Figurative Thought and Language

16

Figurative Thought and Language in Action

EDITED BY
Mario Brdar and
Rita Brdar-Szabó

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Volume 16

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Edited by

Mario Brdar
University of Osijek

Rita Brdar-Szabó
Eötvös Loránd University, Budapest

John Benjamins Publishing Company
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Figurative thought and language research in the 21st century

Back to the future

Mario Brdar and Rita Brdar-Szabó
University of Osijek / ELTE, Budapest

At the time of its inception, Cognitive Linguistics was all about conceptual metaphors, and also about metonymies and image schemas. As a result of the rapid development and diversification of cognitive linguistics, new topics and methodologies emerged, gradually pushing conceptual metaphors and metonymies out of the center stage. However, vigorous research into how conceptual metaphors and metonymies interact with each other as well as with other forms of figurativity in order to motivate linguistic structures that we have recently witnessed justifies its coming back into the limelight. One of the venues that have been instrumental in making this possible is the series of international conferences on Figurative Thought and Language.

The present volume carries selected contributions based on talks given at the 3rd edition on the conference that was held in Osijek in April, 2017, organized by the first editor. The contents of the volume reflect the highlights of the conference, as its topics include a wide range of phenomena as well as of perspectives entertained. Some of the chapters are more synoptic and comprehensive, giving a top-down overview, while some others engage in an *in medias res* enterprise, cutting right into the gist of problems. Some of the chapters are so to say in a point-counterpoint relationship. Most of the volume assumes a synchronic perspective, but diachronic coverage of processes is not missing either.

The volume opens with a state-of-the-art overview of research into the modeling of conceptual metaphor and metonymy, stating major problems and challenges in research, e.g. some fundamental issues of defining and delimiting metonymy, but also indicating possible solutions and how rapport can be established with other disciplines showing interest in these phenomena. Individual chapters that follow are concerned not only with the impact of figuration, primarily of conceptual metaphor and metonymy, on grammatical forms, but also exemplary discussions of how figurative language is processed and understood, as well as practical ramifications of

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its use in various types of discourse (the language of media, politics, and healthcare communication. The volume is divided into four major parts carrying chapters that gradually progress, from part to part, from chapter to chapter, from more general issues towards more specific issues of figurative thought and language in action, as forming the linguistic system, as it is processed by individuals, and finally, as a series of case studies of socially "responsible" linguistics, how certain phenomena can be manipulated and/or put to use in solving problems.

Part 1 contains three chapters that reflect on metaphor and metonymy as cornerstones of figurative thought and language. After a synthetic overview of the research on metaphor, acknowledging its amazing diversity and multidisciplinarity, Ray Gibbs sets out in the first chapter to identify some topical challenges for metaphor scholars, both of theoretical and practical nature, from accounting for the nature of metaphor to empirical study of how it works in human life. Specifically, these challenges have to do with metaphor identification, the meanings of metaphor in discourse, online metaphor processing, and the metaphorical character of source domains. Gibbs argues that these challenges are "matters for all of us to think about" as we move forward both individually in our respective research endeavors and as a research collective trying to explain both the regularities and variations in metaphorical thinking, language, and multimodal action. This chapter, in a manner of speaking, pre-figures the whole volume, both regarding its structure and contents. At the same time, it succeeds in linking the past and the present, as well as pointing to the future while drawing on the insights resulting from the cumulative efforts by cognitive (and otherwise) linguists so far, true to the subtitle of this introduction.

The other two chapters in this part are concerned with some fundamental problems of metonymy. They show a great deal of overlap and complementarity, regarding not only their general stance on the fact of material realization of metonymy, but also with respect to some details of analysis of the same type of examples, but there are also some points of divergence of opinion.

Cristiano Broccias in his chapter further develops the critique of recent approaches to metonymy, expanding on Broccias (2017) and incorporating the views expounded in Matzner (2016). The problematic aspects of recent metonymy research are, according to Broccias, first, the belief that metonymy is a sort of Platonic category, i.e. a homogenous class of phenomena to which an overarching definition would apply; secondly, overplaying its conceptual nature, and, finally, its relation with similar phenomena like active zones. The key elements that Matzner stresses in his tropical approach to metonymy, and which Broccias takes over in his analysis, are abrasiveness and dependence on form. The former refers to the collocational contrast or selectional incompatibility between the metonymic source and its environment, e.g., when the metonymic source is expressed in a subject of a sentence

that does not agree semantically with its predicate. The latter is of course tightly related with this – if not triggered by some formal element, but only conceived as a conceptual phenomenon,[1] metonymy can become so inflated "that its analytical usefulness may turn out to be at stake" (the same point was stressed in Brdar and Brdar-Szabó 2013 and 2014a and b). Broccias argues that a Cognitive Grammar approach to metonymy, which rests on the reference point ability and conceptual integration, is the solution for many of the above problems. The conceptual integration in this approach has hardly anything to do with the conceptual integration or blending in the sense of Fauconnier and Turner (1996), or as applied to metonymy in Radden (2014), or Alač and Coulson (2004). Rather, this is a useful term to highlight the fact that the conceptualizer "needs to integrate the 'virtual' target into the original sentence so as to obtain a conceptualization that 'makes sense'." The fine-grained analysis of a range of cases shows how this approach can handle a variety of cases, from 'straightforward' metonymies to 'metonymic association.'

The focus of the second chapter on metonymy (and the third in this part) by Brdar and Brdar-Szabó is on the nature of metonymic targets and its relationship with their sources. Starting from a position similar to Panther (2005), and Broccias (this volume), which takes material manifestation of metonymy seriously, they propose to treat metonymy not as any sort of mappings, but as a cognitive operation of conceptual elaboration based on the part-whole relationship that is triggered by the use of an expression (or metonymic vehicle) associated with a certain conceptual cluster (or metonymic source) within a conceptual domain. It is argued on the basis of the analysis of a series of selected examples that there are only PART FOR WHOLE and WHOLE FOR PART metonymies, but no PART FOR PART metonymies.

It has been occasionally claimed that metonymy could be interpreted as a special case of conceptual blending, with the metonymic target as a kind of blended space, but also in some cases as a generic space. Both of these stipulations are rejected on theoretical and empirical grounds. However, we suggest that mental spaces are nevertheless involved in metonymy. The novelty of the metonymy definition that Brdar-Szabó and Brdar propose in their chapter lies in the claim that the activation of the source conceptual cluster opens up a mental space which is dynamically expanded or reduced, in the sense of Ruiz de Mendoza (1999, 2000), so as to come as close as possible to fitting the conceptual givens provided by the co(n)text of use. This mental space, which is not a blended space, typically changes as we skip from

1. The importance of the role of the metonymic vehicle in activating the metonymic source, which in turn makes possible access to the metonymic target, has been recognized in only a fraction of recent research, e.g. in Panther (2005), but also in Brdar and Brdar-Szabó (2014a), Brdar (2017), and Brdar-Szabó and Brdar (2021), as well as in this volume.

one metonymic layer to another, or from one metonymy to another in the same metonymic chain. By approaching metonymy in this manner, we are able to explain in a very natural way a number of phenomena observed in recent research.

Part 2 carries three chapters dealing with the interaction between figurative thought and linguistic structures. Gábor Győri is concerned in his chapter with the role of figurative thought in the processes of formation and of naming basic level categories. Specifically, he concentrates on the sources of massive cross-linguistic differences in basic level categorization. In view of some fundamental assumptions in cognitive linguistics, such differences should be practically non-existent.

First of all, we should recall the cognitive linguistic claim that large areas of language are motivated by the facts of human embodiment. If much of what we consider to be the central facts of human embodiment is shared by humans, and therefore universal, we should therefore expect human languages to be, if not the same, then at least extremely similar, and this should also apply to categories we have in language. Cognitive linguists have "naturally" exhibited more interest in demonstrating cross-linguistic similarities. In actual fact, the cognitive linguistic success in uncovering all that "hidden" systematicity and universality was long (and still is) advertised as one of its major comparative advantages over other approaches. Returning to the issue Győri discusses, it is paradoxical that there should exist such a tremendous amount of cross-linguistic variation at the basic level categorization. As he demonstrates, labels serving as basic level ones in one language may not designate basic level categories in another language, while seemingly corresponding categories may subsume different sets of referents in different languages, or two or more basic level categories in one language may be merged into a single category in another language.

Apparently, insisting on universality cannot be easily reconciled with the sort of subjective realism which was hailed as the philosophical backbone of cognitive linguistics. In his overview of the relevant literature, Győri points out that categorization is a biological-cognitive process that involves selective sorting of various pieces of information about the world and that it reflects an interpretation of reality in terms of the perceiver's biology. In other words, it is a process influenced by the perceiver's perspective yielding a particular interpretation of reality and does not reflect some kind of objective structure in the world. What is more, according to Lakoff (1987) and Johnson (1987), the perspective on the world that is reflected in the categories of a language is not only based on perception but crucially involves imaginative structures of understanding.

Győri argues that the above-mentioned paradox cannot be solved unless we draw a distinction between the perceptual categories emerging naturally in the human perceptual system during physical interaction with the environment, on

the one hand, and the categories coded in language, on the other. A plausible explanation of the paradox must also involve an account of how basic level categories are coded in language. He claims that their coding in language does not take place independently of socio-cultural interaction. The only place where this interaction can happen is language, and this is what makes possible the alignment of speakers' individual conceptualizations of the world leading to the creation of cultural categories that reflect the shared knowledge of the speech community about their environment, ultimately contributing to intersubjectivity. The author also shows that the historical process of lexicalization and the emergence of cultural categories are inextricably connected. The process of lexicalization is extremely complex and involves imaginative processes at several points. First, they are involved in the process of conceptualization of the world around us. Further, various conventionalized linguistic expressions that are utilized in formulating new ways of looking upon this reality can or have already been modulated by metonymies and metaphors.

As pointed out by Polzenhagen at the beginning of his chapter, grammaticalization processes lend themselves to the illustration of several fundamental positions upheld in cognitive linguistics. First of all, they are excellent evidence of the view that lexicon and grammar are inseparable and form a continuum. Further, grammaticalization processes lend themselves to modeling in terms of conceptual metonymies and metaphors. Finally, they substantiate the cognitive linguistic position that meanings and meaning changes reside in specific constructions. This is demonstrated on what we may consider to be a prime example of the expression of figurative thought in the grammaticalization of English auxiliary verbs, specifically, the development of *have*-perfect and the *be-going-to*-form in English. Metaphor/metonymy-based accounts of auxiliation, such as those by Sweetser (1988, 1990) and Heine et al. (1991), recently came to be challenged by neo-Gricean and relevance-theoretic pragmatic models (e.g. Eckardt, 2006), while some authors assume an intermediate position, allowing for both metaphorical/metonymic processes and pragmatic inferences (Bybee, Perkins & Pagliuca, 1994; Traugott & Dasher 2002; Hopper & Traugott 1993). Polzenhagen argues in his chapter that (in line with the subtitle of this introduction) we should go back to the original framework proposed by Heine and his collaborators.

Polzenhagen highlights three aspects of auxiliation that he believes have not received much attention and clearly support a modeling based on cognitive linguistic premises. The first of these is what he refers to as the "lexical preface of grammaticalization processes", illustrated on the example of the *be-going-to*-form. Various accounts that can be found across the literature, attempt to account for its development by singling out the original movement sense of the verb *to go* as the starting point. They then try to identify what is referred to as "bridge contexts",

i.e. contexts which allow for both readings, the original movement sense and the "new" meaning. However, this approach overlooks the fact that, at the time when the grammaticalization of this construction started and gained ground (i.e. the 15th century onwards), the verb *to go* was highly polysemous and had already developed a wide range of well-attested lexical senses far beyond the mere movement meaning. It is shown that some of these senses and the constructions they entered do in fact exhibit the metaphoric meaning and the viewpoint placement characteristic of the emerging *be-going-to*-form, which indicates that the source-to-target distance was already bridged at the lexical level. Hence, there is no need to assume the original movement sense to be the input to this development.

The second contributing factor that Polzenhagen highlights are conceptual patterns associated with the notions that constitute the meaning of the forms involved, more dynamically seen as global conceptual context of specific grammaticalization paths. These patterns are illustrated on the example of the English *have*-perfect. The meaning of this form is generally associated in the relevant literature with notions such as 'result,' 'effect', 'experience', and 'explanation' (note the traditional labels used for the types of perfect that are commonly distinguished: perfect of result, perfect of experience, perfect of explanation). The temporal and causal constellations expressed by the *have*-perfect are, as Polzenhagen points out, the perfect mirror image of the one encoded by the *be-going-to* form. While the latter takes a prospective view on the verbalized event from the perspective of what it is brought about, the former expresses a retrospective view on the event from the perspective of its effects.

It is remarkable that talk about results, effects, explanations and experience is to a significant degree saliently conceptualized or framed, by means of the language of POSSESSION and CHANGE OF POSSESSION, as manifest in a host of collocational patterns with verbs of possession and change of possession (e.g. *have/gain/get/share an experience*). The corpus data that Polzenhagen adduces indicate that these conceptual patterns have a long and robust history. The specific case of grammaticalization of the English *have*-perfect hence is just one manifestation of a much more global metaphoric conceptual pattern.

The third aspect highlighted by Polzenhagen is the interaction with the development of other items in the respective domains. It has often been observed that grammatical morphemes normally do not develop in isolation from each other in a given language. They influence each other in a number of ways. For example, the development of one item may depend on the presence of others, but there are many other subtle ways of their interplay. Further, the presence of a grammatical morpheme may evoke its (potential) conceptual counterpart, which may lead to the development of a new construction as a marker of such a counterpart morpheme,

which in turn may influence the grammaticalization path of the morpheme that originally set in motion the development. Polzenhagen argues on the basis of corpus data that the *be-going-to* form and the *have*-perfect in English have developed in such "an *in-tandem* constellation." This can be seen as another example of a complex system of interconnections in grammatical systems, where, in Langacker's words, "everything has to fit, and everything has to fit together" (2002, p. 39).

This part closes by the chapter by Klaus-Uwe Panther on physical and communicative force in caused-motion constructions. The goal of this chapter is to provide evidence that folk or cultural models of talk and action, as well as the opposition between physical and communicative force, motivate the kind of inferences that language users draw from two subtypes of transitive caused-motion constructions.

Language users apparently distinguish between linguistic and extralinguistic actions, and the former are often viewed as not being genuine actions, but just "mere talk". This folk model of action contrasts with a well-known "expert" model of language use, viz. speech act theory, which treats linguistic actions and extra-linguistic actions as being on a par. In addition to these two contrasting models, the chapter also makes use of the Talmyan concept of force dynamics. Johnson (1987) relates the notion of illocutionary force as developed in speech act theory to what he calls compulsion, because in most speech acts some content is presented under or by means of a given force. However, force alone cannot capture the subtle conceptual-pragmatic differences in inferential potential between communicative and physical matrix verbs in transitive caused-motion constructions. Panther claims that in order to capture different implicational strengths it seems more promising to invoke the folk model of talk and action.

Following the wisdom of this model, communicative action does not count as "real action" and therefore it is not surprising that transitive caused-motion constructions with such verbs have weaker, i.e. more easily cancelable, implications than transitive caused-motion constructions with verbs that express physical force. Verbs of physical action such as *push into* or *force out of* entail ACTUAL MOTION of a Patient into/out of a location, where LOCATION may also be metaphorized as an EVENT, such as in *push someone into a modeling competition*. On the other hand, directive speech act verbs such as *ask into* or *order out of*, do not entail ACTUAL MOTION but merely implicate it to varying degrees. Although transitive caused-motion constructions support the assumption of the distinction between entailment and implicature, there are also cases with a fuzzy border between.

Irony is the testing ground in Part 3 for a discussion of how figurative language is processed and understood. Irony has always been a popular research topic, but has recently enjoyed an extremely prominent status on the cognitive linguistic research agenda, as shown by the very first volume in the Figurative Thought and

Language series, edited by Athanasiadou and Colston (2017), or by their more recent edited volume (Athanasiadou and Colston, 2020), as well as by a series of individual articles published in the last five years in venues that figure as flagships of cognitive linguistics (cf. Gibbs et al, 2018; Gibbs, 2021; Ruiz de Mendoza & Lozano-Palacio, 2019a and 2019b; Canestrati & Bianchi, 2018; Lehmann, 2021; Kwon & Kim, 2021), or in the three volumes from previous editions of the Figurative Thought and Language conference series (Colston, 2017; Colston & Carreno, 2020; Geeraerts, 2021; Barnden, 2021; Ruiz de Mendoza & Lozano-Palacio, 2021).

The first chapter in this part, by Herbert L. Colston, Michelle Sims, Maija Pumphrey, Eleanor Kinney, Xina Evangelista, Nathan Vandermolen-Pater, and Graham Feeny, investigates the role that embodied simulations play in the processing of verbal irony. The authors argue for a model that emphasizes the crucial role of embodied simulation in the production and comprehension of both literal and figurative language.

Embodied simulations are prescribed patterns of neural activity in motor and sensory brain regions that correspond to relatively generic units of embodied motor and sensory activity. Instead of just activating some theoretical semantic or other representations in long-term memory or in the mental lexicon, sequences of generic sensory and motor simulations are "run in an as-if-actually-happening mode." Most of the research on embodied simulation has involved simple types of non-figurative forms of language.

Research into embodied simulation in metaphor processing showed that processing of metaphorical language containing sensory or motor content is very similar to the processing of non-figurative, non-metaphorical language containing that same content, allowing for extremely high processing speeds and patterns that are comparable to that for non-metaphorical processing. According to the authors, embodied simulation plays a crucial role in the processing of ironic language. The support for this is delivered by the results of an experiment described in detail in their chapter. The data they obtained appear to resolve some of the past debates on whether verbal irony processing takes place in stages. Taking the role of embodied simulation into our equation makes it possible to explain why, for example, reading times data often show that figurative language processing does not take longer than non-figurative language processing.

The central issue that Belaj and Tanacković Faletar are concerned with is on-line recognition and interpretation of two main types of irony, verbal and situational, within a specific communicative context. They start from the observation that, unlike many other forms of figurative language, e.g. conceptual metaphor and metonymy, for whose identification and analysis there are some well-established heuristic tools, irony lacks such "standardized" conceptual tools to rely on for its

detection and appropriate interpretation.[2] Banking on the methodological tools of cognitive linguistics, specifically Blending Theory (Fauconnier & Turner 2002) and Frame Semantics (Fillmore 1977, 1982, 1985), Belaj and Tanacković Faletar go on to claim that the detection of irony proceeds (or fails) entirely on-line. Our recognition of it rests on our ability to establish, creatively and on-line, a dynamic relationship between our knowledge of language, on the one hand, and the relevant information about the communicative situation and its protagonists, on the other. Our general ability to recognize it does not seem to depend on the prior acquisition of conventional figures in the process of language learning.

Their analysis has shown that, although the results of interpreting verbal and situational irony may be the same, the interpretations of the two types of irony in fact run in opposite directions. A closer look at how a blend is constructed through the selective projection of elements from input spaces reveals that the blend inherits the situational frame from one input space, while it inherits only a specific element of the current situation from the other. Verbal and situational ironies differ with respect to the order of the projection of elements into the blended space. The construction of the blend begins in the case of verbal irony by the setting up of a situational frame. Due to pretense, the speaker comes out as being honest and serious. The authors metaphorically refer to this as ironic nesting, i.e., the recognition of irony is compared to detecting of a cuckoo's egg in another bird's nest.

In situational irony, on the other hand, the projection of a certain situational element into the blend precedes the projection of the situational frame. Irony arises from the incompatibility of the two elements projected into the blend. Its interpretation is triggered by detecting something in the current situation that is odd or unexpected, and which therefore attracts the interpreter's attention. This is followed by projecting into the blend of an element of the same situation "which, for some reason, suggests to the interpreter that the situation should develop in a markedly different way. As a result, the situational element that initially attracted the interpreter's attention becomes embedded into an incompatible situational frame." The authors metaphorically refer to this as replacing the original frame of a photograph or a painting by another frame which patently does not suit what is depicted in terms of color, shape, or size.

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2. Note, however, that irony may be signalled in a number of ways. Most explicitly this is the case with markers discussed in Barbe (1993) and irony call-outs discussed in Gibbs (2021), but it can be marked by some constructions, like for example by rhetorical questions or superlative constructions, or by agreement adverbials (cf. Muecke, 1978), renamed as ironic indices by Attardo (2000), suprasegmental features (ironic tone), and even by some facial or bodily gestures (Gibbs, 2000).

The volume is rounded off by a part with chapters illustrating what figurative language can do in authentic discourse. The first chapter in this part is by Theresa Catalano and Linda R. Waugh. It combines critical discourse studies with metonymy (and also with metaphor) research (referred to as CMA, short for critical metaphor/metonymy analysis) in order to explore the contrast between how (im-)migrants (this expression is used as an umbrella term to cover people in a range of similar situations) are portrayed in media discourse and how they talk about themselves. They use as data published sources for the former type of discourse, and a collection of interviews with (im-)migrants for the latter, most of which were carried out by the authors, and some come from published sources.

The comparison of the two types of discourse was performed on metonymies and metaphors interacting with metonymies related to the topic of immigration that were extracted from the database. A series of differences between the two were uncovered. It is also remarkable that while journey is often mentioned in the media discourse in the literal sense, JOURNEY metaphors hardly ever occur. On the other hand, interviews with migrants contain multiple metonymies related to the JOURNEY metaphor. Most importantly, while the media, and even migration advocates, make use of a number of dehumanizing metaphors and related metonymies, e.g. immigrants are presented as FLOOD, the immigrants, who show that they are aware of this type of framing, turn out to be quite resilient, being still able to think and talk about themselves in positive, holistic, and varied ways.

The second chapter in this part is by Sanja Berberović and Nihada Delibegović Džanić. They examine the use of the expression *to drain the swamp* as an example of figurative creativity arising through conceptual blending. They demonstrate how the creative meaning of this figurative expression is further modulated as a result of a step-by-step process of elaborating, modifying, and reinterpreting the original blend by additional projections from input spaces. Metaphorically speaking, the blend is picking up elements of meaning as it keeps rolling from speaker to speaker, from one text to another, from one situation to another. In addition, such creative blends also provide discourse coherence at the intertextual level.

By analyzing a number of examples collected from various news sources, the authors show that creative figurative language can be used in different ways by members of a discourse community to achieve particular rhetorical goals as well as maintain discourse coherence. Innovative conceptual blends can be used to keep political discussions alive and be rhetorically effective in arguing for a certain point of view, i.e., they contribute to the framing and re-framing of particular issues in the Lakovian sense (Lakoff, 2014), as happens in the material studied by the authors when alternative scenarios are proposed in which participants in political debates extend and negotiate the meaning of a dominant figurative expression or scenario and adjust it to their own rhetorical goals.

While swamping American political discourse with the expression *to drain the swamp* originally helped Donald Trump to set up a scenario that successfully promoted his political agenda and manipulated the media by diverting their attention from more important issues, it also allowed discourse participants to reappropriate the scenario to their advantage, modifying and adjusting it to fit their political views. Transcending the traditional wisdom in the framing theory, the authors convincingly show that when a particular frame cannot be avoided or reframed in political discourse, as it seems to have been the case with *to drain the swamp*, then at least a particular figurative expression can be creatively exploited so as to discredit that same frame.

This part, and the whole volume, closes with a chapter by Ágnes Kuna, Naike Bochatay, Sara Kim and Márta Csabai on conflict management in health care. Both the first part of the title and the motto sum up the main message of this contribution. The former – "Being in the same boat, in two ways" – is the exemplification of the two basic strategies of conceptualizing and managing conflicts by using metaphors in different ways. This is in sync with the motto: "Conflict can be either bad or good. Conflict presents danger and opportunity" (Hocker & Wilmot, 2017, p. 39). The title and the motto of this chapter can be seen as suggesting the power of metaphor as a pro-active tool.

Although the results presented in the chapter do not offer too many reasons for optimism, the very fact that increasing attention is being paid to empirical investigations into the impact of metaphor on the conceptualization, communication and management of conflicts in real life situations in different professional and private fields is promising. The case of healthcare workers is just one of these areas, but it is one of the most important ones because patient care presupposes the coordination of systematic long-term activities of different professional groups in highly stressful situations with a great risk for the well-being of both patients and professionals. The proper way of communicating conflicts between healthcare workers seems to be of crucial relevance for efficient, safe and successful patient care because this can pave the way to management and resolution of arising conflicts. The present chapter focuses on the exploration of conflicts reported by Hungarian healthcare professionals and is embedded into the context of an international research project on the role of metaphor in conflict communication and management.

Although the Hungarian data mainly mirror power-based conflicts among hierarchically organized groups of healthcare workers (97%) and the reported conflicts are construed predominantly in a negative way, there is no place for pessimism or disappointment. Both the empirical results of the present research and the findings reported in the literature demonstrate that conflicts are predominantly conceptualized as COMPETITION metaphors. The positive supportive, creative or constructive aspects of conflicts are less often portrayed as COOPERATION, but when

they are, then conflicts tend to be conceptualized as BEING IN THE SAME BOAT. The first stage of this project is to be followed up by a cross-cultural analysis of the conflict metaphors taken from all power-related conflict stories provided by American, Swiss, and Hungarian participants. The comparative analysis will hopefully help understand cultural models underlying conflicts in health care. Additionally, it is planned that the results of metaphor research should find their way into the conflict management training of healthcare workers. This is in a way *Metaphors We Live By* made real, i.e. as metaphors we quarrel by. Since metaphor-related conflict awareness raising can be considered as an investment into the future, we once more go back to the past in order to study the present and change the future, in short, back to the future.

What all these chapters reflect as unique *fil rouge* in this volume is demonstrating the vitality of cognitive linguistic studies of figuration in the 21st century contexts, when combined with new research methodologies and in tandem with other disciplines sharing its interests, and, of course, applied to an even broader range of study areas. So to say, the volume demonstrates how rewarding it is to return to the true origins of cognitive linguistics for new sources of inspiration, and then take a fresh start that promises a true cornucopia of future results.

As transpires from the above, the volume is rich in relevant and novel insights of various types, from new attempts at definitions and typologies of well-established phenomena, proofs of the validity of specific directions/models/systems of thought within cognitive linguistics, demonstrations of deep-running motivational links at the same level of analysis or crossing them, sometimes ultimately leading to the cultural substrate. We also realize the instrumental role of figurativity in reconciling the wish to engage in creativity with the proclivity for resource-saving solutions, while at the same time maintaining (inter)textual coherence. Individual chapters prove that cognitive linguistics in which the study of figurative thought and language has a central status is a down-to-earth model that can help us cope with all kinds of daily experiences, be they unexpected, humorous or problematic situations, or any combination of these.

This volume is the result of a long process since its inception, due to a number of external factors, most important one being, of course, the current global health crisis (it was prefigured by the serious illness of the first editor, just following the conference at which the talks on which the chapters of this volume are based were presented in April, 2017. Because this illness was regarding its symptoms and course, very similar to the present COVID-19, for both editors this is another respect in which they could personally go back to the future, not giving up the hope and just keeping working in a search for a higher sense). We are deeply grateful to all the contributors for their patience, their keeping with us in this project, and for

keeping working on their chapters in the face of the global crisis. We also owe special gratitude to John Benjamins and the series editors for believing in this project and encouraging us along the way.

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PART 1

Modeling figurative thought and language

Important challenges in the study of metaphors

Raymond W. Gibbs Jr.

The world of metaphor scholarship is amazingly diverse, involving a myriad of empirical methods and theoretical frameworks. This diversity is greatly appealing, given the enormous complexity of metaphorical thinking, language, and human action. This chapter identifies some challenges for metaphor scholars both in doing particular empirical work and in offering theoretical accounts of metaphor and its role in human life. These challenges focus on issues with metaphor identification, the meanings of metaphor in discourse, online metaphor processing, and the metaphorical character of source domains. I see these challenges as "matters for all of us to think about" as we try to explain both the regularities and variations in metaphorical thinking, language, and multimodal action.

Keywords: conceptual metaphor, embodied metaphor, psycholinguistics, regularities, source domains, variations

1. Introduction

These are exciting times in the interdisciplinary world of metaphor studies, as evidenced by international conferences, such as "Figurative Thought and Language 3" held in Osijek, Croatia in May 2017. Metaphor scholars from many disciplines presented their latest empirical findings, theoretical ideas, and, as usual, there was an incredible variety in the topics, methods, and theories discussed. One of the things I cherish about being a metaphor scholar is this delicious mix of people, topics, and ideas, something that is often lacking, in my experience, in most established disciplinary conferences (e.g.,traditional psycholinguistics professional meetings).

My own presentation at FLT3 offered an overview of my recently, at that time, published book *Metaphor wars: Conceptual metaphor in human life* (Gibbs, 2017), which outlined some of the intense battles over the legitimacy of conceptual metaphor theory (CMT) in metaphor scholarship. Although CMT is by far and away the most dominant theoretical framework within metaphor studies, plenty of scholars, including quite a few who do not even study metaphor, have felt compelled,

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sometimes with good reason, to be harshly critical of the theory, with quite a few even advocating its complete rejection. *Metaphor wars* provided a review of the extensive empirical and experimental literature, from many fields, which is strongly supportive of the claims of CMT. Quite simply, there is no way that one can dismiss the idea that people possess substantial embodied metaphorical knowledge, which plays an important role in metaphorical thinking, language use, and expressive actions. Conceptual metaphors may be used in partial, probabilistic and multimodal ways in everyday life. At the very least, conceptual metaphors are an important constraint on people's continuing impulse to engage in various metaphorical actions in both ordinary and special life circumstances. I did not ever claim that this conclusion will end the wars over metaphor. My hope was just to get some scholars to adopt more nuanced views about theoretical and empirical debates over CMT, and many other issues, within metaphor research and theory. CMT is not entirely right or entirely wrong, yet clearly explains a significant amount of how people act in the metaphorical ways they do.

This chapter takes the next step by identifying some challenges that face metaphor scholars both in doing particular empirical work and in offering theoretical accounts of what metaphor is and how it works in human life. I see these challenges as "matters for all of us to think about" as we move forward both individually in our respective research endeavors and as a research collective trying to explain both the regularities and variations in metaphorical thinking, language, and multimodal action.

2. Identifying metaphors: The view from nowhere?

One of the important advances in metaphor scholarship over the past decade or so is the increased interest in creating concrete, empirically reliable methods for identifying metaphors both in linguistic and non-linguistic domains. For example, the "metaphor identification procedure" (MIP) (Pragglejaz Group, 2007) and its extension MIPVU (Steen et al., 2010) have provided researchers with criteria by which to determine whether some word in discourse potentially conveyed metaphorical meaning. Consider the four main steps in MIP:

1. Read the entire text (i.e., written text or talk transcript) to establish a general understanding of the discourse.
2. Determine the lexical units in the text.
3. For each lexical unit in the text, check its possible metaphorical use: Establish the meaning of the lexical unit in context (i.e., how it applies to an entity, its

relation in the situation evoked by the text (contextual meaning)). You should take into account what words are before and after the lexical unit. Determine if the lexical unit has a more basic current/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); and historically older. Basic meanings are not necessarily the most frequent meanings of lexical units.

4. If the lexical unit has a more basic current/contemporary meaning in other contexts than the given context, decide whether the contextual meaning can be understood by comparison or contrast with the basic meaning. If yes, mark the lexical unit as metaphorical. Repeat steps 1–4 for each lexical unit.

This procedure was expanded upon in slight, but important, ways in MIPVU, with both methods being rapidly adopted by scholars so that they can empirically demonstrate which of their research materials possibly expressed metaphorical meanings. I personally have employed MIP in various of my own corpus and experimental studies (as well as being one of the authors of MIP in the Pragglejaz Group). Many metaphor scholars tell me that these metaphor identification schemes are quite useful, and I agree with this assessment. We no longer have to endure endless fights over what was metaphorical given our, often varying, intuitions about the matter. Although procedures like MIP and MIPVU only focus on individual word meanings in context, these methods have been further extended to create a number of other metaphor identification schemes for more specific aspects of language, such as deliberate metaphor (Reijnierse et al., 2018), irony and hyperbole (Burgers et al., 2016), as well as different forms of visual metaphor (Steen, 2018).

Nonetheless, significant problems remain with how these identification methods are applied and the conclusions drawn from individual counts of metaphorically used words. First, there is an easy tendency to assume that metaphorical word counts accurately reflect the degree of metaphorical thinking or metaphorical meaning within different discourses. The more metaphoricity in language, then the greater metaphoricity in thought. There are surprises in some of these metaphor counts such as there is a greater proportion of metaphorically used words in academic discourse than in literary language (Steen et al., 2010), although the abstract topics studied within academia make the findings somewhat less unexpected. The problem, though, is that even a single metaphorical utterance can structure an entire discourse to be understood metaphorically even if few of the words that follow would be identified as potentially metaphorical according to MIP or MIPVU. Consider the following short paragraph (from Gibbs, 2013a).

> Imagine that you are a single person. A friend sets you up on a blind date. You really like this person and start dating a lot. **Your relationship was moving along in a good direction**. But then it got even better. The relationship felt like it was the best you ever had. This continues to this day. No matter what happens, the two of you are quite happy together.

This narrative contains 69 words but only 3 to 5 of these potentially express metaphorical meanings. The bold-faced statement, for instance, expresses a very conventional metaphor (ROMANTIC RELATIONSHIPS ARE JOURNEYS) through the use of the phrase "moving along in a good direction." Even though the overall proportion of metaphorically used words in this narrative is quite small (less than 7% overall), the use of the relationships being journeys idea has a large influence over people's interpretation of the entire narrative.

When a group of university students read this simple narrative, they easily drew several metaphorical inferences about the nature of the romantic relationship (Gibbs, 2013a). For example, when questioned, the vast majority of the students stated that the relationship had progressed to a significant distance, was presently progressing at a fast rate, was progressing along a straight line, and that the two individuals in the relationship were both heading in the same direction. None of these assumptions were explicitly stated in the narrative, but were reasonable metaphorical inferences given the simple "moving in a good direction" statement. In this manner, even a small number of metaphorically used words can evoke a larger, dominant metaphorical conceptualization of some topic (e.g., a romantic relationship) that is further elaborated upon by non-metaphorical language.

These observations raise the question of whether simple counts of metaphorically used words or expressions accurately reflect varying degrees of metaphorical thought within some discourse or across larger segments of language within different genres. One important challenge is to develop metrics for assessing metaphoricity in linguistic and non-linguistic activities that are not just based on counting up individual, metaphorically-used words. Among the possibilities to explore are (a) detailing the extent of metaphoricity in sentences, utterances, different stretches of written discourse, as well as within and across turns in conversation, (b) how various source domains manifest themselves in different forms and genres of discourse, (c) the degree to which people mix their metaphors and how these may reflect flexible metaphorical thinking about certain topics, and (d) showing how non-metaphorical language actually reflects, and often expands upon, different metaphorical ideas as expressed earlier in discourse. Most generally, it is time to do more than just count metaphors. We need to examine in much greater detail what those metaphors mean, the concepts they reflect, and the way these blend together across discourse to express larger metaphorical ideas or messages.

A related problem is that scholars sometimes adopt some metaphor identification method to provide a desired degree of empirical rigors to their studies, yet from there posit the existence of different hypothetical entities, such as image schemas, conceptual metaphors, systematic metaphors, conceptual blends, and so on, without offering *any* criteria as to how these determinations were ever made. Cognitive linguistic studies do not typically explain exactly how different decisions were made regarding metaphorical meaning and the positing of underlying cognitive motivations for metaphorical language patterns. The lack of reliable schemes for inferring possible conceptual metaphors from patterns of metaphorical language (perhaps done by some metaphor identification scheme) is a huge obstacle in advancing the field of metaphor scholarship forward, away from one based solely on our individual intuitions.

But there is a deeper concern with all metaphorical identification schemes, which is that these are entirely based on "the analyst's" perspective. Of course, scholars using metaphor identification procedures aim to assess metaphoricity given their understanding of the context in which specific words appear (e.g., Step 1 in MIP and MIPVU). Taking context into account should give analysts some idea of the possible human-based intentions that may motivate the use of metaphorical language. At the same time, reading the context in which words appear does not necessarily provide accurate insights into what speakers and writers (or gesturers) may have in mind when using words in metaphorical ways. Metaphor identifications are often deemed to be "potential" and not necessarily related to what people were actually doing when using language.

The difficulty, though, is that there is a strong tendency for scholars to quickly drop the "potential" label and to assume that their metaphorical word counts reflect real metaphorical usage, such as evident in discussions of differences in metaphoricity in various discourse genres (Steen et al., 2010). One illustration of this problem is seen in the trend to not adopt the actual perspective of a speaker or writer producing words that may be used metaphorically or not. Some apparent metaphors may actually reflect what people literally think, as in the case of individuals with psychological disorders, non-native speakers of a second language, children, and those whose allegorical messages are expressed in entirely literal terms.

Most scholars would admit, if pushed, that psychological studies are needed to really determine if a speaker, for example, was thinking in some active metaphorical manner when using certain words with potential metaphorical meanings. Yet, once again, scholars too often reify metaphor identifications as true indications of metaphorical thinking on the part of the speaker or writer of some metaphorical discourse. The challenge here is to find ways of adopting real-people's perspectives when speaking and writing, at least enough so as to not casually claim that a word

was potentially being used metaphorically given the analyst's "objective" point of view alone. Our scholarly analyses of metaphor should not be so quickly accepted as what real people in real discourse are actually doing.

3. What meanings do people understand when they understand metaphor?

Many studies present analyses of metaphorical language patterns (e.g., at the word, phrase, expression and discourse levels) as a way of capturing the possible cognitive and experiential factors that give rise to these patterns. In many metaphor analyses, such as those seen within the theoretical frameworks of conceptual metaphor and conceptual integration theories, the inferred underlying motivations for the existence of metaphorical words, phrases, and entire texts (e.g., poems) are presumed to have some connection to what people actually do when learning and using metaphor.

But does the articulation of the potential motivations for linguistic structure or behavior adequately describe what (a) really occurred diachronically, and (b) what contemporary speakers know and do when using specific words and expressions in particular discourse contexts? The simple fact is that people do not necessarily compute or infer the full meaning of any word or expression regardless of the overall context in which they appear. Instead, people create meaningful interpretations when using language that are just "good enough" for the present purposes. To take one example, conceptual blending analyses of metaphorical expressions (e.g., *He's digging his own grave*) describe a complex range of inputs, connections and emergent blended spaces (Fauconnier & Turner, 2002), yet it is not at all clear that people mentally perform most of these analyses when they produce or interpret these metaphorical statements in discourse.

Some scholars who are critical of cognitive linguistic analyses of metaphor suggest that these studies are only related to how metaphor works as a facet of thought or of language. They argue, quite sensibly, for the necessity of studying metaphor in communication (Steen, 2008). One of the great ironies, however, is that scholars claim strict divisions between metaphor in thought, language and communication, yet hardly ever study what people actually experience when they interpret metaphor, both in and out of language (see Gibbs, 2013b for a critique of the strict tripartite divisions between thought, language, and communication). Few of the empirical analyses that aim to quantify the number of metaphorically used words in discourse; for instance, ever bother to then explore if people actually infer those metaphorical messages, despite the urgent cries for studying metaphor in communication.

I readily acknowledge the complex empirical work looking at how various forms of metaphor may shape individual reasoning or persuasion (e.g., metaphors in political discourse). But these studies only draw a link between particular metaphors and people's beliefs about specific topics (e.g., does hearing *Crime is a preying beast* lead people to adopt certain beliefs about the best ways to address crime problems?) (Thibodeau & Boroditsky, 2011). They do not explore exactly what people have understood from the metaphors they are presented with and connect those meaning products to whatever decisions they come to as a result of reading particular individual metaphors. There is too big of a gap in much of our scholarship between our empirical judgments of "This word (or phrase) may convey metaphorical meaning" and "Seeing a particular metaphor may lead people to think in certain ways." One future challenge, then, is to close this gap by trying to better understand what people actually experience when they produce or encounter metaphors in everyday life and even more specialized discourses.

A different problem is that metaphor scholars typically work with a simplified sense of "metaphor understanding." We often talk of "understanding" or "recovering" a metaphorical meaning with the assumption that there is a generic process of metaphor understanding. But there is no single cognitive activity which can be uniquely called "understanding." Our abilities to interpret any linguistic or non-linguistic meaning are always situated within different types of behavioral tasks people are engaged in throughout their daily lives, as well as background assumptions about what different genres of discourse require in terms of what should be understood. I have earlier argued that metaphor understanding can, possibly be distinguished between comprehension, recognition, interpretation, and appreciation (Gibbs, 1994). Each one of these facets of understanding arises over different time-spans and is constrained by the specific motivations or tasks that a person has in any moment of discourse (e.g., fast-acting comprehension process in everyday talk; slow, reflective interpretation of literary texts).

But the complexity of metaphor understanding actually arises based on the interaction of several, extant factors related to who the people are using metaphor, the specific language and metaphors encountered, the specific understanding tasks they face, and how researchers analyze the data they collect to draw inferences about understanding processes (Gibbs & Colston, 2012). For example, individuals differ from one another along a vast number of dimensions including age, language experience, gender, occupation, social status and culture, political background/beliefs, cognitive differences (e.g., IQ, working memory capacity), bodily action, geographic origin, personality, social relationship and common ground.

Second, language use differs along various linguistic dimensions, including conventionality (e.g., novelty, creativity, sophistication), frequency, familiarity,

prototypicality/salience, discourse coherence, grammatical structure, prosodic and intonation patterns (e.g., accent, speed of delivery), collocations and word co-occurrences, relation to enduring concepts, relation to embodied experience, genre, discourse and text contexts, and gesture/bodily movements.

Third, interpreting language is not a singular, monolithic activity but differs depending on a person's goals or the task he or she has undertaken. Consider some of the understanding goals that people face in everyday discourse: quick comprehension in conversation/reading, explicit recognition that some word or phrase conveys a specific linguistic meaning (e.g., counterfactual, metaphor), reflective interpretation in reading, solving problems/making decisions, arguments/persuasion, memory, appreciation/explicit aesthetic judgments (e.g., humor, creativity, mastery), hypothesis or expectation confirmation, valence judgments and emotional reactions.

These general factors, and their individual components, all affect the empirical findings obtained in psycholinguistic and neuroscience studies on metaphor production and processing. Certain scholars believe that it may be possible to control for all of these factors, even within the context of a single series of studies, to create a normative theory of metaphor understanding which may be applicable to all people in all circumstances (Cardillo et al., 2010). Yet this is an unrealistic expectation. Language use *always* depends on various personal, linguistic and situational factors.

There is still a huge need for a more sophisticated view of metaphor understanding, one that properly acknowledges the multitude of meanings many metaphors convey, perhaps only some of which are typically inferred in most discourse contexts. To take one example, people understand metaphors, both in terms of processing times and meanings inferred, differently depending on the conversational aims of a speaker. Thus, people interpret *Lawyers are also sharks* differently depending on whether this statement offered new information, supported a prior claim about lawyers or contradicted a previous claim (Gibbs et al., 2011). We need to recognize how metaphor understanding is not merely a matter of meaning recovery but is centered around a variety of pragmatic effects, emotional reactions, and aesthetic responses (Colston, 2015). Reading a political argument may give rise to various metaphorical understandings, but these are tightly intertwined with the effects these understandings have on us, our always changing relationships with other speakers and writers, our immediate and long-term personal goals, and the adaptive actions we engage in at the moment when language passes back and forth between us.

There is no reason, in my view, for metaphor scholars to ignore these realities in the empirical work they do and the theoretical conclusions drawn from their analyses. I hasten to add that some cognitive linguists are embarking on the empirical study of these questions, and some are doing experimental research, on a

variety of grammatical and semantic topics (Dabrowska, 2013, 2014; Divjak et al., 2016; Duffy, 2014; Duffy & Feist, 2014), including corpus linguistic findings on specific metaphor patterns (e.g., Stefanowitsch, 2011). The results of these studies highlight the difficulties in creating accounts of metaphor understanding entirely in terms of idealistic speaker-hearers. The time is ripe for metaphor scholars to embrace the above-mentioned complexities in their own empirical and theoretical accounts of metaphor use. Do not simply assume, without comment, that metaphor understanding is a singular activity which works in the same way for all people in all circumstances.

4. Online, incremental metaphor processing

People do not approach language from the analyst's perspective, but they interpret meaning in an incremental manner (i.e., word-by-word) rather than as complete, discreet objects. Incremental processing is a simple fact of ordinary language use.

Consider this issue from the perspective of a man who hears his romantic partner say, *Where is this relationship going?* Psycholinguistic studies show that people do not wait until seeing or hearing the end of linguistic statements before beginning to process their meanings (Gibbs, 1994). Thus, the addressee in the romantic partner situation begins to construct a meaningful interpretation when hearing *where*, which sets up an expectation of a spatial location that immediately comes into play when hearing *this relationship*, which is then further elaborated upon by *going*. In this way, listeners do not process the entire statement and only then access some potentially relevant cognitive motivation, such as the conceptual metaphor ROMANTIC RELATIONSHIPS ARE JOURNEYS.

If anything, certain cognitive motivations, such as underlying conceptual metaphors, are created incrementally and not simply retrieved in full after linguistic processing has finished. There may be a host of cognitive constraints that contribute partial information during online language processing, including previously inferred conceptual metaphors, metonymies, image schemas, and blended spaces, to name just a few (Gibbs & Santa Cruz, 2012). Similarly, metaphor understanding often occurs in the context of other vernal metaphors, metaphorical gestures and facial expressions, all of which partly influence the metaphorical concepts instantiated and the meanings inferred during interpersonal communication. Metaphor understanding never starts from a neutral or blank-slate point of view but emerges incrementally in light of a wide-range of informational constraints.

Consider again the romantic couple where one person asks *Where is this relationship going?* Even if the speaker produced this utterance with some deliberate intention, the choice of words, and basic metaphors, will be shaped by many other

interacting constraints ranging from cultural influences (e.g., what are conventional ways to talk about relationship problems), immediate social contexts (e.g., how to respond in the context of an argument), previously produced speech (e.g., earlier stated verbal metaphors), and present bodily postures and gestures (e.g., point forward gesture). In this way, conscious deliberation (e.g., the speaker was aware of thinking of their relationship as heading to some metaphorical location) does not control all aspects of what was produced. Our sometimes thoughtful use of language by no means implies that other cognitive unconscious factors, along with various social and cultural forces, are irrelevant to what people say and communicate. Discourse unfolds according to many interacting constraints and is never driven by modular capacities alone (e.g., conscious deliberation, underlying cognitive motivations).

This characterization of metaphor interpretation and production as an incremental process has important implications for metaphor scholarship. First, many cognitive motivations identified by cognitive linguistic studies may emerge in partial, probabilistic ways during online language use. Right now, cognitive linguistic studies tend to emphasize specific cognitive or embodied motivations that shape linguistic structures and behaviors in an all-or-none manner. Second, the incremental understanding of language also involves various conceptual knowledge (e.g., frames) and pragmatic information and constraints (e.g., principles of relevance) that clearly interact with underlying cognitive motivations during online metaphor processing (Tendahl & Gibbs, 2008). Meeting the reality of incremental processing, therefore, demands that metaphor scholars situate their hypotheses within a broader, deeper pragmatic background of where meaning arises and is understood.

The fundamental interactivity of spoken discourse also demands greater attention from metaphor researchers. For example, metaphor scholars should properly acknowledge several key aspects of embodied language use, including how people (a) strive for inter-subjective conformity, (b) recognize the communicative intentions of others, (c) make predictions in a dynamic environment, and (d) integrate multimodal cues to form collaborative understandings in discourse (Kok & Cienki, 2017). Indeed, our understanding of the "embodied" nature of metaphorical cognition and language should encompass the interactive, and not just solitary, perspective of communicative interaction. Under this view, many metaphorical meanings are understood as emergent products given the implicit coordination between people in terms of their speech, prosody, gaze, posture, gesture, and body positioning during conversation (Gibbs, 2006; Gibbs & Cameron, 2007).

The presumed cognitive motivations for metaphorical language are not simply located within individual brains and bodies, but are shared and coordinated across conversational participants. It is precisely for this reason that the very concept of "cognitive motivations" must be understood as distributed and in a constant flux

given the dynamics of any interpersonal interaction. People may create shared conceptual understandings of certain metaphorical ideas or topics in discourse, and explicitly negotiate what they mean in context, rather than passively access underlying cognitive motivations from memory (Gibbs, 2017; Gibbs & Santa Cruz, 2012). One implication of this possibility is that the recruitment of cognitive motivations during real-time metaphor use is constructed from a range of bodily actions, especially those that are emergent from how two or more speakers attempt to coordinate at any moment in time.

5. The metaphorical essence of source domains

A prevalent belief among contemporary metaphor scholars is that metaphor, in both thought and language, arises from the mapping of source domain information onto often abstract target domains (e.g., LIFE IS A JOURNEY). These source-to-target domain mappings give rise to a rich set of entailments that lend target domains their rich metaphorical character. A further assumption within CMT, most notably, is that source domains are primarily rooted in bodily experience. Thus, our bodily experiences associated with taking journeys is mapped onto different target domains, such as life, which, again, provides a metaphorical understanding of these target domains (e.g., LIFE IS A JOURNEY). Source domain knowledge, because it is grounded in the body, is assumed to be inherently non-metaphorical.

My claim is that most source domains are actually quite metaphorical, precisely because people routinely conceptualize their bodily experiences in metaphorical ways. Under this argument, there is no completely non-symbolic, non-metaphorical understanding of the body and the diverse sensations and actions related to bodily life. There are several lines of empirical findings from linguistics, psychology, and anthropology that lend support to this claim.

First, many linguistic statements, often viewed as conveying literal meanings also convey metaphorical messages. Consider the following idiomatic expressions:

go out on a limb
skating on thin ice
rock the boat
spill the beans
get away with murder

When these phrases are used in literal, physical contexts, they automatically evoke their figurative, metaphorical meanings. When one *goes out on a limb*, one is metaphorically also in a precarious, potentially dangerous situation. The same idea applies to literal uses of *skating on thin ice* and *rock the boat*. When one literally

spills the beans, that person is also metaphorically expressing the idea that some materials are now suddenly revealed for all to see. And when one literally commits murder, and gets away with this crime, one metaphorically has engaged in a terrible action and has not had to suffer any penalty for doing so.

Many proverbial expressions also convey metaphorical ideas when employed in purely literal circumstances. For example, the suggestion *don't count your chickens before they are hatched*, in the context of chicken hatching immediately conveys the broader symbolic message of not prematurely doing something before some precondition has been met. Similarly, *the early bird captures the worm* when used literally in talking about early morning bird behavior immediately evokes the message that getting a head-start in one's daily activities is likely to lead to greater success than if one delays.

Experimental studies show that people quickly infer metaphorical meanings when they hear idioms and proverbs being used literally (Gibbs, 1980, 1986). This general finding is not simply due to a tight, yet arbitrary, association between the literal and metaphorical meanings of many idioms and proverbs. Instead, understanding the literal bodily actions referred to in many idioms and proverbs immediately leads people to infer broader symbolic meanings regarding these actions. I have earlier referred to this tendency as the "allegorical impulse" (Gibbs, 2011, p. 222):

> A fundamental property of human cognition in which we continually seek diverse connections between the immediate here and now with more abstract, enduring symbolic themes. The evocation of these symbolic themes creates rich, diverse networks of meaning that are metaphoric, deeply embodied, and give rise to multiple affective and aesthetic reactions.

People's ability to routinely interpret simple descriptions of physical actions in allegorical terms offer another line of evidence for the possibility that basic bodily experiences are routinely understood in metaphorical terms (e.g., Robert Frost's poem "The Road Not Taken" about a man walking through the woods and having to make decisions about which path to follow is evocative of the broader conceptual metaphor LIFE IS A JOURNEY) (Okonski & Gibbs, 2019).

Yet even very basic physiological sensations and reactions are also deeply tied to symbolic, metaphorical ideas. Pain, for example, is not a pure sensation that is experienced apart from conceptualization. Consider some of the ways that people describe their pain, along with the conceptual metaphors that motivate these specific statements (Semino, 2010, p. 207):

> *A sharp stab of pain made her sit back down.* (PAIN IS A SHARP OBJECT)
> *A massive killing pain came over my right eye […] I clawed at my head trying to uproot the fiendish talons from their iron grip.* (PAIN IS A TORMENTING ANIMAL).
> *Pain is fire that can devour the whole body.* (PAIN IS FIRE)

We also frequently experience pain in terms of our interaction with different objects, as seen in the following examples and the specific words used to describe pain (Semino 2010, p. 210):

INSERTION OF POINTED OBJECTS
stinging, pricking, boring, drilling, penetrating
APPLICATION OF SHARP OBJECTS
sharp, cutting, lacerating, stabbing, piercing
PULLING/TEARING
tugging, pulling, wrenching, squeezing, tearing
APPLICATION OF PRESSURE/WEIGHT
pinching, pressing, crushing, tight, heavy

One long-term, chronic patient described his bodily pain in more elaborate metaphorical terms (Semino, 2010: 221), as follows:

> *I am constantly battling with the physical pain. You could possibly describe it as swords on fire. It is as if they are ripping out my leg all the time. Red hot swords. They move. They start in my back and move down relentlessly, like an escalator. […] I think it is probably one rod and a million swords.*

Sexual physical sensations and actions are also typically understood in metaphorical ways. Some common metaphorical concepts for sexual behavior include the following:

SEX IS PLAYING SPORTS
SEX IS WAR
SEX IS HUNTING
SEX IS EATING
SEX IS DOING SOMETHING NAUGHTY
SEX IS FIRE

One specific instantiation of SEX IS PLAYING SPORTS is the metaphor HAVING SEX IS PLAYING BASEBALL as seen in American English where people talk of their sexual activities in terms of success in playing baseball (i.e., where the goal is to get to first base, second base, third base, and then back home to score a run). This set of actions mirrors progress in sex in the following manner:

GETTING TO FIRST BASE – KISSING
GETTING TO SECOND BASE – TOUCHING ABOVE THE WAIST
GETTING TO THIRD BASE – TOUCHING BELOW THE WAIST
HITTING A HOME RUN OR GETTING TO HOME PLATE – FULL-OUT INTERCOURSE

People readily conceptualize their bodily actions during sex in terms of metaphors. Even physiological sexual responses are characterized in metaphorical terms. One

study asked speakers from 27 languages to "describe terms for orgasm as well as the announcements they use before having an orgasm in their native language" (Chiang & Chiang, 2016). Many languages focus on orgasm in terms of the following general metaphorical idea:

ORGASM IS A DESTINATION		
Source: JOURNEY		Target: SEX
travelers	⇒	participants
distance covered	⇒	progress made
decisions about way to go	⇒	choices over what to do
destination of the journey	⇒	orgasm

A more specific instantiation of the destination in orgasm is seen in the following metaphor, with some examples from different languages:

ORGASM IS THE PEAK OF A TIDE
"highest peak" (English and Indonesian)
"sexual peak" (Korean)
"point highest" (Thai)
"high tide" (Mandarin Chinese)

Each of the above metaphors also are motivated by the idea of HAPPY IS UP. Still, there is some variation between languages in the exact nature of travel to and from the destination of the orgasm. Consider two different ways of announcing orgasm:

"I'm coming" (toward orgasm place or hearer)
"I'm going" (away from orgasm or hearer)

The "going" idea also refers, in some languages, to moving toward heaven as in Japanese and French (i.e., *la petite mort*).

Masturbation is another bodily experience for which metaphor rushes in to help people conceptualize this basic, to many, bodily action. American English has literally many hundreds of metaphorical, and metonymic. Phrases that are used to talk about autoerotic experiences for both men (e.g., *spank your monkey*, *fondle your flagpole*, *chock the chicken*, *lubbing the tube*, *milking the cow*, *twist your crank*) and women (e.g., *pat the kitty*, *flick your bean*, *dot the "I," sweep the carpet*, *stuff the taco*, *polish the spoon*).

Finally, many other basic bodily phenomena, ranging from urination and defecation to menstruation and breast feeding, and to different diseases and even near-death experiences, are widely characterized in metaphorical terms, often differently in varying cultures (Csordas, 1994) with many of these metaphors being centered around success and failure in SOURCE-PATH-GOAL events.

One can argue that the metaphorical manner in which basic bodily experiences are discussed is purely a social, pragmatic phenomenon and not truly a conceptual one. This alternative claims that metaphors for bodily sensations are merely euphemisms which are created to avoid speaking directly of bodily functions. But it is unclear if people, and cultures overall, actually have completely non-metaphorical understandings of bodily experiences, and only speak metaphorically of these for social purposes. Here is one place where it may be impossible to both think and speak of the body without metaphor.

A different skeptical reaction to my claim is that there is a fundamental difference between bodily sensations and conceptualizations of these experiences. Yet the classic divide between sensation, perception and conception is now widely questioned in Psychology given different lines of evidence that argue against "pure" sensation apart from an individual's immediate and long-term motivations and goals (Schiffman, 2011). Within neuroscience, there is also more and more research demonstrating the existence of diverse, interactive connections between different sensory brain areas and between sensory neural systems with areas associated with higher-order cognition (Shapiro & D'Espisito, 2016).

The possibility that bodily experiences are inherently metaphorical, to a significant degree, has many implications for contemporary metaphor theory. Metaphor may not just arise from the mapping of information from non-metaphorical, embodied source domains onto more abstract target domains. Instead, metaphorical, embodied source domains may metonymically relate to abstract target domains. Moreover, the metaphorical nature of bodily experience suggests that metaphor is even more pervasive in everyday life than has been acknowledged in the past, even by those of us who are great enthusiasts of metaphors we live by and related ideas. At the very least, there is an important methodological imperative that falls out from my arguments about metaphorical source domain: the "metaphorical body imperative" "We should always be open to the possibility that bodily experiences themselves are significantly constituted by metaphor and explicitly explore this idea in our analyses of metaphor in thought, language, and action." We can no longer assume that bodily-based source domains are necessarily non-metaphorical.

6. Conclusion

The four general challenges for metaphor scholarship identified in this article are by no means the only methodological and theoretical issues requiring attention in future metaphor research. But these stated concerns about metaphor identification, the meanings of metaphors, online metaphor processing, and the metaphorical

character of source domains in metaphorical concepts are surely areas deserving of deeper, expanded thinking and study. Nobody likes to have others, like me, preaching to them about what they all should be doing in their respective, individual research projects on metaphor, or any other topic. Readers can surely offer many suggestions to me about what I should be focusing on in my own scholarly efforts, as indeed many have done in the past. My general aim here, however, has been to share some of the concerns I have about ongoing trends in the multidisciplinary world of metaphor research. I discuss these concerns as a way of inviting others to worry about some of the methodological practices and theoretical arguments that I engage in within my own work. Although I have no easy solutions to the challenges raised here, my hope is that by thinking more broadly about research trends in the field, we may expand the scope of our metaphor scholarship, specifically in terms of how we analyze our data and draw theoretical conclusions from these analyses.

Of course, scholars from different disciplines may respond to these challenges in different ways, including ignoring some or all of them. Still, my most general plea is for the greater recognition that metaphor, both in language and action, is always something human beings do in complex ecological contexts (e.g., physical environments, culture, other people). We may not all be psychologists, yet trying to situate metaphor studies within the larger context of human thinking and action, including interpersonal communication, is essential, in my view, to adequately characterize the complex realities of metaphor in human life. A key part of my message here is to urge greater caution about the inferences we draw about human thinking and meaning from the study of metaphor on the page alone. We should more fully embrace how people think, speak and act in metaphorical ways for a multitude of intrinsic and extrinsic, dynamical factors.

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A Cognitive Grammar approach to 'metonymy'

Cristiano Broccias
Università di Genova

This chapter builds on Broccias's (2017) critique of recent cognitive linguistic approaches to metonymy, which tend to neglect form and the substitutive relation built into the traditional X FOR Y formula. By bringing back to the fore the tropical characterization of metonymy (Matzner 2016), which instead relies heavily on form and abrasiveness, this chapter develops a Cognitive Grammar approach to metonymy which rests on the reference point ability and conceptual integration. It shows how this approach can handle a variety of cases, from 'straightforward' metonymies to 'metonymic association'. Crucially, it is argued that the multifaceted examples taken into consideration do not necessarily cohere into a 'Platonic' category.

Keywords: metonymy, reference point ability, conceptual integration, active zones, facets, conversion

1. The cognitive approach to metonymy

In Broccias (2017), I highlighted certain features of recent cognitive linguistic research into metonymy that are, in my view, potentially problematic. Here it suffices to mention three, namely the nature of metonymy as a 'Platonic' category, the emphasis on its conceptual nature and its controversial relation to other notions such as active zones.

Firstly, cognitive linguists sometimes seem to espouse, either implicitly or explicitly, an 'essentialist' or 'Platonic' view of metonymy in the sense that what is observed is regarded as a shadow of an ideal essence. This is best illustrated by the following quotation from one of the leading scholars in cognitive linguistic metonymy research:

> [o]n a theoretical level, a first concern is that we are still not very good at defining and identifying [metonymy]… (Littlemore, 2015, p. 194)

https://doi.org/10.1075/itl.16.02bro

Metonymy is thus presupposed to exist as a 'perfect' category, whose essence is what analysts ultimately try to discover by searching for actual metonymic instantiations – a veritable vicious circle because it is difficult to see how metonymic examples can be searched for if metonymy cannot be defined satisfactorily in the first place. Also, in a truly cognitive approach to metonymy, metonymy should be related to basic cognitive abilities and it is not obvious whether/how such cognitive abilities may define a 'well-behaved' or 'perfect' category.

Secondly, some recent definitions of metonymy within cognitive linguistics (unlike, for instance, work by Brdar and Brdar-Szabó, Ruiz de Mendoza, Panther; see e.g. Brdar, Brdar-Szabó & Perak, 2020; Panther & Radden 1999; Ruiz de Mendoza, 2020) tend to neglect form and the substitutive relation built into the traditional X FOR Y formula in favor of purely conceptual definitions, as the following two quotations from two more leading scholars in metonymy research illustrate:

> [metonymy is] a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, associated with it within the same integrated conceptualisation. (Bierwiaczonek, 2013, p. 16)

> [Metonymy is] an asymmetric mapping of a conceptual domain, the source, onto another domain, the target. Source and target are in the same functional domain and are linked by a pragmatic function, so that the target is mentally activated. (Barcelona, 2011, p. 52)

These two definitions ignore the formal side of metonymy – the fact that in a staple example such as *Washington decided to bomb Iraq*, the nominal *Washington* could be replaced by, for instance, the nominal *the US Government*. Instead, they focus on purely conceptual access, from a source to an associated concept, the target. Although the concept profiled by the nominal *Washington* can certainly be argued to be mapped onto or provide access to the concept profiled by the nominal *the US Government*, strictly speaking, nothing is said about the actual possibility of substitution of the former by the latter in the sentence in question. As is also pointed out further below in the chapter, definitions of the kind reproduced above appear to be very general, encompassing many more cases than would be covered by more traditional definitions of metonymy. For example, even associations such as a memory evoked by the smell of a flower could be subsumed under metonymy on the basis of such definitions. This is not necessarily a drawback but its implications should be clarified in detail: the obvious risk is that the notion of metonymy becomes so encompassing that its analytical usefulness may turn out to be at stake. Further, at least in Barcelona's definition, the target is considered to be active, which is an issue that also deserves further scrutiny, as the point about active zones immediately below shows.[1]

1. The asymmetric nature of metonymy highlighted in Barcelona's definition distinguishes metonymy from metaphor, which in Barcelona's view is an instance of symmetric mapping.

Thirdly, there seems to be little consensus over the existence of differences (and, if so, over how to distinguish) between metonymy, facets (see Paradis, 2004, for example), and active zones (see Langacker, 2009, for example). While all analysts would probably concur that (1) is a metonymic example – *the buses* stands for 'the bus drivers' – staple examples such as those in (2) are instead a bone of contention among metonymy researchers.

(1) *The buses are on strike.*

(2) a. *This book is a history of Iraq.*
b. *This book is very large.*

While Barcelona (2011) regards both (2a) and (2b) as metonymic, Ruiz de Mendoza (2000) would view only (2a) as metonymic, and Croft (2002) would consider neither as being metonymic. Further, Paradis (2004) would analyze both as involving facets: (2a) highlights the content facet of the concept 'book', and (2b) highlights the nature of the book as a physical object, which has a shape and a weight, for example.

Also controversial is the analysis of Langacker's famous sentence in (3) (see, for example, Langacker, 1999):

(3) *Your dog bit my cat (on the tail with its sharp teeth).*

Langacker views (3) as an instance of the profile/active-zone discrepancy. The entities that are directly involved in the action profiled by the verb *bite* (the active zones) are two 'parts' of the dog and the cat – namely the dog's teeth and, for example, the cat's tail – rather than the 'wholes' profiled by the nominals *your dog* and *my cat*. Importantly, it is not clear whether, despite their name, the active zones are actually activated in the sense of Barcelona's definition of metonymy reproduced above. Also, unlike 'typical' examples of metonymy such as (1), the intended target does not need to replace the source but can felicitously coexist with it within the same sentence, without any replacement, as the optional prepositional phrases in (3) show. Finally, Langacker does not seem to distinguish clearly between cases such as (1) and (3), as they would both be treated as instances of the profile/active-zone discrepancy in his approach.

In Broccias (2017), I conclude that 'metonymy' should be viewed as a label for an intricate network defined by various dimensions of variation which do not necessarily cohere into a well-behaved category (i.e. metonymy as an 'ideal essence'). In other words, metonymy is ultimately what we want it to be and agreement upon its 'essence' can only be reached at a very general level, that of basic cognitive abilities (see Section 3 for more details).

