KNOWLEDGE, CREATIVITY AND PRODUCTIVITY FROM THE PERSPECTIVE OF USAGE-BASED FUNCTIONAL LINGUISTICS

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▪ ABSTRACT: In this article, we discuss the notions of linguistic knowledge, creativity, and productivity as they are conceived in Functional Linguistics and in Construction Grammar, also reviewing, more briefly, these concepts in Generative Grammar. In this sense, we revisit the posture that different linguists adopt in relation to these notions, confronting them and highlighting their divergences. We relate each of the concepts to the specific theoretical assumptions of each model of analysis, also pointing out the evolution that such notions have gone through over time, which results from the development of Linguistics as a science. We characterize the construction and its properties, and under the framework of constructionist models, we relate creativity and productivity to the property of schematicity. Finally, based on Usage-based Functional Linguistics, we examine the transitive and the VAdj$_{ADV}$ e VAdj-mente constructions of Brazilian Portuguese to illustrate the role of creativity and productivity and communicative and cognitive factors that motivate new uses of these constructions.

▪ KEYWORDS: Knowledge; creativity; productivity; Functional Linguistics; Construction Grammar.

Introduction

In this article, we examine the notions of knowledge, creativity, and productivity from different linguistic perspectives. More specifically, we discuss these notions according to Functional Linguistics (BYBEE, 2016 [2010], FURTADO DA CUNHA; BISPO; SILVA, 2013) and usage-based constructionist models (TRAUGOTT; TROUSDALE, 2021 [2013], HILPERT, 2014, GOLDBERG, 2019). We also outline a general comparison between these usage-based approaches and more formalistic models, such as Generative Grammar (CHOMSKY, 1986). Furthermore, we present how these linguistic models evolved through the history of Linguistics, from the idea

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of innate grammar to the conception that linguistic knowledge is acquired and fixed in the daily use of language, in concrete situations of communication and responding to communicative and cognitive pressures. In turn, creative and productive properties, whether differentiated or not, are conceived of by generativists as the specific capacity of speakers to produce an infinite number of utterances in their languages, whereas a functionalist conception considers them factors operating in linguistic variation and change. Finally, according to usage-based constructionist models, creativity and productivity are related to constructions' schematic property, which in turn is linked to the way in which domain-general (i.e., non-specific to language) cognitive abilities, such as categorization and analogy, operate.

This article is divided into six sections. After this introduction, we consider some conceptions of linguistic knowledge. Next, we describe the notion of linguistic creativity. We then focus on linguistic construction and its properties. After that, we focus exclusively on creativity from the perspective of Usage-Based Functional Linguistics, examining Portuguese language data from the viewpoint of the functional-constructionist approach to grammar. The last section summarizes our discussion.

Linguistic knowledge

In general terms, the generativist approach considers that linguistic knowledge arises from specific innate processes determined by Universal Grammar, which would be responsible not only for the commonalities among languages (principles), but also for the possibilities of variation (parameters). On the other hand, usage-based linguistic approaches do not conceive of a universal grammar and explain linguistic knowledge through domain-general cognitive processes, such as the abilities to put oneself in someone else's place, to retain and organize information in memory and to categorize and make analogies, which are responsible not only for the acquisition of language knowledge, but also for the organization of knowledge as a whole and for learning in general, problem solving, production of artifacts, etc.

As a rule, in formalist approaches, the conception of linguistic knowledge is based on the idea that speakers make a distinction between knowledge of the lexicon and knowledge of grammar – dictionary and grammar book model, according to Taylor (2012). The lexicon comprises items with referential content, such as nouns, verbs and adjectives; grammar, in turn, comprises functional items such as conjunctions, articles and pronouns. Grammar also includes bound morphemes, such as inflectional and derivational morphemes, as well as rules for inflection and creation of words and sentences. An important point is that generativists assume that computational rules, belonging to the domain of syntax, are applied to lexical items, thus creating syntagmas and sentences, which are generated compositionally (KENEDY, 2015).

Hilpert (2014) points out the large amount of specific linguistic aspects that speakers have to know, according to formalist approaches. Speakers must: know words; know

how to combine words into phrases and sentences; know how to put the right suffixes/endings on words; be able to understand newly coined words; know that sometimes what is meant is different from what is actually said; know that language varies across different contexts; and know idiomatic expressions.

In constructionist approaches based on usage, such as in Usage-Based Functional Linguistics, linguistic knowledge is acquired via linguistic constructions, that is, to know a language an individual needs to know its constructions, which can be a morpheme, a word, an idiom or a partially filled or fully general schema, as we will show later. Speakers do not store constructions in two large categories, lexicon and grammar, because they memorize constructions in use, and in use the reality is that linguistic categories are fluid, grammar is emergent, language varies and changes constantly, linguistic forms are reinforced or weakened by frequency of use. With their domain-general cognitive skills, such as the ability to read intention, categorize and make analogies, speakers understand and produce both linguistic constructions they have already heard many times and new constructions.

Linguistic constructions are linked in a network through connections of form and meaning. All constructions known by speakers of a language form the *construction* of the language, that is, the set of interconnected constructions. According to Goldberg (2003), the totality of our linguistic knowledge is captured by the *constructicon*, as it contains not only morphemes and words, but also larger linguistic units, such as idioms and partially filled constructions, such as the English expression [*jog* (someone's) *memory*], and fully general phrasal patterns, such as the transitive construction [NP V NP] (*Maria killed the cockroach*). A speaker's knowledge of a construction is the total amount of their experience with that construction. This includes variations, social contexts, meaning and the linguistic context in which the construction is used. Hoffmann (2019) states that each speaker's *constructicon* is unique, since life experiences are unique, which entails that different constructions and different connections between them are memorized. Of course, there is a very large set of constructions common to all varieties of a language and also common to many languages, such as, for example, transitive constructions, ditransitive constructions and the [Aux V] construction.

Idioms have always posed a problem for the generativist approach, since they cannot be explained by word formation rules and are not compositional (GOLDBERG, 1995). Therefore, they were seen as idiosyncrasies. But constructionist studies, especially those based on the Construction Grammar model, have shown that languages are permeated by an enormous number of expressions whose forms and meanings cannot be predictable either based on words memorized and stored in the lexicon, or on grammatical syntax rules. Usage-based constructionist approaches postulate that constructions can be more or less compositional, more or less lexically filled, and more or less productive. All these properties occur in a gradient. We memorize constructions like *abandonar o barco (*abandon ship) or *bater as* botas (kicking the bucket) just as we memorize single-word constructions like *quitting* and *dying*.

