact of cultural technologies involved in the production of meanings and the means of disseminating meanings as text. By technology, we mean a range of cultural resources made by society that are involved in the production of meaning material, modeling effects on the meanings produced and that are involved in the display and distribution of texts. In sum, technology is understood as (i) “technology of representation”: modes, used in the production of material meanings; (ii) “technology of production”: material resources such as a pen, paper and electronics, digital and non-digital and non-material semiotic resources such as genres, frames, cohesive devices, speeches; (iii) “technology for the distribution or dissemination of meanings as messages” (KRESS, 2015, p. 52).

Technology in the so called “era of information” enables an *ecology* (KRESS, 2015) of meanings and communication, enables the participation of social individuals in life, who dialogue with the world through texts in a sociocultural context. Therefore, our social practices are always multimodal; we always employ more than one mode when we make meaning. Voice has intonation, silence, rhythm, pace and may also have words, gesture, facial expression and so on. This perspective allows us to reconsider the role of language as the main semiotic mode in the production of meanings, solely capable of expressing all aspects of human life. A social semiotic perspective not only challenges such centrality, but also places other modes of communication at same level of importance traditionally attributed to language.

It is necessary to look at and understand some effects of the ecology of meaning as well as communication and consider that these changes will be accompanied by a broad reconfiguration of the place of language in the social / cultural / semiotic and epistemological world. By anchoring ourselves in a conception of living tongue, whose vitality is through use, we assume the agency of the subjects. In this process of agency, the meaning maker has intentions, values, desires, fears, etc. which are considered when acting by selecting semiotic modes that meet purposes of communication and representation.

Therefore, given the plurality of modes and the diversity of audience (readers), in thinking about the role of the producer (designer), we shift the focus: from a competent performance to the production of adequate (apt) design that, which demands choices that will configure the aesthetic dimension of the text and, consequently, its texture. Thus, this dimension or the aesthetic taste of the meaning maker (designer) is not divorced from the social and political forces of the situational and cultural context in which it is inserted.

All meaning-making processes are complex; they involve a wide range of connections among interests, backgrounds and experiences. In this complexity, modes are used together, constituting a set of modes – a multimodal ensemble. The notion of sign becomes a fundamental element, since it is the core unit considered by semiotic studies. Under a social semiotic perspective, signs are always motivated (and not arbitrary) and they are organized as sign-complexes – a complex of coherent elements. A complex of signs will then foster another sign-complex made by whoever interacts with the text, establishing an interweaving, a cadence between various signs used in a social interaction, in a multimodal ensemble.

Signs are produced in specific environments, intended for an audience and with specific purposes based on interests of their producer, available semiotic resources and awareness of the social environment configuration. Furthermore, Kress (2010) relates both social and individual aspects by stating that:

If the notion of ‘interest’ is extended to the making of signs by the fully acculturated, fully socialized individual, we will have to take into consideration the individual’s social and cultural histories, and her or his present social positioning in the whole complex of social structures which make up an individual’s relationship to an object or event, acting out of that social complex particular moment. (KRESS, 2010, p. 174)

In a sociosemiotic perspective, signs are metaphors because “all signs are formed in a metaphoric process” (KRESS, 1993, p. 174). When producing a sign, we associate forms and meanings through analogy, which is the essence of metaphors: “Signs are the result of metaphoric processes in which analogy is the principle by which they are formed. Analogy is a process of comparison, or classification: x is like y (in criterial ways)” (KRESS, 1997, p. 11). This can be clearly seen in Figures 3 and 4 (that will be further analyzed) where people use modes

of writing and typography in a certain way that texts may “*look like*” or “*sound like*” a child created them. The grammar and the visual aspects of writing were created through a metaphorical process of comparison.

According to Machin (2007), visual communication is rich in similar kinds of associations, in other words, available semiotic resources have potential to make meaning through metaphorical association, that is, experiential associations. For van Leeuwen (2005, p. 30), the essence of metaphor is transference. There is transference from one domain to another due to some perceived association. In other words, an association can be transported from the domain of objects in the real world to the visual elements on the page or screen.

Lakoff and Johnson (1980, p. 47) see such transport of meaning from one domain to another as a fundamental feature of the way that humans organize their experiences. The authors bring some examples of ideas. For them, we often talk about ideas through the metaphor of food such as ‘*chew over this idea*’ or ‘*I can’t swallow what you are saying*’ or ‘*I need time to digest what you have said*’. As these metaphors become so established, we cease to notice them as metaphors at all. However, such metaphor, and the meanings that they transport, according Machin (2007), are central to meaning creating in different communicative modes. Machin states that we also transport meanings of up and down into music. Melodies that go up in tone to be increasing in energy while those that go down are thought to be decreasing in energy. High and low intensities also influence the meaning of colors. The ones with a high degree of saturation are associated with high energy and intensity whereas weak colors are associated with either lower energy or with greater moderation.

Although we recognize the importance of the work Lakoff and Johnson (1980), in this work we focus how meaning are built multimodality, how metaphorical process of signs are motivated and articulated. Since all signs are metaphors, it is important to understand how the material and non-material aspects of the sign are articulated in the production of meanings. From non-material or conceptual aspects, they are understood as categories to establish entities, actions, relations, genres, frames, in other words, the means for producing cohesion and forms of coherence.

When we understand the global meaning of text, we can ask ourselves: How do we understand the role and partiality of each mode in semiotic work? At the macro level, is it possible to look at the whole and see the parts? Or at the micro level, is it possible to look at the parts of

each mode and perceive the whole? To initiate an attempt of responding to such questions, we seek to understand, in the following section, texture as a semiotic resource that enables visual perception, tactile etc. in an integrated way as well as exploring the materialization of meaning making in different media, since we take the text as a multimodal set.

## **2.1 The notion of texture as a semiotic resource for making multimodal metaphors**

In the words of Djonov and van Leeuwen (2011, p. 541), the term *texture* is originally linked to “the art of weaving and the qualities of woven materials, but gradually expanded to encompass the tactile, material quality of objects generally and the synesthetic interaction of tactile, visual and aural features”. Given the unfolding of such term, it is often used to describe the quality of modes and their resources, within a multimodal ensemble, such as the texture of sound (quality of tone such as tension, volume, roughness, vibrato), and, applied to the image, it suggests the illusion of tangibility. Under a social semiotic approach, texture is, therefore, a semiotic resource with tactile, visual, and auditory manifestations playing an increasingly important role in the semiotic scenery.

Despite the growing importance of texture in a range of semiotic practices, it has not received proper academic attention. Kress and van Leeuwen (2001) argue that such fact is due to a tendency of linguistic, literary and semiotic studies to privilege the design of texts and ignore the contribution of their production, communicative use of media and material resources to produce meanings. From the authors’ perspective, texture points to two types of potential meanings: *provenance* and *experiential meanings*.

*Provenance* is linked to the origin of the signifier and the values attributed to it in each context. Djonov and van Leeuwen (2011) situate the denim fabric, pointing out that at first it was used for the production of garments such as heavy trousers for miners, slaves etc., and in another context later the blue jeans meant in the imagination of American cowboys a preference for designating functionality, simplicity, and a choice of equality against class society, meaning a break with traditional bourgeois dress and the values associated with it. Soon, jeans became a symbol a metaphor of sophistication, refinement, elegance.

In many other contexts we can see what meanings are being attributed to material resources such as fashion, architecture, cooking

and so on due to cultural, historical and social aspects, among others. Depending on the context of interpretation, these meanings attributed to the quality and origin of the material may have negative and positive interpretations. For authors, provenance often assigns values to textures, however, it is linked to a type of general knowledge that derives from mass media rather than formal education. In this sense, it is complex to systematize, however it continues to be used by advertisers, designers, popular writers, etc.

Considering *experiential texture meanings* not only involves qualities that will be allowed for a given texture in relation to others, but also implies their link between identifying the quality of the material and associating it with one or more different senses. This movement enables the understanding of synesthesia that can be materially realized and recognized in different media (KRESS; VAN LEEUWEN, 2001). In this paper, we draw our attention to both tactile and visual textures. The tactile texture or tactile surface structure can be felt as we move our fingers lightly over the surface of an object. Tactile texture involves shape, volume, size, weight, but these three-dimensional aspects translate less easily into a two-dimensional visual representation and are less relevant to our interest in computer graphics.

Each form of texture has a value for each material quality. Djonov and van Leeuwen (2011) identified six primary tactile qualities:

FIGURE 1 – System network of primary qualities of tactile surface texture

Tactile-surface-texture	Liquidity	Wet / Dry
	Viscosity	Non- sticky / Sticky
	Temperature	Hot / Cold
	Relief	Flat / Relief
	Density	Dense / Sparse
	Rigidity	Soft / Hard

Source: Djonov and van Leeuwen (2011, p.549).

The identification of these qualities implies the production of metaphorical experiential meanings in certain contexts.

- ✓ **Liquidity** – every surface texture will have a value ranging from wet to dry, can be associated with the idea of water, life, human skin and so on. And negatively can mean rot, ruin etc.
- ✓ **Viscosity** – may have negative associations by the term itself or by associations with contamination, such as a bathroom or a dirty kitchen. However, it may suggest the idea of safety, support, help as in ergonomic design of bicycle handlebars or mouse pads.
- ✓ **Temperature** – are rich sources of metaphors, cold can mean lack of affection while warm conveys the idea of warm, affectionate, intimacy etc.
- ✓ **Reliefs** – relief meanings will depend on many factors, flat surfaces may indicate lack of engagement, however on the plus side may indicate softness, suggesting youth, something new and purity etc.
- ✓ **Density** – can evoke the idea of solidity, resilience, high quality due to abundance whereas low density (drainage) can evoke the idea of economy, poor durability, brittle etc.
- ✓ **Rigidity** – rich source of experiential metaphor. Softness may indicate sensitive, submissive, accommodating while firmness / rigidity may indicate strong, durable, stable or severe.

Regarding the visual texture, in general, it can be presented visually through specific techniques for the use of colors, lines, shapes. Visually representable tactile surface texture qualities can be categorized into material, association and symbolic qualities. Material qualities can be described without reference to specific objects: Relief – achieved by the absence or presence of curves, uneven lines, color variations; Density – can be presented by distributing lines, colors, color variation and saturation; Rough or smooth – made by gradations of color use and line distribution; Consistency – created by the homogeneity or heterogeneity of the use of colors, lines and shapes.

As far as associative qualities are concerned, they can be described as specific aspects of objects. They include liquidity, viscosity and rigidity and, in some cases, temperature. For instance, the softness of velvet can only be suggested through representations of objects made by velvet such as dress, curtains etc. Visual representations of dry or damp surfaces are also suggested by objects such as cracked soil, an old dry tree or liquid in a glass of water in case of moisture. In the case of the visual representation of an ice cream, regardless of color, it would

evoke the idea of something cold, icy and project on the reader, in intense heat conditions, the synesthetic effect of freshness, relief. In short, the material qualities of this group are strongly linked to the objects used for representation, blurring the boundaries between provenance and potential experiential meanings. As an example, Djonov and van Leeuwen (2011) situate velvet as a delicate fabric that is likely to evoke luxury, ostentation, while a more durable jean fabric can evoke practicality.

As for symbolic qualities, they have a conventional representation and evoking the meanings that tactile qualities suggest, such as the use of warm or cold colors to represent cold or warm surfaces. However, the authors state that some visual textures have no equivalent tactile texture as they include intrinsic visual patterns to the object; patterns that reflect an object's interaction with the environment such as transparency, lightness, and abstract patterns. Transparency, for example, can be achieved by varying the distribution and color values, which may or may not represent tactile qualities of liquidity and density. If it does not represent tactile qualities, its potential meaning will be similar to others.

In short, while some texture qualities may apply to different media and being described as synesthetic, others may be purely visual or purely tactile. The purely tactile qualities are inaccessible to the visual. However, the qualities that are shared can be used in software application and evoking tactile sensations and associated meanings in different extensions. In general, we have studied the visual, auditory, tactile texture in isolation, looking at the small parts. In this sense, we explore the design of the meme genre seeking to understand which textures have been articulated; which qualities and aspects of potential tactile or visual texture meanings have been used. Thus, the notion of texture (provenance and experiential meanings) as a semiotic resource to make meaning material evokes the multimodal metaphors.

### **3 Meme as a genre**

We believe a few examples will provide great contributions to our discussion on the notions of text, texture and multimodal metaphors. We chose memes<sup>2</sup> because they represent a current genre that has become quite popular. Therefore, we intend to analyze them, focusing on aspects

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<sup>2</sup> A digital text which usually combines an image with one or two phrases that are often ironic or sarcastic.



of the materialization of meaning, considering the various multimodal aspects that emerge from this genre.

For Marcuschi (2008, p. 155), “textual genres are texts that we find in our daily life and present characteristic socio-communicative patterns defined by functional compositions, enunciative objectives [...]”.<sup>3</sup> Thus, in this paper we consider the meme as a genre, because it has a prototypical textual structure: the language is usually mixed, presenting an image that is noteworthy and is associated with verbal elements which usually appear in the lower or upper margin with the foreground image, characterized as a multimodal text. In addition, they have a typical function: to present content that can be humorous, ironic or critical, which spreads quickly on the web. Thus, by presenting a structure and a function, we consider it pertinent to understand the meme as a genre. Therefore, it is defined as being made up of multimodal characteristics with the tendency to replicate it quickly and to transform it at the same pace.

Moreover, analyzing the meme genre shows that the language is not only constituted by structure; therefore

every language carries within itself a worldview [...] beyond its formal aspect. Studying only the formal aspect [...] detaches the student from the intrasubjective, intersubjective and social character of language (BRASIL, 2000, p. 6-7).<sup>4</sup>

The meme genre also plays an important role today, as just as diverse information is quickly shared across countless media, it also spreads significantly. Another aspect that we emphasize is the prominence received by the image in the meme, which reveals a relationship of this kind with social demands, because “In an attempt to explain intense emotions, statements on numerous subjects, feelings, and political, social, economic, and affective positions, memes emerge as representations of a contemporary culture with fluid implications, and spread rapidly” (CANI, 2019, p. 252).

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<sup>3</sup> Our translation of: “os gêneros textuais são textos que encontramos em nossa vida diária e que apresentam padrões sociocomunicativos característicos definidos por composições funcionais, objetivos enunciativos [...]” (MARCUSCHI, 2008, p. 155).

<sup>4</sup> Our translation of: “toda linguagem carrega dentro de si uma visão de mundo preñha de significados que vão além do aspecto formal. O estudo apenas do aspecto formal [...] desvincula o aluno do caráter intrasubjetivo, intersubjetivo e social da linguagem” (BRASIL, 2000, p. 6-7).