In this chapter, I will argue that a Cognitive Grammar (CG) approach to metonymy can overcome such potential difficulties because, while being based upon general cognitive operations such as the reference-point ability (see Section 3),

CG aims to provide a fine-grained analysis of the phenomena at hand, which do not necessarily result in clear-cut categories as the presumed category 'metonymy' would lead us to believe. Before doing so, though, I will report on recent research into metonymy from the point of view of the literary tradition because it highlights the importance for literary analysis of precisely those features that are now regarded of secondary importance in cognitive linguistic research. This will be the topic of the next section (Section 2). In Sections 3 and 4, I will provide a CG characterization of various 'metonymic' examples, including controversial cases such as noun-to-verb conversion and the alleged metonymic use of sound verbs. Section 5 draws the conclusions.

2. The tropical approach to metonymy

The Platonic, purely conceptual, potentially very broad view of metonymy espoused in recent cognitive linguistic research contrasts with the literary or 'tropical' tradition, which is still alive and kicking. A major recent study of metonymy from the perspective of literary theory is Matzner (2016). Matzner highlights the importance of selectional conflict (what he calls 'abrasiveness'), form (he distinguishes, for example, nominal from adjectival metonymies), and the FOR relation (he discusses the issue of 'replacement' in great depth) in the analysis of literary texts. He also offers a typology of metonymies that include, among other things, what he labels 'index metonymy', 'amplification metonymy', and 'metonymic association.' In what follows, I offer a summary of his approach and comment on its (dis)similarities to the cognitive tradition.

2.1 Index metonymy

Matzner's (2016) category of index metonymy is equivalent to the cognitive linguistic category of referential metonymy in that it is noun-based. It should be noted, however, that Matzner seems to restrict this label to instances where a selectional conflict or collocational contrast ('abrasiveness') obtains, as in his two examples below from Hölderlin's *Gesang des Deutschen* (see Matzner, 2016, p. 69; the metonymic sources are in italics; the translations of all passages in German and Greek below, taken from Matzner 2016, are his own):

(4) *Wenn Platons frommer **Garten** auch schon nicht mehr*
Am alten Strome grünt und der dürftge Mann
*Die **Heldenasche** pflügt, und scheu der*
Vogel der Nacht auf der Säule trauert.

> 'Even if Plato's pious *garden* no longer blossoms
> By the old stream and the indigent man
> Ploughs the *heroes' ashes*, and the
> Bird of the night mourns shyly on the top of the column.'

From a literal point of view, gardens cannot be pious nor can a person plough ashes. Thus, Matzner stresses the importance of the replacement view of metonymy so as to resolve the observed selectional conflict, although this view is usually considered inadequate in the cognitive linguistic camp (see e.g. Bierwiaczonek 2013). Nevertheless, in keeping with the cognitive linguistic approach (see e.g. Littlemore, 2015), he highlights the fact that the target is often indeterminate. For example, *Garten* ('garden') above could refer to "the Platonic philosophers philosophizing in the grove of Academus" (Matzner, 2016, p. 70) or, more generally, Platonic philosophy or, even more generally, Ancient Greek culture. In a sense, Matzner's approach is the best of two worlds in that, although it emphasizes the FOR and hence substitutive relation intrinsic to traditional approaches to metonymy, it also goes against a 'mechanical' replacement view of metonymy by pointing out that the target may be 'virtual.' He repeatedly stresses that

> MV [the metonymic vehicle] and MT [the metonymic target] … are not mere substitutes of one another but have different properties, connotations, and associations, that can gain significance in the interplay between the context and the MV-MT compound. (Matzner, 2016, p. 66)

Similar to index metonymy is Matzner's adjective-based 'grammatical metonymy', which is manifest in cases such as (5), from Pindar's *Second Olympian Ode* (see Matzner, 2016, p. 99).

(5) λείφθη δὲ Θέρσαωδρος ἐριπέντι Πολυωείκει, *νέοις* ἐν ἀέθλοις
ἐν μάχαις τε πολέμου
τιμώμενος …
but Thersandros, who survived the fallen Polyneikes, gained honor in *youthful* contests
And in the battles of war …

In this example, the dative adjective *νέοις* 'young, youthful' does not collocate with the noun *ἀέθλοις* ('contests') but must be converted into a genitive noun (*νέων* 'of young [ones]') so as to interpret the relevant prepositional phrase as 'in contests of/involving young men.' Hence, his term 'grammatical metonymy,' because a change of grammatical class from adjective to noun (as well as case) is required to access the target.

2.2 Amplification metonymy

Alongside index metonymy, Matzner recognizes 'amplification metonymy,' which is also noun-based and abrasive. An illustrative example is given in (6), see Matzner (2016, p. 77), which comes from Pindar's *Pythian Odes*.

(6) κατέκλασε γὰρ ἐντέων σθένος οὐδέν.
For he broke none of his strong equipment.
[lit.: For in no way did he break the strength of the equipment.]

In amplification metonymy, the metonymic vehicle contains the metonymic target. In (6), the metonymic vehicle is identified with 'the strength of the equipment' and the metonymic target with 'the equipment'.

Similar to amplification metonymy is the type of adjective-based 'grammatical metonymy' exemplified in (7), from Pindar's *Eighth Pythian Ode*, which is traditionally called 'enallage' or 'transferred epithet':

(7) βλαχαὶ δ' *αἱματόεσσαι*
τῶν ἐπιμαστιδίων
ἀρτιτρεφεῖς βρέμονται
'loud, *bloody* screams
rise up from infants [lit. those at the breast]
fresh from the nourishing breast'

In ordinary usage, the adjective *αἱματόεσσαι* ('bloody') does not collocate with *βλαχαὶ* ('screams') but, instead, with the genitive *τῶν ἐπιμαστιδίων* ('of infants'): it is the infants that are covered in blood, not the screams. As in the case of noun-based amplification metonymy, the target is already present in the sense that we just need to modify a noun which appears in the text (here 'infants') with the metonymic epithet (here 'bloody') to remove abrasiveness.

2.3 Metonymic association

Interestingly, Matzner distinguishes index and amplification metonymies, whether grammatical or not, from 'metonymic association', which involves cases where both a literal and a metonymic interpretation are possible. This is reminiscent of propositional metonymy in cognitive linguistics (see e.g. Bierwiaczonek, 2013, pp. 24–27) and is illustrated in (8), from Goethe's *Iphigenia among the Taurians*, see Matzner (2016, p. 144).

(8) … *Sinnt er vom **Altar***
*Mich in sein **Bette** mit Gewalt zu ziehn?*
'… Does he intend to drag
Me from the *altar* to his *bed* by force?'

Although the metonymic interpretation is to be preferred (Iphigenia, a priestess, will be forced to become the wife of the King of Scythia Thoas), the literal interpretation (Iphigenia may be dragged from the altar to Thoas' bed) cannot be excluded.

2.4 Interim summary

Although the cognitive linguistic analysis of metonymy emphasizes its conceptual nature, assumes that a unitary definition is possible and tends to neglect form, the lesson from a work such as Matzner's is that, in literary analysis, notions such as abrasiveness, replacement (notwithstanding the possible virtuality of the target) and greater attention to form are needed. In what follows, I will therefore try to highlight these analytical dimensions within a cognitive linguistic framework by adopting a CG approach to metonymy. At the same time, I will also attempt to develop the CG approach so that it does not conflate 'unambiguously' metonymic examples such as (1), facets as in (3), and metonymic association as in (8). The underlying assumption is that it is difficult, if not impossible, to view metonymy as a well-behaved category, as was remarked at the end of Section 1. A word of caution is needed, however. In what follows, for reasons of space, I will be dealing with metonymy from the point of view of the hearer, rather than that of the speaker, although the latter perspective is also important, despite being usually neglected (see Radden, 2015).

3. A Cognitive Grammar approach to metonymy

In this section I will offer a CG analysis of a few staple examples of 'metonymy' as well as related, although contested, notions such as active zones and facets. First, however, I will highlight the cognitive operations underlying the examples to be taken into consideration.

3.1 The reference-point ability

As was emphasized above, contemporary cognitive linguistic research into metonymy tends to downplay the importance of abrasiveness and the substitutive (FOR) relation between the metonymic source and the metonymic target, focussing

instead on the relation between the source and the target as conceptual entities. The net effect of this is that metonymy is essentially reduced to what Langacker dubs the 'reference-point ability' (see e.g. Langacker, 2009), which is illustrated in Figure 1.

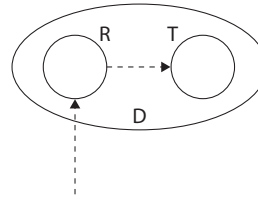

Figure 1. The reference-point ability

This non-language specific cognitive ability requires that the conceptualizer make contact with a reference point R, as is indicated by the dashed arrow ending at the circle R in Figure 1. The reference point R is used as a stepping stone for accessing a target T, which is associated to R by virtue of belonging in the same dominion D (the ellipse in Figure 1) as R.

The reference-point ability is rather broad in scope since it can be invoked to account for any kind of association. It also applies to the case mentioned above of a memory evoked by a smell and Langacker himself uses it to describe grammatical phenomena such as the possessive construction (e.g. *Sally's car*), see for example Langacker (2009). When applied to what is usually understood as metonymy, the reference-point ability may need to be supplemented by our ability to perform conceptual integration, as the relevance of abrasiveness to metonymy shows. In (1) above, for example, not only does the conceptualizer need to access a target – no matter how indeterminate a priori it may be – but she also needs to integrate the 'virtual' target into the original sentence so as to obtain a conceptualization that 'makes sense'. The CG approach sketched below will therefore rely on the interplay of two cognitive abilities: the reference-point ability and our ability for conceptual integration.

3.2 'Straightforward' metonymy in CG

Let us first consider 'straightforward' metonymic cases such as *The buses are on strike* in (1) above. A possible CG analysis is offered in Figure 2. The proposed representation incorporates both the reference-point ability and conceptual integration, and follows Langacker (2009). The ellipse on the left, with its subparts R and T, is the same as in the reference-point ability in Figure 1. The conceptualizer makes contact with the reference point R, which is here the trajector of the clause

(*the buses*).[2] The reference point R is used to access the (virtual) target T, shown as a blue circle, which can correspond, for example, to the bus drivers. The preposition *on* profiles a relation between two entities. Although the clause-level trajector is *the buses*, Figure 2 shows that the trajector of the preposition *on* is in fact the target T. The landmark of the preposition is elaborated by the nominal *strike*, shown as the right-hand square. Crucially, the representation in Figure 2 captures abrasiveness explicitly because *on strike* is connected to *the buses* only indirectly, via the target T. I will assume that a continuous line between R and the square for *strike* would instead have meant that *the buses* is a non-abrasive trajector for the preposition *on*.

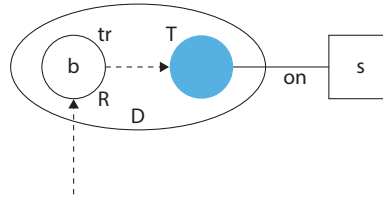

Figure 2. The buses are on strike

3.3 Active zones and part-whole relations

Although Langacker seems to treat metonymies of the kind illustrated by *The buses are on strike* on a par with 'active zones' as in *Your dog bit my cat*, see (3) above, I will contend that the two cases should be pulled apart and can be represented satisfactorily as being distinct within a CG approach. Clearly, they need to be differentiated because no abrasiveness is perceived in (3) and the intended targets (the active zones 'teeth' and 'cat's tail') can be added to the sentence without any structural modification. Also, despite their label, the 'active zones' involved do not seem to be particularly salient or, at least, they intuitively appear to be less salient than the bus drivers in (1), which is probably a correlate of the lack of abrasiveness. A plausible representation is offered in Figure 3. It should be observed that the reference point ability is required twice in this example as *dog* (the clause-level trajector) is used as a reference point to access the target 'sharp teeth' and *cat* (the clause-level landmark) is used as a reference point to access its 'tail'. Importantly, the lack of perceived abrasiveness is represented by the fact that the horizontal line standing for *bit* connects directly both the trajector and the landmark, on the one hand, and their respective active zones, on the other, as is made explicit in Figure 4 for the

2. Note that various details such as the use of the definite article and the verb have been omitted for the sake of simplicity.

former case. This visual arrangement should be contrasted with that in Figure 2, where the predicate *on* 'reaches' the clause-level trajector *the buses* only indirectly through the arrow connecting R to T.

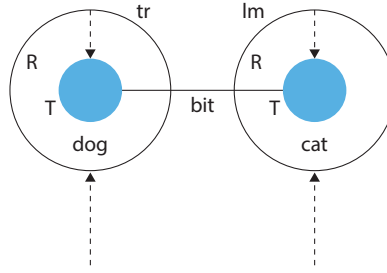

Figure 3. Your dog bit my cat

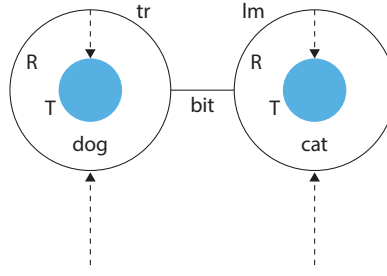

Figure 4. The lack of abrasiveness in *Your dog bit my cat*

Essentially, active zone examples such as (3) involve a part-whole relation between R and T – they would be described as 'target-in-source' metonymies in Ruiz De Mendoza's approach to metonymy (see e.g. Ruiz de Mendoza, 2011). The proposed representational model can easily be extended to 'source-in-target' metonymies such as *Nice wheels!*, as is shown in Figure 5. This example differs from (3) in that abrasiveness is perceived because the adjective *nice* does not modify *wheels* (a part) but rather the metonymic target 'the car' (the whole). Further, *Nice wheels!* differs from 'active zone' examples in that the target, 'the car', is highly salient. Figure 5 shows that the integration between the trajector of the adjective *nice* (tr) and *wheels*, takes place indirectly by means of a correspondence, represented as a dashed horizontal line, between the trajector of *nice* and the metonymic target 'car' (the blue circle). The fact that the correspondence line does not arrive at the reference point R (*wheels*) captures abrasiveness, as in Figure 2 and unlike in Figure 3. To reiterate, the conceptualizer makes contact with the reference point R (*wheels*), which serves as a stepping stone for accessing the target 'car' and it is the metonymic target T that corresponds to the trajector of *nice*.

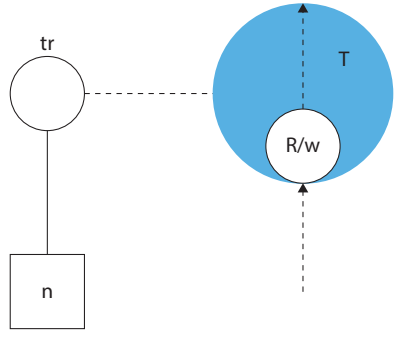

Figure 5. Nice wheels!

When dealing with part-whole relations, it is however important to also distinguish between alienable and inalienable possession. While the active zone example in (3) involves inalienable possession as teeth and tail are constitutive parts of animals such as cats and dogs, the staple metonymic example in (9) does not: water is an alienable part of the kettle. Since abrasiveness obtains (a kettle cannot boil literally), then a representation along the lines of Figure 3 is not satisfactory for (9). Instead, a possible analysis for (9) is offered in Figure 6.

(9) *The kettle is boiling.*

Although the water is inside the kettle and, in this sense, can be described as a part of it, Figure 6 shows explicitly that the water is alienable because the water is represented as being 'detached' from the kettle (see the blue circle in Figure 6). The

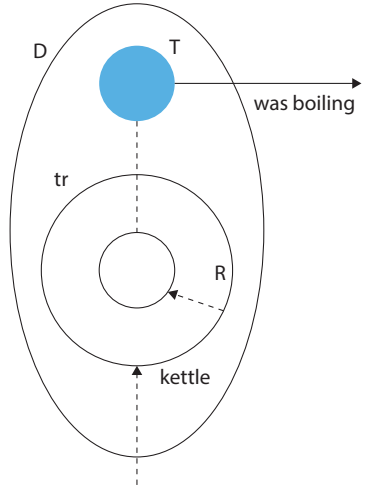

Figure 6. Alienable possession in *The kettle is boiling*

circle representing the detached water is put into correspondence with the circle inside the kettle because the water occupies its interior. Crucially, Figure 6 shows that the metonymic target is the detached water so as to capture the perception of abrasiveness. In other words, the arrow representing the process of boiling does not reach the inside of the kettle directly (as did the line for *bit* with respect, for example, to the dog's teeth in Figure 3) but, rather, is connected to the detached water and then only derivatively, to the kettle itself. Thus, in terms of the reference point ability, Figure 6 claims that the conceptualizer makes contact with the kettle, which she uses as a reference point for accessing the inside of the kettle. This is, however, a 'dummy' target because the inside of the kettle is in correspondence with the water, which constitutes the 'real' target, so that the conceptualizer eventually accesses it in a rather roundabout way.

The examples discussed so far cover Matzner's (2016) category of index metonymy and the representational system introduced here can also be extended to describe the adjectival (grammatical) one, as is sketched summarily in Figure 7, for the English equivalent of the Greek metonymy in (5) above.

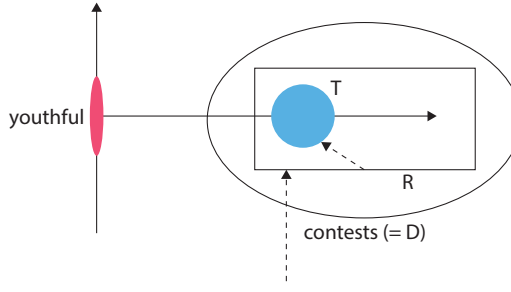

Figure 7. Adjectival metonymy

Here, the dominion D is *contests* as a reified process (despite being plural, Figure 7 represents *contests* as a singular nominal for the sake of simplicity). The actual processual base for *contests* (some form of competition among people, for example) is represented as the rectangle inside D. The people taking part (i.e. the processual trajector) are shown as the blue circle within the rectangle. Thus, the processual trajector is a part of the processual whole. The conceptualizer makes contact with the processual base for the nominal *contests* and uses it as a reference point to access the processual trajector. This is the metonymic target T. Thus, Figure 7 resembles Figure 3 because the line connecting a region ('youthful') along an 'age scale' to the target T also connects with *contests* directly, in the same way as *bit* linked with, for example, both *dog* and its teeth in Figure 3. Hence, we may (wrongly!) expect there to be no perception of abrasiveness; note also that the participants in the *contests* are not alienable parts of the processual whole unlike 'water' with respect

to *kettle* in (9), so that the alternative representation in Figure 6 is not viable here. There is however an important difference between Figure 3 and Figure 7. In the former, both the reference point and the target are things (represented as circles) in the CG sense of the term, while in the latter the reference point is a process (represented as a rectangle) and the target is a thing. Consequently, despite some superficial similarity, Figure 3 and Figure 7 are in fact quite different and I contend that the profile shift from process (R) to thing (T) in Figure 7 may be related to the conceptualizer's perception of abrasiveness, which instead is lacking in the active zone example illustrated in Figure 3.

3.4 Facets

Examples such as (2) above, which are said to involve 'facets', can also be recognized as another instance where the reference-point ability and our ability for conceptual integration are at play. In (2), there does not appear to be any abrasiveness and, thus, (2) resembles active-zone cases. Still, the term 'facet' can be fruitfully applied to instances where there is no physical part-whole relation but, rather, the relation between a whole and one of its parts is of a more abstract nature, as in the case of a book (the whole) in relation to its content and weight (its parts). Facets can also be accommodated into the proposed representational system. Consider the diagram in Figure 8. It shows that facets are similar to active zones as a facet is a part of a whole, albeit of a more abstract nature, as has just been pointed out. Further, as with active zones, there is no perception of abrasiveness, which is captured in Figure 8 by means of the solid horizontal line connecting *interesting* (the square on the right-hand side) directly to the clause-level trajector *the book*. Crucially, the relation between the reference point and the target is depicted as being 'immediate' or 'minimal': the conceptualizer makes contact with the book as a reference point and this provides access to one of its facets – T can be the content of the book or its weight – without probably involving much of a mental path, unlike the other cases considered so far. (Note that the dashed arrow from R to T is absent in Figure 8.)

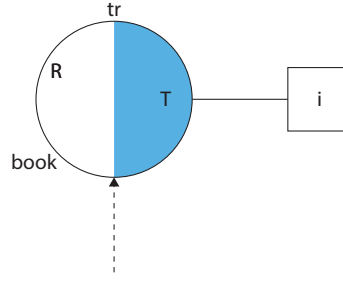

Figure 8. The book is interesting

4. Less 'straightforward' examples of metonymy in CG

So far I have shown how 'straightforward' metonymic examples such as (1), active zones and facets can be accounted for using a CG approach that relies on the reference point ability and conceptual integration. More generally, even such a small selection of cases reveals the complexities involved in the analysis of 'metonymic' examples and the need for attention to form and notions such as abrasiveness, which are highlighted in Matzner (2016).

Having also dealt with Matzner's 'index' metonymies, I will now move on to discuss the remaining two cases mentioned in my short summary of Matzner (2016), namely amplification metonymy and metonymic association, and will then expand on the latter by considering potentially related examples.

4.1 Amplification metonymy

For reasons of space, I will focus on amplification metonymy of the nominal type.[3] In amplification metonymy, the target is already present in the sentence and, in the nominal type, is contained within the target. As a sample sentence, I will consider a modified version of (6), namely *He broke the strength of the equipment*. This is another abrasive example because *broke* collocates with the metonymic target *the equipment* rather than the metonymic source *the strength of the equipment*. A possible representation for this sentence is offered in Figure 9.

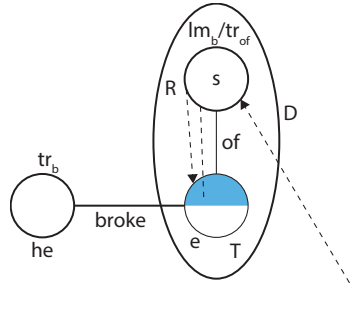

Figure 9. He broke the strength of the equipment

3. The adjectival type in (7) can be represented in similar fashion to the case illustrated in Figure 7.

As before, the diagram in Figure 9 shows abrasiveness explicitly as the solid line representing *broke* connects the clause-level trajector (tr_b) *he* with the metonymic target (T) *the equipment* (e) rather than with the clause-level landmark (lm_b) *the strength of the equipment*. The nominal *the strength* (s) functions as the trajector (tr_{of}) of the relational predicate *of*. Importantly, the nominal *the strength of the equipment* profiles *strength* not the relation expressed by *of* so that only the circle for *strength* has been emboldened. Further, the diagram shows that *strength* corresponds to a facet of the equipment – the prepositional trajector *strength* is linked by means of a dashed line to the blue half of the circle representing this facet of the equipment. In terms of the reference-point ability, I contend that the conceptualizer makes contact with a reference point (R) which corresponds to the nominal *the strength of the equipment* and is redirected to the prepositional landmark *the equipment*, which constitutes the target. As pointed out above, *strength* is a facet which is chosen as the trajector of the relational predicate *of*. In a sense, the facet *strength* has been 'exploded out' of the metonymic target and made explicit as a prepositional trajector.

The examples so far have thus shown that the reference-point ability and conceptual integration may interact in quite complex ways resulting in configurations that do not necessarily cohere into a well-defined category.

4.2 Noun-to-verb conversion

In order to introduce the discussion of metonymic association as in (8) above, I will start by considering an instance of so-called noun-to-verb conversion, as in (10):

(10) *He keyed her car*.

The verb *key* in (10) means 'scratch with a key' and would be treated as an instance of metonymy (of the OBJECT FOR ACTION kind, see e.g. Radden & Kövecses, 1999) in cognitive linguistics. I would like to contend, however, that if what is regarded as metonymy involves both the reference-point ability and integration, then noun-to-verb conversion is quite different. Morphologically speaking, a relation of association between *key* as a noun and *key* as a verb can be envisaged, as is shown in Figure 10. The noun *key* profiles a 'thing' in the CG sense of the term against a base that may include the action in which the key is used as an instrument. The conversion consists in shifting the profile from the 'thing' to the processual base. Nevertheless, on a morphological level, there is no instance of integration since the conversion only concerns the relation between two senses of a given word. If we now consider how the verb *key* is used in the sentence in (10), it is not obvious that either association or integration (or both) are involved. In other words, it is

not obvious that the conceptualizer, when decoding (10), accesses the processual meaning of *key* by means of the association described in Figure 10 – she may access the processual configuration on the right in Figure 10 directly. Nor does she need to 'replace' *key* with, for example, 'scratch with a key' to make the sentence in (10) work. That is, there is no perception of abrasiveness here; rather, if the conceptualizer were not familiar with the meaning of the verb *key* 'to scratch with a key', the meaning of the verb *key* in (10) would be indeterminate for her, corresponding to some higher-level interpretation such as 'do something with a key'. In other words, the use of *key* in (10) is unlikely to be of the same type as the association plus integration processes described earlier.

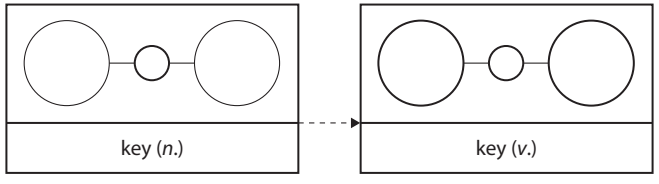

Figure 10. Association between *key* as noun and *key* as a verb

4.3 Metonymic association

Let us now consider the examples in (11):

(11) a. *My teeth were chattering.*
b. *The little boy's hand was shaking.*

These examples are similar to the case of metonymic association in (8) above since they may also have a literal interpretation. Still, the physical actions described in (11) can be associated with physical and psychological states, as is shown in (12) by means of the optional prepositional phrases in parentheses.

(12) a. *My teeth were chattering* *(from the cold).*
b. *The little boy's hand was shaking* *(with fear).*

The situation can be represented as in Figure 11: the profiled process (*chatter* or *shake*) serves as a reference point R for accessing a target T that describes a physical or emotional state (*to be cold* or *to be afraid*). Clearly, only the reference-point ability is involved; no substitutive integration takes place unlike in the 'metonymic' examples discussed above. Obviously, this analysis can also be extended to Matzner's Example (8). It is a matter of definition whether to call such cases as (8) and (11) metonymic. To be sure, they involve the reference-point ability and

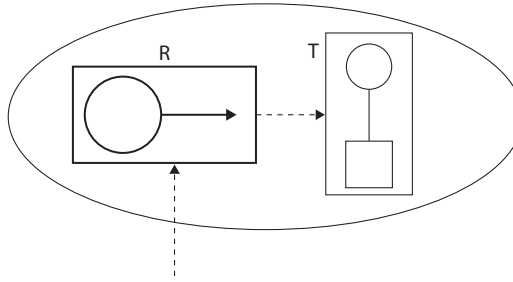

Figure 11. Association with physical and psychological states

thus the co-activation of a source and a target but no 'replacement' in the sense of examples such as (1) because of the lack of abrasiveness. In fact, the lack of abrasiveness correlates with the possible co-occurrence of source and target, as in the case of active zones above.

4.4 Sound metonymies?

Related to metonymic association is the example in (13), which is categorised by Radden and Kövesces (1999, p. 39) as a subtype of EFFECT FOR CAUSE metonymy, namely the SOUND FOR EVENT CAUSING IT: the effect of moving to a halt, the screeching sound, is claimed to stand for motion itself.

(13) *The car screeched to a halt.*

Despite Radden and Kövesces's metonymic analysis, on closer inspection, (13) poses various questions. Firstly, is there really a metonymic target? After all, motion is coded explicitly because it is profiled by the telic prepositional phrase *to a halt*. Thus, it could be argued that (13) just depicts both sound emission and motion without either being a reference point for the other. Nevertheless, as sound emission and motion are indeed related to one another by means of causality, and this is the second point, it could be argued that this example is at least an instance of metonymic association. However, contrary to cases such as (11) for instance, not only is the prepositional phrase hardly optional but there is no 'additional' layer of meaning because the sentence only involves the 'literal' meaning: both motion to a halt and sound emission are profiled. Finally, it should also be asked whether this example is abrasive or not. To be sure, the semantic import of (13) can be described along the lines of Figure 12, which shows that two events, screeching (the squiggly line) and motion to a halt (the pointed arrow) are coextensive, i.e., take place simultaneously. It is also an uncontroversial observation that the screeching sound is emitted by the

car's wheels. It is debatable whether the wheels are conceived of as an active zone (along the lines of Figure 3) or a 'separate' target (along the lines of Figure 6); this may depend on the degree of abrasiveness perceived. The diagram in Figure 12 is non-committal in this respect but, in any case, it shows that the reference point ability is involved. However, this ability concerns the relation between the car and the wheels. It is more controversial to claim that the reference point ability should also be appealed to in order to make sense of the rest of the sentence, contrary to what Radden and Kövesces (1999) suggest.

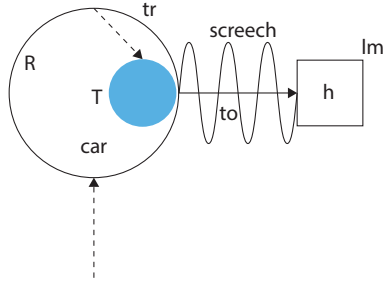

Figure 12. The car screeched to a halt

For example, ignoring the issue of the wheels as a target for the reference point ability, in Broccias (2003), I proposed a non-metonymic analysis, which is reproduced in Figure 13. The sentence is analyzed as the result of the merger of two components, one depicting motion (bottom left) and the other depicting sound emission (bottom right). The linear order of the two components shows the existence of a causal relation: motion (to a halt) causes the screeching sound. The two components are compressed into the representation shown in the upper box, which also depicts the simultaneous unfolding of motion and sound emission. I still believe that a 'truly' metonymic analysis of (13) is unlikely as this would imply that *screech* stands for 'move' and, hence, we should expect examples without *to a halt* to also be possible, i.e., *The car screeched* should be a possible equivalent of *The car screeched to halt*. Still, for the sake of completeness, I have sketched a possible metonymic analysis in Figure 14 alongside the non-metonymic analysis. The dashed curves in the bottom half are relevant to the metonymic analysis, while the dotted curve in the top half (minus the target T) captures the non-metonymic analysis of Figure 13. Note also that I have kept the linear order of Figure 13 so as to show that motion to a halt causes sound emission, but I have depicted the screeching sound as a reference point for accessing a motion event in the metonymic analysis. The dashed curves show the correspondences between the various elements.

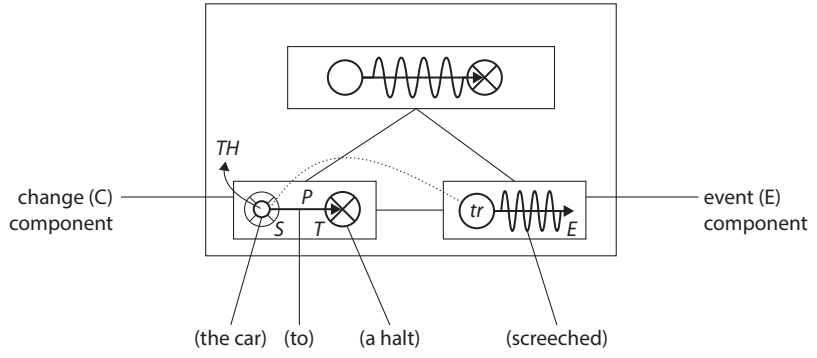

Figure 13. A non-metonymic analysis of *The car screeched to a halt* (from Broccias, 2003)

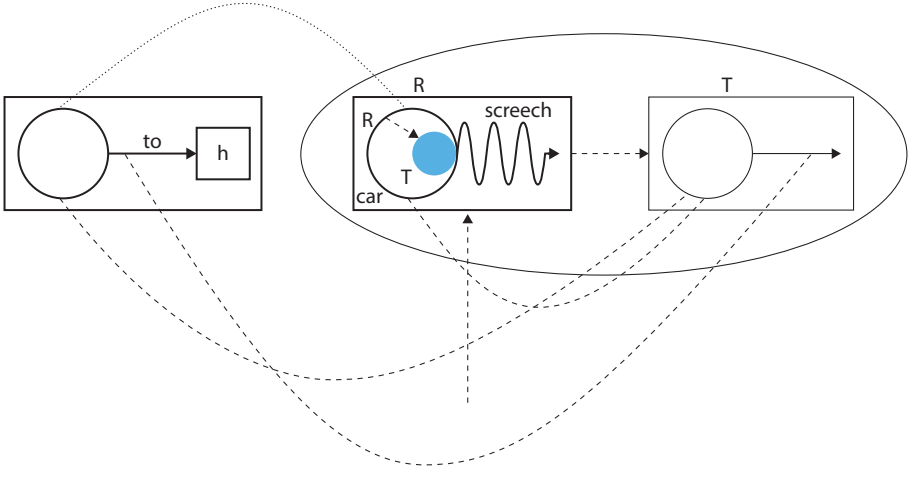

Figure 14. A metonymic analysis of *The car screeched to a halt*

5. Conclusions

In this chapter, I have shown how a CG approach to metonymy may resolve some of the potentially problematic issues visible in recent cognitive research, such as the neglect of form and the FOR relation as well as the lack of agreement over what counts as 'metonymy'. This also means that the CG approach sketched here is consonant with recent research within the tropical tradition as exemplified by Matzner (2016), which emphasizes the importance of form and substitution, notwithstanding the 'virtual' nature of the metonymic target. Although based on the

reference-point ability and conceptual integration, a CG analysis shows how complex the configurations resulting from the use of these two abilities may be. This means, in my view, that it is probably not possible or even desirable to aim to characterize 'metonymy' in a unique manner whether by resorting to an Aristotelian approach or a prototype-based approach, see Broccias (2017) (it is also difficult to see what parameters should be relied upon to identify what counts as being 'prototypical'). Rather, we observe an intricate network of examples where notions such as active zone, facet, abrasives, presence versus virtuality of the target, and so on, however fuzzy they may appear to be, all play a pivotal role.

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Targetting metonymic targets

Mario Brdar and Rita Brdar-Szabó
University of Osijek / ELTE, Budapest

In this chapter we propose to treat metonymy as a cognitive operation of conceptual elaboration based on the part-whole relationship that is triggered by the use of an expression (or metonymic vehicle) associated with a certain conceptual cluster (or metonymic source) within a conceptual domain. The activation of the source conceptual cluster opens up a mental space which is dynamically expanded or reduced, in the sense of Ruiz de Mendoza (1999, 2000), so as to come as close as possible to fitting the conceptual givens provided by the co(n)text of use. By approaching metonymy in this manner we are able to explain in a very natural way a number of facts observed in recent research.

Keywords: metonymic target, metonymic source, mapping, domain expansion, domain reduction, mental space

1. Introduction

1.1 Background: Approaching metonymy

Simplifying things to a degree, we could say that conceptual metonymy has very often been approached in cognitive linguistics as conceptual metaphor's poor sister (Ruiz de Mendoza, 1999). While both are recognized as basic and ubiquitous cognitive processes that pervade all our thinking, speaking and acting, there has been, and still is a gasp between the two. If we consult online bibliographies (general ones, those on cognitive linguistics, or specifically those on metaphor and metonymy), we realize that cognitive linguists have generally been much more interested in metaphor than in metonymy (cf. Table 1).

The amount of attention lavished on metaphor is in a way understandable, considering its ubiquity (witness the title of Paprotté and Dirven, 1985), universality, and the conceptual complexity of metaphorical mappings. Metaphor with its numerous facets and appearance has proved an attractive topic time and again. Nevertheless, it is a bit of a mystery why metonymy has been neglected when it

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Table 1. The number of monographs, edited volumes and articles on metaphor and metonymy indexed in four databases/bibliographies as of January 5, 2020

Database/bibliography	Keyword	
	Metaphor	Metonymy
Web of Science (core Collection)	38,853	1,533
Scopus	43,945	1,483
MLA	152,721	5,014
MetBib (Bibliography of Metaphor and Metonymy – John Benjamins)	10,768	1,602

appears to be equally universal and almost as ubiquitous as metaphor (cf. Barcelona, 2002), although at first sight it appears to be a conceptually simpler operation. Perhaps part of the explanation is that appearances are deceptive, and that metonymy turns out to be a hornets' nest full of hidden complex questions if one dares to touch it.

There is no denying that metaphor's continuing popularity may be due to the fact that metaphorical mappings are relatively easy to detect everywhere in language. However, since the end of the 1990s we note a metonymic turn of a kind. The gap between metaphor and metonymy, which may informally be expressed in terms of the actual number of studies published up to the end of the century and afterwards, may still be far from closing, but the research on metonymy has been accelerating. Janda is right when she says that "… scholarly works on metonymy make a strong case for metonymy as a pervasive, important cognitive process that motivates linguistic phenomena" (Janda, 2011, p. 363).

This differential between the two is also reflected in the fact that, although most cognitive linguists would agree about core elements of the notion of conceptual metonymy, this "is by no means a completely uniform notion, as there is some disagreement among these authors over a number of issues" (Barcelona, 2011, p. 8), but cf. also Matzner (2016), Barnden (2010), and Broccias (this volume) on this issue. In spite of the fact that two whole volumes were devoted to the problem of defining metonymy (cf. Benczes, Barcelona and Ruiz de Mendoza 2011; Blancó-Carrion, Barcelona and Pannain, 2018) and that a number of monographs appeared that concentrate on metonymy (cf. Ruiz de Mendoza 1999; Ruiz de Mendoza & Otal Campo 2002; Bierwiaczonek 2013; Littlemore 2015; Denroche 2015; Matzner 2016; Tóth 2018), we still seem to be very far from a consensus view. This is a very serious problem that requires lots of attention in order to safeguard genuine advance in research. Even assuming the same definition as their starting point, researchers have occasionally come to diametrically opposed conclusions, as shown by the exchange between Janda, on the one hand, and Brdar and Brdar-Szabó, on the other (Janda, 2010a, 2010b, 2011; Brdar and Brdar-Szabó, 2013, 2014; Brdar, 2017).

Another reflection of the differential that we mentioned above is that conceptual metonymy has often been approached in operational terms, i.e. defined in terms of how similar it is, or different from, conceptual metaphor. What such approaches contrasting the two point out as the *differentia specifica* of metonymy or metaphor has to do with the number of conceptual domains (or idealized cognitive models) involved and with what happens with these.

One important point of difference between metaphor and metonymy observed by cognitive linguists has to do with whether the mapping takes place across distinct conceptual domains or within a single domain. The standard view is that a metonymic mapping occurs within a single domain, linking the whole domain with one of its parts, or two parts within the whole, while metaphoric mappings take place across two discrete domains. In the present chapter, we are going to claim, among other things, that metonymy should not be modelled in terms of mappings between the whole domain and its parts, and, in particular, not in terms of mappings between individual parts of the whole domain.

The other difference between the two is that metonymy is claimed to be based on contiguity, whereas metaphor is seen as resting on similarity. Contiguity is here taken to cover all associative relations except similarity, and may thus be too vague a notion, making metonymy almost a cognitive wastebasket.

This operational way of approaching metonymy may be combined with an intensional or extensional type of definition. Of course, the latter two can appear independently of defining metonymy against the background of metaphor.

We first take a look at the extensional approach. The focus of attention of researchers is in such approaches directed to delimiting the range of phenomena that qualify as metonymy (as e.g. in Paradis, 2004; Cruse, 2004; or Croft & Cruse, 2004). In some recent works, metonymy is claimed to be a cluster of related reference point phenomena (Langacker, 1999). Croft and Cruse (2004, p. 47), as well as Paradis (2004), thus distinguish three types of construals that are commonly referred to as metonymy in the literature: metonymization (proper), facetization, and zone activation. Facetization and zone activation are argued by Paradis not to be metonymies. The approach to defining metonymy we are going to propose in Section 2 makes it possible to treat all these as metonymies differing with respect to their specificity and degree of conventionalization (cf. Broccias, this volume, on various forms of metonymic phenomena).

When defined in intensional terms metonymy is treated as a unitary phenomenon, its definition cast in terms of its nature and function. Specifically, it may be described as a cognitive operation or process involving certain cognitive entities in a particular way and producing a particular effect, as for example in Kövecses and Radden (1998, p. 39), where it is said to be

> … a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same domain, or ICM.

It is interesting that this is one of the most popular and widely cited definitions of metonymy, in spite of the fact that its formulation is seriously flawed. The problem that has gone unnoticed by scores of researchers is that it is too narrow and contradicts the whole typology of metonymies that Kövecses and Radden work out. Put this way, it seems to cover only one of three types of metonymies they postulate, the PART FOR PART type that we said will be argued against in this chapter. It is said that the vehicle and the target are within the same idealized cognitive model (ICM) or domain, i.e., they seem to be two parts within the same ICM. Radden and Kövecses (1998, p. 39f) go on after providing this definition and explain immediately why it is not necessary to mention contiguity, actually confirming the suspicion:

> It should be noticed that this definition does not mention "contiguity," or "proximity" between the entities involved in a metonymic relationship. This is because the entities are parts of an ICM, and as such are "contiguously" related.

One can, of course, try to save this formulation by taking a more philosophical stance on this and assuming that there may exist some wholes that have just a single part. This is also done in linguistics, when one describes the relation between units belonging to different levels. Sentences are units of a higher level than clauses. They are as such by default more complex than clauses. A sentence may consist of more than one clause, e.g. an independent and one or more dependent clauses, or of two or more independent clauses (when coordinated). However, a single independent clause may of course stand alone, but function at the syntactic level as a unit on a par with a sentence consisting of more than one clause. In this case, we have a unit that is at the same time a clause and a sentence, i.e. a larger unit or whole has just one part. The same can be observed in the case of morphemes and word, and words and phrases: a word can consist of more than one morpheme, but a single morpheme can also be a word in its own right; an adjective phrase can consist of an adjective functioning as its head and a number of modifiers and/complements, but even if an adjective stands alone it qualifies as an adjective phrase. However, this apparently would not work in the case of metonymy because it would not make much sense if the source and the target were co-extensive.

1.2 The aims and the organization of the chapter

Our aim in this chapter is to suggest that the way towards a better understanding of metonymy may require taking such a radical step as giving up the parallelism between metaphor and metonymy when it comes to mappings. The problems the

assumption of metonymic mappings lead to are discussed in Section 2. We have elsewhere argued against metonymic mappings (Brdar-Szabó and Brdar, 2011), suggesting that they should be replaced by operations of domain expansion or domain reduction, proposed by Ruiz de Mendoza and his collaborators (Ruiz Mendoza & Díez Velasco, 2002; Ruiz de Mendoza & Otal Campo, 2002), which are instances of conceptual elaboration of the metonymic source concept (Panther & Thornburg, 2009). We also show that PART FOR PART metonymies become collateral victims of this approach, as they are untenable without mappings.

In Section 3, we detail our proposal, the essence of which is that the ICM or domain that functions as the metonymic source activates or opens up a mental space in the sense of Fauconnier (1990) that is subsequently expanded or reduced so as to fit the context of use. We also make it clear in this section that our approach should not be misunderstood as suggesting that metonymy were blending or conceptual integration.

In Section 4, we point out some obvious advantages of our proposal. First of all, the problem of PART FOR PART metonymies disappears: they can be accounted for by means of subsequent operations of expansion and reduction, i.e. as complexes consisting of two metonymies. Further, not only can metonymy be defined intensionally in a contradiction-free way, but we can also model more appropriately the dynamic nature of metonymy and make possible a unitary treatment of active zones, facetization, and the so-called metonymy proper. Last but not least, we can better observe the dynamic conceptual oscillation of targets in complex metonymic tiers and chains.

2. Exit metonymic mappings

In this section we challenge the widely accepted wisdom that there is a single mapping involved in metonymy. In order to show what happens in metonymy, we take as our starting point the threefold distinction between linguistic vehicle, metonymic source, and metonymic target, as in Panther (2005, p. 358). In a linguistically manifest metonymic relation, a metonymic source concept (S) is related to a metonymic target concept (T) by means of a linguistic form (e.g. morpheme, word, phrase, sentence), which is called the linguistic vehicle by Panther (2005, p. 358). In an example such as:

(1) *When the **Redcoats** were within several dozen yards, the Americans let loose with a lethal barrage of musket fire, throwing the British into retreat.*

the lexical expression *the Redcoats* is the vehicle normally associated with the source meaning such as 'a red-colored coat.' This source meaning is metonymically

related to the target meaning of 'a British soldier (especially in America during the Revolutionary War) because the object named by the metonymic vehicle formed the most salient part the British infantryman's uniform.

Form: <metonymic vehicle> <lexicalization conventionally associated with T>

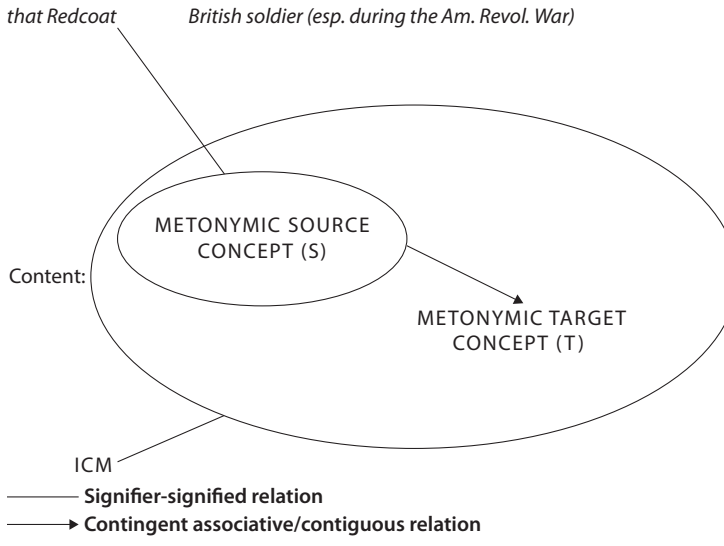

Figure 1. The basic metonymic relation (adapted from Panther, 2005, p. 358)

The link between the metonymic source and the metonymic target in the figure is signaled by means of an arrow, which implies, just like the use of terms such as source and target, a sort of directed movement or transfer. The question is whether metonymy should really be modeled in terms of a directed process. More specifically, should metonymy be presented in terms of mappings that are correspondence-like (the way they are in the case of conceptual metaphors)?

As we have seen above, metonymy is routinely considered to be a single mapping between a metonymic source and a metonymic target within a single domain, or within a domain matrix. In other words, we often have the idea of directed conceptual transfer. Unlike metaphor, where mappings typically go from more concrete domains towards more abstract domains, metonymy has been shown to be able to proceed in either direction, without any concreteness/abstractness differential being necessary.

Metonymy is said to be a mapping in Lakoff and Turner (1989, p. 103), Taylor (1989, p. 123f), Croft (1993, p. 168), and Gibbs (1994, p. 13). It is conspicuous that, to the best of our knowledge, the question of how far the analogy between metaphorical and metonymic mappings can go has hardly ever been explicitly asked. Similarly, the nature of metonymic mapping has hardly ever been explicitly spelled

out, unlike in the case of metaphors. Specifically, we do not get to know what is mapped onto what.

When we use terms such as "correspondence" and "mapping," we must be aware of their metaphorical nature and their implications. Correspondence is the more static term of the two and is adirectional. If we think of the primary function of metaphor as providing the understanding of one thing in terms of another, our conceptualization obviously implies a direction. This is why cognitive linguists generally prefer the term mapping and talk about source and target domain.

It is, however, one thing to talk about correspondences or mappings if the relationship obtaining between the vehicle and the target is based on similarity, and it seems to be another if we talk about conceptual contiguity. It is far easier to talk about mappings if more than one domain is involved. Correspondences or mappings are only to be expected if the main function of metaphor is to present one thing in terms of another, i.e. to facilitate understanding. Typically, in the case of metaphor, the domains brought into relation are relatively distant and distinct (otherwise they would be the same, and this would preclude the relationship of similarity).

It is obvious, however, that the analogy does not work in this way. It would be odd to claim that the essence of the metonymies *Moscow* and *London* in:

(2) *The United States and other Western nations have supported the British position, but* ***Moscow*** *claims that* ***London*** *has failed to provide sufficient evidence to back up its accusation and asserts that the nerve agent could have been produced outside Russia.* (https://www.rferl.org/a/russian-envoy-requests-johnson-meeting-over-spy-case/29151710.html)

is that an element of *Moscow* and *London* as source domains, say the fact that they are the capitals of Russia and the United Kingdom, respectively, maps onto the domain of the government of the respective country, etc. It is actually the conceptual contents associated with the lexical items *Moscow* and *London* that are affected by metonymy, and not the other way round. It appears at this point, paradoxically, that, if there is some sort of mapping, it is more likely to proceed from the concept or domain of GOVERNMENT towards MOSCOW or LONDON, etc., i.e. from the metonymic target towards the metonymic source.

If the analogy were complete, then we might as well think that in the case of metonymy in examples like (1) a single mapping operation takes place, proceeding in our specific case, from the uniform (i.e. the concept REDCOAT) as a part of a domain or subdomain, which is the metonymic source, towards the concept SOLDIER, as the whole (or superordinate) domain, which is the metonymic target. It is obvious that this is seriously flawed. There is no rearrangement of the target in the sense that the properties of the uniform are mapped onto the soldier, or that the soldier is somehow conceptually reduced to being a military uniform. One might

be tempted to think of a sort of conceptual blending between a person and the uniform here. This possibility is examined and rejected in more detail in Section 3.

Note also that in the case of well-entrenched, lexicalized metonymies polysemy may come about, but it is not the polysemy of the lexicalization associated with T, or the metonymic target, but of the lexicalization associated with S, the metonymic source. In other words, the metonymic target does not seem to be affected by metonymy in any significant manner. Barcelona (2007, p. 105) of course warns us against such a simplified view of metonymic mappings:

> Mappings refer to the fact that the source domain is connected to the target domain by imposing a perspective on it, not by projecting its structure onto it, as in metaphor.

3. Enter metonymic source elaboration producing metonymic targets in mental spaces

It is clear that if metonymy can be seen as a mapping at all, it is a sort of mapping that is on several counts very different from the type of mappings we are used to see in the mainstream cognitive linguistic approach to metaphor. We would like to claim here that the metonymy is not a simple case of unidirectional traffic. As noted by Panther (2005, p. 358), the target meaning is admittedly more prominent than the source meaning, but the latter is not completely obliterated by the metonymic target meaning. The latter is still, to some degree, conceptually salient or activated.

What is more, the initial conceptual substrate is no doubt designated by the source concept, but it is plastic enough to allow considerable customizing. The inferences that steer the customization are crucially guided by the information based on the text (i.e. the cotext) and the context (the circumstances). The ultimate outcome of this domain elaboration (reduction or expansion) is that domains are tailored to an optimal measure with regard to their function.

It may seem paradoxical, but we could stipulate that the domain associated with the metonymic vehicle, i.e. the source, undergoes some conceptual restructuring. We have therefore proposed in Brdar and Brdar-Szabó (2011) to treat metonymy as a discourse-driven inference or pragmatic function (Fauconnier 1997), arising in the course of a process very similar to domain expansion or reduction in the sense of Ruiz de Mendoza (1999, 2000).

In this chapter we would like to go a step further and suggest that, integrating the insights by Panther and Thornburg (2009) about conceptual elaboration, metonymy as providing mental access by Kövecses & Radden (1998), as well as the idea of domain expansion and reduction introduced by Ruiz de Mendoza (1999, 2000), with our view of metonymic target as a mental space, metonymy could be defined as:

> a cognitive operation of conceptual elaboration based on the part-whole relationship that is started by the use of an expression (or metonymic vehicle) associated with a certain conceptual content (or metonymic source) within a conceptual domain so that the activation of the source conceptual content triggers the opening up of a mental space linked to it by means of reduction or expansion.

There is no need to mention contiguity at all because, first, the definition includes the part-whole relation, and, even more importantly, it relies on the reduction or expansion of the source. The mental space in question is dynamically expanded or reduced, i.e. filled with conceptual content or emptied of it, so as to come as close as possible to fitting the conceptual givens provided by the co(n)text of use. In the course of this, the mental space thus opened and elaborated also comes very close in terms of its contents to another conceptual cluster (or metonymic target) within the same conceptual domain that may be or is typically associated with another expression.

Approaching metonymy in this way we are able to explain in a very natural way a number of facts observed in recent research. First of all, we see that metonymy is clearly an intra-domain phenomenon, and we do not get bogged down in the issue of identifying domains and subdomains and of shifting between them (cf. Panther, 2006, p. 157). We apparently eliminate the need to assume that any mapping takes place at all. Perhaps even more importantly, we do not need to account for how it would be possible for these putative mappings to proceed from the source to the target, as it is usually claimed, and then do nothing to the target. On the other hand, we have an explanation of the fact that the metonymic source and vehicle as a unit are not necessarily permanently affected, i.e., polysemy is not an automatic consequence of metonymy. Of course, it may ensue in due time as a result of entrenchment. Metonymy is thus able to provide a much-needed conceptual handle or window on a concept that would be otherwise quite difficult to conceptualize and lexicalize.

At the same time we realize that metonymies often appear in networks, i.e. in textual chains, which make them an extremely useful device in the organization (i.e. construction and management) of discourse (cf. Brdar, 2007b; Brdar, 2015; Brdar-Szabó and Brdar, 2011; Hernández-Gomariz, 2018). They can make texts more cohesive and coherent, while allowing us plenty of conceptual maneuvering room. In these chains, different tiers may function as stepping stones: we do not have to "go down" to the metonymic source concept associated with the metonymic vehicle and effectively start the inferencing process anew (in the way that the mapping assumption would imply). We can just continue from the last activated tier, moving up or down from it in the course of the meaning construction as domains are expanded or reduced, which we think contributes considerably to the ease of the information flow and to the speed of processing of discourse containing fairly complex metonymic networks.

Defining metonymy the way we have done above, we are in a position to account not only for conceptual metonymies that are manifest linguistically, or those that can be manifested linguistically, but also for metonymies in other modalities. This approach can also account for the vague reference of many metonymies in discourse, when one metonymic expression can simultaneosuly be interpreted in more than one way, as well as for cases of shifts in reference of one of the same metonymic expression in running discourse. Before we demonstrate this, we need to consider another possible account of metonymy that also involves mental spaces.

From all we have seen so far, we might as well assume that in metonymy we witness not so much mappings as projections steered by mutual accommodation of source and target. Effectively, we might get tempted to consider metonymy to be an instance of conceptual integration or compression, just like metaphor is sometimes considered, as suggested by Radden (2014), Alač and Coulson (2004), Bierwiaczonek (2013), Ioannou (2019). Note that the term integration is also used by Broccias (this volume). He is, however, not using this term in the sense of Fauconnier and Turner (1996) in his chapter, but just as a useful term to highlight the fact that the conceptualizer "needs to integrate the 'virtual' target into the original sentence so as to obtain a conceptualization that 'makes sense'." This is important as to avoid reducing metonymy to just the reference point ability. The reference point ability does not involve any kind of abrasiveness *per se*, while what is commonly understood as metonymy most of the time does.

Alač and Coulson (2004, p. 21) thus suggest that

> … metonymy involves conceptual blending between the concept evoked by the trigger term (…), and that evoked by the intended target…

It is difficult to see how this claim could be defended. It is apparent that when we use *White House* or *Kremlin* as metonymies, we do not normally access any exotic blended spaces combining them with *the President* or *Putin*, respectively, except perhaps in cartoons.

Conceptual integration, as we have seen in many analyses, as in cases like *This surgeon in a butcher* (Grady et al., 1999) or the *trashcan basketball* (Coulson & Fauconnier, 1999), etc., do not seem to involve crossing ontological levels, the surgeon and the butcher, scalpel and knife, a wad of paper and the basketball, the basket and the trashcan, etc. are pairings whose members belong to the same level. It is not the case that one forms a part of the other. If all metonymies lend themselves to an analysis as blends, there must also be some cases involving blends of parts and wholes, i.e. cases of crossing ontological levels. It will be further seen that it is not easy to accept that a part of a whole can be integrated with that same whole (anew), or the other way round.

For Ioannou (2019), metonymy is a frame-integration mechanism. He describes several instances of what we (Brdar-Szabó & Brdar, 2021) call metaleptic metonymy, which can be described by means of a two-stage procedure, i.e. by telescoping two metonymies into one, such that the target of the first is at the same time the source for the other, as described in Brdar (2007a, 2007b) and Brdar-Szabó and Brdar (2011). These will be also discussed in more detail in Section 4 below. Let us in the present context point out that Ioannou surprisingly claims that the element mediating between the two is the generic space and that "[t]he latter is essentially identified with the metonymic target" (Ioannou, 2019, p. 20). This is clearly absurd as it leads to incorrect interpretations in the case of two-tiered or double metonymies, such as AUTHOR FOR WORK FOR UNIQUE SAMPLE, exemplified by *I have a Picasso in the living room* (Ruiz de Mendoza & Pérez Hernández, 2003, p. 38), where the metonymic target is a particular work by Picasso and not the whole of his ouvre.

Although Bierwiaczonek (2013, p. 248) explicitly refers to WHOLE FOR PART and PART FOR WHOLE metonymies as having "all the makings of conceptual integration," involving two input mental spaces – the image space and the disposition space[1] – what he describes as being metonymy-as-blend is actually a blend of two perspectives, or stages, in the whole process of encoding and decoding. He describes, but without actually admitting so, first what goes on in the head of the speaker, and then what goes on in the head of the listener. Otherwise, this is reminiscent of, and can be explained in terms of, the sort of telescoping described in Brdar (2007a, 2007b) and Brdar-Szabó and Brdar (2011), where a round of source expansion is followed by another round of the secondary source (which is at the same time the target of the first round) reduction, provided we would like to model the whole process. This is why Bierwiaczonek (p. 245) thinks that "paradoxically, PART-FOR-WHOLE/PART metonymies result from the activation of the whole, while WHOLE-FOR-PART metonymies result from the activation of a part." Since most metonymy research only accounts for the decoding part, the activation starts from the concept associated with the vehicle, i.e. from the whole in the case of a WHOLE FOR PART metonymy, which is then gradually backgrounded. Translated into Beirwiaczonek's terms, the metonymic source is a dispositional mental space, while the metonymic target is a blended space. It is difficult to see how the metonymic target, or the blended space, differs from the input, his image space, when the whole thing is described as follows in the caption of one of the figures demonstrating the putative blending:

1. The terms are introduced by Damasio (1999, p. 219), who defines image space as "the space in which images of all sensory types explicitly occur and which includes the manifest mental contents," while dispositional space is "a space in which dispositional memories contain records of implicit knowledge on the basis of which images can be constructed in recall, movements can be generated, and the processing of images can be facilitated."

> The integration of the representation of BOOKS BY PATRICK WHITE in the image space with the dispositional space of PATRICK WHITE, producing the metonymic expression *Patrick White* standing for a book written by Patrick White.
>
> (Bierwiaczonek, 2013, p. 250)

Another reason why metonymy might leave the impression of blending is difficulties in the analysis of cases of putative PART FOR PART metonymies, e.g. CONTAINER FOR CONTAINED. In Section 4 below, we show that our approach can easily handle such cases as complex metonymies in which we move from the container to the contained in two simple steps, the metonymic target of the first serving as the source for the other. Their middle element is a blend or merger of the initial source and the ultimate target, but we have two metonymies, neither of which is a blend of its source and target.

4. Some advantages of our view on the nature of metonymy

In most cognitive linguistic approaches to metonymy, three types of metonymies are distinguished in terms of wholes and parts. There are the WHOLE FOR PART type, its mirror image, the PART FOR WHOLE type, as well as PART FOR PART type (Kövecses & Radden, 1998), which comes in numerous subtypes, e.g. CAUSE FOR EFFECT, PRODUCER FOR PRODUCT, CONTAINER FOR THE CONTAINED, etc. The validity of this third type is challenged in a series of articles by Ruiz de Mendoza and his collaborators (Ruiz de Mendoza, 2000; Ruiz de Mendoza & Pérez, 2001; Ruiz de Mendoza & Díez Velasco, 2002; Ruiz de Mendoza & Mairal Usón, 2007). We propose to take a closer look at some of these well-known PART FOR PART metonymies in order to show that they are better analyzed as cases of complex metonymies, i.e. as the outcome of the interaction between two or more (tiered) metonymies.

Examples like (3) have been interpreted as containing a POSSESSION FOR THE POSSESSED metonymy:

(3) *A lot of people used to think I was* ***a black belt*** *just because I was a professional athlete…* (http://goodmenproject.com/featured-content/heart-of-a-beginner/, accessed May 12, 2014)

In other words, an object stands for the person, specifically an article of dress/sports gear stands for the person wearing it. The problem with this is that we cannot access the concept of expertise that is associated with a black belt in certain types of martial arts. If, on the other hand, we assume here a complex, tiered metonymy, the problem disappears. We first have an object which in karate or judo stands metonymically for a certain level of expertise and skill in these martial arts. On top of this first tier, we have the skill in question standing for its possessor, i.e. the belt only indirectly stands for the person having it, the intermediate linking element is the skill.

It is of course also possible to assume that we have two parallel metonymies, sharing the same metonymic source. One of them would link the possession to the possessor (as a PART FOR PART metonymy), and the other would link the possession to the expertise in martial arts. But we would still have the same problem as above, viz. linking the possessor with the concept of expertise. And this is not by far the only case of some characteristic tied to the sartorial possession. Let us mention *suits*, which are not just the people happening to be wearing suits, but a specific kind of people (formal, boring, faceless, etc.). Consider also *bow tie*, which can metonymically stand for an intellectual (real or feigned), or for a non-conformist type of person.

The use of uniforms or uniform-like attire is very similar, for example in medical contexts. The expression *white coat* is a case in point (in spite of the fact that the tradition is apparently not more than 100 years old, and not universal). Its counterparts are common in many languages that are not necessarily related: *weisser Kittel* (German), *hvid frakke* (Danish), *bijeli mantil* (Croatian), *biely plášť* (Slovakian), *fehér köppeny* (Hungarian), *valkoinen takki* (Finnish), *haina albă*, (Romanian), *bata blanca* (Spanish), capotto bianco (Italian), *pallto të bardhë* (Albanian), *beyaz ceket* (Turkish). It is interesting that one of the elements present in many visualisations of physicians – the stethoscope – is used only as a visual metonymy (Brdar, 2019).

We can actually distinguish at least three types of metonymies with sartorial elements serving as sources. In one case, it is simply used to refer to a particular person, while in the other, as above, it goes a step further and denotes a type of person or even a type of situation in which the sartorial element is appropriate. This last case may be illustrated by the following passage from Leach (1976, p. 56):

> Until very recently it was common practice in certain sections of contemporary English society to mark invitation cards for an evening dinner party with one or other of three formality indicators. 'White Tie' meant 'very Formal'. Males were expected to wear a stiff-fronted white shirt, white tie and black tail coat…. 'Black Tie' meant 'Semi-Formal'. Males were expected to wear a dinner jacket (tuxedo), with soft shirt and a bow tie of some sort. This could never be white, but need not be black! 'Informal Dress' meant what it says. (1976, p. 56)

As Atkinson (1985) points out, there is also a certain degree of variation in this semiotic code that is metonymically related to social contexts.

> The military example is nicely paralleled by the behaviour of the flight attendants on major airlines: the stages of the journey and the division of labour are precisely and nicely marked by prescribed changes of uniform, and the addition or removal of specified garments. (1985, p. 86)

In yet another type, the sartorial element, taken in somewhat broader sense, including not only the dress but also "accessory-like" objects, which may be actually essential, indicates the function of the person in question, rather than a type of person. A number of examples can be found in the sports jargon. Football referees are thus in Croatian often referred to as *ljudi u crnom* ('people in black') because of the traditional black color of their dress (though nowadays the jersey can be some other more conspicuous color, e.g. yellow, red or pink):

(4) *Kako **ljudi u crnom** uništavaju domaći nogomet*
'How the people in black are destroying domestic football' (https://torpedo.media/komentar-kako-ljudi-u-crnom-ubijaju-domaci-nogomet/)

In examples like these, the color stands for the dress, which in turn stands for the function of these people in a football game. This label is different from the English expression *men in black* (MIB), although a word-for-word counterpart of the Croatian expression, as it is used to refer to men dressed in black suits, wearing white shirts, black hats and black glasses, who are supposedly US government agents harassing and threatening UFO witness in order to keep them silent about what they saw. Here the reference is not to the function, but rather to a type of people. On the other hand, the German expression *Schwarzkittel* ('black smock') can also be used to denote football referees, but also Catholic priests (pejoratively), and judges. In all these uses, it is based on the function of these people.

Visual metonymies in sports can also use sartorial elements (in a broader sense of the concept), as in the following screenshot taken at the beginning of a football match of the Spanish championship.

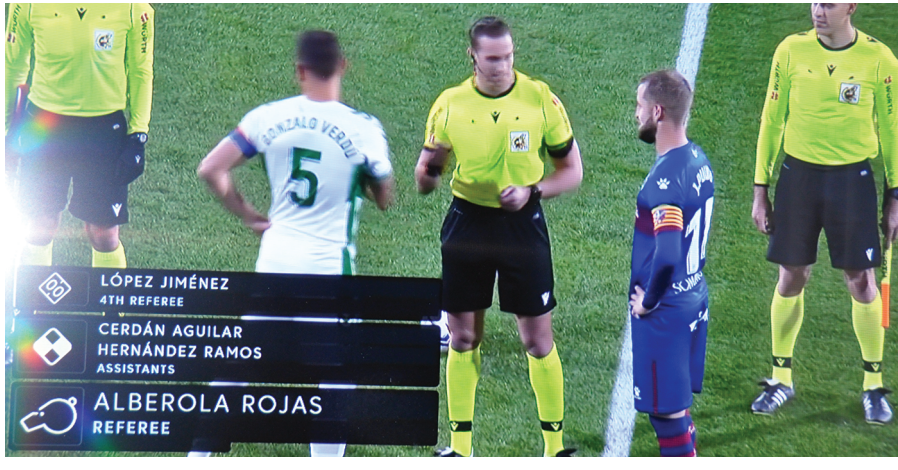

Figure 2. A detail of a screenshot of the beginning of a football match of La Liga, the Spanish championship, with the referee and the assistants

In the lower right-hand corner, we see a stylized whistle, one of the main requisites of the referee, next to the function and the referee's name. As such, it cannot count as a multimodal metonymy because its target (in fact both targets of what would be a cumulative metonymy) are explicitly mentioned (cf. Brdar-Szabó and Brdar, fc, for why this cannot be a multimodal metonymy). Similarly, the referee's assistants are represented by a stylized flag, which parallels the above situation. The video assistant referees in the VAR room are represented slightly later by the fast-reverse button (◂◂). If these visual symbols occurred without identifying text, they would be visual metonymies pointing to the function and then in the second round to a person with that function or role.

