INTRODUCTION

Construction Grammar - theoretical reflections and empirical applications

This special issue brings together a set of studies that adopt Construction Grammar (FILLMORE et al. 1988; GOLDBERG, 1995; HOFFMANN; TROUSDALE, 2013) as their common theoretical framework. The articles illustrate the intensive theoretical and methodological development that Construction Grammar has undergone as an approach to language over the past three decades, and they showcase the range of topics that are currently dealt with in constructional research. This introduction to the special issue aims to provide a context for the individual contributions by outlining central notions of Construction Grammar as well as discussing how the field is currently extending and making connections to other areas of linguistic research. After a general presentation of the theoretical framework, we proceed to synthesize the central points of the articles that make up this publication.

Construction Grammar as it is practiced today would not exist without Charles Fillmore's work on case grammar (FILLMORE, 1968, 1977) and frame semantics (FILLMORE, 1982, 1985). Two fundamental insights that pervade Fillmore's writings and that have become shared tenets of researchers working within constructional approaches are that grammatical structures are inherently meaningful and that the meaning of linguistic constructions has to be understood as relative to semantic frames. Both ideas strongly inform Adele Goldberg's influential study of English argument structure constructions (GOLDBERG, 1995), which has popularized the idea that syntactic patterns are associated with semantic frames. Goldberg (1995, p. 39) has captured this in what she calls the scene-encoding hypothesis, which states that constructions corresponding to the basic sentence types in a language tend to encode as their central senses states and events that are fundamental to human experience. To illustrate, the English ditransitive construction, which is exemplified by sentences such as *John handed me a cold beer*, has as its central sense the

semantic frame of a giving event. We know that at least some of this meaning is associated directly with the syntactic form of the construction, since speakers are able to understand the idea of a transfer in examples with verbs that do not themselves express acts of giving (e.g. *bake* in *John baked me my favorite cookies*) or even with verbs that are not established in the English lexicon (e.g. the denominal verb *crutch* in *John crutched me the tennis ball*, cf. Kaschak and Glenberg, 2000).

The notion that syntax is meaningful has profound consequences for the general view of language that Construction Grammarians take. Most importantly, it implies that knowledge of language can be modeled exclusively in terms of form-meaning pairings. This is in conflict with the widely held assumption that knowledge of language can be separated into a grammatical component that captures all the regularities and a lexicon that contains all information that is idiosyncratic and needs to be memorized as such. Contrasting with this view, Construction Grammar is a model of linguistic knowledge that assumes a uniform representation for all linguistic structures. The basic unit of this representation is the form-meaning pair, which is labeled with the term construction (HILPERT, 2019a, 2). Since all of linguistic knowledge is to be modeled in terms of constructions, it is clear that a wide definition of this concept is necessary. Goldberg (2005, p. 5) offers such a definition that has been widely adopted in the field:

> Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency.

To unpack this definition, we can say that constructions represent linguistic patterns that are stored in speakers' minds. These patterns have both form, that is, phonetic, morphological, or syntactic substance, and they have meaning, which may manifest itself as referential meaning, social meaning, or text-structuring, discourse-pragmatic meaning. Form and meaning are connected through a symbolic link. In many cases, that link will represent an arbitrary convention, so that the knowledge of the form does not render the meaning fully predictable, or vice versa. Goldberg's definition further states that repeated

experience of a linguistic form will lead to the entrenchment of that form, that is, to its holistic representation as a construction. For example, regular plural forms or regular past tenses will become redundantly represented in speakers' minds if they are encountered frequently. Psycholinguistic work indeed supports this view (STEMBERGER; MACWHINNEY, 1988).

If all of linguistic knowledge is understood relative to the notion of constructions, it follows that constructions vary considerably in schematicity and complexity (LANGACKER, 2005). Some constructions are simple and concrete. Monomorphemic words instantiate that type. Other constructions are complex and schematic. Many syntactic constructions consist of multiple parts and have multiple slots, each of which can be filled by elements that belong to a given linguistic category. For instance, the English comparative correlative construction is instantiated by examples such as *the bigger the better* but also *the more you think about it the less you understand*. The construction is the same in both cases, but the examples differ with regard to the syntactic material that is used to fill its two slots. Between simple, concrete constructions and complex, schematic constructions is a continuum of constructions that are partially concrete and schematic. For example, English auxiliary verb constructions have a fixed part, the auxiliary, and an open slot for the lexical verb in the infinitive that occurs with the auxiliary. While relative degrees of complexity and schematicity correlate for many constructions, it is important to point out that there are also constructions that are simple and abstract, as for example part-of-speech categories such as verb or noun. Likewise, there are constructions that are complex and concrete at the same time. Idiomatic multi-word expressions such as the English saying *Don't count your chickens before they hatch* are complex in that they have several identifiable parts that can occur on their own, yet their combination yields a non-predictable, idiosyncratic meaning, in this case a warning that the hearer should not assume a positive outcome that is not fully certain.

It has been stated above that Construction Grammar aims to represent linguistic knowledge in terms of constructions. An important part of this representation concerns the way in which those constructions are organized. This organization is commonly viewed as a network in which constructions are

mutually connected (LANGACKER, 1987; FILLMORE et al. 1988; DIESSEL, 2019). Relations between abstract constructions and their more concrete instantiations are captured by the notion of inheritance. Information that is associated with highly schematic constructions is said to be inherited by more concrete constructions. To illustrate what this means specifically, a highly schematic grammatical pattern of English is the subject-predicate construction (HILPERT, 2019a, p. 12). This construction specifies that the verb agrees with its subject with regard to the grammatical categories of number and person, so that for example a third-person subject triggers the use of an inflectional suffix in the utterance *He sleeps*. This agreement pattern is found across a wide range of more specific constructions that include subjects and verbs, for example in the fully specified idiom *Time flies when you're having fun*. Inheritance links are not the only way in which constructions are connected. Constructions that show overlap in terms of either form or meaning are connected through subpart links (HILPERT, 2019a, p. 62). For example, the phrase *easy to understand* can appear in the English *it*-extraposition construction (*It is easy to understand the basics*) and in the English object-to-subject raising construction (*The basics are easy to understand*). The two constructions thus show formal overlap and are associated in speakers' minds. This does not mean that one should be seen as instantiating the other, which brings us to another important characteristic of Construction Grammar.

Contrary to theories in which mutually related constructions are interpreted as different realizations of the same underlying linguistic structure, Construction Grammar gives priority to the mental representation of structures as they manifest themselves in language use. Goldberg (2002, p. 327) put forward the surface generalizations hypothesis, which states that the characteristics of individual constructions will always yield more robust cues for mental representation than any generalization that holds across two or more constructions. This echoes a point held by Langacker (1999, p. 106), who claims that "lower-level schemas, i.e. structures with greater specificity, have a built-in advantage in the competition with respect to higher-level schemas". The respective roles of low-level generalizations and higher-order schemas are a matter of on-going discussions in Construction Grammar (HILPERT, 2019b.)

The fact that Construction Grammar has continuously grown with regard to its analytical scope is at least partly due to its openness towards corpus-based and experimental methods, which have allowed researchers to test its theoretical claims against empirical data. With regard to corpus-based methods, collostructional analysis (STEFANOWITSCH; GRIES, 2003) and behavioral profile analysis (GRIES; DIVJAK, 2009) have been applied across a wide range of constructional analyses. Experimental, psycholinguistic methods have informed the work of Kaschak and Glenberg (2000), Gries et al. (2005), Goldberg (2006), and Bencini (2013), amongst many others. As the contributions in this special issue show, the empirical testing of constructional hypotheses continues to be an important driving force in the development of the field.

As far as the conceptual foundations of Construction Grammar are concerned, one focus of current research addresses the architecture of the constructional network (DIESSEL, 2019), and specifically the way in which the nodes and the links in the network should be thought of (SOMMERER; SMIRNOVA, 2020). Especially the concept of horizontal links between paradigmatically related constructions has increasingly attracted attention (AUDRING, 2019).

In another strand of current research, Goldberg (2019) addresses the persistent theoretical problem of how speakers form intuitions about ungrammaticality. How is it that some creative uses of language are judged as unusual but possible, whereas others are perceived to be outright ungrammatical? A much-discussed example from English is the use of the verb *explain* in the ditransitive construction, which proficient speakers of English find unacceptable. Goldberg argues that two factors account for this phenomenon, namely semantic coverage on the one hand and statistical preemption on the other. Semantic coverage relates to the way in which different uses of the same construction relate to each other semantically. Statistical preemption occurs across pairs of semantically related constructions that show asymmetries in the frequencies of their collocates. With regard to *explain*, speakers observe it very frequently in the prepositional dative construction (*I explained it to him*), so that its absence in the ditransitive construction is interpreted as the outcome of a grammatical constraint.

As Construction Grammar has continued to develop, researchers have become aware of certain inherent biases that need to be taken into consideration. One such bias lies in the tacit assumption of monolingualism as the normal state of affairs. For many speakers, daily life involves the regular use of two or more languages, yet this fact is only poorly reflected in most linguistic theories. Researchers in Construction Grammar have begun to engage with bilingualism and multilingualism, and there are now efforts to develop theoretical notions that facilitate constructional analyses of speakers' bilingual competence and language use. Höder (2012) has proposed the term diaconstruction to account for generalizations that multilingual speakers make across structures from different languages in their repertoire. Another bias concerns the implicit focus on written language. Constructional analyses commonly use written data as a matter of convenience, but the bias goes deeper than that. Many phenomena that are inherent to the spoken modality, such as filled pauses, repair, or co-construction, have not received analyses in their own right from a constructional perspective, and have even been regarded as noise that needs to be filtered away (BRÔNE; ZIMA, 2014; IMO, 2015). It is clear that Construction Grammar stands to gain a lot from engaging more thoroughly not only with spoken data and actual dialogue, but also with gesture, embodiment, and situated cognition.

The papers in this special issue illustrate the continuing development of Construction Grammar. As constructional analyses are applied to more kinds of data, more languages, and different grammatical and lexical phenomena, our understanding of the theory is bound to develop further, and the community of researchers working on Construction Grammar will continue to grow.

Gragoatá 52 has fourteen articles and a book review that, taken as a whole, present different empirical applications of the theoretical apparatus of Construction Grammar. The first four articles deal with the theme of connectors, focusers and clauses, with different papers on the morphosyntactic organization of the Portuguese language. Then, the next six articles deal with lexical studies, especially involving constructional morphology, names and verbs. A final block of articles deals with constructional variation, which is a topic that has recently

attracted more and more attention in Construction Grammar. Finally, we finish this issue with a book review of "Explain me this: creativity, competition, and the partial productivity of constructions", by Adele Goldberg (2019), whose work has been shaping the field in important ways. As is quite clear, this publication covers a great diversity of themes and reflects connections that link Construction Grammar with other theoretical frameworks, such as Functional Linguistics, Cognitive Linguistics and other theories.

In the first article, André Coneglian discusses the semantic organization of grammatical categories through a constructional analysis of concessive adverbial subordinators. The author develops two hypotheses: (i) it is argued that the way in which morphosyntactic properties map onto semantic properties in the establishment of complex grammatical categories is the result of compositional operations implicated in the constructional meaning of linguistic tokens; (ii) it is considered, then, that the organization of concessive adverbial subordinators is based on their constructional compositional properties. The study shows that concessive adverbial subordinators are organized around a prototypical center that is constituted by the conjunctions *embora, ainda que* and *conquanto,* which are semantically less specified.

Heloise Thompson's article focuses on assimilative comparative clauses with TIPO and IGUAL in the light of Usage-Based Construction Grammar and Frame Semantics. Her study analyzes one of the ways in which the cognitive process of comparison manifests itself in Brazilian Portuguese: the assimilative comparative construction with the connectors *tipo* and *igual.* She concludes that constructions may occur on syntagmatic, sentential and intersentential levels, which contradicts what traditional grammatical studies usually claim.

In the third article, Edvaldo Bispo presents a functional-constructionist investigation of headless relative clauses introduced by WHO [QUEM], considering their morphosyntactic organizing forms, argument structure patterns, as well as their semantic, cognitive and socio-interactional characteristics. The study is qualitative and quantitative, and it is supported theoretically by Usaged-Based Functional Linguistics and Construction Grammar. The results show that the morphosyntactic configuration of

the clauses that constitute the formulaic expressions is related to semantic aspects (counterpoint / language game, cause-effect relations), interactional factors (pragmatic inference, inter/subjectivity) and cognitive aspects (metaphorical and metonymic projections).

Closing the first block of articles, Agameton Justino and Vânia Casseb-Galvão explore the constructional network of the focus scheme [QUE SÓ] in Brazilian Portuguese. According to the authors, focusing is a construction, an abstract entity constituted by pairings of form and meaning and it presupposes the domains of emphasis, contrast and intensification of world knowledge shared by speakers. The construction [que só] serves the pragmatic function of focus, and its constitution arises from the combination of two recurrent focus structures in the Portuguese language. The results demonstrate a superposition of the comparison and intensification domains, revealing a kind of focusing superschema in Contemporary Brazilian Portuguese.

The second block of papers deals with lexical studies, especially involving constructional morphology, names and verbs. Carlos Alexandre Gonçalves, in « The power in the words: (des)lexical constructions with the name of the current president of Brazil » analyzes a set of about 150 lexical formations from the name of the current president of Brazil, such as 'bolsonero', 'boçalnaro', 'bozonazi' and 'bolsolão'. The main goal is to map the processes involved in these expressive coinages and to verify if a new morphological type, called a splinter, a non-morphemic portion frequently used in a series of new words, is also spreading on anthronymic bases. Corroborating Fauconnier and Turner (2002), the author concludes that the production of meanings through lexical manipulation is directly related to the "three Is of the mind": Identity, Imagination and Integration.

The following article, which is authored by Mailson Lopes, approaches lexical compression, also known as micronarrative, through an analytical appreciation for the content of derived words, integrated into the theoretical framework of Construction Grammar. He also outlines a semantic-historical-constructive model for the analysis of derived words. The model draws on Turner's (1996) lessons on the literary mind, initially applied by Botelho (2004), Santos

(2005) and Carmo (2005) to the description of suffixed products in contemporary Portuguese. Based on such works, Lopes (2016a; 2016b) applied for the first time the above-mentioned theoretical model to the historical-diachronic development of the semantics of prefixed words, thus combining ideas from etymology, historical morphology and Construction Grammar. Through a synthesis of these and other works, he outlines the main topics that characterize lexical compression, presenting some examples of its application to language change in its diachronic trajectory from Latin to archaic and modern Portuguese.

The next contribution is by Milena Aguiar, who presents a usage-based analysis of the SNLoc attributive construction in contemporary Portuguese, focusing on the integration of its subparts - SN and locative adverbial pronoun. In a panchronic perspective, the author defends the hypothesis that the SNLoc attributive construction is a marginal member of the class of Portuguese names, resulting from lexical constructionalization. So, a new constructional scheme of language is formed, at the lexical level, assuming a meaning of vagueness and uncertainty, distinct from its original meaning.

In their article, Karen Alonso and Carolina Santos discuss "The polysemy of the relational construction 'NP de NP'" and they describe the construction in terms of the different meanings this form can be associated with – such as purpose, part-whole, and identification, among others. The authors argue in favor of the hypothesis that these senses can be mutually connected in terms of Langacker's reference-point model. The analysis is based on a usage-based perspective of language, which assumes that grammar is modeled by domain-general cognitive processes and is sensitive to speakers' experience.

In the next paper, "The stative construction with the verb *to be*", José Romerito Silva and Marília Sabino analyze uses of this verbal construction in contemporary Portuguese considering the lexicon-grammar *continuum*. In this sense, the paper differs from approaches in which the verb *to be* is considered to be merely relational and meaningless. The analysis that is proposed is qualitative-interpretative, based on functional usage-based linguistics. The database comes from *Corpus Discurso & Gramática* and from *Banco Conversacional de Natal*, comprising texts in spoken and written modalities.

Closing the second block of articles, Maria Angélica Furtado da Cunha explores "The semantics of the ditransitive construction in a diachronic perspective". The author focuses on the ditransitive construction of Brazilian Portuguese, aiming at examining its semantic evolution. The theoretical approach combines assumptions and analytical categories of Usage-based Functional Linguistics and Construction Grammar. The results lead to the conclusion that, in the 18th as well as in the 20th century, the ditransitive construction prototypically conceptualizes an event of physical transfer, in which an animate participant (Subject) transfers an object (Direct Object) to a human entity (Indirect Object). Furthermore, there was no change in the semantic class of verbs that can instantiate extensions from the central meaning of this construction.

The last block adopts different perspectives on constructional variation. The first paper is authored by Luiz Fernando Rocha, Ana Carolina Dias, Karina Vieira and Joice Silva. The analysis focuses on semantic-pragmatic distinctions in the "acredita isso/acredita nisso" pair of grammatical constructions in Portuguese, which are sensitive to syntactic differences and licensed by specific discursive contexts. The authors postulate that the uses of the "acredita isso" construction, common to local counterexpectation contexts, involve a more subjective perspective about the scene evoked. By triggering the frame of perplexity or admiration, the speaker invokes this to her- or himself, rather than to the addressee. The "acredita nisso" construction, common to experienced counterexpectations and local counterposition contexts, encompasses a more objective perspective on the evoked scene, and by triggering the belief frame, the speaker evokes it for the other.

Lilian Ferrari, Diogo Pinheiro, Brendha Portela, Clara Sousa, Gabriela Ribeiro, Paula Sasse and Sara Martins Adelino Correio investigate the semantic pole of two nominal constructions of generic reference in Brazilian Portuguese: [Article + Singular Noun] ("The cat is willful") and [Ø + Singular Noun] ("Cat is willful"). It is proposed that, despite their extensional similarity, these constructions are not semantically equivalent. Specifically, it is argued that the pattern with definite article, but not the one without it, yields the conceptualization of a collection of unprofiled types within

a Type Space. According to the authors, the results show evidence in favor of the hypothesis that the constructional patterns investigated evoke different mental representations.

In the next paper, Naoki Otani presents a paper that deals with a usage-based analysis of alternating syntactic constructions, focusing on English *spray/load* constructions and *clear* constructions. The verbs used in these constructions appear in an alternating syntactic pattern: the THM-object variant (e.g. *He sprayed paint onto the wall*) and the LOC-object variant (e.g. *He sprayed the wall with paint*). The paper aims to demonstrate that these syntactic alternations are functionally motivated by information structure. Topics mentioned in the previous discourse context are shown to influence speakers' choices.

In the last paper of the third block, Maria da Conceição Paiva and Bruno Oliveira discuss some issues related to the modelling of language variation and change within the framework of the Cognitive Construction Grammar. They particularly put into question the principle of no synonymy as outlined by Goldberg (1995, 2006), especially with regard to the lack of a distinction between semantic and pragmatic components in the definition of construction. To this end, they analyze the intraclausal causal constructions POR CAUSA DE and POR CONTA DE in order to show that they can alternate in some contexts. Although these two constructions play different argumentative functions, they share a set of formal and semantic properties that create a space for variation. The results of the analysis provide evidence in favor of a stricter delimitation of the principle of no synonymy.

Closing the list of papers, Lauriê Dall'Orto presents a book review based on « Explain me this: Creativity, Competition, and the Partial Productivity of Constructions », by Adele Goldberg (2019). The work, which is intended for students, teachers and researchers, offers an introduction to the study of how we acquire and use our complex linguistic knowledge. The reviewed book extends Goldberg's successful research program that was developed in her earlier books « Constructions: A Construction Grammar Approach to Argument Structure » (1995) and « Constructions at Work: the nature of generalization in language (2006) », which are widely referenced in linguistic studies developed in Brazil and worldwide.

The variety of themes in this issue represents our commitment to provide a platform for recent developments in the increasingly diverse field of Construction Grammar. We wish you all an enriching reading!

Ivo da Costa do Rosário
(UFF / FAPERJ)

Martin Hilpert
(Universidade Neuchâtel)

Guest editors

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