Regarding the learning of linguistic constructions by children, according to Tomasello (2003a), there are two large groups of cognitive skills:

1. Skills of "intention-reading"

These skills emerge around nine months of age, when babies begin to understand the other's intentions, which can be perceived after the child learns what the act of pointing means (children at this age understand they should look at what is being pointed and not just at the finger).

For the child to acquire the conventional use of linguistic signs, she needs to (TOMASELLO, 2003b):

(a) understand other people as intentional agents;

(b) participate in joint attentional scenes, when an adult draws the child's attention to some element, such as a ball, a doll;

(c) understand not only intentions, but communicative intentions, in which someone wants the child to pay attention to something in the joint attentional scene;

(d) reverse roles with adults in the cultural learning process, for example, use a symbol toward the adult as the adult used it toward them.

2. Skills of "pattern-finding," which are basically the ability to categorize and make analogies.

Linguistic knowledge is developed on the basis of these domain-general skills (skills that enable learning in general, not just language learning). As the child progresses in the acquisition of different types of construction, eventually reaching more abstract constructions, and in the production of utterances larger than the sentence, their entire cognition changes, as shown by Tomasello (2003a).

According to Tomasello, children go through four stages of language acquisition, which are entirely linked to the ability to apprehend more or less abstract/schematic constructions. In the first phase (around 14 months), the child communicates through single-unit constructions, the holophrase, which represents an entire speech act. For example, the word *ball* spoken by a child is a construction that encodes an entire scene, without linguistically encoding the event and the participants.

The next stage is called by the author "verbal island constructions," which has an initial phase with pivot constructions of the type [more X] (*more banana*, *more water*), followed by the phase of verbal island construction itself – around 22 months old – in which the child memorizes the construction from individual verbs, such as [S get O], [S see O], [S want O]. Note that the degree of abstraction in this phase is higher, with events and participants already linguistically marked.

In the third stage, which starts around 36 months, the child makes more abstractions and recognizes patterns even more schematic, such as [S V O], being able to fill the V

with several transitive verbs. This is the stage of abstract construction or verb-general construction, according to Tomasello (2003a). In it, the child learns general schemas of the language and can insert different words in these schemas, forming new sentences.

Finally, research shows that, around the age of 4 or 5 (TOMASELLO, 2003b), the child produces utterances that go beyond the sentence, chaining together events or states of affairs, thus creating oral texts (which the author calls narratives). At this stage, children are able to produce constructions with cohesive elements, such as anaphoric and connective pronouns.

The ability to apprehend different perspectives, in a joint attentional scene, leads the child to understand why there are so many linguistic constructions for similar scenes, and that is why they capture differences such as those distinguishing the terms *walk*, *run*, *crawl*, for example, which all refer to moving the body from different perspectives. They also learn, in the same way, words like *sell* and *buy*, observing the change in perspective in the act. Comprehension of active and passive constructions, for example, is also based on understanding the perspective from which the speaker chooses to express the sentence's topic. Quoting Fisher, Gleitman and Gleitman (1991), Tomasello (2003a, p. 217) posits that constructions "serve as a "zoom lens' which the speaker uses to direct the listener's attention to a particular perspective on a scene."

To become aware of the boundaries between linguistic constructions, the child needs to apprehend the *slots* in constructions, through a functionally based distributional analysis (TOMASELLO, 2003a). For example, a child who hears the utterance *fazer a unha* (have the nails done) will memorize it as a single unit, but when they learn that you can say *fazer a unha*, *fazer o cabelo* (have the hair done) and *fazer a sobrancelha* (have the eyebrows done), they will learn a pattern [fazer X] (´have X done´), a form with a meaning that does not result from the sum of the meanings of each item in the expression (MACHADO VIEIRA, 2018).

Language acquisition is not limited to childhood. Young people and adults learn specific or schematic constructions throughout their lives. When starting a new course, taking a trip and interacting with people from other linguistic communities, adults acquire new constructions. On the other hand, constructions that are no longer in use in the linguistic community start to have weak representations in memory and may disappear. Thus, a community's or person's *constructicon* is constantly changing, and what characterizes linguistic change in a given language is the change in the network of constructions.

Bybee (2016 [2010]) uses dunes as a metaphor to argue that languages have shape, but such shape is constantly changing. The fact that the categories are not discrete allows them to change function, such as, when an adverb becomes a conjunction, or a full verb becomes an auxiliary. Our linguistic knowledge, based on the ability to categorize, to make analogies, for example, encompasses the ability to understand an older construction used in a newer context. A construction can vary semantically when it performs more than one function (what the literature calls variation by dissimilarity), such as the Portuguese connective *posto que* (since/as or though/although), which can

express cause or concession, as in excerpts (1) and (2), respectively. Or a construction may be semantically close to other constructions (variation by similarity) as, for example, the Portuguese constructions *quando* and *toda vez que* (when and whenever, respectively), which have the same basic function – to introduce adverbial clauses of time (fragments 3 and 4) – although they have different pragmatic roles (*toda vez que* is more marked because it is less frequent and emphasizes the recurrence of the event)[1]:

1. *O Estado não questiona o cumprimento dos requisitos de admissibilidade, mas considera que não houve violação dos artigos 1(1), 2, 11 e 12 da Convenção, posto que as supostas vítimas não foram chamadas por nenhum tribunal, nem se lhes foi imposta nenhuma pena por não cumprir com o serviço militar obrigatório* (Portuguese Corpus). [*The State does not question compliance with admissibility requirements, but considers that Articles 1(1), 2, 11 and 12 of the Convention have not been violated,* since the alleged victims were not summoned by any court, *nor any penalty was imposed for failing to perform mandatory military service.*]

2. *A lembrança da perda faz perder o apetite e o sono, posto que haja esperança de remediá-la de outra maneira* (Portuguese Corpus). [*The memory of the loss makes one lose appetite and sleep,* although there is hope of remedying it in another way.]

3. *Concordo absolutamente que filtrar as letras de músicas (bem como filmes, livros, etc) é indispensável aos cristãos. Entretanto uma questão me persegue quando penso neste assunto* (Portuguese Corpus). [*I absolutely agree that screening song lyrics (as well as movies, books, etc.) is indispensable for Christians. However, one question haunts me* when I think about this subject.]

4. *Pelo contrário, melhor seria se tivéssemos um presidente do COB forte, destemido, que as pessoas respeitassem e não temessem. Que elogiasse quando devesse. Mas que fosse suficientemente corajoso, desprendido, para criticar toda vez que o Ministro do Esporte errasse* (Portuguese Corpus). [*On the contrary, it would be better if we had a strong, fearless BOC president that people respected and did not fear. Who praised when he should. But who were brave, altruistic enough to criticize* whenever the Minister of Sport made a mistake.]