All this makes it clear that people can be metonymically accessed in two steps, i.e., via two metonymies in the way that we assumed for *the black belt* case above. Assuming two parallel metonymies would make sense to a degree, but there would be a problem linking the two targets, i.e. the function/value with the person, unless we assume that the target of one also functions as a source for a third metonymy converging on the target of the second, making it a triangular network of three metonymies. It is clear that it is more parsimonious to assume just two metonymies in two steps, as in the case of football referees. Whichever analysis we adopt, there are no PART FOR PART metonymies involved here.

Concerning metonymies of the type CONTAINER FOR CONTENT, which are also claimed to be a subtype of the high-level metonymy PART FOR PART, exemplified in:

(5) *The bottle is sour.*

we again seem to have two metonymies involving the whole and a part in a series, assuming that the whole is a complex one, consisting of the whole-and-part, i.e. of the container and the content together forming a functional unit. First, the vehicle, bottle, as part provides access to the whole (functional unit, i.e. a container filled with milk), and then we have the opposite, the whole is metonymically reduced to its part, the contained, so as to adapt it to the context in which we find bottle collocated with the adjective sour. The fact that we need the middle part of this metonymic path, with the functional unit as the whole, is obscured by assuming a simple but unnatural PART FOR PART metonymy, which in the long run means that, because of it, we do not see that there are actually two simple natural metonymies that are telescoped into one, i.e., A FOR B and B FOR C become A FOR C, with a metonymic jump in the middle.

This analysis is similar to, but also different from the one offered by Broccias (this volume) for:

(6) *The kettle is boiling.*

Broccias sees the water in the kettle, which is the real target of the metonymy, as alienable because it can be 'detached' from the kettle, used as the reference point for

accessing its inside. He also sees this as involving two metonymies, KETTLE FOR ITS INTERIOR and ITS INTERIOR FOR THE LIQUID FILLING IT. Both could be considered to be part for whole metonymies, i.e. the interior of the kettle (or the fillable volume) could be conceptualized as a part of the kettle. This is also suggested by the use of the *of*-construction following *kettle*, and also by the fact that a kettle that cannot be filled with something is not functional. Similar logic could be applied to the second metonymy, too. Assuming that these are a PART FOR PART metonymies produces the same problem as in the example of Greece in (8) discussed below.

It is interesting to note that such "logical jumps," lumping two metonymies into one, attracted the attention of scholars working on figures of speech, and that the phenomenon was singled out as a trope or figure in its own right as metalepsis. It is sometimes considered to be a subtype of metonymy, just like synecdoche. It is often treated as a poorly understood rhetoric ragbag of a sort, including also what is considered to be run-of-the-mill metonymies like EFFECT FOR CAUSE.

Assuming PART FOR PART metonymy also leads to problems with examples like:

(7) ***Zagreb*** *stepped up the fight against corruption, especially at top levels, from mid-2009 when Kosor took over as prime minister from Ivo Sanader. Mr Sanader is currently detained under suspicion of graft.*

…

Croatia's state secretary for European integration, Andrej Plenkovic, remains convinced, however, that ***Zagreb****'s goal of EU membership was 'realistic.' He said Croatia would hope to sign the accession treaty in November, which has be ratified by member states parliaments, a process expected to last up to a year and a half.* ***Zagreb*** *hopes to eventually become a full-fledged EU member by January 2013.*

(http://www.rte.ie/news/special-reports/2011/0518/301210-croatia/)

While in the first two occurrences the metonymic target is shared, i.e., it is the Croatian government that *Zagreb* refers to, the third token causes a problem as it now no longer refers to the government or any other political body/institution, but rather to the whole country, i.e. Croatia as a state. While both, the name of a capital city and the name of a country, can stand metonymically for the government of that country, the name of a capital city can hardly stand for the state or country. Nevertheless, joining an association such as the EU is not something that a government does – it is states/countries that join it. However illicit this shift may be, there is no other possibility.

Such examples are treated in Radden and Kövecses (1999, p. 41) as metonymies involving the Location ICM, one subtype of PART-FOR-PART metonymies, along with CAUSE-EFFECT, CONTAINER-CONTAINED, PRODUCER-PRODUCT metonymies, etc. This would imply that both Zagreb, Croatia and the Croatian government are subdomains within some larger domain, but the question is what this superdomain should be – Radden and Kövecses do not state this exactly anywhere.

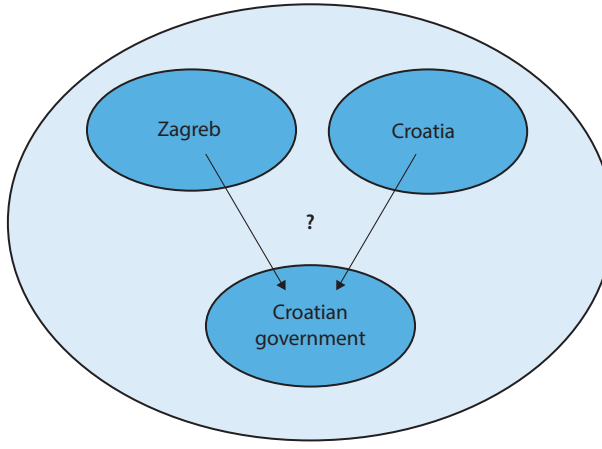

Figure 3. CAPITAL FOR GOVERNMENT metonymy as a PART FOR PART metonymy

It is hard to see how the domain of a whole country is not superordinate to the domain with its capital city. The problem is solved if we assume just two whole for part and part for whole metonymies, CROATIA functioning as the matrix domain.

This situation is similar to the one discussed by Radden (2014):

(8) *Last year,* ***Greece*** *was rescued with a package worth €110 billion.*

This metonymy, used in a context in which more than one target is viable at the same time, is clearly treated as being of the PART FOR PART type, but the domain that serves as the whole is not specified in any way. It can also be observed that domains with ontologically different status are treated as being on equal footing in Radden's analysis (e.g. the budget domain should be within the state domain).

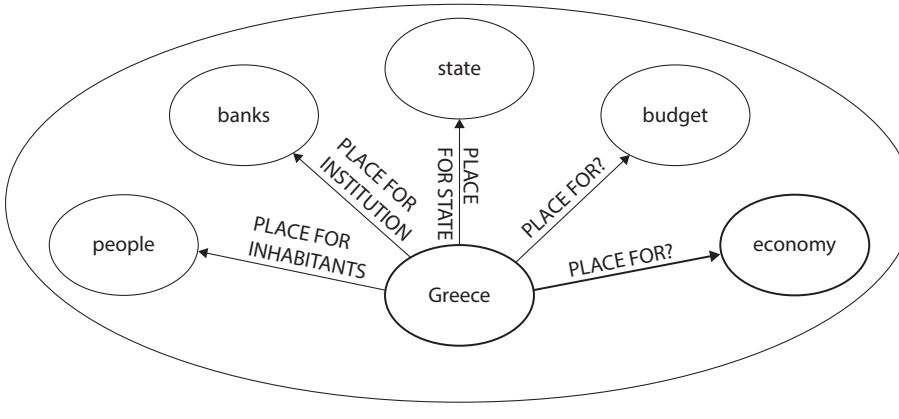

Figure 4. Metonymy with the name of a country as its metonymic vehicle analyzed as a PART FOR PART metonymy, with no label for the domain containing these parts. (Radden, 2014)

We have seen that a number of popular metonymic patterns claimed to be instances of the PART FOR PART type of metonymy are better analyzed as amalgams of several tiers of metonymies of either PART FOR WHOLE or WHOLE FOR PART types. Breaking putative part for part metonymies into a series of simpler metonymies makes it possible to arrive at intuitively more appropriate interpretations that are richer in details.

We now turn to the issue of what counts as metonymy proper. As pointed out above, it has been claimed to be a cluster of related phenomena (Langacker 1999). Croft and Cruse (2004, p. 47), as well as Paradis (2004), thus distinguish three types of construals that are commonly referred to as metonymy in the literature. Paradis (2004) talks about metonymization (proper), facetization, and zone activation, illustrated in the three sets of examples from Croft and Cruse (2004, p. 48) below.

Metonymization (proper) i.e. the process leading to metonymies in the strictest sense of the term, involves the use of a lexical item to evoke the sense of something that is not conventionally linked to that particular lexical item. According to Croft and Cruse (2004, p. 48), metonymy is "the ability of a speaker to select a different contextually salient concept profile in a domain or domain matrix than the one usually symbolized by the word."

(9) ***That french fries** is getting impatient.* (Croft & Cruse, 2004, p. 48)

Facetization, on the other hand, is the highlighting of different facets or domains in a domain matrix. Facets are readings within senses and they can be conventionally activated by one and the same lexical item, i.e., the activated meaning cannot normally be conventionally referred to by some other simple lexical item (though in some cases the concept can be expressed by means of compounds, e.g. *window pane*, in (10) (a).

(10) a. *The **window** is dirty.* (Croft & Cruse, 2004, p. 48)
b. *She came in through the **window**.* (Croft & Cruse, 2004, p. 48)

Facetization is fairly regular in a double sense. Firstly, it tends to operate on lexical items that are associated with certain types of concepts as their primary readings, e.g. the institution reading (*school, bank, court, hospital*, etc.). Secondly, the arrays of readings, i.e. metonymic extensions available with such lexical items are very similar ('building,' 'staff,' 'abstract institution,' etc.).

According to Langacker (1993, 1999), Example (10) can be analyzed as an active zone phenomenon. In a more traditional approach to metonymy, the referential expression *the piano* would be considered to be an instance of metonymy, *piano* standing for 'the sound of piano.'

(11) *She heard the **piano**.*

Langacker (1999, p. 62) observes that active zone phenomena:

> … represent one way of resolving a tension inherent in the choice of central clausal participants. Determining which entities are to be made explicit and prominent as a subject or object usually involves a conflict between two competing desiderata: that of being precise and accurate in regard to which entities actually participate in the profiled interaction; and that of focusing attention on entities that are inherently salient or of primary interest.

Langacker (1991, p. 190) defines active zone as those portions of a trajector or landmark that participate directly in a given relation. While for some relational predicates the active zone of the trajectory and/or landmark may be actually be the whole, in (11) it is not the piano as a whole that can be heard, so it is clear that the relational predicate hear applies only to a subpart of the whole. Similarly, for a relational predicate like *bite* in:

(12) ***Your dog** bit **my cat**.*

the active zone of the trajector and/or landmark is limited to a proper subpart of the whole, such that

> … certain portions of the dog (notably the teeth and jaws) are directly and crucially involved in the biting, and others (e.g. the tail and pancreas) hardly at all. By the same token, only some (unspecified) portion of the cat enjoys the privilege of directly participating in the action. (Langacker, 1999, p. 62)

Such examples exhibit obvious discrepancy between what is profiled by the nominal and what "most directly and crucially participates" in the relationship when it combines with a relational expression with respect to which it functions as subject or object (Langacker, 2009, p. 42).

This sort of analysis clearly applies to cases of whole-part relationships, i.e., when the whole stands for one of its parts. However, Langacker extends this approach to other types of constructions, notably to cases of aspectual verbs (*begin*, *start*) combining directly with nominal complements (and not clausal ones), e.g. *start a book* vs. *start reading/writing a book* as well as to raising constructions like *The book is easy to read*. One of the interesting twists in Langacker's analysis at this point is that, while he explicitly talks about the metonymic nature of the active zone phenomena (1999, p. 62), he goes on to suggest that the trajectors and the landmarks, i.e. subjects and objects, involved in the active zone phenomena may have literal meaning, and that it is the meaning of the predicative expression that gets shifted, i.e. adjusted to accommodate its semantic argument, and incorporates the 'literal' argument as its active zone.

This could of course lead us to consider an alternative analysis in which a relational predication, e.g. a verb, an adjective, an adverb or a preposition, adjusts its meaning to accommodate its semantic argument, and incorporates the 'literal' argument as its active zone. In (11) the meaning of *heard* can be claimed to shift to 'Subj *heard the sound* of Obj,' according to which aspect of the source is activated. Active zone phenomena are apparently even more common than facetization.

Considering the fact that the conceptual distance between the meaning of the metonymic vehicle and the metonymic target in the case of metonymic expressions arising through facetization as well as those of the active zone type is minimal, with hardly any noticeable shift in the direction of what we might call figurative meaning, it is no wonder that these metonymies are so common. They are common in terms of the number of specific instances (both types and tokens) and are also common in terms of their being widespread across languages.

Note that Kövecses (2012, p. 143) explicitly argues against separating metonymies in the way suggested by Langacker and claims that "all active zone cases are instances of metonymy." We add to this that taking out facetization from metonymy is also a step that is more of a hair-splitting move than a genuine step towards a better understanding of metonymy. Our proposal – to treat metonymy as a cognitive operation resulting in opening mental spaces over source domains – is equally applicable to all the three groups of phenomena. Where they would differ, as continuous stretches over a continuum of metonymy-hood without sharp boundaries, is the degree of entrenchment and the concomitant conventionalization of polysemy they exhibit.

Regardless of whether we assume that the locus of metonymic shift in examples such as (11) is the nominal participant or the predicative expression, regardless of whether we treat this as instance of the active zone phenomena or as a genuine metonymy, we face the problem of indeterminacy and fluidity of the target, as pointed out by Langacker himself.

Our approach to metonymy, with a flexibly and dynamically expandable or reducible metonymic target, has no problem with such cases. In other words, the definition of metonymy suggested above enables us to appreciate the dynamic nature of metonymy, i.e., we can follow the modulation of metonymic meanings as required by the changes of the context in unfolding discourse.

This can also be observed when dealing with the phenomenon of metonymic patterning in discourse. It was studied in some detail by Barcelona (2005), who uses the term metonymic chains to refer to "direct or indirect series of conceptual metonymies guiding a series of pragmatic inferences" (Barcelona 2005, p. 328). Barcelona is not just interested in purely tracking a series of metonymic

expressions as they occur linearly in a running text, but also in a more complex system of interaction involving both textual and conceptual dimensions when he talks about "two, often more, metonymies regularly occurring at the same or different analytical levels in the same utterance, even in the same sentence" (Barcelona 2005, p. 316).

This term has also been used in a different, more specialized sense in metonymy research, e.g. in Reddy (1979), Fass (1991, 1997), Nerlich and Clarke (2001), Radden and Kövecses (1999, p. 36), Ruiz de Mendoza and Díez (2002), Panther and Thornburg (2003, p. 6), Ruiz de Mendoza and Mairal Usón (2007), and Hilpert (2007). These authors are primarily concerned with metonymies involving multiple conceptual shifts, breaking up "complex conceptual mappings into simple, well-motivated mappings with a strong experiential basis" (Hilpert 2007, p. 80). These are cases of metonymic operations stacked onto each other, producing double or even triple metonymies (Ruiz de Mendoza & Mairal Usón, 2007). Such metonymic chains were referred to as metonymic tiers in Brdar and Brdar-Szabó (2007, 2011), a term useful because it also allows for the interaction of metonymy with metaphor.

Studying metonymy in authentic usage, i.e. in discourse, means that we are bound to find many such instances of metonymic patterning, as in:

(13) ***Croatia*** *and Serbia have banned each other's vehicles from entering their territory and traded sharp accusations over their handling of Europe's migration crisis, which is causing havoc as thousands move through the Balkans each day. Serbia banned Croatian goods and cargo vehicles from entering the country yesterday, and* ***Croatia*** *responded by barring all Serbian-registered vehicles from crossing into its territory.*

Officials in Serbia also angrily accused its neighbour of "racism", amid reports that Serb citizens had been barred from travelling into Croatia, in incidents that ***Zagreb*** *said were caused by a computer problem.*

(https://www.irishtimes.com/news/world/europe/croatia-serbia-tensions-rise-over-migrants-1.2365342)

The three instances of metonymic expressions in (13), *Croatia* twice and then *Zagreb*, form a metonymic chain in which we use two vehicles (but three tokens) and two metonymic sources (represented as the blue and the red discs in the middle) that share the same metonymic target concept, i.e. a mental space that is the result of the source reduction (represented as the purple disc at the top). The vehicles (represented as the two grey and one brown rectangular panels at the bottom) therefore function as virtual synonyms (cf. Brdar, 2015).

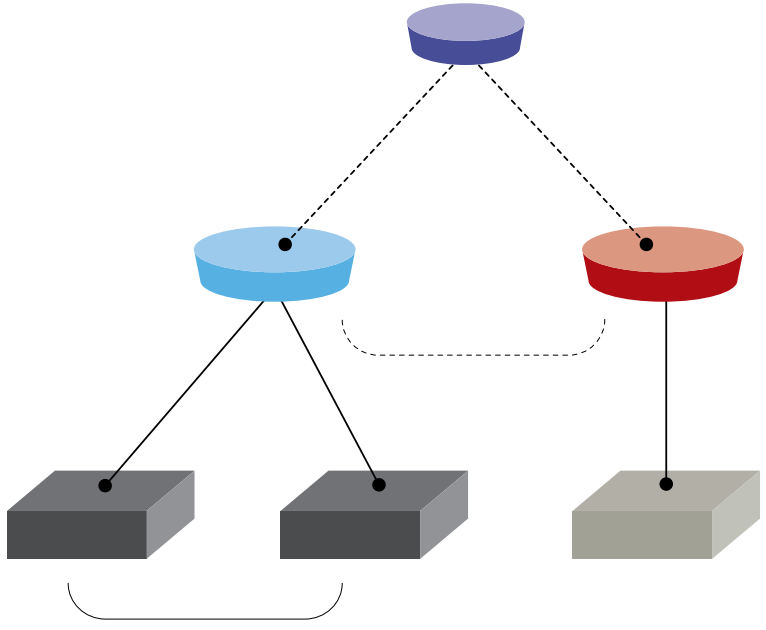

Figure 5. A metonymic chain with two metonymic sources (the blue and the red disc) sharing a single metonymic target (the purple disc) and functioning as virtual synonyms, with three metonymic vehicles (the panels as the bottom)

Metonymic networks can often exhibit considerable complexities, as shown by the example that follows, in which we apparently retain the same vehicle while its metonymic target keeps expanding on the go, picking up more and more elements of meaning as we progress in the discourse. What follows are relevant parts of a recipe that is titled *Stuffed mushrooms*. In the list of ingredients we find, among others, *30 fresh mushrooms, washed and dried*. The procedural part of the recipe in which we follow the expression *mushroom* goes as follows:

(14) *Preheat the oven to 375 degrees. Stem the **mushrooms** and set the caps aside. Combine the basil, garlic, walnuts, olive oil, salt, and 1 cup of **mushroom stems** in a food processor and puree until fairly creamy. Add the tofu and puree until incorporated. The mixture can be left slightly chunky and textured. Place the **mushroom caps** upside down on a baking pan and, using a small spoon, fill each one so the filling mounds up just over the edge. You can smooth the filling or leave it rough, as you prefer. Bake until the **mushrooms** are wrinkled and the filling is browned, about 20 minutes. Baking will create some moisture in the pan, so it is a good idea to remove the **mushrooms** from the pan immediately after taking them out of the oven.* (Breen, J. and Thurston, S., 2011, *Cooking up the good life: Creative recipes for the family table*. Minneapolis: University of Minnesota Press, p. 13)

The third and the sixth sentences refer to processed mushrooms, i.e. to *mushroom caps*. But in the last two sentences we have just *mushrooms*, although we know that what is meant is mushroom caps. But even more precisely, the mushroom caps, referred to as just *mushrooms*, are now actually filled with the mixture of pureed mushroom stems, basil, garlic, walnuts and tofu. We see that the actual reference of *mushroom* dynamically changes as we move towards the end of the recipe, and that metonymic shifts make our life (and language) easier, less complicated, by enlisting variable mental spaces undergoing first reduction and then expansion, as shown in Figure 5 below. Metonymic paths are signaled by broken lines colored green and blue. The path colored green involves a conceptual reduction aligning its resulting target mental space with the reference of the expression *mushroom cap*, followed by the expansion resulting in 'mushroom caps filled with the mixture.' The blue path is the same, except that it ends with another round of expansion, the targeted meaning being something like 'baked mushroom caps filled with the mixture.'

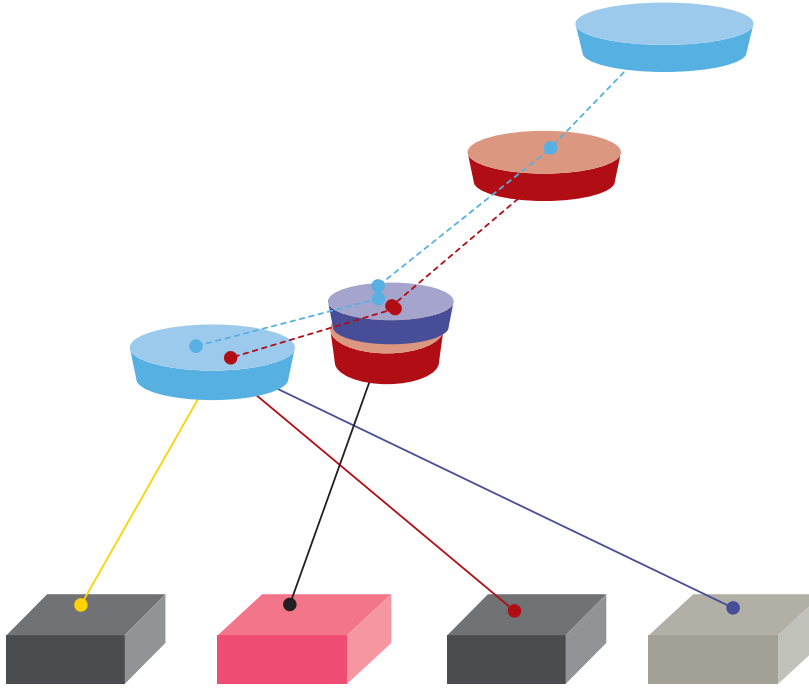

Figure 6. Reduction and expansion of a metonymic source in a complex metonymic chain

What we have seen above just goes to prove that our definition of metonymy is perfectly suited to tracking such series of metonymic vehicles and the online shifting up and down on conceptual hierarchies accompanying them.

5. Conclusion

The central concern of this chapter has been to show that a better understanding of metonymy may require taking a radical step away from the traditional road, giving up the parallelism between metaphor and metonymy when it comes to the phenomenon of mappings, which we have claimed is absent in the case of conceptual metonymies, and that all the necessary conceptual work can be done by means of conceptual elaboration in the form of source domain expansion or reduction. We have also shown that PART FOR PART metonymies are not viable without mappings.

In Section 3, we detail our proposal, the essence of which is that metonymy is thus a cognitive operation of conceptual elaboration based on the part-whole relationship that is started by the use of an expression (or metonymic vehicle) associated with a certain conceptual content (or metonymic source) within a conceptual domain so that the activation of the source conceptual content triggers the opening up of a mental space linked to it by means of reduction or expansion. The mental space in question is scaled, i.e. expanded or reduced, so as to fit the context of use. The source conceptual content thus functions as an effective mental shortcut.

We have also made it clear in this section that our approach should not be misunderstood as suggesting that metonymy were blending or conceptual integration, as claimed in some recent works.

In the final section of this chapter, we have expounded some obvious advantages of our proposal as it eliminates a number of problems that have been plaguing metonymy research. First of all, PART FOR PART metonymies that are anyway problematic if there are no metonymic mappings, are demonstrated to be cases of amalgamation or compression of several subsequent operations of expansion and reduction, i.e. as complexes consisting of two metonymies. Further, not only can metonymy be defined intensionally in a contradiction-free way, but we can also model more appropriately the dynamic nature of metonymy and make possible a unitary treatment of active zones, facetization, and the so-called metonymy proper. Last but not least, we can better observe the dynamic shifting of targets in complex metonymic tiers and chains. Of course our definition is at the moment just a proposal in need of empirical testing on authentic material (also across languages) as well as probing its theoretical ramifications.

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PART 2

The impact of figurative thought on linguistic structures

The effect of figurative thought on basic level categorization

How categories come to be formed and named

Gábor Győri
University of Pécs

The definition for basic level categories relies on perceptual attributes, mostly on the perception of particular shape characteristics (Rosch, 1978). However, as is well known, there are cross-linguistic differences in basic level categorization with regard to the scope of the categories designated by the respective terms. Since word meanings do not directly correspond to perceptually definable basic level categories, these words do not designate the same range of referents, even though the attributes themselves do not necessarily differ cross-culturally. The same objects may belong to totally different linguistic categories, or even be assigned to levels above or below the perceptually basic one of the category system in different languages. The present theoretical study will explore why objects exhibiting similar perceptual characteristics come to be assigned to different linguistic categories. I suggest that the diversity originates in the figurative construals and ensuing conceptualizations underlying the lexicalization processes of these categories.

Keywords: categorization, perception, figurative thought, lexicalization, cultural conceptualization, construal, conventionalization

1. Introduction

For an efficient interaction with our environment it is crucial that we recognize phenomena not simply as individual occurrences but as instances of specific types with regard to certain structural and functional similarities. Language serves this cognitive process by providing a model of the world in terms of a category system. In this system, phenomena are organized into groups of objects, events, actions, processes, qualities, relations, etc., based on their common characteristics and generalities as we experience them through interaction with our surroundings.

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Although human experience with the world is typically categorized by means of language (e.g., Croft & Cruse, 2004, p. 74; Lipka, 1992, p. 49; Rosch, 1978, p. 29; Tomasello, 1999, p. 8), it is not the primary tool for assigning phenomena of the environment to various groups based on their shared properties. As is explained by Stevan Harnad (2005, p. 21) in his article tellingly titled *To cognize is to categorize: Cognition is categorization*, "[C]ategorization is any *systematic differential interaction between an autonomous, adaptive sensorimotor system and its world*" (italics in the original). As Singh and Hoffman (2013, p. 172) say, sensorimotor information is interpreted through perception and even "perceived shape is [only] an adaptive guide to behavior, not a reflection of objective reality." Thus, categorization as a biological-cognitive process involves the selective sorting of this information about the world and reflects an interpretation of reality in terms of the perceiver's biology. Perception tailors the information to the organism's needs in order to enable an adaptive and functional interaction with the environment (Goodson 2003, p. 116, 263; Harnad, 2005, p. 36). Rosch (1978, p. 29) describes this state of affairs in the following way:

> […] the perceived world [… is …] not a metaphysical world without a knower. What kinds of attributes *can* be perceived are […] species-specific. […] What attributes *will* be perceived […] is undoubtedly determined by many factors having to do with the functional needs of the knower interacting with the physical and social environment.

Thus, categorization as such is a process influenced by the perceiver's perspective yielding a particular interpretation of reality and does not reflect some kind of objective structure in the world. In the case of linguistic categorization, the perspectival nature of this interpretation is even more prominent (Geeraerts, 1997, p. 8; Tomasello, 1999, p. 9). The perspectives taken on the world and reflected in the category system of a language is not based on perception alone, but "[c]ategories involve imaginative structures of understanding, such as schemata, metaphor, metonymy, and mental imagery" (Johnson, 1987, p. xi; see also Lakoff, 1987, p. 8).

Human understanding of the world is therefore to a great extent based on figurative thought manifest in our linguistic categories, and these categories are not independent of the cultural setting in which they are applied to our understanding of reality (Lakoff, 1987, p. 8; Tomasello, 1999, p. 8). According to Rosch (1978, p. 28),

> the issues in categorization […] have to do with explaining the categories found in a culture and coded by the language of that culture at a particular point in time. When we speak of the formation of categories, we mean their formation in the culture.

From a linguistic point of view such an explanation must be based on the historical process of lexicalization "by which new linguistic entities, be it simple or complex words or just new senses, become conventionalized on the level of the lexicon" (Blank, 2001, p. 1603). In this sense lexicalization means the diachronic emergence of new lexical items in the course of language change (e.g., Blank, 2003; Traugott, 2002). However, the term lexicalization is also applied in the psycholinguistic sense, i.e., as the process of speech production through which a speaker arrives at a linguistic expression representing their thoughts (e.g., Levin & Rappaport Hovav, 2019; Talmy, 2007). As a matter of fact, these two interpretations of lexicalization cannot be separated because any diachronic change has its roots in the speakers' synchronic language use (e.g., Anttila, 1992; Blank, 1999; Winters, 1992). According to Traugott (1999, 2011), semantic change and the emergence of new lexical items always derive from novel usage based on conversational implicature with the aim of inviting inferences in the hearer. Speakers resort to novel usage for the sake of communicative efficiency and expressivity, which are therefore the joint functional causes governing semantic change (Geeraerts, 1997, p. 108).

Implicature is often based on figurative thought in the form of metaphorical and metonymical expressions because these are the most obvious ways "of being innovative and at the same time understandable" (Nerlich & Clarke, 1992, p. 137). The expressions may become conventionalized with time and develop into literal meanings, resulting in the formation of new linguistic categories of cultural relevance (e.g., Brinton & Traugott, 2005; Győri, 1996, 2002; Traugott & Dasher, 2002). Thus, lexicalization paths and changes in meaning reflect perspectives in the form of metaphorization and metonymization that speakers must have taken in one-time novel usages when expressing their thoughts.

An illustrative example of the above process is, for instance, the variation in the diachronic development of the words meaning 'tree' in English, German and French. Although the first two belong to the Germanic branch of Indo-European, English *tree* derives from the Proto-Indo-European root **deru-* / **dreu-* 'to be firm, solid, steadfast' (Watkins, 1985, p. 12), while German *Baum* can be traced back to the root **bheu-* / **bheu̯ə-* 'to grow, thrive' (DWDS Online). French *arbre* (with similar words for 'tree' in other Romance languages) goes back to the root **h₃rd*^{h}- 'upright, high' (de Vaan 2008, p. 50). In all three cases we have to do with original categorizations from a metonymic perspective based on a contiguous salient feature underlying the lexicalization process. Thus, *tree* is THE FIRM (THING), *Baum* is THE GROWING (THING), and *arbre* is THE UPRIGHT (THING), which form the starting points of the ensuing cultural conceptualization process.

When categories become coded in language, they tend to be arranged into a system, which is reflected in semantic relations like synonymy, antonymy, hyponymy, etc. Therefore, the process of modification of the category system of a language through lexical-semantic change must also be viewed from the perspective of lexical field theory because any such alteration will inevitably go hand in hand with the restructuring of lexical fields (Lehrer, 1985). In the case of new lexical entities being formed or a lexical item going through a change in meaning, the structure of the entire lexical field to which these items belong will change, often involving culture specific lexicalization patterns (e.g., Brinton & Traugott, 2005, p. 10).

The relationship of hyponymy is characteristic especially for object categories because in general they become organized along a vertical and a horizontal dimension (Rosch, 1978, p. 30), as opposed to action categories (Győri, 2019). The vertical dimension relates to the inclusiveness of categories yielding different levels that are super- and subordinate to each other, while the horizontal dimension relates to the connection between coordinate categories, which are all subordinate to (i.e., included by) the same superordinate category. Rosch and her colleagues (Rosch et al., 1976; Rosch, 1978) identified a level on the vertical axis which is special both perceptually and linguistically. This level, termed the basic level, is the most salient with regard to the perceptual characteristics of objects. Thus, for instance TREE is a category at the basic level, while PLANT is its superordinate category and, for instance, BIRCH, ELM, WILLOW, etc. are categories subordinate to it.

The perceptual salience of the basic level has two specific implications for language. The first one is that the word for the basic level category is the most useful and thus the most frequently used name for an object. The second one – an inference made on the basis of the first one – is that "in the evolution of languages, one would expect names to evolve first for basic level objects, spreading both upward and downward as taxonomies increased in depth" (Rosch, 1978, p. 35). As we have seen above in the case of English *tree*, German *Baum* and French *arbre*, the emergence of names for basic level categories is based on metaphorical or metonymical lexicalization processes, which might vary cross-linguistically in spite of the perceptual similarities of the categorized objects.

In the following I will take a look at this evolution and examine the process of lexicalization in the case of basic level object categories and also of lexemes for super- and subordinate categories. My aim is to find out whether this process differs in any respect for the different types of categories, especially in regard to figuration. I will also explore the way lexical-semantic change shapes the category system of the language based on the imaginative structures of understanding and how these structures influence the cultural conceptualizations of these categories while operating in our interpretation of the world in interaction with perception.

2. The role of figuration and perception in the formation of basic level categories in language

One of the most prominent features of a category system is that its categories are located along a vertical axis, which represents a sequence of super- and subordination, i.e., from the bottom toward the top the ranked categories exhibit larger and larger degrees of inclusiveness. As categories form a hierarchy, one of the levels has a special status with regard to the attributes characterizing the categories located at this level. This is the basic level, which is the highest level in a hierarchy at which the categories included in their superordinate category are still characterizable with perceptual attributes (Rosch et al., 1976; Rosch, 1978). For instance, the category CLAW HAMMER can clearly be described with perceptual attributes, but this is also true for HAMMER, which ranks higher in the hierarchy of tools and includes therefore claw hammers among other types of hammers. On the other hand, for the category TOOL, which is superordinate to the category HAMMER, no explicit perceptual attributes shared by its subordinates can be listed.

Rosch's (1978, p. 31) "operational definitions of the basic level of abstraction" relate almost exclusively to shape perception. According to these definitions, the basic level is the most inclusive level at which shapes of objects are the most similar, an object is recognizable by an averaged shape (i.e., superimposed average outlines of objects), and an image of a member of the category can reasonably represent the whole category. Also the motor movements "which humans habitually use [… to …] interact with those objects" – listed as one of the definitions – are "[i]nseparable from the perceived attributes of objects" (Rosch, 1978, p. 33). This is so because the shapes of objects allow predictions as to the possible interactions with them (Singh & Hoffman, 2013, p. 181). What we have to do with here is basically Gibson's (1979, p. 119) notion of *affordance* because the function of perception is to identify entities as similar based on the physical attributes that afford them the same function in the interaction with the environment. The types of categories characterized by Rosch's (1978, p. 31) definitions – "motor movements in common, objective similarity in shape, and identifiability of averaged shapes" – are categories that already emerge in the human perceptual system in a pre-linguistic form (Harnad, 2005, p. 21–22; Singh & Hoffman, 2013, p. 172; Tomasello, 1999, p. 58, 125; Westermann & Mareschal, 2014).

However, human categorization and our perception of the world in terms of categories rely on language to an enormous extent (Lupyan, 2016). Therefore, it is often assumed that words are names for categories (e.g., Brown, 1958; Berlin & Kay, 1969; Rosch et al., 1976; Rosch, 1978; Lakoff, 1987, pp. 33–34; Malt, 2015). By naming things, we put them into categories and we are conscious of categories in the form of words, i.e., our knowledge of the meaning of a word implies the

knowledge of what the types of things are that the particular word can be used to refer to (cf. Lucy, 1996, p. 45; Croft & Cruse, 2004, p. 74). Since "[c]ategories are generally designated by names (e.g., *dog*, *animal*)" (Rosch, 1978, p. 30) (italics in the original), Rosch suggested that basic level categorization – due to its salience in our interaction with the world – has relevant implications for language.

In addition to the already mentioned two implications in connection with frequency of usage and emergence of basic level categories in the history of language, Rosch (1978, p. 35) also points out that there is a correlation between the basic level of categorization and language development in children. Names of basic level object categories are acquired earlier than words denoting categories at super- and subordinate levels. As has been shown in several studies since then, this is due to the fact that at this age categorization strongly depends on the perception of physical attributes (Tomasello, 1999, p. 58; Diesendruck, 2003, p. 777; Pruden et al., 2006; Waxman & Lidz, 2006, p. 311; Westermann & Mareschal, 2014). It seems to follow from this and from studies carried out with adults (Archambault et al., 2000) that "words for basic-level categories tend to be recognisable via gestalt perception" (Gallese & Lakoff, 2005, p. 446). On this basis it appears legitimate to say that for instance the basic level word *hammer* identifies a gestalt, i.e., an averaged image which is representative of hammers in general and which can therefore represent also its subordinates (included in the more general category HAMMER), e.g., a claw hammer and a blacksmith hammer. The same can be said for the above mentioned category TREE and its subordinates.

However, "words are not simply names for pre-existing extralinguistic categories [because] [d]ifferent languages do not capture reality in the same way" (Lipka, 1992, p. 48). Even at the basic level, at which perception undoubtedly plays the most important role in the recognition of a category designated by a word, words do not appear to be simply labels for categories identifiable on purely perceptual grounds. The categories for which children first acquire words, for which words occur most frequently in the everyday speech of adults and for which words evolve first in the history of a language – as compared to categories at other levels of the vertical axis – are not perceptual categories *per se*. Therefore, it is essential to differentiate between perceptually grounded basic level categories and basic level terms, which are the reflections of how parts of reality have been culturally conceptualized and categorized for purposes of linguistic representation and communication (Győri, 2017).

Thus, for instance, the word *cup* (with the meaning 'drinking container') is definitely a basic level term based on the above linguistic criteria, but gestalt perception does not seem to be enough for the recognition of the linguistic category it denotes, considering the various shapes of its referents, as for instance a ceramic cup with a handle versus a paper cup. Beside perception, the categorization of these objects

is largely influenced also by cultural conceptualization and therefore the data related to the above linguistic aspects can show great variation across languages. This variation is manifest in mainly two types of differences. The first one relates to the scope of the categories, i.e., to the discrepancies between the range of referents a basic level term denotes. The second one relates to the issue of what terms can be considered basic, since terms that are at the basic level in one language may denote (theoretically even equivalent) categories that are located at the super- or subordinate level in another language.

Linguistic categories are based on how word meaning is represented in the mind. As a consequence, even in the case of words designating basic level categories, conclusions as to their "denotational values – the 'objects' they refer to" (Lucy, 1996, p. 45) – cannot be based on perceptual attributes alone. The above differences in linguistic categorization can be explained only by considering semantic knowledge based on linguistic convention, which is strongly influenced by cultural and encyclopedic knowledge even in the case of the basic level. Rosch (1978, p. 27) called attention to the fact that human categorization is "the result of psychological principles of categorization." These principles are responsible for category systems being as they are because they guide the formation of categories in the human mind. However, since human categorization in a cultural sense cannot be separated from linguistic categorization, as Rosch (1978, p. 28) herself explains, it appears to be obvious that the psychological principles must go hand in hand with the figurative construals entailed in the lexicalization processes.

In the following sections I will look into how the above principles and figurative thought interact in the linguistic categorization of reality. In spite of the fact that this interaction results in various cross-linguistic differences, they can be accounted for by Rosch's (1978, p. 27) principles of categorization and cannot be considered "the arbitrary product of historical accident or of whimsy." Linguistic categories always reflect how speakers during the history of a language "have found it useful to categorize […] the world" (Tomasello, 1999, p. 8), which is strongly connected to sociocultural aspects of language behavior in a community (Gumperz & Levinson, 1996, p. 7). However, the particular perspective taken on entities in categorizing them is only one of "the ways in which individuals choose to construe [these phenomena] out of a number of other ways they might have construed them" (Tomasello, 1999, p. 9) due to the indispensable application of imaginative structures of understanding, such as metaphor and metonymy in the conceptualizations. The interpretation of reality – even with the involvement of human imagination – is regulated through a feedback mechanism in line with Rosch's principles because it must be functional and have an adaptive value for the perceiver and categorizer, and of course the language user (Harnad 2005, p. 26; Rosch, 1978, p. 29).

3. The conceptualization of basic level categories and the influence of figuration

When talking about categorization, we can have two different types of processes in mind. Entities can either be grouped together consistent with existing categories and with the established system into which these categories are arranged, or they can be grouped in novel ways, which amounts to creating new categories. The first type is the spontaneous and unconscious everyday activity of the mind that allows us to recognize entities in our environment as belonging to already familiar groups (or classes), guiding through this our interaction with these entities (Ashby & O'Brian, 2005, p. 83). The second type occurs when interaction with our environment requires taking some new perspective on the world by grouping entities in a way that will give rise to a novel category and perhaps also change the established category system. From a linguistic point of view, the first type involves the recognition of entities in terms of the category system of a particular language, i.e., in terms of the way the language categorizes them through its lexicon. The second type occurs in language in the process of lexicalization. Here the newly coined expressions reflect the conceptualization of how parts of reality are interpreted and what perspectives are taken on them, revealing the basis of the novel grouping of entities to form new linguistic categories. In subsection 3.1 I will deal with the first type and turn to the second type in subsection 3.2.

3.1 Levels of categorization, the scope of categories, and the effect of figurative thought

As suggested in Section 2 by the example *cup*, it is not shape perception and the perception of physical characteristics of entities that assigns entities unambiguously to basic level linguistic categories. The correspondence between perception based on sensory experience and the scope of referents of words is not definite, since words are not simply labels for categories, i.e., they do not designate a gestalt or an objective shape even at the basic level. Language – through cultural conceptualizations and perspectives – exerts a strong influence on the role of perception in categorization (Davidoff, 2001; Kemmerer, 2016; Lupyan, 2012; Nisbett & Miyamoto, 2005). In the case of basic level categorization, the conceptualization of entities results in a linguistic category made up of a combination of gestalt perception and the cultural knowledge of the range of referents of a linguistic expression. The interplay between these two will account for basic level linguistic categories comprising culturally established and conventionalized sets of perceptual attributes (or shape specifications) which will delineate the scope of referents of the particular basic level terms.

A cross-linguistic comparison of basic level terms shows that in the above interplay the perceptual clues playing a role in the categorization might often be overridden by the strong influence of culture through "practices of speaking, the local conduct of social life, and the social distribution of shared understandings" (Gumperz & Levinson, 1996, p. 7). This will often lead to different scopes of the comparable categories, which might as a result also occupy different levels in the taxonomy. As we will see below, the conceptualization involved in figurative naming may also play an important role in the emergence of these differences. This also means that the lexicalizations based on figurative construals will also lead to differently structured lexical fields.

If we take an extra-linguistic category and compare its linguistic manifestation, i.e., the way it is coded in various languages, it becomes immediately obvious that the allegedly corresponding words do not name the same category (Lipka, 1992, pp. 48–52). For instance even in the case of a basic level category like CHAIR, the German word *Stuhl* is used to refer to a narrower scope of objects than its supposed English equivalent *chair*, as it does not refer to objects normally designated in English by the word *armchair*. Based on their different range of referents, German *Stuhl* and English *chair* seem to represent different gestalts and thus not designate exactly the same category. Furthermore, German (along with several other languages, e.g., French, Russian, Chinese, Hungarian, etc.) has a separate word for the category ARMCHAIR (of the kind upholstered for comfortable sitting), namely *Sessel*, implying that it is not subordinate to and therefore not a kind of *Stuhl*. This suggests that *Sessel* and *Stuhl* are words for two different basic level categories recognizable only via perceiving two different gestalts, while English *chair* is supposed to represent one gestalt via which both a kitchen chair and an armchair should theoretically be recognizable according to Gallese and Lakoff (200, p. 446).

How is it possible then to define the category CHAIR with "objective similarity in shape, and identifiability of averaged shapes" (Rosch 1978: 31)? If "an image [i.e., averaged shape] could be reasonably representative of the class as a whole" (Rosch, 1978, p. 34), then either the German or the English word appears to be 'misused.' However, this is obviously not the case, since *Sessel* and *Stuhl* represent two different, coordinate categories, while *chair* and *armchair* also represent two different categories but at different levels, being super- and subordinate to each other.

Although categorization is primarily a non-linguistic cognitive activity, it is not easy to free ourselves from the influence of language (cf. Lupyan, 2016). Research on young children learning categories is to a large extent based on vocabulary acquisition (e.g., Pruden et al., 2006), and also experiments on categorization involving adults mostly contain some form of naming task (e.g., Archambault et al., 2000). When referring to the category CHAIR, there is no way to escape the fact that we are

using a particular English word with a particular range of referents and therefore the category referred to cannot be deemed to be independent of the meaning of the English word *chair*. This word calls to mind and selects a different set of category members than when we formulate our thoughts in German using the word *Stuhl* to talk about the category STUHL.

The explanation for this state of affairs must be looked for in cultural conceptualization, which is basically manifest in how categories are formed "in a culture and [how they are] coded by the language of that culture" (Rosch, 1978, p. 28). Thus, the lexicalization process represents an important aspect of the cultural formation of categories as it reveals explicit factors playing a role in the conceptualization. In the case of *armchair* the morphological structure of the word reveals that we have to do with a subordinate relation between the category ARMCHAIR and the category CHAIR because the compound expresses a 'kind of' relationship, i.e., *armchair* is a hyponym of *chair* (cf. Bauer, 1983, p. 30).

In the case of English *table* and *desk* as opposed to German *Tisch* and *Schreibtisch* we have to do with the exact converse situation. Again, it is not purely a set of perceptual attributes of a non-linguistic category TABLE/TISCH, which serves as the basis for the conceptualization underlying the meaning of *table* and *Tisch* respectively. The word *table* is not applicable to the same range of items as the German word *Tisch* (although commonly translated with English *table*). *Table* and *desk* are both hyponyms of *furniture*, whereas German *Tisch* is a hyponym of *Möbel* ('furniture') and a hypernym of *Schreibtisch* (commonly translated into English as *desk*). This latter is again a compound expressing a 'kind of' relationship, i.e., membership in the category TISCH but distinguished from other members by the characteristic 'used for writing at/on it.'

If "words for basic-level categories tend to be recognizable via gestalt perception" (Gallese & Lakoff, 2005, p. 446), then objects designated by the words *desk* and *table* must be recognized as different gestalts, while the same two objects conventionally called in German *Tisch* and *Schreibtisch* respectively are supposed to conform to one gestalt, since *Schreibtisch* is 'only' a subcategory of the basic level *Tisch*. These discrepancies show that these words do not simply designate categories that emerge in our interaction with the environment through identifying purely perceptual attributes. The linguistic categories represented by these words do not overlap because they are structured in consistency with conventionalized cultural conceptualizations of how their attributes correlate and show therefore different category inclusion (or 'kind of') relations.

This type of relation is conceptualized on metonymic grounds based on associating a group of the members of a category with one of their salient features that distinguishes them from other members. Thus, an armchair is a chair conceptually

contiguous with the characteristic 'having arms', and the referents of *Schreibtisch* are conceptually contiguous with the characteristic 'typically used for writing at/on it.' However, these compounds are not metonymical in the sense of the endocentric compounds analyzed by Brdar (2017, p. 144) because here the elements forming the compound are not metonymical before the compounding, and they do not even acquire a metonymic sense due to the compounding. In fact, they are not real metonyms technically because it is not the attribute as a metonymic vehicle that stands in itself for the whole subcategory, as for instance in the case of *glass* 'a drinking container made of glass.' But in spite of this, the manifestation of figuration is also apparent in the lexicalization of both *armchair* and *Schreibtisch*. The reason for their metonymical status is that the concept of the specified attribute named in the modifier elements of these compounds "provides mental access to […the target concept …] within the same domain, or ICM" (Kövecses & Radden, 1998, p. 39). It is in this sense that both of these compounds are metonymical, but *armchair* is in addition also a metaphor-based creative compound due to the metaphorical meaning of the modifying constituent (Benczes, 2006, pp. 91–92). As opposed to this, the term *Sessel* displays the typical linguistic characteristic of basic level categories, namely that "they are named by short, morphologically simple items" (Geeraerts, 2010, p. 201). The figurative ways that may possibly be detectable in the conceptualization of basic level categories will be discussed later.

Although one would expect cultural influence to be more detectable in the case of artifacts, it also occurs with natural kinds causing similar cross-linguistics differences. However, in their case the scope of the categories, i.e., the range of referents of the expressions, is not that likely to be different. The discrepancies mostly occur in connection with the taxonomy because the otherwise corresponding linguistic categories do not occupy the same level. For instance, the English words *peach* and *apricot* appear to be terms clearly designating the basic level categories PEACH and APRICOT, to which FRUIT is a superordinate. However, the Hungarian compound words *őszibarack* 'peach' and *sárgabarack* 'apricot' designate subordinate categories to the one designated by the term *barack*, which is definitely a term at the basic level, considering the criteria of early acquisition and frequency of use.

The exact opposite is the case with English *cherry*, to which *sour cherry* and *sweet cherry* are subordinates, while Hungarian *meggy* 'sour cherry' and *cseresznye* 'sweet cherry' designate two different basic level categories. According to Atran and Medin (2008, p. 102), "discrepancies in findings for different populations suggest that the basic level is knowledge-dependent" with regard to "familiarity with the biological world." The basic level in the above examples obviously depends to a great extent on the knowledge of the evolved cultural conventions with respect to the particular linguistic categorizations. Thus, the culturally conventionalized

conceptualizations reflected in the naming practices do not correspond to the biological classifications as found in plant taxonomy. In the above examples the lexicalization as hyponyms also happens through compounding, in which the 'kind of' relation is construed metonymically based on associated attributes.

However, these examples also show that in the case of natural kinds shape perception plays a much more important role in categorization than in the case of artifacts. The categories designated respectively by the pairs of terms *peach* and *őszibarack*, *apricot* and *sárgabarack*, *sour cherry* and *meggy*, and *sweet cherry* and *cseresznye* can in fact be characterized as exhibiting "motor movements in common, objective similarity in shape, and identifiability of averaged shapes" Rosch's (1978, p. 31). This is the reason why no differences in the range of referents of the terms and in the scope of the categories can be detected in these cases. However, the categories that these terms identify cannot uniformly be located at the basic level in a linguistic sense, which can be accounted for by the different cultural conceptualizations engendered by the different figurative construals.

The above examples show also another aspect of how linguistic categorization, i.e., lexicalization based on cultural conceptualization through imaginative structures of understanding, can influence the structure of a lexical field. While the contrasting of English *chair* and German *Stuhl*, as well as English *table* and German *Tisch*, shows variation in the range of referents, in the case of the categories including the types of fruits mentioned above, such variation cannot be found in the comparison of the English and Hungarian terms. In spite of this, discrepancies as to corresponding categories occupying different levels can be still observed with both the former and the latter examples. However, in the case of the latter examples we can also observe that the taxonomic discrepancies in subordination between the two languages bring about gaps in the lexical field. This causes a difference in the structure of the lexical field through the fact that the term *barack*, although it names a basic level category between the superordinate term *gyümölcs* 'fruit' and the subordinate terms *őszibarack* and *sárgabarack*, has no equivalent (a cover term for *peach* and *apricot*) in English. In the same vein, Hungarian lacks a cover term for *cseresznye* and *meggy* (corresponding to English *cherry*).

These examples show how variation in figurative thought, through effecting the scope and occupied level of a category, might influence the way a category system is set up, leading to various differences in the structure of lexical fields across languages. However, it must be remarked here that variation in culturally conventionalized conceptualizations may also occur within one language because they are largely conditioned by the constant variation in usage across a speech community (Clark, 1996, p. 352–353). This is also reflected in the differences between definitions for the same lexical item in various dictionaries. Thus, whereas the 1978, special edition of Gerhard Wahrig's *Deutsches Wörterbuch* defines *Sessel* as

"bequemer, gepolsterter *Stuhl* mit (oft gepolsterten) Armlehnen," i.e., 'comfortable, upholstered *chair* with (frequently upholstered) armrests' (Wahrig, 1978), the 2011, 9th edition gives the meaning of this word as "bequemes, gepolstertes *Sitzmöbel* mit (oft gepolsterten) Armlehnen," i.e., 'comfortable, upholstered *piece of furniture for sitting* with (frequently upholstered) armrests' (Wahrig-Burfeind, 2011) (author's emphases and translations).

Also, the variation between the dictionary definitions for *table* and *desk* suggest that their taxonomic relation can be construed in two different ways in English. The *Concise Oxford English Dictionary* defines the word *table* as "a piece of furniture with a flat top and one or more legs providing a level surface for eating, writing, or working at" and the word *desk* as "a piece of furniture with a flat or sloped surface at which one can read, write, or do other work" (Stevenson & Waite, 2011, pp. 388, 1464). Based on these definitions, they are both cohyponyms of *furniture*, i.e., coordinate basic level categories of the superordinate category FURNITURE. As opposed to this, if we look at the definitions of these two terms in the *Merriam-Webster's Collegiate Dictionary* (2004, pp. 338, 1270), then *desk* appears to be a hyponym of *table*, since the first one is defined as "a table, frame, or case with a sloping or horizontal surface especially for writing and reading and often with drawers, compartments, and pigeonholes" and the latter one as "a piece of furniture consisting of a smooth flat slab fixed on legs." On these grounds TABLE is a basic level category and DESK is its subordinate.

However, looking at the lexicalized forms of basic level categories, we usually find that a relatively common characteristic of basic level terms is their monomorphemic structure (Geeraerts, 2010, p. 201). In contrast, subordinates are often coded in language in a descriptive, semantically transparent way, which is usually (though not always) manifest in a complex word, mostly a compound, e.g., *dining table*, *armchair*, *claw hammer*, *sour cherry*, etc., making the hyponymic relations explicit and unquestionable. The dividing up of a basic level category through categorizing a set of its members as subordinates, along with the parallel lexicalization process, is usually based on construing this set in a figurative way by metonymically highlighting some specific characteristics that only these members share. The semantic transparency of these terms reflects the basis for their conceptualization as to the restriction of the scope of the basic level category to a certain set of members, which reveals their position in the taxonomy. It is primarily the different conceptualizations in this respect that are the most likely to be responsible for the variations, also across the dictionary definitions, regarding the taxonomic relations between the examples in the preceding paragraphs.

In his pioneering study on what the most natural name in a language is of all the variants by which an object can be called, Roger Brown (1958, p. 17) identified the most common name used for an object as being "at the level of usual utility"

with regard to the taxonomic relations in which all the names in the lexicon applicable to the same object stand. He characterized other names at the super- and subordinate levels as "recategorizations [which] are acts of imagination, whereas the major categorization is a kind of passive recognition of the true character of the referent" (Brown, 1958, p.17).

Although Brown (1958) did not intend his explanation of the levels of categorization as an account of lexicalization, we have seen above that categorizations at the subordinate level are often based on "acts of imagination" in terms of construals as a 'kind of' relationship on metonymic grounds. It must be mentioned here, however, that the 'kind of' relationship is not always explicit in this form, e.g., in the case of subordinate categories to TREE (see above). But what about the level superordinate to the basic one? For instance, the category FURNITURE, according to the examples in Rosch and Mervis's (1975, p. 579) experiment, includes also such basic level categories as CUSHION, RUG, VASE, TELEPHONE, etc., which are definitely not included in the range of referents of German *Möbel* (the category MÖBEL, theoretically equivalent to FURNITURE). Actually, what we have to do with here are not simply categories but meanings of words, and while of course "[a]ny linguistic expression […] represents […] a category of referents" (Croft & Cruse, 2004, p. 74), it does not do so independently of the socioculturally motivated "imaginative structures of meaning" (Johnson, 1987, p. 174).

In the case of words representing artifact categories above the basic level in the taxonomy, categorization is based to a very large extent on such imaginative structures manifest in cultural conceptualizations. These conceptualizations involve the culturally conventionalized knowledge of a range of referents, as testified in the difference between the dictionary definitions for *furniture* and *Möbel*. The *Merriam-Webster's Collegiate Dictionary* (2004, p. 508) gives the meaning of *furniture* as "movable articles used in readying an area (such as a room or patio) for occupancy or use," and according to the *OED Online* the word *furniture* in its prevailing sense represents a category that includes "[m]ovable articles, whether useful or ornamental, in a dwelling-house, place of business, or public building." At the same time the category represented by *Möbel* includes items defined as "beweglicher Gegenstand in einer Wohnung, der besonders zum Sitzen, Liegen oder Aufbewahren von Kleidung, Hausrat dient" (DWDS Online), i.e., 'movable object in an apartment, which serves especially sitting, lying, and storing of clothing, household items' (author's translation).

While subordination divides up basic level categories into less inclusive sets based to a great extent also on cultural knowledge beside the familiarity with perceptual attributes, the superordinate level groups basic level categories together into more inclusive categories based on relatively abstract, often purely cultural knowledge. The terms standing for this level, just as the ones designating basic level

categories, are most often non-transparent semantically and thus do not reflect their figurative construal underlying the conceptualization. In the next section I will examine whether it is possible to find some connection between their status in the hierarchy by looking for some kind of figuration inherent in their lexicalization and conceptualization via their etymology.

3.2 Figuration in the conceptualization and lexicalization of categories

The existing linguistic categories and the system these categories form in the language represent the given culture's cognitive adaptation to its environment and provides ready-made knowledge about this environment for newer generations (Glushko et al., 2008, p. 131; Harnad, 2005, p. 37; Palmer, 1996, p. 52; Tomasello, 1999, p. 133, 159). This adaptation – the forming of categories of cultural validity – comes about by coding the categories that speakers of a language have found useful for construing phenomena of the world. A category which is supposed to be generally known and congruent throughout a whole culture cannot exist without being named (cf. Rosch, 1978, p. 28), therefore the elaboration and coordination of culturally salient conceptual structures require linguistic interaction between speakers and hearers at a sociocultural level. However, the process of coding is not simply the labeling of already existing and established cultural categories. The categorizing function of language means its involvement in the formation of categories of cultural validity, which actually means that cultural categories come about in the naming process.

When referring to phenomena as we communicate about our interaction with the world, we use the established category system, i.e., the words of our language, which comprise our culturally conventionalized conceptualizations of reality. However, in this interaction – depending on the circumstances, the changes in the environment, etc. – reference to entities from various new and unconventional perspectives may be taken, which must also be accomplished by using the established category system. The application of conventional expressions in semantically unconventional ways to convey some new perspective will seemingly result in a mismatch between the category conventionally represented by the expression and the novel perspective or referent. But our conceptualizing capacity, based on imaginative structures of understanding relying on figurative thought, will help us detect a conceivable connection between the two and facilitate the identification of the intended meaning.

The connection derives from the fact that "[c]ategorization is […] the interpretation of experience with respect to previously existing structures" (Langacker, 2008, p. 17), i.e., "imposition of structure" (Langacker, 1987, p. 105). Any new experience can only be comprehended in terms of existing categories and categorized

and put into words on the basis of the knowledge of familiar experience residing in our already established linguistic categories (Blank, 2003, p. 45). The categorization of new experience, as a joint cognitive and linguistic process, happens mostly by means of metaphor and metonymy, which are the primary means for further elaborating the evoked existing knowledge structures (Lipka, 1992, p. 124). If the same linguistic reference reoccurs under the same contextual conditions, the new categorization and the attached conceptualization will become culturally shared, which may ultimately lead to the conventionalization of the expression in the process of lexicalization.

Superordinate categorization usually involves a description indicating an expansion in the sense of assembling certain basic level categories and conceptualizing them as a collection based on the way we understand, interpret and imagine some natural and/or cultural correlation between them. The lexemes *furniture* and *Möbel* are not immediately transparent semantically, especially as to the scope of the category and its place in the taxonomy, like *kitchen chair*, but their etymologies reveal how the categories FURNITURE and MÖBEL have become lexicalized. According to the *OED Online*, the word *furniture* is a borrowing of French *fourniture* with the earliest attested meanings in the sixteenth century, 'the action of fitting out or equipping, of accomplishing (a design), or of providing *with* (supplies)' and 'the action of decorating or embellishing; a means of doing this.' *Fourniture* derives from Old French *furnir*, which was borrowed separately earlier with the meaning 'to accomplish, complete, fulfil.' The German word *Möbel* is a borrowing of French *meuble* in the 16th and 17th centuries, first with the meaning 'household item' and then as 'furnishing object,' which goes back to Medieval Latin *mōbile* 'movable goods' derived from Latin *mōbilis* 'movable' < Latin *moveō* 'to move' (DWDS Online; de Vaan, 2008, p. 390). Thus, considering these data, the basis for the conceptualization found in the term *furniture* is provided by the construal '(things for) fitting out or equipping, or ornamenting' and *Möbel* suggests that the conceptualization it comprises is based on the construal 'movable things (one owns).'

Obviously, the various collections of the types of entities that the above lexemes have come to refer to respectively are the result of cultural-linguistic conceptualizations (ensuing from the different metonymical construals as 'furnishings' and 'movables') and the subsequent conventionalization processes rooted in the shared sociocultural behavior and knowledge of the speech communities. However, as it is apparent from the comparison of these word histories and the above dictionary definitions for these two lexemes, the one-time construals and conceptualizations are absolutely not deterministic with regard to later conceptualizations and the scope of categories (and the range of referents of these words). These depend much more on changing cultural conventions.

If we look at natural kind superordinates, we might expect that the figurative construal of phenomena as revealed through the etymologies might show less culture dependence regarding conceptualizations. For example, English *plant* and German *Pflanze* 'plant' are borrowings from Latin, where the verb *plantāre* meant "to propagate from cuttings, to press into the ground with the feet," deriving from the Proto-Indo-European root **pl(e)h*$_2$- 'flat' (DWDS Online; OED Online; de Vaan, 2008, p. 470). This suggests the original metonymic construal as 'the result of the activity when one presses seeds into the ground with one's feet.' In comparison, both Russian *растение* 'plant' and Hungarian *növény* 'plant' are transparent morphosemantically as they are nominal derivations from the verbs *расти* 'to grow' and *nő* 'to grow' respectively, thus meaning 'the thing that grows.' In these examples we can again witness the principle role of metonymic construal in interpreting some part of reality through association with some contiguous phenomenon based on perception and/or world knowledge. However, since these metonymic construals reflect very general perspectives, the culturally conventionalized conceptualization through the speech community's shared understanding, in these cases as well, plays a crucial role in the emergence of the category, though not leading to dissimilar ranges of referents.

The lexicalized forms of the superordinate category FRUIT in English (*fruit*) and German (*Frucht*) are borrowings from Latin, and together with their French cognate *fruit*, are explained as deriving from Latin *fruī* 'to enjoy' (DWDS Online; OED Online; de Vaan, 2008, p. 244). If we look at Hungarian *gyümölcs* 'fruit,' we find that it is a borrowing of Old Turkish *ǰimiš* 'fruit' in the 12th century, which is derived from the verb *ye-* 'to eat' (Benkő, 1984, p. 1140). Thus, we again have to do with originally metonymic construals, 'the thing one enjoys' and 'the thing one eats,' but the ensuing conceptualizations appear to rely slightly more on sociocultural conventions and habits than in the case of PLANT. In the case of the latter, the construal relies on the relatively objective description of a contiguous activity, whereas in the case of the former, we can observe a more subjective construal relying on what the conceptually joined entities afford for members of a human culture.

Up to now we have seen how figurative thought may influence subordination and superordination by way of the construals underlying lexicalization, reflected either in the (morpho)semantic transparency of the expression or in its etymology. Although semantic transparency may also occur in the case of basic level terms (e.g., *glass*, see above), it is absolutely not characteristic of them (see Geeraerts, 2010, p. 201). This is definitely due to a large extent to their frequency of use in everyday communication and representation owing to their utility and usefulness (Brown, 1958, p. 17; Rosch, 1978, p. 35). But this utility and usefulness is also reflected in their lexicalization processes, implying a close association with the characteristics of the referents themselves, since they are "the categories most codable, most coded,

and most necessary in language" (Rosch et al., 1976, p. 382). However, as we have seen in connection with the various cross-linguistic discrepancies, the notion of "usual utility" is closely linked to cultural conceptualization, which often ignores any alleged "true character" the entities included in a basic level category might exhibit.

Even if the true character is not to be taken literally as an objective reflection of reality, basic level categories are construed in their own right. They are construed on the basis of their own characteristics and not relative to other categories like super- and subordinate ones, which emerge only relative to basic level categories. However, while basic level categories are not recategorizations, they are still acts of imagination in the special sense of being construed in terms of imaginative structures of understanding. This means that they are construed in a way chosen from other possible ways of construal, but of course relative to perceived world structure, cognitive economy, and their function and usefulness. But the figuration in the construal does not in itself determine the level of categorization. For instance, in the case of *glass* the metonymic construal in itself, 'thing made of glass,' includes a much broader range of referents than the real conceptualization of the actual category. If we only look at the original construal, then it could theoretically function as a superordinate, but cultural convention of usage has engendered a basic level conceptualization. Similar examples can be found even with natural kinds. In the cases of the already mentioned German *Baum* 'tree' (deriving from Proto-Indo-European **bheu-* / **bheu̯ə-* 'to grow, thrive') and Hungarian *növény* 'plant' (a nominal derivation from the verb *nő* 'to grow') the same metonymic construal ('the thing that grows') produced a basic level category in the former case and a superordinate category in the latter. These examples demonstrate the direct relevance of cultural conventionalization through usage in the ensuing conceptualization and that the concrete figuration is just a starting point for mutual understanding in this process (cf. Nerlich & Clarke, 1992, p. 137).

Beside the regular cultural conventionalization process through language use, other sociocultural and cognitive factors, as well as language history, may play a role in the development of a particular conceptualization inherent in a basic level term. For instance, English *stool* and German *Stuhl* 'chair' ultimately derive from the Proto-Indo-European root **stā-* 'to stand,' since in the Germanic languages the word first denoted a high stand where the ruler was seated, as testified by Gothic *stōls* 'throne' (OED Online; DWDS Online). Thus, the word originates in a metonymical reference to a new entity categorized as a stand but of course conceptualized as a particular type of stand. Since the type of stand that *Stuhl* originally referred to served actually as a seat, the expression was extended later on in cultural history to certain other objects functioning as seats parallel to a change in the conceptualization. Eventually the meaning of the word was conventionalized to denote a particular range of referents, which necessarily involved the evolving

of a culturally conventionalized knowledge of particular shapes as well, due to the basic level status of the word.

