
*Routledge Handbook of Cognitive Linguistics* (2021) is not the first publication of its type: it was preceded by the now-classic *Oxford Handbook of Cognitive Linguistics* (Geeraerts & Cuyckens 2007), *Handbook of Cognitive Linguistics* published by Mouton de Gruyter (Dąbrowska & Divjak 2015) and *The Cambridge Handbook of Cognitive Linguistics* (Dancygier 2017). The consecutive volumes chronicle the changing perspectives on this dynamically developing, meaning-oriented and usage-based framework.

The first handbook of Cognitive Linguistics (henceforth CL), Geeraerts & Cuyckens 2007, to this day remains unmatched for sheer size and scope. It takes stock of the research paradigm that had at that point emerged as an independent framework, comprehensively covering its development, major theories, core concepts and key areas of interest. Following in its steps, Dąbrowska & Divjak 2015 and Dancygier 2017 document CL’s progress within the next decade, with the former showcasing the empirical turn in the framework’s methodology and the latter putting emphasis on the contextualization of language inherent in the notions such as embodiment, intersubjectivity or multimodality. The question arises how the present handbook by Routledge can contribute to the overall picture of the framework and what is the perspective it offers on the current state of the CL enterprise.

With its 43 contributions divided into four sections, *Routledge Handbook* offers a fairly comprehensive summary of all the major trends within the CL framework. In the introduction to the volume, the editors (Xu Wen & John R. Taylor) briefly sketch the development of Cognitive Linguistics and situate it relative to generative and functional paradigms. They propose a typology of different strands of CL-inspired research and delimit the three major
areas covered by the handbook: the fundamental theories of CL (Part I), its core topics and concepts (Part II) and the interface between CL and other disciplines (Part III and IV). This structure reflects a major theme of the volume: it highlights the contribution of CL to various fields of research and the interdisciplinary character of the framework. Out of the three remaining handbooks, only the first, foundational one (Geeraerts & Cuyckens 2007) devotes separate sections to situating CL vis-à-vis other approaches (part III ‘Situating Cognitive Linguistics’ and part VI ‘Applied and interdisciplinary perspectives’: 10 chapters within altogether 49 chapters of the volume).

In *Routledge Handbook*, approximately half of the chapters adopt interdisciplinary or comparative perspective; in many of them, scholars for whom CL is not the primary framework comment on the contribution of CL-inspired research to their respective areas of expertise. Such a ‘view from the outside’ offers readers a chance to evaluate the impact of CL within particular fields of study, but it has its dangers as well: some of the contributions run the risk of being less thorough than their counterparts in the other handbooks, which adopt the in-framework perspective.

Part I of the volume (‘Basic theories and hypotheses’) introduces some of the core theories that have shaped CL over the last decades, offering, apart from the summary of their basic tenets, evaluations of recent developments and perspectives for future research. Chapter 1 (‘Cognitive semantics’ by Dirk Geeraerts) overviews a range of models applied by CL for the description of linguistic meaning (prototypicality, semantic frames, radial networks, construal, conceptual mappings), focusing on their shared features and common directions of development: they are all based on the conception of meaning as perspectival, dynamic, encyclopaedic and experiential. The author takes up the issues of the meaning of the term ‘cognitive’ (the balance between its psycholinguistic and sociolinguistic aspects), the ‘empirical turn’ in methodology (increasing importance of experimental and corpus-based research) and the potential integration of the models.

Chapter 2 (‘Cognitive grammar’ by Cristiano Broccias) defines Langacker’s Cognitive Grammar (1991, 2008) in contrast to Generative Grammar and goes on to elaborate on some of its basic notions: the lexicon-grammar continuum, cognitive processes and models underlying the use of language, conceptual account of grammatical classes and Langacker’s recent insights (2016) into the role of constituency in the dynamic processing of language.

