



# ***The Mental Spaces Model and an analysis of non-canonical past verbal values***

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## **Abstract**

*This article focuses on the analysis and explanation of some variation in the semantic values of certain verb forms in relation to their prototypical values. This phenomenon of language in use deals with temporal verbal values that do not correspond to the values canonically attached to the verb forms and can be viewed as having cognitive motivation. We investigated an oral and written language corpus of Brazilian Portuguese, and samples from the data were diagrammed under the perspective of the Mental Spaces Model (Fauconnier, 1994, 1997, Cutrer, 1994). The mental spaces in the diagrams constructed were structured by frames and organized by the discourse notions of BASE, V-POINT, FOCUS, and EVENT, which mirror other cognitive processes, especially visual perception, as well as the tense-aspect categories of PRESENT, PAST, PERFECTIVE, IMPERFECTIVE, PROGRESSIVE, and PERFECT. This article approaches, more specifically, the countersequential value of Perfective Past Indicative (Pretérito Perfeito) and the future in past value of Imperfective Past Indicative (Pretérito Imperfeito). Results showed that the Mental Spaces Model can be used for understanding meaning construction relative to verbal elements, related to both canonical and non-canonical values.*

**Key words:** Cognitive Linguistics, Mental Spaces, past verbal values, Brazilian Portuguese, domains, usage based.

## **1. Introduction**

Verb tense has been traditionally described as a deictic category that situates the event expressed by the lexical item in the verb phrase (VP) in a time frame relative to the moment of speech: present corresponds to the situation in which event time matches speech time; for past there is an asymmetry in which event time precedes speech time; and for future we have the inversion of this asymmetrical relation. Nevertheless, in real language use contexts, it is common to find interpretations of verb forms that differ from those meaning distinctions. The diagrams realized in the scope of this research, under the theoretical framework of Cognitive Linguistics (CL, henceforth), more specifically, under the framework of the Mental Spaces Model

(MSM, henceforth), reveal cognitive motivation for such variation in interpretation that results in values here called non-canonical: the countersequential value of Perfective Past Indicative (*Pretérito Perfeito*) and the future in past value of Imperfective Past Indicative (*Pretérito Imperfeito*), found in a corpus of Brazilian Portuguese<sup>i</sup>.

Before presenting the analysis itself, it is necessary to discuss certain notions and categories that constitute the MSM in Fauconnier (1994, 1997, 2007) and Cutrer (1994).

MSM affiliates to CL, which is a field of knowledge that postulates both the existence of a common basis for language and for cognition, and the interrelation of these dimensions of human experience in various aspects (Langacker, 1990, 2001). Due to such postulates, CL adopts a cognitive perspective to the comprehension of linguistic phenomena, in general.

According to MSM, which is a semantic and descriptive model, meaning construction relates, at the cognitive level, to information distribution. Fauconnier (1994, 1997) and Cutrer (1994) suggest that part of the cognitive processes connected to any discourse manifestation can potentially be represented using MSM, since the model offers theoretical resources to represent graphically, through diagrams in the form of a mental-space lattice, the dynamic processes of producing and interpreting both written and oral discourse. In this context, the linguistic manifestation is diagrammed in terms of a hierarchy of related spaces, which is constantly updated as discourse evolves. The linguistic expressions with their lexical and grammatical content provide information for the establishment of the spaces and their elements, which are structured and interconnected in a network, the lattice. MSM, thus, provides support to the representation and the resulting comprehension of how grammatical meanings are attached to forms.

When mental spaces, the main constitutive element of MSM, represent linguistic expressions, they are structured by the frames<sup>ii</sup> that correspond to those expressions. Frames can be defined as cognitive structures related to fairly stable knowledge in the speaker/hearer's long term memory, which are activated by the occurrence of specific linguistic expressions in discourse. Frames organize content within the mental spaces of the diagrams. The spaces are constructions of a local and momentary nature, not, therefore, fixed mental representations. Fauconnier (2007) states:

It has been hypothesized that at the neural level, mental spaces are sets of activated neuronal assemblies and that the connections between elements correspond to coactivation-bindings. On this view, mental spaces operate in working memory but are built up partly by activating structures available from long-term memory. (Fauconnier, 2007, p. 351).

