

Barbara Dancygier, ed., *The Cambridge Handbook of Cognitive Linguistics*. 2017. Cambridge: Cambridge University Press.
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The inception of Cognitive Linguistics dates back to the 1980s with the foundational contributions of Charles Fillmore, George Lakoff, Ronald Langacker, and Len Talmy who proposed an alternative to the then dominant generativist view on language. Four decades later, Cognitive Linguistics (henceforth CL) has established itself as an important paradigm in the language sciences. *The Cambridge Handbook of Cognitive Linguistics* not only takes stock of the expansion and developments of the CL framework but also reflects upon the challenges it has to overcome to remain both a broadly inclusive endeavor and an integrated theory of language. Barbara Dancygier, the editor of the *Handbook*, is particularly well qualified to bring together the diversity of methods and theories developed in CL, as a prolific contributor to the field and the current President of the International Cognitive Linguistics Association. The handbook is the third CL handbook and is preceded by *The Oxford Handbook of Cognitive Linguistics* (Geeraerts & Cuyckens 2007), and by the *Handbook of Cognitive Linguistics* (Dąbrowska & Divjak 2015). The first established the wide diversity of topics studied in CL, the second showcased the diversity of methods employed in the paradigm, and the third brings unity in diversity.

The Handbook starts with an introduction by the editor and then features forty-one chapters that are organized in six parts, followed by a list of references and a topical index. With the exception of Part VI, each part is introduced by an opening commentary that aims to provide a broader context to the themes discussed by the chapters within each part.

Part I, ‘Language in Cognition and Culture’, is introduced by Nick J. Enfield who reminds the reader of the central commitments of CL to study language in use and as a cognitive faculty embedded in its cultural context. In his Chapter, Daniel Casasanto reviews a series of metaphor studies to help the reader get a sense of the complex relations between language and cognition, the study of which is at the core of the CL research program. Casasanto starts with a point of crucial importance for any research interested in the interface between language and cognition: the “language reflects thinking” credo should change from a dogma to a hypothesis. In Chapter 3, ‘The Study of Indigenous Languages’,

Sally Rice highlights the need for a strong ethical commitment of reciprocity vis-à-vis the indigenous communities whose collaboration did so much to help researchers establish Cognitive Linguistics. Rice provides an exhaustive report of how studies of minority languages have not only played a significant role in the inception of CL four decades ago, but have also continuously provided researchers with unique insights into the study of language ever since. Rice closes the chapter with several ideas to answer the question: what can CL do for Minority Language communities? Chapter 4 (by Laura E. de Ruiter & Anna L. Theakston) and Chapter 5 (by Andrea Tyler) introduce the reader to methods and results of the constructivist approach applied to first and second language acquisition, respectively.

Part II, 'Language, Body, and Multimodal Communication', starts with an opening commentary by Mark Turner, who writes that the study of language within a broader understanding of human communication that involves distinct but interacting sensory modalities (hearing, sight, touch) and semiotic systems (language, gesture, graphic representation) dates back to antiquity. However, as Turner explains, this tradition fell into disuse in the twentieth century when the study of communication fragmented into distinct disciplines that developed independently. As CL was born from the ashes of the "partition-and-conquer" understanding of language, the *polytropic* ('of many ways') nature of communication has certainly regained momentum in linguistics under the popular – and polysemous – term *multimodality*. This historical contextualization of such a hot topic in CL gives way to a different focus in the second half of the opening commentary, in which Turner shifts to a presentation of the Red Hen Lab, a big data project for the study of multimodal communication. The chapter by Sherman Wilcox and Corinne Occhino turns to signed languages (SL), which have come a long way to be properly recognized as such, as illustrated by the quote from the President of the Milan Conference in 1880 saying that "Gesture is not the true language of man which suits the dignity of his nature" (qtd. in Lane 1984: 393). Wilcox and Occhino demonstrate the relevance of cognitive approaches to SL and the interest in studying SL for central CL topics (metonymy, metaphor, mental spaces, blending), and also show how SL linguists have successfully described the traditional levels of structure that all languages exhibit. Chapter 8 provides an excellent introduction to the study of gesture by Kensy Cooperrider and Susan Goldin-Meadow. The authors manage to both familiarize the reader with the main concepts and findings of gesture studies and to propose an honest summary of crucial ongoing debates in the study of gesture (e.g. is gesture part of language?) by providing supporting evidence for different views. In Chapter 9, Kurt Feyaerts, Geert Brône, and Bert Oben present arguments to include interaction studies and multimodality in the CL research program. Chapter 10 is devoted to viewpoint, which Lieven Vandelanotte argues should be brought center stage, and can be studied using a