In this sense, the meme genre is associated with the aspirations of today's society to transmit a message through multimodal resources, using a small, objective and viralizing verbal language. In this perspective, the meme connects to this new culture called *cyberculture*, conceptualized by Lévy (1999) and further explained by Bruno (2019, p. 119) "understood as the culture of digital networks, it is plural and plastic, as it houses multiple sociocultural movements in cyberspace". Therefore, memes allow us to identify the variety of meanings that are made through communication and how multimodal metaphors manifest themselves in contemporary times.

This genre also reaffirms an understanding of the complexity of language, since

The true substance of language is not constituted by an abstract system of linguistic forms, neither by the isolated monological utterance, nor by the psychophysiological act of its production, but by the social phenomenon of verbal interaction, carried out through utterance or utterance. Verbal interaction thus constitutes the fundamental reality of language (BAKHTIN, 2006a, p. 125).<sup>5</sup>

Accordingly, when we observe the construction of meanings in modernity, we note that digital technologies contribute to the emergence of new genres permeated by multimodality, which collaborate in the resignification of the role of receiver and producer of texts, not inserting them in isolated concepts and opposites, but from an integration perspective where the recipient of the text can also play the role of producer and vice versa.

#### **4 Meme genre analysis: mapping potential meanings**

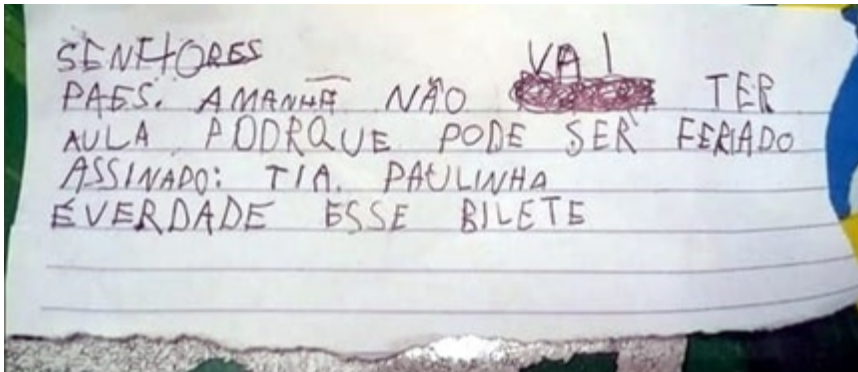
For genre analysis, we chose memes that had a significant repercussion in 2018 and demonstrated how constructed meanings are directly related to cultural, social and ideological patterns. In addition, they exemplify Halliday and Hasan's (2002) notion of text and explain how texture as a semiotic resource contributes to the perception of multimodal metaphors.

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<sup>5</sup> Our translation of: "a verdadeira substância da língua não é constituída por um sistema abstrato de formas lingüísticas, nem pela enunciação monológica isolada, nem pelo ato psicofisiológico de sua produção, mas pelo fenômeno social da interação verbal, realizada através da enunciação ou das enunciações. A interação verbal constitui assim a realidade fundamental da língua" (BAKHTIN, 2006b, p. 125).

In 2018, a 5-year-old boy from the interior of São Paulo handed a note to his mother, informing her that there would be no class due to a possible holiday. In addition, the boy attributed the authorship of the note to his teacher, as shown in the following image:

FIGURE 2 – Meme #1<sup>6</sup>



We highlight the fact that the boy was able to produce a note following basic characteristics of this genre; however, when committing inadequacies regarding the standard norm (such as: *paes*, *podrque*, *bilete*); erasures (which would not be typical on a teacher's note); handing out a piece of paper that is detached in any way with uneven letters – which may characterize a child's handwriting – makes it clear to the mother who is the real author of the note.

By associating the notion of texture of Kress and van Leeuwen (2001) with this note, we understand the potential meanings mentioned by the authors (provenance and experiential meanings). About provenance, we realize that the origin is not a note written by a teacher or whose origin refers to an educational institution. The characteristics previously listed, such as irregular writing, orthographic inadequacies and the paper, reinforce that the sender of this message was a child.

As for the experiential meanings, on the piece of paper, we realize that there is no linearity in the margins, there are curves in the lower margin, which reveals a visual texture that can be associated with the tactile in which the relief aspect is highlighted by the irregularities.

<sup>6</sup> Available at: <https://segredosdomundo.r7.com/e-verdade-esse-bilhete-um-dos-maiores-memes-de-2018/>. Access on: Sept. 7<sup>th</sup>, 2019.

Thus, these textures evoke the certainty that the note was not written by the teacher, who, even if she had written it in handwriting, probably she would have been more careful in selecting and cutting out the paper. Still regarding the experiential meanings, we emphasize once again the asymmetry and variation of the letter size, which reveals a visual texture through the relief (presence of irregularities) and the consistency (heterogeneity in the size of the letters), reaffirming the sense that the note was not written by aunt Paulinha.

From this note, several memes were viralized on the internet with different themes, but always with the catchphrase: ‘this note is true’. Therefore, we will analyze two memes constructed based on this context, one with a playful content and another that addresses a controversial issue of today. Next, we will see how the notions of texture manifest in the meme that there is bias towards entertainment and distraction, whose protagonist is a dog.

FIGURE 3 – Meme #2<sup>7</sup>



<sup>7</sup> Available at: <https://www.tribunapr.com.br/noticias/brasil/show-de-memes-depois-do-menino-do-bilete-os-pets-mandam-seus-recados-para-seus-donos/>. Access on: Oct. 11<sup>th</sup>, 2019.

In this meme, concerning experiential meanings we note that, regarding the tactile textures, we can highlight, in terms of liquidity, the dry quality, because the moisture characteristic does not dominate the environment. Thus, on the floor, there is no water, mud, or dirt, which leads to the idea that the owner cares about hygiene, demonstrating not only cleanliness, but also affection and zeal. In addition, this care also manifests itself in the dog's hair (white and clean), which expresses a concern for the welfare of the pet. We also highlight that when it comes to rigidity, the dog's hair allows to associate visual textures with tactile, because this specific aspect conveys softness.

Regarding the ticket, it follows similar characteristics from its origin: similar structure with the completion of the sentence: "this note is true". There are some differences from the original text, as the meme in question has no signature, no erasures, and although it is written on a piece of paper, it does not have as many irregularities in the cut as the paper chosen by the boy on the original note. Regarding the linguistic aspect in this meme, the only orthographic inadequacy is the word *bilete*. In relation to the potential meanings, in the provenance aspect, the text suggests that the authorship belongs to an adult, probably a veterinarian, indicating the care that the parents (in this case the dog owners) should take with the pet.

However, the visual textures that emerge from this note in the item *relief* reveal the idea of authorship. It is noteworthy that the text was written in a simple notebook paper, detached without scissors, due to the irregularities presented in the left margin, which denounce that the vet was not the author of the ticket. Still in the relief aspect, the irregularities are also manifested in the spelling of the letter. The content also shows that the vet is not the real author, as he would not make a recommendation to bathe only once a year and, on the other hand, to walk ten times a day. Thus, as to the provenance, the intention is to convey the idea that the author of the note would be the dog, which is reaffirmed by the dog's pitying gaze, as if he wished the owner to follow exactly what is written on the note. On the other hand, as the dog has no skills to write a note, we know that its authorship refers to its owner, as a way to generate entertainment in relation to the statement: "This note is true".

Visual textures of the image as a whole, in relation to consistency, reveal a uniformity of colors, as there is a dominance of lighter and neutral tones, allowing to infer multimodal metaphors that evoke an environment

of tranquility, harmony, which can be associated with a happy home. The notions of texture amalgamate, building a web of meanings that allows us to understand how the internet plays an important role in society. From this perspective, a note from a boy has such a significant repercussion that people reproduce scenarios, texts that can become memes and generate various social, political, and cultural impacts, among others; tied to a particular context.

Then we will look at another meme with the sentence: *É verdade esse bilette*:

FIGURE 4 – Meme #3<sup>8</sup>



In Figure 4, the visual mode presents babies sitting on a couch and holding a sheet of paper. Regarding the verbal mode, we notice inadequacies in relation to the standard variety, such as: *toma, vasina, doctor, e, ese, bilette*. Thus, on the provenance, the note indicates at the signature that this information was given by a doctor. However, looking at the visual textures evoked by the meme, we highlight the irregularities

<sup>8</sup> Available at: <http://www.museudememes.com.br/sermons/e-verdade-esse-bilette/>. Access on: Oct. 11<sup>th</sup>, 2019.

of the letters in the relief aspect, which vary in size and thus reveal a heterogeneity in the size of the letters (consistency), reaffirming that the text was not written by a doctor. Moreover, still on the provenance, it is not common for doctors to write notes, but a prescription which has a prototype structure with the name of the patient, prescription, date and signature of the doctor. Thus, the evoked textures allow us to infer that this health professional is not the author of the note, nor the babies, since they cannot yet write a text. The likely authors would be the parents of the babies who appropriated the statement: *This note is true*, through the discursive context, to arouse criticism about the act of not vaccinating.

As for the experiential meanings, we also mentioned an association between tactile and visual textures, since the presence of babies evokes, in the rigidity aspect, the characteristic of cuteness, conveying empathy, affection. This smoothness aspect is also expressed in color consistency, with light and neutral tones, which delivers a sort of lightness to the criticism, that is, it manifests itself in the discursive context without an aggressive bias. All these meanings characterize the transference, quoted by van Leeuwen (2005), showing that way the multimodal metaphors.

While not being hostile, the strategy of placing babies as alleged authors of the note makes the criticism manifest clear, since it is possible to infer the question: the opinion of babies on more complex issues has a scientific basis, can you accept it passively?

The criticism raised by this meme addresses a controversial issue today, as anti-vaccination movements have been growing in various parts of the world, which has generated different points of view. On the one hand, those in favor of the movement against vaccination, for various reasons, such as: side effects (because they believe that immunization can lead to permanent disability for the child); syringe contamination (for them there is no guarantee for the use of disposable materials); lack of belief in the effectiveness of vaccination; the association of vaccination with autism; lack of trust in the pharmaceutical industry, among others, listed on different websites and in different media, such as WhatsApp, Facebook, Instagram. On the other hand, there are health agencies, health professionals, the pharmaceutical industry and several citizens who defend immunization, anchored in other arguments: disease prevention; belief that lack of vaccination may allow the return of eradicated diseases; personal and collective protection; reduction of high costs for

disease treatment; benefits of immunization for the protection of future generations, among others, found on various websites, scientific articles and in the media in general.

Furthermore, this meme reinforces that “memes contribute not only to generating humor but also to recording human thinking through social criticism” (CANI, 2019, p. 263). Thus, we emphasize that memes are important instruments for taking positions. Through them, it is possible to address different issues, such as: politics, economics, racial discrimination, religion, violence, among others, and define an opinion about them. As argued by Rojo (2012, p. 30), this aspect meets critical literacies “that seek to interpret the social and cultural contexts of circulation and production of these designs and statements. All this aiming, as an ultimate instance, to the production of a transformed practice [...]”.<sup>9</sup>

## 5 Conclusion

By proposing a discussion around the notion of texture as a synesthetic semiotic resource, we seek to address the possibilities of meaning production that it brings to visual and tactile surfaces. Our discussions focus on the meme genre in which resources are articulated in the construction of complex signs so that we produce meanings in an integrated way, in other words, in a multimodal set.

Besides seeing characteristics and functions of the meme as a text of cyberculture, we understand that semiotic work with this genre enhances the agency of subjects through the choice and selection of semiotic resources to materialize meanings. We observe that the choice of each mode and its affordances respectively is guided by the producer’s interest. Thus, the sign reflects the interest of its producer in a process of metaphorical construction to get, at a given moment, its communicative purposes. Thus, the selection criteria are defined from metaphorical associations, in other words, experiential associations.

If we assume that our interactions are metaphorical, mediated by signs that are created at each interaction, in turn, motivated by the

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<sup>9</sup> Our translation of: “que buscam interpretar os contextos sociais e culturais de circulação e produção desses designs e enunciados. Tudo isso visando, como instância última, à produção de uma prática transformada [...]” (ROJO, 2012, p. 30).



interest of its producer, it is necessary to observe the semiotic work we do in choosing each mode besides understanding the work carried out by the representation and production technologies. Memes reveal how these associations weave texts and provide, in the words of Djonov and van Leeuwen (2011), synesthetic interaction of tactile and visual characteristics.

The semiotic work involved in the instantiation of memes shifts the reader into a meaning making process in which he/she needs to interact, negotiate, refute and so on. The articulation of these modes in memes is largely aimed at (re) contextualizing texts by provoking irony, humor, satire etc. thus transgressing the fixed and arbitrary character of the sign, (re) placing it in the ongoing process of creation to register the interest of a cognitively reflecting / dialoguing subject in a place in the physical, social, historical, cultural, conceptual world.

We shifted our focus away from describing meanings of visual communication to potential meanings of people, places, and things represented, and came to describe them in terms of combinations of abstract qualities, thus leaving the lexical logic to grammar logic, which allows us to construct a multitude of sign-complex with a toolbox composed of a restricted set of lexical options and grammatical operations. In short, this parallel, from the logic of the lexicon to the logic of grammar, reinforces the value of studying the text from a semiotic perspective.

As we reflect on how the qualities and aspects of tactile and visual textures that emerge from memes' multimodal metaphors, we realize that a singular statement '*é verdade esse bilhete*' – this message is true – can turn into multiple meanings that imply a collectivity. Moreover, in order to understand the discourse(s), which may be inferred from texts, one must understand, behind a linguistic bias, the various semioses, semantic, pragmatic aspects raised by all forms of communication.

### **Authorship Statement**

This paper developed by the three authors, members of the Brazilian research group in Multimodality, Reading and Text – GEMULTE, funded by the National Council for Scientific and Technological Development (CNPq). Data collection was performed by the third author. The authors selected the corpus and designed the analysis in the article. All authors collaborated on interpreting results, writing and revising the paper.

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## Multimodal Metaphors of Interculturereality

### *Metaforas multimodais da interculturerealidade*

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**Abstract:** The present paper looks at the interactive construction of multimodal metaphors of interculturereality – a term coined by the author from interculturality and intercorporeality, assuming that intercultural interaction is always an embodied phenomenon, shared among its participants. For this, two videotaped sequences of a group conversation are analyzed drawing upon interaction analysis (COUPER-KUHLEN; SELTING, 2018). The data was transcribed following the GAT2 (SELTING *et al.*, 2011) guidelines, including gesture form annotation, which relied on the system described by Bressemer (2013). Gesture function was interpreted drawing on the interactional context and on the system proposed by Kendon (2004) and Bressemer and Müller (2013). The results question the validity of the classical conduit metaphor of communication (REDDY, 1979) in the intercultural context and instead propose an embodied approach to the conceptualization of the understanding process among the participants. The analysis also shows that even though the metaphors are multimodal, the metaphoric content is not always evenly distributed among the different modalities (speech, gesture). Apart from that, the metaphorical content is constructed sequentially, referring to preceding metaphors used by the same or different interlocutors and associated with metaphorical blends.