Linguistic constructions often undergo changes in form and/or meaning, and these changes are also stored in memory. When these changes occur in either form or meaning they are called by Traugott and Trousdale (2021 [2013]) constructional changes and do not alter the network of constructions of a given synchrony. However, when changes occur in both form and meaning, there is the creation of a new construction or constructionalization, in the terms of Traugott and Trousdale (2021 [2013]). When

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[1]   Data from Cezario, Alonso e Castanheira (2020).

there is constructionalization, the entire network is changed by the entry of this new construction, which starts to compete with other constructions of the same paradigm. This is what happened, for example, with the entry of constructions *embora* (although) and *mesmo que* (even though) in the modern period of Portuguese language history, which became nodes of the concessive connectives' paradigm.

Just as speakers memorize constructions that are more grammatical, such as connectives in their contexts of use (in larger constructions, such as adverbial hypotactic clauses, for example), they also memorize constructions with more referential meanings, such as idioms.

Therefore, we can say that, on the one hand, linguistic knowledge is acquired by memorizing constructions, their contexts of use and their connections with other constructions of the language *constructicon*; on the other hand, there is a whole set of cognitive abilities that lead, among other things, to the recognition of categories and different elements that are equated by analogy. These capabilities, when operating on a *constructicon* – all linguistic knowledge–, explain human creativity in the comprehension and creation of new utterances, as we will address in the next section.

Linguistic creativity

The theme of creativity permeates linguistic studies regardless of the theoretical model adopted. Our objective here is to review how creativity is treated by different theoretical approaches. Among linguistics, when one talks about creativity, it is usually associated with Noam Chomsky, who used it as an argument in favor of the existence of a universal grammar, as we will see later. However, there are other views of this typically human ability.

Historically related to the structuralist theoretical framework, Meillet (1912) touches the issue of creativity, albeit indirectly, by describing how new grammatical forms emerge in a language via analogy processes, or analogical innovation, in which new paradigms arise through formal similarity with established paradigms, and via grammaticalization, in which an autonomous word becomes a grammatical element. Even before Meillet, Humboldt (1988 [1836]) was also interested in the origin of grammar and grammatical forms. Although they do not deal specifically with creativity, but with the genesis of grammar, these two scholars touch the theme.

Lyons (1977) makes a distinction between creativity and productivity. According to him, creativity does not refer only to the fact that a given utterance has never occurred in the previous experience of the speaker, but refers to the utterance's originality or novelty. This gives us an opportunity to discuss whether creativity is a property of languages, or a characteristic feature of the use made of language by speakers in particular situations. For Lyons, productivity, in turn, concerns the fact that speakers can use lexemes in entirely original utterances, which they have never encountered before. Whether or not we agree with the distinction proposed by Lyons, we observe

a strong link between creativity and productivity as properties of language. We will return to this point later.

In two dictionaries of linguistics we consulted, Matthews (1997) and Crystal (2000), the entry *creativity* immediately refers to Chomsky, who, in his early works, uses the concept to refer to the "ability of speakers to produce and understand sentences they have not heard before" (MATTHEWS, 1997, p. 81), that is, the human-specific capacity of "language users to produce and understand an indefinitely large number of sentences, most of which they will not have heard or used before" (CRYSTAL, 2000, p. 71). In this sense, the notion of creativity is closer to what Lyons calls productivity.

Inspired by Humboldt, Chomsky (1965, 1986) argues that the object of linguistics is the speaker's ability to produce an infinite number of sentences. In Humboldt's words, language involves the "infinite use of finite means" (CHOMSKY, 1986, p. 30). An important point of Chomsky's argument is that the creative mastery of language is a unique characteristic of human beings, that is, it is species-specific.

Chomsky indeed emphasizes language's creative aspect as a central pillar of the epistemological argument for the existence of a Universal Grammar. In this sense, the development of Generative Grammar had as one of its primary objectives to explain the creative capacity of speakers, and it was to that purpose that generative rules were formulated. Endowed with this capacity, speakers of a language can produce and understand an indefinitely large number of utterances they have never heard before, and that may never have been uttered before (CHOMSKY, 1965). This capacity to form and understand new sentences is exercised by speakers in an unreflected manner, without awareness of the underlying grammatical rules that constitute utterances. Here, creativity and productivity seem to refer to the same capacity.

With regard to the Functional Linguistics' theoretical framework, our main focus in this article, we note that functionalist linguists also address the question of creativity. In general terms, we see Functional Linguistics as a theory that seeks to explain the interaction between language and usage, considering that grammar can be affected by language usage (BYBEE, 2016 [2010]).

Based on the grammaticalization paradigm, Lehmann (1985) explains linguistic change by attributing it to creativity, along the lines of Meillet's approach (1912). Lehmann's hypothesis is that speakers are always looking for originality and expressiveness, but as they only have available a limited number of linguistic possibilities, there tends to be a general movement in one direction. The result produced becomes commonplace, and then development must begin again. This hypothesis is related to Meillet's (1912) conception of spiral development and may help explain the recurrence of certain grammaticalization processes in different languages. In this sense, grammaticalization arises because "speakers do not want to express themselves the same way they did yesterday, and in particular not the same way as somebody else did yesterday" (McMAHON, 1994).

The spiral development characteristic of grammaticalization can therefore be explained by the creative use of language, but this spiral also has a linguistic aspect,

which Givón (1971, 2012 [1979]) sees as part of a larger cycle, represented by the famous trajectory: speech > syntax > morphology > morphophonemics > zero. This means that the forms that originally contributed to build coherent discourse become part of the syntax, grammaticalization then integrates these forms into morphology and subsequent phonological attrition merges them into morphophonemic markers, and finally they can disappear. Givón (1971, p. 413) summarizes this trajectory by stating that "today's morphology is yesterday's syntax."

Traugott and Heine (1991) argue how far grammaticalization is induced by individuals, and to what extent it is an act of human creativity, rather than the result of language-internal changes due to structural forces. They argue that this question has not been usually posed in terms of psychological or cognitive motivation. Adopting the perspective of the grammaticalization paradigm and focusing on creativity at the cognitive level, Martelotta, Votre and Cezario (1996) examine metaphorical and metonymic mechanisms that act in grammaticalization. To illustrate the metaphorical process, based on Heine, Claudi and Hünnermeyer (1991), they consider the space > discourse trajectory, in which spatial concepts, by analogy, come to designate points in the text, as in:

5. … *você chega assim … tem … tipo de frente pra janela … a porta é à minha esquerda … aí toda parte da parede esquerda … tem armário … **depois** vem o freezer … a geladeira … mais um armário* … (MARTELOTTA, 2011, p. 99). [… you get there … there is …kinda facing the window … the door is to my left … then the whole left wall … there are cabinets … **then** there is the freezer … the refrigerator … and another cabinet …]

6. *esse Itamar é:: brincadeira … é muito ruim … não está:: conseguindo nada mesmo … o cara não tem a menor noção do que ele tinha que estar fazendo lá … é uma anta completa … e totalmente despreparado pra ser presidente … **depois** … não tem o menor controle mais sobre a economia … a inflação voltou a aumentar* … (MARTELOTTA, 2011, p. 99). [Itamar, he is:: a joke … he's very bad … he's not:: getting anything done at all … the guy has no idea what he had to be doing there … he's a complete dumb-ass … and totally unprepared to be president … **then** … he no longer has the slightest control over the economy … inflation has rose again …]

Martelotta (2011) points out that in (5) the item *depois* has a spatial sense, while in (6) *depois* lost its original sense of next in space and assumed the function of introducing additional arguments for what is being said, that is, its use is textual, similar to *além disso* (in addition).