variety of tools developed in CL. First, viewpoint is both ubiquitous and inseparable from our embodied Self experience of the world (Sweetser 2012:1), and hence inherently a key topic given CL's interest in the relation between embodied experiences and language. Second, viewpoint is intersubjectively and multimodally construed, which further underscores its relevance within the CL paradigm that approaches language as intimately connected to other semiotic systems (e.g. gesture) and sensory modalities (sight, hearing) and embedded in socially shared contexts. Chapters 9 and 10 both already rely on the concept of intersubjectivity, which Jordan Zlatev develops at length in Chapter 11. Grounding his discussion in Husserl's (1978) and Merleau-Ponty's (2012) phenomenology, Zlatev presents the notion of embodied intersubjectivity as a way to resolve a ubiquitous tension found in CL, that only few endeavor to resolve. The apparent paradox found in CL is to consider language both as being embodied (i.e. individually experienced through one's body) and social (i.e. socially experienced through interpersonal interactions). Critics from interactional linguistics (Linell 2009), functional linguistics (Harder 1996), and the philosophy of linguistics (Itkonen 2003) have argued that CL has unduly privileged the embodied aspect of meaning-making and neglected the interactive social one. Zlatev succeeds in restoring this balance with the notion of *embodied intersubjectivity* (Zlatev & Blomberg 2016), which helps illuminate issues found in key CL topics and notions such as metaphor, construal, or image schemas. In Chapter 12, Ronny Boogaart and Alex Reuneker demonstrate the intersubjective dimension of grammar and the relevance of the tools this approach provides for analyzing negation, complementation, modality, and conditional constructions.

Part III, 'Aspects of Linguistic Analysis', consists of an opening commentary by John Newman and of a further nine chapters that contribute to painting a representative picture of the various fields of linguistic analysis that are not unique to CL *per se* but for which CL provides a most coherent framework. The Chapters follow a coherent progression from Chapter 14 on phonology (Geoffrey S. Nathan), to the word level with Chapter 15 (Geert Booij) on a constructionist approach to morphology and Chapter 16 (John R. Taylor) on lexical semantics, to the clause level with Chapter 17 on Cognitive Grammar (Ronald W. Langacker) and Chapters 18 and 19 on Construction Grammars (both by Thomas Hoffmann), to the discourse level with Chapter 20 on pragmatics (Kerstin Fischer) and Chapter 21 on fictive interaction (Esther Pascual and Todd Oakley), and finally as closing chapter to this Part Chapter 22 on diachronic approaches (Alexander Bergs). As Newman notes in the opening commentary, all chapters of Part III have in common the fundamental cognitive linguistic principle that form and meaning constitutes an integrated whole, which they illustrate and integrate into their analyses.