The mental spaces in the diagrams of MSM, depending on the grammatical content that they represent, are marked by distinct discourse notions and tense-aspect categories. The discourse notions available in the framework are those of FOCUS, EVENT, BASE and VIEW POINT (V-POINT), and, on its turn, the tense-aspect categories are those of PRESENT, PAST, FUTURE, PERFECT, PERFECTIVE, IMPERFECTIVE and PROGRESSIVE.

Concerning the discourse notions, FOCUS marks the space that represents the focus of attention in the process of meaning construction; EVENT marks the space in which the event that is indicated by the verb is constructed; BASE is the initial space, which is always PRESENT, from which the other spaces get organized; and V-POINT marks the space from which other spaces are accessed and structured, and functions as reference to the tense-aspect categories as well (Cutrer, 1994).

The notions of V-POINT and FOCUS are special, since they mirror aspects of visual cognition. In the CL theoretical framework, Langacker (2001), to whom the process of linguistic conceptualization reflects processes of visual perception, points to the central role of the experience of visualization in semantic and grammatical structuring. The notion of BASE, in its turn, is related to the concept of 'domains of reality'. In any discourse situation, we might find varieties of such domains at play simultaneously: DISCOURSE INTERACTION, which applies to diverse communicative situations (story telling, conversation, monologue, etc.); NARRATIVE DOMAIN; FICTION DOMAIN, COUNTERFACTUAL DOMAIN, etc.. Each of these domains has its own structure in terms of characters, events and relations. MSM considers domains of reality as BASES that are constructed along the discourse situation and that are accessed for the temporal interpretation of certain events. A verbal value has to be understood from the BASE in which the discourse is anchored at the specific moment of that occurrence or, alternatively, this verbal value can itself determine a change of BASE.

The tense-aspect categories that integrate MSM were proposed by Cutrer, having Bybee and Dahl (1989)'s crosslinguistic study as support. This study showed that about 80% of the languages analyzed presented six types of morphemic grammatical markings of tense-aspect content. To these categories, Cutrer adds PRESENT, which is the unmarked form in the languages (Cutrer, 1994). In Cutrer's proposal, PRESENT, FUTURE and PAST are tense categories, expressing the temporal relations between the spaces; PERFECT, PERFECTIVE, IMPERFECTIVE and PROGRESSIVE are aspect categories, providing information about the relation between V-POINT and FOCUS. These tense-aspects are categories at the cognitive level and reflect universal types of relations/links between the spaces in the network. Thus, they are not linguistic categories, but can be mapped onto the grammatical categories of the languages in various combinations. In Brazilian Portuguese, for example, we find combinations, in the Indicative, such as FUTURE and PAST, in Future of Past (*Futuro do Pretérito*); PAST and PERFECTIVE, in Perfective Past (*Pretérito Perfeito*); PAST and PERFECT, in Pluperfect Past (*Pretérito Mais que Perfeito*).

To sum up, the theoretical elements that MSM offers allow for the representation of the unfolding of discourse through a network of spaces that are structured by frames,

interconnected according to tense-aspect categories, and this network indicates the BASE in which the discourse anchors, the V-POINT that is assumed by the speaker, as well as the EVENT that is in FOCUS.

The diagrams that are built according to this model allow us then to partially visualize cognitive processes underlying discourse manifestations (Fauconnier, 1994, 1997; Cutrer, 1994) and potentially help in the comprehension of how the meaning of linguistic expressions is constructed from these processes.

It is important to point out that these diagrams are theoretical constructs that integrate the Mental Spaces Model formalism. They are not cognitively real, but they are intended to capture some aspects of the cognitive processing. Thus, these diagrams are theoretical representations of a cognitive reality: speakers do not actually create diagrams in their minds.

## **2. 2. Verb tense and MSM**

The traditional definition of tense can be seen in Cunha's work (1971), where we find that tense is:

the variation that indicates the moment in which the fact expressed by the verb occurs. The three natural verb tenses are *the present, the preterite (or past) and the future*, that designate, respectively, a fact occurred at *the moment in which we speak, before the moment in which we speak, and after the moment in which we speak* (Cunha, 1971, p. 256).<sup>iii</sup>

In relation to certain values conveyed by verb forms found in language in use that do not correspond to this canonical definition, grammar books provide, in general, local, *ad hoc* explanations. Even though the explanations provided reveal certain semantic and stylistic aspects of those verb forms, they do not point to cognitive reasons for the use of those forms, nor do they allow for generalizations.