Votre (1996) examines how speakers make use of old forms and old constructions to create new utterances. In this sense, the author deals with the body > mind metaphorical trajectory, such as the use of the lexemes *cabeça* (head) in *ser o cabeça da manifestação* (being the head of the manifestation), *ter cabeça oca* (being empty minded); *mão* (hand)

em *dar uma mãozinha* (lend a hand), *de segunda mão* (hand-me-down*)*; *pé* (foot), em *sem pé nem cabeça* (nonsense; literally, without foot or head), *estar com o pé na cova* (to have one foot on the grave); among many other examples. It appears, therefore, that metaphor is a recurrent resource in linguistic creativity.

In a more recent study, Bybee (2016 [2010]) deals with cognitive processes that operate both in language and in other domains, such as visual perception, musical skills and mathematical reasoning, among others. Bybee argues that linguistic structure can be explained without the need to postulate language-specific processes. Among these processes, the author points to analogy as the primary mechanism of morphosyntactic creativity. She gives as an example the use of a new item in a construction, as with *bananas* in *That drives me bananas* by analogy to *That drives me crazy*.

Adopting a constructional approach, Bybee (2016 [2010]) argues that the ability to fill the slots, or schematic positions, of a given construction is a source of creativity and productivity in language, without detailing the distinction between the two properties.

Both Cognitive Linguistics (LANGACKER, 1987, among others) and Construction Grammar (GOLDBERG, 1995, 2006, 2019; CROFT, 2001; TRAUGOTT; TROUSDALE, 2021 [2013]; HILPERT, 2014) are also concerned with creativity and productivity. The former is manifested by filling in the schematic slots in a construction, as in Bybee's approach. Thus, different instantiations of a slot lead to the formulation of a more abstract node that ranges over the instantiations in the constructional network. Productivity, in turn, has to do precisely with the schematicity in the construction or its slots, so the more schematic a construction, the more likely it is to be highly productive. We can conclude therefore that schematicity favors the speaker's creativity in filling slots, which thus results in greater productivity of the construction in terms of number of *types* and *tokens*.

Bybee (2016 [2010]) points out that an important source of creativity and productivity in language regarding the expression of novel concepts and the description of novel situations is the ability to expand the schematic slots in constructions to fill them with novel lexical items, phrases or other constructions. There is considerable evidence indicating that this expansion process refers to specific sets of items that have been previously experienced and, consequently, stored in memory.

The term *analogy* has been used in the literature to refer to the use of a novel item in an existing pattern, based on specific stored exemplars, according to Skousen (1898), Eddington (2000), Baayen (2003), Boas (2003) and Bybee and Eddington (2006), among many others. Analogy is considered by these authors to contrast with rule-governed productivity, as argued by Chomsky, because it is based on similarity to existing items rather than on more general symbolic rules. As we argued earlier, in a usage-based construction grammar model, analogy usually refers to the process by which a speaker comes to use a novel item in a construction. Since constructions are language-specific and built up through our everyday experience with language, the probability and acceptability of a novel item in a construction are not only gradient

but also based on the extent of similarity to older, already conventionalized uses of the construction.

In this context, the creative use of language by speakers is based on the fact that novel utterances, or novel constructions, come from prior utterances or constructions already established in the language. This is also what happens in the initial stages of language acquisition and in the production of novel utterances by adults, whether in morphological or syntactic terms, as described above.

Construction and its properties

In section 2, we said that usage-based linguistic approaches conceive of the knowledge of a language as formed by a set of constructions in a network, and that this set forms the *constructicon* of the language, which contains various types of pairings of form and function, from morphemes, to units such as words and idioms, to fully schematic constructions, such as the transitive construction SVO.

In this section, we present and discuss the construction's properties, with examples taken from some studies focusing on the Portuguese language. As we stated earlier, each linguistic construction is linked to others in a network and this is precisely the constructionist models' conception of grammar: grammar is therefore the network of constructions of a language. There are thus different types of links between constructions, which can be formal, semantic or pragmatic. This can trigger in the listener's mind an alert for changes in the form and/or function of constructions, so that novel constructions can be created, with the diffusion, for example, of a new way of instantiating a construction (phonetic-phonological variation) and/or a new semantic-pragmatic role assigned to it.

This conception of grammar arises especially in studies adopting a Construction Grammar approach. This theoretical framework's origin is traditionally associated with the publication of the study by Fillmore, Kay and O'Connor (1988), which focuses on idioms containing the conjunction *let alone*, as in *He doesn't eat fish, let alone shrimp*. These authors were interested in finding a place for idioms in the speaker's knowledge of his language's grammar. This linguistic analysis model gains projection with the study of Goldberg (1995) about argument structure constructions. In her book, Goldberg gives a synchronous description of speakers' linguistic knowledge in the form of an inventory of constructions, organized in a network and linked by inheritance relations.

In Construction Grammar approaches, as in Usage-Centered Functional Linguistics[2] constructions are the basic units of language. Constructions are theoretically defined as pairings of form and function that carry their own schematic meaning, partially

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[2] The label Usage-Based Functional Linguistics (LFCU) was created by the research group Discourse & Grammar, a Brazilian academic community focused on North American functionalist research, with headquarters at three universities: UFRN, UFRJ and UFF.

independent of the words that compose it, thus serving as a schema or model that brings together what is common to a set of elements of the same nature (GOLDBERG, 1995).