Part IV, 'Conceptual Mappings', consists of six chapters preceded by an opening commentary by Eve Sweetser. Part IV provides an introduction to some of the most widely studied topics in CL such as metaphor (across different chapters, one by Karen Sullivan, one by Elena Semino, and one by Teenie Matlock), metonymy (Jeanette Littlemore), and conceptual blends (Todd Oakley and Esther Pascual), presenting case studies and discussing recent developments in the various frameworks designed to approach these phenomena. It is now generally accepted in CL that claims made on these phenomena have to be supported by authentic data. The methods developed in corpus linguistics over the past few decades are one way to support this research, and Elena Semino's chapter provides a good introduction to the relevance of corpus linguistics in metaphor analysis, discussing both specific case studies and more general theoretical implications. Part IV also includes a chapter on embodiment (Raymond W. Gibbs, Jr.), a notion that is foundational to the study of language as a cognitive faculty that is dependent on the experience of the body. As Gibbs rightly notes however, most CL accounts of embodiment as a motivating force in the meaning-making process emphasize a private experience of the body, but disregard the fact that we are social creatures whose bodies interact and engage in *shared* meaning-making activities (Gibbs 2005; Blomberg & Zlatev 2014). Gibbs concludes that CL should more systematically pay attention to the interactive and contextual dimensions of embodied meaning, and to its sedimentation through time.

Part V, 'Methodological Approaches', provides an overview of the diverse methods employed in CL, which are sometimes considered to compete with each other whereas, in fact, they complete one another. Chris Sinha's opening commentary warns about treating language exclusively as "an autonomous object of scientific inquiry" (p. 496) and of worshipping quantitative methods as the "Holy Grail" of language analysis (p. 497). It therefore only makes sense to follow up on Sinha's call for caution with Chapter 31 by Laura A. Janda, one of the cognitive linguists spearheading the quantitative turn (Janda 2013). It is precisely because Janda is one of the greatest experts in quantitative methods that she can access the bigger picture of language study, of which qualitative methods are an integral part. Her expertise grants her the clarity of seeing both the immense, proven potential that quantitative methods have to offer while also exposing the pitfalls of one-sided reliance on such methods. Janda presents the usefulness of a selected set of statistical models to address recurring questions in CL. She also rehabilitates the relevance of introspection, which no one should be too quick to dismiss, given that data does not speak for itself. She explains how introspection – perhaps in the sense of *disciplined intuition* (Itkonen 2008; Devylder & Zlatev forthcoming) – plays a necessary role in the formulation of hypotheses and in the interpretation of results. Thanks to Sinha's opening commentary and to Janda's inspiring

chapter, the reader is well equipped to learn more about the diversity of methods used in CL with an informed and critical eye. The chapters which follow present rich pickings for the methodologically inquiring mind: include a nuanced survey of neurolinguistic methods applied in CL (Seana Coulston), an account of the symbiosis between sociolinguistic methods and CL (Willem B. Hollman), and between corpus linguistics methods and CL (Stefan Gries), and a review of computational resources developed for formalizing Fillmore's (1982) Frame Semantics Theory (Hans C. Boas) and Conceptual Metaphor Theory (Oana A. David). Part V ends with an introduction to *cognitive text analysis* (Barbara Dancygier) and the methods that are employed to analyze both literary and non-literary (e.g. journalistic) text. Dancygier shows the usefulness of the CL toolkit to analyze text, and the relevance of cognitive text analysis to inform broader questions addressed in the CL paradigm such as the relation between experiential and linguistic meaning.

Part VI, 'Concepts and Approaches: Space and Time', is the final part of the Handbook and aims to look at one popular phenomenon studied in CL, the mapping of space onto time, from a variety of approaches. The part consists of four chapters reviewing different methods used to analyze the language, experience, and conceptualization of time and space via cross-linguistic comparisons (Eve Sweetser and Alice Gaby); gesture analysis, eye-tracking methods, experiments and elicitation-based fieldwork methods (Alice Gaby and Eve Sweetser); nonlinguistic experiments and elicitation (Tom Gijssels and Daniel Casasanto); and finally discourse analysis (Thora Tenbrink). This last part of the Handbook thus illustrates that the complexity of a multifaceted phenomenon can only be accounted for through a multiplicity of approaches. CL, as an inherently interdisciplinary framework, is presented as the most relevant paradigm to explain the meaning-making processes of complex phenomena such as time and space.