The CL framework, especially concerning MSM, can provide such cognitive reasons and explanations. Instead of treating verb tense as a relation between speech time and event time, MSM defines verb tense mainly through the relation between V-POINT and FOCUS (Turner, 1996; Cutrer, 1994).

The non-canonical verbal values focused in this paper occur when a verb form, depending on the context where it is found, has a distinct value from that expressed by the label attributed to this form according to the traditional definition of verb tense.<sup>iv</sup> A non-canonical value of a verb tense is reached through the same cognitive principles that are active in the canonical interpretation of this tense (Cutrer, 1994). MSM postulates, then, the unification of cognitive mechanisms involved in the use of verb tenses, without distinguishing between the production and interpretation of

verbal elements in narratives, or in any other discourse situation.

Thus, in this study, we aimed at a unified analysis of canonical and non-canonical verbal values focusing on certain values of Perfective Past Indicative (*Pretérito Perfeito*) and Imperfective Past Indicative (*Pretérito Imperfeito*).

In the diagrams made in the scope of this study, circles represent mental spaces. Each space, with the exception of BASE spaces, is named by a capital letter sometimes accompanied by a number: this letter represents the tense-aspect category that mainly marks the space (P – PAST; F – FUTURE; Pf – PERFECT; Pg – PROGRESSIVE); the numbers show the quantity of similar spaces (for example, P1 names the first PAST space of a sequence). The frames that structure the spaces are represented by rectangular boxes on the top side of the circles. The letters inside the circle represent the frame roles of the event. Each space receives discourse category markings of FOCUS, EVENT, V-POINT or BASE, as well as tense-aspect category markings of PRESENT, FUTURE, PAST, PERFECT, PERFECTIVE, IMPERFECTIVE or PROGRESSIVE, according to the grammatical content in the enunciation that the space represents. Those categories can move from one space to another due to discourse dynamics. In order to indicate such change, parentheses are used around a category marking in the space it used to be. In all, a diagram composed with such elements represents the dynamic process that language users go through when producing and interpreting discourse.

### ***3. 3. Values of Perfective Past Indicative***

#### **3.1. Canonical Perfective Past**

In narrative discourse, Perfective Past Indicative canonically expresses sequentiality, that is, the events that occur in that tense, ordered in discourse, reflect a supposed chronological sequence of occurrences of these events in experience. Perfective Past, then, is the verb tense that generally conveys the central story line in narratives (Tenuta, 2006).

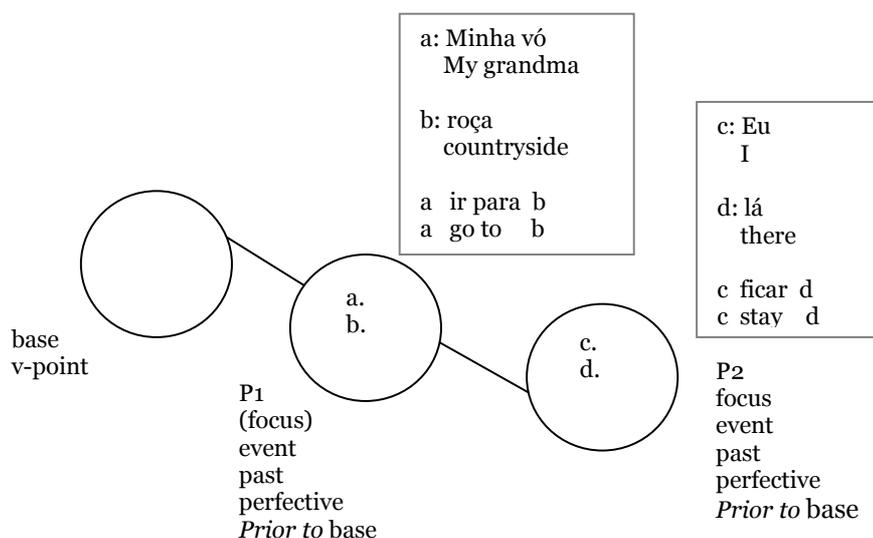
Diagram 1 corresponds to example (1), a narrative extract in which Perfective Past shows its canonical value, i.e. sequentiality:

- (1) Aí    minha vó    foi    pra roça  
Then   my grandma   went   to the countryside
- e    eu    fiquei    lá  
and I   stayed   there.v

PAST identifies or cues construction of some past space N. It indicates that:

- i) N is in FOCUS
- ii) N's parent is V-POINT
- iii) N's time is prior to V-POINT (parent)
- iv) events or properties represented in N are FACT from V-POINT (parent) (Cutrer, 1994, p. 88)

The MSM definition of the temporal category PAST is required for diagramming the values expressed by Perfective Past:



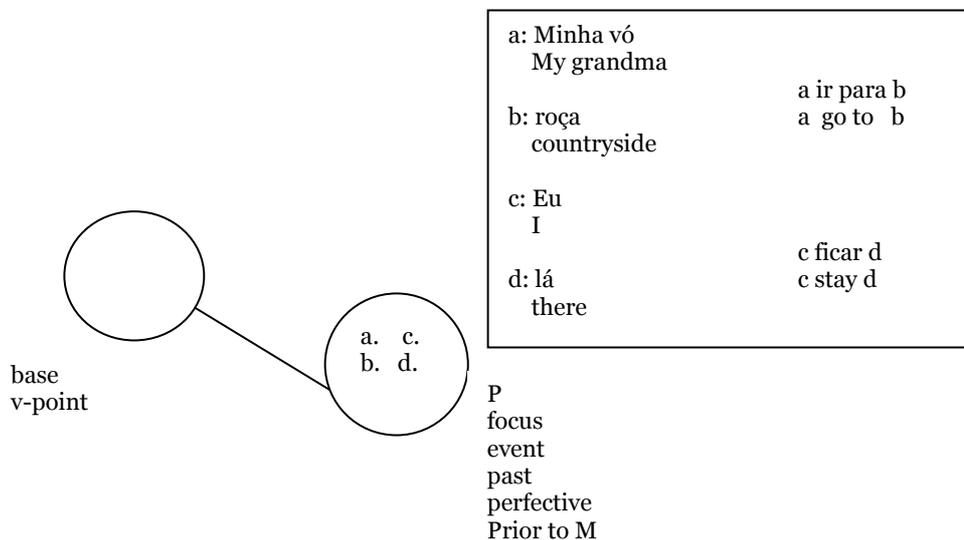
**Diagram 1. Canonical Perfective Past (a)**

In diagram 1, the BASE space is also V-POINT, and it is the deictic center in the NARRATION SITUATION DOMAIN, the reference point for the interpretation of tense values of the events anchored in it. It is from this point of reference then that the verb tenses of the other spaces (P1 and P2) are interpreted. This means that the events in the story are seen as past in relation to the PRESENT of NARRATION SITUATION. The events expressed by the forms of Perfective Past are represented in P1 and P2, which are spaces marked by the categories PAST and PERFECTIVE<sup>vi</sup>. P1 and P2 are structured individually by the frames of the events that they represent.

P1 and P2 are diagrammed in a sequence, with the objective of mirroring the order of occurrence of events: both are spaces containing the representation of past events that integrate the story line of which they are part. The events represented in P1 and P2 are expressed by forms of Perfective Past with canonical, sequential interpretation, and are marked by the categories PAST and PERFECTIVE. The fact that V-POINT is at BASE in this example is related to characteristics of the PERFECTIVE

aspectual category of P1 and P2 (V-POINT different from FOCUS - see Diagram 8), and it makes it possible for P1 and P2 to be understood as past in relation to this V-POINT/BASE. This means that V-POINT/BASE is the space from which the verb tenses of the events represented in P1 and P2 are interpreted (the story events are seen as past in relation to the present of NARRATION SITUATION). The FOCUS MARKING occurs first in space P1 and then in space P2, showing the sequence of events that were the focus of attention in that initial part of the example.

P1 and P2 may be represented, alternatively, as in Diagram 2, occupying only one space P, since they are both anchored in the same BASE/V-POINT. Linked to space P in Diagram 2, we find the frames that individually structure spaces P1 and P2, in Diagram 1.