However, it also appears to be true that the strong influence of cultural conventionalization on how entities become eventually conceptualized is relatively random, as it can also happen that the same metonymic construal gives rise to different basic level conceptualizations even within the same lexical field and within the same language. Such an occurrence can be witnessed in the case of the words meaning 'chair' and 'table' in several Slavic languages, e.g., Russian *стул* and *стол*, both deriving from the Proto-Indo-European root *$steh_2$- 'to stand,' and thus both are construed metonymically as 'the thing that stands' (Derksen, 2008, p. 468).

Compared to how *Stuhl* acquired its present meaning in German, the word *Sessel* 'armchair' has a much less complex history, as it eventually comes from Proto-Indo-European **sed-* 'to sit,' revealing an original metonymic conceptualization as 'a thing for sitting on' (DWDS Online). Its conceptualization in terms of a basic level category is just as much the result of the cultural conventionalization of usage with regard to the range of referents as of conventionalized knowledge of some particular shape prompting a characteristic affordance. Interestingly, the etymology of English *chair* also reveals the original construal of the category as 'a thing for sitting on,' but the history of its conventionalization is a bit more intricate. It is a borrowing of Old French *chaëre* going back to Latin *cathedra* 'seat,' borrowed from Greek *kathédra* 'seat' < *katá* 'down' + *éd-* 'sit', *éd-* ultimately deriving from Proto-Indo-European **sed-* 'to sit' (OED Online; Beekes, 2010, p. 376). This latter example shows that borrowing may play a crucial role in influencing the status of words in the lexicon, in this case restructuring the particular lexical field with regard to taxonomy by causing semantic change in another item (cf. Lehrer, 1985). The borrowing of *chair* must have affected the possible range of referents in the semantic evolution of English *stool*, a word with a closely related sense, which event must be at least partly responsible for the semantic discrepancy between it and its German cognate *Stuhl*.

The semantic evolutions of the cognates German *Tisch* and English *desk* further illustrate how initial figurative construals may be affected by diverging pathways of conventionalization. Both words are borrowings of Latin *discus* 'disc,' which goes back to Greek *dískos* (DWDS Online; OED Online) and reflect the metonymic construal of an entity in terms of its most salient structural part, which yields a basic level category based to a large degree on shape perception and the function connected to it. Interestingly, the origin of the word *table* reveals a figurative construal very similar to the above. It is a borrowing from Latin *tabula* 'flat board, plank' and developed the meaning 'a raised board at which people may sit' in the fourteenth and fifteenth centuries (OED Online). Similarly to the case of *chair* and *stool*, its borrowing and semantic development in English must have

affected the meaning of *desk*, which was borrowed earlier with the meaning 'table.' The arrival of *table* must have contributed to the two words coming to be used with different ranges of referents and therefore conceptualized as belonging to two coordinate basic level categories under the same superordinate. As is apparent from the examples, both the names and the basic level categories they designate are products and results of culturally evolved conventionalized conceptualizations which started out from initial figurative construals based on contiguous perceptual and functional attributes.

4. Conclusion

Basic level categories have been identified as the most salient in a taxonomy with regard to the perceptual characteristics of the entities they include. According to the general definition for the basic level, these categories are recognized via gestalt perception, i.e., their members are grouped on the basis of a representative shape. Basic level categories are the ones for which a name appears to be the most useful in language due to categorization at this level being the most functional in our interaction with the environment. Therefore, they are the most frequently used names for object categories in everyday linguistic communication, the ones that children learn first in language acquisition and which emerge before super- and subordinate categories in language history.

It is also common knowledge that there are significant cross-linguistic differences with regard to categorizing reality even at the basic level. The discrepancies are varied. Seemingly corresponding terms may subsume different sets of referents, and terms appearing as basic level ones in one language may not designate basic level categories in another language. It may also occur that two or more categories that count as basic level ones in a language correspond to one category only in another language, which also counts as a basic level category. This state of affairs stands in contradiction to the definition of the basic level, according to which such categories can be recognized through their specific shape characteristics.

In the paper I argued that the explanation for the cross-linguistic variation can be found in the way figurative thought plays a role in the lexicalization of basic level categories. Not even these categories are lexicalized by constructing terms that delineate such categories based on purely perceptual grounds. The lexicalization of basic level categories originates in figurative construal based varyingly on most of the time culturally induced knowledge of salient structural and/or functional attributes. These construals are then elaborated into culturally conventionalized conceptualizations on the basis of communicational and representational usefulness in the speakers' interaction with their environment. This will later on influence

such properties of the conceptual categories as the range of referents and the level occupied in the taxonomy.

These culturally shared conceptual categories emerge through the historical process of lexicalization and are not independent of sociocultural interaction. This interaction can only take place via language and is responsible for coordinating speakers' individual conceptualizations of the world for the sake of creating cultural categories in which the speech community's shared knowledge about their environment resides. In the case of the basic level, perception undeniably plays an important role in the emergence of cultural categories, but the process is largely influenced by various cognitive, linguistic, and cultural factors. As any linguistic change starts out from synchronic language use, this influence derives from, on the one hand, how parts of reality are conceptualized with the help of imaginative structures as we endeavor to understand the world around us. This understanding cannot be separated from the ways linguistic expressions are applied in the lexicalization process when formulating new perspectives with the help of metonymically and metaphorically modulated conventional expressions.

On the other hand, a very strong influence comes from the fact that the categories emerge as part of the cultural history of the speech community and therefore reflect aspects of their way of life and cultural beliefs. All these influences become incorporated in the meanings of the basic level terms, which do not simply involve the knowledge of a set of perceptually and functionally salient attributes, but also the knowledge of a conventionalized and often figuratively construed set of such attributes, the salience of which is culture dependent.

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Reconsidering accounts of the grammaticalization of auxiliaries

The cases of *be-going-to* and *have*-perfect

Frank Polzenhagen
University of Koblenz-Landau

The present paper re-addresses two standard examples of grammaticalization research, i.e. the development of the *be-going-to* form and the evolution of the English *have*-perfect. Analyzing these two forms in communion is motivated by the fact that they express conceptual patterns that are mirror images of each other and by the observation that they have developed, historically speaking, largely in an in-tandem constellation. The specific perspective taken in the paper explores several dimensions of the broader conceptual context of their auxiliation: (i) the "lexical preface" of grammaticalization processes, (ii) conceptual patterns associated with the notions that constitute the "meaning" of the respective forms, and (iii) the interaction with the development of other items in the respective domains. These aspects have received only scarce attention in grammaticalization research.

Keywords: metaphor, metonymy, MOTION, POSSESSION, grams, collocational patterns

1. Introduction

Grammaticalization processes have been a prominent issue on the research agenda of linguistics at least since the 1980s, when the notion of grammaticalization was brought to the attention of the wider circle of linguists beyond its original base in historical linguistics. Authors that were instrumental to the popularisation of this notion include Givón (e.g. 1971), Lehmann (1995 [1982]), Heine and his colleagues (e.g. Heine, Claudi & Hünnemeyer, 1991) and Hopper & Traugott (2003 [1993]).[1] The enthusiastic reception it received, in particular, among proponents of the emerg-

1. The body of grammaticalization research is too vast to be reviewed here. For a survey, I wish to refer the reader to Narrog & Heine (2011).

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ing cognitive-linguistic approach to language is not surprising. Grammaticalization processes promised to be illustrations *par excellence* of several fundamental stances in Cognitive Linguistics (CL). Specifically, they are prime evidence of the view that lexicon and grammar form a continuum rather than being separate realms, they lend themselves to a modeling in terms of conceptual metonymies and metaphors, and they give substance to the CL position that meaning and meaning change are located in specific constructions (see Polzenhagen, 2014, for a brief discussion).

Broadly speaking, two strands have emerged in grammaticalization research over the last decades,[2] and the two forms under analysis in the present chapter, i.e. the *have*-perfect and the *be-going-to*-form, have come to be textbook examples of both approaches. The first strand is firmly rooted in CL and strives to account for the data in terms of a metaphoric and/or metonymic transfer. The *be-going-to*-form, for instance, is commonly modeled as the product of the general SPACE-to-TIME mapping. The gist of it is expressed in the following quote from Heine, Claudi & Hünnemeyer (1991, p. 47):

> … the domain of spatial movements is used as a metaphorical vehicle to refer to the domain of deictic time: the verb *go to* denoting a physical action serves as a structural template for conceptualizing a grammatical notion, that is, deictic time.

The motivation these authors see for this metaphorical mapping is the same as the one generally assumed in conceptual-metaphor theory: "a concrete movement like *go to* is 'more easily grasped' than a concept of the more abstract domain of tense categories" (Heine, Claudi & Hünnemeyer, 1991, p. 47). A refined version of this approach is presented in Kuteva (2001, p. 116–124). What such authors take as their starting point is hence the construction <be going to + inf.> in its literal movement sense. According to this view, the non-literal uses emerged as the product of the general metaphoric movement-to-time mapping. Repeated usage led to the conventionalization of the "new" use and its establishment as an auxiliary construction.

The second strand analyses the auxiliation of <be-going-to + inf.> as an instance of pragmatic inferences. It does not necessarily align with the CL framework. Some proponents of this view, e.g. Eckardt (2006), even question the viability of notions such as 'conceptual metaphor/metonymy,' place themselves explicitly in opposition to CL, and propose an account against the background of formal semantics instead. Authors in this strand focus on the analysis of local contexts of historical tokens implicating "near future." According to this view, the historical hearer, being confronted with <be-going-to + inf.> in a context suggesting 'immediate future of

2. Both strands are situated in a fairly long history of ideas. Quite elaborated metaphor-based accounts, for instance of the perfect form, can already be found in the 18th century; for an overview, see Polzenhagen (2014).

the event,' attributed the imminence meaning to the <be going to> construction. Note that this reinterpretation comes with a structural reanalysis of the sequence be-going-to-verb in terms of a distinct construction of the type <aux + main verb>. The "new" meaning is then stored by the hearer and, if it is reinforced through repeated usage, becomes part of the entrenched repertoire of expressions.

Taking an intermediate position, some authors allow for the involvement of both metonymic/metaphoric processes and pragmatic inferencing (e.g. Bybee, Perkins & Pagliuca, 1994; Traugott & Dasher, 2002). Hopper & Traugott (2003 [1993], p. 93), in their influential account of the grammaticalization of the *be-going-to* form, have the same input (the construction with a literal movement sense) and the same output (a future-tense form) as Heine, Claudi & Hünnemeyer (1991).[3] However, their account differs from the one given by the latter authors in at least two crucial ways. First of all, they put greater emphasis on syntactic (syntagmatic) reanalysis. Secondly, they stress the impact of the purpose component contributed by *to*. They argue, basically, that both 'moving towards a goal' (the contribution of *go*) and 'achieving a purpose' (the contribution of the purposive to-clause) *imply* (or rather: *implicate*) that the goal or purpose lie in the time ahead (Hopper & Traugott, 2003[1993], p. 88–89), i.e. GOAL and PURPOSE metonymically evoke the temporal element that brings forth the near-future meaning of the construction. At this stage, there is thus a construction with a dual nature, i.e. movement towards a goal and purpose, both implicating future. In specific contexts, the movement sense can be backgrounded, i.e., bleached in favor of the purpose sense, without the future interpretation being lost. Eventually, the construction spreads, via analogy, to contexts which do not involve motion at all.

The aim and strength of grammaticalization theory consist in accounting for the path from the original lexical meaning of an item to the grammatical meaning it has developed in a given construction. In the case of the two verb forms under analysis, the challenge is to model the paths from the lexical source domains of MOVEMENT and POSSESSION, respectively, to the target meanings of these forms in contemporary use. As indicated above, in current grammaticalization research, the focus has shifted on *local* contexts of historical usage. This endeavor involves the identification of actual instances of so-called "bridge contexts" between the "old" and the "new" meanings. This approach is in line with the general trend towards a usage-based linguistics (irrespective of an author's theoretical orientation), and the usage-based focus on actual instances of language use is certainly a highly fruitful

3. I do not share the characterisation of the *be-going-to* form as a future-tense form (see Polzenhagen, 2008, 2017 for a discussion); rather, it is a *prospective* form, which needs to be distinguished from future-tense forms in a strict sense. Hence, I only partly agree with the assumed output of these models.

endeavor. However, in the present chapter, I will take a complementary perspective and consider *global* conceptual patterns and the wider conceptual background that I believe to be relevant to auxiliation. I will highlight the following three contributing factors, using the *have*-perfect and the *be-going-to*-form as cases in point:

i. the "lexical preface" of grammaticalization processes (Section 2.1);
ii. conceptual patterns associated with the notions that constitute the "meaning" of the respective forms (Section 2.2);
iii. the interaction with the development of other items in the respective domains (Section 2.3).

These factors are virtually unaddressed in pragmatic-reinterpretation models, given their focus on local contexts. Even in the standard CL-oriented metaphor/metonymy-based accounts, they have received little or no attention.

2. Elements of the wider conceptual background of grammaticalization processes

2.1 The "lexical preface" to grammaticalization stories: The example of *be-going-to*

The present section argues for the need to take into consideration the full lexical potential of items that undergo grammaticalization processes. I will highlight the example of the *be-going-to* form, but I believe that my argument holds true for many other cases as well.

As has been noted in the introduction, accounts of the grammaticalization path of the *be-going-to* construction generally take the movement sense of lexical *go* as their starting point. They try to identify "bridge contexts," i.e. contexts in which both a reading with the, informally speaking, "old" motion meaning and a reading in terms of the "new" meaning are possible. Depending on the camp an author belongs to, these two readings are seen as related and licensed either by a conceptual metaphor/metonymy or through a pragmatic inference in a specific context.

The "new" meaning of the *be-going-to* construction is that of a prospective form with a strong causal component; it expresses a prospective view on an event based on "evidence" of a cause at reference time. What counts as evidence is either indications of an event to come (e.g., 'clouds in the sky' in the case of *it is going to rain*), or somebody's intention to bring about an event (e.g., in *I am going to move to London*). The "dual" character of *be-going-to*, i.e., expressing the temporal notion of a "prospective" and the notion of "evidence" of a cause, and its specific viewpoint placement are graphically represented in the following figure.

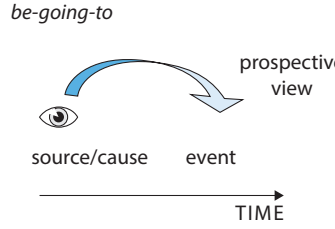

Figure 1. Viewpoint placement of *be-going-to*

The argument made in the present section is that there is no need to take the movement sense of *go* as the immediate input of the grammaticalization path that led to this constructional meaning. At the time when this construction emerged, gained ground and finally got established, the lexical item *go* had already developed a wide range of well-attested senses, some of them remarkably close, in conceptual terms, to the meaning expressed by *be-going-to*. To put it bluntly: In the lexical item *go*, much if not all of the bridge was already built or, if one favors a pragmatic account, much if not all of the inference already inferred.

In order to back this argument, it is a straightforward choice to use the OED entry for *go* as an empirical basis. The relevant period is the one between the emergence of the <be going to + inf.> construction in the 15th century and the time it is safely attested with the "new" grammaticalized sense sketched above, i.e., around 1700; hence, the relevant senses are those attested up to the end of the Early Modern English (EModE) period.

The OED lists an impressive total of 130 senses and 21 sub-entries for *to go*. The lexicographic principles of structuring an entry used by the OED do, of course, not correspond to the grouping of senses one would favor from a CL perspective. In the following, I will present senses and examples that illustrate them in terms of underlying conceptual metaphors. My account does not claim to be exhaustive; only some of the senses are picked out in order to give substance to my specific argument. In fact, most of the senses listed in the OED are not relevant to the present concern. Many of them emerged after the EModE period, and those will not be mentioned. Others are attested for the relevant period but are semantically outside the present scope.

Go is well attested for the relevant period as a lexicalization of the general MOVING TIME and MOVING EGO conceptualizations, as in the following OED examples:

(1) [*a*1400 (1325)] *Ten dais on þe monet was gan*.

(2) [*a*1616] *The time goes by: Away*.

(3) [1662] *The further we go back in history, the fuller the world was of Deities*.

Furthermore, *go* had and still has a number of lexicalized fictive-motion senses (for a classification of fictive motion, see Talmy, 2000); e.g.:

(4) [*a*1533] *This other way goeth to Rome.*

(5) [*a*1586] *Follow him through the doore, that goes into the garden.*

Further senses of *go* attested in the OED include:

TO CEASE TO EXIST IS BEING GONE, which is linked to EXISTING IS BEING PRESENT IN SPACE; e.g.

(6) [1508] *All thair vittalis war gone.*

PERFORMING A FUNCTION IS MOVEMENT; e.g.

(7) [1503] *The organs went and the bellys dyd rynge.*

BEING IN HARMONY/BEING COMPATIBLE IS GOING TOGETHER; e.g.

(8) [*a*1616] ***Antony***. *Of Cæsar seeke your Honour, with your safety.*
Cleopatra. *They do not go together.*

ALTERNATIVES ARE ALTERNATIVE PATHS AND DESTINATIONS; e.g.

(9) [1597] *So in many Armies, if the matter should be tryed by duell betweene two Champions, the victory should go on one side, and yet if it be tried by the grosse, it would go of the other side.*

BEING MORE IMPORTANT THAN SOMETHING IS GOING BEFORE IT, which is linked to the notion of 'leadership' on a journey; e.g.

(10) [*a*1382] *The wisdam of God goende beforn alle thingus, who enserchede?*

However, the most relevant instances for the present concern are those that betray the ubiquitous conceptualization of EVENTS in terms of the SOURCE-PATH-GOAL schema.[4] The underlying specific construal of a motion event performed by *go* is well-studied in CL. It has two important characteristics: (i) it places the focus on the GOAL component (final windowing) unlike, for instance, motion verbs like *leave* (initial windowing); (ii) it places the viewpoint in the source region of the motion event unlike, for instance, *arrive* and *reach*, where the motion event is viewed from the perspective of the GOAL (viewpoint with the GOAL):

4. For a CL account of metaphorized motion, see, e.g., Radden (1996). On the notion of 'event schema', see Radden & Dirven (2007), but also Heine (1993, 1997) with his earlier and related notion of 'propositional schemas.' An in-depth analysis of motion events and conceptualizations in terms of motion is given in Talmy (2000).

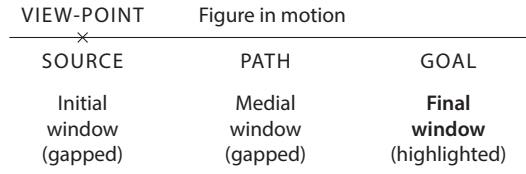

Figure 2. Construal of a motion event by *go* (adapted from Ungerer & Schmid, 2006: 323, leaning on Talmy, 2000)

This basic pattern is transferred and preserved in the construal of events in terms of motion. A broad array of general and more specific variants of this global conceptualization are lexicalized in the period under investigation. Specific profiles are usually expressed by particular prepositions joined to *go*.

The general construal of events or sequences of events in terms of the SOURCE-PATH-GOAL schema is manifest in the following sense of *go*, glossed by the OED as 'to have a specified (favorable or unfavorable) course or issue':

(11) [1490] *He vnderstode that the thynge wente euyll for hym.*

(12) [*a*1533] *Ye mater was lykely to go yll agaynst the erle.*

The SOURCE-PATH-GOAL schema yields the notion of an intrinsic direction of the course of the event. The following example expresses this notion:

(13) [1612] *They looke vpon men, and matters with an evill eie, and are best pleased when thinges goe backward.*

The underlying conceptualization is CHANGING FOR THE WORSE IS GOING BACKWARDS, a sense of *go* that the OED attests up to the 17th century.

The profiling of particular phases of an event is achieved mainly through the combination of *go* with specific prepositions, e.g., the use of *go* with *to* in the expression *go to!* glossed by the OED as 'chiefly in *imp*. as an exhortation' and meaning 'Come on! Do it!', as in:

(14) [*c*1460] *Here shal no man tary the, I pray the go to!*

(15) [1583] *Go to now bring me a doublet.*

(16) [1611] *And they sayd one to another; Goe to, let vs make bricke.*

In such uses, the entire event is in scope, i.e., the viewpoint is with the preparatory or pre-phase of the event. The same focus is set in the sense glossed in the OED as 'betake oneself *to* (an employment or occupation); to proceed to some specified course of action'; e.g.

(17) [1577] *I goe to writing or reading, or suche other businesse as I haue.*

and in the sense 'to set oneself, attempt *to* (do something)'; e.g.

(18) [1662] *Nay, he goes to prove the truth of Sanchoniathons History by* […].

Note that the latter involves an embedded <to + inf.> construction.

A focus on the SOURCE region or *initial window* (in Talmy's, 2000, terminology) of the verbalized event is expressed in the following example; the relevant sense is glossed in the OED as 'to begin, undertake (an action)':

(19) [*a*1616] *This Action I now goe on, Is for my better grace.*

This focus is the contribution of the profile of the preposition *on*. A focus on the continuation of an event or activity, in turn, is expressed by foregrounding the PATH component of the SOURCE-PATH-GOAL schema (*medial window* in Talmy's terminology). Examples of the conceptualization TO CONTINUE IS TO MOVE ON ALONG A PATH include lexicalizations of *go* with *forth* and *on*; e.g.:

(20) [1535] *So Iob proceaded and wente forth in his communicacion.*

(21) [1634] *I will here goe on with the description.*

Conceptualizations that set into perspective the final window of the verbalized event (more or rather than the PATH) are expressed, for instance, by combinations of *go* with *through*:

FULFILLING A PLAN IS MOVING TO THE END OF A PATH; e.g.

(22) [*a*1535] & *since he had ones begon, he would stoutly go through.*

(23) [1631] *You chang'd Your purpose, why did you not goe through, And murder him?*

Further relevant conceptualizations that are lexicalized as senses of *go* include:

PURSUING ONE'S OCCUPATION IS GOING ABOUT IT, where the occupation is a SPACE through which the PATH is leading; e.g.

(24) [1577] *Yf they [= bees; FP] goe about their businesse cheerefully.*

(25) [1642] *The worke which himselfe and Paul went about.*

OCCUPATIONS ARE DESTINATIONS; e.g.

(26) [1641] *Some go for recreations which trouble the mind more then the hardest study, as Chesse.*

It is straightforward to locate the immediate ancestor of the *be-going-to* form with those uses of *go* that come with the embedded <to + inf.> construction, i.e. those exemplified by

(27) [1662] *Nay, he goes to prove the truth of Sanchoniathons History by* […].

As noted above, these uses place the viewpoint in the pre-phase or SOURCE region of an event. This is exactly what 18th-century grammarians like Beattie and Pickbourn state about the meaning of the *be-going-to* form at their time:

> I am *going* to write; that is, I am engaged in an action which is preparatory to, or will be immediately followed by, the act of writing. (Beattie, 1788, pp. 248–249)

> By the help of these we form a kind of *inceptive* tenses, not denoting real action, but signifying readiness and preparation, with intention to act; as, I am going to write, I am about to write, I was going to write, I was about to write, I shall be going to write, I shall be about to write, &c. (Pickbourn, 1789, pp. 119)

However, as I hope to have shown, there is no need to locate the source of the meaning of the *be-going-to* form merely with the senses expressed by the specific <go + to inf.> pattern. Instead, the meaning of this form seems to reflect viewpoint constellations that were conveyed by several <go + prep.> constructions. Similar observations can be made with respect to the way the other end of the SOURCE-PATH-GOAL schema is expressed: The PURPOSES ARE DESTINATIONS aspect of the meaning of the *be-going-to* form was also conveyed by the combination of *go* with several prepositions at the relevant period of time. It is not unique to the <go + to inf.> pattern. In other words, the grammaticalization of the *be-going-to* form had a very substantial preface in lexicalized senses of *go*.

Furthermore, the global presence of the relevant patterns is also attested in the use of related lexical items. Bybee (2006, pp. 719–720) rightly points to parallel sequences with other verbs of motion, e.g. *travelling*, *journeying*, *returning*. The most pertinent case, however, is the verb *to walk*. Its original meaning in OE is 'to roll' (OED: s.v. *to walk*). In the Middle English (ME) and Early Modern English (EModE) period, however, there is a broad range of new senses, some of them expressing conceptual patterns fully parallel to those given above for *go*. Consider the following OED examples (s.v. *to walk*):

TIME IS AN OBJECT MOVING THROUGH SPACE, in the now extinct sense glossed by the OED as 'of time: to pass, elapse'; e.g.

(28) [▸c1250] *An hundred winter* […] *welken* ('A hundred winters passed')

DIFFUSION OF INFORMATION IS DISPERSION IN SPACE; e.g.

(29) [a1425 /▸c1333–52] *Þe word of him walkes ful wide.*

BEING IN HARMONY IS GOING TOGETHER; e.g.

(30) [1600] *So pride and beggerie shall walke together.*

FOLLOWING A RULE IS MOVING ALONG A PATH; e.g.

(31) [1574] *When a man walketh as hauing none other record but god, …*

BEING ACTIVE ABOUT SOMETHING IS MOVING ALONG A PATH; e.g.

(32) [*a*1500 / ▸a1415] *And þi[l]ke folke þat han ben bysy erly and late to walke aboute worldely good, now schuld be bysy, alsoo, to vyset pore and seke*.

However, *walk* is not only relevant to the present argument as a case in point to show that the conceptual patterns underlying the meaning of the *be-going-to* form have a global presence and are expressed in an array of other items. There is also a much more immediate influence of *walk* on the grammaticalization of the *be-going-to* form. Above, two characteristics of the verb *go* were highlighted that made it prone to developing into an auxiliary with a prospective and causal meaning, i.e. its inherent GOAL bias and its specific placement of the viewpoint in the SOURCE region of a SOURCE-PATH-GOAL pattern. The third crucial characteristic of *go* that can be seen as a prerequisite to its auxiliation is its status as a general motion verb. Specifically, present-day English *go* is neutral to the manner of motion, unlike verbs such as *run*, *fly*, *crawl*, etc. (cf. Ungerer & Schmid, 2006, p. 324). Motion verbs with a strong manner-of-motion component are less predestined to undergo a similar auxiliation.

Historically speaking, however, *go* was of course, first and foremost, a verb with a strong manner-of-motion component, as it is still witnessed in its German cognate *gehen*. The OED accurately represents this fact by starting the entry of *go* with the relevant sense 'to move or travel on one's feet (opposed to *creep*, *fly*, *ride*, *swim*, etc.); to move on foot at an ordinary pace (opposed to *run*, etc.)', under the global heading 'Of movement, irrespective of the point of departure or destination'. This was indeed the primary sense of *go* in Old English. Here are some examples taken from the OED (s.v. *to go*):

(33) [*c*1000] *Blinde geseoþ, healte gað*.

(34) [*a*1400] *Do crepels gan, þe blind haf sight*

(35) [?*c*1450] *He was halt and myght not go*.

It is highly significant that the attestation of this sense stops in the 15th century, i.e. shortly before the *be-going-to* form enters the scene. By the middle of the 15th century, it was the verb *to walk* that had completely taken over this manner-of-motion sense; the first OED examples date back to the 13th century. The OED (s.v. *to walk*) summarizes the development of *walk* in the following way:

> It is remarkable that to the end of the Old English period the primary sense of the verb (strong and weak) is 'to roll', and that from the beginning of the Middle English period it is 'to move about, travel.' […] The development of sense appears to have been from 'to roll, fluctuate, move back and forth' to 'to move to and fro, roam about, wander here and there' to 'to journey, travel, go on foot.'

With *walk* replacing *go* in the manner-of-motion sense, *go* was a motion verb general enough to take the grammaticalization path it took.

The present section highlighted conceptual patterns linked to relevant items at the onset of grammaticalization paths. The aspect of the broader conceptual background of grammaticalization processes addressed in the following section relates to the notion of 'collocations' and extends the scope of analysis to the meaning associated with grammaticalized constructions.

2.2 Associated notions and their collocational patterns: The example of the *have*-perfect

Grammatical constructions are associated with more or less explicit "meanings." Across the various theories, the *have*-perfect, i.e., the case highlighted in the present section, is associated with notions like 'result.' 'effect,' 'explanation' and 'experience.' Some regard these notions as the genuine meaning of the *have*-perfect, especially proponents of current-relevance theories. Others account for them in terms of interpretations or pragmatic inferences linked to the *have*-perfect. This controversy notwithstanding, there is a more or less general consensus on the presence of these causal notions in the use of the *have*-perfect.

In fact, the temporal and causal constellation expressed by the *have*-perfect is the perfect mirror image of the one encoded by the *be-going-to* form (cf. Section 2.1). While the latter takes a prospective view on the verbalized event from the perspective of what it is brought about, the former expresses a retrospective view on the event from the perspective of its effects. This mirror-image constellation is represented in the Figure 3.

It seems to be straightforward to take a closer look at the way notions that are linked to a given grammatical form are themselves conceptualized. In the case of those associated with the English *have*-perfect, this consideration leads to an almost trivial observation: Talk about results, effects, explanations and experience is framed, to a significant degree, in the language of POSSESSION and CHANGE OF POSSESSION. Examples abound: *to get / give / have an explanation*, *to obtain / get*

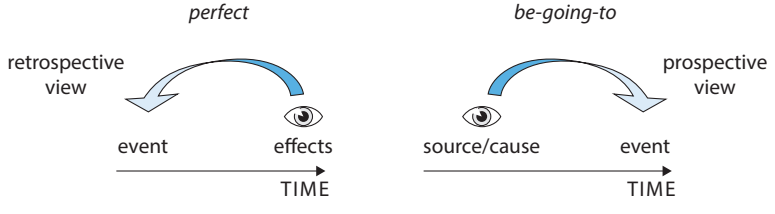

Figure 3. Temporal and causal constellations expressed by the *have*-perfect and the *be-going-to* form

results, etc. In CL, such collocational patterns are regarded as indicators and expressions of underlying conceptual links.[5] In this particular case, they suggest the presence of conceptual metaphors like RESULTS/ EXPLANATIONS/ EXPERIENCES ARE POSSESSIONS.[6] If these are indeed salient conceptualizations with a broad presence, the grammaticalization of a verb of possession like *have* to encode notions as those given above appears to be not only highly motivated but just one manifestation of a far more global pattern.

The aim of this section is to give corpus-linguistic substance to this point. I will first test the salience of RESULTS/ EXPLANATIONS/ EXPERIENCES ARE POSSESSIONS in present-day English through an analysis of the data in the *FLOB* corpus.[7] Then, I will trace the presence of one of them (EXPERIENCES ARE POSSESSIONS) in earlier stages of English, using the *Helsinki* corpus[8] as an empirical basis. The corpus analysis was performed with *WordSmith* (Scott, 1999).

The search items *experience/experiences* produced 261 hits in *FLOB*, *explanation/explanations* had 88, and *result/results* 387. Since the scope of the present analysis was restricted to verbal collocates of the respective nouns, verbal tokens (*to experience, to result*) were removed. The remaining tokens, i.e. the nominal uses of the items, were grouped according to the type of construction they are embedded in.[9] In some cases, one token was embedded in two valency patterns and thus eligible for two listings; e.g.

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5. This interpretation of collocational structures bears obvious parallels to the approach taken in early British contextualism, notably by John Firth. Collocations, according to Firth, are a genuine aspect of word meaning. As he put it in his well-known bon mot: One "shall know a word by the company it keeps" (Firth, 1968, p. 179). Within CL, collocational studies have also come to be a major concern (e.g. Gries & Stefanowitsch, 2006; Stefanowitsch & Gries, 2006).

6. The CL standard reference for the analysis of the domain of POSSESSION is Langacker (1995). Heine (1997) is a book-length study with a cross-linguistic scope on grammaticalization processes involving the domain of POSSESSION.

7. *FLOB* is a 1-million-word corpus of the *BROWN*-family. It represents BrE of the 1990s.

8. The *Helsinki* corpus is one of the historical standard corpora of English. It consists of sections representing OE, ME and EModE, including historical dialects.

9. This grouping was driven by valency-based syntactic criteria (e.g., whether the relevant construction is copulative, intransitive or transitive, or whether the items occur as modifiers/complements of nouns) but highlighted semantic considerations in terms of the thematic role of the relevant item in a given valency structure. Occurrences in a passives structure, for instance, such as *the results were reported*, are counted as instances of <X reports results>, or generally <X VERB _> (group 4) in the tables below, since the relevant item (*results*) is the AFFECTED ENTITY (logical object) even if it shows as the syntactic subject. I am aware of the fact that this handling poses a number of problems; however, it yields a largely coherent treatment for the most relevant group, i.e. group 4, in the tables below. Particle verbs (phrasal verbs, prepositional verbs) are generally treated as VERB in the classification.

(36) *drinking tea and eating well-buttered crumpets, is an experience which few can have today.*

In this example, the use in the matrix phrase was counted as an instance of <X IS experience> and the use in the relative clause as an instance of <X VERB experience>. Like this, 223 nominal tokens of *experience(s)*, 327 of *result(s)* and 89 of *explanation(s)* were left for further analysis.

The complete breakdown of the tokens according to the type of construction they occur in is given in Table 1.

Table 1. Tokens of *experience(s)*, *result(s)* and *explanation(s)* in *FLOB* according to construction types

	Experience	*Result*	*Explanation*
hits in FLOB as computed by *WordSmith*	**EXPERIENCE 237** **EXPERIENCES 24**	**RESULT 215** **RESULTS 172**	**EXPLANATION 58** **EXPLANATIONS 30**
Group 1 as the subject in a copulative construction type <_ IS X>	<experience IS X> 10	<result IS X> 52	<explanation IS X> 9
Group 2 as the complement in a copulative construction type <X IS _>	<X IS experience> 15	<X IS result (of)> 22	<X IS explanation> 5
Group 3 as the logical subject of VERB type <_ VERB (X)>	<experience VERB (X)> 25	<result VERB (X)> 37	<explanation VERB (X)> 11
Group 4 as the logical object of VERB type <X VERB _>	<X VERB experience> 105	<X VERB result> 95	<X VERB explanation> 36
Group 5 as a modifier/ complement of NOUN type <N PREP _>	<N PREP experience> 39	<N PREP result> 22	<N PREP explanation> 17
Group 6 as the complement in various other prepositional phrases type <PREP _>	<PREP experience> 23	<PREP result> 85	<PREP explanation> 9
Group 7 miscellaneous	6	14	2
total of tokens considered	223	327	89

Most of the groups, however, are not or only partly relevant to the present concern. For obvious reasons, group 4 (type <X VERB _>) is the most pertinent one, and I will restrict the following analysis to this type. This is also the largest of the seven groups, which reflects the fact that RESULTS, EXPERIENCE and EXPLANATIONS are prototypically construed as AFFECTED ENTITIES with a low degree of force. In this group, almost 30% of the tokens of the three nouns collocate with verbs expressing

'possession' or 'getting hold of something.'[10] The detailed breakdowns are given in Tables 2–4.

Table 2. *Experience(s)*. Collocations with verbs from the domain of possession in the construction <X VERB experience> in *FLOB*

Type	Number of tokens
have an experience	19
gain[a] an experience	9
provide[b] an experience	3
give an experience	2
share an experience	2
convey an experience	1
get an experience	1
possess an experience	1
acquire[c] an experience	1
equipped[d] by an experience	1
total	**40**
% of all tokens in Group 4 (105)	**38.1 %**

a. *Gain* is a loan from French, attested in English in the sense 'to acquire possession' since the 15th century. Originally, it had a spatial meaning, still retained in examples like *There were some who … sprang into the river and gained the opposite bank* [1855]. Cf. OED (s.v. *gain*).

b. *Provide* is a French loan, attested in English in the sense 'to supply someone / to equip with the necessary resources' since the 15th century. It has its origin in a verb of vision; its Latin cognate is *prōvidēre*. Cf. OED (s.v. *provide*).

c. *Acquire* is a French loan, attested in English in the sense 'to gain a possession' since the 15th century. It is a cognate of Latin *quaerere* ('to ask') and hence, originally, a speech-act verb. Cf. OED (s.v. *acquire*).

d. *Equip* is a French loan, attested in English in the sense 'to supply with resources' since the 17th century. Cf. OED (s.v. *equip*).

10. The remaining tokens show a broad range of patterns other than the conceptualisation in terms of POSSESSION. In the case of EXPERIENCE, we find, for instance, a cluster of collocations exemplified by *draw on / build on / base on / grounded in experience*, where EXPERIENCE is conceptualised as a FOUNDATION, and instances exemplified by *use an experience*, where it is a TOOL. Further patterns include those with verbal collocates such as *reflect* or *learn from*, and with a group of speech-act verbs exemplified by *recount, report, describe, express*. However, none of these alternative patterns comes even close to the overall share of POSSESSION-related collocations. There is a similar heterogeneity among collocates of *result(s)* that are not related to POSSESSION. Here, we find, for instance, a cluster of verbal collocates that exemplifies a general reification (RESULTS ARE OBJECTS) without, however, conceptualising RESULTS as, more narrowly, POSSESSIONS but, for instance, as OBJECTS OF PERCEPTION, with verbal collocates such as *see* and *look at/to*. Closely related, there are collocations such as *show results*. Further clusters are formed with verbal collocates such as *publish* and semantically related verbs (e.g. *announce, present, release, report, inform of*), as well as with collocating verbs of the type exemplified by *interpret, assess, evaluate*. There is a parallel heterogenous situation with the case of EXPLANATION.

Table 3. *Result(s)*. Collocations with verbs from the domain of possession in the construction <X VERB result> in *FLOB*

Type	Number of tokens
obtain[a] a result	8
have a result	2
get a result	2
give a result	1
seek a result	1
look for a result	1
find a result	1
total	**18**
% of all tokens in Group 4 (95)	**18.9%**

a. *Obtain* is a French loan, attested in English in the sense 'to come into possession of sth.' since the 15th century. The French root *-tenir* reveals its origin as a genuine possessive verb ('to hold'). Cf. OED (s.v. *obtain*).

Table 4. *Explanation(s)*. Collocations with verbs from the domain of possession in the construction <X VERB explanation> in *FLOB*

Type	Number of tokens
give an explanation	6
seek an explanation	2
have an explanation	1
owe an explanation	1
offer an explanation	1
benefit[a] from an explanation	1
total	**12**
% of all tokens in Group 4 (36)	**33.3%**

a. *Benefit* is a French loan, attested in English in the sense 'to receive advantage, profit, good' since the 17th century. It derives from Latin *benefactum* ('good deed'); cf. OED (s.v. *benefit*).

The example of *experience(s)* merits a more detailed illustration of the data. Representative tokens of the metaphor EXPERIENCES ARE POSSESSIONS include:

(37) *Britain has had considerable experience of dealing with abroad*

(38) *Careful personnel selection is important to provide on-the-job experience*

(39) *I'd give them the experience of an Engineman emerging from the flux*

(40) *to make the resources available to gain the experience necessary for network television production*

(41) *so that she could share her American experience when she got back home*

(42) *It's important to get experience at that level as well*

(43) *on-the-job experience which the designer or draughtsman may not possess*

(44) […] *all of whom acquired valuable experience of office*

(45) *The debt disaster is hitting hardest at the part of Britain least equipped by experience to bear it*

The comparatively lower score of possession-related verbal collocates in the case of *result(s)* is due to the fact that these verbs have a strong competitor: <achieve a result> with 7 tokens (7.4 per cent of all tokens in the relevant group, only surpassed by *obtain* with 8 tokens). Although *achieve* is recorded in the OED with a possessive meaning ('to succeed in gaining') since the 14th century, this item has a spatial conceptual basis (in the sense of 'to reach') rather than a possessive one;[11] therefore, the sequence *achieve a result* was not counted as a genuine instance of RESULTS ARE POSSESSIONS.

In sum, the *FLOB* data attest to the strong presence of RESULTS/ EXPLANATIONS/ EXPERIENCES ARE POSSESSIONS in present-day English. However, one should not assume, without empirical backing, that the situation is necessarily similar in earlier stages of English. Conceptual patterns may change over time, and so may their linguistic manifestations. Of the three items under analysis, only *experience(s)* lends itself for a direct comparative examination with sufficient historical depth, i.e., at least back to EModE and, to some degree, ME. According to the OED, *explanation* in the relevant sense is only attested from a1610 onwards, and *result* in the relevant sense 'effect' after 1638. In the empirical basis chosen here, i.e. the *Helsinki* corpus, there are indeed no more than 2 tokens of *result* and 1 of *explanation* in the EModE section (covering 1500 to 1710), and none in the ME one (1150 to 1500). In contrast, *experience(s)* and its spelling variants, attested by the OED from the late 14th century onwards, have 78 tokens in the EModE section, and 14 in the ME one, all of them nominal. At least the EModE component thus produces a number of tokens that allows for a conclusive comparison to the data from *FLOB*.[12]

The application of the same selection criteria as with the *FLOB* data above yielded the following breakdown of the historical tokens, presented here (Table 5) in direct comparison with the results from *FLOB*:

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11. It relates to Middle French *a chief venir* and 7th-century Latin *ad caput venire* 'come to the extremity of,' and is hence ultimately linked to Latin *caput* ('head,' i.e. the [upper] extreme end); cf. OED (s.v. achieve).

12. Recall that the search of *FLOB* produced 261 hits. One has to bear in mind, however, that *FLOB* is, roughly speaking, twice as big as the EModE section (551,000 words) and the ME section (608,570 words) of the *Helsinki* corpus. Furthermore, *FLOB* has more than 40 verbal tokens, whereas all of the tokens in the historical corpora are nominal. The absence of verbal tokens in the historical corpora does not come as a surprise: The first attested use of the verb *to experience* in the OED dates from the 1550s.

Table 5. Tokens of *experience(s)* in *FLOB* and the *Helsinki* corpus (EModE and ME sections)

	FLOB	***Helsinki* corpus EModE section**	***Helsinki* corpus ME section**
hits as computed by *WordSmith*	**EXPERIENCE 237 EXPERIENCES 24**	**EXPERENCE 1 EXPERIENCE 73 EXPERIENCES 2 EXPERIENS 2**	**EXPERIENCE 8 EXPERIENS 2 EXPERYENCE 4**
Group 1 as the subject in a copulative construction type < experience IS X>	10	4	0
Group 2 as the complement in a copulative construction type <X IS experience>	15	1	0
Group 3 as the logical subject of VERB type <experience VERB (X)>	25	11	2
Group 4 as the logical object of VERB type <X VERB experience>	105	17	3
Group 5 as a modifier/complement of NOUN type <N PREP experience>	39	3	0
Group 6 complement in various other prepositional phrases type <PREP experience>	23	39	9
Group 7 miscellaneous	6	7	0
total of tokens considered	223	82	14

The data from the historical corpora are dominated by tokens of the type <by experience> in Group 6 (39 in the EModE and 9 in the ME section). As has been stated above, however, it is Group 4 that is the most relevant one for the present concern. The results obtained for this group in the EModE corpus are overwhelmingly in favor of my argument, with 6 of the 17 tokens being of the type <have an experience>:

(46) *everye persone being the King's Subject having knowledge and experience of the nature of herbes rotes*

(47) *his Majesty has been induced from his owne motion alone to repeate his instances for Father Petre's promotion, as having had long experience of his merit*, […]

(48) *you are but a young woman, and one that hath had no great experience of the World*

(49) *We haue also had experience yt* [= that; FP] *the desire of a kingdome knoweth no kinred*

(50) *the experiens we haue had of your lyfe past and godly conuersacion*

(51) *had they not sufficent experiens howe men had sworne one way & then another way*

Furthermore, there are 2 tokens of the type <want experience>, in the historically older sense of *want* as 'to lack':[13]

(52) *I cannot hunt euerie corner because I want experience:*

(53) *what she wants in Experience, she has in Breeding;*

These 8 direct expressions of EXPERIENCES ARE POSSESSIONS amount to 47 per cent of the tokens in this group. In addition, there are 2 tokens that also clearly relate to this metaphor, one with *purchase* and one with *be master of*:

(54) *vnlesse Experience be a Iewell, that I haue purchased at an infinite rate*

(55) *with the experience that we are now Masters of*

Unfortunately, Group 4 in the ME section comprises only 3 tokens. Certainly, a more extensive corpus of ME needs to be consulted to get conclusive data. However, it is clearly in favor of my argument that 2 of these tokens are indeed of the type <have an experience>; both of them come from Chaucer:

(56) *Tho loked I doun upon the est orizonte, and fond there the 20 degre of Geminis ascendyng, which that I tok for myn ascendent. And in this wise had I the experience for evermo in which manere I shulde knowe the tyde of the day and eke myn ascendant.*

(57) *And than had I of this conclusioun the ful experience.*

The complete picture of collocations of *experience(s)* with verbs from the domain of POSSESSION in the construction <X VERB experience> is given in Table 6.

These findings suggest an unbroken presence of EXPERIENCES ARE POSSESSIONS over the centuries. They also suggest that this conceptualization was productive: While only the core verbs *have* and *want* [= lack] appear in this pattern in the two

13. *Want* in the modern sense of 'to desire, to wish for' is a fairly recent development, not attested by the OED before the 18th century.

Table 6. Collocations of *experience(s)* with verbs from the domain of POSSESSION in *FLOB* and the *Helsinki* corpus (EModE and ME sections)

Type	Tokens in *FLOB*	Tokens in *Helsinki* corpus EModE section	Tokens in *Helsinki* corpus ME section
have an experience	19	6	2
gain an experience	9		
provide an experience	3		
give an experience	2		
share an experience	2		
convey an experience	1		
get an experience	1		
possess an experience	1		
acquire an experience	1		
equipped by an experience	1		
want [= lack] experience		2	
total	**40**	**8**	**2**
share of all tokens of <X VERB experience>	**38.1%**	**47.1%**	**66.6%**

historical corpora, there is a fairly broad range of further verbs, both of "native" and "foreign" origin, from the relevant lexical field in the modern English data. For the collocations with verbs of French origin, one may be tempted to argue that the entire constructions could have been taken over from French. However, the data suggest otherwise: If these collocations were indeed directly borrowed, one would expect them to be on record at an earlier stage, given the social history of French in medieval England. In fact, however, these collocations are even absent from the EModE corpus covering the period from 1500 to 1710.

2.3 Interaction with the development of other items in the respective domains

It is commonplace in grammaticalization theory that *grams*, i.e., grammatical morphemes in the sense of Bybee, Perkins and Pagliuca (1994), do not develop in isolation from each other in a given language. Grams influence each other in various ways. First of all, the development of a particular gram obviously depends on the presence of other grams with a related scope, in that constructions sort out their territory *vis-à-vis* the grams that are already present. While this is a very straightforward way in which grams influence each other, other ways are perhaps subtler. When a gram is established, its presence in a relevant context will evoke its (potential) conceptual counterparts; e.g. past evokes non-past, plural evokes singular. Conceptual counterparts will also be evoked when they do not yet have an established form to

express them. This may favor or influence the development of a new construction as a marker of such a counterpart gram. In turn, this development may eventually have repercussions on the path taken by the original gram that inspired it.

The proposal made in the present section is based on these considerations. I will argue that the *be-going-to* form and the *have*-perfect in English have indeed developed in such an *in-tandem* constellation. As has been stated earlier, they express counterparts at the conceptual level in modern English, both with respect to the temporal and the causal constellations they convey: The *have*-perfect verbalizes a retrospective view on the event from the perspective of its effect, while the *be-going-to* form signals a prospective view on the event from the viewpoint of what is seen as bringing about the event. Diachronically speaking, the *be-going-to* form yielded a grammaticalized contrast to the retrospective and resultative meaning of the historically older *have*-perfect, a contrast that had been latent and potential but had remained grammatically unexploited before.

With the general and growing reliance on corpus data in current linguistics, frequency records have come to serve as weighty arguments also in grammaticalization research (see, e.g., the studies in Lindquist & Mair, 2004). There is an obvious correlation between the degree of entrenchment of a conceptual pattern and the frequency of occurrence of the forms that express it. Especially with respect to grammaticalization processes, comparative frequency data are indeed a strong indicator of the conventionalization of a form (and the correlated gram). *In-tandem* developments of grams that are conceptual counterparts should also show in terms of the frequency of the respective forms, although the correlation can be expected to be less direct and subtler.

I am unaware of any corpus-linguistic study that explicitly correlates the developments of *have*-perfect and *be-going-to* form. However, taken individually, the paths followed by these forms are corpus-linguistically well-documented. With respect to the latter, Elsness (1994) and Núñez-Pertejo (1999) provide the data for the *Helsinki* corpus, Mair (2004) searched the OED as a corpus, and Nesselhauf (2006) exploited the *ARCHER* corpus. The most comprehensive and detailed corpus-linguistic studies on the history of the *have*-perfect I am aware of are Kytö (1997) and Elsness (1997), both using a combination of several corpora.

My discussion will rely on the output of these studies rather than providing new corpus data. Admittedly, this choice involves some methodological problems. The studies mentioned above have quite different reference points and foci. However, it is precisely their different designs and scopes that make a comparison profitable for my concern. I am looking for global trends and patterns, and if they emerge in a coherent way across various dimensions of data, this certainly adds strength to the argument. In order to facilitate the comparison of the material, I will present some of the data in a format different from that used in the original studies.

With respect to the development of the *be-going-to* form, the picture is fairly straightforward. It had a relatively low profile until the middle of the 19th century and then experienced a rapid increase. Figure 4 attests to this development. It is based on the data from Mair's (2004) analysis of the occurrences of the string *be-going-to + inf.* in the OED.

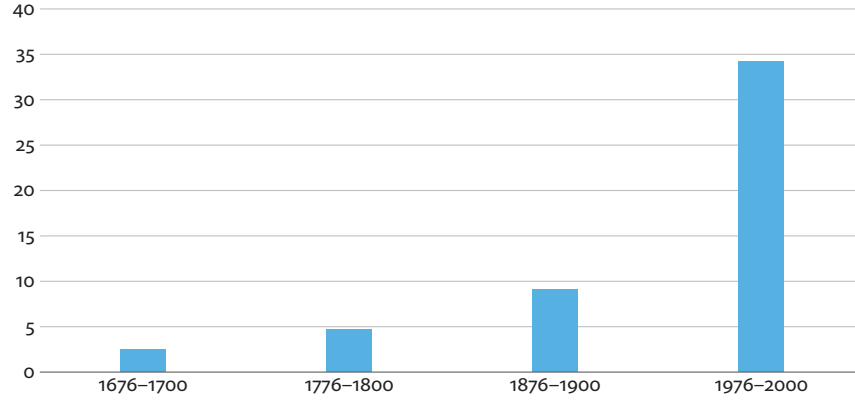

Figure 4. <going-to + inf.> in the OED; frequency as n/10,000 OED citations (on the basis of the figures given by Mair, 2004, p. 128)

The distribution between genuine instances of the *be-going-to* form and prepositional uses of <going to> is provided in Figure 5. The *be-going-to* form has continuously "encroached" on the territory of <going to>, which is rightly interpreted by Mair (2004, p. 129) as a crucial indicator and concomitant of its grammaticalization.

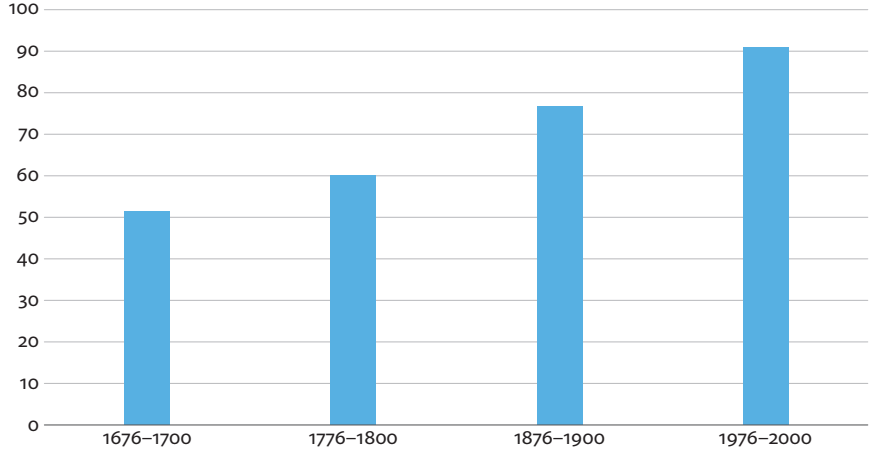

Figure 5. Percentage of the construction <going-to + inf.> relative to all tokens of <going to> in the OED (on the basis of the figures in Mair, 2004: 128)

Furthermore, in the course of its spread, the form also took over from potential competitors in the relevant semantic territory, which is often another concomitant of a grammaticalization process. This is shown by Nesselhauf's (2006, p. 518) comparison of *be-going-to* and *be-to*. Figure 6 provides the absolute number of tokens Nesselhauf obtained from the BrE component of *ARCHER* for the period from 1700 onwards.

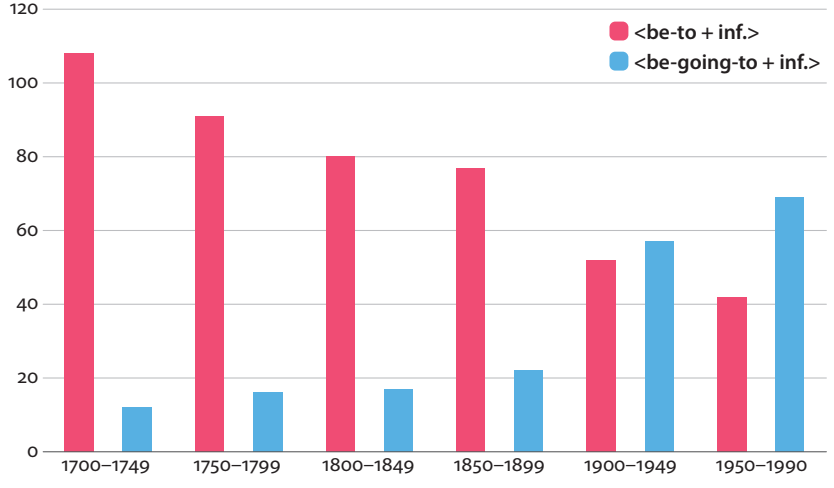

Figure 6. <be-going-to + inf.> and <be-to + inf.> in *ARCHER-M*, BrE compared; absolute number of tokens (cf. Nesselhauf, 2006, p. 518, Figure 1)[14]

The picture obtained from the two studies reviewed above is that of an expanding form in several respects: *be-going-to* experiences a rapid increase in terms of frequency, firmly occupies its host construction and wins out over competitors. This development reaches a critical point in the last decades of the 19th century.

The argument made in the present section is that the *be-going-to* form and the *have*-perfect developed *in tandem* in the relevant period, which led to a significant restructuring of the system of categories of the English verb. It is thus in order to take a look at the available data for the *have*-perfect as well. Unfortunately, the picture that emerges from the literature is far less conclusive. I am unaware of any corpus-linguistic study that provides the full story of the historical development of this form. Elsness's (1997) study has gaps of 150 years between the periods covered by his corpus components, and, deplorably, the period most relevant to my specific

14. Nesselhauf used *ARCHER-M*, an early version of the corpus (the current one is *ARCHER 3.1*). For her results for the AmE component, see Nesselhauf (2006, p. 518). There, the increase of *be-going-to* is significantly sharper in the 1850–1899 period already, i.e. it comes earlier than in the BrE data.

concern is in one of these gaps. Kytö's (1997) study, in turn, only considers perfects in intransitive constructions, since her focus is on the *be*/*have* variation for the perfect auxiliary. Nevertheless, these two studies still provide relevant and useful data.

Kytö (1997) gives detailed frequency data for 50-year periods obtained from her early version of *ARCHER*. In order to facilitate comparison, I calculated the normalized frequencies relative to 10,000 words, based on Kytö's absolute figures and considering the size of the sub-corpora. I included *be*-perfects and *have*-perfects to get the global profile of the perfect. The data are presented in Figure 7:

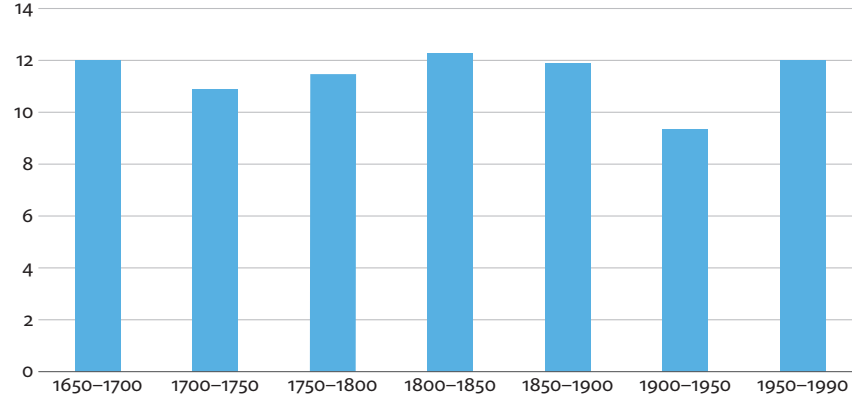

Figure 7. The perfect form (with *have* and *be*) in intransitives constructions in *ARCHER*; frequency as n/10,000 words (calculated on the basis of the figures given by Kytö, 1997, p. 33)

In the early 20th century, the perfect suffers a considerable decline by 25% in terms of its frequency in Kytö's data. Elsness's (1997) study on the history of *have*-perfect reveals a similar decline scenario at this period, which suggests that we are not dealing with an idiosyncrasy of a particular corpus.

This decline scenario does not come unexpected from the perspective of the model I advocate. It was in the 19th century when the *have*-perfect finally gave up most of its long-standing competition with the Tense forms, in particular the preterite. Metaphorically speaking, it withdrew to its correlation sense, which found its conceptual counterpart with the expanding *be-going-to* form. Against the background of my model, a likely scenario for the late 19th century is a mirror-image development of the *have*-perfect and the *be-going-to* form. In the establishment of a fully-fledged category of Correlation, the latter form underwent a rapid expansion, and the former tightened its profile and withdrew from other territories.[15]

15. This observation invites a comparative perspective. The fact that the German perfect, for instance, has largely taken the path towards Tense can be attributed, partly at least, to the lack of a construction equivalent to the English *be-going-to* form, i.e. German did not develop an

Ultimately, the analysis can be taken even further to include other grams. Specifically, the grammaticalization of the *be-going-to* form can be related to the development of *will*-future and hence to other items in the so-called Tense-Aspect system of English. *Will*, originally a main verb expressing volition/intention, grammaticalized to a future auxiliary without modal coloring in the ME period.[16] Unlike e.g. *have*, which preserved its main-verb status expressing possession parallel to its auxiliation to a perfect marker, volitional/intentional *will* ceased to exist as a main verb, with the exception of a few formulaic phrases (e.g. in a wedding ceremony). It is more than straightforward to link the falling-out of *will* as the prime marker of volition/intention to the parallel, compensating, development of new linguistic resources to express these notions, notably the semantic change of *want* (expressing volition) at the lexical level and the grammaticalization of *be-going-to* (expressing intention) at the grammatical level.

3. Summary and conclusions

In the present chapter, I argued for a greater attention to aspects of the global conceptual context in the study of grammaticalization processes, and auxiliation in particular. Taking the *be-going-to* form and the *have*-perfect as cases in point, I addressed several dimensions of this context that, I believe, are crucial parts of the conceptual background against which these two forms emerged and evolved.

Specifically, I argued that the following aspects should be taken into consideration: (a) Lexical items that undergo auxiliation usually display significant polysemy at the time of the onset of their grammaticalization process. Some of their lexicalized senses, derived metaphorically or metonymically from their base sense, already bridge some of the conceptual distance between what is usually taken to be their source meaning and the target meaning expressed by the grammaticalized construction. In other words, grammaticalization processes often have a "lexical preface," which, I believe, is generally neglected in the current models.

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entrenched formal marker of the conceptual counterpart to a retrospective gram with an effect-of-an-event viewpoint. Though the German perfect fulfils correlation functions, the underlying conceptual contrast has not grammaticalized in this language in terms of a fully-fledged category of Correlation.

16. I am aware of the fact that the status of *will* is very disputed. Many accounts place *will* in the group of modals. Due to limited space, I cannot address this issue here. In my view, present-day English *will* is polysemous, with a modal and a temporal sense coexisting. Polysemy is, of course, as unspectacular with auxiliaries as it is with other lexical items; many of the modal auxiliaries, for instance, display both epistemic and deontic senses.

(b) The conceptual link between source and target meaning often has a broad presence, far beyond the individual instance of grammaticalization. This is a hallmark insight of more traditional metaphor/metonymy-based models, with their emphasis on the conceptual system. However, it is losing recognition with the current shift to local-context approaches. This is most unfortunate, in particular since this insight allows us to account for the motivatedness of grammaticalization processes. Diachronic collocational studies may be a way to give further substance to it and to explore it further. (c) Items do not grammaticalize in isolation. The path they take reflects interaction and competition with the paths taken by other items in the respective realm. They are part of a network of mutable lexical and grammatical resources evolving in order to express the relevant conceptual notions. This aspect of interdependence is still a largely unexplored area of investigation.

In my chapter, I highlighted the cases of the *be-going-to* form and the *have*-perfect. I am not claiming that the mechanisms explored here necessarily apply to *all* grammaticalization processes. However, I believe that they are, to varying degrees, at work at least in the realm of auxiliation. Throughout the chapter, occasional comments were made on other forms, suggesting that the framework can be readily extended to address cases beyond those investigated here.

Note

The present chapter is part of a manuscript in preparation that gives a more comprehensive account of English verb categories. The view of the system of English verb categories underlying my account is sketched in Polzenhagen (2008, 2017). A related brief history of the idea of grammaticalization is given in Polzenhagen (2014).

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Physical and communicative force in Caused-Motion constructions

What they entail and what they implicate

Klaus-Uwe Panther
University of Hamburg

Folk models of "mere" talk and "real" action shape the inferential properties of Transitive Caused-Motion (TCM) constructions with a human Patient as direct object. Physical action verbs like *force into/out of* semantically *entail* motion of the Patient into/out of a location. In contrast, constructions with speech act verbs like *order into/out of* pragmatically *implicate* motion of the Patient. Notwithstanding, cases like *boo out of* show that strong communicative pressure can result in entailed motion of the Patient. Finally, the contrast between constructional pairs like *order somebody out of the car* (stronger implicature of motion) vs. *order somebody to get out of the car* (weaker implicature of motion) supports the hypothesis of an iconic relationship between *syntactic closeness* and *implicational strength*.

Keywords: folk models of talk and action, physical action verbs, speech act verbs, entailment, implicature, iconicity

1. Introduction

The goal of this chapter is to provide evidence that folk models of talk and action, as well as the opposition between physical and communicative force, have an impact on the kind of inferences language users draw from two subtypes of the *resultative construction*.[1] More specifically, the chapter is an explorative study that focuses mainly (but not exclusively) on the inferences triggered by two *Transitive Caused-Motion* (TCM) constructions, whose matrix verbs are either verbs of physical action or verbs of linguistic action. These two TCM constructions are schematically represented in (1) and (2):

1. For a general introduction to resultative constructions (including TCM constructions), see e.g. Boas (2003); for a recent specialized study, see Peña Cervel (2016).

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(1) S_{AG} V_{ACT} DO_{PAT} *out of/into/to* LOC

(2) S_{AG} V_{ACT} DO_{PAT} *out of/into* ACT

In (1), S_{AG} symbolizes an agentive subject, V_{ACT} is a transitive verb of action, DO_{PAT} a direct object functioning as a (human) Patient, and LOC a location, such as a "region" or a "container" (in the literal or metaphorical sense). In construction (2), instead of a location LOC, reference is made to some action ACT that the Patient performs as a result of the Agent's verbal or non-verbal (more or less forceful) instigation. Construction (2) is thus motivated by a metaphorical conceptualization of EVENTS as LOCATIONS, i.e., it is a figurative version of (1).

Here are four examples illustrating the TCM construction:[2]

(3) *The Secret Service* ***shoved*** *him into the limousine and they rushed out of there.* (COCA 2009)

(4) *His Commander in Chief has* ***ordered*** *him into the Saudi Arabian desert and that's where he is.* (COCA 1990)

(5) *Two weeks ago, I saw Cameron Diaz at Fred Segal – and* ***talked*** *her out of buying a truly heinous angora sweater!* (iWeb 2000, imsdb.com)[3]

(6) *Despite the woman's doubts, Pasquale* ***persuaded*** *her into joining the class.* (iWeb 2017, tapinto.net)

Sentences (3) and (4) illustrate construction (1). The main clause or matrix verb – these terms are used synonymously here – of sentence (3) describes a physical action (*shoved*), whereas in (4) it depicts a linguistic action, more specifically, an illocutionary act (*has ordered*). Sentence (3) implies that the male referent of the pronoun *him* moves into the limousine, and in (4), there is a strong suggestion that the human Patient *him* has actually moved into the Saudi Arabian desert. This interpretation is confirmed by the second clause *that's where he is*. Caused motion is at work in both sentences; and this raises the intriguing question whether the implications triggered by (3) and (4) are of the same kind. Example (3) clearly *entails* motion of the direct object referent to a location; the ACTUALITY OF MOTION reading cannot be canceled without contradiction. As to Example (4), at first sight, it seems to function in the same way as (3), i.e. as a case of enforced movement of the Patient to a location, and hence a non-defeasible entailment. However, as is shown

2. For the reader's convenience, the transitive action verbs and, occasionally other linguistic units, are printed in bold in many examples throughout the chapter. The acronym *COCA* refers to the Corpus of Contemporary American English (available at: https://corpus.byu.edu/coca). Another corpus frequently used in this contribution is *iWeb* (available at: https://corpus.byu.edu/iweb).