**Keywords:** metaphors; multimodality; interculturality; intercorporeality; migration.

**Resumo:** O presente artigo analisa a construção interativa de metáforas multimodais da interculturerealidade – um termo proveniente da interculturalidade e intercorporealidade, assumindo que a interação intercultural é sempre um fenômeno incorporado, compartilhado entre os seus participantes. Para tal, duas sequências gravadas em vídeo de uma conversa em grupo serão analisadas com base na análise da interação (COUPER-KUHLEN; SELTING, 2018). Os dados foram transcritos seguindo as

orientações do sistema GAT2 (SELTING *et al.*, 2011), incluindo a anotação da forma gestual, que se baseou no sistema descrito por Bressemer (2013). A função dos gestos foi interpretada com base no contexto interacional e no sistema proposto por Kendon (2004) e Bressemer e Müller (2013). Os resultados questionam a validade da metáfora clássica do conduto de comunicação (REDDY, 2012) no contexto intercultural e, além disso, propõem uma abordagem corporificada da conceituação do processo de entendimento entre os participantes. A análise também mostra que, embora as metáforas sejam multimodais, o conteúdo metafórico não é sempre uniformemente distribuído entre as diferentes modalidades (fala, gesto). Além disso, o conteúdo metafórico é construído sequencialmente, referindo-se a metáforas anteriores utilizadas pelos mesmos ou diferentes interlocutores e recorrendo a mesclagens metafóricas.

**Palavras-chave:** metáforas; multimodalidade; interculturalidade; intercorporeidade; migração.

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## 1. Introduction

Migration is a phenomenon that has been an integral part of societies since the beginning of humanity. It has, however, attained new superdiverse (VERTOVEC, 2007) dimensions in the course of the past decades, leading to unexpected social compositions. The conviviality in modern societies is thus becoming a challenge, and calls for the understanding of interculturereality. This term is a coinage of the terms *interculture* and *intercorporeality* and refers to the embodied co-construction of reality in intercultural settings. The term *interculture* is defined as an ad hoc creation of “culture constructed in cultural contexts” (KOOLE; THIJE, 1994, p. 69). This ad hoc creation is blended with prior cultural norms and models of the interlocutors, which leads to a “mutual transformation of knowledge and communicative behavior rather than transmission” (KECSKÉS, 2014, p. 15). The creation of *intercultures* therefore, can contribute to successful conviviality. However, how does this transformation process take place in interaction?

Interaction studies show that interactions are essentially co-created through the microtuning of the interlocutors (BARTH-WEINGARTEN; REBER; SELTING, 2010). This also takes place in narratives, to which listeners contribute actively through response-tokens (GARDNER,

2001). Certainly, this is also the case in intracultural communication, however, in intercultural settings a core common ground – in the sense of “[c]ommonalities, conventions, common beliefs, shared knowledge, and the like all” (KECSKÉS, 2014, p. 2) – is limited and thus cannot be taken for granted. Therefore, the interlocutors need to co-construct the common ground and not merely seek and activate it, as it would be the case in intracultural interaction. This leads to a change in intersubjectivity and language use: “So the nature of intersubjectivity seems to be undergoing change. There is more reliance on language created ad hoc by individuals in the course of interaction than on prefabricated language and preexisting frames” (KECSKÉS, 2014, p. 2).

Here the second term of the coinage – intercorporeality – comes into play, which was first introduced by Merleau-Ponty and has currently been taken up by studies on embodied interaction. This line of research views “the human body as being constituted by its corporeal relations and interactions with other human or animate bodies” (MEYER; STREECK, JORDAN, 2017, p. xviii). As Tanaka (2015, p. 462) puts it “Intercorporeality contains a perception–action loop between the self and the other. Perceiving the other’s action prompts the same action in the self (like contagious yawning) or the possibility of the action (like smiling). Conversely, the self’s action prompts the same action, or its possibility, in the other’s body.” (TANAKA, 2015, p. 462). This can also apply to emotions as Fuchs (2017) points out recurring to the term *bodily resonance*, which he defines as “an intuitive understanding of others’ emotions in our embodied engagement with them” (FUCHS, 2017, p. 3). The interlocutors, however, are not necessarily conscious of this since “[t]he ongoing interaction induces, on a prereflective level, a process of mutual modification of bodily and emotional states, thus enabling a primary form of empathy without requiring any representations” (FUCHS, 2017, p. 3). Intercorporeal resonance, therefore, cannot be controlled, even though it is the basis for social relations (MEYER, STREECK, JORDAN, 2017, p. xxv-xxvi). In that sense intercorporeality aims at extending the concept of intersubjectivity in that the ego’s reflexive circle is enlarged by including the alter ego and the surrounding environment (MEYER; STREECK; JORDAN, 2017, p. xxi).

A migration experience – understood as a long-term change of the living environment – brings about a change in all of these components: the (cultural) environment changes, the actions of the alter ego are different and have to be interpreted in different ways than in the country

of origin and thus the ego itself has to go through a transformation process. All of these components are intertwined and influence each other in diverse ways, some of which the subjects involved are not even conscious about, because they are not part of the explicit knowledge. Instead “schemes of orientation and interpretation” (SCHÜTZ, 1944) are changed through the process of interaction with the new cultural environment. Even though the schemes of orientation are implicit, they become visible in interactions in focusing passages with metaphorical and interactive density as centers of common experience (BOHNSACK; NENTWIG-GESEMANN; NOHL, 2007). Being incorporated, they are also observable in spontaneous gesture (CIENKI, 2008), also called gesticulation (KENDON, 1988) or *ceiving* (STREECK, 2009). Apart from that, gesture can also “reveal metaphoric thinking, which may be taking place with or without accompanying speech” (CIENKI; MÜLLER, 2008, p. 2). The multimodal or verbo-gestural (MÜLLER, 2008) metaphors can have the same or different source domains, thus permitting further insight into the conceptualization processes. Metaphors are understood in the present article in the sense of “understanding one conceptual domain in terms of another conceptual domain” (KÖVECSES; BENCZES, 2010, p. 4) in the sense of “CONCEPTUAL DOMAIN A IS CONCEPTUAL DOMAIN B”.

## 2. Methodology

The sequences analyzed in the present paper are taken from a group discussion among Brazilian migrants in Germany that has been recorded in the context of a larger research project by the author (LADILOVA, forthcoming). The participants had been living in Germany for about three years at the point of filming. The interaction was motivated by question cards that were placed in the middle of the table, allowing speakers to switch the topics whenever they felt it was necessary. The interactions were transcribed according to the GAT 2 conventions (SELTING *et al.*, 2011) and the gestural form was annotated drawing upon the system proposed by Bressemer (2013). The annotation of the gestures was included into the GAT 2 transcription, using abbreviations of the hand shape and orientation such as “LOH PLTB” (left open hand palm lateral towards body) and adding the direction, quality and type of movement as well as the position in the gesture space whenever necessary. Apart from that in some cases, the gestures were described



in their phases, such as preparation, pre-stroke hold, stroke, post-stroke hold and retraction (MCNEILL, 2016, p. 5-6).

The interpretation of the gesture form was done drawing upon the interactional context and the gesture functions proposed by Kendon (2004) and Bressemer and Müller (2013). Initially, the focus of the analysis was merely on the “central” multimodal metaphors that are used when referring to interculturereality. In the process of analysis, however, it became clear that many of the metaphors around these central parts are either also metaphors of interculturality themselves or they are central for the interpretation of the metaphors of interculturereality. It therefore, was decided to conduct a sequential analysis (SCHEGLOFF, 2007). Instead of taking sequences from different interactions or different speakers, the focus of the analysis was placed on two sequences from the same interaction and the same speaker when she refers to the same topic: interculturereality with a German friend of hers. While the first sequence is a more general “introduction” of the interactions with her friend, the second sequence goes into details about the challenges of achieving understanding in these interactions. This type of analysis helps to gain an in-depth understanding of the phenomenon in question: the conceptualization of interculturereality.

### **3. Analysis**

#### **3.1 Living and moving between cultures**

The first example is based on a sequence that took place after half an hour of conversation while the participants were discussing the question card “Do you feel integrated in Germany and why?”. While answering this question the speakers first engaged in discussing their own situation as still not quite what they would want it to be and then looked for reasons for this. One of these reasons seems to be the German culture or the way German people are “hard to conquer”. This war metaphor makes it clear that the interlocutors conceptualize the process of making friends with Germans as difficult. The speaker of the current sequence then mentions her only German friend and describes her as atypically German, because she is spontaneous in planning encounters. She then explains that she (her friend) had already lived in France and even has a Brazilian in her family, and it is, therefore, easier to reach a common understanding with her.

- G1 00:34:46.779 - 00:35:31.762)<sup>1</sup>
- 01 CB: <<2OH PU> mas é alguÉM,>  
but it's someone
- 02 <<ROH PLAB, LOH PLTB right> que já viveu na FRAnça,>  
that had already lived in france
- 03 <<ROH PLTB, LOH PLAB left> e JÁ tem um pouco de:,>  
and already has a little bit of
- 04 <<ROH PLAB, LOH PLTB right and left> (.) conTAtO;>  
contact
- 05 <<2OH PLTB> tem alguém brasileiro na faMÍlia, atÉ;>  
she has a Brazilian person in the family even
- 06 (-) eu acho que <<LOH PLTB up and down, looking at AA> acaba  
entendeNdo um pouco melho:r,>  
i think that she is able to understand a bit better
- 07 AA: (nods slightly))
- 08 CB: <<2 stretched back and forth> e a gente vive entre cultURas;=>  
and we live between cultures
- 09 <<2 stretched back and forth> =eu tentando entender ELA,  
me trying to understand her
- 10 ela tentando me entendeR;  
she trying to understand me
- 11 (-) mas é !RA!ro encontrar alguém <<nodding, looking at AA> que  
queira, (.)>  
but it's seldom to find someone who wants to
- 12 AA: ((nods slightly))
- 13 CB: <<LH fist dropping down> realmente !TO!pe,> ((looks at GA))  
really accepts
- 14 GA: <<p> uh::m;>
- 15 CB: (.) esse desaFIO de:,<  
this challenge of
- 16 <<L2 stretched left and right, looking at GA> (.) interculturAl  
assim;=>  
intercultural like that

<sup>1</sup> The video of this sequence can be accessed following the link: <https://youtu.be/mLgtcH7ERvM>

17 GA: ((nods slightly))

18 CB: <<lifting eyebrows, shaking head> =Entre,  
between


19 (.) é, os brasiLEIros <<nodding> e os alemães>  
well, the brazilians and the germans

20 GA: ((laughs))

21 AA: ((smiles and nods slightly))

While referring to her friend *mas é alguÉM*, (L01), CB makes a palm up gesture with both hands (image 1a.) that are then moved to the left (image 1b.), while she speaks about her friend having lived in France <<ROH PLAB, LOH PLTB right> *que já viveu na FRANça,* (L01) and then to the left (image 1c.) and again to the right and to the left concluding that she (her friend), therefore, has already had some (intercultural) contact <<ROH PLTB, LOH PLAB left> *e JÁ tem um pouco de:,>* <<ROH PLAB, LOH PLTB right and left> *(.) conTAtO;>* (L03-04, image 1d.). CB adds that her friend even has somebody from Brazil in her family while holding her hands with open palms towards her body <<2OH PLTB> *tem alguém brasileiro na família, atÉ;>* (L05, image 1e.).

**1: Right and left movement (L02-04)**

	<p>01 &lt;&lt;2OH PU&gt; <i>mas é alguÉM,&gt;</i> but it's someone</p>
--	--



b.

02 <<ROH PLAB, LOH PLTB right> que  
 já viveu na FRANça,>  
 that had already lived in france



c.

03 <<ROH PLTB, LOH PLAB left> e JÁ  
 tem um pouco de:,>  
 and already has a little bit of



d.

04 <<ROH PLAB, LOH PLTB right and  
 left> (.) contAto;>  
 contact



05 <<20H PLTB> tem alguém brasileiro na família, até;>  
she has a Brazilian person in the family even

e.

The gesture in image 1a. is a classical palm presentation gesture (KENDON, 2004, p. 271) which is used in explanations. This gesture belongs to the palm up open hand (PUOH) gesture family, which has the pragmatic function of “presenting an abstract discursive object as a manipulable and visible one, inviting participants to take on a shared perspective on this object” (BRESSEM, MÜLLER, 2013, p. 1582). With this gesture, CB metaphorically places the content of her speech in front of her, as if it was an object and draws the attention of the other interlocutors to it. The following movement of her hands to the right and to the left (images 1 b., c. and d.) shows the movement of that object between two different spaces. This movement illustrates the intercultural contact of CB’s friend as moving from one culture to another. This gesture is iconic in that it shows the movement between cultures and metaphoric in that it refers to the conceptual metaphor INTERCULTURAL EXPERIENCE / CONTACT IS MOVING FROM ONE CULTURE TO ANOTHER. Since CB also uses the word ‘contact’ <<ROH PLAB, LOH PLTB right and left> (.) conTato;> in her speech, in L04 the metaphor of (cultural) contact is, therefore, a verbo-gestural or a multimodal one.

CB then states that her friend can, therefore, understand (her) a bit better (-) eu acho que <<LOH PLTB up and down> acaba entendENDO um pouco melho:r,> and moves her hand – that she had lowered down to her lap – slightly up and down with the palm in a lateral position towards her body (L06, image 2).

## 2: Up and down movement (L06)



(-) eu acho que <<LOH PLTB up and down, looking at AA> acaba entendENDO um pouco melho:r,>  
i think that she is able to understand a bit better

This gesture is a palm presentation gesture, which CB is not able to open to a palm-up position due to the lack of space. This gesture can have the function of an explanation, a comment or a clarification (KENDON, 2004, p. 271), which would all fit the given context in which CB comments on her friend having had intercultural contact, and therefore, being able to understand (the cultural specificities of CB). While performing this gesture, CB looks at AA, who responds with a slight nod – a response token (GARDNER, 2001) which can be carried out through speech (e.g. “uhu:m;”), slight nodding or both (nodding and speech) and is also called backchanneling (WAGNER; MALISZ, KOPP, 2014) or acknowledgement (SCHEGLOFF, 1982). This token displays active listenership without affiliative stances.

CB then says that they (she and her friend) live in-between cultures, trying to understand each other: <<2 stretched back and forth> e a gente vive entre cultURas;=> <<2 streched back and forth> =eu tentando entender ELA, ela tentando me entenDER; moving both hands back and forth with the index finger stretched out (L08-10 / image 3).