Chapter 3 (‘Construction grammar and frame semantics’ by Hans C. Boas) traces the development of the constructionist framework and explores its connection with frame semantics, together with its online database FrameNet project (http://framenet.icsi.berkeley.edu). It discusses the key
topics in current research: argument structure constructions, constructional networks, productivity and motivation of constructions. The author compares different theories within the framework, following the development of its methodology and gradually widening scope of its research. The chapter closes with a discussion of the applications of constructionist insights in diverse fields of enquiry, such as language acquisition, linguistic variation and change or language contact, as well as the perspectives for further research on typology of constructions, interactions between constructions of different schematicity levels, and empirical methods of identifying and describing constructions in corpus data.

Chapter 4 (‘Multimodal construction grammar’ by Thomas Hoffmann) builds on the previous one, focusing on how multimodal constructions, semiotic packages consisting of linguistic structures and non-linguistic elements such as gestures or facial expressions, can be accounted for in terms of construction grammar and conceptual blending.

Chapter 5 (‘Natural semantic metalanguage’ by Cliff Goddard) concerns the theory of semantic primitives developed by Anna Wierzbicka (1996): the architecture and history of the model, its basic tenets, key issues and applications. The chapter closes with a brief summary of ongoing studies and perspectives for further research, covering the areas of intercultural pragmatics, minimal languages and the semantics of grammatical constructions.

Chapter 6 (‘Word grammar’ by Richard Hudson), describes the basic tenets of a theory not identical to main cognitive frameworks, but based on the same underlying principles, most notably the idea that linguistic knowledge is not fundamentally different from other types of knowledge and can be modelled as a network. Selected aspects of morphology, syntax, semantics and pragmatics are described within a framework that relies on word-to-word dependencies rather than phrase structure.

Chapter 7 (‘The creativity of negation’ by Rachel Gioral) relies on numerous experimental and corpus studies to examine the role of negation in prompting default metaphorical or sarcastic interpretation of utterances in several languages.

In Part II (‘Central topics in cognitive linguistics’), the contributors zoom in on particular key concepts and theoretical tools of the CL framework. Chapter 8 (‘Embodiment’ by Xu Wen & Canzhong Jiang) deals with one of the cornerstones of CL, a multidisciplinary, increasingly popular view of language as a system grounded in bodily and sociocultural experience (Evans 2019: 202–204). The chapter investigates the role of embodiment in linguistic conceptualization, language processing, acquisition and change.
Chapter 9 (‘Image schemas’ by Dennis Tay) deals with basic preconceptual representations of spatial relations (Evans 2019: 225), which figure prominently in many central CL theories, including conceptual metaphor theory (Lakoff & Johnson 1980), Langacker’s cognitive grammar (1991, 2008) or Talmy’s (1988) force dynamics. The chapter overviews the scope and history of the concept, discussing its relevance to the study of metaphor, polysemy, grammaticalization, discourse analysis and language acquisition, as well as its more recent applications in psychotherapy and interface design.

Chapter 10 (‘Categorization’ by Xu Wen & Zhengling Fu) starts with a comparison of four theories of categorization: the classical theory, prototype theory, Lakoff’s theory of ICMs and vantage theory. Then the authors discuss levels of categorization, the phenomenon of decategorization, the characteristics of grammatical categories in Mandarin Chinese, and the relevance of categorization in translation, language learning and teaching. This is by far the weakest chapter in the volume – imprecise and not adequately referenced.

Chapter 11 (‘Standard and extended conceptual metaphor theory’ by Zoltan Kövecses) offers an overview of the standard conceptual metaphor theory (Lakoff & Johnson 1980, Lakoff 1993), together with its latest extended version (Kövecses 2020), which includes a model of contextual mechanisms underlying the creation and processing of metaphor, and locates metaphorical mappings simultaneously at four hierarchical levels of conceptual structures: image schemas, domains, frames and mental spaces.

Chapter 12 (‘Conceptual Metonymy Theory revisited: some definitional and taxonomic issues’ by Ruiz de Mendoza) addresses the nature and scope of metonymy, first summarizing the major cognitive descriptions of the phenomenon in terms of conceptual mapping, a point of access and conceptual elaboration, and then putting forward a framework to integrate them as a combination of cognitive operations. The proposed taxonomy of metonymies relies on features such as the nature of the mapping, its degree of complexity, or the genericity and ontological status of the conceptual domains it involves.