The interdisciplinarity of CL is perhaps an idealized scenario that should not be taken for granted. For the intrinsic interdisciplinarity of CL to be a real strength, the diversity of approaches to language have to complete each other and not remain on parallel lines that never meet. For these lines to cross, cognitive linguists can for example try to agree on using the same terms more or less cohesively. Here is an example.

'Multimodality' is a buzzword that has led some to talk about "an explosion of multimodal studies" (Jewitt 2009: 2). That is not to say that the ever-growing number of contributions to this domain of investigation is not much needed or welcome in CL. A paradigm that defines language as a non-independent cognitive faculty necessarily requires considering language within its much broader context and in interaction with other meaning-making systems, sensory channels, and semiotic resources and media, as is argued in several chapters of the Handbook.

There is, however a fair amount of variation in defining ‘multimodality’ and different traditions of using the terms of the ‘multimodal lexicon’ (e.g. modality, mode, modes of expression, modes of representations, artifacts, semiotic modes & sub-modes, semiotic resources, semiotic systems, medium, etc.). The Handbook provides a good illustration of how noisy the multimodality buzz can be.

Within a common field of investigation, using the same terms to refer to clearly distinct phenomena is a problem. Studying language within its much broader context is a complex task that requires the collaboration of different expertise. For instance, experts in the study of the speech-gesture interface and experts in the picture-text interaction cannot enrich each other’s contributions towards a better understanding of multimodality in general if they do not speak the same language. ‘Multimodality’ is not defined or approached cohesively in CL. It can be, in some cases, and the Cognitive Linguistics special issue on viewpoint in multimodal communication (Dancygier & Vandelanotte 2017) provides evidence for a broadly defined cohesiveness. However, several examples taken from the Handbook show that there is still room for improving the clarity of the main concepts involved in multimodal studies.

Before going further into the discussion it is important to insist that this is not a trivial terminological debate, particularly within CL. It has important implications that stand in the way of interdisciplinarity and progress, and should be addressed seriously. It is equally important to note that raising these issues is in no way dismissive of the research that is behind the use of these terms. This is merely an invitation to think about ways that could facilitate future communication and synergy among experts in multimodal studies.

Defining something as multimodal naturally implies that it involves at least two modalities, or modes. That is about as far as the consensus goes in CL, and that is not very far because we already do not know if we are talking about modes or modalities in “multimodality”, and what both terms mean. For Vandelanotte (p.158), a modality is a sensory channel (e.g. “the visual modality”), for Sullivan (p.389–391) in line with the CL tradition that uses the term ‘visual metaphors’ in contrast to ‘linguistic metaphors’, modality has to mean that pictures and written text are two modalities (the combination of which is thus “multimodal”), for Feyaerts et al. (p.135), the term extends to just about any aspect of a face-to-face interaction. Feyaerts et al. also talk about “semiotic modes of representation” (*ibid.*) and for Cooperrider and Goldin-Meadow (p.123), gestures and speech are “modes of expression” and their combination, multimodal. Again, the research reported by these contributions in the Handbook are all coherently articulated within the scope of each Chapter, and the phenomena under investigation are all crucial to better understand language in its broader context. Yet, taken together all four chapters do not have a cohesive understanding of what multimodality

means. This rapid survey of only four contributions means that when one reads a CL paper on multimodality, one can expect the term to either mean: the combination of text and image, the combination of gesture and speech, the combination of vision and hearing, or a combination of all of the above and more. This Tower of Babel-like definition of ‘multimodality’ becomes even more vague and diluted when one takes a peak outside the confines of the Handbook.¹

My own proposal would be to adopt a strict definition of multimodality in line with the proposals of Green (2014), Zlatev (2018), and Stampoulidis & Bolognesi (in press) and to first make a clear conceptual *and* terminological distinction between semiotic systems (language, gesture, graphic representation) and sensory modalities (kinetic, visual, vocal, aural, olfactory). This simple distinction allows one to identify patterns at a finer level of granularity than the broader definitions of multimodality could. For example, using this polysemiotic/multimodal terminological distinction would allow us to describe a picture + caption advertisement as *polysemiotic* (picture+language) and *unimodal* (i.e. only one modality involved: vision); playing a video game as a *monosemiotic* (one semiotic system involved: graphic representation) and *multimodal* (kinetic/visual + aural) activity; attending a conference presentation as a *polysemiotic* (language + gestures + graphic representation) and *multimodal* (vocal/aural + kinetic/visual) situation.