**3: Back and forth movement (L08-10)**

08 <<2 stretched back and forth> e  
 a gente vive entre culTURas;=>  
 and we live between cultures

09 <<2 stretched back and forth>  
 =eu tentando entender ELA,  
 me trying to understand her

10 ela tentando me entenDER;  
 she trying to understand me

At a first glance, this gesture could easily be interpreted as an example of the classical conduit metaphor of communication (REDDY, 1979) in the sense of “COMMUNICATION IS SENDING MEANING OBJECTS FROM A MIND CONTAINER TO ANOTHER MIND CONTAINER ALONG A CONDUIT” (KÖVECSES; BENCZES, 2010, p. 234). However, the expression *viver entre culturas* “to live between cultures” in L08 as well as the use of *gerund* in L09-10 make it clear that CB is not conceptualizing herself and her friend as mind containers that merely exchange meaning objects along a conduit. Instead, they both inhabit the space in-between cultures while they construct their interculturereality, which consists of moving between the respective cultures that are conceptualized as locations on a path. The movement of the fingers, therefore, points to the movement of CB and her friend and not of mere objects. The multimodal metaphor expressed here is INTERCULTURAL UNDERSTANDING IS MOVING BACK AND FORTH ON THE PATH BETWEEN CULTURES.

At the end of the given sequence CB concludes that it is rare to find somebody who really wants to accept this intercultural challenge: (-) *mas é !RA!ro encontrar alguém <<nodding, looking at AA> que queira, (.)> <<LH fist dropping down> realmente !TO!pe,> (.) esse desaFIO de:, <<L2 stretched left and right, looking at GA> (.) interculturRAL assim;=> (L11-16).*

She puts an extra strong accent on !RA! ro “rare” (L11) and !TO!pe, “accepts” (L13), also adding a gestural accent to the last word by letting her drop fall down (image 4).

#### 4: Dropping of the fist (L13)



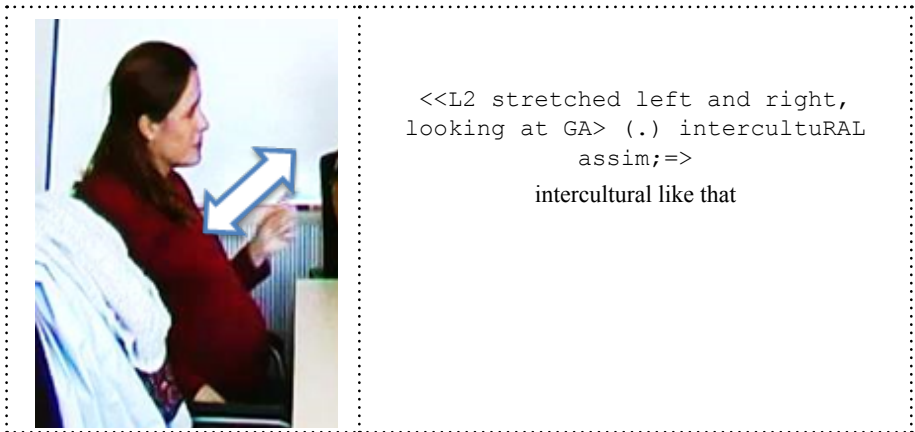
<<LH fist dropping down> realmente  
!TO!pe,> ((looks at GA))  
really accepts

The dropping of the fist gesture visualizes the difficulty that CB is speaking about – the effort of accepting the intercultural challenge. The metaphor of effort is thus expressed by multimodal means: the dropping of fist gesture and the words !TO!pe, “accepts” (L13) and desaFIO “challenge” (L15). In L11 CB looks at AA, who responds by nodding slightly in the next line. Then CB looks at GA in L13, who reacts with a quiet <<p> uh::m;> in L14. Both turns (L12 and L14) are response tokens as already mentioned above.

CB then makes a left and right movement with her left index finger, while she talks about interculturality <<L2 stretched left and right, looking at GA> (.) intercultural assim;=> (L16 / image 5).



### 5: Back and forth movement (L16)



This right and left movement with the stretched finger seems to be a blend (FAUCONNIER; TURNER, 2002) of gestures used by the speaker previously as shown in the following image: left and right movement that CB made in L02-04 when referring to the (inter)cultural experience of her friend (image 1d. / 6a.) and the back and forth movement with the stretched index fingers when speaking about the intercultural understanding process with her friend (L08-10, image 3 / 6b.).

### 6: Gesture blend



a.

INTERCULTURAL EXPERIENCE /  
CONTACT IS MOVING FROM ONE  
CULTURE TO ANOTHER



b.

INTERCULTURAL UNDERSTANDING  
IS MOVING BACK AND FORTH ON  
THE PATH BETWEEN CULTURES



c.

ACCEPTING THE INTERCULTURAL  
CHALLENGE IS BEING ABLE TO  
MOVE IN-BETWEEN CULTURES



The gesture blend is an indication of a conceptual metaphoric blend of the cultural contact and the intercultural understanding process leading to the metaphor ACCEPTING THE INTERCULTURAL CHALLENGE IS BEING ABLE TO MOVE IN-BETWEEN CULTURES. Cultures in this case are the locations on the path and the actors involved in the movement between them are the people that are participating in intercultural communication. As it has been mentioned before, the expression *viver entre culturas* “to live between cultures” (L08) and the use of the gerund in L09-10 make it clear that those people are actually acting in the intercultural space themselves and not merely sending meaning objects between mind containers, as conceptualized by the classical conduit metaphor of communication.

Since the metaphor ACCEPTING THE INTERCULTURAL CHALLENGE IS BEING ABLE TO MOVE IN-BETWEEN CULTURES in L16 is also underlined by the word *intercultural* (L16), it is partially composed of multimodal means. While the speech expresses the intercultural dimension of the metaphor, the dimension of understanding is only expressed in the gesture, the meaning of which can be reestablished anaphorically – that is, with reference to the preceding gesture of the understanding process between CB and her friend.

CB finishes her turn by adding <<lifting eyebrows, shaking head> =ENTre, (.) é, os brasiLEIros <<nodding> e os alemães (L18-19), expressing that the intercultural challenge that she was talking about referred to the understanding between Germans and Brazilians. GA and AA acknowledge what CB had said by laughing slightly (GA in L20) and smiling (AA in L21). These responses can be seen as affiliative strategies that express solidarity (ATTARDO, 2015, p. 176).

The expression *viver entre culturas* “to live between cultures” in L07 and the use of the gerund *tentando entender* (“trying to understand”) in L09-10, as well as the metaphor blend discussed in image 6 make it clear that the intercultural experience that CB is narrating is clearly an embodied one. CB conceptualizes the understanding process that she and her friend are achieving as a space they both inhabit between cultures and not a space they use to simply send “meaning objects along a conduit” in the process of communication, while both remaining in their own cultures. This means that in order to achieve understanding CB and her friend need to leave their respective cultures, at least for the time they are interacting. Even though this process could imply real movement of

the body in the interaction process, most probably what this metaphor refers to is a reorganization of the attention of the interlocutors in the intercultural space in the sense of a new organization of their senses in order to achieve understanding. This understanding relies on bodily resonance – “a process of mutual modification of bodily and emotional states, thus enabling a primary form of empathy without requiring any representations” (FUCHS, 2017, p. 3), which builds the basis for their ability to co-construct a common ground ad-hoc. This ad hoc creation blends with the prior knowledge of the interlocutors, thus leading to its transformation (KECSKÉS, 2014, p. 15). This process has been described by Alfred Schütz (1944) in his essay “The Stranger” as a process that goes along with a “dislocation of the habitual system of relevance” of the one who wishes to become part of a new culture. This leads to a crisis that can be overcome through the “modification of schemes of orientation and interpretation”. How this takes place in the given context will become clear in the analysis of the second sequence.

### **3.2 Building bridges and overcoming barriers of understanding**

The second sequence took place after an hour of interactions at a point when the interlocutors were discussing the question of whether they can make themselves understood in German. While some of the other participants mentioned that their German skills might not be good enough yet, in order to be able to make themselves understood properly, CB states in the following sequence that for her this is not a problem. As opposed to the other participants, she indicated in her metadata that she is fluent in German. However, as already discussed in the previous sequence, from the perspective of the participants intercultural understanding requires repeated back and forth movement between cultures. What happens when this movement is impeded by different understandings of certain concepts within the interculturereality and how can one go along in order to achieve understanding in such situations? The analysis of the following sequence looks into these questions.

G1 (01:09:59:373-01:11:346)<sup>2</sup>

01 CB: para mim não é nem um CAso de:,  
for me it's not even a case of

02 <<2OH PD apart> se eu me faço entender no dia a DIA,>  
if i can make myself understood in daily life

03 °h a:hm na questão linGUÍstica.  
in the linguistic sense

04 nisso,  
in this

05 <<2OH PVAB left> a gente acaba dando um JEItO;=  
we end up finding a way

06 <looking at AA> =faz uma (.) PONte;>  
we build a bridge

07 AA: ((nods))

08 CB:arranja outra estruTUra,=  
arrange another structure

09 =e vai (.) <<shaking head> adIANte;=>  
and ahead

10 AA: ((nods))

11 <<2OH PLD, looking at AA> =ou não sabe a paLAvra,>  
or if you don't know a word

12 AA: ((nods))

13 CB:<<2OH PLTB quick back and forth> explica um POUco,>  
you explain a little

14 <<LOH PLD> e dizendo conheço aquela> paLAvra e tal;  
and saying I know that word and such

15 (.) mas a:h me depaRE:i,  
but i came across myself

16 <<LHPD 1-2 touching stretched on the table> falando com uma  
amIga aleMÃ;>  
speaking with a german friend

---

<sup>2</sup> The video of this sequence can be accessed following the link: <https://youtu.be/B6mOdNMjUHQ>

- 17 <<2H PL 1-5 crooked moving up> alguns> <<a. 2H PVTC 1-5 crooked  
back and forth> pressuPO:stos;=>  
certain presumptions
- 18 <<2H PVTC 1-5 crooked up> (.) =ou ALgo,>  
or something
- 19 <<2H PVTC 1-5 crooked opening down to the sides> (.)  
bastAnte::,>  
quite
- 20 <<2H PVAB 1-5 crooked> °h> <<2H PVAB 1-5 crooked turning in,  
dropping down and rotating> e::h;>
- 21 <<2H PLTC 1-5 crooked> °h eu diria> <<2H PLTC 1-5 spread bent  
dropping> abstrAto;>  
i would say abstract
- 22 <<2OH PLTB shaking> tentando explicar para Ela;  
trying to explain to her
- 23 (.) e como <<2OH PLTB prep.> é difícil, <2OH PLTB apart> entre  
cultURas,>  
and how it is difficult between cultures
- 24 <<2OH PLTB L before R> lidar com Isso.>  
to deal with it
- 25 <<LOH PLTB ROH PVTB drops> e AL!! tinha barrEIra.>  
and there was a barrier there
- 26 <<ROH PVTB drops> não importava o QUANTo explicAsse,>  
it did not matter how much i explained
- 27 <<RH PTB 2 stretched circles> de outra forma em aleMÃO;>  
in another way in german
- 28 <<RH PTB 2 stretched quick circles> ela tava entendendo tudo  
Isso,=>  
she was understanding all of this
- 29 <<RH PTB 2 stretched drops> =mas ela não estava entenDendo,>  
but she was not understanding
- 30 <<RH PLTB 2 stretched> o MEU ponto de vista como brasileIra,  
my point of view as a brazilian

- 31 (-) e: <<RH PLTB 2 stretched back and forth> até que a gente  
conseGUIU;>  
and until we managed
- 32 <<RH PTB 2 stretched quick circles> a::h,  
33 a:::h,>  
34 nesse sentIdo.  
in this sense
- 35 e::,  
36 a::hm,  
37 eu acho que mais nesse <<p> sentIdo de:,>  
i think it's more in this sense of
- 38 (-) o que a gente Acha que É:;  
what we think is
- 39 (.) <<2OH PU quick back and forth, p> compreensível,>  
understandable
- 40 automaticamente;=  
automatically
- 41 nem sempre É;  
not always is so
- 42 para uma pessoa aQUI;  
for a person here

CB introduces her statement by saying that for her the question of understanding is not about being able to make herself understood in everyday life in the linguistic sense: *para mim não é nem um CAso de:, <<2OH PD apart> se eu me faço entender no dia a DIA,> °h a:hm na questão linGUística. (L01-03)*. She accompanies her speech by a palm down gesture in L02, which is slightly drawn apart to the sides as can be seen in the following image. With this gesture, CB places the scenario of daily life in front of her, on which she acts in the following gestures. This gesture is a depiction (STREECK, 2009), which becomes especially clear because CB looks at her hands while gesturing.

### 7: Palm down gesture (L02)





<<2OH PD apart> se eu me faço  
entender no dia a DIA,>  
if i can make myself understood in daily life

CB then mentions several ways of making herself understood: first, a general way, for which CB recurs to a Brazilian expression <<2OH PVAB> a gente> <<2OH PVAB left> acaba dando um JEItto;=> in L05, which can be translated as “we end up finding a way”. During this intonation unit, CB makes a movement to the left with her hands. As can be seen in image 9 CB initiates this gesture with her hands open with the palms facing away from the body (preparation phase). Then she moves her hands to the left (stroke). CB then repeats the same movement during the next intonation unit in which she talks about building a bridge <looking at AA> =faz uma (.) POnte;> (L06).






**8: Movement to the left (L05, 06)**

<p>preparation</p>		<p>stroke</p>	
<p>05 &lt;&lt;20H PVAB left&gt; a gente acaba dando um JEItO;= we end up finding a way</p> <p>06 &lt;looking at AA&gt; =faz uma (.) POnTe;&gt; we build a bridge</p>			

This movement to the left takes place in the space that CB had designated to her “understanding processes in daily life”. At the same time, this gesture is not merely an iconic depiction, but a metaphoric conceptualization of how the understanding takes place. The usage of the word *POnTe*; “bridge” (L06) complements the gestural metaphor ENABLING UNDERSTANDING IS MOVING FROM ONE LOCATION TO ANOTHER (OVER A BRIDGE). The bridge is the help for crossing the distance between those locations, which refer to the different cultures in the given case. This metaphor also implies that the participants of the intercultural interaction perform the movement along the bridge between the respective cultures themselves and not merely through sending meaning objects along that bridge. As opposed to the metaphor of intercultural understanding used in the previous sequence, the present metaphor implies movement in only one direction. In L06 CB also looks at AA that responds with slight nodding in L07 – a backchanneling assuring CB that she is being heard.