**Diagram 2. Canonical Perfective Past (b)**

### 3.2. Perfective Past with countersequential value

It has already been said that Perfective Past, in a narrative, canonically conveys the events in the story line in a sequence. However, we find this verb tense expressing a non-canonical countersequential value. Perfective Past expresses countersequenciality when an event expressed in that verb tense appears, in the narrative sequence, posterior to the point at which it should appear if that narrative sequence corresponded to the sequence of events in the story. This is, the chaining of discourse, at this point in the narrative, does not correspond to the sequence of the events that supposedly occurred in experience. <sup>vii</sup>

Example (2), which is an expanded extract that includes example (1), presents a form of Perfective Past with countersequential value:

(2) Aí    minha avó    foi    pra roça  
Then   my grandma   went   to the countryside

e    eu    fiquei    lá  
and   I    stayed    there.

Eu    estava    esperando  
I    was    waiting.

Porque    Ada    Casô  
Because    Ada    married

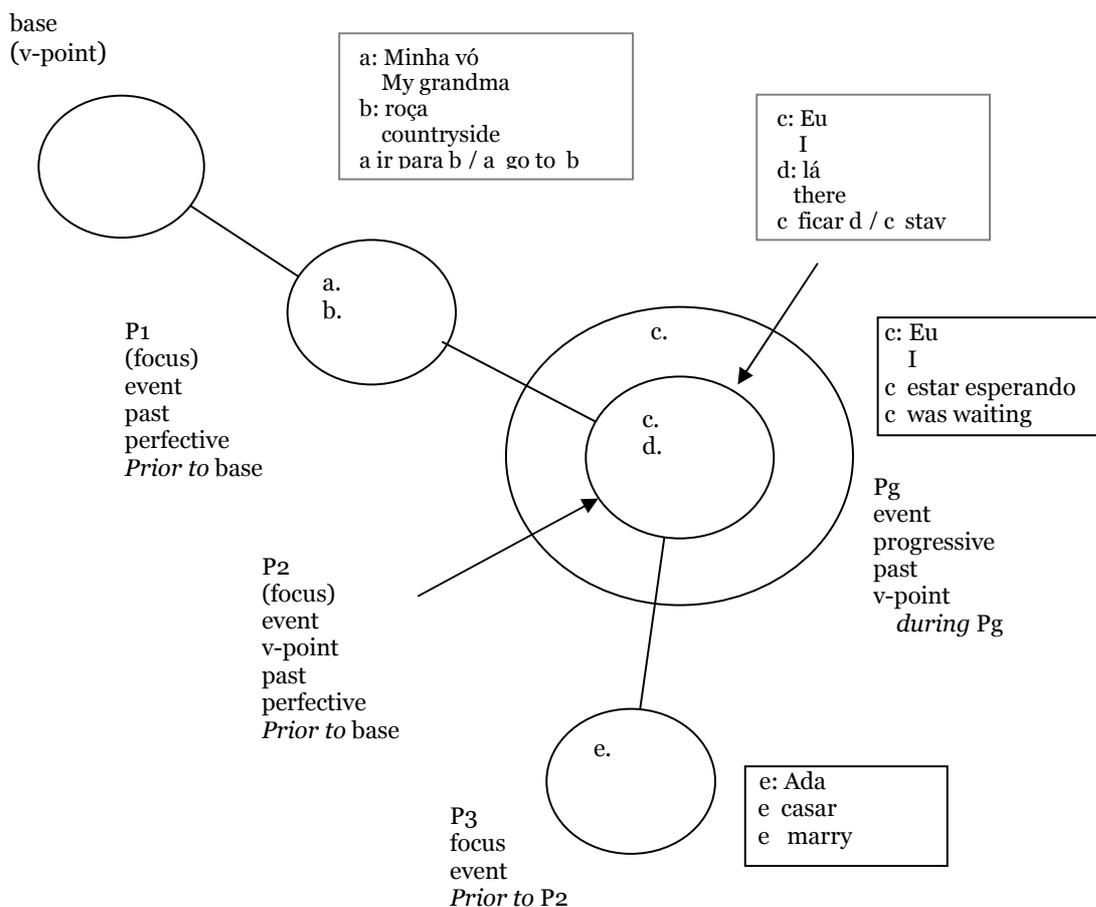
e    morava    pr'aquele lugar  
and   lived    there