One does not have to agree with the strict definition of multimodality proposed here, but at least one can know what to disagree with and the debate can move forward. The Handbook is therefore representative of the state of the art in CL in the sense that it not only reflects the enthusiasm for topics that are crucial to a better understanding of human communication, but also illustrates the need for sharper definitions of technical terms. It is not the role of the editor to steer the ship out of the multimodal mist and certainly not within the reviewer’s authority to do so. The latter nonetheless has a responsibility to signal the existence of this mist and of CL-friendly contributions that offer ways to dissipate it.

The study of language within its broader cognitive, cultural, polysemiotic and multimodal context has been CL’s greatest contribution to the study of language as a whole. Yet, in this ambitious program lies perhaps also its main challenge. Taking into account the multiplicity of factors involved in human communication necessitates the development of theoretical and methodological expertise in each dimension involved in the process. It is fair to say that for the past four decades CL has reached an unprecedented level of expertise that is well captured by the Handbook. This multiplicity of expertise, however, puts the CL paradigm

1. See Green (2014:7–12) for a survey of ten different meanings and applications of the term “multimodality”, which adds to yet another terminological tradition of multimodal studies that has its own distinct definitions of “modes” and “sub-modes” (e.g. Stöckl 2004; Bateman 2014).

at risk if experts work in isolation. This significant challenge was clearly spelled out in the 2016 special issue of *Cognitive Linguistics* ‘Looking back, looking forward’ edited by Divjak, Levshina & Klavan (2016). Editors and contributors took stock of the route CL has followed since its inception and address the challenge of integrating the plurality of streams into an integrated theory of language. As Croft (2016: 599) notes:

The Chomskyan paradigm does not embrace all of the many dimensions of language. On the other hand, it is not easy to meld all the dimensions of language into an alternative approach. [...] In whatever way, the Balkanization of non-Chomskyan linguistics must end if we are to make greater progress in understanding the nature of language during the twenty-first century.

Divjak et al. (2016) identify three axes (*the cognitive axis, the social axis, the methodological axis*) and three dimensions (*the dimension of time: synchrony vs. diachrony, the dimension of diversity: one language vs. many, the dimension of “modality”: sound and gestures*) that should ideally be interwoven into an integrated theory of language. As the above summary shows, all these axes and dimensions are remarkably well represented in *The Cambridge Handbook of Cognitive Linguistics*.

The Handbook does not offer an entirely exhaustive survey of CL, as no single volume can; of course, we can always wish for an even greater diversity of CL-inspired investigations and approaches. For example, the Handbook could give the impression that there is a metaphor theory in CL (i.e. versions of the Conceptual Metaphor Theory), whereas there are metaphor theories – plural – that are too fully developed and address too many crucial gaps of CMT to be considered marginal (e.g. Bowdle & Gentner 2005; Zinken 2007; Müller 2009; Steen 2011; Devylder & Zlatev forthcoming). The Handbook nonetheless provides a representative overview of the paradigm that is accessible to neophytes. It is also very useful to more weathered cognitive linguists who have expertise in one or several domains of inquiry but who probably do not master all topics and methods discussed in the Handbook. Most importantly, the Handbook succeeds in the challenging task of making the plurality of topics and methods communicate with one another thanks to its well thought-out architecture. As Dancygier announces in the introduction, “each chapter is a free-standing text, but they all connect, in various ways, with many other chapters in the handbook”. That promise is kept. At first glance, some Chapters look like they might belong to other parts of the Handbook. For instance, the chapter ‘Corpus Linguistics and Metaphors’ (Semino) of Part IV and the chapter ‘Computational Approaches to Metaphor’ (David) of Part V feel like they could interchangeably belong to either part. But you cannot have it both ways: you either allow permeable boundaries or open doors that allow