Chapter 13 (‘Force Dynamics’ by Walter De Mulder) describes Talmy’s (1988) semantic model based on the concept of force interaction. The chapter summarizes the basic architecture of the model, together with its later extensions and critical insights by other scholars, and reviews its possible applications in the analysis of causatives, modality (Sweetser 1990) or argument realization (Croft 2012).

Chapter 14 (‘Construal’ by Zeki Hamawand) deals with the way that speakers conceptually structure a situation in alternative ways for the purposes of communication. This process and the range of linguistic
means to achieve it are described as construal (Evans 2019: 353–354). The author highlights its key role in cognitive semantics, lists the advantages of the theory and the dimensions along which alternative construals can be described, illustrated by numerous lexical, morphological and syntactic examples.

Chapter 15 (‘Concepts and conceptualization’ by Canzhong Jiang & Kun Yang) begins by discussing the ontological status of concepts, their structure, origin and relation to language. Then it overviews the definitions of the process of conceptualization and distinguishes its six parameters (non-insularity, interactivity, dynamicity, imaginativeness, subjectivity, and embodiedness), which is followed by an overview of cognitive research on two basic aspects of conceptualization: the psychological and the sociological one.

Chapter 16 (‘Iconicity’ by Günter Radden) overviews CL research on iconicity: the perceived resemblance between the form and the meaning of a linguistic sign (Ungerer & Schmid 2006: 300–305). The author distinguishes three basic types of iconicity – imagic, diagrammatic and associative – and situates them along a scale from more iconic to more arbitrary signs.

Chapter 17 (‘Motivation’ by Klaus-Uwe Panther) deals with linguistic motivation, discussing the history of the concept and its significance for CL, the relationship between arbitrariness and motivation in language, and various categories of motivational factors that shape language, such as systemic, cognitive or socio-cultural ones.

Chapter 18 (‘Grammaticalization, lexicalization, and constructionalization’ by Renata Enghels & Mar Garachana Camarero) examines several key notions in the cognitive study of language change: grammaticalization (change from lexical meaning to grammatical function), lexicalization (conventionalization of lexical items) and constructionalization (the gradual entrenchment of constructions). Grammaticalization is the main focus of the chapter: the authors follow the history of the concept, describing it first in terms of reduction and then of expansion of the features of the linguistic expression involved, to finally offer an account couched in terms of construction grammar.

Chapter 19 (‘Intersubjectivity and intersubjectification’ by Lieselotte Brems) reviews different approaches to intersubjectivity – the notion of cognitive coordination between the speaker and the hearer (Boogart & Reuneker 2017: 204), expressed linguistically by e.g. politeness signals or discourse markers. The author takes up the questions of defining the phenomenon, its range, subtypes and formal correlates.
Chapter 20 (‘Grounding’ by Frank Brisard) concerns the cognitive linguistic counterpart of reference: the process of linking an utterance to the ground: the speech event, its time, place and participants (Langacker 2008: 259), realized grammatically in a variety of ways (e.g. determiners, modals, finite verbs). The chapter follows the development of the concept in Cognitive Grammar, together with its recent extensions, and considers the case study of the present progressive construction as a grounding predication.

In Chapter 21 (‘Humor and cognitive linguistics’) Salvatore Attardo compares cognitive research on humor with his own General Theory of Verbal Humour (2001), examines how various cognitive mechanisms (frame shifting, blending, metaphor) are applied in the production of humorous utterances and reviews recent research on the role of embodiment and grammatical constructions.

Chapter 22 (‘Linguistic synaesthesia’ by Francesca Strik Lievers, Chu-Ren Huang & Jiajuan Xiong) defines synaesthesia as a type of metaphor combining different sensory modalities and examines a range of perceptual, cultural and linguistic factors which account for cross-linguistic similarities in the dominant mapping patterns, with hearing and sight as the preferred target modalities.