3. The abbreviation *imsdb* stands for *Internet Movie Script Data Base*. Example (5) has been retrieved from the "Shooting Draft" (July 31, 2000) of the movie *Legally Blond*.

in Section 4, there are subtle conceptual-pragmatic differences between physical actions and linguistic actions regarding their respective inferential properties.

Sentences (5) and (6) are instances of construction (2). Sentence (5) conveys that, because of the rhetorical efforts of the Agent, the Patient does not buy, or at least does not intend to buy, the *heinous angora sweater* any longer; and sentence (6) implies that the Patient in question, thanks to the persuasive skills of Pasquale, joins a class.

One intriguing question raised by sentences such as (3)–(6) is: How, if at all, do *folk* or *cultural models* of action influence the semantic and/or pragmatic *implications* they trigger? One commonplace stereotype that is potentially relevant in this context is ordinary speakers' folk model of talk and action. This model is briefly introduced in Section 2.1 and contrasted with the "expert" model of speech act theory. Furthermore, with respect to constructions of type (1) and (2), the concept of *force dynamics* has to be considered, i.e., the conceptualization and coding of "how entities interact with respect to force" (Talmy, 2000, p. 409). The relevance of force dynamics for the conceptual-pragmatic analysis of TCM constructions is addressed in Section 2.2.

Before turning to the analysis of TCM constructions (1) and (2), and their implicational properties in Section 4, three additional constructions and their inferential potential are briefly described in Section 3, viz. the ditransitive construction, another resultative construction, and the infinitival complement construction. The last-mentioned construction is of special interest in the present context because verbs of communicative action such as *order* and *ask* can often occur in both the TCM construction and the infinitival complement construction with roughly the same meaning. However, as is argued in Section 4, the inferential properties of these two constructions contrast in subtle ways.

The chapter concludes in Section 5 with a brief summary of the results of this explorative study, as well as open questions and desiderata for further research.

2. Folk models of action, force and types of inference

2.1 The folk model of talk and action

The following examples from the American English corpus COCA provide evidence that language users distinguish between linguistic and extralinguistic actions, and that the former are often viewed as not being genuine actions:[4]

4. See Panther (2016, p. 180) for discussion of Examples (7)–(9).

(7) *A U.N. convoy came under attack in Syria, another reminder that all the talk of a ceasefire is just talk.* (COCA 2012)

(8) *He told delightful stories, mostly about animals who talk and act a lot like humans.* (COCA 2000)

(9) *Let's be candid about this: We're all full of it. We just talk, talk, talk, but don't act.* (WebCorp 2006)

(10) *Do you trust the left wing talking heads or do you trust law enforcement professionals?* (COCA 2013)

Utterance (7) expresses the tautological proposition that talk of a ceasefire is just talk, and the focus adverb *just* conveys that there is no additional action taking place beyond talking, which triggers the pragmatic implication (conversational implicature) that no "real" efforts to implement a ceasefire are undertaken. In Example (8), by means of the coordinate structure *talk and act*, the reader is invited to infer that talking and acting are contrastive types of actions – again an implied suggestion that talking is not really like acting. The short discourse (9) even entails that talking is not acting. Finally, in (10) the term *talking head*, which, according to the online *New Oxford American Dictionary* (NOAD), is an informal metonymy for 'a commentator or reporter on television who addresses the camera and is viewed in close-up', does not necessarily have a pejorative connotation. Nevertheless, in this excerpt from the television program 'The Five' on the news channel Fox, the interviewer establishes a contrast between *left-wing talking heads* (negative evaluation) and *law enforcement professionals* (positive evaluation). In conclusion, utterances such as (7)–(10) appeal to a folk model of talk and action as diagrammed in Figure 1.[5]

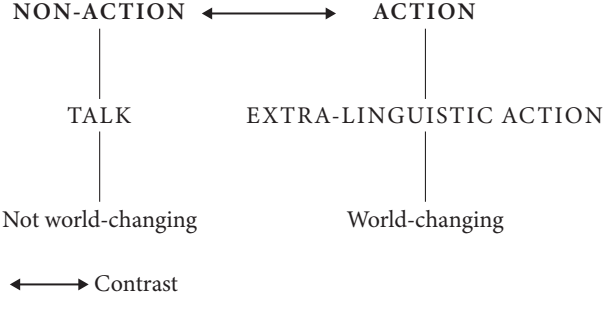

Figure 1. Folk model: Talk as non-action

5. Adopted from Panther (2016, p. 181).

The folk model of action contrasts with a well-known "expert" model of language use, viz. speech act theory. In this model, linguistic actions and extra-linguistic actions are on a par, as diagrammed in Figure 2.[6]

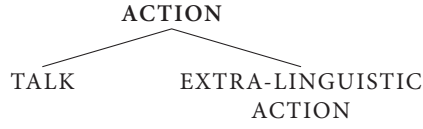

Figure 2. Speech act theory: Talk as action

In Section 4, it is argued that the folk model of talk has an influence on the inferential properties of the TCM constructions analyzed in this chapter.[7]

2.2 Force dynamics

In addition to the folk model of action, the concept of *force dynamics* appears to be relevant to the subject matter of this chapter. Subcases of force dynamics include "the exertion of force, resistance to such a force, the overcoming of such a resistance, blockage of the expression of force, removal of such a blockage, and the like" (Talmy, 2000, p. 409). Talmy claims that force dynamics affects various language levels, including closed-class (i.e. grammatical) units and open-class lexical items.

In cognitive-linguistic work, force dynamic concepts have been used in the analysis of e.g. modality and conditionality by Sweetser (1990) and speech acts by Johnson (1987, p. 58), who relates the notion of illocutionary force as developed in speech act theory (see Austin 1962; Searle 1969, 1971, 1976, 1983) to what he calls, more generally, *compulsion*, i.e., "in most speech acts there will be a content presented *under* or *by means of* a given force." Johnson (1987, p. 59) distinguishes four kinds of forces (in the metaphorical sense) "that can operate in a specific speech act situation." In particular, he posits the following forces or compulsions to be at work in illocutionary acts (Johnson 1987, p. 59):

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6. Adopted from Panther (2016, p. 182).

7. The folk model of talk as "mere talk", i.e. as non-action, is of course not the only folk or cultural model found in language communities. For example, the importance of the "word", i.e. the significance of language (use) in the creation of reality, is stressed in the Christian faith: The bible contains verses such as *In the beginning was the Word, and the Word was with God, and the Word was God* (John 1:1) or *And God said, Let there be light, and there was light* (Genesis 1:3) (https://kingjamesbibleonline.org). In speech act terms (Searle, 1976), the latter is a declaration, i.e. a case of 'saying it makes it so'. More profanely, although historically motivated by religious doctrines, there are proverbial uses such as *Speak of the devil, and he will* appear, uttered in a situation in which a non-present person referred to in a conversation suddenly shows up.

i. The purpose of *statements* (i.e. assertives or representatives in Searle's terminology) is to force "the hearer to add some belief to their belief system."
ii. *Questions* typically compel a hearer to provide a piece of information (not yet known by the questioner).
iii. By means of *directives* hearers are compelled to perform some action.
iv. *Declarations* "constitute forceful changes of the state of the world."[8]

The forces described in i.–iv. are basically what Searle (1971) calls the illocutionary effect of a speech act, i.e. the intended recognition of the illocutionary force by the hearer.

To conclude, the gestalt-theoretic notion of force or compulsion is relevant to the topic of this contribution, since concepts of 'force' or 'compulsion' certainly must be part of an adequate description of TCM constructions. However, forces can be more or less strong, and, as I argue in Section 4, the strength of the force depends on whether the matrix verb denotes a linguistic or a physical action. This is where the folk model of action (Figure 1) enters the scene as a potentially more promising explanatory concept.

3. Physical actions vs. communicative actions in three constructions

Before turning to TCM constructions proper in Section 4, for comparative reasons, it is helpful to consider the inferential properties of extralinguistic action verbs and speech act verbs with instances of three additional constructions: (i) the ditransitive construction, (ii) another resultative construction, and (iii) the infinitival complement construction. These constructions, as does the TCM construction, demonstrate the necessity of distinguishing between inferences that are pragmatically induced (implicatures) and inferences that follow from the construction by conceptual necessity (entailments). I argue that adequate cognitive semantic and pragmatic descriptions of these constructions, as of the TCM construction, must include an account of their inferential potential.

As is well known, the ditransitive construction is compatible with verbs like *give* and *promise*. However, these verbs trigger distinct inferences, as can be seen in examples (11) and (12):[9]

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8. Johnson does not describe commissives and expressives in terms of force dynamics, but they can be accounted for in his framework. For example, a promise, which belongs to the commissive illocutionary category, effectuates the speaker's self-imposed compulsion to carry out some action; and an expressive speech act, such as an apology, involves an emotional and/or social force to express regret or contrition for bad or inappropriate behavior.

9. The following notational conventions are used: $\models$: 'entails', $\not\models$: 'does not entail'; the subscript t symbolizes the time of the performance of the action denoted by the verb; and the subscript t_+ a temporally subsequent state-of-affairs (which is not necessarily true).

(11) […] *my sister gave$_t$ me a copy of "The Six Wives of Henry VIII" many years ago* […]. (COCA 2011)
⊨ *I had$_{t+}$ a copy of "The Six Wives of Henry VIII."*

(12) *My sister promised$_t$ me a copy of "The Six Wives of Henry VIII" many years ago.*
⊭ I *had$_{t+}$ a copy of "The Six Wives of Henry VIII."*

The first sentence in (11), which contains the physical action verb form *gave*, entails that the recipient *me* received and hence *had* the book in question – not necessarily forever, but for at least some time period after having been given the copy. In contrast, the substitution of *gave* with *promised*, as in (12), does not entail that the speaker actually had a copy of the book *The Six Wives of Henry VIII*, although the first sentence of (12) may trigger the *expectation* that the promisor kept her promise.

An analogous contrast can be observed with resultative constructions, as exemplified in (13) and (14):[10]

(13) *He hammered$_t$ the surface flat.*
⊨ *The surface was$_{t+}$ flat.*

(14) *The NSW Premier, the Hon. John T. Lang, officially declared$_t$ the Bridge open.* (GloWbE, AU)
⊭ *The Bridge was$_{t+}$ open.*

The first sentence in (13) enforces the interpretation that the surface was flat as a result of the action of hammering, but an analogous entailment does not hold for (14). Although (14) conveys a strong suggestion, i.e. invites the inference that the bridge was open to traffic as an effect of the ceremonial declaration performed by a government official, viz. the Premier of the Australian federal state of South New Wales, some incident might have occurred that annulled the declaration. If the bridge had collapsed right after it had been declared to be open, the intended illocutionary effect of the declaration would have been canceled. The utterance of words, even if they are official declarations, is sometimes not sufficient to ensure the effect intended by the utterer. Even more so, if it turns out that the declarer is not legally sanctioned to declare the bridge open, the declaration is null and void.

As a third construction, consider propositions that are coded as infinitival complements, as in Examples (15)–(17). The truth value of such propositions depends on the meaning of the matrix verb or verbal expression that heads the non-finite complement:

(15) *John managed$_t$ to solve the problem.*
⊨ *John solved$_t$ the problem.*

10. The abbreviation *GloWbE* stands for the Corpus of Global Web-Based English (available at: https://corpus.byu.edu/glowbe). The example stems from an Australian news media source.

(16) *John remembered$_t$ to lock his door.*
⊨ *John locked$_t$ his door.*

(17) *John promised$_t$ to solve the problem.*
⊭ *John solved$_{t+}$ the problem.*

(18) *The police advised$_t$ him to stay home.* (COCA 2013).
⊭ *He stayed$_{t+}$ home.*

The non-linguistic verbs *manage* and *remember* in (15) and (16), which are usually referred to as 'implicative verbs' (see Karttunen, 1971, p. 341), entail the truth of the content of the infinitive clause that is embedded under them. In contrast, illocutionary verbs like *promise* and *advise* are not implicative. It is an open question whether the proposition expressed in the complement clause is satisfied in the case of these verbs; i.e., from the first sentence in (17) it does not follow necessarily that John solved the problem, and, likewise, the first sentence of (18) does not entail that the male person in question stayed home.

A particularly intriguing problem arises regarding the interpretation of infinitival complements of verbs that denote *perlocutionary acts*, such as *persuade* and *convince*. A perlocutionary act is a speech act that "intrinsically involves an effect on the behaviour, beliefs, feelings, etc., of a listener" (Crystal, 2008, p. 358). Consider Examples (19) and (20):

(19) *She persuaded him to take up athletics* […]. (COCA 2009)

(20) […] *she convinced him to perform in Boston as planned* […]. (COCA 2007)

Sentences (19) and (20) strongly suggest the truth of the propositions 'She took up athletics' and 'He performed in Boston as planned', respectively. Indeed, in the online NOAD, both *persuade* and *convince someone to do something* are defined as 'cause (someone) to do something through reasoning or argument'.[11] According to this definition, an Agent causes a Patient to perform some action; i.e., the perlocutionary acts described in (19) and (20) *entail* that the respective addressees *actually* took up athletics and performed in Boston, respectively. By definition, these implicata should not be defeasible.

In contrast to the "real action" interpretation described in the preceding paragraph, Ray Gibbs and Herbert Colston (p.c.) have suggested that the truth of the infinitival complements of *persuade* and *convince* is not entailed. What is entailed is the *intention* of the Patient to perform the action expressed by the infinitive

11. This reading is also proposed on FrameNet (accessed December 16, 2018 at: https://framenet.icsi.berkeley.edu/fndrupal/luIndex). The meaning of *persuade* is paraphrased as 'cause to do something through reasoning or argument,' and *convince* is defined as 'persuade to do something'.

clause or the Patient's *belief* that the action *should* be performed, but these mental attitudes do not entail the actual performance of the action in question. Evidence supporting this interpretation would be cases in which the ACTUALITY interpretation is explicitly canceled.

The online edition of the *Oxford English Dictionary* (OED) gives two definitions of *persuade* that are relevant in this connection: (i) 'To urge successfully *to* do something […]' and (ii) 'To attempt to induce or draw to something; to urge, strongly advise, or plead with; to try to convince (*that*)'. Sense (i) is illustrated in the OED with the following sentence:

(21) 2001 Times 24 Apr. II. 15/*1 An advertisement persuaded her to try the dietary supplement glucosamine*.

If the definition given in the OED is correct, sentence (21) entails that the female person referred to by means of the pronoun *her* tried (out) the dietary supplement glucosamine. As to reading (ii), I have found only two examples in the OED, which date back to the late 19th and early 20th century, respectively. In both cases, the ACTUALITY interpretation is explicitly canceled:

(22) 1883 W. H. Cope *Gloss. Hampshire Words* 66 *I persuaded him to see the Doctor, but he wouldn't do it*.

(23) 1923 E. GEPP Essex Dial. Dict. (ed. 2) 86 *I've persuaded him times to have that tooth out, but he 'on't*.

In conclusion, perlocutionary verbs like *persuade* and *convince* with infinitival complements appear to be implicative in the sense that they entail a mental attitude of the Patient to act or behave in a certain way, but they do not entail, but very strongly implicate that the state-of-affairs coded in the infinitive clause actually occurs.

4. Physical actions vs. communicative actions in TCM constructions

4.1 Introduction

To begin with, it is important to note that the constructional schemata (1) and (2) occur more commonly with matrix verbs denoting physical action than with ones that designate communicative acts. Thus, one frequently finds physical matrix verbs such as *bring*, *drag*, *drive*, *force*, *keep*, *kick*, *knock*, *lock*, *pull*, *push*, *take*, *throw*, *yank*, etc., in the TCM construction, which all *entail* motion of the Patient into or out of some location, as in the following examples:

(24) *She* ***brought*** *him into the kitchen* […]. (COCA 2000)

(25) *They **dragged** him out of the room* (COCA 2016)

(26) *And they rose up and **drove** him out of the town* […]. (COCA 2015)

(27) *Then he took Drew's concealed weapon, **forced** him into Rodney's car, and they drove off together.* (COCA 2013)

(28) *She **kept** them out of other people's yards.* (COCA 2010)

(29) […] *The Welsh held little affection for the Normans who **kept** them out of England.* (COCA 2006)

(30) *Then he got behind the boy, **kicked** him into the hallway, and slammed the door.* (COCA 2015)

(31) *After Donovan had eaten, Olafsdottr **locked** him into a sort of ward room.* (COCA 2011)

(32) *She **pulled** him out of his seat and toward the dance floor.* (COCA 2015)

(33) *She **pushed** him into a corner* […]. (COCA 2010)

(34) *Friday, FBI agents who had been surveilling him for at least a month, **took** him out his house in handcuffs* […]. (COCA 2015)

(35) […] *Kitchener rounded up not just Boer soldiers but also their wives and children and **threw** them into hastily improvised camps with terrible living conditions.* (COCA 2010)

(36) *Charlie grabbed Gordon and **yanked** him out of the hall* […]. (COCA 2017)

In contrast to verbs of forceful non-linguistic action, verbs of communication appear to be more restricted in the TCM construction. Here are some examples:

(37) *Her parents **talked** her out of taking that job and Cheryl lived to regret it.* (COCA 2001)

(38) *Rick even **argued** them into letting him train in a mockup lunar module* […]. (COCA 1996)

(39) *When Tiffany's mom arrived, Mrs. Kaplan **asked** her into her office to chat while Tiffany waited.* (COCA 2012)

(40) *The robbers **ordered** them out of the car, then got inside and drove off in an unknown direction* […]. (COCA 2017)

(41) *On one particularly fabulous summer morning, we **begged** her into letting us try some coffee until she finally conceded and poured us each a cup.* (iWeb, kitchenmeetgirl.com)

(42) *Chuck Schumer of New York **urged** him into the race.* (iWeb, www.metronews.ca)

(43) *He **invited** her into his cottage to talk with him and his wife* […] (iWeb, patheguy.com)

(44) *The workers **allowed** them into the gated private property* […].
(iWeb, pawpuloud.com)

(45) *When John Cena was shown on the big screen, the crowd **booed** him out of the building.* (iWeb 2013, wrestlinginc.com)

In Table 1, some communicative matrix verbs occurring in the TMC constructions are categorized according to their basic speech act functions (see e.g. Austin, 1962; Searle, 1976).

Table 1. Speech act verbs in TCM constructions

Speech act verbs	Examples
Locutionary	talk into/out of
Illocutionary	
ASSERTIVES	argue into/out of
COMMISSIVES	–
DIRECTIVES	ask, beg, order, urge, invite, allow into/out of
EXPRESSIVES	boo out of
DECLARATIONS	–
Perlocutionary	persuade, convince into/out of

The verb *talk* listed in the first row of Table 1 is basically of the locutionary type, but in the TCM construction *talk someone into/out of something* it is used in the perlocutionary senses 'persuade somebody to do something that they are unwilling to do' and 'persuade someone not do something unwise', respectively (NOAD).

In the illocutionary category, the verb *argue*, in its basic sense, denotes an assertive speech act (see e.g. Searle & Vanderveken, 1985, p. 184), i.e., *argue* is used as the matrix verb of finite complement constructions instantiated by sentences such as *She argued that greenhouse gases are the primary cause of global warming*. In contrast, TCM constructions containing *argue (into/out of)* (see Example (38)) denote a perlocutionary sense 'persuade someone to do/not to do something by giving reasons' (NOAD). Like directive verbs, *argue* is associated with a relatively strong degree of force, as becomes evident from expressions such as *a forceful argument* and metaphors like ARGUMENT IS WAR (Lakoff & Johnson, 1980, p. 4). Most of the illocutionary verbs that occur in the TCM construction are directives such as *ask* (in its directive sense), *order*, *beg*, *urge*, *invite*, and the permissive verb *allow*, which like the verb *permit*, can be classified as a directive.[12] I have not been able to find TCM constructions with commissive or declarative verbs. The reason for the relative frequency of directive speech act verbs is, I propose, that directives exert

12. Searle and Vanderveken (1985) analyze *permit* as the "denegation" of an act of prohibition.

varying degrees of pressure, imposition, or compulsion (in terms of Johnson, 1987) on the hearer to act in a certain way.

A special case is the verb *boo*, which is derived via conversion from the exclamation *boo!* The verb has the meaning 'say "boo" to show disapproval or contempt' (NOAD). In this sense, it could be classified as an expressive speech act verb. A crowd shouting *boo!* exerts a high degree of communicative pressure on the Patient. Among the communicative matrix verbs that are usable in the TCM construction, *boo* is exceptional in that it signals so much force on the Patient that her or his motion is not just strongly suggested (implicated), but semantically implied. Hence, a sentence like (45) *entails* that John Cena actually left the building. Such strong implicational properties are not associated with the other verbs listed in Table 1, as will become clear in the subsequent sections.

Finally, it is important to note that the directive verbs and the perlocutionary verb *persuade* listed in Table 1 can be used in other constructions than the TCM construction, specifically, as matrix verbs of infinitival complements. Thus one finds pairs like the following:

(46) a. *She asked him into her office.*
b. *She asked him to come to/step into her office.*

(47) a. *The police officer ordered him out of the car.*
b. *The police officer ordered him to step out of the car.*

(48) a. *John persuaded Mary into buying a new laptop.*
b. *John persuaded Mary to buy a new laptop.*

Sentences (46)b.–(48)b. exhibit what is called *object control* in generative grammar. The object of the matrix verbs, i.e. the Patient, determines the reference of the understood subject of the infinitive clause (see e.g. Panther, 2015 for an overview of control phenomena). I am leaving open here whether the TCM sentences (46) a.–(48)a. should also be seen as involving object control. Suffice it to point out what appears to be a remarkable constraint regarding subject control verbs such as *promise*. While *promise* can be used as the matrix verb of infinitival complements (see (49)b.), it cannot appear in the TCM construction (see (49)a.).

(49) a. **She promised him into buying a new laptop.*
b. *She promised him to buy a new laptop.*

The conceptual-pragmatic differences, especially their implicational properties, between the TCM and the infinitival complement constructions are discussed in more detail in Section 4.7.

4.2 Hypotheses

While the TCM construction with non-linguistic matrix action verbs, as in (24)–(36), *entail* motion (or some other action) of the Patient, Goldberg (1995, p. 161) contends that, in the case of communicative matrix predicates, motion of the Patient is not "strictly entailed", although the conditions of *satisfaction* of directive speech acts like ordering and requesting do entail motion. A directive illocutionary act is satisfied if its propositional content, which denotes an action to be carried out by the addressee, is actually performed by that participant. In other words, hearers may comply with a directive speech act, in which case it is satisfied, but they may also not carry out the requested action. If Goldberg is correct, then Examples (37)–(45), which contain communicative matrix verbs, should not have ACTUALITY entailments, although most of them certainly very strongly invite ACTUALITY implicatures.[13]

All of the Examples (24)–(45) involve some kind of "force" applied by the Agent, but force *per se* is not sufficient to explain the subtle conceptual-pragmatic differences in inferential potential between communicative and physical matrix verbs in TCM constructions. To capture the differing implicational strengths it seems more promising to relate these examples to the folk model of talk and action, as diagrammed in Figure 1. If communicative action is not "real action," then it does not come as a surprise that TCM constructions with such verbs have weaker, i.e. more easily cancelable, implications than TCM constructions with verbs that express physical force. The distinction that is relevant here is thus the one between (semantic) entailment and conversational implicature.[14] I propose the following hypotheses (50), which are subsequently supported and elaborated with further data:

(50) a. TCM constructions denoting physical actions have stronger implications of ACTUALITY than those denoting communicative actions.
b. Physical action verbs induce ACTUALITY entailments, while communicative action verbs trigger ACTUALITY implicatures, the latter being default inferences (conversational implicatures) in the sense of Levinson (2000).

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13. As already mentioned, exceptionally, the communicative verb *boo* discussed in Section 4.1 behaves like a verb expressing physical force, i.e., it has an ACTUALITY entailment.

14. The term 'entailment' is used somewhat misleadingly in conceptual metaphor theory. "Metaphorical entailments" do not follow by necessity from a metaphorical expression (unless additional premises are introduced). In this contribution, the term 'entailment' is used in the sense that the truth of a proposition follows necessarily from the truth of another proposition, as in the example given in Crystal (2008, p. 170): *I can see a dog* entails *I can see an animal*.

c. More specifically, these implicatures are based on the conceptual metonymy MEANS (to accomplish an action) FOR ACTUAL ACTION.[15]
d. The boundary between ACTUALITY entailment and ACTUALITY implicature might be fuzzy in certain cases.

4.3 ACTUALITY entailments vs. defeasible ACTUALITY implicatures

To begin with, consider the contrast between (51) (matrix verb: physical action) and (52) (matrix verb: illocutionary verb):

(51) *The constables pushed$_t$ him into the carriage, threw his bag after him, and jumped in.* (COCA 2015)
⊨ *He* MOVED$_t$ *into the carriage.*
⊨ *He* WAS$_{t+}$ *in the carriage.*

(52) *Mr. Schumacher invited$_t$ the actor into the editing room of "Batman Forever" […].* (COCA 1996)
+> *The actor* MOVED$_t$ *into the editing room.*
⊨ *The actor* WAS$_{t+}$ *in the editing room.*

While in (51) the physical action predicate *push (into)* entails that the affected Patient *him* ends up in the carriage, an implication that is not defeasible, in (52), retrieved from an article that appeared in the *New York Times*, the assumption that the actor Matthew McConaughey entered the editing room is strongly implicated on the basis of the MEANS FOR ACTION metonymy: The illocutionary act of inviting is a means to get the actor in question to move into the editing room. But what is the evidence that the implications of (51) and (52) are not of the same kind? Evidence for an implicature would be a situation in which it would be explicitly or indirectly canceled, i.e., in the case of (52), a situation in which the actor *declined* film director Schumacher's invitation. But in fact, as the larger discourse context shows, the inference that the actor entered the editing is indirectly *confirmed*:

(53) *Mr. Schumacher* ***invited*** *the actor into the editing room of "Batman Forever," which he also directed, with the purpose of casting him in a small role in "A Time to Kill." But the more they talked, the more Mr. Schumacher became convinced that Mr. McConaughey could play Brigance.*

The piece of information that Mr. Schumacher had a presumably long conversation with actor Matthew McConaughey supports and confirms the inference that the latter accepted the invitation and entered the editing room. Notwithstanding, I claim that *invited the actor into the editing room* as such does not entail that the

15. The symbol '+>' represents the pragmatic relation of implicature.

actor moved into the editing room. In the following examples, the inference triggered by the TCM construction is explicitly canceled, which is evidence that it is a (strong) implicature:

(54) *I **invited** her into the room, but she declined.* (books.google.co.uk)

(55) *[…] he **invited** her into his office, but she did not follow him there […].* (books.google.co.uk)

(56) *He **invited** her into his hotel room but she insisted that there was no time […].* (books.google.co.uk)

Even a forceful directive matrix verb such as *order (out of)*, which strongly suggests motion of the Patient out of some location, is defeasible, as the following example demonstrates:

(57) *The detectives **ordered** him out of his vehicle, but instead he sped away.* (COCA 2014)

The first clause in (57) implicates by default that the suspect stepped out of the car. However, against all expectations, this inference turns out to be false – the driver of the vehicle *sped away*.

Finally, in the following three examples, the default implicature of the Patient's motion out of a location is again canceled in the subsequent discourse:

(58) *The officer accused the man of being a pedophile, prohibited him from using his phone, **ordered** him out of the car for a pat-down and asked to search his car. When the man **refused**, citing his constitutional rights, the officer reportedly pointed a gun at his head and arrested him.* (COCA 2015)

(59) *Grant soon **ordered** me out of the room but I refused to go. And finding himself locked in, he became quite angry and ordered me peremptorily to open the door and get out instantly. This order I firmly but good-naturedly **refused** to obey.* (COCA 2000)

(60) *The North Koreans stopped talks and **ordered** him out of the country, but Richardson says he flatly **refused** to go. Instead, "I stayed in their guest house for two days – isolated," he remembers. Finally, the North Koreans resumed talks and later released the pilot.* (COCA 1997)

As regards (58), the alleged pedophile would most likely have been forced out of the car after his arrest, but this is not an automatic consequence of being *ordered* out of the car. The man's refusal to step out of the car is strong evidence that *order (out of)* does not trigger an ACTUALITY entailment. Similarly, in (59), the first-person narrator does not leave the room, but explicitly disobeys the order, and, in (60), U.S. ambassador Mr. Richardson *flatly refused* to obey the order to leave North Korea.

Contrary to what is proposed in this contribution, Branimir Belaj and Goran Tanacković (p.c.) argue that directive verbs such as *order*, *invite* and *ask* in TCM constructions (see Table 1) have two meanings: (i) entailed motion of the Patient into or out of a location/action, (ii) implicated motion of the Patient into or out of a location/action. If this account is correct, one would have to assume two separate entries in the mental lexicon of language users. According to Belaj and Tanacković, the meaning that prevails in actual language use is determined by the context. However, the discourse-pragmatic properties of directive TCMs can be accounted for by a simpler and more elegant model: Directive verbs in TCM constructions trigger a default implicature that the Patient moves into or out of a location. By definition, this implicature is defeasible. Nevertheless, because of its strength, it is often confirmed or reinforced by the subsequent discourse (see Section 4.4). From a theoretical perspective, an account is preferable that abides by what is known as Ockham's razor (*lex parsimoniae*), stipulated by the Scholastic philosopher William of Ockham: "Plurality is not to be posited without necessity" (quoted in Spade, 2006, p. 101).[16]

4.4 Contextually confirmed and reinforced ACTUALITY implicatures

In Section 4.3, by way of example, it was shown that even very strong directives like *order (out of)* do not entail motion of the Patient out of a location. Notwithstanding, they trigger a default implicature of the ACTUALITY of the motion event – where the implicature itself is conceptually motivated by the metonymic association between an ACTION and the MEANS to accomplish this action. Such default implicatures are, unless canceled, *confirmed* (more or less directly) or even, for reasons of emphasis, *reinforced* in the ensuing discourse. To begin with, consider the following two fictional pieces:

(61) *That week Jeffrey **asked** Rudy into his office for coffee, but they didn't drink coffee. Instead Jeffrey pounded a fist at his desk and wept into his other hand.*
(COCA 2006)

(62) *Three months after the meteorite struck, Daddy **asked** us into the barn. Sitting on the meteorite was a tiny white box he had hammered together.*
(COCA 2013)

In Examples (61) and (62), the default implicature that Rudy walked into Jeffrey's office and that the children moved into the barn, respectively, are confirmed in the

16. This principle is also commonly formulated as "Beings should not be multiplied without necessity" (Spade, 2006, p. 101) .

subsequent discourse. Confirmation itself is often based on inference. In (61), it is not explicitly reported that Rudy was in Jeffrey's office, but from facts such as that *Jeffrey pounded a fist at his desk* – a desk being usually part of office furniture – the reader can infer abductively that Rudy moved into the office. In the same vein, in (62), after the barn has been introduced as a location, it makes sense to assume that the meteorite is located in the barn, and that, in fact, the children have moved into the barn.

An even stronger confirmation, i.e. an explicit *reinforcement* of the ACTUALITY implicature, can be observed in (63), an instance of TCM construction (2):

(63) *I **urged** him into counseling and he went, insisting it helped and made him feel much better.* (COCA 1993)

The second conjunct in (63), i.e. *and he went* (i.e. into counseling) is redundant because it is already pragmatically implied by *I urged him into counseling*. This redundancy has the rhetorical function of emphasizing the point that the person referred to by the personal pronoun *he* did the right thing when going into counseling, because it helped him psychologically.

4.5 Borderline cases: When implicature turns into quasi-entailment of ACTUALITY

So far it has been assumed in this contribution that there is a clear-cut distinction between entailment and default implicature. However, there are discourse data with directive verbs that implicate ACTUALITY of the Patient's motion so strongly that this inference does not seem to be defeasible. One such case is (64):

(64) *The man touched his wife's shoulder and **urged** her out of the room, closing the door.* (COCA 1992)

In (64), the directive speech act verb *urged (out of)* comes close to exhibiting the additional conceptual property of a non-linguistic physical action. How does this connotation come about? The answer is, I propose, that the clause preceding *urged* narrates that the husband *touched his wife's shoulder*, and this piece of information plays a crucial role in the interpretation of the example. The physical action of touching adds to the strength of the ACTUALITY implicature, as does the occurrence of the subsequent event that reports the husband's action of *closing the door*. Together, these discourse elements create the effect of a non-cancelable *entailment-like* inference.

A quasi-physical action sense is also conveyed in the following example, which is drawn from the story *City of the Dog* by John Langan:

(65) *Chris had me turn off the engine, leaving on the headlights, and hand him the keys. He exited the car and circled around the front to my side, the automatic pointed at me throughout. Standing far enough away that I couldn't slam my door against him, he* ***urged*** *me out of the car.* (COCA 2010)

The scene described in (65) evokes a possible physical confrontation between the first person narrator and the antagonist *Chris*, who threatens the narrator with his automatic gun. Given this context, the action of urging the narrator out of the car inherits a sense of physical action, and consequently the implication of the actual motion of the Patient out of the car becomes virtually non-defeasible.

Examples like (64) and (65) suggest that *urge (into/out of)* in the TCM construction (1) can have meaning components of both communicative and physical force, and that these forces may in fact operate in unison, thus blurring the distinction between implicature and entailment.

4.6 Metaphor: PHYSICAL ACTION AS COMMUNICATIVE ACTION

The two Examples (64) and (65) discussed in Section 4.5 demonstrate the occasionally thin line between default implicature and entailment, as manifested by a verb like *urge* that basically denotes a linguistic action, but acquires an additional contextually-driven sense of physical action. The reverse phenomenon may also occur: A physical action verb, such as *push*, may be reinterpreted as a communicative action. Compare the physical action sense of *push* in the initial sentence of (51), repeated here as (66), with the communicative action sense of this verb in (67):

(66) *The constables* ***pushed*** *him into the carriage, threw his bag after him, and jumped in.* (COCA 2015)

(67) *An aunt* ***pushed*** *her into a modeling competition at age 15.* (COCA 2014)

Example (66) is an instance of construction (1), i.e. entails literal motion of the Patient into the carriage, whereas (67) exemplifies (2), i.e., it entails that the Patient partakes in a modeling competition, an activity induced by the Agent. In the latter case, the verb *push* is used metaphorically in roughly the same sense as the perlocutionary verb *persuade (into)*. The metaphorical mappings from the 'physical action' sense to the 'communicative action' reading can be represented as in Table 2 (where the double-lined arrows mark metaphorical correspondences).

In sentences like (67), the communicative use of *push (into)* inherits its (non-defeasible) ACTUALITY entailment from its physical source meaning, i.e. the implication that the (female) Patient, who is the addressee of the communicative act of pushing, *actually* participates in a modeling competition at the age of 15.

Table 2. Physical action as a metaphor for communicative action

Source		Target
PHYSICAL AGENT	==>	SPEAKER
PHYSICAL ACTION: Pushing PATIENT into LOCATION	==>	COMMUNICATIVE ACTION: *Successfully* talking/persuading ADDRESSEE into doing something
PATIENT	==>	HEARER
PATIENT'S LOCATION	==>	ADDRESSEE'S ACTION

4.7 Manner and iconicity: How they influence the strength of implications

In this section, I return to an issue already mentioned in Section 4.1, viz., the relative implicational strength of TCM constructions with communicative matrix verbs in contrast to the use of the same verbs with infinitival complements. A good starting point to tackle this problem is Givón's (2001, p. 40) principle of *event integration and clause union*: "The stronger is the *semantic bond* between […] two events, the more extensive will be the *syntactic integration* of the two clauses into a single though complex clause." Givón (2001, p. 43) proposes a complementation scale that is given in a slightly simplified way in Table 3.

Table 3. Complementation scale (adapted from Givón, 2001, p. 43)

Complementation type	Example	Semantic bond
Co-lexicalized COMPLEMENT	She *let go* of the knife.	STRONG
Bare-stem COMPLEMENT	She *let* him *go* home.	↕
Infinitive COMPLEMENT	She *asked* him *to leave*.	↕
Subjunctive COMPLEMENT	She *suggested* that he *leave*.	↕
Indirect quote COMPLEMENT	She *said* that he *might leave* later.	↕
Direct quote COMPLEMENT	She *said*: "He might leave later."	WEAK

I propose that Givón's principle of event integration and clause union in combination with Lakoff and Johnson's (1980) *iconic* principle CLOSENESS IS STRENGTH OF EFFECT, which they regard as a conceptual metaphor, accounts for the contrasts in implicational strength between the following pairs of sentences:

(68) a. [*A*] *very kind lady* ***asked*** *me* ***into*** *her office for a cup of tea*.
(iWeb, www.belfasttelegraph.co.uk)

b. *A very kind lady* ***asked*** *me to* ***step/come*** *into her office for a cup of tea*.

(69) a. *She became ill, her mother took in the children, and her doctor* ***ordered*** *her* ***into*** *the hospital.* (deeptrancenow.com)
b. *She became ill, her mother took in the children, and her doctor* ***ordered*** *her to go to a hospital.*

(70) a. *He* ***ordered*** *her* ***into*** *his car and they set off inland.* (1843magazine.com)
b. *He* ***ordered*** *her to* ***get into*** *his car and they set off inland.*

(71) a. *One man* ***invited*** *us* ***into*** *his simple home made with mud walls and a dirt floor* […]. (iWeb, ttb.org)
b. *One man* ***invited*** *us to come* ***into*** *his simple home made with mud wall and a dirt floor.*

(72) a. *I* ***persuaded*** *Dan* ***into*** *letting me publish a condensed version of his teachings* […]. (iWeb, danpena.com)
b. *I* ***persuaded*** *Dan to let me publish a condensed version of his teachings.*

At first glance, the sentences in (68)a.–(72) a. look virtually synonymous with their respective counterparts in (68)b.–(72)b. However, the a.-sentences are structured as *one* (albeit complex) clause, whereas the b.-sentences are structurally organized as *two* clauses: A main (or: matrix) clause plus an embedded infinitive clause. In terms of Givón's terminology, the a.-sentences (TCM constructions) exhibit a much stronger semantic bond between two events than the bi-clausal b.-sentences (infinitival complement constructions). More precisely, the semantic bond is the strength of the causal connection between speaker's communicative action and its effect on the hearer's behavior.

To see that there is stronger syntactic integration in the case of the a.-sentences than in the b.-sentences consider the following contrast:

(73) a. ?***At two o'clock****, a very kind lady asked me into her office* ***at four o'clock*** *for a cup of tea.*
b. ***At two o'clock****, a very kind lady asked me to come into her office* ***at four o'clock*** *for a cup of tea.*

The sentences in (73) contain two time expressions. Sentence (73)b. sounds perfectly natural. It is possible to utter a request at one time and expect it to be fulfilled at another time. In contrast, in sentence (73)a., this scenario is somewhat unlikely because the sentence is morphosyntactically coded as *one* clause. Given the iconic principle that *one* clause denotes *one* event, it can be predicted that cases like (73)a. are felt to be pragmatically odd.

In a similar vein, Lakoff and Johnson's principle CLOSENESS IS STRENGTH OF EFFECT accounts for the differences in causal connectivity observed in the sentence pairs (68)–(72). Lakoff and Johnson (1980, p. 131) hypothesize that "[t]he CLOSER

the form indicating CAUSATION is to the form indicating the EFFECT, the stronger the link is." They illustrate this iconic principle with examples like the following:

(74) *Sam killed Harry.*

(75) *Sam caused Harry to die.*

Sentence (74) exemplifies DIRECT CAUSATION, coded as a single event by means of the verb form *killed*, whereas (75), which is truth-conditionally equivalent to (74), is coded by two verb forms (*caused* and *die*), i.e. as two events, and hence, in contrast to (74), suggests INDIRECT CAUSATION.

Building on the Givón's and Lakoff and Johnson's insights, I propose that there is also an iconic principle that applies to the TCM constructions analyzed in this contribution: SYNTACTIC CLOSENESS correlates with STRENGTH OF IMPLICATION. It was shown in the preceding sections that TCMs with matrix verbs of physical action induce entailments. In the case of communicative verbs, the correlation is one between SYNTACTIC CLOSENESS and STRENGTH OF IMPLICATURE, where, as already pointed out, the implicature is based on the metonymy MEANS FOR ACTION. According to this principle, TCM constructions predictably exhibit stronger implicatures than the corresponding infinitive complement constructions. Consider the following examples (where the symbols '+>' are used for strong(er) implicatures, and '–>' for weak(er) implicatures):

(76) a. *The detectives ordered him out of the car.*
b. +> *He stepped out of the car.*

(77) a. *The detectives ordered him to step out of the car.*
b. –> *He stepped out of the car.*

(78) a. *He urged me out of the car.*
b. +> *I moved out of the car.*

(79) a. *He urged me to step out of the car.*
b. –> *I moved out of the car.*

In (76)a., two events, i.e. ordering and moving out of the vehicle, are compacted syntactically into one clause. This *manner of coding* triggers a strong implicature (see (76)b.) that the motion of the Patient out of the vehicle *actually* takes place. In contrast, (77)a. codes the two events in question in two separate clauses, and i.e., in the matrix clause and in the infinitival complement clause, respectively. Hence, the ACTUALITY implicature (77)b. is much weaker. The same holds for Examples (78)a. and (79)a. The former strongly implicates motion of the Patient out of the car whereas, in the latter, the syntactic coding of the events of urging and the event of the Patient stepping out of the car are represented as separate events

and, consequently, the force of the ACTUALITY implicature is much weaker. Notice however that in all four Examples (76)a.–(79)a., the implicature is cancelable (for corpus data attesting such cancelations of implicatures, see Examples (54)–(58) in Section 4.3.

From a pragmatic perspective, the observations in the preceding paragraph can be related to Grice's (1975, p. 46) Maxim of Manner, although Grice probably did not have peculiarities of morphosyntactic coding in mind, such as the ones discussed above, when he formulated it. What is relevant in the present context is the conception of *manner scales* as presented e.g. in Panther and Thornburg (2014, pp. 169–170). In that article, it is postulated that pairs of expressions that convey more or less the same content, but differ in length and/or prosodic prominence, may trigger different kinds of pragmatic inferences (implicatures). As a simple example, consider the manner scale <*be able to, have the ability to*>, where the first member *be able to* is morphologically and phonologically shorter than the second member *have the ability to*. The members of this scale trigger ACTUALITY implicatures, as can be seen from the following examples:

(80) a. *She was able to solve the problem.*
b. +> *She solved the problem.*

(81) a. *She had the ability to solve the problem.*
b. –> *She solved the problem.*

While (80)a. triggers a strong ACTUALITY implicature to the effect that the female person in question managed to solve the problem, which is hard (though not impossible) to cancel, (81)a. triggers a much weaker ACTUALITY implicature. The weak implicature in (81)b. can of course be reinforced by the additional assertion *And in fact, she did solve it*.

A manner scale can also be formulated for TCM constructions and infinitival complement constructions with directive speech act verbs as matrix predicates. As has been shown in this section, the TCM construction triggers a stronger implicature of ACTUALITY than the second member of the scale, i.e. the corresponding infinitival complement construction.

As a final remark, it is also worth pointing out that prosodic factors have an impact on the strength of an implicature. For example, if in (76)a. the verb form *ordered* is given prosodic prominence (stress), the hearer is induced to focus on the basic meaning of *order* as a (mere) speech act – in contrast, to "real" physical actions like *pushing, shoving, yanking*, etc. As a consequence, the implicature of ACTUALITY is weakened and it becomes easier to cancel this implicature, as can be seen in (82)a. In contrast, putting emphatic stress on a physical action verb like *yank*, as in (82)b., does not and cannot affect the entailment of ACTUAL motion.

(82) a. *The detectives ORDERED him out the car, but he refused to comply with their order and didn't step out of the vehicle.*
b. **The detectives YANKED him out of the car, but he resisted and didn't move out of the vehicle.*

5. Conclusion and outlook

In this contribution, evidence has been provided that the folk model of talk and action has repercussions on the semantics and pragmatics of certain subtypes of the TCM construction with regard to the inferences they trigger. Verbs of physical action such as *push into*, *force out of, kick into*, etc. entail ACTUAL MOTION of a Patient into/out of a location, where LOCATION may also be metaphorized as an EVENT, such as in *push someone into a modeling competition* (see (67)). In contrast, directive speech act verbs such as *ask into*, *order out of*, etc. do not entail ACTUAL MOTION but merely implicate it to varying degrees. The implicature has a metonymic basis, i.e., the communicative acts – in particular, directive acts – are MEANS used by the Agent to cause MOTION or some other ACTION performed by the Patient. Verbs with communicative impact like *boo (out of)* behave, however, like physical action verbs – they entail motion of the Patient.

Although the TCM construction data I have investigated provide strong support for distinguishing between (semantic) entailment and (pragmatic) implicature, there exist cases where the border between them is fuzzy, and the two inference types become virtually indistinguishable. Furthermore, there probably exist idiolectal, dialectal, sociolectal, and cross-linguistic variations and differences regarding the existence of the two TCM constructions and the strength of inferences triggered by them. In this sense, the present contribution is definitely not the last word on this fascinating subject, and the results presented in this chapter should be supplemented by and tested against further corpus examples and experimental data.

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PART 3

Processing of figurative language

Two case studies on irony

Embodied simulations and verbal irony comprehension

Herbert L. Colston, Michelle Sims, Maija Pumphrey, Eleanor Kinney, Xina Evangelista, Nathan Vandermolen-Pater and Graham Feeny
University of Alberta

Recent research has addressed the role that embodied simulations (ESs) play in language processing (Bergen, 2012). One forefront in this work is investigating ESs' role in metaphorical language comprehension, as when one hears or reads: "The Donald Trump supporter went *bananas* after the 2016 U.S. election". The work reveals that the pattern of ESs found in metaphor processing resembles that of comparable non-metaphorical language – but isn't exactly the same. Current work is attempting to discern how similar/different these ES patterns are. To date, however, little work has explored embodied simulations in verbal irony (e.g., sarcasm, as in saying, "Nice work" when someone errs). The current study reports preliminary results of an analysis of ES activity when people process verbal irony.

Keywords: verbal irony, embodied simulations, language processing, comprehension, metaphor, figurative language

1. Representation and activation

One of the most prevalent metaphors used by scholars attempting to conceptualize the process of language comprehension has been that of representation and activation.[1] Although predating the cognitive revolution (Psychology) and the cognitive commitment (Linguistics), these milestones greatly enhanced the metaphor, as did the development of computing technology. Language scholars have essentially considered large parts of language comprehension as being greatly dependent on meaningful content being represented in our minds somehow, with pieces of

1. A metaphor also commonly used by non-academics.

https://doi.org/10.1075/itl.16.07col

that content then waxing and waning in activation level as part and parcel of the language comprehension process. Whether this stored content takes the form of sub-lexical units, words and their meanings, meta-lexical information, morpho-syntactic knowledge, phrasal items, propositional segments, or larger schemas, scripts, frames, situation models, stereotypes and other knowledge structures, the argument has been that this material is somehow held by or represented in the human mind, and is then accessed, used and then re-stowed to enable language comprehension to work.

How the material initially *got* represented in the mind has many varied explanations. Some material might be innate. Some might be prone for ready learning – *plug-and-play* representations if you will (e.g., social identities [e.g., *mother*], rapid word learning in early language acquisition, etc.). Other content might appear naturally as part of normal cognitive or socio-cognitive development (e.g., Theory of Mind, Piagetian milestones). Still other content might be inferred, or obtained or acquired somehow directly, from a person's environment or other people. Some content has been proposed as instrumental in that its main purpose is to aid other meaningful content acquisition (e.g., word learning "assumptions"). Still other content might be acquired through deduction, induction, and construction, or vicariously in a way by observing others acquiring it. Some content might even be derivative, being built from patterns found across sub-strata content (e.g., image schemas). Content can also be forgotten and relearned. Or it might be stored deeply and remain un-accessed for a long period of time – but then retrieved later spontaneously, perhaps with some surprise on the person's part.

This content is also triggered though somehow, by language proper when we encounter it in the form of spoken, sung, signed, written or recorded words and morphosyntax. The elicited content then becomes active in the mind for a while – for the purposes of comprehension – rising in activation level from some initial stored potential state. Activation can also spread among the different instantiations of the stored content. Activation can even be hard-wired into the language itself through the processes of reference or authorized inference (e.g., pronominal, metonymic, indirectness). But activation eventually fades back to an idling state, or some form of deliberative suppression takes place, allowing activation to move onto other content.

How this representation and activation actually occur has been the matter of much discussion, debate and research. It's been conceptualized and/or operationalized as information – in the sense of digitalized data, as changed rates of neural firing, as transfer of content from a long-term memory store into working memory, as simply knowledge in the head, as encodings in a system of neural synapses regulated by microtubules and as corresponding increases and drops in

cranial blood flow, protein consumption, heat, etc., among many other accounts. It has even been generified as patterns of linkage strengths between nodes and layers in abstract neural network computing systems – enabling us to build computer programs that can learn very rapidly by adjusting these weights after receiving performance feedback.

Whether explicitly or not, this representation and activation metaphor underlies practically all our accounts in psycholinguistics, and has for decades. Admittedly many other accompanying processes have also been proposed to enable comprehension – which would closely interact with representation and activation. Rich forms of motivated interpretation taking place upon activated meaningful content, which in turn leads to other activated content, affecting the flow and pattern of additional subsequent, so-called "bottom-up" processing, is just one example. And of course language comprehension is not the only domain which uses this representation and activation metaphor – many areas of cognition also rely on it. But the process of comprehension nevertheless still depends heavily, so this approach claims, on the idea of representing content in the mind, as *meaning* if you will, that gets activated when triggered by linguistic segments we encounter (i.e., read "bird" think *bird*) (Craddock, Tuszynski, & Hameroff, 2012; Glass, 2016; Sedivy, 2014; Warren, 2013).

2. Embodied simulations

But the more recent discovery of embodied simulations (ESs) significantly alters and enhances this basic representation and activation metaphor in comprehension (as well as cognition more broadly). Embodied simulations don't dismiss the general notion of representation and activation. Indeed ES might be considered just a different means by which meaningful mental content is represented in the mind. But the sources or store house of that "stored information" – sensory and motor cortical areas, and the forms of activation proposed by ESs – that of quick simulations of authentic sensory or motor neural activity – essentially the same activity as would occur in sensory and motor cortical areas during *actual* episodes of sensation or motor activity within an external environment, greatly changes how we might think about this component of meaning, gotten at through language.

Embodied simulations are prescribed patterns of neural activity in motor and sensory brain regions that correspond to relatively generic units of embodied motor and sensory activity (e.g., the pattern of neural activity taking place in your motor cortex when you physically "push" something forward, like a cart, or activity in your sensory cortex when you visually see a physical object, like a bunch of yellow

"bananas"). Embodied simulations have been shown somewhat remarkably to underlie online language processing and to constitute some of the very content of meaning itself (see Bergen 2012 for a review of the initial research leading to the idea of embodied simulations). ES are thus an integral part of language functioning, rather than just being an epi- or co-occurring phenomenon of language production or comprehension

Thus, rather than just activating some theoretical semantic or other representations in long-term memory or in a mental lexicon when you encounter language, instead sequences of generic sensory and motor simulations are run in an *as-if-actually-happening* mode. These enriched, generic sensory and motor experiences, built up through a lifetime of sensory and motor interactions between our physical bodies and the external world, are stored in the form of neural programs, and are re-enacted when we encounter language *about* those experiences, giving us much of the content of meaning itself. So if you hear spoken, read written or see signed language corresponding to sensory or motor experiences, as in:

> The yellow bananas are on the silver refrigerator.

or

> Pushing a grocery cart through snow is difficult.

your sensory and/or motor cortical regions, normally used for *actual* processing of sensory information or for motor activity, exhibit patterns of activity *as if you were actually* seeing yellow bananas on a silver refrigerator, or genuinely pushing a grocery cart through snow. The primary difference between the actual neural activations and those simulated when language is processed, is the peripheral motor and sensory segments, your eyes and arms as it were, which are temporarily disengaged in the case of language processing – in a process similar to what occurs during REM sleep dreaming. Indeed, we have evidence of the operation, and imperfection, of this REM-dreaming "clutch" disengagement mechanism on occasion when people's muscles twitch while they are dreaming about motor activity (e.g., leg spasms occurring when a person dreams about running). When you dream about running, your motor cortex *is* effectively running, only your legs are disengaged (mostly) during the process. Such an imperfect disengagement might even be useful communicatively and could underlie the prevalence of many co-speech gestural behaviors (see below).

It thus seems as if evolutionarily, as language was developing in hominids, it usurped the functioning of much older, well established and baser neural capacities – sensory and motor functioning, as a major source of meaningful content. Such sources as sensation and motor activity are also good bets at *aligning* these meaningful experiences between interlocutors – one of the things a language needs

to accomplish or at least approach – given the preponderance of similarity across people in how they sense and how they move given our generally consistently formed body structures and functional abilities (Anderson, 2010; Bergen, 2012; Colston, in press; Gallese, 2007; 2008; Gallese & Lakoff, 2005).[2]

3. Evidence

We have evidence of the operation of ESs in language functioning from sensory, motor, gestural and neurological sources. As a brief token example of the sensory evidence for ESs' involvement in language comprehension, consider how a simple language/image verification task can show ESs at work. If participants in an experiment are asked to perform a very simple task – listen to short sentences, then view a picture, then press buttons corresponding to "yes" or "no" to express as quickly as possible whether the picture depicts something said in the sentence or not, something remarkable happens. If, for instance, a person hears the sentence:

> "The nail was hammered into the wall."

and then sees a picture of a nail, most people give the correct "yes" response with near-perfect accuracy and very little delay. However, if the nail in the image is horizontal – people's responses will be slightly but reliably faster compared to the exact same nail positioned vertically. On the other hand, the opposite result is obtained if the sentence is as follows:

> "The nail was hammered into the floor"

Here people are faster to respond "yes" to a vertical image of a nail relative to the same image showing the nail horizontally.

This pattern is readily explained by ESs. During and immediately following the processing of the heard sentences people are running ESs in their visual cortical areas corresponding to actually seeing nails being hammered into walls or floors.[3] Accordingly, when the people then actually see images of nails, their visual processing is facilitated – they are fairly far along in the process of running an

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2. Without question we also exhibit physical differences, which can significantly impact linguistic communion (Bergen, 2012). But one might argue the similarities are more prevalent – at least enough so that language could be built upon motor and sensory ESs, plus some other capacities (Colston, in press).

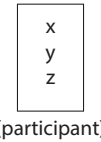
3. Motor ESs could also play a role in this task, but the outcome nonetheless shows the operation of sensory ESs.

embodied simulation or have just completed one, when they are shown the image, such that the neural activity to manage that actual seeing of nails is facilitated. But importantly, the orientation of the nails in the sentences and images matters greatly – imaged nails that more closely correspond to the just-simulated nails from the comprehended language provide greater facilitation. This pattern of results is very difficult to explain without postulating something like ESs taking place during the processing of the heard sentences.

An incredible variety of such effects have been shown (see Bergen 2012 for a review). Sometimes the evidence for ESs occurring in language processing is exhibited via the kind of facilitation just described. But on occasion, evidence can also point to ESs when people's measured behavior is inhibited. For instance, in some cases an ES can actually delay or slow a person's ability to do some form of sensory or motor processing because the ES is utilizing the neural structures that do that processing, such that they are not as free to perform another bit of processing. A number of factors affect whether ES might appear as facilitation or inhibition, including the complexity of the processing involved and/or the severity of the task demands, along with general workload and/or fatigue. But either facilitation or inhibition can be used as evidence for ESs occurring.

Embodied simulations can also be detected through motor measures, often through tasks testing for an action compatibility effect (ACE). Indeed, a wide variety of highly creative apparata have been devised to conduct this work. The essential idea is to have people perform some task involving language comprehension, as described above for the sensory measures. But instead of just a simple generic response (i.e., pressing a "yes" or "no" button), people are required to respond to the language task with a more gross-movement motor action designed to be influenced by the ESs presumably being co-conducted. Again, whether through facilitation or inhibition, this general paradigm is able to show the operation of ESs as part of the operation of language comprehension.

For a simple example, imagine a button box with three buttons, represented as x, y and z (see below), in a linear arrangement placed in front of participants in an experiment. The y button is the designated as the "home" button (where the participant rests their index finger at the start of each trial in the experiment). The x and z buttons are then assigned as "yes" and "no" – this latter assignment changing either across different blocks of trials or across different participants in the experiment.



Participants are then asked to do a simple sentence verification task. They are directed to press "yes" as soon as they can determine if a sentence they hear or read is a grammatically correct English sentence, or to press, "no" if otherwise. Participants are then given sentences to judge. Some sentences are grammatically incorrect. Others are correct. The latter are the ones of interest. Of these, some mention actual motor actions which may or may not align with the motor response required of the participant in the task. For instance, participants might read sentences such as:

1. "You hand an interviewer your business card."

or

2. "You pull open your kitchen utensil drawer."

or

3. "You type a word with a computer keyboard."

If the "yes" key is assigned as x (farther away from the participant than the home button), people are often quicker to respond "yes" to sentence 1 compared to the control sentence 3. But if "yes" is assigned to z (nearer to the participant than the home button), then participants are often faster to respond to 2 compared to 3. This all assumes of course that the length and morphosyntactic complexity of the sentences and other factors is controlled for, along with the varying ability going from word to word to reliably guess grammatical correctness across the different sentences – something that might not be the case in these example sentences but which can be accomplished in experimental materials.

So with simple sentences such as these, a slight degree of facilitation can be found if the motor action required of the correct response aligns with the motor action being simulated in the processing of the sentence (i.e. reaching forward to press the "yes" key or to hand someone an object). Again, this is a difficult to explain outcome unless one allows for the facilitative (or inhibitive) effects of ES taking place in language comprehension. As with the simpler sensory responses discussed earlier, a very wide variety of ACE tasks and motor actions have been tested and through either facilitative or inhibitory outcomes, evidence has accumulated for the operation of ESs in language comprehension (Bergen, 2012; De Vega, 2008; Glenberg & Kaschak, 2002; Zwaan & Taylor, 2006).

But we can also observe ES taking place in language production. Indeed, as mentioned earlier, the imperfect detachment process of our peripheral motor system (e.g., our muscles, joints, ligaments, etc.) during ES performance might actually be useful for the purposes of communication. In the form of co-speech gesture, ES leaking out of us seem to clarify or enhance a perceiver's/hearer's ability to conduct the language processing required of them (Goldin-Meadow et al 2001).

For instance, for most speakers gesture is a common accompaniment to their speech, even if the speaker is blind (Iverson & Goldin-Meadow, 2001; McNeil, 1992). Indeed, co-speech gesture is also typically an aid to language *production* (Krauss, 1998). Moreover, much of this co-speech gesture is iconic and/or performative to a degree in that the gestures typically resemble either the content being discussed (i.e., stemming from perceptual simulation, as in a person holding fists forward but then rapidly spreading out their fingers outward as they talk about witnessing an explosion) or the actions of a person interacting with that discussed content (i.e., stemming from motor simulation – a person pretending to type on a keyboard while saying they had been answering emails). Indeed, co-speech gestures can also reveal cognitive structural underpinnings relating abstract and concrete content as in conceptual metaphors. A speaker for instance might perform a hands-out, palms up gesture when asking an interlocutor to, "Consider this." Here the speaker seems to be exhibiting the common conceptual metaphor of IDEAS are OBJECTS by appearing to physically offer or hand over an object to an interlocutor while asking the person to consider an idea.

A variety of kinds of neurological evidence can also demonstrate ESs occurring as part of comprehension and production. A full review of this evidence is beyond the intent and scope of this chapter (see Rizzolatti and Craighero, 2007 for a review), but evidence has been shown from scanning techniques, in clinical studies and through short term manipulations to neural motor functioning affecting language processing. For example, brain imaging has shown that people processing language content related to different physical actions (e.g., "to lick", "pick" or "kick" something), show activation in cortical motor areas corresponding to the specific body parts that perform those actions (e.g., the tongue, fingers and feet respectively). Other corroborative studies have shown how lesions or degenerative processes adversely affecting cortical motor areas disrupt language processing of verbs related to those motor areas more so than comparable nouns (Bak & Hodges, 2003). Short term satiation or fatiguing of certain motor movements (i.e., by having participant repeat a simple motor motion a high number of times) can also produce slowed responses to comprehension of language involving ESs of that movement (Glenberg, Sato & Cattaneo, 2008).

So a very clear relationship seems to hold between motor-cortex processing and language processing of motion or action semantic content. We can observe motor cortex activation during language processing of motion content. If motor cortex functioning is damaged, corresponding language comprehension is adversely affected. And if we induce temporary fatigue in motor functioning, related language functioning is concomitantly diminished temporarily. Similar neurological evidence is also available to show sensory cortical involvement in language functioning.

4. Embodied simulations and verbal irony

Most of the research on ES has involved non-figurative forms of language. And most of that research has addressed relatively simple types of language containing sensory and motor content. But two areas of this research nonetheless speak at least a bit to possible ES underpinnings of verbal irony comprehension – ES in metaphorical language and ES in negated or counterfactual constructions.

Research looking at ES in metaphor processing has been quite interesting in that it not only adds to what we know about ESs and metaphor processing, but it also speaks to and possibly resolves or at least obviates long-standing debates about how metaphor is comprehended.[4] The essential finding is that processing of metaphorical language containing sensory or motor content is quite similar to that for non-figurative, non-metaphorical language containing that same content. So for instance, processing of:

> "The man pushed his cart at the grocery."

and

> "The man pushed his agenda at the meeting."

is generally similar with respect to the role, sequencing and speed of embodied simulations. But for the metaphorical language there appears to be a very rapid "wrap-up" ES taking place at the end that does not occur with the nonfigurative construction (Bergen, 2012).

For both utterances ES involving sensory and/or motor content (i.e., a man pushing something) need to take place. But for the metaphorical utterance that motor or sensory pushing needs to be honed to fit the more metaphorical contextual situation. But interestingly, the embodied content of "pushing something" still seems involved in that metaphor comprehension. The embodied information from visualizing, imagining or simulating the act of physically pushing something makes it into the metaphorical comprehension, but is made to fit the metaphorical context.

Thus, it looks like embodied simulations account both for the enriched, embodied, metaphorical, concrete, meaningful, hard-to-paraphrase aspect of metaphors, but ESs also allow for extremely rapid processing speeds and patterns, very similar to that for non-metaphorical processing. This can make metaphors as fast or faster to comprehend than non-figurative language. ESs thus weakens a bit the argument that metaphor processing is somehow "special" or that it involves processes different from non-metaphorical processing – the ESs in metaphorical

4. This research also speaks to how we might rethink the pragmatic effects of metaphor (e.g., enriching meaning, persuading, etc.) (Colston, 2018, June).

and non-metaphorical constructions are largely similar – excepting the slight deviation at the end of processing. ESs may also have bypassed the old stage debates in metaphor theorizing (e.g., one stage or two) in that they can allow for the input of the nonfigurative components of metaphorical source domains yet not force a consideration of metaphors requiring multiple stages of processing.

Embodied simulations in negated and counterfactual language, as in the processing of constructions like,

> "The yellow bananas are not on the silver refrigerator."

or

> "Had the yellow bananas been on the silver refrigerator."

also might speak to how ES could underlie verbal irony processing given how verbal irony has often been claimed to involve negation in some form (Gibbs & Colston, 2007). The general pattern of embodied simulations in these kinds of constructions is also similar to what we see in metaphorical ESs – something similar to non-negated or non-counterfactual ESs followed by a "wrap up" ES at the end – likely to simulate the physical thing *not* being present or taking place. The essential idea is that in order to simulate something not occurring/existing, you must first simulate the thing negated or the thing not present. But as with metaphorical ESs, this process is not of the form of a re-interpretation or secondary or additional stage of processing. Rather it is just a slight alteration to the end-game in the sequence of ESs to fold in the non-presence of the simulated content. So it can occur in ways very similar to non-negated or non-counterfactual language. But it can take a bit longer.

So these two lines of research enable some preliminary predictions to be made for how ESs might function in verbal irony comprehension. First, processing of negated and counterfactual sentences is a bit of a complex task, relative to processing non-negated and non-counterfactual language. Accordingly, ACE tasks on negations and counterfactual often produce inhibition results. If people must respond with a motor movement that is currently being simulated in the processing of negated or counterfactual language, those responses are a bit slowed. One might perhaps expect a similar pattern in how verbal irony would be processed given it's resemblance to negation/counterfactuality. But the way ESs function in metaphor processing to enable the richness of the sensory/motor content to be included also speaks to verbal irony – which has its own powerful set of 'enriched, embodied, concrete, meaningful, hard-to-paraphrase aspects', exhibited in the strength of its pragmatic effects (i.e., to enhance or manage negativity, to persuade, etc. [Colston, 2015]).

5. Verbal irony? Being sarcastic with joysticks

To evaluate the possible operation of ESs in verbal irony comprehension a series of stories was created and audio recorded with endings of verbal irony or non-figurative commentary. Participants were asked to respond, using a desk-mounted joystick that would move either forward – away from the participants – , or backward – toward the participant, from a resting central position. Participants were to respond as quickly and accurately as they could, as to whether the comment they heard at the end of each story was a sensible English statement (one of the joystick movement directions being designated "yes" and the other "no"). For a portion of the stories, the direction of their "yes" response was *compatible* with a motor movement presumably being simulated from the heard comments (e.g., hearing "Nice shove" & making a forward joystick movement to mean "yes"). These trials were compared against stories where the required response motor movement was *incompatible* with the simulated motions (e.g., hearing "Nice pull" & making a forward joystick movement meaning "yes"). Comparisons were also made on both non-figurative versions of the comments – a story character successfully moves something forward and a companion says, "nice shove", as well as on sarcastic comments – a character attempts to move something forward but fails and a companion says, "nice shove".