CB then continues to give concrete examples of how the “bridge of understanding” is being built. This entails arranging another structure and continuing: *arranja outra estruTUra, = e vai (.) <<shaking head> adiANte;=>* (L08-09) or explaining the meaning of a word one cannot find with other words: *<<2OH PLD, looking at AA> =ou não sabe a paLAvra,> <<2OH PLTB quick back and forth> explica um POUco,> <<LOH PLD> e dizendo conheço aquela> paLAvra e tal;* (L11-14). The first strategy goes along with the retraction phase of the previous gesture and a slight shaking of the head in L09 *= e vai (.) <<shaking head> adiANte;=>*. This movement is a depiction of the moving ahead that CB talks about from a character viewpoint, which implies a stronger involvement in the action – in the sense of less distance – than from an observer viewpoint (MCNEILL, 1992, p. 119). The second strategy is accompanied by a gesture series shown in the following image. First CB arranges the gesture space with a palm down gesture over the table while introducing the problem of not knowing a word *<<2OH PLD, looking at AA> =ou não sabe a paLAvra,>* (L11 / image 9a.), as she has already done in L02 / image 7. Then she mentions the strategy of explaining (that word) a little *<<2OH PLTB quick back and forth> explica um POUco,>* moving her hands back and forth in quick movements (L13 / image 9b.). This gesture depicts the process of understanding in the sense of EXPLANATION IS GOING BACK AND FORTH. CB ends this subsequence by rewording the strategy as replacing the word one does not know with another word *<<LOH PLD> e dizendo conheço aquela> paLAvra e tal;* and making a deictic gesture to the left with an open palm (L14 / image 9c.). Since CB is pointing at an abstract entity – the word explained, this gesture is also metaphoric. AA supports CB in her argumentation by nodding in L10 and 12.

### 9: Explaining a word

<p>a.</p> 	<p>11 &lt;&lt;2OH PLD, looking at AA&gt; =ou não sabe a paLAvra,&gt; or if you don't know a word</p>
<p>b.</p> 	<p>13 &lt;&lt;2OH PLTB quick back and forth&gt; explica um POUco,&gt; you explain a little</p>
<p>c.</p> 	<p>14 &lt;&lt;LOH PLD&gt; e dizendo conheço aquela&gt; paLAvra e tal; and saying I know that word and such</p>

Then CB introduces a situation in which it was hard to achieve understanding with the friend she already talked about in the first sequence analyzed in this article: (.) mas a:h me depaRE:i, <<LHPD 1-2 touching stretched on the table> falando com uma amIga aleMÃ;> (L15-16 in the first sequence). This time she places the issue with her friend “on the table” with a palm down gesture that touches the table slightly with the stretched fingers (L16), as can be seen in image 10. This gesture has several dimensions: it is a deictic gesture used by CB to point at the issue she is talking about. At the same time, it is a depiction, since she is looking at her hand, with which she is creating the space in which the action to follow will unfold. Moreover, it is a metaphoric gesture, since the gesture is pointing or depicting an abstract entity – an issue that CB had with her friend.

#### 10: The issue on the table (L16)

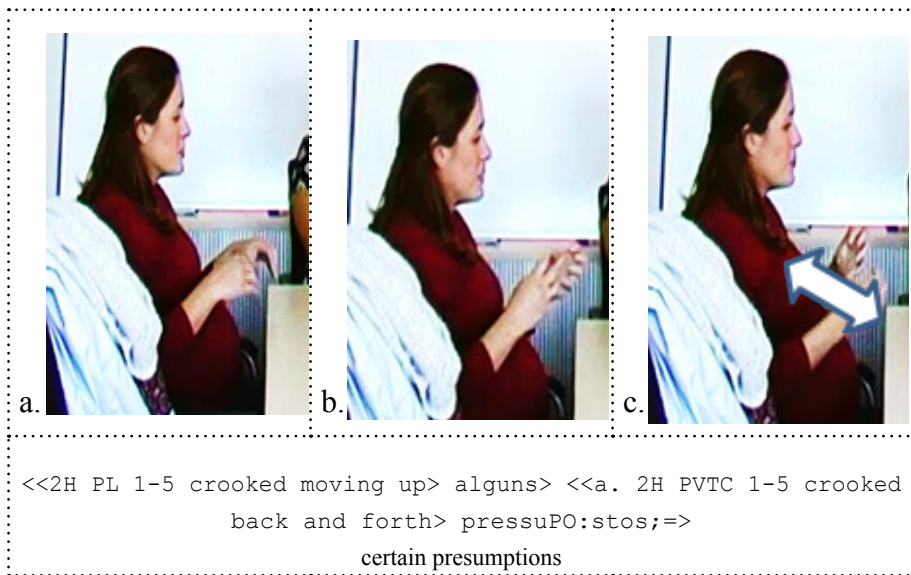


<<LHPD 1-2 touching stretched on  
the table> falando com uma  
amIga aleMÃ;>  
speaking with a german friend

CB continues to explain that the issue that she had with her friend had to do with talking about certain presumptions. The many (filled) pauses and the extensive gesturing point to the difficulty CB is having to express what was going on exactly. In L17 she initiates a gesture with cupped hands with the palms down in front of her (image 11a.) that she then moves with the palms towards the center (image 11b.) while saying *alguns.* – “some”. With this depiction gesture, CB metaphorically picks




up the topic of her talk and places it in front of her. She then moves the hands apart and together again (image 11c.) while uttering the word *pressuPO:stos;* – “presumptions”. This last gesture depicts the process of going apart due to certain “presumptions”.



**11: Cupped hands (L17)**



CB continues with the same hand shape and orientation lifting her hands slightly up (image 12a.) while saying *=ou ALgo*, “or something”, in L18 and then dropping the hands and opening them slightly (image 12b.) while saying *bastAnte:::*, “quite” in L19. CB then lifts and opens the gesturing hands up a little before dropping and rotating them (image 12c.) during the filled pause (L20). Then CB drops the hands a bit lower (image 12d.) while she says *⁰h eu diria abstRAto;* “i would say abstract” (L21) and then shakes the hands in the last position (image 12e.) while opening them slightly and saying *tentando explicar para Ela;* “trying to explain to her” (L22).

## 12: Cupped hands II

<p>a.</p> 	<p>18 &lt;&lt;2H PVTC 1-5 crooked up&gt; (.) =ou ALgo,&gt; or something</p>
<p>b.</p> 	<p>19 &lt;&lt;2H PVTC 1-5 crooked opening down to the sides&gt; (.) basTante::,&gt; quite</p>
<p>c.</p> 	<p>20 &lt;&lt;2H PVAB 1-5 crooked&gt; °h&gt; &lt;&lt;2H PVAB 1-5 crooked turning in, dropping down and rotating&gt; e::h;&gt;</p>



<p>d.</p> 	<p>21 &lt;&lt;2H PLTC 1-5 crooked&gt; °h eu diria&gt; &lt;&lt;2H PLTC 1-5 spread bent dropping&gt; abSTRAtO;&gt; i would say abstract</p>
<p>e.</p> 	<p>22 &lt;&lt;2OH PLTB shaking&gt; tentando explicar para Ela; trying to explain to her</p>

The cupped hands gestures in the images 11 and 12 show how CB is manipulating and inspecting an object she is holding in her hands – the abstract notions she is talking about – hereby expressing the metaphor PRESUMPTIONS / ABSTRACT CONCEPTS ARE OBJECTS. At the same time, these gestures are used during the process of cognitive search for concepts that could express the issue that CB has with her friend. They, therefore, also depict the process of trying to grasp something that CB is having difficulty with expressing.

In the next gesture the hands are moved apart (image 13a.) and then held in a post-stroke hold (image 13b.) while CB speaks about the difficulty of dealing with (presumptions) between cultures (.) e como <<2OH PLTB prep.> é difícil, <2OH PLTB apart> entre cultURas,> <<2OH PLTB L before R> lidar com Isso.> (L23-24).

As in the case of the gesture in image 11c. (L17) this gesture depicts the process of moving apart (due to cultural differences) in the sense of the multimodal metaphor POTENTIAL INTERCULTURAL NON-UNDERSTANDING IS MOVING APART / SEPARATION.

### 13: Dragging apart gesture


<p>a.</p> 	<p>23 (.) e como          &lt;&lt;2OH PLTB prep.&gt;          é difícil, &lt;2OH          PLTB apart&gt; entre          cultUras,&gt;          and how it is difficult between          cultures</p>
<p>b.</p> 	<p>24 &lt;&lt;2OH PLTB L          before R&gt; lidar com          Isso.&gt;          to deal with it</p>

From the last gestural position in image 13b. CB then lifts her right hand and lets it fall quickly right in front of her left hand (image 14) while speaking about the barrier that was there (between her and her friend) <<LOH PLTB ROH PVTB drops> e AL!! tinha barrEira.> (L25). This gesture is a multimodal metaphor of NON-UNDERSTANDING IS



A BARRIER / A CLASH. It is especially interesting that the metaphor of the barrier is expressed verbally while the metaphor of the barrier/clash is expressed only in the gesture by the right hand dropping onto the left.

**14: Barrier gesture (L25)**



<<LOH PLTB ROH PVTB drops> e AL!! tinha barrEira.>  
and there was a barrier there

In L26 CB repeats the same “barrier gesture” (image 15a.) that then becomes a circular gesture with a stretched index finger in L27 (image 15b.), while she speaks about the unsuccessfulness of her explanation intents <<ROH PVTB drops> não importava o QUANTo explicAsse,> <<RH PTB 2 stretched circles> de outra forma em aleMÃO;> “it did not matter how much i explained in another way in german” (L26-27). CB then makes small circle gestures while she speaks about her friend understanding (the meaning of the words she was saying) <<RH PTB 2 stretched quick circles> ela tava entendendo tudo Isso,=> “she was understanding all of this” (L28 / image 15c.). Then she drops the gesturing hand (image 15d.) while she says that her friend, however, did not understand <<RH PTB 2 stretched drops> =mas ela não estava entenDendo,> (L29) her point of view as a Brazilian <<RH PLTB 2 stretched> o MEU ponto de vista como brasileIra, (L30). In the last line, CB makes a self-deictic gesture.

### 15: Gestures of not understanding



a.

26 <<ROH PVTB drops>  
 não importava o QUANTo  
 explicAsse,>  
 it did not matter how much i  
 explained



b.

27 <<RH PTB 2 stretched  
 circles> de outra forma  
 em aleMÃO;>  
 in another way in german



c.

28 <<RH PTB 2 stretched  
 quick circles> ela tava  
 entendendo tudo  
 Isso, =>  
 she was understanding all of this

<p>d.</p> 	<p>29 &lt;&lt;RH PTB 2 stretched drops&gt; =mas ela não estava entenDendo,&gt; but she was not understanding</p>
<p>e.</p> 	<p>30 &lt;&lt;RH PLTB 2 stretched&gt; o MEU ponto de vista como brasileIra, my point of view as a brazilian</p>

After that CB makes a back and forth gesture with the same gesturing hand while speaking about achieving (understanding) e: << RH PLTB 2 stretched back and forth> até que a gente conseGUIU;> in L31 / image 16a., which then becomes a circular gesture while CB makes utters the interjection a: :h, L32 / image 16b.. The back and forth gesture seems to refer to the metaphor INTERCULTURAL UNDERSTANDING IS MOVING BACK AND FORTH ON THE PATH BETWEEN CULTURES, which was already discussed in the first sequence. The small cyclic getures in L28 and L32 express the metaphor UNDERSTANDING IS A QUICK CYCLIC PROCESS, while the bigger circles in L27 express the metaphor EXPLANATION IS A CYCLIC PROCESS. The difference is in the size of the circle and the pace at which

it is performed: explanation seems to be conceptualized as slower and bigger than the cognitive process of thinking or understanding.

### 16: Gestures of understanding



a.

31 (-) e: << RH PLTB 2 stretched back and forth> até que a gente conseGUIU;>  
and until we managed



b.

32 <<RH PTB 2 stretched quick circles>  
a::h,

Finally CB makes a meta-comment on her own statements by saying that she thinks that what we (the Brazilians) think is understandable is not always the case for people in Germany eu acho que mais nesse <<p> sentIdo de:, > o que a gente Acha que É::; (.) <<back and forth with both hands, p> compreensível, > automaticamente;= nem sempre É; para uma pessoa aQUI; (L37-42). She complements her speech by a quick back and forth gesture in L39 while she utters the

word *compreensível*, “understandable”, which is spoken at a slower pace. This is the same gesture as in L13 / image 9b., which was used in the context of the metaphor EXPLANATION IS GOING BACK AND FORTH. Even though it is now used with a different word (“understandable” instead of “explaining”), it obviously refers to the same underlying conceptualization of INTERCULTURAL UNDERSTANDING IS MOVEMENT ON A PATH BETWEEN CULTURES.

**17: Back and forth gesture (L39)**

	<p>(.) &lt;&lt;20H PU quick back and forth, p&gt; <i>compreensível</i>,&gt; understandable</p>
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To put it in a nutshell, in the second sequence CB first talks about some strategies of achieving understanding in a foreign language such as ENABLING UNDERSTANDING IS MOVING FROM ONE LOCATION TO ANOTHER (OVER A BRIDGE) and EXPLANATION IS GOING BACK AND FORTH. Moreover, she mentions a situation in which she and her friend had difficulties to achieve understanding due to presumptions and abstract concepts linked to cultural differences. These difficulties are conceptualized in different ways. While POTENTIAL INTERCULTURAL NON-UNDERSTANDING IS MOVING APART / SEPARATION, NON-UNDERSTANDING IS A BARRIER / A CLASH. CB also talks about the process of achieving understanding through explanation and constant effort to understand the point of view of the other, which are conceptualized in the following ways: EXPLANATION IS A CYCLIC PROCESS, UNDERSTANDING IS A QUICK CYCLIC PROCESS and ENABLING INTERCULTURAL UNDERSTANDING IS GOING BACK AND FORTH. It is interesting that explanation is conceptualized as moving back and forth and as circular movement.

The difference here is probably in the focus of the underlying explanatory process: while the back and forth movement foregrounds the process of explaining as such, the circular movement puts the fact of treating an intercultural issue that the interlocutors are having difficulty with over and over again to the fore. A similar thing happens with the quick back and forth gesture which goes along with two different utterances: <<2OH PLTB quick back and forth> explica um POUco,> “you explain a little (L13) and <<2OH PU quick back and forth, p> compreensível,> “understandable” (L39), but seems to refer to the same underlying conceptualization of INTERCULTURAL UNDERSTANDING IS MOVEMENT ON A PATH BETWEEN CULTURES.

#### 4. Discussion

The preceding analysis showed that when referring to interculturereality CB uses recurrent gesture types, which express conceptual metaphors. The latter are often also expressed in speech – thus being multimodal. The most frequent metaphor in the given context is INTERCULTURAL UNDERSTANDING IS MOVEMENT ON A PATH BETWEEN CULTURES that is expressed in the back and forth movement in different ways. This movement is performed with open palms when referring to the general process of understanding as in image 17 / L39 and image 9b. / L13. of the second sequence or with stretched fingers when referring to concrete interactive processes as in image 3 / L8-10 and image 5 / L16 of the first sequence and in image 16a. / L31 of the second sequence. The process of achieving understanding is represented as a movement in the direction of the other (building a bridge) as in image 8 / L05-06.