Part III of the volume (‘Interface between cognitive linguistics and other fields or disciplines’) is the comparative section, where most of the contributions evaluate the impact of CL within a given field of study relative to other frameworks. Chapter 23 (‘Culture in language and cognition’ by Chris Sinha) sketches the history of cultural linguistics and its methods of collecting and analyzing data. It overviews the research on selected key topics: linguistic relativity and embodiment, linguistic representation of color, space and time.

Chapter 24 (‘Cognitive linguistics and figurative language’ by Herbert L. Colston) offers a critical overview of accounts of figurative language based on cognitive principles. In his discussion of metaphor and metonymy, but also other phenomena such as conceptual integration, hyperbole and irony, the author argues for the inclusion of various cognitive processes (e.g. attention and memory) in the study of figurative devices.

Chapter 25 (‘Qualifying conceptualizations’ by Jan Nuyts) examines basic cognitive mechanisms of qualifying new information in relation to our existing knowledge along a hierarchically structured set of dimensions, including aspect, space, time, modality and evidentiality. The author describes the relations between the dimensions, their linguistic expression and the role they play in the processes of subjectification and intersubjectification.
Chapter 26 (‘Cognitive pragmatics’ by Marco Mazzone) explores mental processes which underlie pragmatic understanding. The author does not refer to any research within the CL framework, but instead relies on mainstream pragmatic theories, such as Gricean maxims (Grice 1975) or Relevance Theory (Sperber & Wilson 1986), and the argument is sometimes starkly at odds with the basic principles of CL, e.g. in its search for a single, modular mechanism of inference-based intention recognition.

In Chapter 27 (‘Cognitive poetics and the problem of metaphor’) Jeroen Vandaele defines the scope and the aims of cognitive poetics, reviews major issues in the discipline, and focuses on metaphor: the two cognitive linguistic approaches (the Conceptual Metaphor Theory and the Blending Theory) are compared with other theories (the Interactional Theory and Relevance Theory) in terms of how well they can explain what makes a poetic metaphor poetic. The author eventually proposes an interdisciplinary framework that combines elements of all the theories discussed.

Chapter 28 (‘Cognitive linguistics and discourse studies’ by Ulrike Schröder) gives a brief overview of emerging trends and recent developments in cognitive discourse analysis in the fields of metaphor & metonymy, blending, constructions, viewpoint and discourse models. The author points out a shift in the scope of the discipline towards sociolinguistic issues (e.g. social, cultural or genre variation) as well as a shift in methodology towards the analysis of dynamic spoken discourse, often multimodal, in contextualized corpus data.

Chapter 29 (‘Signed languages and cognitive linguistics’ by Sherman Wilcox & Rocío Martínez) focuses on CL’s contribution to the study of signed languages, including successful accounts of phenomena such as iconicity, metaphor and metonymy, blending and mental spaces, modality and evidentiality, pointing and grammaticalization of gestures. The authors argue that the non-modular cognitive framework is uniquely suited to the investigation of many problematic issues in the study of signed languages.

Chapter 30 (‘Cognitive linguistics and gesture’ by Julius Haasemer & Vito Evola) emphasizes deep affinities between CL and gesture studies, due to tight connections of gestures to speech, cognition and social interactions. The chapter elaborates on formal and functional aspects of co-speech gestures as well as their cognitive and social function in communication.

Chapter 31 (‘Cognitive linguistics and translation studies’ by Kairong Xiao) investigates how tools and methods of CL can be applied in the study of translation. The cognitive approach addresses many criticisms leveled against linguistic theories of translation (e.g. focus on form or static and limited view of meaning) and thanks to theoretical tools such as Langacker’s
(1987: 110–112) notion of imagery, conceptual mappings or frame semantics, the process of translation can be studied in terms of dynamic construal of meaning. In this respect, the author recognizes the foundational contribution of Tabakowska (1993).