According to Croft (2001, 2009), the representation of the construction comprises two dimensions, those of form and function, interlinked by symbolic correspondence. The dimension of form involves phonological, morphological and syntactic properties. The functional dimension, in turn, comprises semantic, pragmatic and discursive properties related to a given structural configuration. The function includes the particularities of the situation described by the utterance, the properties of the discourse in which the utterance is found and the context of use itself. This conception of grammar can be represented by the following figure:

Image 1 – The symbolic structure of a construction
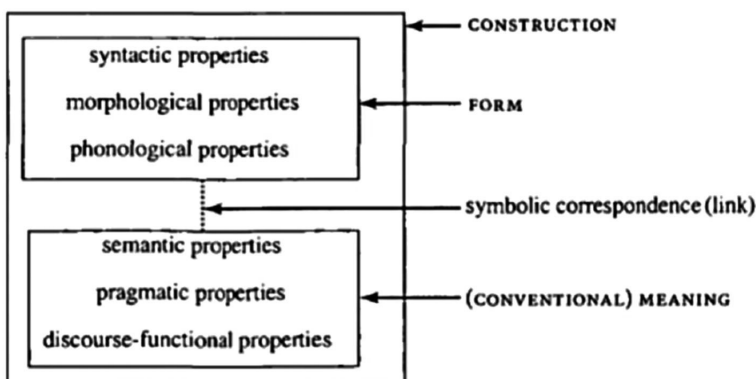
Source: Adapted from Croft (2009, p. 258).

Thus, speakers store all the properties of a construction based on the uses they have heard and repeated in new speech act situations. Even with many variations in form or function, through our capacity of memory and categorization, we group these variations into a single category, that is, a given construction.

Construction can be conceived of in terms of several dimensions, all of which are gradient. As for size, it can be (i) atomic or monomorphemic, such as *casa*, *im*, *-ável*, *se*, *-s* (ii) complex, as in *mexer os pauzinhos* (pull strings), *em cima de* (on top of) or (iii) intermediate, as seen in *rodopiar* (to whirl), where *rod*[*o*]- is analyzable, but *-pi-*, is not, or *trancafiar* (to lock), where the lexeme *tranc*[*a*]- is analyzable, but the element *-fi-* is not. As for the degree of phonological specificity, the construction can be (i) substantive, such as *azul* (blue), -s, which are phonologically defined; (ii) schematic, as in N or SV; or (iii) intermediate, as in V-*mento*: *casamento* (marriage), *rompimento* (breakup). Regarding the type of concept it represents, the construction can be content/lexical (associated with the schematic categories N, V and ADJ) or procedural/grammatical (abstract meaning marking linguistic relations and deictic inflections).

As we saw in section 2, Traugott and Trousdale (2021 [2013]), referring to a constructional approach to linguistic change, consider that, in order to create a new node – a new construction – in the linguistic network, there must be change in both dimensions, in form and in function. If there is a change in only one dimension, we have a constructional change, in the sense of a change affecting one of the properties shown in Figure 1. For example, the formation of the construction *a gente* (corresponding to the pronoun *we*) from the construction formed by the noun phrase *a + gente* (*the + people*) is the result of a series of changes in form (such as the formation of a chunk, where the form *a* ceases to be an article and becomes phonologically a syllable of the lexeme) and in function (the loss of the collective idea of the word *gente* and the inclusion of the speaker as a person in the discourse), as shown in studies such as those by Lopes (2003, 2007) and Soares (2018).

In order to study linguistic constructions and establish their links with other constructions from a synchronic perspective, or to understand the changes affecting the constructional network from one synchrony to another, it is necessary to make use of several methodological resources, as it is not easy to assess whether two uses of a certain form are two different constructions or just variants of the same construction, also called *allostructions* (CAPPELLE, 2006).

Thus, constructionist linguists focus their analysis on the properties of constructions, as shown in Figure 1, on variations in semantic-pragmatic uses and/or on formal variations, based on three properties of constructions: schematicity, productivity and compositionality. Initially formulated by Langacker (2005) and later further developed by Traugott and Trousdale (2021 [2013]), these properties account for the relationship between form and function in a construction.

Schematicity refers to the degree of specificity of the construction, i.e. whether it is filled or not. In this sense, constructions can be (i) totally unspecified (or open), such as the transitive clause schema [NP$_1$ V NP$_2$]; (ii) partially specified, such as the sequence *tomar* (take) NP; and (iii) fully specified (or idiosyncratic), such as *tirar leite de pedra*[3] (to draw blood from a stone). A construction emerges in everyday linguistic usage, and over time one of its slots may open and it thus become more schematic. This is what happened with the English construction [SUBJ drive PRO X], as in *It drives me crazy* (BYBEE, 2016 [2010]). At the beginning of the twentieth century, the adjectives that filled slot X were *mad* and *crazy*, *mad* being used in the denotative sense (with the meaning of insane, as in medicine) and *crazy*, in the connotative sense. Over the centuries, the use of *crazy* increased in frequency, *mad* also gained a connotative meaning and other elements began to be used to fill the slot, such as *bananas* and *up the wall*. In other words, there was an increase in the construction's schematicity. This is also what happened in the formation of the adverbial construction *-mente* (Adj-*mente*). Initially, there was a limited set of adjectives that combined with the suffix *-mente* (such as the adjectives – happy – and *calmo* – calm) and, over time, more types of

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[3] On idiosyncratic constructions in Brazilian Portuguese, see Furtado da Cunha e Bispo (2019).

adjectives could be used to fill the Adj slot (CAMPOS, 2013; CAMPOS; CEZARIO; ALONSO, 2017).

Productivity – a property closely related to schematicity – refers to the increase in the frequency of occurrence (token frequency) of a construction or in type frequency over time (BYBEE, 2003, TRAUGOTT; TROUSDALE, 2021 [2013]). The greater the frequency, especially of types, that is, the number of different expressions a particular construction has, the greater the productivity will be. Productivity is also an important parameter in synchronic studies when we compare two constructions with similar function, such as the uses of V Adj$_{ADV}$ and V Adj-*mente*, as in *Falar rápido* (talk fast) and *Falar rapidamente* (talk quickly). Campos (2019) shows that, with mode value, the first construction is more productive when the V has no complement, such as in (7); and V Adv -*mente* is more productive in contexts where there is a verbal complement, such as in (8):

7. *O movimento é bem simples. Basta bater com a palma da mão na coxa e pisar no chão, imitando os movimentos feitos em uma bateria de verdade. Bata com a mão direita na coxa direita, mão esquerda na coxa esquerda. Não precisa **bater forte**, o importante é executar o movimento* (Portuguese Corpus, Web. CAMPOS, 2019, p 90). [The movement is quite simple. Just slap the palm of your hand on your thigh and step on the floor, imitating the movements as in real drums. Slap the right hand on the right thigh, left hand on the left thigh. You don't need to slap **hard (forte)**, the important thing is to execute the movement.]