It could seem logical to interpret this in the context of the classical conduit metaphor (REDDY, 1979). A detailed multimodal sequential analysis of the metaphors expressed by CB, however, shows that she does not conceptualize the intercultural process of understanding as sending meaning objects from her mind container to her friends mind container along a conduit. Instead, what seems to be the case is that she conceptualizes intercultural understanding as active movement in a space between cultures – the *interculture*. As has already been discussed in the context of the first sequence, this movement refers to the reorganization of the bodily resources and senses of the interlocutors in the context of the co-construction of an ad-hoc common ground, which cannot be relied

upon to the same extend as in intracultural communication (KECSKÉS, 2014, p. 15). What replaces this lack of common ground before and in the process of the co-construction of the ad-hoc common ground is bodily resonance – “a primary form of empathy” (FUCHS, 2017, p. 3), something that the interlocutors might not be aware of, but which is essential for successful understanding. A successful understanding process leads to the blending of prior knowledge of the interlocutors with the ad-hoc creation of common ground, leading to a transformation of their knowledge and communicative behavior. This transformation, however, can be a difficult process, especially if the person involved finds him- or herself emerged in a new culture – as it is the case in a migration setting (SCHÜTZ, 1944).

The second sequence shows how this difficulty can be due to certain presumptions, which can make the understanding difficult – conceptualized as moving apart in image 11c. / L17 and image 13, L23, or even create a barrier or a clash to mutual understanding (image 14 / 15a. and L 25, 26.), even if both interlocutors are actively engaged in the co-construction of common ground. Only through the repeated process of explanation – shown as circles in image 27 / L15b. is it possible to achieve understanding, depicted by small and quick circles in image 28 / L15c. and image 16b. / L32. Due to this need of active co-construction of common ground in intercultural interaction, the “meaning objects” cannot simply be sent along a conduit, making it the responsibility of the “receiver” to unpack their meaning. Instead there is a need for an active negotiation of meaning in order to achieve understanding, in which both interlocutors have to be active at all times in order to be able to create language ad hoc in interaction (KECSKÉS, 2014, p. 2). In this process the ideas are not “locked within the skull and life process of each of us” as Reddy (1979, p. 287) puts it, but need to be created mutually ad hoc. As Merleau-Ponty (1964, p. 116) puts it: “We must abandon the fundamental prejudice according to which the psyche is that which is accessible only to myself and cannot be seen from outside”. Moreover, even though “no one receives anyone else’s thoughts directly in their minds when they are using language” (REDDY, 1979, p. 287), intercorporeal resonance makes it possible and necessary for the interlocutors to perceive each other’s emotions without any (verbal) representation (FUCHS, 2017, p. 3) when these representations cannot be relied upon, as is the case in interculturereality.

## 5. Conclusion

Intercultural encounters confront their participants with the challenge of having to co-construct the common ground in the interaction process, because they cannot rely on pre-established norms and communicative behavior. At the same time, this newly established common ground blends with the prior knowledge of the interlocutors, leading to its transformation. As has become clear in the course of the analysis of the present article, this process is conceptualized as active, laborious and continuous. The multimodal metaphors for successful understanding identified in the present article reach from back and forth gestures, accompanied by verbal utterances such as “trying to understand each other”, “intercultural challenge” or “managing to understand each other”, to cyclic gestures co-expressed with verbal utterances such as “understanding”. Difficulties in the understanding process are expressed through gestures of moving apart and clashing that go along with utterances such as *difícil* (L23 in sequence 2) “difficult” and *barrreira* (L25 in sequence 2) “barrier”. All of this shows that successful understanding in the interculturereality is not self-evident and that the interlocutors have to leave their respective cultures and work their way through the challenges. For this, they have to reorganize not only their mental, but also their bodily resources.

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## Metaphoric semiosis: a Peircean perspective

### *Semiose metafórica: uma perspectiva peirceana*

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**Abstract:** This article presents how metaphoric semiosis develops from the perspective of Peircean semiotics. The study takes as theoretical framework the general foundations of metaphor as described by classical theories, its recognized cognitive nature and the theory of signs developed by Charles S. Peirce (1839-1914) based on his three phenomenological categories. This is on the assumption that the application of Peirce's broad conceptual tools – philosophical and semiotic – to his concept of metaphor as a hypoicon and its subdivisions constitutes an original and dynamic theory of metaphor, capable of operationalizing integrated analyzes of multimodal aspects of metaphor. In conclusion, considerations are made about the truth value of a good metaphor according to Peircean theoretical framework.

**Keywords:** metaphor; semiotics; meaning; cognition; iconicity; multimodality.

**Resumo:** Este artigo apresenta a forma como se desenvolve a semiose metafórica sob a perspectiva da semiótica peirceana. O estudo toma como quadro teórico os fundamentos gerais da metáfora descritos pelas teóricas clássicas, sua reconhecida natureza cognitiva e a teoria dos signos desenvolvida por Charles S. Peirce com base em suas três categorias fenomenológicas. Parte-se do pressuposto de que a aplicação do amplo instrumental conceitual de Peirce, tanto filosófico como semiótico, a seu conceito de metáfora como hipoicone e suas subdivisões constitui uma teoria original e dinâmica da metáfora, capaz de operacionalizar análises integradas de aspectos multimodais da metáfora. À guisa de conclusão, são tecidas considerações sobre o valor de verdade de uma boa metáfora de acordo com o quadro teórico peirceano.

**Palavras-chave:** metáfora; semiótica; significação; cognição; iconicidade; multimodalidade.

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The use of metaphors is one of the most fundamental expression skills: metaphorical thinking can be expressed in all forms of human language. Metaphorical signs can be found in verbal, visual and sound semiotic systems, and in their various hybrid manifestations, consigning the multimodal nature of the metaphorical phenomenon, always complex and fruitful. The present paper seeks to present the general foundations of its functioning, its cognitive nature and a Peircean semiotic approach on its multiple facets of iconicity, showing how a comprehensive and integrated understanding of this phenomenon of meaning can be drawn from Peirce's theory of signs and its phenomenological basis, in order to shed light on the paths through which insightful metaphors arise.

## **1. Fundamentals of the metaphorical process**

In the use of verbal language, metaphor means the transposition from proper meaning to figurative meaning and can be understood in two senses, a broad one and a specific one. In general terms, all forms of figurative language have a metaphorical nature and can be considered metaphors in the broad sense. In a strict sense, metaphor designates a specific figure of speech among many others, in which a word or sentence, which usually denotes a type of object or action, is used to designate another object or action, which has something in common with the first, suggesting an analogy between them.

According to Eco (1994, p. 534-535), metaphor in the strict sense can be defined in several ways: as a transfer of the name of an object to another motivated by analogy, as an exchange of an appropriate term for a figurative one or even as an abbreviated similarity between the compared term and the comparative term. There are numberless and diversified theories about the functioning of metaphors in verbal language; however, according to Nöth (1995, p. 128), there are two complementary concepts that substantiate their definition: *transfer* and *similarity*, and all the explanations (linguistic, semiotic, philosophical, psychoanalytic, cognitive, etc.) about metaphorical processes of meaning are based on those two principles.

Theories of metaphor can be divided into theories of *comparison* and of *interaction* (NIKLAS, 1994, p. 544). The comparative approach bases that semantic phenomenon solely on the similarities between its two terms, being fundamentally a paradigmatic perspective, complementary to the concept of substitution (NÖTH, 1995), while the perspective of interaction encompasses, in addition to similarity, the interaction between the two poles united by the metaphorical expression, being considered a predominantly syntagmatic approach, without, however, waiving with the paradigmatic aspects.

The *transfer* applies to every figure of speech and, according to Nöth (1995), it is expressed in the very etymology of the word ‘metaphor’, which is formed by the prefix *metá* (Greek; in the middle of, between; behind, subsequent, after; with, according to, as per; during) plus the noun-forming post-positive *phorá* (Greek), which means the action of taking or carrying forward. According to Houaiss (2001), in classical Greek, the prefix *metá* was already part of words that expressed ideas of interposition, intermediation and change of place or condition. Transfer is a principle of substitution, of translating the meaning from one initial place to another; that is, from one semantic field to another, being observable in any figure of speech, since these two “places” can be considered the original literal meaning and the figurative meaning.

Nöth (1995) further states that *similarity* is the distinctive criterion of metaphors in the strict sense, which seeks to establish a similarity or an implied comparison between ideas connected to two different spheres of meaning. According to Lopes (1986, p. 24-25), metaphor has once been considered an abbreviated comparison, elliptical due to the absence of a comparative particle (for example, “as, like, such, thus, such as, likewise”, etc.). The metaphor, therefore, would be a figure resulting from a comparison between two terms, A and B, considered “improperly” similar to each other; A would then be the term to be defined, the *compared* term, and B, the *comparative* term, which defines it from a common meaning between both. Although poetic language makes extensive use of metaphors, Lopes (1986, p. 24-25) observes that, “as natural languages are systems of signs through which we use something (B) to say another thing (A), they are essentially metaphorical”, and there can be no semiotic system that cannot exercise the metalinguistic function of producing the necessary paraphrases to declare and explain the meaning of another expression. Thus, Lopes explains that,

whenever we translate a certain segment of speech through an unexpected, unfamiliar paradigm, using it instead of the expected paradigm, programmed in our memory, we will be producing a metaphor (which can be subsequently interpreted, by the recipient, as an error or a license, but that does not destroy the metaphorical mechanism itself).

It is not very easy to accept the idea that it is sufficient to suppress the comparative particle of a comparison to create a metaphor. However, that is what seems to actually happen:

*Comparison:* My heart is like a dumped bucket

*Metaphor:* ‘My heart is a dumped bucket’ (Fernando Pessoa)  
(LOPES, 1986, p. 25, my translation<sup>1</sup>)

In other words, metaphors express judgments or reasoning that result from the comparison between two ideas that are connected by means of a similarity or analogy different from those previously established and which have become usual. The similarity between the two related contents is the foundation that accounts for the semantic motivation of metaphors and other figures of speech. As Ducrot (1979, p. 315) observes, “the attribution of a predicate to an object may be presented as a fact, as a possibility, or as a necessity, and logicians then speak, respectively, of categorical, hypothetical, and apodeictic judgments”. Consequently, a metaphor can be considered an attribution of possible predicates to an object by means of a hypothetical judgment, expressed in a figurative manner. For example, if a man demonstrates a great ability to deal with a complex problem, someone who admires this behavior may say: “He is a computer”. This metaphor, which attributes the abilities of a computer (comparative term) to a certain person (compared term), is a hypothesis about his intelligence, since it does not refer to a

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<sup>1</sup> In the original: “sempre que traduzirmos um dado segmento discursivo por meio de um paradigma inesperado, pouco familiar, utilizando-o no lugar do paradigma esperado, programado em nossa memória, estaremos produzindo uma metáfora (que poderá ser interpretada, subsequentemente, pelo destinatário, como um erro ou uma licença; mas isso não destrói o mecanismo metafórico em si).

Não é muito fácil aceitar a ideia de que basta suprimir a partícula comparativa de uma comparação para fazer uma metáfora. É isso mesmo, no entanto, que parece ocorrer efetivamente:

*Comparação:* Meu coração é como um balde despejado

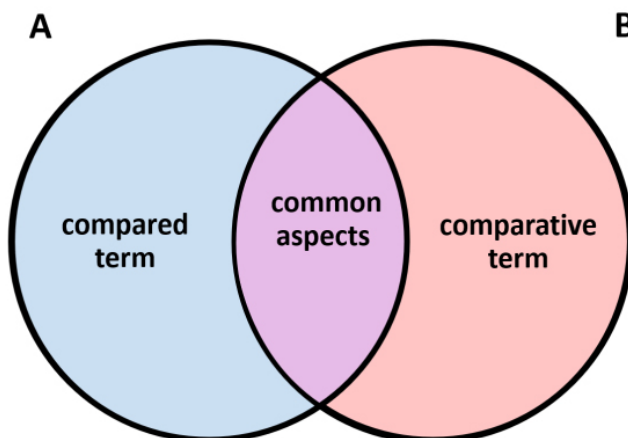
*Metáfora:* ‘Meu coração é um balde despejado’ (Fernando Pessoa)”. (LOPES, 1986, p. 25.)



proven fact, nor it is an attribution by necessity. And even though this metaphorical expression were used in reference to someone who was proven to be very intelligent, it would do so in a figurative way based on the common aspects or analogies between both terms (the compared one and the comparative one), and therefore expresses it in a hypothetical way, and can give no assurance about it.

That fundamental metaphorical mechanism of predicate attribution can be schematically expressed as follows:

FIGURE 1 – Scheme of metaphor showing the semantic spheres associated by their common aspects through metaphorical expression



Source: Author.

Although there are theories that advocate the occurrence of transfer and suppression of characteristics between the two terms of the metaphorical operation, what makes them questionable “is always the fact that we cannot tell who gains what and who loses instead something else. More than of a transfer we could speak of a back-and-forth of properties. This phenomenon was called ‘condensation’ by Freud” (ECO, 1994, p. 537). A metaphor may be *in presentia*, when both terms are expressed, or *in absentia*, when one only one of them – usually the comparative one – is evinced, and even in the latter case, as explains Edeline (1994, p. 549), the two terms are “linked by a copula expressing all possible degrees of comparison, ranging from likeness to total identity”. That is why a metaphor can always be explored more deeply, bringing to the fore

aspects of the analogy that were not intended in the first place, enlarging the range of common aspects between both terms. In the example “He is a computer”, someone may observe that, besides intelligent, he is also very fast or precise, or even that he is not very sensitive or emotional, once this person resembles and is being compared to a machine. Thus, every form of metaphor always operates a substitution, through a movement of displacement of meaning by similarity or contiguity, and a subsequent operation of condensation of the associated semantic fields, that is, a condensation between the compared term and a comparative term.

## 2. The cognitive nature of metaphor

The approach to the cognitive aspects of metaphor is based on the principle that it is, originally, a phenomenon of *apprehension* of reality and, subsequently, of mental association. Thought and consequent metaphorical use of semiotic systems are based both on the ability to *recognize* factual similarities existing in the surrounding environment, and on the ability to *establish* and *express* associations by similarity and contiguity between different objects. Such relations are not necessarily given or defined beforehand, and can be established by the mind of the one who observes the qualities inherent in each entity with the potential to evoke an almost infinite multiplicity of associations.

Despite the comprehensive literature on the subject, Eco (1994, p. 539) points to the fact that theories about it have been based on Aristotelian postulations about metaphor and the acknowledgment of its cognitive nature, which can be divided into three main lines of reasoning. The first understands it as a conceptual exchange of properties, and the second as a natural capacity of the mind to perceive characteristics of reality:

In the first line of thought, the metaphor was seen as a device producing an exchange of properties between conceptual entities, such an exchange producing in some way an *increasing of knowledge* or a *different understanding* of the concepts involved in the metaphorical ‘short circuit’. [...]