Chapter 32 (‘Cognitive linguistics and language pedagogy’ by Dilin Liu & Tzung-Hung Tsai) begins with a brief historical overview, showing how the successive theories of language informed the methodologies of language teaching and goes on to focus on the contribution of the CL framework and the main questions related to implementing its insights into teaching practice. It reviews studies on the effectiveness of CL approach in teaching multiword units, prepositions, modals, conditionals and other schematic constructions. The following chapter (‘Cognitive linguistics and second language acquisition’ by Han Luo) covers similar issues, placing emphasis on the usage-based theory of language acquisition, which posits that SLA proceeds similarly to first language acquisition: from item-based learning to gradually more schematic constructions. The author suggests that the main factors which influence the acquisition of constructions pertain to their frequency and prototypicality; SLA is thus frequency-based and prototype-driven. CL-informed language pedagogy stresses the role of linguistic motivation and the author reviews several motivated accounts of the areas of language traditionally viewed as arbitrary, including metaphor and metonymy, polysemy, construction grammar and construal.

Chapter 34 (‘Cognitive linguistics and digital lexicography’ by Esra’ Moustafa Abdelzaher) examines how CL’s insights inform methods and media used to present lexicographic data with the aim of increasing the cognitive commitment and reducing the cognitive effort of dictionary users. The author reviews several digital lexicographic resources, including FrameNet and MetaNet Wiki, to show how they implement the theoretical tools of CL, such as Prototype Theory (Geeraerts 1989), Frame Semantics (Fillmore & Baker 2011) and Conceptual Metaphor Theory (Lakoff & Johnson 1980).

Chapter 35 (‘Cognitive linguistics and phytonymic lexicon’ by Nataliya Panasenko) analyses a system of specific terms, herb terminology in several Indo-European languages, in terms of mechanisms described by CL: information processing channels (e.g. vision or smell), metaphor and metonymy, and the stage of cognitive activity.

Chapter 36 (‘Cognitive linguistics and proverbs’ by Sadia Belkhir) offers a cultural-cognitive analysis of animal proverbs in several unrelated languages within the basic and the extended version of Conceptual Metaphor Theory.
In Part IV of the handbook (‘New directions in cognitive linguistics’) the contributors explore the newest research trends within the CL framework and beyond. Chapter 37 (‘Cognitive neuroscience of language’ by Rutvik H. Desai & Nicholas Riccardi) explores the neurobiological basis of selected aspects of speech comprehension and production. It relies on recent experimental evidence from brain scans and brain trauma studies in order to map functional and structural routes activated in the performance of various linguistic tasks: processing lexical concepts and sentences or spoken and written language.

Chapter 38 (‘Cognitive linguistics and language evolution’ by Gábor Győri) argues that the CL framework can significantly contribute to the studies of language origin and development since its basic tenets are compatible with the recent functional-evolutionary approaches to the issue. The view of language as embodied and usage-based is consonant with the idea that it evolved to serve both cognitive and social functions.

Chapter 39 (‘Diachronic construction grammar’ by Dirk Noël & Timothy Colleman) focuses on the diachronic strand of the construction grammar studies, which deal with how constructions arise, change and disappear, and how various relationships and processes shape constructional networks. The authors document the recent emergence of the approach and overview its basic theoretical tools, some of its representative research and main methodologies.

Chapter 40 (‘Multimodality’ by Charles J. Forceville) investigates how other modalities, besides the verbal one, contribute to the process of communication. The author compares functional and cognitive approaches to the issue, reviewing the two main strands within the latter: the research on co-speech gestures and the study of combinations of text and visuals in terms of Conceptual Metaphor Theory. The chapter discusses the main controversies within this emerging field of study (e.g. the definition of mode) and closes with a number of suggestions for its further development.

Chapter 41 (‘Foundational Issues in Biolinguistics’ by Kleanthes K. Grohmann & Maria Kambanaros) addresses the status of natural language as a mental phenomenon specific to the human species in terms of 5 fundamental questions: the nature of language, its acquisition, usage, neurological basis and evolution. The authors approach the issue from a generative perspective, but aim to show how a certain reformulation of the basic terms within the theory could make it more framework-independent and potentially CL-compatible. The discussion is couched solely in philosophical terms, without much recourse to actual evidence from genetics or neurobiology.
Chapter 42 (‘Thinking on behalf of the world: Radical embodied ecolinguistics’ by Sune Vork Steffensen & Stephen J. Cowley) traces the development of ecolinguistics, which sees language within its social as well as environmental context, exploring linguistic diversity and investigating how human linguistic activity impacts the environment. The framework of radical embodied ecolinguistics, subsequently proposed by the authors, rejects mental representations and instead sees language as a complex social activity, described as ‘languaging’. The authors juxtapose this view with generative and CL approaches to the relationship between language and cognition.