8. *No meu tempo de colégio eu cheguei a **agredir tão fortemente um colega** que ele desmaiou e foi parar no hospital, eu virava o verdadeiro Hulk [personagem de filme] nas crises de depressão », contou* (Portuguese Corpus, Web. CAMPOS, 2019, p.90). [In my high school days, I hit a colleague so **strongly (fortemente)** that he passed out and ended up in the hospital, I used to become the real Hulk [film character] in depression crises », he said.]

Campos (2019) shows that when users want to call attention to something that goes beyond the information transmitted by the verb (shared focus), they use the construction with adverb -*mente*; and when they focus exclusively on the information contained in the verb (exclusive focus), they use the construction with an adjective turned into an adverb. For example, by comparing the use of V-*forte*, as in (7), and V-*fortemente*, as in (8), the author found that in 60% of cases the former is used without complement, while the latter is used 90% of the time with complement.

Another example is the adjectival construction [X-*vel*], whose prototypical lexical base is derived from a transitive verb (*reciclar* (recycle) > *reciclável* (recyclable), *remover* (remove) > *removível* (removable)). This construction became productive enough to sanction adjectives based on non-transitive verbs (*durar* (last/endure) >

durável (durable); *falir* (fail/bankrupt) > *falível* (fallible)) and even nouns (*pote* (pot) > *potável* (potable); *via* (way/route) > *viável* (viable)) (JOVEM; SILVA, 2017).

Compositionality is related to the extent to which the link between form and function is transparent. A construction is compositional when the meaning of the whole can be predicted by the combination of the meanings of its parts. By way of illustration, compare the sentences:

9.   a. … *num sei de onde ele tirou a arma lá né* … (FURTADO DA CUNHA, 1998, p. 34). [… *I don't know from where* he got the gun*, right?* …]
      b. *Se acha que desisti de te ver, tire o cavalinho da chuva⁴.* [*If you think I've given up on seeing you,* don't get your hopes up (literally*,* get the horse out of the rain).]

In (9a), the meaning of the sentence in italics can be determined by the meaning of its component parts, while in (9b) the expression *tire o cavalinho da chuva* cannot be interpreted solely based on the meaning of its parts.

Compositionality thus refers to the degree of semantic transparency of the elements that make up the construction. In general, the creation of a construction is motivated and the combination of the meanings of its parts allows language users to understand its meaning. Over time, compositionality can be lost, and the relationship between form and meaning becomes ever more conventional, as in the case of [SUBJ drive PRO crazy] presented above or of the construction *não ter eira nem beira* (to be poor), which was motivated when it still referred to parts of the roof (the houses of the rich had three roof layers, called in Portuguese *eira*, *beira* and *tribeira*, and those of the poor had only the *tribeira*) and today it has completely lost its motivation, having acquired the meaning of *being poor*. Another example is the verb *desvendar* (unveil), in the sense of *descobrir* (discover), which has lost the compositional character of *tirar a venda* (literally, take the blindfold off).

To varying degrees, these properties are directly involved in linguistic creativity, as we will see below.

Creativity and productivity in Brazilian Portuguese data

As discussed above, Construction Grammar understands linguistic creativity as arising from the various possibilities of filling schematic or open slots within a construction, by using a new lexical item, syntagma or construction.

The productivity of a construction is therefore closely related to creativity, since productivity has to do with the extent to which a construction can be expanded. This

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4   Song *Tire o cavalinho da chuva* from the band Chiclete com Banana. Available at: https://www.letras.mus.br/chiclete-com-banana/115822/. Access on: 16 Sept. 2018.

property is associated with host-class expansion, as formulated by Himmelmann (2004), and with type frequency (BYBEE, 2003) or construction frequency (TRAUGOTT; TROUSDALE, 2021 [2013]), that is, the number of different expressions that a given construction has. Thus, the emergence of new constructs in a construction evidences the productivity of the mechanism that creates these linguistic units, at the same time that it evidences the creativity involved in this mechanism. In this sense, it is possible to establish the following relationships: schematicity ↔ creativity ↔ productivity.

In this section, we examine some Brazilian Portuguese constructions that gave rise to creative, innovative uses motivated by cognitive and interactional processes, such as the transitive construction and the constructions VAdj$_{ADV}$ and VAdj-*mente*.

In the functional domain of argument structure constructions, we take the transitive construction to illustrate creativity and the resulting productivity. Construction Grammar defines an argument structure construction as a form-meaning pairing that does not depend on particular verbs, with their own meaning, regardless of its component parts – Verb and Noun Phrases. It thus functions as an abstract model or schema that brings together in itself what is common to a set of verbs. While not denying that a great deal of information is provided by individual lexical items, this approach argues that constructions carry meaning, which may not be fully associated with the component words of the constructs that a particular construction licenses. This means that the syntactic pattern and semantic specifications of this type of construction are independent of the verbs it employs. The frequency of use is responsible for fixing novel instantiations of a construction in the language, facilitating the production and processing of these form-function pairings. Our assumption is that argument structure constructions correspond to the most basic clause types and, in their central sense, encode scenes (situations and events) that are fundamental to human experience.

By examining the argument structure of transitive verbs, Furtado da Cunha (2011) proposes that a transitive clause normally encodes the canonical event, which comprises two thematic roles: an Agent (a participant who intentionally performs the action) and a Patient (a participant who undergoes a change of state or location). The clause format corresponding to the representation of the canonical event reflects the normal observation of a prototypical action. A Subject's prototypical role is that of Agent, and the typical Direct Object is a Patient, while participants peripheral to the situation represented are expressed as oblique arguments (preceded by a preposition).

Despite its privileged status, the canonical event is just one of the conceptual archetypes based on which languages tend to develop a basic clause type (LANGACKER, 1987). In addition, a language also contains a set of simple clause types that represent other particular conceptual archetypes, with their own prototypical values. Based on their prototypes, these clause structures are extended and adapted for coding other types of situations, in a clearly motivated way. Because of these extensions, a given clause type – an argument structure construction – is conventionally applied to a wide variety of situations. Conceiving and coding one event in terms of another represents

a kind of socially constructed cognitive shortcut that allows for reducing the demands of linguistic processing.

By examining actual usage data, Furtado da Cunha (2011) investigates syntactic argument structure patterns of verbs traditionally classified as transitive, concluding that in both speech and writing, action-process verbs predominate (42% of a total of 1,321 occurrences), that is, those that express an action in which an animated, intentional subject causes a change in the patient's state or location, as in the excerpt:

10. *Biff pega esse almanaque ... pega a máquina do tempo* e volta para o passado … né … (FURTADO DA CUNHA, 1998, p. 187). [Biff takes this almanac… takes the time machine and goes back to the past… right?...]