Chapters to communicate with one another, or you have impermeable high walls keeping Chapters in isolation of each other. The latter is coherent with a modular Chomskyan perspective on language; the former reflects the integrated alternative approach that CL has to offer. In that sense the Handbook is a subtle but firm invitation to cognitive linguists to work and communicate with one another, which is the only way for both individual and collective success.

Finally, it has been established that language shapes thoughts (Casasanto 2008; Boroditsky 2011), and that metaphoric mapping shapes reasoning (Thibodeau & Boroditsky 2011). From a sociology of science perspective, we could thus expect that the metaphors used to describe CL as an intellectual enterprise would encourage us to reason about it and its future course in a specific way. One impression that one can get from the cognitive linguistic literature is that CL is a paradigm of many centers (all topics are central) and of many turns (the empirical turn, the quantitative turn, the social turn, etc.). The many centres and turns metaphors could lead one to think about CL as a fragmented and confused paradigm that does not really know where it is going and keeps changing direction, or that will leave behind those who will not take the next turn. This mapping seems neither accurate nor productive for the future of CL. Instead I would rather think about Cognitive Linguistics as a palimpsest, as an overlay of methods and theories that have been written in completion of each other, some fading out with time but still leaving traces that are used by others, and sometimes developed in contrast to each other, but that in the end manage to remain on the same page. *The Cambridge Handbook of Cognitive Linguistics* captures this metaphor well by representing the diversity of methods, theories, and generations of cognitive linguists that have collectively managed to make tremendous progress in the understanding of language for the past four decades.

References

- Bateman, John. 2014. *Text and Image: A Critical Introduction to the Visual/Verbal Divide*. London: Routledge. <https://doi.org/10.4324/9781315773971>
- Blomberg, Johan & Jordan Zlatev. 2014. Actual and non-actual motion: Why experientialist semantics needs phenomenology (and vice versa). *Phenomenology and the Cognitive Sciences* 13 (3): 395–418. <https://doi.org/10.1007/s11097-013-9299-x>
- Boroditsky, Lera. 2011. How language shapes thought. *Scientific American* 304 (2): 62–65. <https://doi.org/10.1038/scientificamerican0211-62>
- Bowdle, Brian F. & Dedre Gentner. 2005. The career of metaphor. *Psychological Review* 112 (1): 193. <https://doi.org/10.1037/0033-295X.112.1.193>