5.1 Non-figurative language

Stories all depicted the participant and another person doing some activity that either failed or succeeded. The other person would then be the speaker of the final comment, said as if spoken to the participant. For example the *nonfigurative* version of one story was as follows (emphases added):

> You are helping a friend move a very heavy desk between rooms. You have gotten it as far as the door threshold, but now it seems to be stuck. You try and try, but the desk won't budge. Your friend is about to give up. But you say let's give it one more try. You give it a final attempt and **the desk moves through the door**. Your friend says, **"Nice shove."**

A *nonfigurative control* version of this story would end instead with the comment not describing a motion act, "Nice job", but otherwise was identical.[5]

5. Stories were written without using the motion verbs or synonyms in the text body (i.e., in this example story, "shove" or "push".

Comparison of the reaction times to respond "yes" to these two versions (e.g., ending in "Nice shove" versus "Nice job") enables determination of whether participants are running ESs when comprehending the motion act comment ("Nice shove"). Half the stories in the comparison involved movements away from the participant (e.g., shove, push, throw, etc.) the other half of the stories involved movements toward the participant (e.g., pull, yank, etc.). The response times to the two directions were pooled for the comparison. Only correctly answered "yes" responses were included in the analysis (comparing *incompatible* and *compatible* motion directions). Analyses were not conducted on the correct "no" (i.e., nonsensical) responses (e.g., for the example story above, the speaker saying the comment, "Nice book").

The results overall revealed a significant inhibition when comparing the response times on the motion comments (e.g., "Nice push") relative to the non-motion comments (e.g., "Nice job"), with the former overall taking longer. But most of this difference depends upon the compatibility variable (i.e., whether or not the motion required to make the response is compatible with the motion described in the heard comment). When the motion heard is *incompatible* (e.g., moving outward to respond "yes" when processing "Nice pull"), a slight but non-significant difference is found compared to response times to the control, non-motion comment (moving outward to say "yes" when processing, "Nice job"). But when the motion is *compatible* (e.g., moving outward to respond "yes" when processing "Nice push"), then motion comments RTs are significantly slower than those for the control non-motion comments (e.g., moving outward to respond "yes" when processing "Nice job"). These results are depicted in Figure 1.

These results make sense in that participants are conducting a fairly complex task with a high degree of workload. Inhibition is thus what would be expected in the case of compatible response motions (i.e., when the response required overlaps with the ES taking place) relative to incompatible motions (i.e., when the response required differs from the ES taking place), as it is in research looking at negated and counterfactual constructions. These results thus serve nicely as a comparison base to then evaluate what occurs when the spoken comments at the end of the stories are sarcastic.

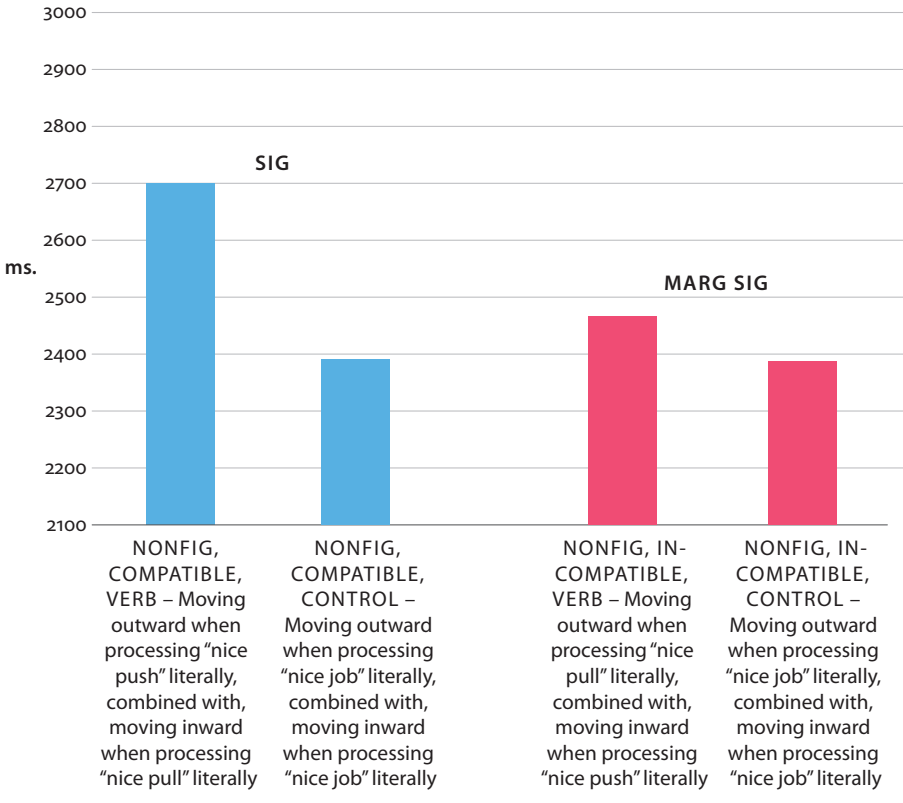


Figure 1. Nonfigurative, heard items, raw data

5.2 Verbal irony

The *verbal irony* version of the example story from above was as follows (emphases added):

> You are helping a friend move a very heavy desk between rooms. You have gotten it as far as the door threshold, but now it seems to be stuck. You try and try, but the desk won't budge. Your friend is about to give up. But you say let's give it one more try. You give it a final attempt and **the desk remains stuck**. Your friend says, **"Nice shove."**

A *verbal irony control* version of this story would end instead with the sarcastic comment not describing a motion act, "Nice job", but was otherwise identical.

Analyses were conducted similarly to those for the nonfigurative language. The results were also similar to those obtained with the non-figurative commentary. Overall a significant inhibition was found when comparing the response times on the sarcastic motion comments (e.g., "Nice push") relative to the sarcastic non-motion comments (e.g., "Nice job"), with the former overall taking longer. And, as with the non-figurative items, much of this difference depends on the compatibility variable (i.e., whether or not the motion required to make the response is compatible with the motion described in the heard comment). When the motion heard is *incompatible* (e.g., moving outward to respond "yes" when processing the sarcastically intended, "Nice pull"), a slight difference was found compared to response times to the control, non-motion sarcastic comment (moving outward to say "yes" when processing the sarcastically intended, "Nice job"). But when the motion is *compatible* (e.g., moving outward to respond "yes" when processing the sarcastically intended, "Nice push"), then motion comment RTs are slowed to a greater degree compared to those for the control non-motion comments (e.g., moving outward to respond "yes" when processing the sarcastically intended, "Nice job"). These results are depicted in Figure 2.

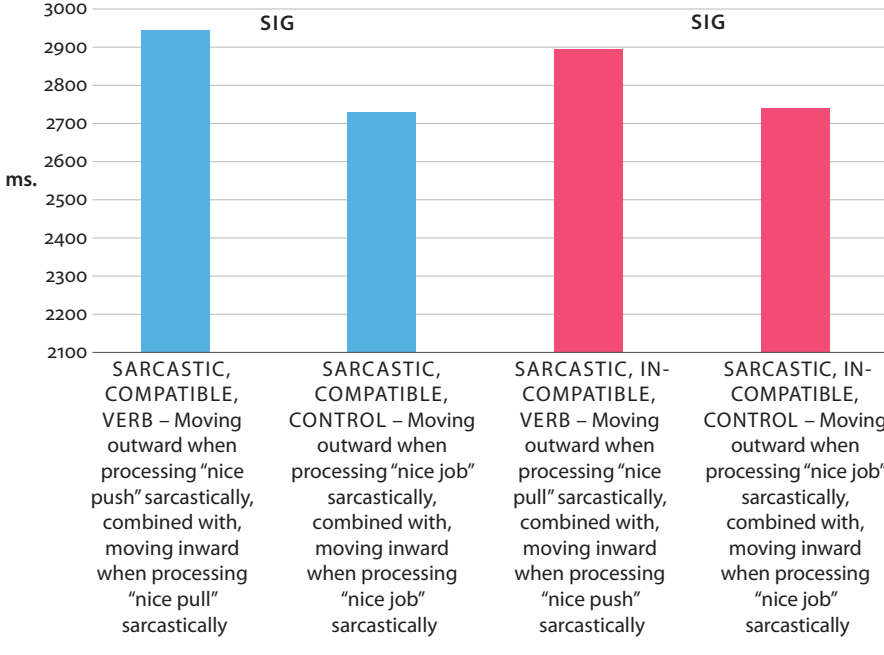


Figure 2. Ironic, heard items, raw data

6. Discussion

The results may be briefly summarized as follows. For non-figurative language, relative to a non-motion baseline (e.g., "Nice job"), processing language *incompatible* with response movement (e.g., hearing "Nice shove" and responding by pulling), is slightly inhibited. But, relative to a no-motion baseline (e.g., "Nice job"), processing language *compatible* with response movement (e.g., hearing "Nice shove" and responding by pushing) is *more* inhibited. For figurative language, overall processing times are slower compared to non-figurative, but the pattern just described for non-figurative language recurs – relative to a non-motion baseline (e.g., "Nice job"), processing language incompatible with response movement (e.g., hearing "Nice shove" [meant sarcastically] and responding by pulling) is slightly inhibited. But relative to a non-motion baseline (e.g., "Nice job"), processing language compatible with response movement (e.g., hearing "Nice shove" [meant sarcastically] and responding by pushing) is more inhibited.

What we thus have is a pattern of results where sarcastic commentary behaves similarly to non-figurative/non-sarcastic commentary. If a response to indicate one's decision about the language heard (i.e., is the language a sensible English statement) overlaps with the specific ES being conducted in the comprehension of that language (i.e., motion moving outward or motion moving toward oneself), people's responses are slowed. We also have evidence that the overlap does not have to be precise – it could be simply along the possible dimension of motion (e.g., pulling or pushing). But the inhibition effect is stronger if the precise motion overlaps (e.g., having to move your arm forward to respond to language about moving forward ["nice push"]).

Interestingly, we obtain this effect on sarcastic language, where the intended meaning of a speaker's comment is oppositional to the non-figurative meaning of the comment. For instance, the speakers in our stories are appearing to complement the participant's motions (e.g., "Nice pull") but are actually intending to deride that motion (e.g., the participant fails at pulling open a stuck drawer). So as with metaphorical ESs, some of that non-figurative meaning is passing through the comprehension system in the form of ESs taking place on the surface form of the commentary, as shown by the inhibitory effect of those ESs taking place. But, akin to negated or counterfactual language processing, the task with sarcastic commentary is a bit more difficult resulting in overall slightly slower processing times than for non-sarcastic commentary.

We should mention that the above results are also showing multiple replications. An analogous pilot study not reported here which used forward (moving away from one's body) versus backward (moving toward one's body) button presses on modified keyboards rather than joystick movements, but with an otherwise

similar procedure, produced the same pattern of results. These results were also obtained on both heard and read stories and comments. The analyses in the present study on the non-figurative and verbal irony items were also conducted factoring out individual difference and learning factors, which produced essentially the same pattern of results.

One potential question left unanswered by this study is whether verbal irony processing *inherently* poses relative difficulty (compared to non-figurative processing) as that shown with negated and counterfactual language. Although the current study suggests this is the correct interpretation, the task used could have inflated the difficulty of the irony processing. The task had included together both the ironic and non-ironic items. So participants were having to evaluate both sarcasm and non-figurative language together, and to respond to their sensibility. Planned future work will investigate the robustness of the inhibition effect with blocked presentation (i.e., having participants work with only non-figurative commentary or only sarcastic commentary, not the two mixed together). The relatively lighter load imposed on participants with blocked presentation might attenuate the strength of inhibition, or possibly even flip it to facilitation.

These results provide new evidence on how to think about the processing of verbal irony. They are informative to the theorizing on verbal irony much as the current work on ESs in metaphor is to models of that figurative form's processing. The results also obviate to a degree some of the past debates on verbal irony processing vis-à-vis stage arguments. As with metaphor, the reconceptualizing of representation and activation as embodied simulation enables us to accommodate aspects of opposing past accounts of verbal irony comprehension. Some of those accounts pointed to seeming roles being played by the so-called "literal" meanings of the surface forms involved. These accounts usually resorted to multiple stages of processing to bring this non-figurative influence in. But other accounts were supported by reading time data that often would show figurative language processing taking no longer than non-figurative language processing provided adequate contextual support is given. Such accounts accordingly begged against multi-stage accounts. Embodied simulations appear to bridge this difference – they afford means to bring in so-called "literal" meaning in the form of sensory and/or motor simulations. But they do away with the need to appeal to multiple stages and widely varying processing times.

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Verbal and situational irony

On the conceptual mechanisms underlying two patterns of irony

Branimir Belaj and Goran Tanacković Faletar
University of Osijek

Unlike metaphor and metonymy, irony has no "standardized" conceptual tools to rely on for its detection. The detection of irony proceeds entirely on-line; its comprehension does not rest on prior acquisition of conventional figures in the processes of language learning; it rests on our ability to establish, creatively and on-line, a dynamic relationship between our knowledge of language and the relevant information about the communicative situation and its protagonists. The goal of the present study is to shed light on the conceptual underpinnings of on-line interpretation of two main types of irony, verbal and situational, within a communicative context, using the methodological tools of cognitive linguistics, specifically Blending Theory (Fauconnier & Turner, 2002) and frame semantics (Fillmore, 1977, 1982, 1985).

Keywords: verbal irony, situational irony, Blending Theory, frame semantics

1. Introduction

The study of irony goes back as far as antiquity. In classical rhetoric, *irony* (Gr. *eironeía*) 'dissembling' was considered both a figure of speech (trope) and a figure of thought that rests on an incongruity between what is said and what is meant. In other words, the figurative meaning was seen as opposite to the literal meaning. In the 20th century, irony enters linguistics, first into the field of pragmatics Grice (1975, 1978) and later into psycholinguistics and cognitive linguistics. Kreuz & Roberts (1993) distinguish between four types of irony: (i) Socratic, (ii) dramatic, (iii) irony of fate, and (iv) verbal irony. Socratic irony has a pedagogical function, viz. the speaker leads the audience to cognitive insight while assuming a pretense of ignorance of a topic. In dramatic irony, the audience has some knowledge to which on-stage protagonists are oblivious. Irony of fate corresponds to situational irony. While there may indeed be viable grounds for distinguishing between various irony

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types,[1] all contemporary linguistic approaches to irony agree on one point – irony comes in two main types – verbal and situational.

In this chapter we discuss these two main types of irony in order to gain a deeper understanding of these irony patterns including the differences between them. The plan of the chapter is as follows: in Section 1 we give an overview of the major theoretical approaches to irony; Section 2 explains the theoretical and methodological framework adopted in this chapter, i.e. cognitive linguistics, specifically Blending Theory. Section 3 details the key differences between the two irony types, focusing first on verbal irony in Section 3.1 and then on situational irony in Section 3.2. The chapter ends with conclusions in Section 4.

Merriam-Webster Online Dictionary features two definitions of irony, which are consistent with the two main irony types. Within situational irony, two subsenses are distinguished. Verbal irony is thus defined as

1. a: the use of words to express something other than and especially the opposite of the literal meaning

and situational irony as

2. a(1): incongruity between the actual result of a sequence of events and the normal or expected result
   a(2): an event or result marked by such incongruity.[2]

   a situation in which something which was intended to have a particular result has the opposite or a very different result,…

while verbal irony is characterized as

> the use of words that are the opposite of what you mean, as a way of being funny[3]

The notions of opposition or incongruity are key components of some other definitions of verbal and situational irony. An opposition between what is said and what is meant lies at the heart of definitions of irony in the Gricean (1975, 1978) classical or standard pragmatic model. After all, juxtaposing the incongruous content of word and thought flouts the Maxim of Quality (be truthful).[4]

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1. For alternative taxonomies of irony see e.g. Muecke (1969) and Ruiz de Mendoza & Lozano-Palacio (2019).

2. https://www.merriam-webster.com/dictionary/irony

3. https://dictionary.cambridge.org/dictionary/english/irony

4. Although Grice emphasizes flouting of the Quality Maxim, irony in fact also implies a violation of other maxims, in particular, the Maxims of Relevance and Manner, and sometimes also the Maxim of Quantity.

Irony definitions based on the notion of opposition, like Grice's and those from classical rhetoric,[5] served as an important impetus to the first major theory of irony – the Mention Theory (Sperber & Wilson, 1981; Sperber, 1984; Jorgensen, Miller & Sperber, 1984; Wilson & Sperber, 1992, 2012). The Mention Theory rests on the distinction between *use* and *mention* (Sperber & Wilson, 1981), i.e., between reference and self-reference as in *Ivan je dobar učenik* / *Učenik je imenica muškoga roda* ('Ivan is a good student' / 'Student is a noun of masculine gender'). In an ironical utterance, the speaker echoes or paraphrases another person's utterance, or repeats an implicit socially accepted norm, joint expectations, antecedent events, etc. (Kreuz & Glucksberg, 1989). In doing so, the speaker expects the interlocutor to recognize both the source of, and the speaker's attitude toward, the utterance. The interlocutor is expected to detect what is typically negative evaluative irony, which may range from innocuous mocking – often accompanied by humor,[6] all through more radical, sarcastic forms of irony intended to disparage or offend (Colston, 1997; Toplak & Katz, 2000). Positive ironic utterances with a negative intended evaluation are the prototype (Kreuz & Link, 2002; Burgers & Steen, 2017). Thus, Coulson (2005) claims that when a negative ironic form is used of some positive reality, this must involve literal echo. Positive utterances with negative import, in turn, are not subject to this constraint since norms are, as a rule, positive and therefore prototypical, and positive utterances are much faster to recognize as ironic than negative ones (Kreuz & Glucksberg, 1989). Positive ironic utterances mitigate negative evaluation since the positive literal meaning cannot be ignored during the processing of irony (Dews & Winner 1995; Dews, Kaplan & Winner, 1995). At the same time, positive ironic utterances are perceived more negatively when the reality is moderately negative (Colston, 1997).

Later, in the framework of Relevance Theory, Sperber & Wilson (1986) and Wilson & Sperber (1992) situate irony in the broader context of the general principles of information processing, which includes a *cognitive environment* – memory, personal beliefs, assumptions, ongoing situation, antecedent discourse, cultural

5. The Gricean definition differs from that of classical rhetoric only insofar as in Grice's account, the ironic figurative meaning is considered a type of pragmatic implicature.

6. Humor often accompanies the recognition of an ironic relationship between elements of a situational frame. One could perhaps claim that irony and humor stand in a causal relationship, in which case irony could be seen as one of the many conceptual "triggers" of humor in an act of communication. However, irony also occurs independently; in other words, humor may, but need not attend irony. In fact, irony may be the source of humor, humor may be the source of irony, something else may be behind both irony and humor, etc. The relationship between humor and irony is a complex one and its discussion lies outside the scope of this chapter. For more detail, the reader is referred to Gibbs, Bryant & Colston (2014) and Bryant & Gibbs (2015).

values, encyclopedic knowledge, etc. The degree of relevance of the information processed is a trade-off between the effort invested by the speaker in communicating a message and the contextual effects achieved in the interlocutor. The magnitude of this effect is proportional, and the amount of effort invested is inversely proportional, to the degree of relevance achieved in the interlocutor. According to the so-called Principle of Relevance there is a presumption of relevance for every utterance made. Every utterance has a purpose and is designed to elicit desired effects in its intended audience. Thus, the goal of communication is to minimize processing effort while maximizing cognitive effects. In this broader framework, the notion of *echoic mention* was replaced with the idea of *interpretive resemblance*; the idea of *echoic utterances* gave way to the less restrictive notion of *echoic interpretations*. Verbal irony came to be understood as a variety of echoic interpretation, whose detection and processing depend on the interaction between linguistic form and a shared cognitive environment, and on consistency with the principle of relevance. Wilson & Sperber (1992) do not advocate opposition/contrast as a fundamental feature of every irony mainly because there are at least three types of ironic utterances that are inconsistent with the idea of opposition; viz. *ironical understatements*, *ironical quotations*, and *ironical interjections*.

Another highly influential theory of irony is the Pretense Theory (Clark & Gerrig, 1984; Kumon Nakamura, Glucksberg & Brown, 1995; Clark 1996; Currie, 2006). Unlike the Mention Theory, which is based on the echoic use of utterances, the Pretense Theory is informed by the metaphor of stage acting. Clark & Gerrig's (1984) theory leans on ancient Socratic irony, which is also reflected in Grice (1978). Clark and Gerrig (1984) in fact defend Grice from criticism levied by advocates of the Mention Theory, arguing that, when Grice spoke of the opposition between what is said and what is meant as a *sine qua non* of every irony instance, he actually appealed to pretense. The beauty of irony, according to Clark & Gerrig (1984), is in the covert "play" between the ironist and two types of audience – the comprehending audience who are privy to the irony based on background suppositions, convictions, and knowledge, and the uncomprehending audience. There is always a victim of irony and in the Pretense Theory there are two kinds: first, the uninformed, injudicious person the ironist is pretending to be and whose words the ironist is using ironically; second, the audience who understands ironic statements literally, fails to understand the ironist's intent, or both. Postulating these two victim types, according to Clark and Gerrig, is one of several key advantages of the Pretense Theory over the Mention Theory, as the latter cannot distinguish between them. The Pretense Theory is also argued to be superior in that the Mention Theory fails to capture the resemblance between verbal (rhetorical) irony, dramatic irony, and irony of fate. Thirdly, the Mention Theory is argued to be incapable of

explaining discourse irony.[7] The Pretense Theory, in contrast, can easily handle this because the different forms of irony can be linked on the basis of the two audience types. According to Clark and Gerrig, because of its superior explanatory value, the Pretense Theory is preferable to the Mention Theory.

It is beyond doubt that the Pretense Theory explains more by covering all types of irony, however, this does not mean that it should always be privileged. Although seemingly conflicting, the two theories in fact do not exclude each other. Quite the contrary, they are compatible since many ironic utterances can be explained in terms of either theory. As duly pointed out by Colston (2017, p. 33), the theories differ mainly in which aspects of irony they foreground. It seems then that the best, and arguably the necessary, way forward is in some form of integration, such as the approach advocated by Popa-Wyatt (2014), or any other that would marry both of the three basic features of irony, viz. echo and pretense. The third aspect of irony, viz. opposition, which was argued to be a key ingredient of every irony from antiquity to Grice, has come under considerable criticism mainly by proponents of the Mention Theory but also beyond. However, this criticism is ill-placed.

In the context of irony, opposition must be understood more broadly than antonymy, i.e. as more than merely opposition in language. Not only should it encompass pretense, as claimed by Clark & Gerrig (1984) in their defense of Grice; it should be reconstrued along the lines of how opposition in ironic utterances is handled in Partington (2007), Burgers, van Malken & Schellens (2011) and Burgers & Steen (2017). A broader view of opposition in irony should go beyond opposition in language and include, above all, a conceptual opposition or opposition at the level of thought, involving a shift in evaluative valence. When opposition is approached in this manner, then every irony will include opposition as its key property. Then, there is nothing controversial about Gibbs' (1986) oft-quoted example *I love people who signal* as an ironic comment on a driver who failed to signal before changing

7. This is supported by reference to the oft quoted essay by J. Swift "A Modest Proposal". Other authors also argue that the Mention Theory fails to account for the interpretation of irony in more complex discourse forms. For instance, Coulson (2005), who adds to the pool of criticism the problem of insincere questions, insincere offers, and overpolite requests. In his prototype-based Implicit Display Theory, Utsumi (2000) also underscores the inapplicability of the Mention Theory to many ironic utterances. Among others, he calls attention to cases when someone's utterances are echoed with no ironic intention. Utsumi is also critical of the Pretense Theory. He argues that the theory is ill-equipped to cover all instances of irony since not every irony involves pretense (Utsumi does not agree that pretense is involved in situations where e.g. a mother uses the positive utterance *I just love children who keep their rooms clean* to reprimand her child for not having cleaned the room). Conversely, he claims that there are cases of pretense that cannot be considered irony, e.g. parody.

lanes, which Coulson (2005) claims is a prototypical case of irony not involving opposition. Nor is there anything problematic about Wilson & Sperber's (1992) example used to support the same argument, viz. *Oh, Tuscany in May!*, an ironic echoic allusion to a friend's antecedent claim about the beautiful Tuscany weather in May, where the speaker's reality is completely different. It may well be that these examples and many more cannot be analyzed by reference to antonymy or formal opposition at the level of language. However, they can be seen as reflecting mental opposition and involving a shift in evaluative valence. So, mental opposition is involved even though it is true that e.g. *I love people who signal* does not mean 'I don't love people who signal' or 'I love people who don't signal'. It does not even mean 'I don't love people who don't' signal', although in the latter case the scope of negation comes closest to the intended meaning. Interestingly, when Coulson (2005, p. 129) argues "…the sarcasm seems to derive from the tension between the expected insult and the apparent compliment that is expressed", this is none other than a case of opposition based on a shift in evaluative valence, i.e. a conceptual opposition between the expected and the uttered.[8]

Also, in Utsumi's (2000) Implicit Display Theory, the interpretation of an utterance as ironic necessarily presupposes the existence of an ironic environment. The ironic environment represents an opposition between the expected and the realized event, where irony steps in as a way to express discontent with the event that occurred. In addition, the utterance itself must meet the conditions of allusion, pragmatic insincerity (Glucksberg 1995), and indirect expression of negative attitude. We may, therefore, speak of double opposition here: (i) opposition realized by the ironic utterance, viz. the opposition between what is said and what was expected to be said based on the three factors of implicit display mentioned above, and (ii) opposition as motivation for the ironic utterance, which hinges on the contrast between what was expected to happen and what actually happened. What adds to the importance of opposition in ironic utterances is the fact that the contrast between what is real and what was expected affects the intensity of irony. The bigger the contrast, the stronger the irony and vice versa (Colston 2017).[9]

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8. Coulson (2005) uses the example *I just love children who keep their rooms clean* to advance similar arguments against the presence of opposition in every case of irony (cf. also Utsumi, 2000). In this utterance, addressed by a mother to her child who failed to clean his room, opposition indeed remains formally unexpressed by any specific language form. However, there is an opposition based on a shift in evaluative valence.

9. Colston (2017) addresses various contrast-, and therefore irony-boosting, elements of ironic utterances. This includes, e.g. the presence of entities ranked higher on the scale of concreteness, a larger number of NPs, a salience of causality, various modal expressions, etc.

In the following we turn to the Blending Theory to discuss more fully the two basic types of irony – verbal and situational and gain a deeper understanding of these irony patterns including the differences between them.

2. Conceptual integration as a mechanism of interpreting and processing irony

There are at least three reasons why we adopt Blending Theory, also known as Conceptual Integration Theory, as a framework for a coherent discussion of irony as defined above and of differences between the processes governing the detection of verbal and situational irony.[10] First, as argued above, every ironic utterance assumes an opposition, i.e. a type of counterfactuality[11] regardless of whether the utterance features antonymy as opposition at the level of language form, or conceptual opposition involving a shift in evaluative valence. When the meaning of an utterance builds on an opposition of two opposing scenarios, the model of conceptual blending lends itself as the most fitting tool for its description within the cognitive linguistic framework:

> Human beings pretend, imitate, lie, fantasize, deceive, delude, consider alternatives, simulate, make models, and propose hypotheses. Our mental life depends in every way on counterfactual thinking, and the central engine of such thinking is conceptual integration. (Fauconnier & Turner, 2002, p. xiv–xv)

Secondly, Blending Theory, unlike most other cognitive linguistic models and beyond, is not limited to the analysis of verbal utterances and is therefore well-equipped to handle both verbal and situational irony. Thirdly, Blending Theory is compatible with all the major theories of irony. Insights from those theories can easily be incorporated into, and thereby support, the Blending Theory framework, as we illustrate in Section 3.1.1.

Blending Theory has been developed within the cognitive linguistic framework for some thirty years, mainly in the studies by Gilles Fauconnier and Mark Turner (Fauconnier & Turner, 1996, 1998, 1999, 2002; Turner & Fauconnier, 1995, 2000).[12]

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10. For a discussion of irony within the framework of Blending Theory see also Coulson (2005), Tobin & Israel (2012), Pálinkás (2014) and Tobin (2020).

11. For more on the use of Blending Theory to account for various types of counterfactuals, see Turner (1996), Coulson (2000), Fauconnier & Turner (2002, p. 217–247); also Belaj & Tanacković Faletar (2006) for a similar discussion of counterfactuals in Croatian.

12. Blending Theory had its precursor in Mental Space Theory (Fauconnier 1985, Fauconnier & Turner, 1994).

The road for the theory, however, had been paved earlier, specifically by Conceptual Metaphor Theory (Lakoff & Johnson, 1980), which had led Fauconnier and Turner to take a substantially different stance on the dynamics of cognitive processes. Conceptual Metaphor Theory assumes the standard two-domain approach to the analysis of figurative expressions. The theory tends to focus on conventional metaphorical expressions, which are widespread among members of a culture[13] and are motivated by the same conceptual metaphor.

Blending Theory does acknowledge the results of research done within the framework of Conceptual Metaphor Theory, and does not discount the part metaphor plays in the dynamics of cognitive processes. Still, unlike the two-domain model of Conceptual Metaphor Theory, Fauconnier and Turner advocate the so-called multi-space model shown in Figure 1, which in its prototypical cases includes:

- input space 1 and 2 (akin to source domain and target domain from Conceptual Metaphor Theory)
- generic space (contains schematic elements common to the input spaces, and represents their indirect link)
- blend (projection space, essential for the interpretation of an expression; a completely new scenario emerges in the blend, one that is composed not only of elements inherited from the inputs, but also novel elements that only emerge through running the scenario created in the blend).

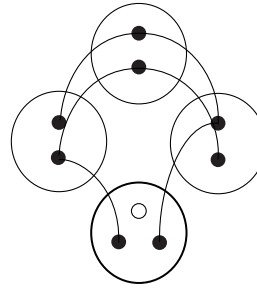

Figure 1. The basic model of conceptual integration

Blending Theory operates with the idea of "mental spaces", which is a notion different from that of "domains" from Conceptual Metaphor Theory. Blending Theory puts more emphasis on the dynamics of cognitive processes than their outcomes since mental spaces are defined as:

13. On the interdependence of conceptual metaphor and culture, see Kövecses (2005, 2006).

> … small conceptual packets constructed as we think and talk, for purposes of local understanding and action (…) They are interconnected, and can be modified as thought and discourse unfold. Mental spaces can be used generally to model dynamic mappings in thought and language. (Fauconnier & Turner, 2002, p. 40)

The approach to verbal irony presented in 3.1.1 is our proposal for a unified approach, where Blending Theory steps up as a framework capable of incorporating insights from the Mention Theory, the Pretense Theory, and the theory of an implicit display of ironic environment. Specifically, *echoing* and *pretense* are presented as two types of realization of an implicit display of ironic environment. The ironic environment manifests itself in contrasting elements from different input spaces, while its implicit display is immanent to the blend, where elements from the inputs become tightly integrated.[14]

3. Verbal and situational irony

Ironic situations are interpreted according to two basic conceptual patterns. One is involved in interpreting verbal irony, the other is responsible for non-verbal irony, but both patterns can be accommodated into the conceptual integration model. One of their key differences is in how exactly one builds the blended space, viz. the space that is crucial for detecting and interpreting irony.

In verbal irony, the blend is built by setting up a context (by verbal or situational means) that is in obvious contrast (incompatibility) with the expected situation. Here, the situational *frame* (Fillmore 1977, 1982, 1985) and the counterfactual element incongruent with that frame are projected into the blend from the inputs. The recognition of their incongruity is schematically depicted in the blend as an "explosion" (cf. Figure 2).

Unlike with verbal irony, the detection of situational irony runs in the opposite direction – from a situational element towards the situational frame that imposes some expectations concerning how the situation should evolve. That is why in Figure 3, we situate in Input space 2 the frame which we only become aware of after we have detected a situational element that attracts our attention (the x sign). From there, this frame is projected into the blend. This differs from the illustration in Figure 2, where the constituted situational frame is conceptually primary in

14. In Colston's (2017, p. 21–22) terminology *mental spaces* correspond in principle to the notion of a *schema*, and the combining of two schemas in an ironic utterance, which Colston calls *conjoined antonymy*, corresponds to the projection space, i.e. the blend. In Clark (1996), mental spaces correspond to so-called *layers* (*layer 1* and *layer 2*).

relation to the verbal element that we become aware of in the blend only after the frame has been constructed.

There is yet another, more important, difference between these two irony types. Just like verbal irony, situational irony also hinges on opposition and unexpectedness. Nevertheless, unlike the verbal type, situational irony is itself in most cases a compact, schematic, conventionalized configuration of a conceptual background, a situation/event type or frame, against which new specific instances of a situation/event are interpreted.[15] Instances and frames reinforce each other; repeating a situational/event pattern leads to its establishment as a conventional, culturally entrenched frame. Thereafter, each new case of the same type of situational irony is interpreted relative to the background of that schematic frame as its instance (we return to this in 2.3.2).

To summarize our discussion of the two conceptual patterns underlying verbal and situational irony, let us metaphorically refer to the first pattern of blend constitution as *ironic nesting* and to the second one as *ironic framing*.

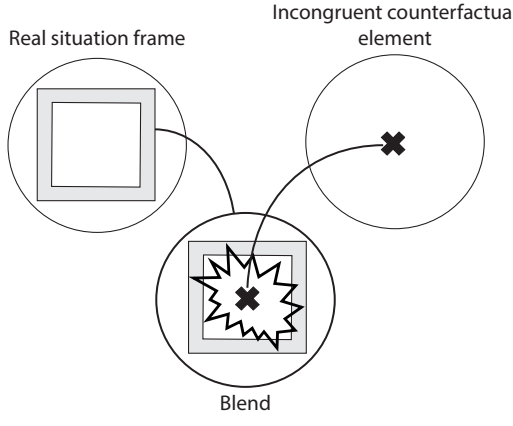

Figure 2. Ironic nesting

15. The inclusion of encyclopedic background knowledge in Fillmore's *scenes*-and-*frames* approach to meaning interpretation goes back to the end of 1960s and beginning of 1970s. This approach is best illustrated by replacing the question *What is the meaning of a form*? with "What do I need to know in order to use this form appropriately and to understand other people when they use it?" (Fillmore, 1971, p. 274).

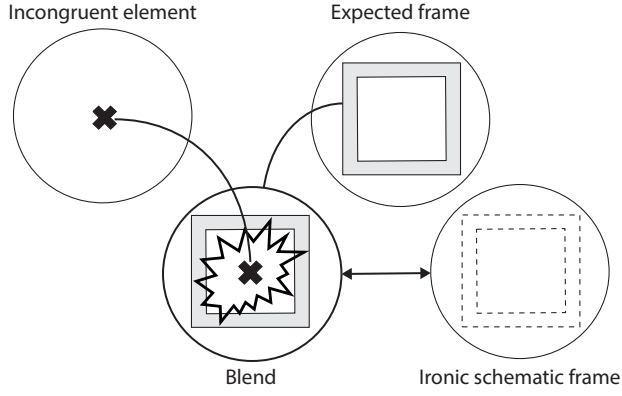

Figure 3. Ironic framing

We believe the two patterns of conceptual integration are capable of capturing the key differences between verbal and nonverbal irony. We would add though, that verbal irony is most often reinforced by a change in intonation, body language, and gesture (cf. e.g. Colston, 2020; Tabacaru, 2020). Ironic utterances also often feature syntactically marked constituent/word order (Haiman, 1998, p. 57; Escandell-Vidal & Leonetti, 2020). For instance, the Croatian utterances *Odlično si ti to uradio*! ('You did that beautifully', literally (approximately): Beautifully did you that do) and *Od velike si mi pomoći bio* ('You've been of great help to me'; literally (approximately): Of great help have you been to me') will very likely be received as ironic even with no supporting context, since the opposition-bearing elements are topicalized. Compare their neutral counterparts *Ti si to odlično uradio* ('You did that beautifully') and *Bio si mi od velike pomoći* ('You've been of great help to me').

What is also characteristic of verbal irony is the speaker's clear awareness and will, but not necessarily her intention, of constructing and conveying an ironic situation. Although most theories tacitly assume that irony unquestionably involves the ironist's conscious and rational decision, i.e. *deliberateness*, Gibbs (2012) and Gibbs & Samermit (2017) call this into question by claiming that irony is often a matter of an unplanned spur-of-the-moment decision. Therefore, we need to distinguish the speaker's awareness and willingness when making an ironic utterance – which must be there and may be momentary – from deliberateness, which takes longer as it implies a planned course of action aimed at achieving a specific goal of ironizing. Deliberateness is indeed present in many cases of irony. This is most prototypically so in Socratic irony, and in irony involving hierarchical ironists, who deploy irony in order to flaunt their superiority (intellectual, economic, cultural, political, etc.) over their audience (Ruiz de Mendoza, 2019). And yet in many cases, irony is indeed a product of context-bound, spontaneous decision-making.

In contrast, situational irony, whether or not it features verbal elements, is always characterized by chance, i.e. the ironic situation is not constructed deliberately. This leads to a higher degree of surprise when such irony is detected, and usually results in a stronger humorous effect. The following two sections analyze the two irony types in more detail.

3.1 Verbal irony

Unlike with metaphorical and metonymic utterances, interpreting ironic utterances is always conditioned by the context of the utterance. The success of processing irony depends on the conceptual activation of a cognitive environment (Sperber & Wilson, 1986) shared by the interlocutors, or the frames. Besides the ironic environment, which is a necessary condition for ironic utterances, the success of processing irony also depends on activating frames. Frames represent conventional conceptual backgrounds of structured knowledge relative to which the speaker builds, and the addressee interprets, an ironic statement. This occurs, of course, under the assumption that the speaker aims for the addressee to grasp the irony, which is the case in the majority of ironic utterances. We may speak of two types of frames that underpin ironic utterances, and on whose activation rests the success of irony interpretation:

i. *schematic frames* and
ii. *specific frames*.

3.1.1 *Ironic utterances based on schematic frames*

Schematic frames represent general background knowledge pertinent to the specific situation involved in ironizing. This includes conventional social norms, which the ironist may refer to by echoing. In such cases the ironist "changes the interlocutor's cognitive environment" by prompting them to conceptually access the frame of background knowledge necessary for interpreting the irony at hand. Such knowledge is part of the generic space. The generic space thus becomes salient, since the interpretation of the ironic utterance depends on its activation. Let us illustrate with an example of a conversation in (1) and it associated conceptual integration network in Figure 4:

(1) *X: Good morning, how are you? What can I get you?*
Y: I'm not that well, actually. I got my medical results and it seems I'm seriously ill… A box of Marlboro Red and this bottle of whiskey, please.
X: Sure, that will solve all your problems! Here you are! Have a nice day!

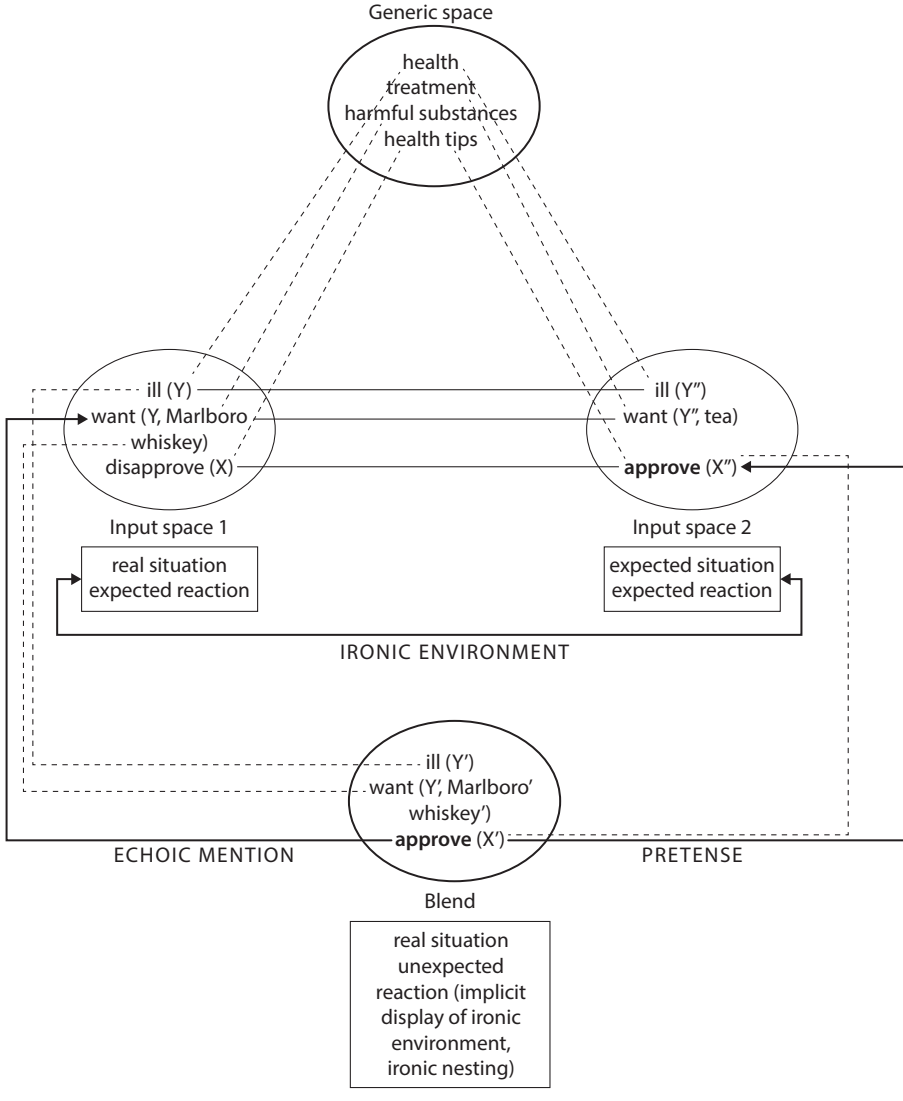

Figure 4. Ironic nesting based on a schematic frame in generic space

The first input space accommodates the real situation and the expected reaction to this situation. In this case, it is the clash between person Y's request and their state of health, including person X's incredulity and disapproval of the request. The second mental space includes Y's expected request given their condition and X's expected approval. The incongruity between the real and the expected situation creates an ironic environment, which motivates the ironic utterance in the blended

space. In other words, the ironic environment motivates the projection into the blend of Y's ill-health and request from input space 1 and the approval from input space 2. This discrepancy between the real situation and the unexpected reaction can be thought of the presence of a "cuckoo's egg" in the nest of an alien, unfitting frame. The ironic utterance *Sure, that will solve all your problems* is first of all an implicit echo of an element from input space one, conveyed by the demonstrative *that*. Because of its link to the literal approval from input space two, the ironic utterance can also be interpreted as a case of pretense.

The generic space is the key facilitator of this type of irony. As a schematic frame, it includes general knowledge and social norms concerning how consumption of certain foods and beverages may affect human health. Hence the heavier line of the circle representing this frame in Figure 4. In other words, despite the echo conveyed by the demonstrative *that*, in this case it is not the echo that motivates irony through frame activation (which is the case in e.g. *Oh, Tuscany in May!* (Wilson & Sperber, 1992), uttered at experiencing unexpectedly bad weather on visiting a friend in Tuscany during the month of May, despite the friend's earlier statement that Tuscany's weather in May is beautiful; or, in *What lovely weather!* (Sperber & Wilson, 1981), which echoes a weather forecaster's failed prediction that the weather would be nice). Irony is here activated by the VP *will solve all your problems*, which is meant to call up in the interlocutor the schematic frame of disease and treatment, which includes knowledge about harmful effects of alcohol and cigarettes and the need to avoid them when one's health has already been compromised.

Here is another example, from Ruiz de Mendoza & Lozano-Palacio (2019), where the success of interpreting irony depends on the activation of a schematic frame of general background knowledge. A foreign student in Germany walks into a bookstore and asks the seller if they had a copy of Hitler's Mein Kampf. When the seller remarks *"Of course we have that one; it's a best-seller in this country!"*, the interpreter, if he is to successfully read the irony, needs to activate the generic space and its schematic frame featuring knowledge about the condemning relationship of present-day Germany towards the German Reich.

The model of irony processing based on schematic frames in the generic space would also explain utterances like *Are you sure you don't want another slice of pizza?*, *I just love children who keep their rooms clean!*, and *Thanks for holding the door* (Coulson 2005), including the earlier mentioned example *I love people who signal* (Gibbs 1986, Coulson 2005, Pálinkás 2014, Ruiz de Mendoza & Lozano Palacio 2019). In all these ironic utterances, irony rests on echoing general social norms from the schematic frames that include knowledge about appropriate social behaviors. There is clearly an incongruity between these norms and the real situation subject to ironic disapproval. In the first example, the norm is proper dinner table

etiquette, the second norm concerns children's duty to keep their rooms tidy, the third is door etiquette and similar norms of social assistance, and the fourth governs normative traffic behavior.

3.1.2 *Ironic utterances based on specific frames*

Unlike with schematic frames, ironizing that builds on specific frames involves two types of situations. The first are references to another person's words uttered in antecedent discourse and their *echoing*. The goal is to express a negative attitude toward those words given the clash between the real and the expected situation. Examples include the oft quoted and here already mentioned examples *Oh, Tuscany in May!* and *What lovely weather!*. In the following, we shall explain this type of irony by analyzing an example from Croatian news discourse using the conceptual integration model. At one point at the end of the spring of 2020, when Croatia did not register any new Covid-19 cases, the Croatian Prime Minister exclaimed victoriously that we had beat Corona. Only a few months later, the incidence began to rapidly increase, leading to partial lockdown. One news reporter commented:

(2) *Over the past few days the number of new Covid cases has skyrocketed, more and more people need to be hospitalized, hospitals are filling up to their capacity and the death toll is on the rise – but, hey, don't you worry – we have beat Corona!*
(Figure 5)

As is the case with the ironic utterance tapping a schematic frame within the generic space (Figure 4), in this example too the first input space includes the real situation. Here, it is the unfavorable epidemiological trend in Croatia, high numbers of Covid-19 cases, and consequently a reasonably concerned reaction by the journalist. The second input space includes the favorable situation as would be expected given the Prime Minister's recent statement. Juxtaposing these two input spaces also creates an ironic environment conducive to the ironic utterance. But unlike (1), in example (2) the ironic utterance and its processing are not associated with general knowledge about Covid-19 as a schematic frame. The cognitive environment relative to which irony emerges and is interpreted in the blend, is a specific utterance made at an earlier time. Therefore, irony rests on activating a specific frame which must reside in the third input space, from where the ironist pulls someone's, here the Prime Minister's, words by echoing, and where, through pretense, the ironist reverses roles. The unfavorable situation is thus ironically presented as favorable, but only to communicate a negative attitude. The person whose words are being echoed is a victim of the irony. In this case, the generic space is backgrounded since it does not contribute directly to the interpretation of irony. Its role is only to facilitate or license mappings of specific elements from the various input spaces based on their commonality. Therefore, in Figure 5 the generic space is marked

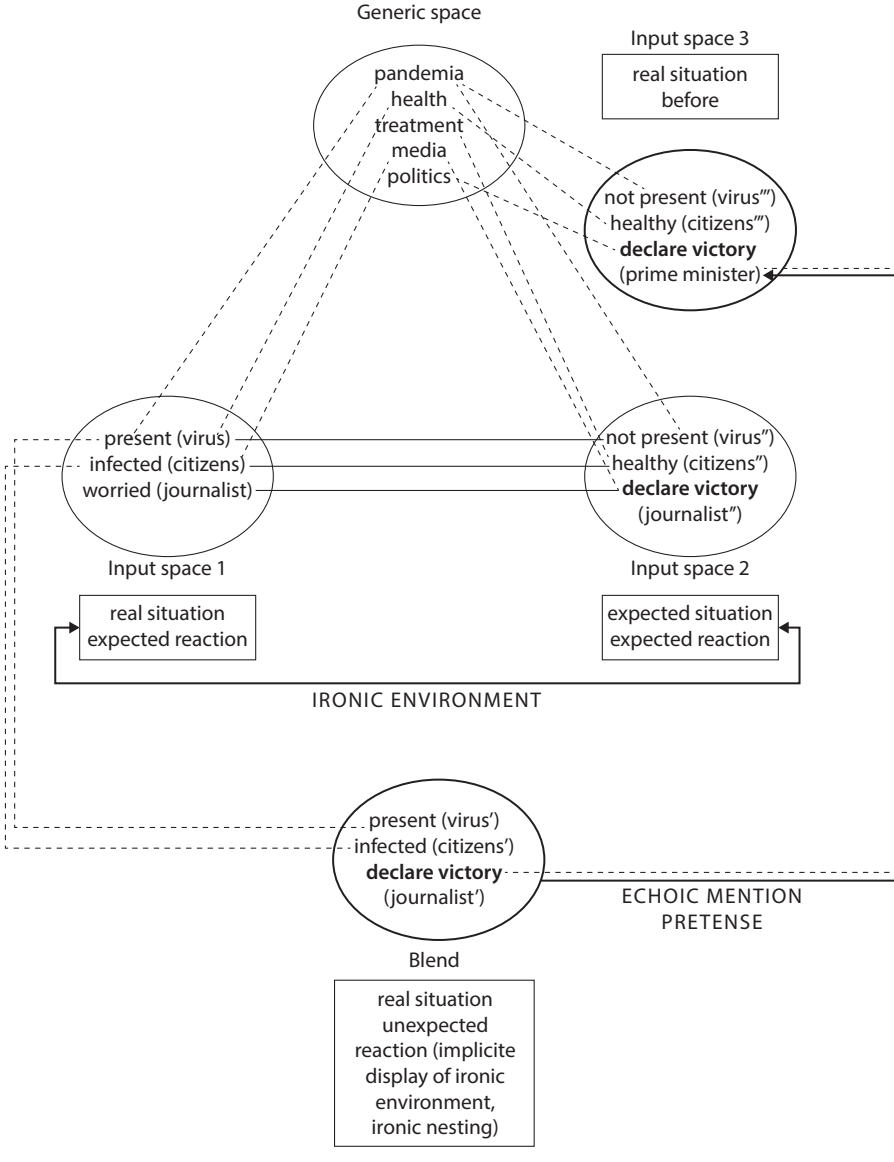

Figure 5. Ironic nesting based on a specific frame in input space

with a thinner line, and the third input space is marked with a thick solid line to highlight its role as the basis of ironizing.

As for the speed of processing irony, Gibbs (1986) showed that ironic utterances based on echoing, i.e. those that rest on the activation of more specific frames, are processed faster. This is perfectly reasonable since interpreting irony that involves activating more schematic frames, viz. configurations of general knowledge,

requires some degree of knowledge in those processing such ironies. Of course, the amount and depth of this knowledge varies from person to person. Similarly, in line with Gibbs' (1986) arguments, it stands to reason that ironic utterances that echo the words uttered by the interlocutor would be processed faster than those uttered by a third party. Thus, there is no doubt that the addressee will easily grasp the irony in examples like *Oh, Tuscany in May!* In our Example (2), however, it is likely that within the audience of those who heard the journalist's comment, there would be those who had not heard the Prime Minister's antecedent statement, and would therefore be unable to interpret this irony.[16]

3.2 Situational irony

The conceptual process that we called ironic framing is associated with situational irony. Unlike ironic nesting, where an incongruent element of a situation is "planted" into a previously established situational frame, in ironic framing a specific situational element is "padded up" by an incongruent situational frame later in the course of conceptual processing. Situational irony rests on juxtaposing contradictory elements of an event. The event is opposite to what was expected or involves a contradictory outcome (Muecke, 1969). Situational irony is, thus, construable as a theory of irregularities in human activity (Lucariello, 1994) and in that sense, opposition – but more broadly construed – can be considered a key feature of situational irony too. Unintentional irony is also a form of situational irony (Gibbs, O'Brien & Doolittle, 1995; Lucariello, 1994). Unintentional irony includes verbal or nonverbal events that are interpreted ironically even though irony was not intentionally or deliberately produced by either the speaker or event participants. This suggests that, unlike with verbal irony, in situational ironies that include a speech act, the speaker is not an agent but an involuntary agent.

Situational irony (Muecke, 1969; Littman & Mey, 1991; Lucariello, 1994; Shelley, 2001) has received far less scholarly attention than verbal irony. Among the more notable contributions, we single out Lucariello (1994), which posits seven types of situational irony (*Imbalances*, *Losses*, *Wins*, *Double Outcomes*, *Dramatic*, *Catch-22* and *Coincidence*) and twenty eight subtypes. In these various types, situational irony arises through combining four features: *unexpectedness*, *human frailty*, *outcome* and *opposition*, of which, according to Lucariello, unexpectedness is the only one shared

16. Incidentally, when it comes to processing irony or figurative expressions generally, Gibbs (1979, 1980, 1983, 1984, 1986) claims that interpreting figurative meanings does not depend on interpreting literal meanings and that one does not need to attend to the literal first before figuring out the figurative meaning (*direct access account*). Evidence for an alternative view, where the interpretation of ironic meanings takes longer than the interpretation of literal meanings, can be found in Dews & Winner (1999) and Schwoebel et al. (2000).

by all types. Lucariello does not consider oppositeness as a defining feature of irony because of her literal understanding of the concept (under the literal interpretation, there is indeed no opposition in the types *Coincidence* or *Catch-22*). But if construed more broadly as a shift in observer's evaluative valence, then oppositeness can be argued to underlie all types of situational irony too.

Lucariello distinguishes between three event types: nonironic events for which there is a script, i.e. the *expected-scripted* type, *unexpected ironic* events and *unexpected nonironic*, *idiosyncratic* events. In this system, unexpected nonironic events are more ironic than expected ones because unexpectedness is a key feature of every situational irony. Lucariello takes the term *script*, corresponding in principle to Fillmore's frames,[17] from Schank & Abelson (1977) and uses it in the sense of a *mental representation* or *schema for expected events* or *regular knowledge structures*, while situational irony, i.e. unexpected ironic events are defined as *general schematic knowledge structures*. To our mind, there is no reason not to include the notion of frames in the interpretation of nonironic expected and unexpected ironic events alike. Granted, different types of nonironic expected events are always interpreted against background knowledge structures of the same or at least similar degree of conventionality and cognitive-cultural entrenchment. With unexpected ironic events, i.e. situational ironies, this is not the case, and different types and subtypes of situational irony vary in the degree of conventionality and cognitive entrenchment of the frames against which they are interpreted. Thus, for instance, *Deserved Losses* or *Sequential Wins → Losses* are interpreted based on highly conventionalized and deeply entrenched frames. This is supported by the fact that, in many cultures, these types have assumed something of a proverbial character due to their frequency. The type *Deserved Losses* is reflected in the proverb *Tko pod drugim jamu kopa, sam u nju upada* ('what goes around comes around' lit. He who digs a whole under another, will fall into it himself). *Sequential Wins → Losses* is mirrored in the proverb *Pazi što želiš da to i ne dobiješ* ('beware what you wish for'). Some subtypes of situational irony correspond to sayings that emerged from the equally conventional and entrenched frames. For instance, for the subtype *Simultaneous Wins and Losses* there is a common saying *Naći ćeš to kad se najmanje budeš nadao* ('You'll find it when you least expect it'). The saying has become established because of repeated experiences of people investing a lot of energy into finding something only to find it in the least expected or closest possible place, etc. In many cases, however, the frames are far less conventionalized, i.e. in the various subtypes of *Imbalances*.

17. In cognitive linguistics and beyond, several terms that correspond more or less to Fillmore's frames enjoy currency. For instance, in Langacker (1987, p. 147) these are *domain* and *domain matrix*, in Lakoff (1987) *Idealized Cognitive Model* (ICM), in Palmer (1996, p. 75) *scenario*.

We explain below the constitution and interpretation of two examples of situational irony using the conceptual integration model.

3.2.1 *Situational irony associated with the less conventional frames*

Example (3) involves an interpretation associated with the less conventional frame of *Situational Imbalance*:

(3) *A famous TV weatherman organizes a big garden party for his child's eighth birthday. Ten minutes after the party starts, the guests are chased away by a heavy thunderstorm.*

The first input space includes a storm as an incompatible situational element. The second input includes the expected situation, i.e. nice weather that would allow the party to proceed. As in verbal irony, the conceptual juxtaposition of the two input spaces creates an *ironic environment*, that is, prepares ground for situational irony. The generic space includes schematic elements abstracted away from shared elements of the inputs, thus licensing their mapping. In the blend, the inappropriate situational element (*thunderstorm*) from input space 1 replaces its antonym (*nice weather*) from the expected frame of input space 2, thereby creating a counterfactual ironic situation. The latter is interpreted in the blend relative to the background knowledge structured by the Situational Imbalance frame.

Detecting the ironic relationship begins by recognizing the situational element which, for some reason, attracts attention (guests leaving the garden party due to a thunderstorm). It is only in the later stages of blend composition that this conspicuous situational element is embedded into a then activated incompatible situational frame. Crucially, this frame imposes substantially different expectations concerning how the situation should evolve, but is invited into the blend because the interpreter has some relevant knowledge about the protagonists or other aspects of the situation (e.g. the fact that the party was organized by a well-known weather forecaster). The detection of incompatibility, i.e. incongruence between two elements in the blend has a humorous effect. Running the blend composed in this manner makes it obvious why it is funny for a thunderstorm to interrupt a garden party organized by a famous TV weather forecaster and not when it happens at the party organized by someone else. Therefore, a contrast between the opposing elements of an ironic environment, which Colston (2017) discusses in reference to verbal irony, arguably has an even more important role in the processing of situational irony. This is also because, unlike verbal irony, situational irony involves visual perception, which makes the opposition even more conspicuous to the observer. Thus, is (3) the contrast is sharper and the irony is stronger not only because a thunderstorm interrupted the party of a famous weather forecaster but also because the storm itself is of high intensity, not just harmless rain (Figure 6).

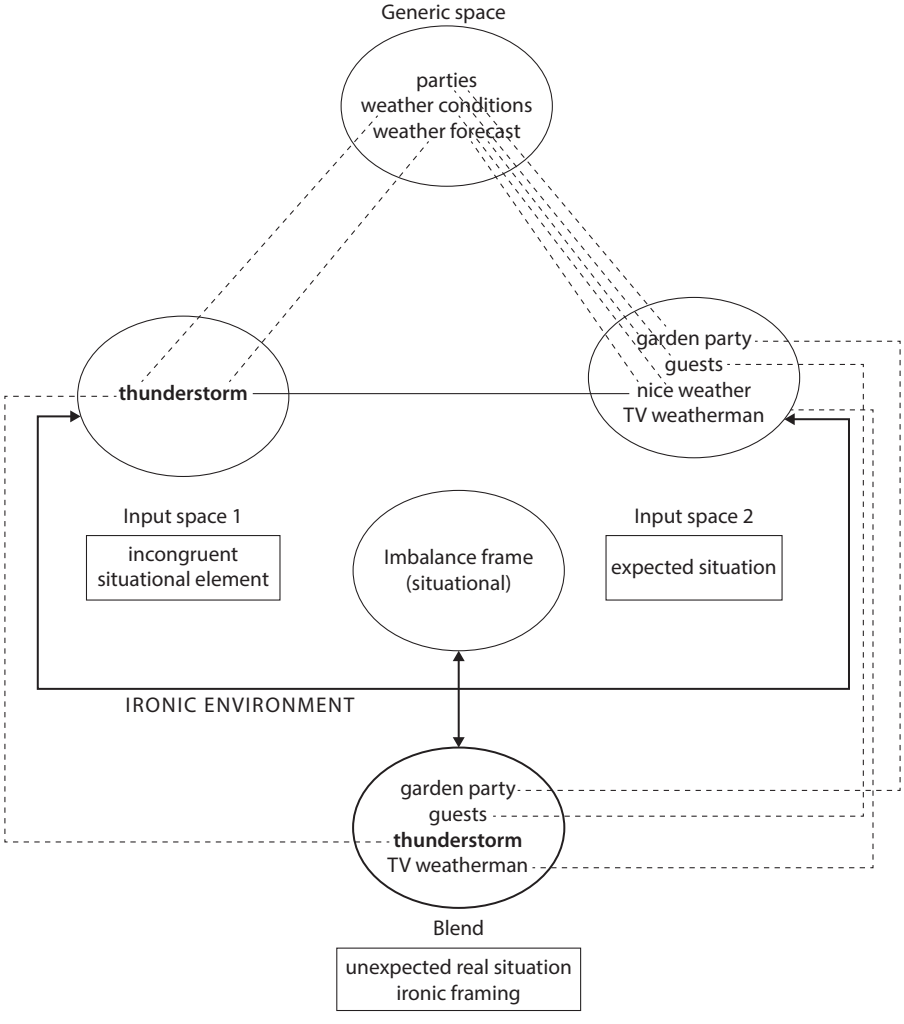

Figure 6. Ironic framing in situational irony with a less salient ironic frame

3.2.2 *Situational irony associated with highly conventional frames*

The interpretation of (4), in turn, is based on activating a highly conventional and entrenched frame:

(4) *John has been playing lottery for years and has always dreamt of a big win. He finally strikes it lucky and becomes rich. Over time, his initial happiness degrades into misery because John is becoming more and more obsessed with money and for fear of losing it he becomes physically and emotionally unstable.*

The process of conceptual integration, shown in Figure 7, includes an interaction inside the blend of elements inherited from the two input spaces, exactly as in Figure 6. The only difference is in the degree of cognitive entrenchment of the frames relative to which the situation is interpreted. A stronger degree of entrenchment, and with it a higher salience of the *Double outcome* frame, is iconically marked by a thicker line on the circle representing this frame. The more conventional and culturally ingrained a frame, the higher its salience in processing ironic situations.

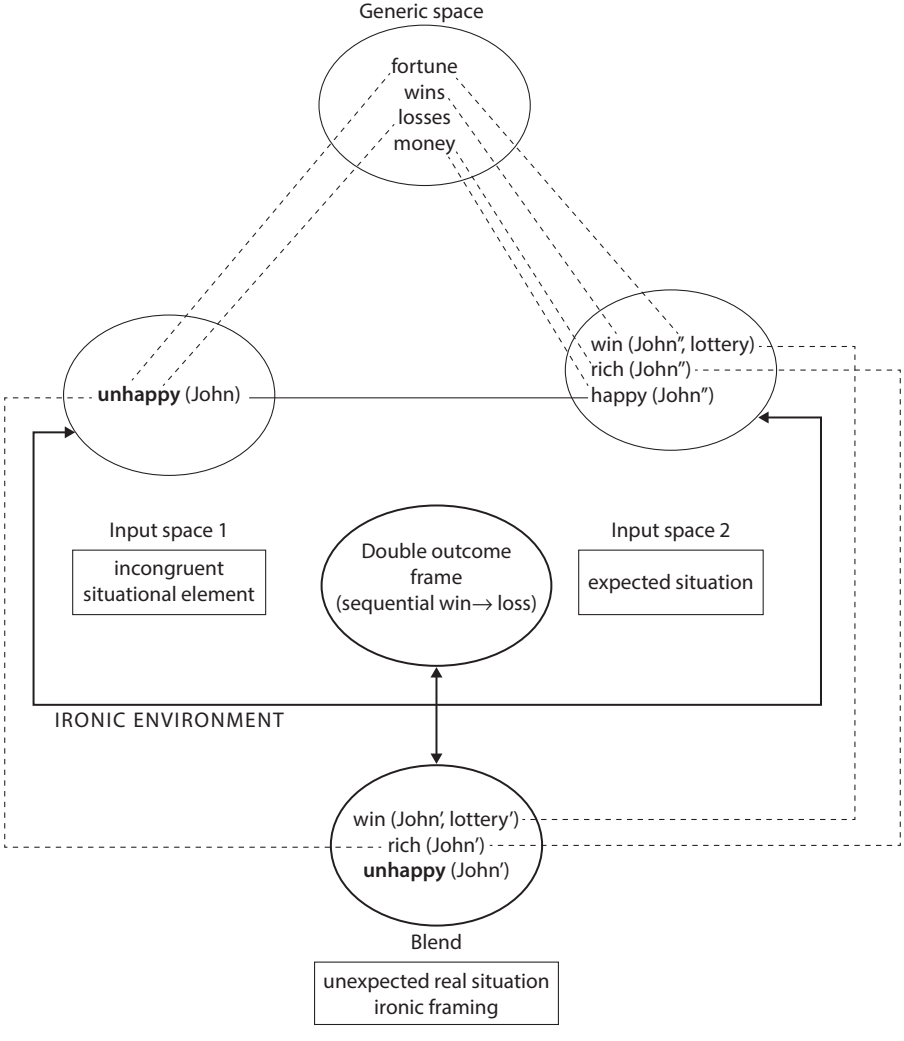

Figure 7. Ironic framing in situational irony with a more salient ironic frame

4. Conclusion

In this study we applied the conceptual integration model to examples of verbal and situational irony in an attempt to explicate patterns of their interpretation. We argued that this model is the best-equipped model within the cognitive linguistic framework to handle the analysis of ironic utterances. Firstly, because every irony assumes opposition in the form of a shift in evaluative valence, i.e. various forms of counterfactuality – and Blending Theory has already proven to be the most apt methodological tool for analyzing verbal and nonverbal counterfactuals. Secondly, the analytical model of conceptual integration is compatible with all of the most influential theories of irony (*Echoic Mention*, *Pretense*, *Implicit Display of Ironic Environment*), and also with some we have not addressed here, such as Shelley's 2001 *Bicoherence Theory* and Tobin & Israel's 2012 and Tobin's 2020 *Viewpoint Theory*). Each of these approaches contributes in its own way to understanding particular aspects of the emergence and interpretation of irony within the conceptual integration model.

Our analysis has shown that, although the results of interpreting the two irony types may be the same, the interpretations of verbal and situational irony in fact run in opposite directions. A closer analysis of how a blend is constructed by selectively projecting elements from input spaces revealed that the blend inherits the situational frame from one input space; from the other it only inherits a specific element of the current situation.