The structural pattern and conceptual schema (SUBJ/AG V DO/PAT) characteristic of action verbs are directly related to the expression of the prototypical transitive event. Thus, a basic pattern of experience is encoded in a basic pattern of language. There is, therefore, an iconic relationship between conceptual schema (represented here by the prototypical transitive event) and linguistic structure (prototypical transitive clause).

However, the SVO syntactic pattern is also used for action (26% of cases, as in (2)), process (12% of cases, as in (3)) and state (20% of cases, as in (4)), which differ from the semantic prototype of the causative transitive event due to their arguments' semantic roles:

11. Aí a gente foi lanchar … *ele pediu vitamina de abacate e um hambúrguer* … (FURTADO DA CUNHA, 1998, p. 228). [Then we went for a snack… he ordered an avocado smoothie and a hamburger...]
12. e eu fui lá … *receber um livro* e tal … (FURTADO DA CUNHA, 1998, p. 180). [*and I went there...* to receive a book *and all the rest...*]
13. e eu sempre trabalhando porque *eu tenho o prêmio da melhor UNIJOVEM* … (FURTADO DA CUNHA, 1998, p. 177). [and I always working because *I received the award for the best UNIJOVEM…*]

Based on this pairing of the prototypical event with the canonical form of the clause, Furtado da Cunha (2011) accepts the hypothesis, formulated by several authors, that the meaning of the form is gradually extended semantically and metaphorically while the form remains the same. Because of these extensions, this clause type is conventionally applied to a wide variety of situations. That is, the SVO pattern is also used to encode situations that do not correspond to the prototypical transitive event, with verbs of semantic types of action, process and state, whose subject, direct object or both arguments do not play the same semantic roles as in the prototypical transitive clause.

According to Goldberg (1995), constructions may be related by different inheritance links. For her, there are four major types of inheritance links: polysemy links, metaphorical extension links, subpart links and instance links. Polysemy links capture

the semantic relations between a construction and any extensions of its meaning. In this sense, the extensions of meaning found in transitive constructions can be explained by the fact that constructions tend to be polysemic, presenting a variety of interrelated senses conventionally sanctioned by use, organized in a network. Therefore, clauses that differ from the prototypical transitive scene inherit their senses from the central sense of the transitive construction, illustrating a case of polysemous inheritance link[5].

The unsystematic observation of the language in use makes it possible to capture innovative transitive occurrences in which what is at stake is not only the semantic type of verb. See the following digital banners, in which *funcionar* (to function), traditionally classified as an intransitive verb (FERNANDES, 2003; LUFT, 2003; BORBA, 2002), is used in a transitive construction:

Image 2 – Beer Garden

Source: Facebook[6].

Image 3 – Katsuyasushi

Source: Instagram[7].

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[5] For more details on microconstructional instantiations related to the transitive construction by inheritance links of different types, see Furtado da Cunha e Silva (2018).

[6] Available at: https://www.facebook.com/pages/category/Beer-Garden/depoisdaesquina/photos. Access on: 27 mar. 2020.

[7] Available at: instagram.com/katsuyasushi/?hl=pt. Access on: 27 abr. 2020.

In *Hoje não funcionaremos nosso delivery* (Today we will not function our delivery) the verb *funcionar* fills the V slot in the transitive construction NP1 V NP2. It thus inherits, from this construction, the argument roles of Subject/Agent (Ø = we) and Object/Patient (*nosso delivery*). The frame of *funcionar* does not project an agent or a patient since this verb does not necessarily indicate a causative event. These arguments are licensed by the transitive construction itself. This means that the subject/agent and the object/patient are not lexically selected by the verb, but profiled by the construction itself. They can therefore be explained in terms of the fusion of the transitive construction with an intransitive or monoargumental verb, exemplifying a case of instance inheritance link, in which a given construction is a more specific version of another: the verb *funcionar*, prototypically intransitive, is used as transitive. Language users' creativity adjust/extend the valence of *funcionar*, which can be used in a transitive pattern given the fully schematic nature of the transitive construction. It is worth mentioning that what triggers the adaptation of *funcionar* to a prototypical transitive pattern is the extension of the central sense of this verb, which starts to admit an agentive subject and an affected object, thus activating a semantic frame linked to the idea of X affecting Y. Faced with new contexts, speakers can use an already known word in a creative way, so that this word can be readily interpreted because it clearly relates to its original meaning.

Another case that illustrates the creative use of a verb can be observed in the following ad:

14. Ultra hidratante Forever Liss desmaia cabelo – Época Cosméticos[8]. [*Ultra Moisturizing Forever Liss Faints Hair – Época Cosmetics.*]

In verb government dictionaries, we found an entry for *desmaiar* (to faint) in which it is classified as a transitive verb, with the meaning of "to make something lose color," "to fade" (pronominal), as in the example provided by the dictionaries: *A doença desmaiou-lhe as faces* (the disease made his/her face faint) (FERNANDES, 2003, p. 199; LUFT, 2003, p. 225). Borba (2002) does not register this government, only the intransitive one. In (14), *desmaiar* follows the transitive pattern, but with another sense: to reduce hair volume. In this case, the verb's new sense adapts to the transitive schema, in what appears to be a more recent use of *desmaiar*. Once again, it is the semantic content of the verb that changes, thus making it possible to encode it in a transitive structure. The use of an old word for a new purpose is efficient for the speaker, who is not required to coin a new term and risk miscommunication; it is also effective for the listener, who is able to use their knowledge about an existing meaning of a word to help apprehend a novel meaning. The familiar meaning provides an indication of the intended meaning (GOLDBERG, 2019).

Still about transitive constructions, let us examine the following example:

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8   Available at: https://www.epocacosmeticos.com.br/ Access on: 16 nov. 2020.

15. *Alan Empereur diz que testou positivo* para a Covid-19[9]. [Alan Empereur says he tested positive *for Covid-19*.]