- Casasanto, Daniel. 2008. Who's afraid of the big bad Whorf? Crosslinguistic differences in temporal language and thought. *Language Learning* 58: 63–79. <https://doi.org/10.1111/j.1467-9922.2008.00462.x>
- Croft, William. 2016. Typology and the future of Cognitive Linguistics. *Cognitive Linguistics* 27 (4): 587–602. <https://doi.org/10.1515/cog-2016-0056>
- Dąbrowska, Ewa & Dagmar Divjak. 2015. *Handbook of Cognitive Linguistics*. Berlin and Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110292022>
- Dancygier, Barbara & Lieven Vandelanotte. 2017. Viewpoint phenomena in multimodal communication. *Cognitive Linguistics* 28 (3): 371–380. <https://doi.org/10.1515/cog-2017-0075>
- Devylder, Simon & Jordan Zlatev. Forthcoming. Cutting and breaking metaphors of the self and the motivation and sedimentation model. In *Figurative Meaning Construction in Thought and Language*, Annalisa Baicchi & Günter Radden (eds). Amsterdam and Philadelphia: John Benjamins.
- Divjak, Dagmar, Natalia Levshina & Jane Klavan. 2016. Cognitive Linguistics: Looking back, looking forward. *Cognitive Linguistics* 27 (4): 447–463. <https://doi.org/10.1515/cog-2016-0095>
- Geeraerts, Dirk & Hubert Cuyckens (eds). 2007. *The Oxford Handbook of Cognitive Linguistics*. Oxford: Oxford University Press.
- Gibbs, Raymond W. J. 2005. The psychological status of image schemas. In *From Perception to Meaning*, Beate Hampe (ed.). Berlin and Boston: De Gruyter Mouton, 113–136. <https://doi.org/10.1515/9783110197532.2.113>
- Green, Jennifer. 2014. *Drawn from the Ground: Sound, Sign and Inscription in Central Australian Sand Stories*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139237109>
- Harder, Peter. 1996. *Functional Semantics: A Theory of Meaning, Structure and Tense in English*. Berlin and Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110818758>
- Husserl, Edmund. 1978. *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*. Evanston: Northwestern University Press.
- Itkonen, Esa. 2003. *What is Language?* Turku: University of Turku Press.
- Itkonen, Esa. 2008. Concerning the role of consciousness in linguistics. *Journal of Consciousness Studies* 15 (6): 15–33.
- Janda, Laura A. 2013. *Cognitive Linguistics—The Quantitative Turn: The Essential Reader*. Berlin and Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110335255>
- Jewitt, Carey (ed.). 2009. *The Routledge Handbook of Multimodal Analysis*. London: Routledge.
- Lane, Harlan. 1984. *When the Mind Hears: A History of the Deaf*. New York: Random House.
- Linell, Per. 2009. *Rethinking Language, Mind, and World Dialogically: Interactional and Contextual Theories of Human Sense-making*. Charlotte, NC: Information Age Publishing.
- Merleau-Ponty, Maurice. 2012. *Phenomenology of Perception*. London and New York: Routledge.
- Müller, Cornelia. 2009. *Metaphors Dead and Alive, Sleeping and Waking: A Dynamic View*. Chicago: University of Chicago Press.
- Stampoulidis, Georgios & Marianna Bolognesi. In press. Bringing metaphors back to the streets: A corpus-based study for the identification and interpretation of rhetorical figures in street art. *Visual Communication*.
- Steen, Gerard J. 2011. The contemporary theory of metaphor – now new and improved! *Review of Cognitive Linguistics* 9 (1): 26–64. <https://doi.org/10.1075/rcl.9.1.03ste>

- Stöckl, Hartmut. 2004. *Die Sprache im Bild – Das Bild in der Sprache: Zur Verknüpfung von Sprache und Bild im massenmedialen Text. Konzepte. Theorien. Analysemethoden*. Berlin: Walter de Gruyter. <https://doi.org/10.1515/9783110201994>
- Sweetser, Eve. Introduction: Viewpoint and perspective in language and gesture, from the ground down. In *Viewpoint in Language: A Multimodal Perspective*, Barbara Dancygier and Eve Sweetser (eds). Cambridge: Cambridge University Press, 1–22.
- Thibodeau, Paul H. & Lera Boroditsky. 2011. Metaphors we think with: The role of metaphor in reasoning. *PLOS one* 6 (2): e16782. <https://doi.org/10.1371/journal.pone.0016782>
- Zinken, Jörg. 2007. Discourse metaphors: The link between figurative language and habitual analogies. *Cognitive Linguistics* 18 (3): 445–466. <https://doi.org/10.1515/COG.2007.024>
- Zlatev, Jordan. 2018. Mimesis theory, learning, and polysemiotic communication. In *Encyclopedia of Educational Philosophy and Theory*, Michael A. Peters (ed.). Singapore: Springer. https://doi.org/10.1007/978-981-287-532-7_672-1
- Zlatev, Jordan & Johan Blomberg. 2016. Embodied intersubjectivity, sedimentation and non-actual motion expressions. *Nordic Journal of Linguistics* 39 (2): 185–208. <https://doi.org/10.1017/S0332586516000123>

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