The order of projections of those elements into the blend was argued to be different in the two patterns of irony interpretation. In the case of verbal irony, the construction of the blend begins by setting up a situational frame, aided to some extent by the manner and intonation of speech, body language, gestures etc. This results in a "faux" situational frame, where, through pretense, the speaker comes across as being honest and serious. The recognition of verbal irony was metaphorically represented as a case of an unexpected detection of a cuckoo's egg in another bird's nest and the process of constructing the blend in this way was called *ironic nesting*.

In our analysis of verbal irony, we underscored the importance of distinguishing between schematic and specific frames, since the interpretation of irony rests crucially on their activation. Schematic frames, we argued, are located in the generic space, and include generically structured background knowledge, which includes various *echoes* or *echoic mentions* of social norms. Activating specific frames, in turn, involves ironizing by echoing the words of the interlocutor or someone else from an antecedent situation evoked by the ironic utterance. Such frames were argued to be part of the third input space.

The interpretation of situational irony was argued to run in the opposite direction. In situational irony, the projection of a certain situational element from Input

space 1 into the blend precedes the projection of the situational frame from Input space 2. Irony resides in the incompatibility of the two elements projected into the blend. Its interpretation involves first of all detecting an aspect of the current situation that, due to its oddity or unexpectedness, draws the interpreter's attention. This was argued to be the first phase of blend construction in the detection of situational irony. Then follows the projection into the blend of an element of the same situation which, for some reason, suggests to the interpreter that the situation should develop in a markedly different way. As a result, the situational element that initially attracted the interpreter's attention becomes embedded into an incompatible situational frame. This enhances the perception of its incongruity with the expected situation, as if it were pinned against a contrasting surface. To use some colorful analogy again, we could compare the detection of situational irony to reframing a photograph or a painting using a frame that does not suit the content in style, color, shape, size, etc. This imagery was, incidentally, our primary motive for using the term ironic framing in reference to this sequence of projecting elements of input spaces into the blend.

The second, perhaps, more important reason is that the frequent repetition of various instances of situational irony of the same type leads over time to the abstraction, i.e. schematization of an event structure. In other words, from this arise conventional frames of background knowledge of various degrees of entrenchment that generalize over various instances of situational irony of the same type. In this way, paradoxically, and ironically, situational irony, which aims to subvert common, predictable situational frames, may become an established, predictable frame itself.

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PART 4

Figurative thought and language in use

Metonymies of migration

Media discourse about and by migrants

Theresa Catalano and Linda R. Waugh
University of Nebraska-Lincoln / University of Arizona

This chapter uses critical discourse studies (CDS) combined with metonymy/metaphor analysis to explore the difference between metonymies used to talk about migration/migrants in media discourse and those used by migrants themselves. Findings reveal differences between the way metonymies (and metaphors motivated by them) are used by migrants as opposed to a variety of media sources (e.g. online newspapers, television reports) and what this reveals about migration. Furthermore, while migrants are impacted in various ways by discourse about them, they are still able to think and talk about themselves in positive, holistic, and varied ways. The authors conclude that critical metonymy/metaphor analysis allows for alternative ways of envisioning migration and globally mobile people.

Keywords: metonymy, metaphor, migration, migrants, media discourse

1. Introduction

In today's increasingly mobile, transnational and superdiverse world, anti-immigrant sentiment increasingly permeates societies across the globe. Media discourse influences, produces and reproduces discourses prevalent in society. As such, it is an important genre with which to gauge public opinion. The use of figuration (especially figurative language) in media discourse has had a great impact on public opinion about migrants (Catalano, 2013) and on the lives of migrants themselves (Leudar et al, 2008). In this chapter, we focus on how metonymies in media discourse (and the metaphors they motivate) are used for political purposes and the way they are perceived by migrants. In addition, we compare media discourse about migration to the way that migrants talk about themselves with the aim of bringing to the forefront alternative ways of imagining migration experiences.

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2. Theoretical framework

2.1 Migrants and metonymy

For the purposes of this chapter, we use "migrants" as an umbrella term to include all those who fit the following UNICEF definition:

> Individuals who are moving or have moved across an international border or within a state away from their habitual place of residence, regardless of: (1) the person's legal status; (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of the stay is.
>
> (Garin et al, 2016, p. 14)

As such, when discussing interview data, refugees, asylum seekers, economic (im) migrants, etc. will all be referred to in terms of each individual's own identification or experiences, but when talking about migrants in a general sense, we adopt this term.

Metonymy is the use of language and visual communication that "allows us to use one well-understood aspect of something to stand for the thing as a whole" (Littlemore, 2015, p. 4). Like metaphor, it "plays a key role in helping us make sense of the world" and "shapes the way we think and the way we influence the thoughts of others" (Littlemore, 2015, p.191, 197). Below is an example of the role of metonymy in migration discourse (bolding of words is done by the authors and indicates metonymies focused on in the discussion):

> "**tracking** the **border children** is the only way to ensure they are not getting federal and state benefits". (Bergin, 2014, as cited in Catalano, 2017, p. 131)

The example above shows how metonymies and metaphors interact. The excerpt was taken from an article recounting the immigration of unaccompanied children from Central America to the U.S. The expression "border children" that refers to these children who are apprehended while trying to come to the United States is a PLACE FOR EVENT HAPPENING AT THAT PLACE metonymy in the sense that the border stands for the event of apprehending children there. It is also an ATTRIBUTE FOR ENTITY metonymy in which the place where the children were apprehended is highlighted as the children's defining characteristic. Assuming there are two areas and a border between them, the border itself does not belong to either of them, but it metonymically extends to cover the area that is not where the speaker and addressee are. It is a place that is exotic, fraught, distant, and, most importantly, not 'here', detaching the children from the circumstances (and U.S. Central American policies) that could illuminate one dimension of the U.S.'s own responsibility (Catalano, 2017). This metonymy works well for those who wish to use the discourse about the unaccompanied children to connect to the larger political agenda of "securing the

border." By forefronting "border" over and over (there were 11 tokens in this one article), an unconscious connection is made between the children and government policies that (at least some) people want to see enforced. In addition, by using the metaphorical linguistic expression "tracking" together with the metonymy for these immigrant children, the metaphor IMMIGRANTS ARE ANIMALS is produced.

2.2 Critical discourse studies + metonymy/metaphor analysis

Critical discourse studies (CDS) is a transdisciplinary, eclectic and problem-oriented approach that "emphasizes the way in which language is implicated in issues such as power and ideology that determine how language is used, what effect it has, and how it reflects, serves, and furthers the interests, positions, perspectives, and values of, those who are in power" (Waugh, Catalano, Masaeed, Hong Do & Renigar, 2015, p. 72). As such, CDS will be particularly useful for the purposes of this paper in which we seek to understand the ways that language shapes public opinion about migrants, and thus how this language affects migrants.

Critical metonymy/metaphor analysis (CMA[1]) is the combination of critical discourse studies and metonymy/metaphor analysis which focuses on the role of metonymy and/or metaphor in influencing public opinion, but also the study of how metonymies lead to metaphors that become powerful rhetorical tools that are often echoed and repeated in mainstream media discourse (Portero-Muñoz, 2011). According to Charteris-Black (2014, p. 203), critical explanation of metonymy/metaphor involves working out exactly what is obscured by the use of these tropes. In addition, when critically examining metonymies/metaphors, it is helpful to think about alternative choices that could have been made in order to represent the same thing/ person/ event. Referring back to our example of "border children," Catalano (2017) revealed that this metonymy was particularly useful in connecting discourse about child migrants to border security. She found that the use of "border" obscured the fact that these children have little to do with the physical border itself (e.g. the demarcation line between the US and Mexico), other than the one moment in which they are apprehended there, and more with the US policies having to do with those who cross the border. In this case, it is also helpful to look at how metonymies are used over time. In a www.google.com search of articles about unaccompanied children from Central America in 2018, we found that "border children" had faded from media discourse and was largely replaced by "separated children" or similar phrases that convey a more humanitarian approach (and moral

1. The term "CMA" includes both metonymy and metaphor.

dismay) at President Donald Trump's so-called "zero tolerance policy" which separated children from their parents in order to detain the parents.[2] Thus, a CMA approach not only breaks down the process of metonymy so we can understand the stand-for relationship, but it helps us comprehend the way these metonymies (and metaphors they lead to) might influence public opinion on immigration policy, whether for or against it.

2.3 Figurative language and migration discourse

There are numerous studies that examine the use of metaphor in media discourse about migration. While we cannot cover all the work done in this area, we will highlight a few important ones. Santa Ana's (1999, 2002) work on metaphor in discourse about migration in the *L.A. Times* found ANIMAL and WATER metaphors to be prevalent in immigration discourse while his later study (2013) established that animal metaphors were largely replaced by CRIME metaphors which equated (im)migrants to criminals. Despite the fact that studies show that immigrants commit less violent crimes than native-born citizens (Ingraham, 2018), this false idea is so frequent in the media that much of the public thinks the opposite. Catalano and Waugh (2013) show that frequently, migrant crimes are highlighted and used for political purposes (see Mettler et al, 2018 about Trump forefronting crimes by migrants with the homicide of an Iowa college student). This type of emphasizing of crimes has led to the perpetuation of the IMMIGRANTS ARE CRIMINALS metaphor (Santa Ana, 2013), which was capitalized on by Trump in his election campaign to be President of the US. Unfortunately, since the 2016 election, use of this metaphor in media discourse has only become more prevalent.

In regard to immigration policy, Charteris-Black (2006) investigated how metaphors were used in the 2005 British election campaign to legitimize right-wing political communication. In his study, he found metaphors of NATURAL DISASTER and CONTAINER (in terms of pressure building and a notion of a bounded area protecting within from danger outside it) to be most prevalent. Hart's (2010, p. 144) findings were similar, stating that the frames of WAR and CONTAINER were the most commonly found, which was confirmed by other studies such as El Refaie (2001), Chilton (2004) and Semino (2008). Cisneros (2008) provides a nice overview of metaphors of immigrants and immigration that appear frequently in the literature. In addition, he examines the visual representations (images) of immigrants in television news segments from major news networks in the U.S. of various political

2. See http://time.com/5314769/family-separation-policy-donald-trump/ for details on Trump's 'zero tolerance policy' and its effects.

tendencies, finding that they are portrayed as contaminating communities and the environment. Interestingly, when images of immigrants being captured or arrested are featured through night vision lenses, their bodies take on strange neon green luminosity, blending together. Cisneros argues that this footage creates an impression of an ominous and oncoming stream of toxic green pollution, which constructs immigration as a mobile, toxic threat (2008, p. 581).This green neon light that is often featured in reports on migration may also evoke the image/concept of aliens, and the lexical item associated with it is polysemous, thus also activating the concept of alien as a non-citizen, legal or illegal.

Along these same lines, Musolff (2012) explored the representation of migrants and minorities as parasites in racist discourse and traces PARASITE "scrounging" metaphors (e.g., "foreign scroungers", "parasites with a German passport") to Nazi discourse and the Holocaust. Continuing his discourse-historical approach, based on Wodak (2009), to metaphor analysis (i.e., looking at their prevalence in discourse over time), Musolff (2016) discusses the metaphor scenarios, "shorthand narratives with a default argumentative, emotional and interactional appeal which become commonplace in the respective discourse community" (2016, p. 137), that are most commonly found in migration discourse. His findings showed the most common scenarios to be (a) The SPACE-CONTAINER scenario, in which the nation-state is conceptualized as a container with distinct boundaries (as mentioned above in the work of Charteris-Black (2006) and Hart (2010); (b) The MOVEMENT scenario in which migrants are represented as dangerous, moving water (discussed below); (c) The ACTION scenario in terms of people being responsible for "letting in" or "sending back" migrants; and (d) The EFFECT scenario which imagines several disparate (both negative and positive) results, such as the takeover of the dominant culture by immigrants, the gains society could achieve by receiving the best and brightest of immigrant populations, and that of parasites who "scrounge" (e.g., social scroungers who "suck" the country of resources) (2016, p. 82–84).

In Viola and Musolff's (2019) volume, *Migration and media: Discourses about identities in crisis*, several studies tackle the role of migration in media discourse related to the recent European migrant crisis. For example, Arcimaviciene (2019) analyzes media texts collected from the US and UK online media sources in 2015–2017 on that topic, considering whether gender and metaphor correlate when migration issues are discussed by media representatives. Using *Metaphor Identification Procedure* (Pragglejaz Group, 2007), the author also discusses how particular frames (i.e. objects, natural phenomena, crimes, war and terrorism) contribute to suppressing positive emotions such as empathy or compassion for the migrants. Silaški and Đurović (2019) examine linguistic and multimodal instantiations of the WALL metaphor in Serbian media texts published in 2015, aiming to identify the most

frequent scenarios modelled around this metaphor in a critical period during the European migrant crisis.

While we have discussed mainly studies that focus on metaphor, a few studies on migration discourse have dealt significantly with (multimodal, i.e. textual and visual) metonymy, such as Catalano and Waugh (2013, mentioned earlier), which compared the representation of undocumented migrants in U.S. news reports reporting crimes to similar reports of CEOs and their crimes. Findings from this study show that while discourse reporting CEO crimes contains frequent metonymies of SIMPLIFIED EVENT FOR COMPLEX SUB-EVENTS and INSTITUTION FOR PERSON in which crimes were reported in vague and incomplete ways and individuals were not held responsible for their crimes, metonymies of migrants dehumanize them and place them firmly in the crime frame (e.g., "illegal alien"). In addition, the DEFINING PROPERTY FOR CATEGORY metonymy is commonly used to highlight migrants' qualities of the "Other" with nationyms such as "Mexican." In image, CEOs were represented as friendly and kind through the stand-for relationship between their emotions and their defining properties (e.g., smiling) while migrants were shown in unflattering 'mug shots.'

Another study that focuses significant attention on (multimodal) metonymy is Catalano and Musolff (2019). In this study, the authors attend to verbal and visual metonymies that dehumanize and criminalize child migrants in online news sources that report on unaccompanied youths from Central America and Border Patrol/immigration officials in the U.S. Findings reveal metonymies of FOREIGN BEING FOR HUMAN, DEFINING PROPERTY FOR PERSON (e.g., criminals) to represent migrant children while metonymies such as ACTIONS OF SOLDIERS/ SENTINEL/OR COWBOYS FOR ACTIONS OF BORDER PATROL lead to WAR/WILD WEST metaphors that justify the militarization of the border, and therefore help garner public support for unjust policies and treatment of migrants.

While it is clear from the brief summary above that there is much scholarship that examines media discourse and figurative language regarding immigration discourse, there is little research that reports on the use of figurative language about migration in the discourse of migrants themselves. Two studies that have done this (Catalano, 2016 and Catalano & Mitchell-McCollough, 2019), show that there are great differences in the way that migrants talk about migration versus how the media reports it. However, only Catalano (2016) focuses attention on metonymy. Hence, our study builds on these earlier studies utilizing data from both in order to go into depth on the role of metonymy in revealing how migrants conceptualize immigration. While we cannot (and do not) ignore metaphors that are motivated by these metonymies, our main focus will be on metonymy's important role and how these metonymies change depending on the source.

3. Method

Data for this study consists of examples of metonymies in migration discourse from published studies (See Table 1).

Table 1. Data sources: Analyses of media discourse on migrants/migration

Source	Description
Charteris-Black (2006)	Book that investigates how metaphors were used in the 2005 British election campaign to legitimize right-wing political communication
Cisneros (2008)	Article that provides an overview of most commonly found metaphors of immigrants/immigration
Hart (2010)	Book on cognitive linguistics and critical discourse studies which features data from media discourse on immigration
Musolff (2012)	Book chapter that discusses the representation of migrants as parasites in racist discourses
Musolff (2O16)	Book on metaphor scenarios most commonly found in immigration discourse
Santa Ana (1999, 2002)	Book (1999) that studies immigration discourse in the *L.A. Times* and article that features critical metaphor analysis of this discourse
Santa Ana (2013)	Multimodal study of news stories about Latino
Santa Ana (2016)	An examination of contemporary US network television news stories about immigrants
Viola (2019)	Book featuring several chapters which discuss migration in media discourse about the recent European migration crisis

These examples are then compared to data from Catalano (2016) which features in-depth interviews with 77 migrants from 41 different countries in 12 different destination countries in which adult migrants were asked to talk about their migration experiences. In addition, examples are taken from Catalano and Mitchell-McCollough (2019), as well as from articles/books published during the years 2014–2016 which feature interviews with unaccompanied child refugees (in which they talk about their immigration experiences) done by humanitarian organizations such as the UN Refugee Agency (UNHCR) and UNICEF, and ethnographic studies such as Heidbrink (2014) and Terrio (2015) (See Table 2).

Because this study concerns a vulnerable population which is difficult to access, we chose to utilize this less publicized data to bring forward the voices of child refugees, and to compare the way they talk about their migration experiences to that of the media discourse from our two other data sets. Examples from the interview data collected for this study (some of which has not been previously published) are

Table 2. Data sources: Studies featuring interviews with migrants

Source	Description
Brekke (2014)	Story in Huff post featuring an interview with a young man that migrated to the US when he was 13
Burnett (2016, as cited in Catalano	*NPR* story on increase in Central Americans seeking asylum featuring & M.us.olff (2019) interviews with Border Patrol agents
Garam (2016) as cited in	Story and film about migrant youth from Central America and their experiences in the US
Catalano & Mitchell-McCollough (2019)	
Catalano (2016)	Interviews with 77 migrants from around the world (residing in 12 different countries
Catalano, Fox, & Vandeyar (2016)	Qualitative study that features interviews with migrant students in the US and South Africa
Closed Doors (2015)	A *Human Rights Watch* report on Mexico's failure to protect Central American refugee and migrant children including interviews with the children
Heidbrink (2014, as cited in Catalano & Mitchell-McCollough (2019)	Ethnographic study that describes children's experiences as they move through US detention centers, immigration courts and federal foster care
Terrio, (2015, as cited in Catalano & Mitchell-McCollough (2019)	Ethnographic study that features interviews with unaccompanied youths from Central America

highlighted and analyzed for metonymy/metaphor and their interaction, and then compared to media discourse on similar topics.

Data analysis consisted of first uploading all of the interview transcripts from multiple files to MAXQDA and coding for metonymies related to topics of migration only (any metonymies that did not relate to migration themes were not coded). In addition, metaphors that interacted with these metonymies of migration were coded and categorized. Once metonymies and metaphors were coded, these themes were compared with common metonymies and metaphors found in migration discourse in the literature (and discussed above) and examples were brought together in the findings section in order to show similarities/differences among metonymies/metaphors depending on the source (See Catalano & Mitchell-McCollough, 2019 for more details on metaphor/metonymy coding and categories).

4. Findings

4.1 Journeys, roads, and setbacks

Findings reveal many differences between the way migrants talk about their migration experiences and the way they are described in media discourse. Although there were many literal references to the journey migrants take, the JOURNEY metaphor was not found to be present in media discourse (can be seen from our literature review above). On the other hand, interviews with migrants featured multiple metonymies that motivated the JOURNEY metaphor. Below, Gaspar talks about his life after escaping from Guatemala when he was 13 (he was orphaned at the age of (5) and coming to the U.S. by himself:

(1) *Esta **vida** que **estamos corriendo** es lo más difícil, cansado con sueño*. [..] *Le digo a mis amigos que **no nos echamos par' atrás***. [This life that **we are living** ('running') is the most difficult, tired, sleep-deprived. I tell my friends that we cannot **fall back**] (Carcamo, 2016, translation by the author)

Interestingly, the metonymy "corriendo" (literally translated as "running" as in the "life we are running") does not mean running and escaping in order to save one's life (as the English expression, "running for your life", does). Instead, it refers to life as a whole and the process of living (not escaping). However, we interpret this metonymy as interacting with the JOURNEY metaphor, since *vida* 'life' is represented as *corriendo* 'running/flowing', an action that visualizes the forward movement as positive advancement on the JOURNEY. Additionally, Gaspar had to work to support himself, and in the video that documents his life, he is shown running from school, running down the stairs to his job, and boarding trains to travel to and fro. Hence, it is possible that Gaspar used this metonymy because it fits with his life when he escaped from a dangerous situation, but also the life he currently lives, which is extremely busy and in which he must move quickly from one responsibility to another (Catalano & Mitchell-McCollough, 2019).

In the second part of Example (1), *no nos echamos par' atrás* 'we cannot fall back' (PHYSICAL MOVEMENT FOR SOCIAL/PSYCHOLOGICAL CHANGE) implies that for Gaspar and his friends, returning to his home country, would be backward movement, which draws on larger orientational metaphors such as ACTION IS MOTION AND DIFFICULTIES ARE IMPEDIMENTS TO MOTION (Kövecses, 2015, p. 4) in which future EVENTS ARE AHEAD and THE PAST IS BEHIND (Lakoff & Johnson, 1980, p. 16). Hence, falling backwards is what happens when migrants have to return to the life they had before, and this has a negative connotation since falling can be dangerous and also not something that can be controlled, and the life they had before was full of dangers.

José Luis Zelaya (who traveled from Honduras to the U.S.) echoes this metaphor in Example (2), defending his mother's choice to allow him to go to the U.S. alone and later follow him (Brekke, 2014):

(2) *Whenever a **human being**, like **my mother**, is faced with a decision of [life or death], I think that **my mom** is going to choose **life**…The situations at home only promoted a feeling of **death**… I think this journey is seen as a **journey of hope** … It's seen as a **journey of life**. It's seen as a **journey of better opportunities** and I think that's what my mother was thinking whenever she made the journey.*

Here, through metonymy, the JOURNEY of immigration is associated with positive characteristics such as "hope," "life," and "better opportunities," whereas not taking the journey is seen as "death." This sharp contrast represents well why the choice is not difficult and is obvious for many migrants, despite the increasingly more dangerous conditions they must face on the journey. What is also interesting about this example is the stark contrast between the way that media discourse represents migrants as seen in the literature review, and the humanizing metonymies used by José Luis, such as "human being" and "my mother."

4.2 Floods, oceans, and ponds

As we mentioned in the literature review, there are numerous studies that demonstrate the use of movement scenarios featuring dangerous water, as in this example from Hart (2010, p. 153):

(3) *With illegal immigrants **flooding** into Britain…*

In Example (3), the metonymy "flooding" stands for the movement of migrants from another country to Britain. Through comparison of the migrants to dangerous water (e.g. the metaphor IMMIGRANTS ARE DANGEROUS WATER), fear is created about the Other.

However, in interviews with migrants, metonymies in the semantic domain of water were not commonly used to talk about their own migration experiences. Instead, the dangerous water represented the unknown obstacles the migrants had to face in the adaptation process, not actual people. Thus, the metonymies of "wild ocean" and "overboard" "foreign ship" in Examples (4) and (5) below stand for the unknown or new country and figuring out how to adjust, as seen in the following examples (from Catalano, 2016, p. 198):

(4) *Migrating is like being thrown into a **wild ocean**….*
(Tanisha, from Nigeria to South Africa)

(5) *Migration is like putting a man in **water** who doesn't know how to **swim**. He will learn to swim, which he would probably not do in **his own pond**, but if you throw a man **overboard**, in a **foreign ship**, this is what **makes a person**.*

(Sachin, from India to Jamaica)

Interestingly, in Example (5), the "water" (or "pond") takes on the characteristics of *us* vs. *them* because when it is one's "own pond," it is familiar, but this familiarity leads to lack of adventure or unwillingness to take risks. In Sachin's perception of migration, the water is not the person, it is a person's land or territory, or a "foreign" territory. Hence, the water could be associated both with the migrant's home or the new country, but when it is the new country this water has a positive connotation because it is only when a man leaves his own ship or territory, that he becomes a person. Overall, the portrayal of migration here is that it is a positive step in growing and becoming a better person (i.e., CULTIVATION), and it is precisely the unknown nature of the "water" that helps and nurtures a person to grow.

In a final Example (6) related to water (from data cited in Catalano, 2016, not previously published), Gui, who moved from China to the U.K., to Canada, back to China, and then the U.S., attempts to explain human migration and why human beings are so inclined to be mobile. He says:

(6) *Let's put it in a simple way, man struggles **upwards; water flows downwards**. Maybe people are looking for a better living environment when* [*they*] *consider migrate to a new place.*

In (6) we again see orientational metaphors through the metonymies "upwards" and "downwards" (which connect to the metaphors of ACTION IS MOTION and DIFFICULTIES ARE IMPEDIMENTS TO MOTION). However, the metonymy "water" stands for life and its natural force in carrying people toward one path or the other.

4.3 Invasions and machine guns

Besides water metaphors, media discourse is also ripe with metonymies that invoke WAR metaphors which map the characteristics of foreign invaders onto migrants with words like "invasion" to stand for their arrival, or like "illegal immigrants," which place migrants firmly in the frame of crime, as in these examples:

(7) *The invasion of Britain by illegal immigrants continues unabated.*

(Hart, 2010, p. 144)

War metaphors were also frequent in the discourse that migrants used to talk about their migration experiences, but the war was not against "invading" migrants. The war was learning the language. Example (7) demonstrates this metaphor (from

Catalano, 2016, p. 170) in an interview with Chiharu, who talks about her move from Japan to the U.S. and her interactions with her boss:

(8) *But then I don't have this, you know, language ability to **fight back.** And also culturally, you know, I'm not sup- it's re – I feel really uncomfortable to, you know, **fight** against my, you know boss, coordinator. So… feel like I'm always in this weak position that… that my, where my supervisor always have… I think it's basically they use my language ability and also cultural background, she knows that I don't really **fight** against, you know… Yeah, and she, you know, speak, like, you know, **like a machine gun**, then, I – I, like (**tatatatatatatata**), then I cannot really have room to, you know, um… to say my point.*

In this comment, Chiharu represents, through sound symbolism (Waugh 1993/2000), her boss's fast speech with the sound of a machine gun firing off in rapid succession. The metonymy "machine gun" is particularly helpful in understanding how students must feel when they are learning a language and their teacher is talking and they struggle to understand. If migrants see language learning through the metaphor of WAR, and the teacher's words are like a machine gun, what must they be feeling? When unpacking metonymies such as this, it is helpful to think of other words that might be included in this same semantic domain. In this case, words that collocate with war could be violence, loss, death, blood, bomb, etc… Furthermore, war is something we don't have control over – it is something very few want. Hence, the WAR metaphor in this case reveals real fear and angst – emotions that can make it difficult for anyone to learn or do their job. De-constructing this metonymy is important in terms of supporting all those who work with migrants and are trying to welcome them and help them succeed; this support could focus on, for example, getting them to understand the importance of slowing down speech and helping migrants relax when they feel anxiety and a loss of control.

4.4 Predators and prey

A metaphor found to be common in media discourse in the United States (Santa Ana, 1999, 2002) is IMMIGRANTS ARE ANIMALS. In media discourse recounting the stories of border patrol agents in Arizona, the classic American Western was re-created using animal metaphors and the narrative of the border patrol agent who is the hero who "stands outside of a society that is threatened by uncivilized villains that can only be stopped if the hero moves … to defend the town folk" (Santa Ana, 2016, p. 100). Example (9) illustrates this phenomenon as a border patrol agent discusses his difficulties in doing his job:

(9) *"Our agents are so caught up with* ***rounding up*** *the ones that are turning themselves in,* ***corralling them*** *and getting them to the station, that we don't have adequate resources to get the ones that are trying to* ***get away****," Cabrera says.*
(Burnett, 2016)

This comment shows how children, just like cattle, are rounded up and corralled, and try to "get away". Perpetuated by metonymies such as "rounding up" and "corralling," the dehumanization of child migrants by the U.S. border patrol has been instrumental in defending inhumane policies, such as the separation of child migrants from their parents, and the mistreatment of children in detention facilities (Catalano & Musolff, 2019).

Surprisingly, animal metaphors were also common in stories told by child migrants from Central America, and also refer to migrants as animals. However, in the discourse of the unaccompanied youths, this is done for the purposes of showing the inhumane way in which migrants are treated (and their awareness of it), or, as in the following example, to convey an idea of predator vs. prey:

(10) *I spent two months and 21 days there," Edgar said. "I needed to be there for my* ***protection****, because they [the gang] were* ***hunting*** *for me.* (Closed Doors, 2015)

Edgar, age 20 (who traveled from Honduras to the U.S.) conceptualizes himself as a weak animal and victim of predator gang members he escaped from by staying in a shelter run by missionaries. This could be partly because often, in order to claim asylum, migrants must construct a narrative in which they explain the dire circumstances they are leaving and difficulties they face in order to seek asylum in the U.S. Interestingly, metonymies such as "hunt" were also found in media discourse that talk about finding migrants (Santa Ana, 1999), so the metaphor is the same, but used for very different purposes.

Some other interesting metonymies that invoke an ANIMAL metaphor refer to the train that many Central American migrants take across Mexico, often called *la bestia* 'the bestia'. In Heidbrink's (2014, p. 91) interviews with child migrants, she was informed by numerous youths of how the trains would "slow to fifty kilometres per hour allowing migrants to grab hold of ladders and pull themselves on top of the trains or stow away in open cars, risking losing a limb or worse." In a similar study by Terrio (2015), Pedro told the author:

(11) *It is a* ***voracious creature*** *who grabs you and* ***pulls you down*** *onto the tracks. If* ***it gets a taste of the foot, it wants the whole leg.*** *If* ***it gets the leg, it wants all of you****.* (Terrio, 2015, p. 33)

Example (11) shows how Pedro personifies the train, how he perceives it as a hungry predator and his own vulnerability as prey (Catalano & Mitchell-McCollough, 2019).

As both Heidbrink (2014) and Terrio (2015) found, children often characterize themselves as at risk, in this case, of disembodiment from powerful machines that, while serving as important vehicles that transport them to their end goals, include the potential for great danger. However, the willingness of the children to flee in spite of the risk demonstrates not only a strong sense of agency in facing this predator, but also the desperate conditions which many of them face if they do not leave their countries (Catalano & Mitchell-McCollough, 2019).

4.5 Do migrants know what they are called?

In media and legal immigration discourse in the United States, metonymies that equate immigrants with foreign beings and animals are prevalent. Many migrants (such as Martez, below) are keenly aware of the terms used to describe them (Catalano, 2016, p. 181):

(12) *In the United States you're a "**legal alien**" in uh, in Canada, you're a "**landed immigrant.**" So, from that point of view you feel very welcome …into the country. (From Mexico to Costa Rica, to Canada to U.S. to Canada)*

Martez, who was born in Mexico City to Spanish parents and migrated to Costa Rica, then the U.S., then Canada, then the U.S. and back to Canada, noticed that he was called different things in the legal terminology of Canada vs. the U.S. "Legal alien" (in the U.S.) refers to a foreign being, and the two adjectives here are interesting in that "(il)legal" focuses on only legal status, and when it is used a noun, such as in "illegals," it strips people of their humanity. Legal alien is a double metonymy and each part is demeaning, which makes it doubly demeaning. On the other hand, a "landed immigrant" is at least still a human being, even if the word "immigrant" is still a metonymy that focuses on the person not being born in the country they live in. "Landed" in Canada focuses on the fact that the person has arrived and is now accepted, part of the 'land' and by metonymy, part of the country. Hence, "landed immigrant" has a much more positive connotation due to the metonymic associations of the two words and of the phrase as a whole. Martez doesn't know all this about metonymy, but he knows that when people call him a "landed immigrant," he feels more welcome than when called a "legal alien."

Legal discourse in the United States echoes Martez's observations, and it is very frequent (especially since Trump's election) to see the following metonymies

in immigration discourse (cf. Catalano & Musolff, 2019): "illegal aliens," "legal aliens," "resident aliens," "catch and release,[3]" "parole,[4]" "detainee." These metonymies 'Other' migrants, placing them in animal or criminal frames, and the negative connotations they are loaded with are not lost on migrants, who understand well what they stand for. In the next comment (13) by Modesto, who traveled from a Quiché-speaking community in Guatemala to the U.S., he uses the metonymy "illegals," showing a deep understanding of the connection between this term, and the reason it is used:

(13) *The only thing I know is that immigration is* ***big business, illegals*** *are a big business. The people who run the private prisons make a lot of money. The longer they keep you in jail, the more money they make…* (Terrio, 2015, p. 202)

Here "illegals" is used the same way as in legal/immigration discourse, but to highlight the way in which this whole concept of a person being "illegal" is a way for contractors such as the Corrections Corporation of American (CCA), who run private prisons and who profit from filling the detention centers with migrants, to make money (Golash-Borza, 2009). Hence, Modesto discloses here that he not only knows the term used to call people like him, but he is also fully aware of the "immigration industrial complex" and the uses of the metonymy to garner support for political and economic reasons (Golash-Borza, 2009, p. 283).

Terms like "illegals" and "illegal alien" have become so common in political discourse that people who consume media discourse and use these terms often do not consider, or are not even aware of, alternative ways of framing the issue. Below, Petra, who traveled from Mexico to the U.S., illustrates a different way of imagining the situation, showing how, for those who have no way of crossing the border through legal channels, going "over the hills" is just what you do when you have no other choice:

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3. "Catch and release" refers to a previous policy in which migrants were taken in to be fingerprinted and registered, and then allowed to leave the detention facility (and later report for a court date). Not by coincidence, it resembles a conservation policy of the same name in which fishermen are allowed to catch certain fish but are then required by law to release them.

4. "Parole" (as in being "on parole" is a term adapted from the Immigration and Nationality Act of the United States which refers to migrants without authorization who are being held by the Department of Homeland Security. "Humanitarian parole" occurs when migrants are allowed to stay in the country until their advance parole document expires. Parole is also the term used to refer to prisoners released under certain circumstances, just as "detainee" is used to describe people who have been arrested and are imprisoned.

(14) *I came **over the hills**- I'm not ashamed of doing that because when I left from there, I came with a purpose and I said that even if I don't cross the border in a year, I am not going to come back because **I didn't want the miserable life I had for my children** and I think that thanks to some purposes, important things that I love, the sacrifice, I think, has been worth it.* (Catalano, 2016, p. 118)

In (14), "over the hills" (in Spanish, *por el cerro*) is an interesting metonymy in which DIRECTION/ LOCATION OF IMMIGRATION STANDS FOR METHOD OF IMMIGRATION and is a much better depiction of how she migrated than saying she came "illegally." This also reveals that many migrants do not conceptualize migrating as a crime – coming "over the hills" is the only choice they have when they want their family to have a decent life.

Of course, many countries do not refer to migrants as "illegals," and some countries use derogatory terms that don't make the distinction between migrants who have been authorized to enter and those who have not. In the next example, Innya, who moved from Nigeria to South Africa to do her PhD, shows how she is fully aware of metonymies used to talk about migrants in South Africa. She also demonstrates her intercultural competency and ability to use humor to make friends and turn a possibly volatile situation into an amicable one (Catalano, Fox, & Vandeyar, 2016, p. 147[5]):

(15) *They never called me a **Kwerekwere** before, but even if they do something like that **I'll just turn it into a joke**. I'll just say, 'You, are you talking to me?' You know that kind of a joke and at the end of the day **we all become friends**.*
(Innya, Nigeria to South Africa)

"Kwerekwere" is a derogatory metonymy based on onomatopoeia in which the word "Kwerekwere" stands for the sound of the language used by some migrants (as it is heard by those who don't understand it) and the sound/language stands for the people making the sound. This label is given to migrants who came to South African townships but couldn't speak local languages. Thus, their "babble" sounded like "kwerekwere" and this term came to stand metonymically first for the sound of languages other than local ones, and by second order meaning, foreigners or outsiders, specifically, Black Africans from other countries. This is a common phenomenon around the world – where the language of a different people is considered to be babbling nonsense and is used in a derogatory way to stand for the people themselves and thus the metonymic implication is that these people are babblers or idiots. This meaning has expanded and now it is a derogatory term for Black African

5. This example was published in Catalano, Fox & Vandeyar (2016) in which data from interviews with South African migrants were discussed, but was also a sub-section of Catalano's (2016) original study (although this example was not published in the book).

immigrants living in South Africa in general, not just townships. "Kwerekwere," which originally described the way "foreigners" talked, could be compared with the "tatatatata" sound that Chiharu perceived when her teacher spoke to her. So, to both sides, the other sounds like a babbler, but in Chiharu's case, the metaphor has more violent connotations.

4.6 Resisting the categories

Other interviewees noted their hybrid identities and the way they learned to utilize all their experiences, as in this example from Chiara, who immigrated from Italy to Russia and then to the U.S. (Catalano, 2016, p. 184):

(16) *But, so I'm trying to think of myself more, you know, every single day, uh, as a **cosmopolitan person** who's you know, I got to live in Russia, I got to live in America, or I got to live in Italy for many, many years, and so I can combine all these, um… experiences and try to use them all, and also, try maybe to detach myself a little bit from, um, being **solely and merely an Italian**….*

In her comments, Chiara rejects metonymies of nationality that she feels are often placed upon her (and which are commonly used to describe migrants), replacing them with a more humanizing term that points to the positive aspects of migrating – such as having familiarity and ease with living in many different places and with being globally mobile, and "cosmopolitan", and not "solely and merely an Italian."

In this final example, Miljan and Dijana, a married couple from Sarajevo who went to the United States as refugees in 2001, resist metonymies that were used to refer to them during the Bosnian war. They were able to obtain refugee status to go to the United States because they could prove that they were in danger in Bosnia due to the fact that they were a mixed couple of two different religions. Miljan is Eastern Orthodox and his wife is Muslim, although like most living in Sarajevo at the time, neither of them are religious. In his comment below, Miljan refutes the metonymy "Bosnian Serb" which people used to refer to him, because he said he was born and raised in Bosnia – he had nothing to do with Serbia. Hence, in this example, he notes the indirect indexicality of the metonymy "Bosnian Serb" which erases what Miljan feels is the real cause of the war – religion. He says (Catalano, 2016, p. 47):

(17) *I am **Bosnian** man. After that, I am **Orthodox**. I am **not Serb**. I am Orthodox.*

Interestingly, prior to 1993, the metonymy "Muslimani" [Muslims] was used in the Yugoslav constitution to refer to Muslims in Bosnia and Herzegovina, but in 1993 this term was changed to "Bošnjak" [Bosniak] in order to highlight ties to the

region. In the case of Miljan who was born and raised in the region but was not Muslim, referring to Miljan as a Bosnian Serb, covertly (to those who know the code) identifies him as someone living in Bosnia, but whose religion is Orthodox. However, people could not just discriminate openly against him because he was Orthodox. Hence the code word Serb was utilized and the metonymic process of NATIONALITY/REGIONYM FOR RELIGION did the job on its own. Use of metonymies that replaced names of religions by nationyms or regionyms added to the complexity and confusion of the war and its causes and concealed a proxy war in which religion and politics intermixed and were at the heart of the matter. This example also illustrates how metonymies can be used to erase (Gal & Irvine, 1995) truths that people want to hide.

5. Conclusion

In this chapter, we have seen the important role of metonymy in both media and migrant discourse about migration events. While media discourse often 'Others' migrants through a variety of different metonyms such as "illegals," "kwerekwere," and "floods," interviews with migrants show that they conceptualize their experiences in different ways, such as comparing their migration experiences to a "wild ocean" or a "journey of hope." We also revealed that migrants are not unaffected or unaware of the way they are referred to in media discourse, and they often have a sophisticated understanding of the way metonymies such as "illegals" are used in the immigration process and who profits from it. In addition, they have varied, nuanced, and complicated conceptualizations of their own identities (e.g. "cosmopolitan person," "human being"), which stand in stark contrast to media discourse.

Thus, while migrants are impacted in various ways by discourse about them, they are still able to think and talk about themselves in a different way. Breaking down the subtle process of metonymy involved in both media and migrant discourses allows us to understand the importance of highlighting migrant voices that opens up alternative ways of envisioning migration events and people.

In closing, we want to stress that metonymies/metaphors that dehumanize migrants are used even by immigrant advocates, particularly those that compare movement of migrants to water (i.e. wave, influx, flow). Although these seem harmless, and as the first author pointed out to Zoltan Kövecses[6] when this paper

6. The first author would like to thank Zoltan Kövecses (during this conference presentation in Osijek, Croatia) for bringing up the point that water metaphors are one of the ways we conceptualize crowds of moving people. After the conference Kövecses took the time to discuss this further, and through dialog, the authors came to better understand why water metaphors in the

was presented in Osijek in 2017, that, while it may seem natural or neutral to conceptualize large moving groups of people as water, doing so works against pro-immigration aims, because a natural reaction to flowing water that needs to be stopped is to stop it, and therefore, immigration policies are seen in a positive light as the dams, the force *holding back* the (im)migrants. Hence, in addition to raising consciousness about media discourse and its effects on migrants, we encourage scholars to examine their own discourse for the use of figurative language and how it might unconsciously affect the way they and others discuss and even perhaps think about migration issues.

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case of immigration discourse are not harmless, as they might be in other cases such as the example Kövecses gave us of a crowd "flowing into the stadium" (Kövecses, personal communication, 2017).

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Draining the swamp

Creative figurative language in political discourse

Sanja Berberović and Nihada Delibegović Džanić
University of Tuzla

This chapter examines the use of the expression *to drain the swamp*, whose meaning is created in conceptual blending, and the creative figurative language produced by the elaboration, modification, and reinterpretation of the blend itself in the contemporary American political discourse. This paper aims to show that creative figurative language can be used in different ways by members of a discourse community to achieve various rhetorical goals and discourse coherence. Specifically, applying conceptual blending theory, this paper analyzes innovative conceptual blends used to keep political discussions alive and be rhetorically effective. In addition, such creative blends also provide discourse coherence at the intertextual level.

Keywords: creative figurative language, conceptual blending, political discourse, discourse goals, intertextual coherence

1. Introduction

In October 2016, as a part of his presidential election campaign, in a press release, Donald Trump vowed that he would make the government honest again by draining the swamp in Washington. This was the first time Trump used the figurative expression *to drain the swamp*, which was soon accepted by his supporters, who started chanting this slogan in rallies and used it as a hashtag in posts in cyberspace. The original literal meaning of this expression was to get rid of mosquitoes and thus prevent the spread of malaria. Subsequently, it acquired its figurative meaning and became a fairly frequent expression in American political discourse in different periods. Although legend has it that parts of Washington D.C. were built on swampland, it is doubtful whether this expression has been used in relation to Washington politics because of that fact.

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Nevertheless, this figurative expression has had a long history in American politics. According to etymologist Barry Popik, the first recorded use of this figurative expression can be traced back to the socialist movement in 1903. In more recent history, quite a few prominent politicians have used this figurative expression in relation to different political phenomena, retaining the negative meaning denoted by the expression. Ronald Reagan pledged to drain the swamp "of big government" in 1982, Donald Rumsfeld wanted to drain the swamp "that supports terrorism" in 2001, and Nancy Pelosi promised to drain the swamp "after more than a decade of Republican rule" in 2006. As it has been already mentioned, the expression was again picked up in 2016 by Donald Trump and has since been prevalent in his rhetoric.

Considering its prominence in the current American political discourse, it is not surprising that the meaning of this expression has been creatively stretched, reinterpreted, reformulated, and humorously modified on numerous occasions by participants in political discourse. By talking about the figurative muck and mire, alligators and mosquitoes and other swamp creatures in Washington, discourse participants attempt to achieve different discourse goals, from providing insights into the issue to criticizing the use of the expression itself. In many cases, these insights are formulated in more or less creative figurative language.

The chapter examines the use of the expression *to drain the swamp*, whose meaning is created in conceptual blending, and the creative figurative language produced by the elaboration, modification, and reinterpretation of the blend itself in the contemporary American political discourse. This paper aims to show that creative figurative language can be used in different ways by members of a discourse community to achieve various rhetorical goals and discourse coherence. Specifically, applying conceptual blending theory, the paper analyzes innovative conceptual blends, which are used by discourse participants to keep political discussions alive but also to be rhetorically effective. In addition, such creative blends also provide discourse coherence at the intertextual level.

The chapter is organized as follows: In the first part of the paper, we provide a brief overview of conceptual blending theory. By applying conceptual blending theory, the second part presents the analysis of the figurative expression *to drain the swamp* used in the contemporary American political discourse and its role in shaping the discourse, that is, achieving discourse goals and discourse coherence. Specifically, the paper focuses on the coinage of this figurative expression in conceptual blending by elaboration, modification, and reinterpretation of the original blend by additional projections from input spaces. It also looks at the role the creative figurative language plays in achieving rhetorical goals in political discourse and contributing to discourse coherence at the intertextual level by examining a number of examples collected from various news sources. Finally, we present the main conclusions drawn from the analysis.

2. Conceptual blending theory

Conceptual blending theory, or conceptual integration theory, is a theory of meaning construction, which was proposed by Fauconnier & Turner in 1993 in the 1990s. . This theory has its foundation in Fauconnier's (1985) mental space theory. Mental spaces are defined as "very partial assemblies constructed as we think and talk for purposes of local understanding and action" (Fauconnier, 2007, p. 351). Since its inception, the basic postulates of conceptual blending theory have been elaborated and presented by Coulson & Oakley (2000), Grady et al. (1999), Fauconnier & Turner (2006 [1998], 2000, 2002), Turner (2007, 2014), Turner & Fauconnier (1995, 1999, 2003). As a basic cognitive operation, conceptual blending "is as indispensable for basic everyday thought as it is for artistic and scientific abilities" (Fauconnier & Turner, 2002, p. vi).

In conceptual blending, meaning is created in a conceptual integration network by establishing and maintaining relations between mental spaces. Mental spaces in conceptual integration networks contain elements and relations that have an internal organization. A conceptual integration network comprises at least two input spaces, a generic space and a blended space. However, a single network can be composed of several inputs and blends. Counterpart connections that connect input spaces are established in the process of partial matching. These connections are based on various kinds of relations, including identity, analogy, metonymy, transformation, metaphoric connections, and vital relations mappings. A new mental space, the blend, receives only partial projections from the input spaces. The generic space contains the elements shared by all inputs, and these elements from the generic space are, in turn, mapped onto the counterpart elements in the input spaces.[1]

The emergent structure arising in the blend is not simply copied from one of the inputs. It is generated in three ways, namely through the unconscious processes of composition, completion, and elaboration. Composition is the process of projecting elements from the inputs into the blend and creating new relations that are not present in the inputs. Completion refers to bringing additional structure to the blend to fill out a pattern created in the blend by the projections from the inputs. Background knowledge and structure are brought into the blend unconsciously. Elaboration further develops the blend through mental simulation of the event in the blend, which can be performed indefinitely, enabling the blend to run in many different directions.

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1. It should be noted that the generic space has been disputed (Brandt & Brandt, 2005; Oakley, 2011; Oakley & Pascual, 2017), with claims that it is "a superfluous artifact of analysis" (Oakley, 2011, p. 6) and no agreement on the need for a generic space has been reached yet.

As conceptual blending is an online, dynamic process, mental spaces in an integration network can be modified at any stage of the network construction. Input spaces can also be modified by backward projections (Fauconnier & Turner, 2002) or retrospective projections (Coulson, 2001) from the blend. Integration networks are built by setting up the mental space, establishing cross-space mappings, finding shared structures, projecting from the blend to the inputs, recruiting additional structure to the inputs or the blend, and running other operations in the blend (Fauconnier & Turner, 2002, p. 44). These dynamic processes unfold during discourse production and result in novel conceptualizations, inferences, conceptual structure, and logic arising in the emergent structure in the blended space, which are unique to the blend. Dancygier & Sweetser (2014, p. 85) argue that analyzing how blends emerge reveals details about two processes. Considering the structure of the inputs and selective projections provides a better understanding of the conceptual structures in the blending processes, while "understanding the results of the process (new conceptualizations, new inferences, reconstrual of the inputs) allows us to capture the nature of meaning emergence and of the processes responsible for linguistic creativity." (Dancygier & Sweetser, 2014, p. 85).

Turner & Fauconnier (1995, p. 186) claim that conceptual blending can be found "in everyday language, idioms, creative thought in mathematics, evolution of sociocultural models, jokes, advertising, and other aspects of linguistic and nonlinguistic behavior". Considering the omnipresence of blending, it comes as no surprise that conceptual blending theory has been applied in various disciplines ranging from linguistics to art, music, and politics. In linguistic studies, conceptual blending has been used in the studies of a wide variety of semantic and pragmatic phenomena. The theory has also been used in the study of different types of discourse and its various aspects (see Hougaard & Oakley, 2008; Dancygier, 2006; Oakley & Pascual, 2017).

In addition, conceptual blending theorists have also discussed the rhetorical potential of blending in discourse (see Oakley, 2011; Oakley and Pascual, 2017; Dancygier & Sweetser, 2014). Coulson (1996, 2002, 2005, 2006) discusses the creation of the meaning of jokes and political cartoons and shows that humorous blends that contain absurd concepts in the blend can highlight certain aspects of reality. Similarly, Coulson (2006), Coulson & Oakley (2006), Coulson & Pascual (2006), and Oakley & Coulson (2008) discuss the rhetorical potential of conceptual blends in argumentative and persuasive discourse. The rhetorical persuasiveness of such blends lies in the incongruity produced in the blend; that is, it is achieved by combining the input spaces that are not congruent. These studies reveal that conceptual blending can be used as a rhetorical means to persuade the hearers to change reality and perhaps make them take action.

The studies discussing the rhetorical force of blending emphasize the importance of the emergent structure in producing new conceptualizations that shed new

light on the real-life domains. What appears to be of greater importance than the structure of the blend itself are the inferences, emotional responses, and rhetorical force created in the blend. "The blended space is rarely the principal rhetorical focus of the network, as it is far more often the case (as with satire) that it exists to help us think about the topic of one of the input spaces" (Oakley, 2011, p. 6). It can be claimed that blends are often created to put forward specific arguments. Thus, the speaker's main goal is to divert the hearer's attention to the inferences and conceptualizations produced by the blend, not to the new structure created (Coulson & Pascual, 2006). Backward projections from the blended space to the input spaces make possible reasoning differently about input spaces or promoting construals in them. Backward projections from the blend to one or both inputs highlight certain aspects of the input(s) in accordance with the inferences created in the blend. Blends can have rhetorical power and can help the hearers view reality differently, provoke their emotional response, and sometimes even make them change the world around them. As Dancygier & Sweetser (2014, p. 191) claim, "blending supports the speaker's rhetorical goals in a way that a single-space representation could not."

Apart from having a rhetorical power, conceptual blends can have a text organizing force. Conceptual blending theorists have not paid much attention to the role of blends in achieving discourse coherence. Nevertheless, numerous cognitive linguistic studies dealing with figurative language, mostly metaphor, and occasionally blending, in real discourse find that one of the main functions of metaphor (and blends) is to provide discourse coherence at either intertextual or intratextual levels (see Berberović, 2013; Berberović & Mujagić, 2017; Cameron, 2003; Charteris-Black, 2004; Dancygier, 2012; Deignan, 2005; Dorst, 2017; Koller, 2004; Kövecses, 2009, 2015, 2016, 2018; Musolff, 2000, 2004, 2006, 2016, 2017; Ritchie, 2017a, 2017b; Semino, 2008, 2010; Semino et al., 2013). As defined by Chilton and Schäffner (2002: 29), intertextual coherence refers to the coherence across texts, while intratextual coherence refers to the coherence within texts. As for intertextual coherence, what the abovementioned studies find is that conventional and novel figurative expressions originating from one text can be repeatedly used by discourse participants in other text establishing intertextual relationships in a variety of ways, from alluding to the original expression in a different text discussing the same issue to revitalizing figurative expressions at different historical periods. Also, the figurative meaning of the expression can remain the same, or it can be creatively exploited, reinterpreted, or modified to promote different views and achieve different discourse goals. Thus, as this paper aims to show, the creative exploitation, reinterpretation, or modification of a prominent blend in political discourse contributes to promoting rhetorical goals and strengthening discourse coherence.

3. Methodology

The examples discussed in this paper were tracked from mid-October 2016 to the beginning of to mid-April 2017 by Google News Alert set to monitor the appearance of the expression *to drain the swamp* in different news sources. During this time frame (October 16, 2016 – April 16, 2017), Google News tracked a total of 1112 articles containing the expression *to drain the swamp* from various online editions of newspapers in English. In 916 articles, the expression was used in relation to Trump's pledge *to drain the swamp in Washington* and was used figuratively. The highest number of articles containing the expression was in November and December of 2016 when the news focused on Trump's cabinet picks. The examples discussed in this paper were singled out as the creative elaboration, modification, and reinterpretation of the swamp narrative from the articles mentioned above. The total number of creative examples isolated was 198. The examples were selected and classified based on the discourse goals identified for the individual uses of the expression in the context. Considering the number of the examples found and the space limitations of this study, only a selection of these examples is presented and discussed in the following section.

As for the criteria used for the creativity of the examples, we accept what Hidalgo-Downing (2016, p. 109) views as creativity, that is, "the production of something that is novel and contextually adaptive – which undergoes constant re-contextualisation – and which involves the perception of two or more incongruous domains in an unstable relationship that requires a higher-level resolution and receives 'social value'". It should also be noted that a clear-cut line between what is considered conventional and innovative cannot be drawn. Thus, creativity is regarded as a matter of degree.

4. Draining the swamp

In a press statement on October 16, 2016, Donald Trump used the expression *to drain the swamp* for the first time.

(1) *It's time* ***to drain the swamp*** *in Washington, D.C. That's why I'm proposing a package of ethics reforms to make our government honest once again.*
[Donald Trump, October 16, 2016]

A day later, he repeated his promise in a tweet on his Twitter profile using the same expression and, thus, initiating a discussion on reforming the government in terms of draining the swamp.

(2) *I will Make Our Government Honest Again – believe me. But first, I'm going to have to* ***#DrainTheSwamp****.* [Donald Trump, October 17, 2016]

Although Trump, later on, admitted that he himself had not been impressed by the figurative expression in question, he was very satisfied by the effect it created. *To drain the swamp* became a slogan chanted by masses in the period that followed.

This figurative expression evokes a scenario in which the swamp – in popular imagination thought of as a dark and somewhat mysterious and primitive place usually inhabited by creatures such as rats, snakes, and other dangerous animals – is home to corrupt politicians. The swamp has to be drained so that faith in and honesty of the government would be restored. This rallying cry, perceived as a call for ethics, was readily picked up by the working and middle-class people desperate to see a change in Washington politics finally. Therefore, Trump pledged to rid Washington of lobbyists who run the government, reduce conflict of interest, cut government spending, fraud, and abuse of power, or simply fight the establishment in Washington.

As it has been already mentioned, *to drain the swamp* is a figurative expression meaning to get rid of something harmful in politics, as government corruption, which is perceived by ordinary citizens as completely unacceptable. The figurative meaning of this expression is created in conceptual blending.

The conceptual integration network, as we explained above, comprises four spaces, two input spaces, a generic space, and a blended space. Input space 1 contains the concept of swamp draining. This process has been extensively used to secure additional land for agriculture and reduce the possibility of spreading diseases borne by swamp insects such as mosquitoes and other animals. Although

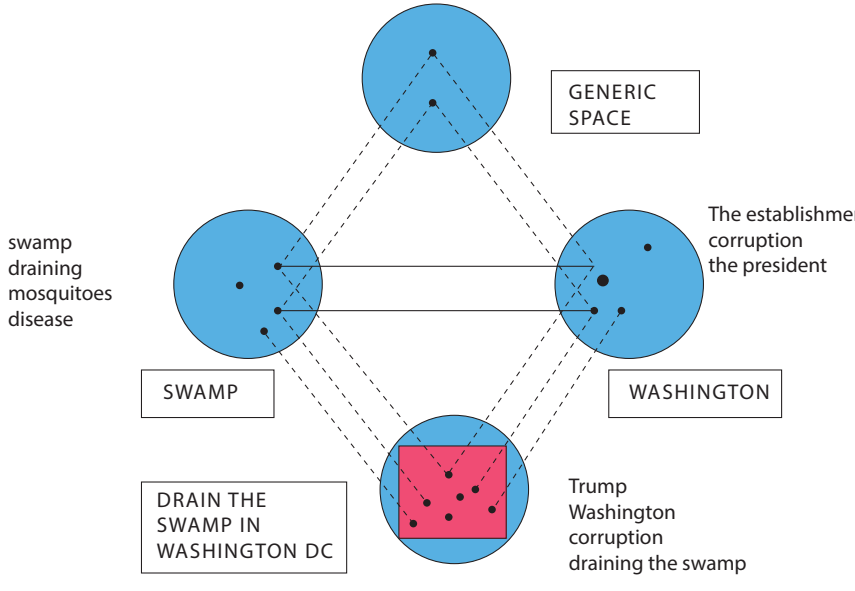

Figure 1. The conceptual integration network for *to drain the swamp*

swamp draining has had a long history, nowadays, ecologists believe that swamps are valuable ecosystems and are trying to restore them. Also, as already mentioned, commonly, swamps are seen as places that hide mysterious sounds and dreadful creatures and can be places where dangerous things can happen.

Input space 2 contains American politics, or, to be more precise, Washington politics, with all key political actors in Washington D.C., ranging from the president to different lobbyists trying to influence and shape Washington politics. As the United States capital, Washington D.C. is home to the centers of all three branches of government, and thus the center of financial, political, and social power. It is also home to different lobbying firms, career politicians, and corporations trying to achieve their special interests. However, ordinary Americans perceive Washington as a place paralyzed by these special interests and feel that political insiders are out of touch with the problems ordinary people face on an everyday basis.

Cross-space mappings connect the swamp from input space 1 to Washington as a place of political power from input space 2. Also, the process of draining the swamp from input space 1 is connected to the process of reforming the government from input space 2 and killing mosquitoes to reduce the possibility of disease from input space 1 to eliminating corruption in Washington from input space 2. The blend inherits the organizing frame for input space 1. Projected to the blend from input space 1 is a swamp, as an ecosystem that has a particular configuration and can be dangerous, and the concept of draining the swamp to eliminate the dangers. From input space 2, the blend receives the projections that include Washington, which metonymically represents the U.S. government, with all the political actors involved in the political life of the capital, as well as corruption present in the capital. This input space also projects Donald Trump to the blend, who is determined to change the way of Washington dealings. In the emergent structure in the blend, Donald Trump is trying to clean the swamp of corruption in Washington by draining it. The inferences produced in the blend are projected back from the blend to input space 2. The projections highlight certain aspects of this input in accordance with the new structure created in the blend. In that sense, backward projections from the blend to input space 2 highlight the perception that corruption is an omnipresent disease in Washington and needs to be eliminated by removing the politicians from the establishment.

Draining the swamp in Washington to make the government moral and honest became a narrative in which, unlike his opponent Hillary Clinton, Trump, a Washington outsider, emerged as a presidential candidate fighting for the working and middle-class people by changing the government dealings and restoring honesty in Washington. The scenario created by the use of this figurative expression became so dominant that, in a way, it shaped the social and political reality. Also, Trump's use of this expression in his statements initiated the discussion on

government corruption in figurative terms. Such use of figurative expressions is especially common in political discourse because their meanings are often negotiated and reinterpreted by discourse participants (Musolff, 2016), which also greatly influences the longevity of such expressions in certain genres and registers (Semino et al., 2013).[2] The prominence of the figurative expression *to drain the swamp* formed a micro-tradition of discussing government corruption within the American political discourse community in terms of draining the swamp. Such a course of events indicates that a particular figurative expression can become very prominent within a particular discourse community, subsequently allowing further creative exploitation, reinterpretation, and modification.

Furthermore, such figurative expressions can be viewed, as Cameron & Deignan (2006, p. 679), as metaphoreme, indexing Ritchie's (2017a, 2017b) metaphorical stories or story metaphors, or creating Musolff's (2004, 2016) metaphorical scenarios. Disregarding different terms used for the same or similar phenomenon discussed in the abovementioned studies, all of them emphasize that the meaning of figurative expressions cannot be accounted for by simply considering cross-domain mappings. Rather, other factors, such as social, cultural, and cognitive, influence figurative language use and its understanding in the discourse. The meaning of such figurative expressions emerges in the discourse, can be reinterpreted or negotiated in the interaction of discourse participants, and can be used in specific contexts or across contexts, that is, can undergo what Semino et al. (2013) call re-contextualization. Thus, in order to fully understand the modified and reinterpreted meanings of the swamp expression formulated in creative language, we also have to take into account the development of these different meanings in discourse and scenario(s) it creates, all with the aim of achieving different rhetorical goals on the part of discourse participants. In addition, all the studies mentioned above are of relevance to the present study, as most of the conceptual metaphor theorists (see Kövecses, 2005; Semino, 2008; Semino et al., 2013; Musolff, 2004, 2016; Ritchie, 2017a) involved in the study of metaphor in discourse admit that the metaphorical expressions they examine, especially the innovative ones, could be treated as products of conceptual blending. What is more, two recent studies discussing *to drain the swamp* expression in political discourse, although having different aims

2. It is important to mention that Trump himself kept changing the way in which he used the expression. A cursory glance at Trump's use of the expression in the period following the one covered by this study shows that Washington D.C. was not the only swamp he tried to drain, that is, the meaning was not related to government corruption only. By the end of his term in 2021, he used the expression for almost anything he did not like and referred to it as a swamp that needs draining, such as journalists, politicians opposing his immigration policy and tax cuts, bureaucrats, and so on.

from the present study, treat this expression as either a metaphor or a conceptual blend (Burgers et al., 2019) or a conceptual blend (Charteris-Black, 2018, p. 234).

Also, reusing this figurative expression or alluding to it, different texts on the same topic are intertextually connected (see Semino, 2008; Semino et al., 2013; Musolff, 2016, 2017). Once the expression became prominent within the American political discourse community, government corruption was discussed in terms of swamp draining among members of the discourse community, which also triggered the exploitation, reinterpretation, and modification of the blend itself, producing more or less creative figurative language. Thus, the conventional and novel figurative language produced in conceptual blending establishes intertextual links between texts dealing with the same political issue and contributes to strengthening discourse coherence.

(3) a. *According to Susan Ferrechio of the Washington Examiner, Trump may choose* ***to wallow in the swamp rather than drain it****.*
[thecommentator.com, February 22, 2017]

b. *His idea of* ***draining the swamp is to add more alligators****.*
[Madison.com, February 24, 2017]

c. *During his campaign, Donald Trump promised* ***to drain the swamp, but now, knee deep in the muck, he seems to be taking advice from the rats and snakes living there****.* [New Castle News, February 21, 2017]

d. ***Swamp-Draining 101: Don't Appoint Swamp Rats***
[The Nation, December 14, 2016]

e. *If Steven Mnuchin, Betsy DeVos and Steve Bannon are who we are counting on* ***to drain the swamp, I would put my money on the mosquitoes****.*
[The Nation, December 14, 2016]

These examples can be treated as modified and elaborated versions of the swamp blend. As the original blend, these blends are asymmetric, inheriting the organizing frame from input space 1, the swamp input. However, apart from the swamp and the process of draining it, other various portions of conceptual material are activated and projected to the blend from the swamp input. In the examples in (3), different aspects of the swamp concept, ranging from animals that inhabit swamps such as alligators, rats, and snakes to the specific characteristics of this ecosystem, such as terrain configuration, are projected to the blend. These blends exploit the background knowledge about swamps possessed by Americans, including social, cognitive, and cultural aspects. It also demonstrates the flexibility of blending in meaning creation. Some of these blends can be perceived as showing a higher degree of creativity because they activate the aspects of this input that are not as salient as the aspects exploited in the original blend. Thus, recruiting marginal aspects of this input space produces more striking examples of figurative creativity, both linguistically and conceptually.

The familiarity and accessibility of the swamp blend and the rich conceptual knowledge about the swamp input, shared by the members of the discourse community, are exploited in the modification of the original blend, occurring online, in dynamic discourse situations. The product of complex cognitive operations in conceptual blending is creative figurative language, which can be used to achieve different discourse goals and promote a certain rhetorical agenda. In that sense, members of the American discourse community creatively stretched the swamp blend, producing creative figurative language in order to criticize Trump's political moves which are contrary to draining the swamp in Washington, and they did so in order to provide their own insights into this issue and give advice for solving it, to ridicule its use and prominence through political humor, as well as to criticize the prominence and question the validity of the expression itself.

In (4) and (5), using highly creative figurative language, the participants in the political debate about the establishment in Washington provide their insights into this issue by discussing the state of affairs in the capital and offer advice to the president on how to solve this problem.

(4) a. *What makes the matter worse, there doesn't seem to be anyone yet in his inner circle who truly understands how our government and politics actually work. **"Draining the swamp"** is certainly ambitious but not really the problem. He needs people around him who know how **to handle the exposed alligators and snakes that live there. The "swamp" (Washington, D.C.) is merely a place; the dangers and complications are its inhabitants**. […] The president really needs to have people around him who understand both the **"swamp" and the "reptiles."*** [The Morning Call, February 22, 2017]

b. *Although we can understand the President's goal of wanting **to drain the swamp**, we encourage him to focus on **the real alligators in it**.* [thehill.com, February 27, 2017]

c. *Yes, Trump **can drain the 'swamp'** but he must do THIS first or **get eaten by the alligators**.* [FoxNews.com, February 15, 2017]

In (4), by receiving further projections of the rich conceptual material from the swamp input, the blended space contains a modified scenario of the Washington swamp as a dangerous place with creatures such as alligators lurking, and its draining becomes a matter of life and death. Thus, backward projections from the blend into input space 1 highlight the negative aspects of the establishment in Washington and the importance of getting rid of it.

Similarly, the examples in (5) have the same discourse goals, that is, to warn about the dangers of the establishment in Washington. As in the previous set of examples, the creative figurative language in these examples is produced in the modified and elaborated blended space, which contains the scenario in which the Washington swamp creatures are fighting back the process of draining the swamp.

(5) a. ***Draining a swamp*** *is a great challenge, especially when others are trying* ***to fill it back up****, including your supposed allies. For decades, the American people have increasingly suffered under* ***a growing horde of mosquitoes, leeches, chiggers, and other blood-sucking organisms that have arranged a wonderful home for themselves in Washington D.C. These organisms*** *often disguise themselves as decent human beings, proclaiming they want to 'help the small guy' or 'defend our freedoms'.*

[American Thinker, March 30, 2017]

b. *Mr. Trump, a self-proclaimed rebel swept into office by a populist insurgency, has vowed to "****drain the swamp****" of the capital. Swamps, with their snakes and alligators, are dangerous ecosystems, their denizens eager to mount fights of their own. In the case of Washington and Mr. Trump,* ***the swamp dwellers are doing so with all their energies and venom****.*

[The Globe and Mail, February 23, 2017]

In (5) a., the process of draining the swamp in Washington, inhabited by blood-sucking creatures, becomes especially hard if someone else is trying *to fill it back up*. The process of filling the swamp instead of draining it is not in accordance with the logic of the swamp input; rather, it is developed in the emergent structure. In (5) b., the Washington swamp inhabitants are putting on the fight against the process of swamp draining. The inferences produced in the emergent structures in the blends are projected back to input space 2. These backward projections from the blend to input space 2 recast Washington insiders as dishonest people fighting to keep the current order in Washington and taking advantage of the establishment at the expense of ordinary people.

Creative figurative language, produced in conceptual blending, was used to criticize Trump for appointing Washington insiders as his cabinet members in spite of having vowed he would get rid of such people in Washington.

(6) a. *During the campaign, Donald Trump pledged* ***to "drain the swamp in Washington."*** *After less than a month,* ***not only is he wallowing in it, but it is getting bigger and deeper by the day.*** *For a man who claims to be so smart, he does not know how to: pick candidates; organize an office; surround himself with smart people instead of a bunch of loose cannons such as …*

[St. Louis Post-Dispatch, February 21, 2017]

b. ***Trump plunges into 'swamp' he promised to 'drain'***

[San Francisco Chronicle, December 1, 2016]

c. *Donald Trump promised* ***to "drain the swamp"*** *if elected president. But judging by his Cabinet picks,* ***he's fishing from that swamp, not draining it****. […] "****This isn't draining the swamp,****" Sen. Sherrod Brown, D-Ohio, said this week. "****It's stocking it with alligators****."*

[San Francisco Chronicle, December 1, 2016]

As in the previous examples, in the examples in (6), the blended space is modified and enriched by projections of additional aspects of the swamp input. The modified emergent structures in the blended spaces in these examples contain a scenario in which Trump becomes part of the Washington swamp by plunging in it, wallowing in it, and fishing his cabinet members from it. In (6) a., for instance, in the modified scenario in the blend, Trump is wallowing in the swamp and constantly making it bigger and deeper by adding more politicians from the Washington establishment to his cabinet. Making the swamp bigger and deeper by adding more swamp creatures to it is the logic developed in the emergent structure in the blend. In all of the examples in (6), inferences produced in the blend are projected back to input space 2 emphasizing the fact that Trump and his cabinet members are part of the establishment and that, instead of getting rid of the establishment in Washington, the Trump administration produces no change.

In addition, imaginative conceptual blends viewed as modified versions of the original swamp blend above can be used to ridicule the prominence and the meaning of the figurative expression and the scenario it creates within the American political discourse community through political humor and satire, in forms of multimodal humor. In addition to the humorous examples presented in (7), numerous other multimodal formats, such as political cartoons and Internet memes, visually exploiting the expression, were produced in the period covered by this study. In the examples in (7), the jokes from late-night comedy shows humorously criticize Trump's political moves.

(7) a. *Despite Donald Trump's campaign promise* ***to drain the swamp****, many of the people in line for his administration are long-time Washington insiders and lobbyists. Because even* ***if you drain the swamp, it's still full of Newts*** *[a picture of Trump ally and former house Speaker Newt Gingrich appears],* ***a sleepy little turtle*** *[a picture of Trump opponent-turned-surrogate Ben Carson appears],* ***a hissing possum*** *[a picture of former New York City mayor Rudy Giuliani appears],* ***and a pile of wet garbage*** [*a picture of New Jersey governor and Trump sycophant, recently demoted from the Trump transition team, Chris Christie appears*]. [Saturday Night Live, November 12, 2016]

b. *The billionaire of the people ordered young garlic soup with thyme and sautéed frog legs. I thought he said he was going* ***to drain the swamp, not eat its contents****.* [The Late Show with Stephen Colbert, November 30, 2016]

In the jokes in (7), the humorous meaning is created due to the unusual combination of related structures, which results in incongruity. As in most previous examples, in Example (7) a., politicians are conceptualized as inhabitants of the Washington swamp. The meaning is created by combining verbal and visual material, playing with phonological similarities between words, as well as exploiting the physical and

mental characteristics of the politicians in question. Thus, in the absurd scenario in the blend, Trump's cabinet picks are newts, possums, and piles of garbage found in the Washington swamp. This absurd world created in the blended space produces humorous effects. Backward projections to input space 2 highlight that his cabinet picks come from the Washington establishment, which does not mean draining the swamp. Similarly, in (7) b., in the bizarre scenario created in the blend, Trump is involved in eating the contents of the swamp, not draining it. Backward projections highlight Trump's failed promise to deal with the establishment in Washington.

In the examples in (8), the discourse participants comment on the use and the meaning of the expression *to drain the swamp*, question its appropriateness in the context of American politics, and reinterpret its meaning by wording their views in metadiscursive comments.

(8) a. ***At its bottom, drain the swamp is a metaphor: If you drain the swamp, you eliminate the mosquitoes (or snakes and alligators, in other iterations) that breed disease. But, ironically, the original disease the expression referred to was the very thing Trump has built his campaign on: big business.*** *Etymologist Barry Popik has traced drain the swamp back to the socialist movement of the early 20th century*.

[slate.com, October 26, 2016]

b. *I've noticed on a couple of fronts, like people chanting "lock her up," that he's in a different role now and maybe he feels that as president, as the next president of the United States, that he should be marginally more dignified than talking about* ***alligators in swamps.*** *I personally have, as a sense of humor, like* ***the alligator and swamp language****. … I think it vividly illustrates the problem, because all the people in this city who are* ***the alligators are going to hate the swamp being drained****. And there's going to be constant fighting over it. But, you know, he is my leader and if he decides* ***to drop the swamp and the alligator, I will drop the swamp and the alligator***.

[NPR, December 21, 2016]

Thus, by reusing or alluding to the figurative expression *to drain the swamp* in Examples (3)–(8), the members of the discourse community present their own views on the issue of the Washington establishment. In order to be rhetorically effective, they shape their views in creative figurative language produced in conceptual blending. In these examples, the original conceptual blend is enriched by additional projections of marginal aspects of the swamp input, producing more creative conceptual blends. These projections modify the scenario created in the original blend, developing it in different directions. Such modified scenarios negotiate and reinterpret the meaning of the original blend and promote strong argumentative stances.

Apart from the modification of the original blend by additional projections, such blends can also be reinterpreted by projections from additional input spaces. In that sense, in the blend in (9), Donald Trump is in the swamp and is ready to drain it physically, but he is also willing to kiss toads that could turn into characters from fairy tales.

(9) *So Trump* ***has waded into the swamp, new galoshes on, digging tools and materials in hand, a winning smile, and high hopes for the commencement of draining****. He thought he might even find* ***a few toads to kiss behind closed doors****, like the old days of smoke-filled rooms, arm-twisting and D.C. deal-making.*
Instead, ***his cigar is soaked, the soggy match won't light, and he's gotten a real whiff of the odor. Now the swamp creatures nip at his ankles, and the mosquitoes have proceeded to drain him****.* [The Daily Caller, February 17, 2017]

As already mentioned, this conceptual blend is a reinterpreted version of the blend discussed previously, in which the blend is modified not only by additional projections from the swamp input, but also by projections from a completely new input, the fairy tale input. Therefore, the conceptual integration network comprises five spaces, three input spaces, a generic space, and a blended space. As in the original blend, input space 1 contains the concept of draining the swamp, and input space 2 contains the state of affairs in the political life in Washington, D.C. Also, another input space contributes to creating a conceptually richer image in the blend, that is, the fairy tale input. Thus, input space 3 contains the concept of a fairy tale, a short story in which positive characters undertake a quest to fight evil. The plot usually takes place in enchanted settings, such as forests, water, or kingdom, often inhabited by fantastic creatures. The problems in fairy tales usually get resolved, and in most cases, events have a happy ending. In some fairy tales, female characters, such as princesses, have to be saved by courageous knights, or they have to save men of their dreams by transforming them from frogs into humans by kissing them.

Apart from the cross-space mappings between the swamp and Washington inputs in the original blend, additional cross-space mappings are established between these inputs and the fairy tale input. Cross-space mappings connect frogs as species that live in swamps to frogs from fairy tales that, after a kiss, turn into positive characters. The main character in a fairy tale enthusiastically embarking on a quest to fight the evil from this input space is connected to Trump vowing to rid Washington of corruption in input space 2.

The blend receives the organizing frame from the swamp input. Projected to the blend from input space 1 are marginal aspects of the knowledge about swamp draining, that is, galoshes, tools, and other equipment for draining and the humidity and odor of the swamp, the creatures that inhabit it, including mosquitoes. From

input space 2, the Washington input, the blend receives projections that include Donald Trump and his vow to rid Washington of corruption and Washington insiders and the way of doing business in Washington, often making deals behind the closed doors. Projected to the blend from input space 2 are toads that turn into princes after kissing and a fight against the evil in which, of course, the good wins. In this elaborate blend, Donald Trump is entering the Washington swamp with full equipment ready to drain it, even hoping to find a few toads to kiss. However, on his quest to rid the Washington swamp of corruption, he is deep into the Washington swamp, with creatures draining him instead of him draining the swamp. In the blend, the quest will probably end badly, contrary to a fairy tale with a happy ending. Backward projections from the blend into the Washington input emphasize that Trump will not easily deliver on his promise to rid Washington of corruption; rather, Trump will gradually become part of the establishment.

Apart from modifying the blend by including a new input, the original blend can also serve as one of the inputs in a new conceptual integration network to create a new scenario built on the basic scenario created by the figurative expression. Thus, this example shows the conceptual flexibility and richness of the blend, which, once created, can be reinterpreted into elaborate and creative scenarios.

(10) *We should* ***drain the swamp. But the drain seems plugged, and the swamp is at record high levels.***
It would take ***massive amounts of industrial-strength drain cleaner to get things flowing in the right direction****. The good news is* ***the Environmental Protection Agency*** *might allow* ***those amounts these days****.*
[The Grand Island Independent, April 1, 2017]

In this example, the blend in which the figurative meaning of the expression *to drain the swamp* is created serves as an input space in a five-space conceptual integration network, thus forming a mega-blend. Therefore, this five-space network is composed of input space 1, which is the abovementioned blend, which contains Donald Trump trying to clean the swamp of corruption in Washington by draining it. Input space 2 includes the concept of clogged sinks, tubs, or toilets in households and the process of unclogging them by using drain cleaners, that is, chemicals that can unclog pipes but also contribute to pollution of water. Input space 3 contains the environmental policy of the Trump administration. By cutting the Environmental Protection Agency's budget, Trump managed to endanger many programs dealing with climate change, pollution clean-up, energy efficiency, and the decades-long programs aimed at improving air and water quality.

Cross-space mappings connect the verb to drain from input space 1, meaning to remove liquid gradually or entirely, and the noun *drain* in the compound *drain cleaner*, which refers to a means, such as a pipe, by which the liquid is drained.

These two inputs are also connected by the process of draining liquid, although the methods and means are completely different. The Washington dealings from input space 1 are connected to Trump's environmental policies from input space 3. Furthermore, the drain cleaner from input space 2 is connected to water pollution regulated by the Environmental Protection Agency. The blend receives selective projections from all three inputs. Projected to the blend are the Washington swamp in need of draining from input space 1, the drain cleaner as a means of draining a clogged sink from input space 2, and the amount of the drain cleaner needed to drain the sink with a high level of water and the Environmental Protection Agency and Trump's environmental policy from input space 3.

In the blend, the Washington swamp needs to be drained because it is plugged, and it has a record high level of water. Considering this situation, large amounts of industrial-strength drain cleaner will need to be used to unclog it, let things flow in the right direction, and the Environmental Protection Agency will allow pollution of water according to the new environmental policies. Backward projections from the blend to input space 3 highlight that the Trump administration has changed U.S. environmental policy, and the Environmental Protection Agency will no longer have the possibility to implement different programs. Backward projections from the blend to input space 1 emphasize that draining the Washington swamp, that is, eliminating government corruption, will be a more demanding task than expected.

As in the previous examples, in Examples (9) and (10), the creative figurative language produced in the reinterpreted conceptual blends is used for argumentative purposes. Such language also contributes to establishing intertextual coherence of political discourse on the issue of government corruption. These examples further illustrate the flexibility of blending as a mechanism of meaning construction.

5. Conclusion

Applying conceptual blending theory, the paper has examined the use of the expression *to drain the swamp*, whose meaning is created in conceptual blending, and the creative figurative language produced by the elaboration, modification, and reinterpretation of the blend itself in the contemporary American political discourse. The paper has shown that creative figurative language can be used in different ways by members of the discourse community to achieve various rhetorical goals and strengthen discourse coherence.

The meaning of figurative expressions such as *to drain the swamp* emerges in political discourse, and it can be reinterpreted or negotiated in the interaction of discourse participants. The meaning created in a conceptual blend can be modified, extended, and reinterpreted by additional projections from inputs. Such blends

exploit the background knowledge about inputs, with all of their social, cognitive, and cultural aspects, which contributes to the creativity of such blends. Thus, the analysis illustrates the flexibility of conceptual blending as a mechanism of meaning construction in discourse.

The modified and reinterpreted scenarios that arise in the blended space negotiate or reinterpret the meaning of the original blend and can be rhetorically effective. The original blend can be developed in different directions, focusing on different aspects of the issue. The newly created emergent structures in the blend yield new conceptualizations, which cast a different light on the real-world domains by backward projections. Thus, the creative figurative language produced in this way can be used to achieve different discourse goals, from criticizing to ridiculing the use and the meaning of the expression itself.

The prominence of a certain figurative expression can form a micro-tradition of discussing particular issues within a discourse community predominantly in figurative terms. Reusing the figurative expression or alluding to it, different texts on the same topic are intertextually connected. Creative figurative language produced in conceptual blending contributes to achieving discourse coherence at the intertextual level.

The analysis has shown that the exploitation, reinterpretation, and modification of a prominent blend in dynamic discourse situations contributes to achieving the overall conceptual and textual coherence of political discourse on a particular subject. As George Lakoff (2014) claims, constantly evoking and activating a specific frame or scenario by reusing particular expressions in political discourse can strengthen a particular worldview. Even when the opponents try to negate it by simply repeating the language, they unconsciously activate the original frame or scenario and thus strengthen it. As this study has attempted to show, by resorting to creativity and proposing alternative scenarios, the participants in political debates extend and negotiate the meaning of a dominant figurative expression or scenario and adjust it to their own rhetorical goals. It can be claimed that *to drain the swamp* swamping American political discourse, on the one hand, helped Donald Trump as the original user of the expression set up a scenario that successfully promoted his political agenda and manipulated the media by diverting their attention from more important issues. However, on the other hand, it allowed discourse participants, especially in the post-election period, to seize an opportunity to use the scenario already dominating the political discourse to their advantage and modify and adjust it to fit their political views. Thus, keeping in mind the danger of reinforcing the frame by repeating particular language, when a particular frame cannot be avoided or reframed in political discourse, as it seems to have been the case with *to drain the swamp*, at least a particular figurative expression can be creatively exploited to discredit that frame.

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Being in the same boat, in two ways

Conflict metaphors in health care

Ágnes Kuna, Naike Bochatay, Sara Kim and Márta Csabai
ELTE, Budapest / University of Geneva / University of Washington, Seattle / University of Szeged

In research on conflicts, the systematic study of metaphors is playing an increasingly prominent role. In the context of a U.S. – Swiss–Hungarian international collaboration investigating conflicts through interviews with healthcare professionals, the present chapter analyzes linguistic and conceptual metaphors in Hungarian interviews. The theoretical background for the analysis is provided by the cognitive theory of metaphor, while its methodology is based on MIPVU.

Moving away from linguistic representations, this study aims to analyze the role of metaphors in the conceptualization, interpretation, and management of conflicts. The chapter presents general, conventionalized orientational and ontological metaphors of conflict, also exploring the core metaphors of the metaphor families of COMPETITION and COOPERATION as well as correlations between conflicts and power structures.

Keywords: competition, cooperation, metaphor family, (re-)framing

> Conflict can be either bad or good.
> Conflict presents danger and opportunity.
> (Hocker–Wilmot, 2017, p. 39)

1. Introduction

Efficient communication, conflict management and cooperation are key factors of successful patient care. However, a growing body of research has shown that the interprofessional practice of healthcare professionals is often stressful, mired by conflicts, unaddressed, and unresolved problems (Kim et al., 2017; Bochatay et al., 2017; Cullati et al., 2019). These conflicts may have a negative impact on both patient care and the wellbeing of the professionals involved. Thus, rather than assuming an idealized setting of cooperation (which is often the case in medical

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training), it is worth assessing the typical conflicts that health care workers experience, which may be a first step towards the management of challenging situations.

Conflicts arise when a person's interests clash with those of another person, and this prevents them from achieving their goals; or several people may claim on the same limited resource; or two or more people's value systems, priorities and attitudes are incompatible with each other. Conflicts may occur at several levels within the same organization. It is possible to distinguish between intrapersonal and interpersonal conflicts, with the latter developing either within a group or between two different groups (Rahim & Bonoma, 1979). Conflicts necessarily arise in all work place environments, thus also in health care. All the more so, because patient care requires the concerted effort of several professions, which is hindered by the high level of stress that comes with healthcare work. As a result, there is an enhanced risk of conflicts arising between healthcare professionals (Leever et al., 2010).

Conflict management and communication between healthcare workers (doctors, nurses, and other personnel) is absolutely vital for the success of patient care. An organizational morale based on cooperation lowers the risk of human errors, enhances efficiency as well as patient safety, and last but not least has a cost-reducing effect (Paradis & Whitehead, 2015). In view of the above, it is crucial to gain a better understanding of conflicts in health care so that an adequate strategy can be developed for improving the situation.

In the context of an international research project investigating conflicts in health care (Kim et al., 2016; Bochatay et al., 2017; Csupor et al., 2017), the present chapter explores conflicts reported by Hungarian professionals, and aims to highlight the role of metaphors in the conceptualization, interpretation and management of conflicts. In line with this objective, the chapter discusses the relationship between conflicts and metaphors (Section 2) and presents the empirical material and the method of metaphor analysis (Section 3). Section 4 gives an overview of the major types of metaphors (CONFLICT IS A CONTAINER OR MOTION, CONFLICT IS AN OBJECT OR A PROCESS/EVENT) and metaphor families (for conceptualizing COMPETITION and COOPERATION) which appear in the conflicts of healthcare professionals. A separate subsection is devoted to figurative features of conflicts and power (Section 4.5). Finally, the chapter summarizes the results of metaphor analysis and offers concluding remarks (Section 5).

2. Conflicts and metaphors

Conflicts naturally accompany our existence as social beings through all spheres of life (family, workplace, institutions, literature, etc.). Conflicts are characterized both by general features and specific ones derived from the social situation (Boulding, 1963). According to the definition of Boulding (1963) and Deutsch (2014), conflicts arise when the goals, expectations and interests of people are perceived as incompatible (Kim et al., 2017). Conflicts are closely intertwined with communication in the following ways: "communication behavior often creates conflict, communication behavior reflects conflict, communication is the vehicle for the productive or destructive management of conflict" (Hocker & Wilmot, 2017, p. 4). Hence, communication is a key factor for the understanding and management of conflicts.

Conflicts may be regarded as complex events involving incompatibility as a central component of their general schema or script (Schank & Abelson, 1977). Incompatibility may pertain to a variety of factors including approaches to solving a task, personality traits, evaluative attitudes to a given entity, emotions, etc. The core element or source of conflict is thus incompatibility, which is linked to a particular entity (object, person, event, etc.) in some fashion. Interpersonal conflicts presuppose at least two participants and explicit or implicit effect (possibly both), which also involve, the individual or group management of the situation engendered by conflict. The latter includes five basic types, namely competing, collaborating, compromising, avoiding, and accommodating strategies (Kilmann & Thomas, 1975), with their names reflecting the fact that the linguistic construal and interpretation of conflicts (as complex events) often relies on metaphors. At the same time, conflicts also function as cultural scripts, defined by Wierzbicka (2015, p. 339) as "representations of cultural norms which are widely held in a given society and are reflected in language." Conflicts have a range of conventionalized and culturally defined features, which are highly amenable to linguistic documentation. Accordingly, the description of conflicts is a multi-level, complex enterprise: It is possible to address (i) conflicts as particular events; (ii) the interpretation of conflicts; and (iii) conflict management and the behavior of participants within it. Cultural norms and patterns play a role at all three levels.

According to McCorkle and Mills (1992, p. 57), "metaphors can function as models for how conflicts should be negotiated." Metaphors and, more generally, the way in which we talk about conflicts function as frames both culturally and at the level of interpreting specific conflicts. Frames aid the organization and understanding of experiences (Goffmann, 1974). By metonymically highlighting certain features, they help process complex phenomena in a simplified, schematic manner. However, this also contributes to the "conservation" of certain features. This is also the case with the word *conflict*, which itself has a metaphorical basis, having been derived from the Latin verb *confligere* 'hit together' (Benkő, 1970).

Here, incompatibility (difference of opinions) is construed as physical aggression, which serves as a basis of symbolization in one of the most common metaphors, CONFLICTS ARE BATTLES, WARS. In accordance with this original semantic structure, the word *conflict* often evokes a negative interpretation even by itself.

There are also several other groups of highly conventionalized metaphors derived from general features of conflicts, which function as cultural models for conflict interpretation (Holland & Quinn, 1987; Shore, 1996). For example, conflicts are typically processes unfolding in time (CONFLICTS ARE PROCESSES), which have both a beginning and an end, and which are characteristically shared, related in a narrative form (CONFLICTS ARE STORIES). Similarly to other states construed as circumstances, conflicts are often conventionally conceptualized in space as CONTAINERS. In addition, conceptualizations more closely related to the context of conflicts can also be observed. Beyond expressing general features of conflicts, these assign a more prominent role to factors specific to the linguistic as well as conceptual construal of a given situation (e.g. PROFESSORS ARE FEUDAL LORDS (16a)).

In both the analysis and management of conflicts, metaphors play an increasingly prominent role (McCorkle & Mills, 1992; Hamburger & Itzhayek, 1998; Hocker & Wilmot, 2017). Metaphors also appear in the literature on conflicts in healthcare settings and in healthcare practices as well (Stein et al., 1990; Hodgkin, 1985; Gibbs & Franks, 2002; Mitchell et al., 2003; Weaver, 2013; Semino et. al, 2018, etc.). This is partly due to the fact that "metaphors express, reflect, and reinforce different ways of making sense of particular aspects of our lives" (Semino et al., 2018, p. 625). Metaphors convey the way people perceive, remember, and analyze information they receive. They have a certain 'framing power,' which is related to the background knowledge, expectations, associations and linguistic constructions associated with the conceptual domains involved (Semino, et al., 2018, pp. 627–628). However, any single metaphor limits people's perception; in other words it has a perspectivizing effect: Source domains highlight certain features of target domains while hiding others (Lakoff & Johnson, 1980, pp. 10–14). For example, the metaphor CONFLICT IS A BATTLE highlights the negative, competitive aspect of conflicts while hiding opportunities for cooperation.

In their study of conflicts in organizations and institutions, Hamburger and Itzhayek (1998, p. 383) claim that "much of the conflict in the organization is caused by people holding different metaphors." This may also apply to conflicts in other environments. The way a conflict is expressed metaphorically creates a certain perception of the situation and related feelings, attitudes: What can happen, what will happen, what should happen, and with what kind of feeling behavior takes place (McCorkle & Mills, 1992).

The systematic analysis of metaphors may facilitate a better understanding of conflict situations, thus also allowing for efficient conflict management; they may

even be a catalyst of change. According to Hocker and Wilmot (2017) metaphors can serve as "diagnostic tools" in conflict management. This has been demonstrated in several analyses of practical issues such as the management of organizational conflicts (Cleary & Packard, 1992; Hamburger & Itzhayek, 1998) and the understanding as well as the treatment of problems arising when young people make career choices (Creed & Nacey, 2021).

Whether conflicts are evaluated positively or negatively is a central concern of research on conflicts. Conflict interactions can indeed be constructive, productive or destructive depending on many factors, including the context in which it occurs (Deutsch, 2014; Hocker & Wilmot, 2017). Nevertheless, conflicts are typically interpreted as negative, destructive phenomena weakening collaboration, problem solving and communication between the participants, as suggested by both everyday feedback and research results. However, conflicts can in fact be positive and constructive as well. They can lead to better judgment, decision making and understanding of others' positions, and can also improve team performance and facilitate stronger team cohesion (Kim et al., 2017).

A negative evaluation of conflicts is also manifested at the level of metaphors. Hocker and Wilmot (2017, pp. 49–60) observe that negative metaphors appear to dominate interpersonal conflicts. Examples include DANGER, WAR, BULLYING, EXPLOSIVE, TRIAL, WILD ACT OF NATURE, ANIMAL BEHAVIOR, MESS, GAME, COMMUNICATION BREAKDOWN, HEROIC ADVENTURE. By contrast, BARGAINING TABLE BALANCING ACT, TIDE, DANCE, GARDEN, and MUSICAL IMPROVISATION can be described as collaborative concepts of conflict. Crum (1987), for his part, talks about "five mindsets in conflict situations" rather than conflict metaphors. These include DESTRUCTION, DECAY, SURVIVAL and the positive schemas of SUCCESS and ARTISTRY. He emphasizes the fact that these "mind sets" (metaphors) help participants re-frame conflict situations, allowing them to learn new ways of thinking and acting.

These lines of investigation increasingly draw on the cognitive theory of metaphor (cf. Lakoff & Jonson, 1980; Johnson, 1987; Lakoff, 1987; Turner, 1987; Lakoff & Turner, 1989, etc.) and the methods of corpus linguistic research on metaphor (Steen et al., 2010), which also inform the present analysis. Accordingly, metaphor is considered as a mapping between conceptual domains which aids the processing and systematization of encyclopedic knowledge. Metaphor is a mental operation, which is conceptual and linguistic at the same time. Generally it is based on everyday experience, and offers an analogical way of representing knowledge about the world in language. Characteristically, metaphors facilitate the understanding of abstract notions by allowing them to be mentally accessed through the properties of more concrete phenomena. This process is significantly shaped by socio-cultural context (Holland & Quinn, 1987; Kövecses, 1999, 2005; Gibbs, 1999, etc.).

3. Data and method

The present chapter focuses on conflicts experienced by Hungarian healthcare professionals, studied within the context of an international (American-Swiss-Hungarian) research project (Kim et al., 2016; Kim et al., 2017; Bochatay et al., 2017; Csupor et al., 2017). The Hungarian research material consisted of interviews recorded with 25 nurses and 50 doctors (between 2014 and 2016), conducted on the basis of the American-Swiss joint protocol. In the 75 interviews, the informants shared 144 conflict stories, of which 91 occurred with co-workers, with the remaining ones typically involving patients or their relatives. Over the course of data collection, we did not give our informants prior instruction as to what kinds of conflicts they should discuss, neither did we provide a definition of conflicts for them. Accordingly, the stories reflect the participants' own interpretation and lived experiences of conflicts, with strong implications for their metaphoric conceptualizations of conflict. The interviews were subjected to content analysis with two independent coders working with qualitative data analysis software ATLAS.ti 7.[1] The subsequent analysis looked into the types, sources, manners of unfolding, and effects of medical conflicts (Csupor et al., 2017), also exploring conflict management strategies and their association with the use of metaphors.

In this study, we performed metaphor analysis based on the methodology for linguistic metaphor identification (MIPVU: Metaphor Identification Process Vrije Universiteit, University of Amsterdam; Steen et al., 2010) on randomly selected interviews shared by 15 doctors and 15 nurses, examining 854 linguistic metaphors associated with conflicts.[2] Beside metaphors, we also analyzed other expressions playing a part in the semantic network of conflicts, including synonymous words and collocations which contribute to the elaboration of conflicts (e.g. *problem, situation, conflict circle, story*). These often also indicate what kinds of conventionalized meanings and attitudes are associated with conflicts.

Our qualitative analysis did not aim for the annotation of all metaphoric expressions appearing in the interviews, rather, it only analyzed linguistic representations that were strongly related to the linguistic as well as conceptual construal of conflicts. Accordingly, the presented examples are always closely linked to the elaboration of conflicts. When it comes to the link between conflicts and power

1. The two independent coders were Éva Csupor and Ágnes Kuna.

2. In examples, linguistic metaphors are consistently marked by bold letters in both Hungarian and English, even though the structural patterns of the two languages do not necessarily correspond to each other from a grammatical perspective. For each example, we specify the number of the interview and the profession of the informant: MD (medical doctor), N (nurse), HN (Head nurse).

structures, the broader context of conflicts is explored (Section 4.5); however, in the case of general categories (Sections 4.1–4.4), it does not receive detailed analysis.

"Metaphor in cognitive linguistics is a two-way affair: it can go from linguistic metaphor to conceptual metaphor, or from conceptual metaphor to linguistic metaphor" (Steen & Gibbs, 1999, p. 1). The present study follows the former route, i.e., it uses linguistic metaphors as a point of departure for describing the conceptualization of conflicts, which in turn may crucially inform their understanding and management (Hocker & Wilmot, 2017). In metaphor analysis, we primarily follow the methodological principle adopted by Semino and her colleagues (Semino et al., 2004), which builds on Steen (1999) at several steps but places more emphasis on context and the role of conventionalized metaphors, relying on corpus data. For the latter aspect of our analysis, we use the Hungarian National Corpus (Oravecz et al., 2014).

The main questions of our research are the following:

1. What kinds of metaphors appear in the conflict stories of healthcare professionals?
2. What is the role of metaphors in the conceptualization of conflicts?
3. How is power distributed in metaphors?
4. Can metaphors play a role in conflict management?

4. Conflict metaphors

Conflicts cannot be interpreted without taking into account their cultural and social contexts (LeBaron, 2014). In essence, conflicts can be considered as socio-cultural concepts, as cultural models or scripts (Wierzbicka, 2015).

> Cultural models are constructed as mental representations in the same way as any mental models with the important exception that the internalization of cultural models is based on more socially constrained experiences than is the case for idiosyncratic models. (Shore, 1999, p. 7)

Several culturally embedded, conventionalized views and metaphors pertain to conflicts, which also influence attitudes to conflict management. These include such paradigm examples of metaphors for conflict (Coleman, 2014) as political (CONFLICT IS WAR/GAME), medical (CONFLICT IS A DISEASE), biological (CONFLICT IS A LIVING ENTITY), and communication metaphors (CONFLICT IS A STORY), etc.

These cultural models and general beliefs are often linguistically represented and transmitted in conventionalized ways in the semantic network of conflicts (e.g. *dolog* 'thing', *baj* 'trouble', *gond* 'concern', *probléma* 'problem', *nézeteltérés*

'disagreement'), foregrounding, metonymically or metaphorically construing prototypical features of conflicts. For example, a conflict may be construed negatively, as a narrative, a thing, etc., foregrounding particular dimensions of the cultural script of conflicts. This is illustrated by (1a), (b).

(1) a. *oltári nagy **probléma*** 'enormous **problem**' (Int. 2, MD)
b. ilyen ***helyzetet mesélj el*** '**tell** me about a **situation** like **this**' (Int. 5, MD)

The present study explores conceptual metaphors appearing in conflict stories shared by healthcare professionals, putting a premium on the analysis of conceptual domains globally characterizing conflicts (CONFLICT IS A CONTAINER, CONFLICT IS A PROCESS, CONFLICT IS COMPETITION etc.). In addition, a separate subsection is devoted to metaphoric conceptualizations of power, the reason being that in American, Swiss and Hungarian conflict stories alike, conflicts correlate strongly with relationships of power. This also suggests that attitudes to power may also constitute a central aspect of conflict management.

4.1 CONFLICT IS A CONTAINER, CONFLICT IS MOTION

The analysis of metaphors appearing in conflict stories has shown that, in the conceptual and linguistic elaboration of conflicts, a prominent role is played by physical experiences and by the associated image schemas. An image schema is a "recurring, dynamic pattern of our perceptual interactions and motor programs that gives coherence and structure to our experience" (Johnson, 1987, p. xiv). This involves the conceptualization of conflicts as CONTAINERS, as OBJECTS, with SPACE and especially the UP-DOWN orientational metaphors (Lakoff & Johnson, 1980) also forming the basis of more complex conceptual structures such as hierarchy (see Section 4.5).

Conflicts can have numerous space related-linguistic representations. Especially frequent, and linguistically highly conventionalized, is the construal of conflicts as CONTAINERS, which often involves the joint elaboration of BEING INSIDE, BEING OUTSIDE, MOVEMENT, or AVOIDANCE (2a)–(e).

In Hungarian, these are typically construed by nouns with locative suffixes or verbs with preverbs (2a)–(e). In constructions like this, verbs (e.g. *lép* 'step') and preverbs (e.g. *ki* 'out') are both metaphorical; moreover, the case suffix (e.g. *-ből*) and the stem (*helyzet* 'situation') are also metaphorical components. Hence, these need to be registered as linguistic representations of metaphoric construal (cf. Simon et al. 2019).

(2) a. ***kilépnék a helyzetből***
'I would like to **step out** of the **situation**' (Int. 4, MD)
b. ***be** kellene **lépni a dologba***
'we should **step into this thing**' (Int. 2, MD)

c. *miért kellett **ebbe bevonni** mást*
'why did you **involve** others **in this**?' (Int. 4, MD)

d. *egy kicsit **belevonultam ebbe a dologba, ebbe a konfliktuskörbe***
'I got a little **involved in** this **situation**, in this **conflict cycle**' (Int. 10, MD)

e. *vagy **elkerülöd** és megcsinálod vagy **belemész** egy **helyzetbe***
'either you **avoid** this **situation** and do your job or you **get into it**' (Int. 5, MD)

Strongly related to the inside/outside spatial relation is the OVERTNESS/OPENNESS of conflicts, which was often mentioned in the interviews *(nyílt konfliktus, nyitott konfliktus* 'overt/open conflict'). At the other extreme, COVERTNESS/CLOSEDNESS has not been conventionalized in the linguistic elaboration of conflicts. In the interviews, the phrases *rejtett konfliktus* 'hidden conflict' and *nem vállalta fel nyíltan* 'he/she was not open about it' are attested.

4.2 CONFLICT IS AN OBJECT

Conflicts are often conceptualized as OBJECTS, which may have a variety of features. They may be heavy, awkward, and they may have size, depth, arrangement, etc. The processes associated with these entities add further specification to the features of conflicts (an entity which can be carried, transferred from one place to another, etc.).

(3) a. *azért ennyire nem voltak **mélyek a dolgok**, hogy el kelljen menni táppénzre*
'but **things** weren't that **deep** that I would have needed to go on sick leave' (Int. 25, N)

b. *haza is **hoztam***
'I **brought it** home too' (Int. 1, MD)

c. *nem olyan **könnyű***
'**it**'s not so **easy**' (Int. 2, MD)

d. *a **legnagyobb** konfliktus*
'the **biggest** conflict' (Int. 2, MD)

e. ***terheli** az otthoniakat **ezzel***
'he **bothers** his family with **it**' (Int. 3, MD)

f. *Szerette volna **átteni rám***
'she wanted to **put it on me**' (Int. 4, MD)

In these cases too, the INSIDE and OUTSIDE metaphors occur in an (almost) conventionalized manner, with the conflict appearing as an object either inside a participant or outside her/him (4a)–(e). It is also possible for a linguistic metaphor to contribute to the elaboration of multiple conceptual metaphors. In (4d), conflicts *gets washed out* of the soul, which is at the same time both movement out of the body and getting rid of some negative thing, a process of "cleaning". This is also

shown by concordances extracted from the Hungarian National Corpus (Oravecz et al., 2014). Typically it is dirt, filth, sin, anger and forgotten knowledge, memories which "get washed out". The verb *lenyel* 'swallow' appearing in (4e) is also metaphorical. One primarily swallows food, drinks and pills. However, a conventionalized metaphorical meaning of *lenyel* 'swallow' also appears, which generally refers to the silent, reluctant acceptance of negative things (*failure, anger, word, thoughts*) rather than releasing them, letting go of them from within (Oravecz et al., 2014). The two examples have it in common that they elaborate conflict by the inside and outside relations, movement and by an entity which is undesirable, associated with negative evaluation. In the case of *kimosódik* 'get washed out', this is construed in a predominantly passive way, whereas *lenyel* 'swallow' designates a type of volitional action.

(4) a. ***bennem** van konfliktus*
'the conflict is **inside me**' (Int. 4, MD)
b. ***belső** konfliktus*
'**inside** conflict' (in several interviews)
c. ***kiizélem magamból***
'I'll **get** it **out**' (Int. 2, MD)
d. *a konfliktus **kimosódott** a **lelkemből***
'the conflict **got washed out of my soul**' (Int. 16, N)
e. ***magunkban tartjuk** és **lenyeljük***
'we **keep** it **in ourselves** and **swallow it**' (Int. 19, N)

4.3 CONFLICT IS A PROCESS/EVENT[3]

As a further important feature, conflicts are also fundamentally processual, having a temporal dimension to them. A conflict begins with the onset of incompatibility, and ends when this incompatibility is brought to an end or managed in some way; or as the case may be, sometimes it fails to be settled. The processual nature of conflicts is highlighted by numerous metaphoric expressions of general use:

(5) a. *És ennek a **dolognak** aztán csak úgy lett **vége***
'and this **thing ended** with […]' (Int. 1, MD)
b. *a konfliktus **után***
'**after** the conflict' (Int. 10, MD)
c. *konfliktus **során***
'**during** a conflict' (Int. 18, N)

3. Note that metaphors related to movement also portray processes. Particular groups can be linked at several levels. In this section, we highlight conventionalized metaphors related to the temporality of conflicts, i.e. their unfolding in time.

d. ***megszakadt a konfliktushelyzet***
'the **conflict situation came to an abrupt end**' (Int. 1, MD)

The popular metaphor CONFLICT IS A STORY is also grounded in the processual conceptualization and narrative processing of conflicts (cf. (1b), (6a), (b)) (Hocker & Wilmot, 2017, pp. 60–62; Winsdale & Monk, 2001). Based on the MIPVU method, the CONFLICTS ARE STORIES metaphor is not necessarily interpretable as a metaphor, since it is part of the basic meaning of a *story* that it is "a coherent series of past events that is told or written or possibly presented in some other way" (Pusztai et al., 2003). However, STORY is a typical way of construing conflicts, which can be generally shared, interpreted, and processed through the verbal medium.

(6) a. *az volt a* ***történet***
'that was the **story**' (Int. 2, MD)
b. ***mesélnék*** [*konfliktust*], *de nincs több*
'**I'd like to tell** about [conflicts], but I don't have more' (Int. 10, MD)

4.4 Conflict metaphors – negative framing

As the previous subsections have shown, a key role is played in the construal of conflict as an abstract process by concrete experiences concerning space, time, and events, with several ontological and orientational metaphors involved (Lakoff & Johnson, 1980). In many cases, these are evoked by conventionalized linguistic expressions in conflict-related interactions.

In the data, numerous other conflict metaphors appear, e.g., CONFLICT IS A MESS, A DISEASE, POISON, PAIN, FOOD OR A DESTRUCTIVE FORCE, e.g. FIRE OR A GAME. Many of these structural metaphors may be interpreted as members of a broader metaphor family bringing together and construing general experiences. Morgan (2008, pp. 487–488) uses the term *metaphor family* to refer to an abstract, broad experiential schema which unites a number of core metaphors. Such abstract schemas include COMPETITION and COOPERATION, which are crucial for the description of conflicts.

In line with previous investigations, our empirical material reveals that conflict metaphors are typically associated with negative concepts. Negative vs. positive framing may have a significant influence on emotions and decision-making in particular situations (see Section 4.5.).

The most frequent metaphor family is that of COMPETITION, whose core metaphors have been extensively documented in the literature (Hodgkin, 1985; Stein et al., 1990; Hamburger & Itzhayek, 1998; Weaver, 2013; Hocker & Wilmot, 2017, etc.), and is also highlighted by the present analysis. Closely related to competition is the conceptual elaboration of DESTRUCTION and CHAOS (Crum, 1987).

In conflict analyses, the core metaphors of WAR, BATTLE and GAME have figured prominently, which is largely due to the general features of interpersonal conflicts. This is closely related to the semantic structure of *conflict* ('clashing') and the typically negative attitudes it evokes, moreover it largely follows from the general features of interpersonal conflicts. These can be described as involving at least two participants who stand in a certain relationship, in the context of which some kind of incompatibility arises with regard to an entity. In linguistic elaborations, several elements of BATTLE may be foregrounded (physical aggressions, teams, opposition, etc.).

4.4.1 *CONFLICT IS WAR, FIGHT*

(7) a. *Igen, hogy őt lehet **támadni**.*
'Yes, she can be **attacked**.' (Int. 4, MD)

b. *hogy picit úgy **felvette** a **harcot** a nővérekkel **szemben**.*
'She kind of **picked up** the **fight against** the nurses' (Int. 5, MD)

c. *megpróbálnék **magam köré állítani egy csapatot, aki** velem együtt **kiharcolja** az igazságot tanúként*
'I tried to **build a team of witnesses around me** that would **fight** for the truth' (Int. 25, N)

d. ***ellenségekkel** vagyok **körülvéve**.*
'I'm **surrounded** by **enemies'** (Int. 25, N)

4.4.2 *CONFLICT IS QUARRELLING*

In the emergence of conflicts as well as in conflict stories and conflict management, a key role is played by communication (Krauss & Morsella, 2014; Hocker & Wilmot, 2017; Kim et al., 2016; Kim et al., 2017; Bochatay et al.; 2017, Csupor et al., 2017), which is also manifested at the level of metaphors, usually as QUARRELLING/DISPUTE within the concept of COMPETITION. Again, this is related to the concept of clashing that forms part of the original semantic structure of the word *conflict*; moreover, it hinges on incompatibility and the ARGUMENT IS WAR structural metaphor as well (Lakoff & Johnson, 1980). Among linguistic elaborations and individual interpretations, conventionalized expressions commonly appear (e.g. *szóváltás* 'dispute', *veszekedés, összeszólalkozás* 'quarrelling'). Much less frequent is the expression *tyúkperpatvar* 'hens' fight', which more strongly highlights the informant's individual, value-depriving interpretation and whose individual character is shown by the fact that it does not occur in the Hungarian National Corpus at all. In the cases of *tyúkperpatvar* and *tyúkudvari konfliktus* 'hen yard conflict/bickering' (19b), a stereotype about women may also be activated, as the conflicts in question involve

(and are experienced by) female participants. Furthermore, *tyúkperpatvar* may also function as a blend, with *tyúkper* 'hen-stealing' and *perpatvar* 'clash' both expressing disdain for the object of dispute, value deprivation and a negative impact on human relationships.

(8) a. *És nincs **veszekedés köztük** és **működik**.*
'And there is no **dispute between them** and **it works**.' (Int. 6, MD)
b. ***szót szó követett** és hát tulajdonképpen elég csúnyán **összeszólalkoztunk**.*
'well, **one word followed the other** and in the end we had quite a nasty **quarrel**.' (Int. 30, N)
c. ***Tyúkperpatvar** jellegű, amikor két kolleganő **összevitatkozik**.*
'It is a **bickering conflict** when two female colleagues are having an **argument**." (Int. 29, HN)

4.4.3 *CONFLICT IS A GAME*

The metaphor CONFLICT IS A GAME is strongly related to the conception of competition, and may be regarded as frequent among conflict metaphors (Stein et al., 1990; McCorkle & Mills, 1992; Weaver, 2013; Hocker & Wilmot, 2017).

(9) a. *én azért látom, hogy nagy **játékos**.*
'what I see though is that he is a great **player**' (Int. 6, MD)
b. *Nyilván magát próbálta **védeni**, de ez ugye rövidtávon kiderült, hogy nem én vagyok a **hunyó**, hanem ő.*
'Of course he tried to **defend** himself but soon it became clear that I am not the **culprit** [**the seeker in a hide-and seek game**]; he is.'
(Int. 18, Nurse)

Within the metaphor family of competition, core metaphors are typically linked to negative concepts. In relation to metaphors of FIGHTING and WAR, the consequences are often foregrounded, for example DESTRUCTION, DEVASTATION, FALLING ILL, PAIN and also CONFUSION as well as CHAOS, as shown by the examples below.

4.4.4 *CONFLICT IS POISON*

(10) *egy **belső feszültség** az embernek és nem az, hogy **kifele** is és **megmérgezi** az egész mindennapos munkát*
'it's an **internal tension** and it's spreading **out** and **poisons** everyday work completely' (Int. 19, Nurse)

4.4.5 *CONFLICT IS A DISEASE/PAIN*

(11) a. ***helyzetet kezelni*** (Int. 3, MD)
'**to treat the situation**'
b. *próbáljuk **ezt orvosolni***
'we are trying to **cure this**' (Int. 10, MD)
c. ***Ez** nekem nagyon **fáj** a mai napig.*
'**This hurts** me so much even today.' (Int. 1, MD)

4.4.6 *CONFLICT IS FIRE*

(12) *szép lassan az egész **kialudt** vagy **kiégett**.*
'slowly the whole thing **went out** or **burned away**' (Int. 10, MD)

4.4.7 *CONFLICT IS A MESS (CREASE/BALL OF THREAD)*

(13) a. ***ebből** a **gomolyagból** mindig tud valamit **megoldani***
'**from this ball of thread** he always finds a ***solution**'* (Int. 3, MD)
b. *megpróbálta úgy **elsimítani** a vezető főorvos a **konfliktust***
'the chief physician tried to kind of **iron out** the **conflict**' (Int. 10, MD)
c. [*A főnővér*] *beül és megpróbálja **elsikálni** a **dolgot** meg ilyenek. És az jó. Mert az ember olyan **biztonságban** érzi magát.*
'[The head nurse] comes in and she tries to **scrub** the **thing away** and stuff like this. And that is good. Because you kind of feel **secure**.' (Int. 24, N)

Positive metaphors appear much less frequently in relation to conflict, and when they do, they are mostly linked to the metaphor family of COOPERATION. Such conceptualizations have been found in conflict stories of persons in leading positions or a higher status in the hierarchy. Therefore I discuss them in detail in the Section 4.5, which addresses the relationship between conflicts and power ((13c), (17a), (b), (18a)–(c)).

4.5 Conflict, power, metaphors

While collecting data, it became evident that power relations and the hierarchical structure of health care were closely related to conflicts (see Figure 1). Although, the analysis of power relations was not part of the original research plan, the issue was so central at the three research sites that we addressed it as a specific area of inquiry (Bochatay et al., 2021). One future goal of our research is to offer a detailed metaphor analysis of conflict stories related to power, also exploring their culture-specific aspects.

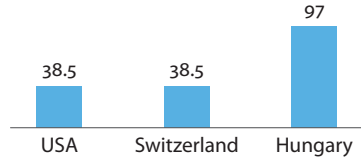

Figure 1. Percentage of conflict stories involving power

A basic feature of healthcare work is the existence of power differentials between participants and groups involved in healing (Hall, 2005; Kreindler et al., 2012). Power refers to "having influence or control over the beliefs, behaviors and values of individuals, groups or institutions" (Kuper et al., 2017, p. 165). The question might arise as to why it is important to address the issue of power in the context of conflict analysis. Research has shown that conflict and power play an important role in team dynamics in health care, they represent the main two reasons why teams fail to work effectively (Janss et al., 2012). Conflict and power are mostly interpreted negatively, although both can/could be the source of effective interprofessional teamwork conducive to the task of inspiring and leading a team (Gabel, 2012; Bochatay et al., 2021).

In the Hungarian data, conflicts and power are intertwined in almost every incident involving healthcare professionals (97%). This connection is typically construed in a negative fashion, it is rare for the higher power status of a doctor or head nurse to receive a positive evaluation ((13c), (17a), (b), (18a)–(c)). In the Hungarian data, power is often construed as an UP/DOWN, BELOW/ABOVE or a SMALL/BIG, YOUNGER/OLDER relationship, which reflects strongly hierarchical interpersonal or interprofessional relations. This is also illustrated by ((14a), (b), (c)). In the 5th interview ((14a), (b)), a female doctor considers it the main source of conflict that one of her female colleagues, who holds a Ph.D., works less (e.g. as physician in attendance) at weekends. More generally, she considers herself superior to others; however, as she arrived at the ward later, others put her in a lower rank. In the 14th interview (14c), the doctor highlights futile battles between professions, tacitly based on super- and subordination, as a source of conflict which hinders efficient work.

(14) a. *Picit idősebb is, mint mi és azért érezteti is, hogy ő- hogy ő valami-valamilyen szinten picit olyan* ***magasabb szinten áll****, mint mi. Pedig szakmailag egyáltalán nem jobb.*
'He is a little older than we are, and because of that he thinks he **stands** at a slightly **higher level** than us. But professionally, he is not any better than us.' (Int. 5, MD)

b. *Hát, ő a **legkisebb** igen, és akkor a most már ugye egyrészt nemcsak nekünk tűnt fel, hanem akik **alattam** vannak. Ketten is vannak, két **kisebb**.*
'Well, yes. He is the **smallest** ('most junior'). And we were not the only ones who saw that. Even the **underdogs**. Well there are two of them, two **smaller** ('more junior') ones.' (Int. 5, MD)

c. *néha **nehéz** ezt a társszakmák **közötti hierarchikus**, de értelmetlen ilyen **harcot kezelni**, főleg, tehát vannak olyan szakmák, ahol ez még jobban kijön, akik az úgymond az orvosi **hierarchia alján** vannak.*
'it's sometimes **hard** to **deal with** [lit. also **cure**] this **hierarchical** [relationship] **between** professions but it's also pointless **to fight**, actually there are jobs where it's even worse, which are kind of **at the bottom of the hierarchy**.' (Int. 14, MD)

The conceptualization of power relations may involve core metaphors of the COMPETITION metaphor family, namely FIGHT and VIOLENCE (14c), as also illustrated by (15) through the POWER IS UP, POWER IS VIOLENCE metaphors.

(15) ***Fölülről taposs**ák az embert*
'They are **treading** on you **from above**' (Int. 19, Nurse)

One key source of conflicts in Hungarian health care are disagreements resulting from tacitly assumed feudal rules, based on unwritten or customary law or strongly hierarchical power relations (Csupor et al., 2017). In Hungarian conflict stories, power and hierarchy are often interpreted as a system of latent feudal rules, which can appear explicitly (16a) or implicitly ((14a), (b)) in the interactions. This "(feudal) hiererchical system," the latent feudal rules probably constitute a cultural pattern and the key element of conflicts experienced by Hungarian healthcare professionals. In the 3rd interview ((16a), (b)), one of main grievance of the doctor is that physicians standing closer to the professor have more opportunities and special benefits (with regard to taking holidays and attending doctor training). Accordingly, he describes the structure of his ward as a feudal society or caste system.

(16) a. *A **feudális rendszer** ezt **megoldja** ezt a **kérdést**. És mindig a **feudális rendszerben** ugye mindig az a gond, hogyha két **földesúr** van két **jobbággyal**, hogy akkor melyik **jobbágy** az **erősebb**. És, hogy melyik az **erősebb** azt általában az dönti el, hogy melyik **földesúr** az **erősebb** és ez így van.* […] *Nyilván ez, mondom **ez feudalizmus**.*
'The **feudalistic system solves** this **question**, and always the main problem in the **feudalistic organization** is when there are **two feudal lords with two serfs**, then which **serf** is **stronger**. And which one is **stronger** is usually decided by whose **lord** is stronger and that's how **this** is. […] Obviously **this** is, like I'm saying, **feudalism**.' (Int. 3, MD)

b. *És kicsit ilyen **kasztrendszer** van, **alá- fölé rendeltségek** és a nővérek rendszeresen érzékenyen reagálnak arra, hogy az orvosok nem tekintik feltétlen **partnerként** őket.*
'And there is a kind of **caste system** with **sub- and superordinations** and nurses often react sensitively to the fact that doctors do not consider them as **partners**.' (Int. 3, MD)

Metaphors related to power and conflicts evoke the concepts POWER IS UP, POWER IS BEING HIGH(ER), POWER IS BEING BIG, POWER IS BEING STRONG(ER), HOSPITAL WARDS ARE EMPIRES WITH FEUDAL ORDER. In this context both power and conflicts are interpreted as rather negative phenomena. However, power and conflicts can support team cohesion and can be the source of effective teamwork (French & Raven, 1959; Kim et. al., 2017). The question is: How are the positive concepts of conflict and power to be characterized?

In the Hungarian data supporting, protective power has a much lower rate than the negatively interpreted power style. This is also shown by the results of our survey of conflict stories. In the case of nurses, the protective role of the head nurse was mentioned more often in an explicit way (in 9 cases out of 25) [cf. ((13c), (17b)]. And in (17a), we see a head nurse's report about how she prepares the schedule for her nurses in a maximally cooperative manner, with the latter construed as each other's SIBLINGS.

(17) a. *A két **testvérnek**, hogy osztod el a legigazságosabban a zsák mákot, hogy az egyik elosztja, a másik választ. Itt **ugyanezt**, én ugyanezt próbáltam vallani.*
'Between two **siblings**, how do you divide a sack of poppy seeds in the fairest way, well one of them divides it, the other one chooses. Here I tried to do the **same**.' (Int. 29, HN)

b. *Az én főnököm a főnővér. Hál' Istennek pont olyan ember, aki nagyon **nyitott ezekre** a **problémákra**.*
'My boss is the head nurse. Thank God she is the kind of person who is very **sensitive to** [lit. open to] **these problems**.' (Int. 22, N.)

By contrast, in the case of doctors, the power of the chief physician or a doctor of higher status was explicitly evaluated in conflict stories as destructive, offensive or negative in 35 instances, with a protective role only receiving two explicit mentions. The latter is exemplified here by a resident doctor's report about the chief physician's attitude (18a). In ((18b), (c), (d)), we present the general opinion of a chief physician about cooperation and conflict management.

(18) a. *És a főorvosnő ennek megfelelően mindig **mögöttem áll** […]. Mindenki **mögé odaáll** egyébként, de így a fiatalok **mögé** különösen. Tehát hogy **teljes vállszélességgel ebbe belevonódott**.*
'And the chief physician [female] always **stands behind me** [stand by me'] […]. She **stands behind** ['supports'] everyone by the way, but especially the young ones. So that she was **involved in this** totally [**shoulder to shoulder with us**]. (Int. 12, MD)

b. *Ezt én a **legelején** elmondtam, hogy **evezzen velem ezen a hajón**, aki ezzel egyetért. Na, most **ebben** azért szerintem sok **partner** van, meg sok **hívem** van, aki ezeket látja és akarja.*
'I said this at the **beginning**, that those who agree should **stay with me on the same boat**. So I think I have a lot of **partners** and **followers** in this, who see and want these things.' (Int. 15, MD)

c. *Tehát ezeket a **kibeszélő-showkat** azért tartjuk, hogy ezeket **minimalizáljuk**.*
'So we do these **talk-shows** in order to **minimize** these things.'
(Interview 15, MD)

d. *azt gondolom, hogy itt **házon belül** nagyjából **egy szekeret húzunk***
'I think here **within the house** we are more or less **pulling the same cart**'
(Int. 15, MD)

The lack of protective power also highlights several conceptions which are highly relevant for the understanding and management of conflicts. In (19a), a resident reports experiencing general, everyday conflicts because of the fact that she is left alone, nobody is instructing her. In (19b) a female doctor, who recently arrived at the department, had a serious conflict with one male colleague. He was verbally and physically aggressive with her. The head of the department did not take this conflict seriously conceptualizing it as BICKERING. He found his position and the reputation of the department more important than solving this problem.

(19) a. *Két éve kezdtem a rezidens képzést, de majdnem szinte a kezdetektől **egyedül vagyok hagyva**, hogy rendeljek egyedül. Aminek tök jó **oktató** jellege is van csak, hogy mondjuk, emellé hiányzik az, hogy valaki **tanítson** is nekem **dolgokat**.*
'I started resident training two years ago but **I have been left alone** almost from the start, I should do consulting hours by myself. Which has a nice instructive aspect to it but it's, like, missing that somebody should also **teach me things**.' (Int. 7, MD)

b. *Nem készült írásbeli jegyzőkönyv, tekintettel arra, hogy az osztályvezető, aki egyben a kórház igazgatója is volt, egyszerűen **nem állt mellém**. […] Nem engedheti meg magának, hogy egy osztály, aminek jó hírneve van jegyzőkönyv készüljön. Gyakorlatilag ezt **lezárta** olyan **címen**, hogy ez egy **tyúkudvari konfliktus**.*

> 'The conflict was unregistered, because the head of the department, who was also the director of the hospital, he simply didn't **stand by me**. […] He cannot let register this conflict in a department which has good reputation. And he **ended it** by saying it is just **bickering**.' (Int. 10, MD)

The construal of conflicts and protective power is conceptually related to spatial relations, movement, communication, and the elaboration of social relations, as already shown by the examples above. The conceptual elaboration of a supportive, positive power role involves the metaphor family of COOPERATION rather than COMPETITION. The participants are regarded as siblings/partners/students-teachers, not as rivals; team work is about rowing together in a boat, moving together, not about fighting and dissent; the participants have an opportunity to voice their opinions rather than having to "swallow" it.

The two metaphor families can also be traced in the empirical material of our research. With regard to question of how space, communication and social relations are construed in conflict stories, it can be said that there are big conceptual differences between positively and negatively interpreted relations (see Table 1).

Table 1. The conceptual characteristics of supportive/constructive and destructive power in conflict

Positive	**Negative**
SPACE (horizontal) near, behind, beside, in front of (near)	SPACE (vertical) above/below (far)
COOPERATION: being in the same boat being partners being sisters/brothers being students/teachers moving in one way	COMPETITION: war, game, fight opposites: being strong/weak; being loud/silent; being big/small
COMMUNICATION: speaking out safety	COMMUNICATION: staying silent, "swallowing" insecurity

Positive conceptualization is primarily characterized by horizontal relations. Mapped onto space, this is manifested in the NEXT TO, BEHIND, IN FRONT OF relations. By contrast, space is typically elaborated by vertical relations in negatively interpreted conflicts, with a key role played by oppositions: ABOVE–BELOW, SMALL–BIG, STRONG–WEAK, LOUD–SILENT, SMOOTH–WRINKLED. On the positive side, movement is more likely to be about approaching and convergent moves, whereas with negative interpretations, distance and clashing are profiled, which

activate two different schemas of social behavior. One is that of COOPERATION, the other is that of COMPETITION. The conceptual specificity of the latter is higher in our empirical material (WAR, GAME, FIGHT, DESTRUCTIVE FORCE, etc.). This is consonant with earlier studies and also with the generally negative evaluation of conflicts and power. Differences also show up in the area of communication, which makes for a key factor in conflict management. Positively evaluated power creates a supporting atmosphere which allows for the open discussion of problems, whereas with negatively interpreted conflicts, the strategy of staying silent and "swallowing" the problem receives linguistic elaboration.

Essentially, the analysis of conflict metaphors shows that there are two different ways of being in the same boat (see Figure 2).

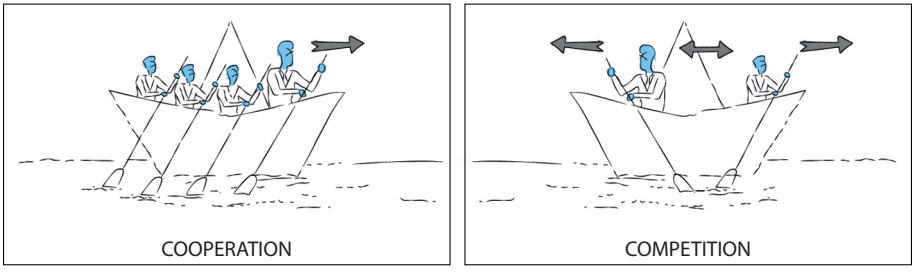

Figure 2. Being in the same boat, in two different ways

5. Conclusion

As the analysis of conflicts reported by healthcare professionals has shown, conflicts have a range of conventionalized conceptual and linguistic construals, which correlate strongly with the bodily, emotional and socio-cultural experiences of their participants. These experiences may have a spatial or temporal dimension, based primarily on the concepts of INSIDE/OUTSIDE, MOVEMENT, and the PROCESS- or EVENT-like conceptualization of conflicts. In addition, conflicts may be conceptualized as heavy OBJECTS or FOOD appearing inside or outside of the body. Two large schematic groups, metaphor families of conflicts can also be documented. These are closely related to the positive vs. negative evaluation/interpretation of conflicts, and bound up with the two main general conceptual schemas of social relations, COOPERATION and COMPETITION (cf. Table 2).

Both the present analysis and other studies reported in the literature suggest that the schema of COMPETITION predominates in linguistic elaborations of conflicts and relationships of power. This includes such concepts as BATTLE, FIGHTING, QUARRELING, GAME, DESTRUCTION, etc. The conceptualization of positive

Table 2. Conflict metaphors in health care conflicts

GENERAL CONCEPTS OF CONFLICTS CONFLICT IS A CONTAINER CONFLICT IS MOTION CONFLICT IS AN OBJECT CONFLICT IS AN EVENT/PROCESS	
COOPERATIVE CONCEPTS OF CONFLICT AND POWER	**COMPETITIVE CONCEPTS OF CONFLICT AND POWER**
COOPERATION IS BEING IN THE SAME BOAT	CONFLICT IS WAR, BATTLE
COOPERATION IS BEING PARTNERS	CONFLICT IS QUARREL
COOPERATION IS BEING SISTERS/BROTHERS	CONFLICT IS A GAME
COOPERATION IS BEING STUDENTS/TEACHERS	CONFLICT IS POISON
	CONFLICT IS A DISEASE/PAIN
	CONFLICT IS FIRE
	CONFLICT IS A MESS
COOPERATION IS BEING BEHIND/BESIDE/IN FRONT OF	POWER IS UP
COOPERATION IS BEING NEAR	POWER IS BEING FAR

supporting power, and the creative, positive evaluation of conflicts are much rarer, which also means that related linguistic and conceptual metaphors are less frequently attested. Still, it is possible to give a broad outline of the conceptual differences between positive and negative conflicts. In the former, horizontal relations (IN FRONT OF, BEHIND, NEXT TO) play a more prominent role in construals of space and movement, with approaching, convergent or shared movement receiving and elaboration. With regard to communication, open discussion, and in terms of social relations, the concepts of family, friendship, partnership and teacher-student relations are evoked. By contrast, negatively evaluated conflicts are characterized by vertical relations (ABOVE/BELOW, HIERARCHY). Here, the conceptual elaboration of distance, conflicting interests, polar opposites, incompatibility and fighting predominate.

In research on conflicts, metaphor analysis is playing an increasingly important role, as metaphors give us an opportunity to look into the sources, emotional and socio-cultural aspects of interpersonal conflicts, including variations in conceptual processing. Working with metaphors, "mind sets" and re-framing also paves the way toward change in the assessment of conflicts and relationships of power (Crum, 1987; Ellison, 2002; Hamburger & Itzhayek, 1998; LeBaron, 2014; Coleman & Deutsch, 2014; Hocker & Wilmot, 2017; etc.). Hamburger and Itzhayek (1988) make the following remark about organizational conflicts in particular, but it holds true for other types of conflict as well that:

> Intervention using the metaphor causes not only logical insight and rational change but an emotional change through the right brain hemisphere. The metaphor gives us insight into the way organization members perceive, organize, and interpret the event and process in the organization. This character of the metaphor […] makes it a powerful instrument in solving organizational conflict and effecting other organizational interventions. (Hamburger & Itzhayek, 1998, p. 395)

As the analysis has shown, conflict metaphors involve a variety of dimensions and concepts, and they can serve as a toolbox for understanding, changing and managing conflicts. The present research project is designed to be followed up by a comparative metaphor analysis of the conflict metaphors found in all power-related conflict stories shared by American (56), Swiss (50), and Hungarian (88) participants. The analysis will address both linguistic and conceptual aspects of the metaphors, also exploring correlations with the social bases of power (French & Raven, 1959; Bochatay et al., 2021). Metaphor analysis and its results will be integrated into the conflict management training of healthcare professionals. Finally, the comparative analysis will also bring us closer to an understanding of cultural models underlying conflicts in health care.

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The contents of the volume prove the vitality of cognitive linguistic studies of figuration when combined with new research methodologies, in tandem with other disciplines, and also when applied to an ever broader range of topics. Individual chapters are concerned not only with some fundamental issues of defining and delimiting metaphor and metonymy, with the impact of figuration on grammatical forms, but are also exemplary discussions of how figurative language is processed and understood, as well as studies of practical ramifications of the use of figurative language in various types of discourse (the language of media, politics and healthcare communication). Most of the volume assumes a synchronic perspective, but diachronic coverage of processes is not missing either. In short, the volume demonstrates how rewarding it is to return to the true origins of cognitive linguistics for new inspiration and take a fresh start promising a true cornucopia of future results.

"This is an exciting new book on figurativity in language and thought. The authors take up some of the most fundamental issues concerning metaphor, metonymy, blending, irony in cognitive linguistics, such as the nature and definition of metaphor and metonymy, the interplay between figurativity and grammar, the processing of irony, embodiment and metaphoricity, the social dimensions of metaphor use, to name just a few. In reading the book, we gain a fresh understanding of what figurativity really involves, how it works, and what makes it important."
Zoltán Kövecses

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