e    o marido dela    tinha    um caminhão  
and   her husband    had    a truck

que    fazia navegação  
that    transported people<sup>viii</sup>

In (2), 'Porque Ada casô', a event expressed in Perfective Past, can be considered countersequential because it represents an event that occurs in the story prior to 'ir pra roça', 'ficar lá' and 'estar esperando', and nevertheless appears in discourse posterior to those events. The translation of the event 'Porque Ada casô' into English was done based on the canonical correspondent verb form: "Because Ada married"; however, the meaning conveyed is similar to the meaning of "Because Ada had married". We adopted this procedure of a canonical translation throughout this work because we are focusing on verb forms and non-canonical values related to these forms in the Portuguese language. At this point, we highlight the importance of taking into consideration the wide linguistic context, the level of discourse realization, if we are to detect non-canonical verbal values.

Next, we show the diagram that corresponds to the extract in (2):



**Diagram 3. Perfective Past with countersequential value**

The BASE space, P1 and P2 are the same spaces in Diagram 1. In Diagram 3, we find Pg and P3. Pg, PROGRESSIVE, is diagrammed according to Tenuta (2006), for narrative Ground, since it represents a situation in which it is Ground relative to P2 (Figure). Thus, in the story in which those events occur, 'estar esperando' (in Pg) is context for 'ficar lá' (in P2). In relation to this type of diagramming, the author states:

That kind of diagram aims at offering the possibility of a more precise visualization of what occurs, cognitively speaking, in the processes of structuring and interpreting the macro-structure of narrative texts. Specially, it shows the complexity of information distribution into Figure or Ground materials, in their interrelations, that can be more general or more local (Tenuta, 2006, p. 120).

The countersequential event, in (2), 'Porque Ada casô', is represented in Diagram 3 through space P3. That event is countersequential for having appeared in the discourse after the narrative event 'e eu fiquei lá', represented in P2, having,

however, supposedly occurred before that event in P2 in the time line of experience. Differently from what occurs with P1 and P2, that are interpreted from V-POINT at BASE, the reference for the temporal interpretation of P3 is V-POINT in P2. This generates an effect of past of past, specifically the countersequential value.

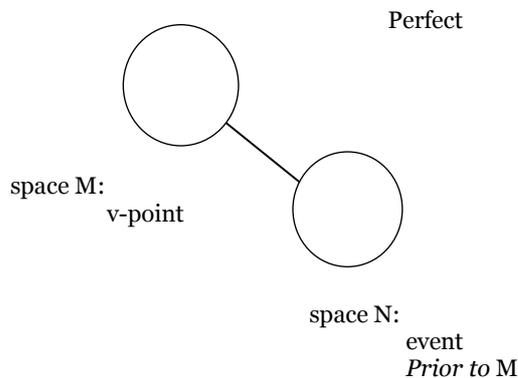
The distinction between canonical and non-canonical values thus occurs due to a difference in the anchoring of interpretation: depending on where we have the V-POINT from which the situation is visualized, we obtain a distinct meaning effect. Therefore, the countersequential value is explained by a change of V-POINT from BASE to a PAST space.

In Brazilian Portuguese, countersequentiality is canonically conveyed through the verb tense Pluperfect. A diagram made for that situation would result in a configuration of spaces distinct from the configuration representing the expression of that same value by means of the Perfective Past. In the case of the Pluperfect, we have the combination of PAST tense and PERFECT aspect categories. On the other hand, in relation to the Perfective Past, we have the combination of PAST tense and PERFECTIVE aspect categories.

Here are Cutrer (1994)'s definitions for PERFECT and PERFECTIVE categories, on which the diagrams for the countersequential values are based:

PERFECT identifies or cues construction of an EVENT space N.  
It indicates that:

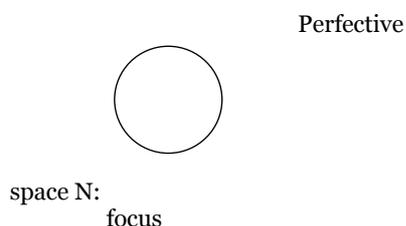
- i) N is not in FOCUS
- ii) N's parent is V-POINT
- iii) N's time is prior to that of V-POINT (Cutrer, 1994, p. 91)



**Diagram 4. Definition of PERFECT**

The PERFECTIVE identifies a FOCUS space N and indicates that:

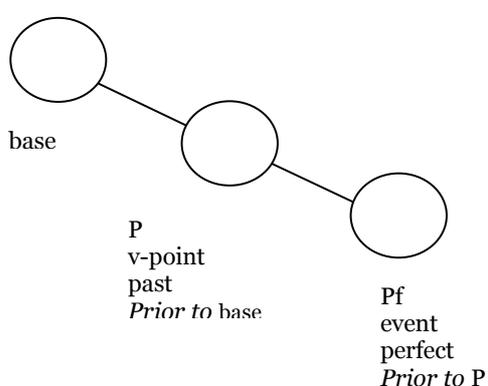
i) N is not V-POINT (Cutrer, 1994, p. 93)



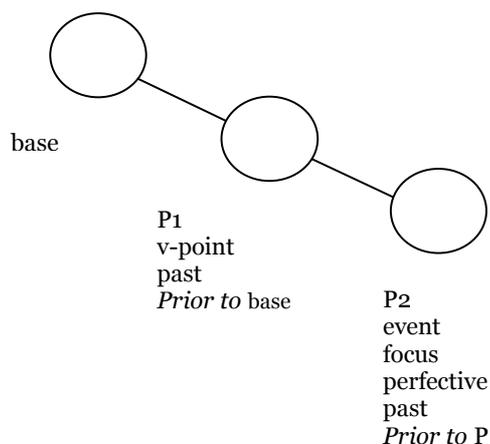
**Diagram 5. Definition of PERFECTIVE**

As illustrated by Diagrams 4 and 5, the definitions of PERFECT and PERFECTIVE are distinct, among other things, because of the FOCUS marking.

Diagrams 6 and 7 illustrate the countersequential value expressed by means of Pluperfect, and by means of Perfective Past:



**Diagram 6. Pluperfect**



**Diagram 7. Countersequential Perfective Past**

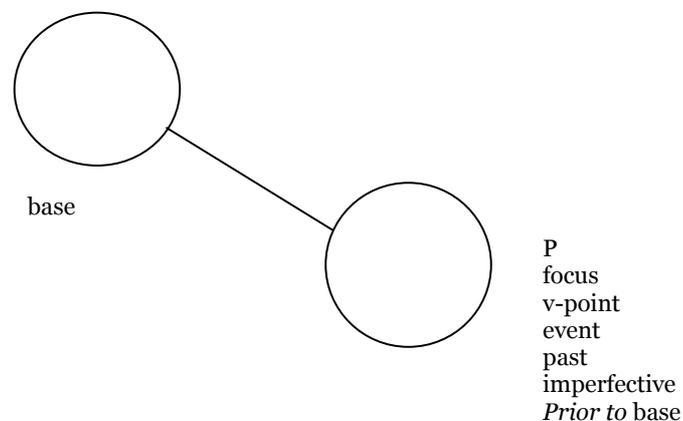
In the case of Pluperfect, the diagram presents a PERFECT space (Pf), which is EVENT, not FOCUS. The diagramming for the countersequential Perfective Past, on its turn, presents a PERFECTIVE space (P2), which is marked FOCUS. Thus, the fact that the speaker uses Perfective Past to express countersequentiality means that he/she realizes, as seen in Diagram 7, a change of V-POINT from BASE to P1, keeping FOCUS at P2, which is EVENT, PERFECTIVE. In this way, V-POINT is separate from FOCUS, what is typical of the PERFECTIVE aspectual category.

In the representation of the countersequential value of Perfective Past, the countersequential FOCUS space (for example, space P2 in Diagram 7) makes it possible, from this point in discourse on, if it is the narrator's intention, the construction either of a narrative sequence other than that central narrative, or of an explanation or clarifying stretch of discourse. Then, in a narrative, a countersequential Perfective Past interrupts the temporal line of the story creating the possibility either of a parallel narrative line departing from that FOCUS space, or of an elaboration of that countersequential event with some description, evaluation or explanation of any kind. This interruption of the central story line can be, in principle, of any extension.

In the case of example (2), the discourse elements that follow the countersequential event have that explanatory/descriptive character ('e morava pr'aquele lugar e o marido dela tinha um caminhão que fazia navegação'). The central narrative, from which the diagrammed extract was taken, and which had been interrupted by that other discourse sequence, was continued afterwards.<sup>ix</sup>

## 4. 4. Values of Imperfective Past Indicative

### 4.1. