# **Introduction. Current challenges in metaphor research**

Nina Julich-Warpakowski

University of Erfurt

Paula Pérez-Sobrino

University of La Rioja

**Abstract**

Metaphor research has witnessed tremendous changes in how *metaphor* is seen and understood. Traditionally, metaphor has been viewed as a special, creative, and noticeable use of language. Lakoff and Johnson’s Conceptual Metaphor Theory (1980) has marked a cognitive revolution by viewing metaphor as pervasive in language as well as fundamental to thought and action. More recently, the discourse revolution has re-emphasised metaphor’s manifestations in language and its function in communication. A methodological revolution has brought forth procedures to identify and analyse metaphor in naturally occurring data (such as, for example, MIP and MIPVU). Despite these advances, in the present paper we identify four challenges that we believe metaphor researchers are still faced with: 1) How metaphorical are metaphors?, 2) Whose metaphor is it anyway?, 3) Metaphor research needs more diversity, and 4) How to study metaphor empirically – qualitatively or quantitatively? We present outlines of the contributions of this special specifying how they address these issues.

**Keywords**: metaphor, cognitive turn, discourse turn, methodology, metaphoricity

## 1. Introduction

Over the past four decades, the field of Cognitive Linguistics has witnessed an increasing interest in the study of metaphor. Scholars have been studying metaphorical expressions and their underlying conceptual mappings in corpora and discourse, as well as their non-verbal manifestation in pictures, music, or gestures, as well as combinations of these in multimodal contexts. Metaphor research has also been expanded to other languages beyond English, thus addressing two of the major criticisms to the initial version of Conceptual Metaphor Theory (Lakoff 1993; Lakoff & Johnson 1980, 1999): that it was exclusively based on linguistic data, and that it was largely dependent on examples in English. Today, Conceptual Metaphor Theory is a robust theoretical framework able to explain the way we reason about ourselves and the world around us. It is useful for researchers working in linguistics, the cognitive sciences, as well as for scholars with an interest in the applied aspects of metaphorical thinking and framing, such as, for example, education, health, or political discourse. Despite this increased interest in metaphor, studying metaphor empirically *in the wild* continues to pose methodological as well as theoretical challenges. It is the aim of this special issue and its five contributions to address and discuss these more recent challenges.

 In this introduction to the special issue, we begin by sketching out a brief history of the revolutions that the study of metaphor has witnessed. We proceed to identify four challenges that metaphor analysts are still faced with when studying metaphor empirically. We conclude by giving an overview of the special issue’s contributions specifying how the contributions target the identified challenges.

## 2. Revolutions in metaphor research

Metaphor has been studied since antiquity with, for example, Aristotle defining metaphor as “the application of an alien name by transference” (quoted in Mahon, 1999, p. 71). While Aristotle famously states that “to have a command of metaphor […] is the mark of genius” (ibid, p. 72), he also argues that “everybody does use metaphors” (ibid, p. 74). It is, however, the first notion of metaphor as special, deviant use of language, the “mark of the genius”, that has characterised the notion of metaphor for centuries and that probably still presents the layman understanding of what metaphor is – metaphor is a special, creative, and noticeable use of language, something that is ornamental as opposed to non-metaphorical, literal language, which in turn is basic and conventional.

 The assumption of metaphor as special was strongly challenged by Lakoff and Johnson (1980, 1999) with the development of Conceptual Metaphor Theory (CMT). The theory assumes that metaphor is part of ordinary language, and that, based on the systematic use of metaphors in language, metaphor is a cognitive process, a way of metaphorical thinking; in short: a matter of thought. This *cognitive revolution* in the study of metaphor put metaphor centre stage within (cognitive) linguistics research. With CMT, Lakoff and Johnson have demonstrated that we think of arguments as war, of love as journeys, or theories as buildings (at least in English-speaking cultures). Work in refinement of CMT by Grady (1997) compellingly shows how such ways of metaphorical thinking are grounded in basic scenes that we experience everyday as we interact with the world through our bodies. For example, the fact that the location that we are in can impact our mood – being *in* the rain may put us *in* a bad mood, while being *inside* *in* a cozy room may put us *in* high spirits – gives rise to a metaphorisation of (mental or emotional) states as locations which further motivates expressions such as ‘being *in* love’. CMT, in other words, revolutionised the study of metaphor in that it changed viewing metaphor as a special niche of language to viewing it a fundamental process of (embodied) thought and action.

 The strong focus on the more general conceptual and embodied nature of metaphor in thought, however, was accompanied by a neglect of the linguistic, socio-cultural, and communicative specifics of metaphorical expressions and utterances in actual discourse (as argued by, for example, Cameron, 1999a, 2003). In the introduction to the very first issue of *Metaphor and the Social World*, Cameron and Low argue that “despite several interesting recent attempts to extend it, conceptual metaphor theory does not yet adequately explain the linguistic, semantic, pragmatic and cultural patterns found in discourse studies; discourse theories of metaphor are required too” (Cameron & Low, 2011, p. 1). This re-emphasis of linguistic as well as socio-cultural aspects of metaphor in use marked a new revolution in the study of metaphor, a *discourse revolution*. From this more discourse-oriented perspective on metaphor, scholarly interest turned away from the purely conceptual nature of metaphor but shifted to a focus on the linguistic manifestation of metaphor as used in a specific context (e.g. whether the metaphor used is novel or conventional, whether it is signalled or not). Furthermore, the relation between metaphor and word class has been explored (e.g. Cameron, 2003, Goatly, 2011[1997], Steen et al., 2010), and the way how metaphor may dynamically unfold in discourse (e.g. whether it is repeated, extended, elaborated, explained, accompanied by gesture, picked up on by other participants in interaction, negotiated, or even rejected, see for example, Semino, 2008). Socio-cultural aspects have been taken into account by examining the specific communicative function of a metaphorical expression in discourse (which sometimes simply may be to phrase negative feedback in a more polite way, rather than making someone see something in terms of something else, see Cameron, 2003, p. 5), as well as trying to factor in the impact of the speaker (and their socio-cultural background) who uses the metaphor. The discourse turn, in other words, revolutionized the study of metaphor in that it re-emphasized the specific (linguistic, socio-cultural) aspects of metaphor in concrete usage events.

 The discourse revolution was accompanied by a *methodological revolution* in metaphor studies. Drawing attention to the use of metaphor in discourse created the need for a reliable procedure with which metaphor could be identified in naturally occurring data. In the light of that, procedures like MIP (*Metaphor Identification Procedure*, Pragglejaz group, 2007) and MIPVU (*Metaphor Identification Procedure* further expanded at the *Vrije Universiteit,* Amsterdam, Steen et al., 2010) were developed, and adapted to the identification of metaphor in languages other than English (Nacey et al, 2019) as well as to the analysis of visual metaphor (e.g. VISMIP, Šorm & Steen, 2018) and metaphor in film (FILMIP, Bort-Mir, 2019). Furthermore, the availability of large amounts of naturally occurring language in corpora made it possible to study metaphor from a more quantitative perspective (e.g. Deignan, 2005, Stefanowitsch, 2005, Stefanowitsch & Gries, 2006). The quantitative study of metaphor has furthermore been facilitated by the compilation of metaphor repositories and databases which are tagged and annotated for metaphor (e.g. the Amsterdam Metaphor Corpus[[1]](#footnote-1), Steen et al., 2010, or the MetaNet project, Petruck, 2018, see also Bolognesi et al., 2019, for an overview). The methodological turn, in other words, revolutionized metaphor studies in that it provided a set of guidelines and procedures as well as data resources in order to study metaphor empirically in naturally occurring data, rather than studying artificial examples in isolation.

 The number of studies and the theoretical as well as methodological progress that metaphor research has witnessed is vast. In the next section, we will now turn to aspects of metaphor research that still remain challenging.

## 2. Current challenges in metaphor research

*1) How metaphorical are metaphors?*

As mentioned in the previous section, empirical metaphor research has been improved in the past 15 years in terms of the reliability of metaphor analysis thanks to the development of guidelines and procedures such as, for example, MIP (Pragglejaz group, 2007) or MIPVU (Steen et al., 2010). The details of these procedures continue to be discussed and refined (e.g. Deignan, 2015, Dorst & Reijnierse, 2015, MacArthur, 2015, Nacey, Krennmayr et al., 2019), but there exists now a clear set of procedures that metaphor analysist can follow which, in turn, has rendered metaphor research more transparent, reliable, as well as replicable. In MIPVU (as well as its predecessor MIP), for example, *metaphor* is defined as indirect meaning that arises from an incongruity of the contextual sense of a word (or lexical unit) and its more basic sense. The contextual sense of a word is the target or topic of the metaphor, the basic sense of a word is the source or vehicle term of the metaphor. Contextual and basic meanings are established using dictionaries, and if both senses can be related by similarity, the word constitutes a metaphor. Decisions are verified by several coders and inter-rater reliability tests. The use of a specific dictionary, the presence of more than one coder, and reliability testing is what makes the procedure reliable, as well as transparent and reproducible.

 While procedures allow us to reliably identify metaphor, a new challenge or question that arises is the extent to which analyses based on, for example, MIPVU, are valid. In other words, how accurately do metaphor identification procedures identify the phenomenon *metaphor*? With MIPVU, any word that presents an incongruity between contextual sense and a basic sense (and a relation of similarity between them) is considered a case of metaphor. Consider the following example, which is taken from a corpus of Western classical music analyses and newspaper performance reviews (Julich-Warpakowski, 2022).

1. The vast majority of the crowd *at* the Last Night [of the Proms, NJW], therefore, have eaten their musical greens. They have dutifully munched through their Symphonia armonie celestium revelationum (by Hildegard of Bingen, 1098-1179). They have lapped up their Saint-Saëns. They have digested Havergal Brian’s Gothic, which, *with* a *running* time of 110 minutes, is listed by the Guinness Book of Records as the world’s *longest* symphony.

In the example, quite vividly, listening to a musical piece is metaphorically referred to in terms of eating (which presents the common metaphorical pattern of understanding one sensory source (hearing) in terms of another (eating), see also Winter & Strik-Lievers, present issue), the respective examples are underlined. More specifically, the metaphorical expressions imply that the less popular classical music pieces by Hildegard of Bingen, Camille Saint-Saëns, and Havergal Brian are less pleasing or harder to understand, much like eating (as well as *munching through*, *lapping up*, or *digesting*) vegetables, which may be equally less pleasing or hard to digest. In other words, whereas Mozart and Beethoven are delicious pieces of chocolate, Hildegard of Bingen, Camille Saint-Saëns, and Havergal Brian are the cabbages and spinach of classical music, just not as sweet and pleasing.

 Apart from those striking examples of metaphor, applying MIPVU, also the words marked in italics in Example (1) are identified as metaphors, such as the prepositions *at* and *with* or the words *running* and *longest* since all those have basic spatial senses that are incongruous with their contextual, here primarily temporal, senses. These metaphorical expressions are much more conventional, their contextual sense can be found in the dictionary, unlike the contextual sense of the more noticeable metaphors that view listening to (classical) music as eating.

 The difference in conventionality of the respective metaphorical expressions may suggest that the underlined expressions are more metaphorical than the italicized cases. This notion of degrees of metaphoricity is not captured by MIPVU (neither was MIPVU intended to do so in the first place) but presents an interesting challenge for current metaphor research (see also Julich-Warpakowski & Jensen, present issue). We may ask ourselves: if a metaphorical expression is highly conventional, should it be considered as somehow less metaphorical or less important for the analyst’s concern? This latter issue also casts doubts on whether it is always informative to identify and count *all* metaphorical expression in a certain text or discourse, as suggested by protocols like MIP and MIPVU (see Gibbs 2015). Rather, deciding on what counts as metaphorical is very much influenced by a specific research question and more fundamentally by the theoretical understanding of what *metaphor* is. Such issues are even more pressing in contexts of creative language use or when very subjective, emotional experiences are recounted since the literal and the metaphorical may easily blur in creative and/or subjective contexts (see Turner & Littlemore, present issue).

 In short, while metaphor identification procedures define metaphor as incongruity, this incongruity may come in degrees (as already noted by Cameron, 1999, 2003, or for example by Müller 2008, and Semino, 2008) and may depend on the degree of conventionality or the degree of incongruity between the two conceptual domains involved in the metaphorical mapping (see also Winter & Strik-Lievers, present issue).

 The difference between the metaphors in (1) may also be explained in terms of deliberateness. Steen defines deliberate metaphor use as “the intentional use of metaphors *as* metaphors between sender and addressee” (Steen, 2017, p. 1, original emphasis). The fact that the eating metaphors stand out – they are creative, novel, the metaphorical theme is extended over various expressions – may imply that they were used intentionally by the author of the text, whereas the other more conventional metaphors may not have been used deliberately. According to Steen, it would only be the deliberate metaphors that are really processed metaphorically, i.e. by accessing the source domain meaning (eating vegetables) in order to make sense of the target domain (listening to music); for the non-deliberate metaphors, their conventional contextual meaning is directly accessed without some form of activation of the basic spatial sense. While the notion of deliberateness seems to capture something important about how the metaphors in (1) differ, it is matter of debate in current metaphor research whether some metaphors are produced more intentionally than others and, more importantly, whether that intention can be reconstituted afterwards by the analyst (Cameron & Low, 2011, p. 3, see also the discussions of metaphor deliberateness in Gibbs 2011a, 2011b, Steen, 2011, Deignan, 2011, Müller, 2011).

 The challenge of acknowledging degrees of metaphoricity is a challenge that researchers concerned with metaphor are currently faced with, and all of the contributions in the special issue address this issue in some way. Metaphor identification procedures thus attempt to provide a reliable way for metaphor identification in linguistic data, but the question of the extent to which these metaphors are actually metaphorical (as well as for whom and when, see below) remains a challenge. Being aware of the issue of the gradable nature of metaphoricity, the authors of MIP and MIPVU carefully emphasize that by relying on the proposed procedure, it is only *potential* cases of metaphor that are identified, thus implying that metaphoricity may be dependent on more than just an incongruity between contextual and basic meaning of an expression. A current challenge in metaphor research is to address what that *potential* entails and how it can be measured*.*

 MIP and MIPVU are metaphor identification procedures that were developed for metaphor identification in linguistic data, i.e. in language. Another remaining challenge is to better and more reliably identify and operationalize how this potential metaphoricity in language relates to metaphor in thought (and action). In other words, when does a metaphor in language point to a metaphor in thought, and to which metaphor in thought does it point? Procedures have been suggested for *conceptual* metaphor analysis (e.g. Steen, 1999, 2009; Cameron & Maslen, 2010, Krennmayr, 2013), but their application seems to be adopted less widely compared to MIP and MIVPU.

*2) Whose metaphor is it anyway?*

The second, related, main challenge that we would like to highlight is: To whom is a metaphorical expression actually metaphorical (and how strongly is it so) and under what circumstances? The gradable nature of a metaphor might be viewed differently by different speakers, in different contexts. Müller (2008), for example, argues that a metaphoricity potential is only realised in a specific instance of language use, and is thus relative to a speaker or a set of speakers and the specific communicative situation in which a potentially metaphorical utterances is used. With respect to metaphor analysis, this implies the following question (as posited by Steen et al. 2010, p. 77, with reference to Cameron, 1999b, p. 114–115): Should we analyse data relative to speech community norms (the way language is generally used and which is reflected in dictionaries and grammars) or relative to individual background knowledge (which varies from speaker to speaker, and may not be captured by dictionaries and grammars). The more conventional metaphors in (1) might be viewed as metaphorical from an analyst’s perspective, whereas they may not be viewed as metaphorical from a layman’s perspective. Moreover, the same metaphors might be viewed as less metaphorical or not metaphorical at all by speakers familiar with the conventions of classical music criticism, whereas speakers not familiar with that kind of technical discourse may perceive these metaphors as more metaphorical. Furthermore, highly subjective contexts such as talking about emotional states or religious beliefs may present settings in which the literal and the metaphorical become easily blurred since some for example emotional experiences seem to be very literally felt in the body by speakers. It is up to the analyst to decide which perspective to take (the speaker’s, the community’s, or the analyst’s). Thus, a further current challenge in metaphor research is to acknowledge, address, and potentially even quantify the impact of the language user’s perspective on metaphoricity.

*3) Metaphor research needs more diversity*

One defining trait of metaphor as put forward by CMT is that it is a matter of thought rather than language (Lakoff & Johnson, 1980). This carries two important implications: on the one hand, metaphorical thought should be manifested in any kind of context, verbal or not; and that metaphors with a strong embodied basis should be universally shared across cultures.

Most of metaphor research currently stems from studies that focus on English as well as studies that focus on linguistic data, of which most take a contemporary, synchronic perspective: The metaphor identification procedures MIP and MIPVU are both procedures for identifying metaphor in language *in English,* and CMT itself was also primarily devised based on examples in English (although e.g. Grady mentions some examples from other languages, 1997, p. 2). This leads to problems for metaphor analysis in languages other than English, as the following example shall illustrate. Metaphor identification procedures like MIP and MIPVU take the *lexical unit* (in a simplified manner: the word) as their basis of analysis, i.e. it is assumed that metaphoricity resides at the level of the word. English is an analytical language which is rich in prepositions. Since prepositions are words, they have the potential to be metaphorically used, as is the case in the following two, constructed, examples:

1. I’ll be *in* the house.
2. I’ll be there *in* an hour.

In (2) *in* is used literally in its basic, spatial sense. In (3), *in* is used metaphorically with a temporal meaning. CMT, in part, was so revolutionary with respect to previous approaches to metaphor in that it also considered prepositions to be metaphorical, highlighting the fundamental importance of metaphor in shaping our understanding of basic concepts such as time (as in 3) or emotional states (e.g. to be *in* love, to be *at* ease), as well as showing that metaphor was ordinary and pervasive in everyday language. Languages typologically different from English, like, for example, synthetic languages, however, tend to express the meaning of prepositions in the form of grammatical case, by inflectional morphemes. Procedures based on English that consider metaphoricity to reside at the level of the world thus would not take the potential metaphoricity of grammatical case (like the locative) into account (see discussions in Nacey et al., 2019). While MIP and MIPVU take the word as the basis of analysis, a current challenge is to reflect on the applicability of this decision with respect to the specific language or data that forms the basis for metaphor analysis.

  Apart from this, many studies have shown that metaphors are shaped by cultural knowledge, habits, or conventions and exhibit variation according to these aspects even in metaphors that have been assumed to be universal (e.g. Kövecses, 2005, Littlemore, 2019). While there is a growing body of such work, a current challenge still is to incorporate findings from such culturally diverse, as well as diachronic work, into theories and methodologies of metaphor. An important contribution in that respect is Nacey et al. (2019) introducing metaphor identification procedures based on MIPVU adapted to languages other than English (including Germanic languages such as German, or Swedish, but also languages typologically unrelated to English such as Chinese or Sesotho).

 Needless to say, the study of non-verbal instantiations of metaphor continues to be a challenge in current metaphor research. While the importance of metaphor in non-verbal data presents important evidence (or at least indications) for the conceptual nature of metaphor, and as such has been addressed early on in metaphor studies (e.g. Forceville, 1996), current challenges still involve the identification and interpretation of metaphor (as well as metonymy) in non-verbal data and their relation to patterns in thought.

*4) How to study metaphor empirically – qualitatively or quantitatively?*

Given the nature of metaphor, which makes us see something in terms of something else, there is a tendency to study metaphor from a more qualitative perspective, *interpreting* what is seen in terms of what else. Studying metaphor from a qualitative perspective can reveal important and very detailed insights about the workings of specific metaphors in specific settings. However, the generalisations that can be made from qualitative findings are limited and often restricted to specific contexts. While quantitative studies allow for wider generalisations, studying metaphor quantitatively is difficult since there is nothing that formally marks a metaphor which could be searched for in a large dataset, and for this reason, metaphor analysis to date usually still requires some degree of manual analysis (for an overview of how to approach metaphor using corpora, see Stefanowitsch, 2006). Today, however, the possibilities and resources for studying metaphor quantitatively have never been richer, given that we have corpora, some of which are even annotated for metaphor (like the Amsterdam Metaphor Corpus mentioned above), or can be tagged for semantic domains (Koller et al., 2008). Furthermore, we now have metaphor databases (for an overview see Bolognesi et al., 2019), as well as semantic-affective norms (for e.g. word concreteness, Brysbaert et al., 2014, or valence, Warriner et al., 2013) which can be fruitfully exploited for metaphor research. The big challenge to be addressed by current and future metaphor research is how to make use of these resources for metaphor research in a meaningful and manageable way. Nevertheless, quantitative approaches should not be favored over more qualitative approaches since it is especially when the two are brought together that their findings contribute most to a better understanding of the workings of metaphor in language, communication, and socio-culturally situated thought and action.

## 3. Outline of the volume

The authors invited to contribute to this special issue converge on the idea that there is a potential *gradability* underlying the status of an expression (verbal or not) as metaphorical. Thus, a connecting thread among the papers is their aim to expand the traditional definition of metaphor in different directions, as well as the ways of operationalizing metaphor for different purposes (more qualitatively oriented vs. more quantitatively oriented) and data (linguistic data – discourse or corpus, rating data).

 The present collection is intended as a code of good practices for the study of metaphor which can inspire young as well as senior scholars to uncover new aspects of interest in the study of metaphor. From different research angles, and by looking at different types of data, all the contributions to this special issue share the focus on (1) the ways in which their data and their approach to metaphor analysis can address *new* research questions or *enhance* the current body of knowledge; (2) potential *data-specific methodological issues* for metaphor identification and analysis, and (3) how to *operationalise* relevant variables in the study of metaphor. In doing so, the contributions of this special issue will raise red flags and provide potential solutions to address challenges for future work in metaphor research.

 In*Zooming in on the Notion of Metaphoricity. Notions, dimensions, and operationalizations*,Julich-Warpakowski and Jensen present an overview of how the notion of *metaphoricity* is understood and studied from different perspectives within the metaphor literature. In general, the notion of metaphoricity is used when metaphor is not considered a binary category anymore, or when the status of an expression as metaphorical is at stake. The authors focus on approaches that view metaphoricity as a gradable phenomenon. In their paper, Julich-Warpakowski and Jensen identify several dimensions along which metaphors can be seen as exhibiting degrees, such as conventionality, conceptual similarity/distance between domains involved in a metaphorical mapping, the degree of metaphor activation in use, or the deliberateness of a metaphor. They discuss ways to operationalise and study metaphoricity based on these different understandings of the term.

 In a qualitative study of data in which participants talk about bereavement, pregnancy loss, or religious beliefs, aspects of metaphoricity and metaphor identification are addressed by Sarah Turner and Jeannette Littlemore in their contribution *Literal or metaphorical? Conventional or innovative? Contested metaphoricity in intense emotional experiences.*The paper discusses the complexity of metaphor analysis in intense emotional experiences data, in which metaphoricity cannot be objectively operationalized but often lies in the eye of the beholder. Given the subjectivity of the metaphorical experience, it is not the aim of Turner and Littlemore to devise a rigid protocol for how to analyse metaphors in very personal and idiosyncratic kinds of discourse, rather Turner and Littlemore embrace the fact that metaphor identification is slippery and relative in these cases, suggesting guidelines for what to keep in mind (e.g. one’s own vs. the viewpoint of the person actually having produced instances of metaphorical language). Trying to take into account the speaker’s perspective, i.e. the one using the metaphor, Turner and Littlemore identify three levels with respect to what metaphor is or how it works: 1) *talking* about something as if it were something else, 2) *experiencing* something as something else, and 3) *believing* that something *is* something else.

*Semantic distance predicts metaphoricity and creativity judgments*byBodo Winter and Francesca Strik-Lievers presents a study in which metaphoricity and creativity are quantitatively operationalised in terms of semantic distance. This contribution connects with the more theoretical contribution by Julich-Warpakowski and Jensen in that it empirically studies one to the dimensions identified as influencing a metaphor’s degree of metaphoricity, i.e. semantic distance between domains. The study focuses on adjective-noun synesthetic metaphor combinations, e.g. *sweet melody*. For these, semantic distance between one domain (represented by the adjective) and another one (represented by the noun) is operationalised via sensory modality ratings obtained by Lynott and Connell (2009) and Lynott et al. (2019). For the study, Winter and Strik-Lievers collected metaphoricity and creativity ratings from 50 and 48 participants respectively via Amazon Mechanical Turk for 25 adjective-noun pairs. Results show that semantic distance can predict participants’ ratings demonstrating that adjective-noun pairs with lower domain similarity are rated as more metaphorical and more creative.

 In *The semantics of a parallel reality. Or: What does religion do to metaphor in an Ancient Egyptian context,* Camilla Di Biase-Dyson presents an analysis of Ancient Egyptian religious texts in three qualitative case studies. All texts reflect instances in which a deity is described, addressed, or encountered. The contribution highlights methodological challenges regarding the analysis of ancient texts (which are very distant temporally and culturally from the modern analyst’s mindset) as well as the potential metaphoricity of language referring to the supernatural. By focusing on religious discourse, the contribution ties in very well with the one by Turner and Littlemore. In particular, Di Biase-Dyson points out that if we take the speaker’s perspective, the metaphoricity of, for example, personifying a deity is questionable since believers may truly believe in some form of personification of the god or goddess in question.

 The special issue closes with an afterword by eminent metaphor scholar Herbert Colston – *Measurement Matters: An Afterward on Current Challenges in Metaphor Research* –who identifies major methodological challenges in metaphor research and ways to overcome or address them. In this conclusion to the special issue, Colston contextualises the contributions of this special issue whithin the field of metaphor (and more broadly figurative language) studies, and stresses that rather than engaging “in proxy conflicts of whose methods are better/worse than others”, we should advance our study of metaphor by exploring and showing how rating measures, historical comparisons, creativity ratings, semantic distance indicators, metaphor identification tools, gradability measures and others can be applied in creative ways thus driving metaphor studies forward.

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**Address of correspondence:**

Nina Julich-Warpakowski

University of Erfurt

Seminar für Sprachwissenschaft

Anglistik/Amerikanistik

Postbox 90 02 21

99105 Erfurt, Germany

nina.julich@uni-erfurt.de

Paula Pérez Sobrino

Departamento de Filologías Modernas

Facultad de Letras y de la Educación

Universidad de La Rioja

26006 Logroño (La Rioja)

paula.perezs@unirioja.es

**Biographical notes:**

**Nina Julich-Warpakowski** is lecturer at the University of Erfurt, Germany. Her research interests include conceptual metaphor, empirical approaches to metaphor, metaphor and music, and corpus linguistics.

**Paula Pérez Sobrino** is a lecturer in Modern Languages at the University of La Rioja. She looks at figurative language in multimodal contexts to investigate how people make sense of everyday creativity. She has published two monographs to date: *Multimodal Metaphor and Metonymy in Advertising* (2017, John Benjamins) and *Unpacking Creativity: The Power of Figurative Communication in Advertising* together with Jeannette Littlemore and Samantha Ford (2021, Cambridge University Press).

1. Available at http://www.vismet.org/metcor/search/showPage.php?page=start [↑](#footnote-ref-1)