Both Luft (2003) and Borba (2002) present *testar* (to test) as a transitive verb, with the meaning of "submit to test" (such as in *Testar (os conhecimentos de) alguém* – Test (the knowledge of) someone). Fernandes (2003), in turn, only registers meanings related to will/testament, as a transitive or transitive-relative verb. In the clause in (15), the subject argument of *testar* plays the semantic role of experiencer, as in a verb-nominal construction such as *Maria caiu doente* (Maria fell ill), which can be represented as $NP_{Exp}V_{Action}SAdj$. On the other hand, *positivo* (positive) may also be understood as an adjective turned into adverb, meaning *positivamente* (positively), illustrating the construction $VSAdj_{ADV}$, very productive in the Portuguese language, as in *falar bonito e pensar grande* (literally, speak beautiful and think big). Whatever the interpretation, we observe a creative use where *testar* adapts to an already existing construction in the language, with *positivo* filling the slot of an adjective or adverb. In this sense, the verb has its meaning changed and therefore can be adapted to another construction. In other words, the "same" verb can be used in more than one argument structure construction and, therefore, its different meanings stem from the type of construction to which it is adapted. This refers to the notion of accommodation (TALMY, 2000) or coercion (CROFT, 1991), which posits that a construction can coerce an element into a different reading[10]. Coercion is possible when a construction requires a particular interpretation that is not independently encoded by particular lexical items. This is what happens with *funcionar* (to function), *desmaiar* (to faint) and *testar* (to test) in the excerpts discussed. These lexical items are coerced by the construction to gain a new interpretation, but to some extent related to their original meaning. According to Michaelis (2004) and Goldberg (2006), the meaning of the lexical item conforms to the meaning of the structure in which it is embedded or, in other words, a constructional pattern can dominate the lexical meaning. Coercion is responsible for many innovative and therefore creative instances in language. This whole process is triggered by the speaker's communicative need for a word to be applied to a new context, to transmit a new content, using forms already available in the language. This is possible because words convey frame-semantic meanings associated with a network of related but relatively distinct meanings (GOLDBERG, 2019).

Two or more words occurring in sequence with high frequency give rise to linguistic collocations, which shows that the grammar of a language should not be conceived of as a set of rules. We can illustrate the phenomenon with collocations originated from the construction with the adjective turned into adverb *bonito* (beautiful). If we think of a grammar of rules, an adjective turned into adverb could modify any verb,

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[9] Available at: https://globoesporte.globo.com. Access on: 16 nov. 2020.

[10] We also have to consider the proposed hypothesis that the expression *testar positivo* may have entered the Brazilian Portuguese language due to translations of the English expression *to test positive* (as in www.informasus.ufscar.br/testar-positivo/).

but the observation of actual usage shows that this does not happen, because there are certain adverbialized adjectives that are linked to certain verbs and not to others. In a quick Google search done in November 2019, we found a lot of instances of *falar bonito* (literally, to speak beautiful), *escrever bonito* (literally, to write beautiful) and *cantar bonito* (literally, to sing beautiful), but none of *pintar bonito* (literally, to paint beautiful), *dirigir bonito* (literally, to drive beautiful) or *cozinhar bonito* (literally, to cook beautiful). The first three examples are cases of collocations, each made up of two words that regularly occur together. Even when chunks are not yet formed, there is some sort of preference, determined by factors such as the presence or absence of verbal complements, as we saw in the previous section, or simply due to the user's greater familiarity (higher frequency) with a certain sequence of words. Campos (2019), when analyzing the construction with verbs and adverbs of manner formed with *-mente* in contrast to adverbialized adjectives, in a sample of blog texts, shows that the occurrence of V+*forte* (strong) is much more common than V+*fortemente* (strongly); that V+*alto* (high) is the only possible option, as there is no V+*altamente*, since *altamente* in current Brazilian Portuguese is not used as an adverb of manner, but as a modalizer; and even that V+*socialmente* (socially) is the only possible option, with no occurrences of V+*social*.

One could suppose that collocations restrict creativity, as they are forged by the force of repetition, but there is in fact as much creativity in choosing a given adjective and turning it into an adverb as in combining it with certain words from a certain semantic field. In the case of the adverbialized adjective *bonito* (beautiful), Tiradentes (2021) found out that it is more associated with verbs referring to acts of communication. Creativity is also present when a new value is assigned to a combination of words, based on the chunking process, thus forming an idiom, as in *dar certo* (succeed), which also originates from a construction with an adverbialized adjective (CAMPOS, 2019; CUMÁN, 2022).

Final considerations

In this article, we discussed the topics of linguistic knowledge and creativity, which are linked to productivity, highlighting the contributions of usage-based constructionist approaches, such as Usage-Based Functional Linguistics. This model seeks both to understand the motivations for the creation of new constructions in the language, and to elucidate the paths that lead to the establishment of these constructions. Domain-general cognitive processes participate in the formation of constructions and in the conventionalization of their uses in a linguistic community.

Formalist approaches, which have a conception of grammar as a rule-based system and distinguish between lexical and grammatical elements, cannot account for the numerous chunks present in a language, such as collocations and idioms. Usage-based approaches, on the other hand, emphasize that a language's grammar is formed by a

network of interlinked constructions and that usage, guided by domain-general cognitive abilities and communicative needs, leads to the fixation of new chunks, with gradual loss of compositionality, which results in collocations and idioms. These cognitive abilities together with communicative needs also participate to form more schematic constructions and to change established usages creatively, as we do when we use a traditionally intransitive verb, such as *desmaiar* (faint) in a transitive construction, as seen above.

More particularly, in the Usage-Based Functional Linguistics approach – which draws knowledge from North American Functional Linguistics and other areas, especially Construction Grammar – creativity is the ability to create novel utterances by applying the principle of iconicity (motivation of various types) and by the way in which domain-general cognitive processes work. The grammar of a language is made up of networked constructions and the formal and semantic links between constructions can give rise to new associations and to the creation of new meanings and new constructions.

Finally, it is worth noting that both Generative Grammar and usage-based approaches recognize the creative potential of language and share the goal of explaining it. In this sense, they consider that language is not a set of previously fixed clauses. Unlike generative grammar, however, usage-based constructionist approaches recognize that the grammatical knowledge of speakers derives from everyday linguistic experience, which is strongly influenced by domain-general cognitive processes, that is, processes that are not specific to language.

- *RESUMO: Discutimos, neste artigo, as noções de conhecimento, criatividade e produtividade linguísticos tal como são concebidas na Linguística Funcional e na Gramática de Construções, fazendo também uma revisão, embora mais breve, desses conceitos na Gramática Gerativa. Nesse sentido, revisitamos a postura que diferentes linguistas adotam em relação a essas noções, confrontando-as e ressaltando suas divergências. Relacionamos cada uma das concepções aos pressupostos teóricos específicos de cada modelo de análise, apontando, ainda, o desenvolvimento que tais noções tiveram ao longo do tempo, resultado do próprio desenvolvimento da Linguística como ciência. Caracterizamos a construção e suas propriedades e, sob o enquadre de modelos construcionistas, relacionamos a criatividade e a produtividade à propriedade de esquematicidade das construções. Por fim, baseadas na Linguística Funcional Centrada no Uso, examinamos a construção transitiva e as construções VAdj$_{ADV}$ e VAdj-mente do português do Brasil, para ilustrar a atuação da criatividade e da produtividade e fatores comunicativos e cognitivos que motivam novos usos dessas construções.*

- *PALAVRAS-CHAVE: Conhecimento; criatividade; produtividade; Linguística Funcional; Gramática de Construções.*

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