In the second line of thought, the cognitive aspect of the metaphor has been stressed. Undoubtedly Aristotle assigned a *cognitive* function to the metaphor, not only when he associates metaphor with enigma – an extended sequence of metaphors – but also when

he says that creating metaphors “is a sign of a natural disposition of the mind”, because *knowing how to find good metaphors* means perceiving or grasping the similarity of things between each other (Poetics, 1459a6-8). (ECO, 1994, p. 539, emphasis added)

Although the theories of metaphor can present features of each of those lines, in general terms, the first strand represents the classic theories of metaphor, and the ones that address its foundations. In the second strand, we can recognize the cognitive theories of metaphor, including the one proposed by George Lakoff and Mark Johnson, based on the experiential character of cognition.

For Lakoff and Johnson (2003, p. 5), “the essence of metaphor is understanding and experiencing one kind of thing in terms of another”. Among the many examples they furnish of how metaphors affect thought, perception and behavior, the “*argument is war* metaphor” shows that arguing is understood as being in opposition to someone else in a verbal battle, giving rise to many derived expressions such as “indefensible claims”, “to attack weak points or to demolish an argument”, and so forth. Accordingly, no metaphor can ever be comprehended or even adequately represented independently of its experiential basis (LAKOFF; JOHNSON, 2003, p. 19), giving rise to different kinds of metaphors (orientational, based on our experience of space, ontological, structural, conceptual, visual, etc.). As a fundamental mechanism of the mind, metaphors encompass what is learned from physical and social experience. They are based on the cognitive apprehension of the world through different sensory channels and also in the most fundamental values of the culture in which someone is immersed. Culture plays an essential role in metaphoric thinking for metaphorical structures are coherent with the fundamental concepts of each culture, shaping the way reality is apprehended by individuals. Hence, “metaphor is primarily a matter of thought and action and only derivatively a matter of language” (LAKOFF; JOHNSON, 2003, p. 153), and its cognitive value relies in that it can provide a partial understanding of something based on previous experiences (LAKOFF; JOHNSON, 2003, p. 154), and thus shape behavior.

Although one can say that “time is life”, evincing that the nature of both is akin, the well-known metaphor “time is money” is an example of how social experience shapes metaphorical thinking, for the association it establishes between the two terms can be considered typical of economic values that have increasingly permeated aspects of culture.

This approach suggests that the knowledge derived from the ordinary use of metaphors is no less important than what something really is. A new metaphor may capture or emphasize aspects of reality previously unknown or that went unnoticed and were not taken into account. The metaphor's cognitive power lies in the possibility of creating new and unusual associations, capable of increasing or modifying knowledge about reality.

The third line of reasoning about the cognitive nature of metaphors understands them as an integrated process of associations that constitutes the essential feature of the whole human semiotic activity and its most varied expressions (thought, language, psyche, etc.):

According to a third line of thought, the pair metaphor/metonymy characterizes the whole of human thought and of the semiotic activity. The position of Freud, quoted above, ranks in some way with this line. During the last decades the most impressive example of such a position has been undoubtedly the one of Jakobson, who has equated the pair metaphor/metonymy with the pair selection/combination (or paradigm/syntagm) and has applied this model to language (from aphasic disturbances to literature), to magic, to cinema, and the visual arts. Under the influence of Jakobson, Lacan has applied the same model to unconscious phenomena. (ECO, 1994, p. 540)

The adequacy of associations by similarity allows metaphor to manifest itself in multiple fields of expression, and the theories addressing it from an integral perspective facilitate the recognition of its possible ways, in multiple languages or semiotic systems, which often coexist in a hybrid, complex manner. Peircean semiotics can be included in that third perspective, and its propositions were essential for the elaborations of Jakobson (1960) and Lacan (2007[1975/1976], p. 117), both readers of Peirce. However, in spite of works such as the one made by Lakoff and Johnson (2003) that emphasize the cognitive and experiential grounds of metaphor, and the efforts made by the representatives of this third type of approach to broaden the understanding of metaphoric phenomena, many studies still discuss the multiple manifestations of metaphor solely in terms of verballity.

The Peircean approach to metaphor comprehends it in a broad, encompassing and integrated manner, due to the high degree of abstraction and generality of its concepts. Analyzing metaphor in semiotic terms

requires knowing and applying the fundamentals of the theory of signs and its different levels of specification, capable of revealing its various facets. Peircean semiotics is the science concerning all the phenomena of significance in their broadest variety of signs, as it is based on the phenomenological categories derived from observation of experience.

### 3. Peircean semiotics

Peirce, a philosopher, mathematician and scientist, searched for universal categories that could be found in everything that presents itself to the mind, and started by examining the most varied phenomena and how they could be captured by thought. That observational foundation, which he called *phaneroscopic* – a peculiar way of referring to phenomenological observations and reflections – led him to realize that every phenomenon can be understood from three omnipresent categories: *firstness*, *secondness* and *thirdness*.

In their most general sense, the categories are monadic, dyadic and triadic relations and, as modes of being, they are embodied in different degrees of prominence in everything that exists. Unlike categories established by other philosophers, such as Aristotle and Kant, the Peircean categories are not static or exclusive, because they are dynamically interconnected, so that, by the principle of *prescission* (PEIRCE, 1880, CP 1.353<sup>2</sup>), firstness can prescind from secondness and thirdness, and secondness can prescind from thirdness, but thirdness always encapsulates secondness and firstness, and secondness encapsulates firstness. Another characteristic of the dynamical interdependence of the categories lies in its recursiveness, by which it is always possible to observe that the three categories are recursively contained in each other, an aspect directly derived from their omnipresence and universality. As Ransdell (1997, §1) explains, Peirce was

convinced that semiotic had to be developed “architectonically”, meaning that it should be developed rigorously from a few relatively simple though highly abstract principles [the categories] which could be used recursively – that is, reapplied repeatedly to their own products – to yield a highly systematic (and potentially

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<sup>2</sup> *The Collected Papers of Charles Sanders Peirce* are quoted as CP, preceded by the year of the manuscript, and followed by the volume, a dot, and the paragraph number.

infinite) network of conceptions of which none would be fully comprehensible apart from its systematic inter-relationships with other conceptions.

In a complementary perspective, Colapietro (1993, p. 61) observes that, although the categories are the most difficult of Peirce's ideas, they are also the most important because they deeply inform and guide his whole investigation of signs, for

One of the functions of Peirce's categories is to guide and stimulate inquiry. They are, in a word, heuristic. This is evident in the way the categories are used by Peirce in his exploration of the various types of signs. Any sign can be taken as something in itself; it might also be considered in relation to another (its object), finally, a sign might function as a go-between (a factor mediating between its object and its interpretant). (COLAPIETRO, 1993, p. 61.)

For Peirce (1897, CP 2.227), semiotics is a form of logic, a way of understanding how the different modes of meaning work and, therefore, the working of thought itself. As the categories are omnipresent, and thirdness is the category of representation and thought, everything can be thought of as a sign, since anything has properties that mean or are capable of meaning something, and that, therefore, can be explored and used to build meanings conveyed by signs. Peirce says that every triadic relation involves meaning, because, if we take any fact of the triadic kind,

by which I mean a fact which can only be defined by simultaneous reference to three things, and you will find there is ample evidence it was never produced by the action of forces on mere dyadic conditions. Thus, your right hand is that hand which is toward the *east*, when you face the *north* with your head toward the *zenith*. Three things, east, west, and up, are required to define the difference between right and left. [...]

In that way you will convince yourself thoroughly that every genuine triadic relation involves thought or *meaning*. Take, for example, the relation of *giving*. A *gives* B to C. This does not consist in A's throwing B away and its accidentally hitting C [...]. If that were all, it would not be a genuine triadic relation, but merely one dyadic relation followed by another. [...] Giving is a transfer of the right of property. Now right is a matter of law, and law is a matter of thought and meaning. I there leave the matter to

your own reflection, merely adding that, though I have inserted the word “genuine”, yet I do not really think that necessary. I think even degenerate triadic relations involve something like thought. (1903, CP 1.345)

Thus, every triadic relation involves meaning or thought of some sort, and a sign is a triadic relation that can be genuine in the sense of being fully general, or can be degenerate, a word Peirce borrows from geometry and by which he means a less general case or special form of signification. The importance of knowing the semiotic fundamentals of triadic relations to the understanding of thought is even clearer in another passage where Peirce (1903, CP 2.234) states that, in an imperfect but true division of triadic relations, they can be classified as relations of *comparison*, of *performance* and of *thought*. That classification derives from a recursive application of the three categories to the understanding of triadic relations. That means that those three types are representative of triadic relations of thought or meaning, but the third one is thought considered in its most genuine and fully triadic form, that is, triadic relations in which thirdness manifests itself more prominently. By their turn, relations of performance are degenerate or less general for they are triadic relations in which secondness manifests itself predominantly, whilst relations of comparison are even more degenerate triadic relations, once in them predominate aspects of firstness.

Metaphor, the focus of the present study, is a triadic relation of comparison that establishes similarities or analogies between two sets of monadic properties pertaining to two different things, without making any reference to the reality of that analogy. A monadic property can be understood as a wholly intrinsic property of something (see RANSDELL, 1997, §19), as a property regarded in itself, and metaphors make use of signs in which firstness also predominates, that is, iconic signs that are the more adequate kind of signs to establish that comparison and express this type of thought.

The sign is the simplest form of thirdness of philosophical interest (CP 1.339, undated), being the most important one to the understanding of thought (1903, CP 2.233), and it can be also investigated in its aspects of secondness and firstness. The sign is a triad, which is constituted as the irreducible relation between a sign in itself or *representamen*, what functions as representation and constitutes its ground, an *object* or referent, what is being represented, and an *interpretant*, conceived as

the signified effect of the sign or interpreting thought (1906, CP 8.322). Unlike the well-known triangle presented by Ogden and Richards (1989[1923], p. 11), the schematic representation of the sign triad is the tripod (1903, CP 2.274, 1903; CP 1.346), as it shows a monadic quality of the triad: its irreducibility, for what makes a sign as such is the amalgamation of its elements and their interrelations, generating meanings at different levels.

The sign or *representamen* (1903, CP 2.242) constitutes the firstness of the sign, and is connected to an *object*, its reference, which consists of the secondness of the sign. This means that the object can be apprehended on two levels: that of the *dynamical object*, that is the real object considered in itself which remains exterior to the sign and thus unaffected by any representations of it; and the *immediate object*, which is the way by which the sign represents the dynamical object (1909, CP 8.314). The triad is completed with its element of thirdness, the *interpretant*, understood as the effect of the sign which contains notions such as those of interpreter and interpretation, but differs from them and goes further, since the sign has an autonomous capacity to generate effects that do not depend on specific interpreters or particular interpretations. Similar to what happens with the object, but at a higher level of complexity, the interpretant (see SANTAELLA, 2004, p. 72-74) can be: *immediate*, which represents the interpretative potential of the sign that cannot be exhausted by any specific interpretation; *dynamical*, the actualized interpretant, the one that is materialized, made effective by the activity of the sign; and *final*, in the sense of the purpose of the sign, the latter an *in futuro* interpretant which represents the tendency of the process of generation of interpretants over time.

The combination of those different sign aspects and the recursive application of the categories gives rise to several sign trichotomies, the best known of those being the one that derives from the relations of the sign with its dynamical object, which is subdivided into *icon*, *index* and *symbol*, and in which it is again possible to observe the recursiveness of the categories. The icon holds qualitative similarities (firstness) in common with its dynamical object; the index maintains a dynamic connection (secondness) in time and/or space with its dynamical object; and the symbol is associated with its dynamical object by reason of an established habit, rule or convention (thirdness). It is important to emphasize that these three types can be found together, merged, due to the categories'



omnipresence. However, as Rauch (1980, p. 330) observes, “although Peircean Firstness, Secondness, and Thirdness are found in linguistic treatments under the cover of icon, index and symbol, the pure dynamicals of the three phenomenological categories are not exploited fully”.

The icon has several subdivisions (SANTAELLA, 1996), and *hypoicons* are the type of iconic sign most directly related to this study. Hypoiconic signs were named by Peirce as such because, despite having predominant iconic aspects, they go beyond the typical vagueness of associations at the level of firstness, and function almost like genuine signs of thirdness, ostensibly representing their objects. *Hypoicons*, in turn, are subdivided into *images*, *diagrams* and *metaphors*:

A possibility alone is an Icon purely by virtue of its quality, and its object can only be a Firstness. But a sign may be *iconic*, that is, may represent its object mainly by its similarity, no matter what its mode of being. If a substantive be wanted, an iconic representamen may be termed a *hypoicon*. [...]

Hypoicons may be roughly divided according to the mode of Firstness of which they partake. Those which partake of simple qualities, or First Firstnesses, are *images*; those which represent the relations, mainly dyadic, or so regarded, of the parts of one thing by analogous relations in their own parts, are *diagrams*; those which represent the representative character of a representamen by representing a parallelism in something else, are *metaphors*. (1902, CP 2.276-277)

For Peirce, any kind of hypoicon that associates two objects based on their meaningful properties, tracing a parallel between them, will be considered a metaphor, being of no importance whether the parallelism is expressed with or without the aid of a comparative particle in verbal language, allowing his theory to be applied to all kinds of metaphor on the same conceptual basis. Another aspect of Peirce’s vast semiotic theory that directly concerns this study is the type of dynamical interpretant that a sign is capable of producing, which can be *emotional*, *energetic* and *logical*. Peirce explains that:

The first proper significate effect of a sign is a feeling produced by it. There is almost always a feeling which we come to interpret as evidence that we comprehend the proper effect of the sign, although the foundation of truth in this is frequently very slight. This ‘emotional interpretant’, as I call it, may amount to much

more than that feeling of recognition; and, in some cases, it is the only proper significate effect that the sign produces. [...] If a sign produces any further proper significate effect, it will do so through the mediation of the emotional interpretant, and such further effect will always involve an effort. I call it energetic interpretant. The effort may be a muscular one [...], but it is much more usually an exertion upon the Inner World, a mental effort. It never can be the meaning of an intellectual concept, since it is a singular act, [while] such a concept is of a general nature. But what further kind of effect can there be? [...] I will call it logical interpretant. [...] Shall we say that this effect may be a thought, that is to say, a mental sign? No doubt it may be so; only, if this sign be of an intellectual kind - as it would have to be - it must itself have a logical interpretant; so that it cannot be the ultimate logical interpreter of the concept. (1907, CP 5.475-76.)

In the emotional interpretant, the sign produces only a quality of feeling, without producing cognition, whereas in the energetic interpretant, there is an effort involved, be it physical or mental. In the logical interpretant, an interpretive elaboration and consequent conclusion will result from the action of the sign.