Chapter 43 (‘Cognitive linguistics and linguistic typology’ by Yuzhi Shi) applies the CL notions of construal and perspective to cross-linguistic studies, comparing passive markers across languages. The author discusses what motivates and constrains the variety of existing structures and the possible grammaticalization paths of content words into passive markers.

It is difficult to unambiguously evaluate the entire volume, due to the variety of the contributions it includes. In terms of its coverage, it is comparable to the other handbooks, but it seems to fall short of them in thoroughness and precision of description. Geeraerts & Cuyckens (2007) outweighs it in sheer scope and Dancygier (2017) in the clarity of structure and argumentation. The volume does not boast such an impressive array of big names as the earlier handbooks, where the respective theories were frequently presented by their very authors. Still, many of the chapters, especially in the two initial sections, are authored by some of the leading figures in the field (e.g. Geeraerts, Hoffmann, Kövecses) and those contributions constitute a major strength of the handbook: they are clear and comprehensive, offering informed summaries of the featured research as well as its evaluation. The volume definitely brings the reader up to date on the current developments of CL, with its references to the most recent research, some of it still in press at the time of writing, and with the authors’ insights on the ongoing and future development of their respective fields. Each chapter finishes with a recommended reading section with comments from the author, which greatly facilitates further research into the topic.

By contrast, Parts III and IV of the volume are definitely less effective, mainly due to the fact that the contributions they include vary in their adopted perspectives: some are entirely CL-oriented (e.g. Chapter 25 on the qualifying system for conceptualizations), some compare different frameworks (e.g. Chapter 31 on translation studies), while others are downright generative (e.g. Chapter 41 on biolinguistics). The various authors seem to differ in their understanding of the term ‘cognitive’: in some of the contributions, the
term covers anything that has to do with mental processing of language, but is not necessarily related to the CL framework as such, and sometimes even contrary to its basic principles (e.g. Chapter 26 on pragmatics addresses the search for “one single cognitive mechanism which is specific for pragmatic understanding” (p. 434)).

Another potential drawback is the lack of separate sections on methodology and sociolinguistics, as this is where the most significant changes in CL have occurred in recent years: the “social turn” (Geeraerts 2016: 527–528) and the “quantitative turn” (Janda 2013: 1–4). Although the shift towards empirical analysis of naturally occurring, contextualized data is a major theme in many of the chapters, it is not discussed in a more systematic way. The section on new directions (Part IV) does not cover methodological issues, but traces new paths of research, some of which are not entirely CL-related (e.g. Chapter 41 on biolinguistics and 42 on ecolinguistics).

Throughout the volume, the chapters vary in their degree of generality: most summarize an extensive field of research, but some pertain to phenomena too specific to warrant the inclusion in the handbook (e.g. Chapter 35 on herb terminology or Chapter 36 on proverbs, which are interesting as case studies, but not comprehensive enough). There are some valuable contributions (most notably the chapters that deal with construction grammar: chapters 3, 4, 18 and 39) as well as much weaker ones, which either cover issues not directly relevant to the CL framework or focus on the author’s own research without offering a broader perspective on the field. Consequently, the Handbook does not very well fulfill its function as a reference book for beginners, but it can be recommended for someone relatively well-versed in the cognitive approach, to systematize their knowledge and situate it within a larger perspective (the reviewer certainly benefitted from most of the chapters, though some of the others caused her a great deal of frustration). Even though the volume is not the best introduction to the field for a novice (Dancygier 2017 would be a much better choice here), it may help to bring scholars up to date with the latest developments of ideas and theories within the CL enterprise. Rather than a bare summary CL-related research, the book offers an evaluation of its current state, reflections on its ongoing development and an overview of how it has inspired other fields of study.

Literature