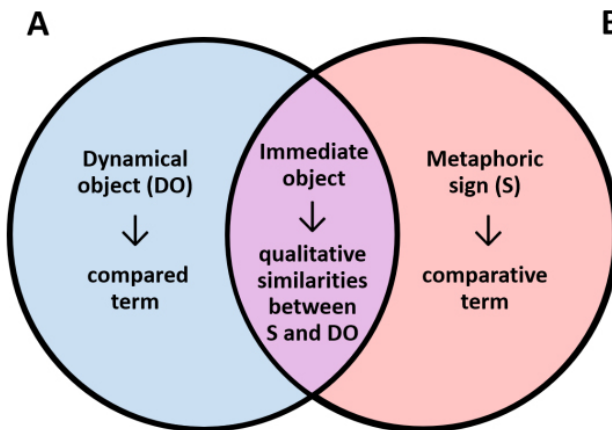
#### 4. Metaphoric semiosis

For Peirce, metaphor is, above all, an *iconic sign*, and “his conception of the iconic sign – like his other semiotical conceptions – was developed neither by generalizing from cases and kinds of iconicity he had observed nor by appropriating a pre-existing theoretical conception of this sort of significance or meaningfulness”, as explained by Ransdell (1997, §1). Thus, Peirce’s theory of metaphor is among the most original ones addressing the subject matter, since it uses the philosophical and abstract basis of his categorial framework, which allows it to simultaneously include its cognitive and linguistic aspects, as well as its different types of manifestations.

This means that, according to the categories, the metaphor is a sign (thirdness) that relates to the object to which it refers, its dynamical object (secondness) with predominance of iconic aspects (firstness). Iconicity is fundamentally a relation of association by similarity between qualitative aspects carried by the sign, due to its immediate object or form

of representation, and the real qualities of the dynamical object, which can be schematically visualized as follows:

FIGURE 2 – Scheme of the metaphorical sign and its similarity relation with the dynamical object



Source: author.

The scheme above shows that, for Peirce (1867, CP 7.590), a metaphor can be defined as a “broad comparison on the ground of characters of a formal and highly abstract kind”. Such relations of comparison are imbued with a vague but insightful cognitive function of presenting the “logical possibilities” (1903, CP 2.234) that stem from qualitative similarities or isomorphisms. The *dynamical object* can be considered the *compared term* as described in traditional approaches, while the *comparative term* is the form of representation adopted by the sign in order to stand for its dynamical object, and the common qualitative features of both terms constitute the *immediate object* which is always encapsulated in the sign. This relation of similarity can be established in multiple ways, by capturing different aspects of both terms. The many typologies of metaphors can be understood as an attempt to classify those relations between the poles of a metaphor, to establish what is being made similar or what is being compared to what and how.

This phenomenon of intersection and condensation, between aspects of the compared term and the comparative one used as a sign, is intrinsic to the metaphorical mechanism and is always present. It can be

easily perceived in visual metaphors, where common qualitative features are fused or juxtaposed, or in poetic language, in which the figurative aspect is more evident, as in the opening lines of Emily Dickinson's famous poem:

There is no Frigate like a Book  
To take us Lands away  
[...]  
(DICKINSON in JOHNSON, 1976, poem n. 1263)

Although in linguistic terms the construction “frigate like a book” is considered a comparison, due to the use of the comparative conjunction “like”, in semiotic terms the association between “frigate” and “book” is considered a metaphor as it links both through their common aspects, presenting books as a means of transportation for the mind and soul.

Peircean analysis of the metaphor can be further specified by applying the principle of recursiveness of the categories to the metaphorical sign, which, constituting itself as a hypoicon, allows a metaphor (hypoicon of thirdness) to encapsulate diagrammatic (hypoicon of secondness) and imagetive (hypoicon of firstness) aspects within itself. This encapsulation means that, like all iconic signs, metaphors represent one or some features of their dynamical object through their immediate object by relations across their various qualitative aspects. However, since they are hypoicons of thirdness, the parallelism of meanings they establish may contain structural analogies and similarities in appearance with their dynamical object, which substantiates and explains the complexity of the metaphorical process of signification in Peircean terms. The expression *family tree* can be taken as an example of those layers of meaning. This metaphor traces a relation of similarity between the image of a tree and the conformation of its branches with the relations across members of the same family, connecting their meanings, that is, this metaphor encapsulates imagetive similarities, structural analogies and a parallelism of meanings between the dynamical object ‘genealogical relations’ and its comparison with a tree contained in the sign.

An icon is a sign of predominant firstness whose object can only be also a firstness, which means that a metaphor is, therefore, a way of presenting an object through hypothetical analogies, for there is nothing determining this correlation, which does not mean that the object of a metaphor cannot be something existing, nor does it prevent a metaphor

from referring to some aspect of reality (see JUNGK, 2018). What a metaphor does is to ascribe some possible properties to its object in a vague and suggestive manner, but it can never do that in a propositional form, and thus cannot furnish any kind of certainty about the reality of the object's properties or characteristics that are being represented metaphorically. This means that a metaphor cannot designate an object or express its general characters as such, as a definition or a concept can do, although it can present them describing some of its attributes, without doing so thoroughly. However, in this case as in all others, the dynamical object as the real object that remains dynamic in the semiosis process will impose itself on the understanding of the sign meanings.

According to the same logic of categorical recursiveness, another form of metaphorical complexity can be observed in the encapsulation of icons into indexes, and of icons and indexes into symbols, which constitute a synthesis of the relations between the sign and the dynamical object, showing how iconicity is fundamental to any process of meaning. For Peirce, there is no other way of conveying meaning except through icons, evincing how metaphors, which are at the highest level of iconicity, are at the base of each and every semiosis process and language (1893, CP 2.290).

Although signs can be created, they have their own autonomy and, once created and expressed, they start to have effects or dynamical interpretants according to their interpretive potentiality (immediate interpretant), based on interpretive tendencies (final interpretant) manifested over time. Since they are iconic signs, metaphors tend to generate emotional interpretants in the dynamic level. However, due to their various and complex levels of meaning, there might be the generation of energetic and logical interpretants, in a more or less prominent manner. The metaphorical meaning depends a lot on the context in which it is generating interpretants, which is always changeable, and, therefore, every metaphor might always be explored, opening the path to deeper considerations about its referent.

The intersection of two semantic spheres creates a region of iconicity whose outlines cannot be fully defined, and the *vitality* of a metaphor does not lie only in the most evident common elements it presents at first sight. The more adequate is the association between the two terms, that is, the more a comparative term is capable of functioning as a sign of a dynamical object, the more a metaphor will open

possibilities to explore the immediate object or the qualitative common aspects between them, and thus to discover new relations of similarity between the sign and dynamical object, allowing to capture analogies that until then had gone unnoticed, and that might well be beyond the content intended in its inception, as in the example “He is a computer” discussed above. The common area between two semantic fields created by a metaphor is malleable, flexible, imbued with *semantic plasticity*, which shows why a metaphor can be interpreted as a mistake or a lie, but also as a revelation about something and even as a bearer of truth. In Peircean terms, truth is expressible by signs that adequately stand for real features of their dynamical objects and, although a metaphor can only do that in a suggestive iconic manner, this capacity demonstrates its fundamental cognitive nature.

An adequate and thus good metaphor establishes a connection between different real features that objectively belong to certain entities or objects. Although its emergence goes through human subjectivity, since the relation established is created in the mind of the one who expresses it, it carries a background of truth, for it will only produce effects of meaning if those similarities are really observable by an interlocutor. This revelatory power is especially observable in adequate, innovative and creative metaphors, when the relation of similarity is established for the first time and the vitality of the metaphorical expression is stronger.

In the process of semiosis, every sign has the potential to generate certain types of dynamical interpretants, those that actually occur in the mind of interpreters, based on their relation with the dynamical object, which can be iconic, indexical and symbolic. *Iconic signs* can generate primarily emotional interpretants or simple qualities of feeling; *indexical signs* tend to generate energetic interpretants, that is, physical or mental actions that require an effort of some kind; and *symbolic signs* tend to generate logical interpretants. In the course of sign action or semiosis, these effective interpretants will follow interpretive tendencies specific to each of these types of signs. Metaphors are signs that awaken sensitivity through qualitative impressions, feelings, emotions and other emotional interpretants. Despite the ineffability of the ways of feeling in general, this type of interpretant forms the basis that underlies actions and attitudes, reasoning and thinking.

## 5. Metaphoric iconicity: from motivation to conventionality

Metaphorical mechanisms of meaning account for many commonly used metaphorical expressions and also for the appearance of many words in a certain language, whose referents are often iconically designated according to one or some of its features (see JUNGK, 2011).

Since its inception, metaphors follow through successive stages on a diachronic path that goes from motivation to conventionality. Initially, the newly created metaphor is semantically innovative, creative, original, as it relates semantic spheres in an unusual way, according to Nöth (1995, p. 131). Over time, however, as it becomes part of the daily language due to its multiple occurrences, the metaphor becomes ordinary and can become conventional, *lexicalized*, becoming a word inserted in the set of rules of the codified system of language, such as for example, the word ‘metaphor’ itself, which is an example of how a symbol, which indicates a particular dynamical object, has an icon as the base of its meaning.

With the disappearance of the original meaning, an *opaque metaphor* emerges, as in the case of the word ‘radical’ which, in a literal sense, means that which ‘comes from the root’, but is now used to mean that which is profound, abrupt or violent (for example, radical change, radical opinion), among other figurative meanings. Another interesting example of this opacity can be found in mathematics. The root finding operation seeks to find the ‘root’ of a given number, which may sound strange to anyone who associates the word with the lower part of a plant, and does not know that, etymologically, the word comes from the Latin ‘radix’, which originally meant basis and foundation of something, according to Houaiss (2001). Thus, the square or cubic root of a number can be understood in a clearer and more transparent way as the base (side) of the square or cube of a certain value (for example, the square root of 4 corresponds to the side of the square of area 4, which is equal to 2, or even, the cubic root of 9 corresponds to the side of the cube of volume 9, which is equal to 3), being that the foundation of the root finding operation, according to Ricieri (2004).

Conventionalization leads, over time, to *dead metaphors*, in which the semantic transparency has been totally lost, and the motivation for the original meaning is known only to the etymologist, according to Nöth (1995, p. 131). Although some metaphors are considered dead

due to the *semantic opacity* with which they are commonly used, their potentiality remains contained in the lexicon, making them potential structures that can be explored and updated by their iconic, poetic exploration, reversing the conventionalization process. Transparency is fundamental to the production and maintenance of the semantic vitality of the metaphor, since

Imagery is in general a matter of linguistic awareness: only then is a linguistic sign produced and understood as a metaphor when the speaker/hearer is aware of the tension between the literal and figurative meanings of the sign. By contrast with simple polysemy, metaphor presupposes semantic transparency. (NÖTH, 1995, p. 131)

The *remetaphorization* or resurrection of dead metaphors makes it possible to revive the image or other form of iconicity that it carries from its origin, once again evincing the figurative sense that goes unnoticed in the ordinary use. That process of revitalizing opaque metaphors awakens the language awareness of those who use or interpret the metaphor, who become aware of the articulation between the literal and the figurative sense and their iconic potential for meaning.

## 6. Multimodal metaphors

Metaphorical mechanisms are elementary for the expression of all forms of human communication. They are able to illustrate, emphasize or iconically show what is being expressed, endowing it with strength, producing a stronger impression and imposing itself on the spirit: you may simply say that you are very hungry, but also that you could eat a horse. Multimodal perspectives on metaphor encompass all their different modes of expression in different kinds of signs. Peirce's semiotic approach to metaphor can also contribute to its multimodal analysis by the application of its multileveled sign types.

Peirce shows that the *modus operandi* of metaphorical thinking is created based on the association by similarity (1893, CP 7.392) of certain monadic qualities, dyadic and triadic relations that exist in all the objects and entities in the world and whose correspondences can be used in any process of meaning. Associations by similarity are broad and plastic, serving multiple uses and the Peircean analysis allows us to understand



the inexhaustible nature of the iconicity contained in metaphors, since the relations between dynamical object and immediate object can always be explored from new perspectives, enriching the metaphorical meaning.

Therefore, a metaphor can be expressed in various ways, that is, a verbal metaphor can be visually explored; a visual metaphor can be verbally enunciated; a verbal metaphor can be used to explain sounds; among many other possibilities. Each language or semiotic system favors a different *communication channel* (verbal, visual, auditory, olfactory, gustatory, tactile, gestural, oneiric, etc.), each with its specific potentials and limitations, and some metaphors can be better expressed in one system than in another. If, on the one hand, there are metaphors that can be more easily expressed verbally (for example, a bird in the hand is worth two in the air), on the other hand, there are relations between qualities that are difficult to express through words and which are more easily expressed visually.

The concepts of transfer and similarity are also essential for the understanding of visual metaphors, wherein there will always be some kind of condensation between two elements, although there can be simple visual condensations that are not actual metaphors. The *semantic intersection* and condensation operation that characterizes the metaphor continues to be active and can expand or restrict itself, depending on how it is expressed. Many visual metaphors in pictorial arts, design and advertising assume as their starting point metaphors that already exist in verbal language or in literature: sayings, clichés, poems, etc. The revival and reinterpretation of metaphors allows for a better understanding of their dynamical object, as it makes evident the aspects that were originally represented by the sign, highlighting its iconicity and revealing its common structures.

## **7. Final remarks: the value of a good metaphor**

Despite the comprehensive literature on the subject, the investigation and discussion regarding the functioning of metaphor are still fundamental to understanding the nature of thought and language. Although Peirce's direct references to metaphorical processes may be considered scarce, what can be considered his *semiotic theory of metaphor* or *metaphorology*, understood as a systematic approach to the workings of metaphors, results from the use of his detailed typologies

of signs, based on categorical principles, proving to be highly original and profitable.

According to Peirce (CP 2.279, 1895), the main distinguishing characteristic of icons is that, by their direct observation, other truths concerning their object can be discovered, in addition to those that were sufficient to determine their construction. A metaphor cannot be fundamentally considered an error, a mistake or even a lie because, in Peircean terms, it is a *cognitive possibility* and, despite assigning certain characteristics to an object, it does not do it in a propositional form and, therefore, does not allow its appreciation in terms of truth or untruth in a peremptory manner. Even a metaphor mistakenly or cunningly employed by someone aiming to deceive or to lie can always be useful to understand and reveal the intentions of those using it. Metaphors invite us to see something in an iconic way, and the true value of a good metaphor lies in expanding the possibilities of knowledge about the referred object, through the continuous association of elements that can decipher it by similarity.

Although the interaction between the sign and the dynamical object can be considered inexhaustible in the metaphorical sign, the stability of a particular metaphor shows its suitability for a certain stage of development of the psychic, social, physical and logical context wherein it subsists. Metaphors are essential for the emotional, empirical and cognitive articulation of reality, being a *sine qua non* condition for the development and the symbolic, cultural and scientific accomplishments of human beings, who are constantly creating and modifying patterns of feeling, thought and action through the *iconic power* of thought and of all forms of language.

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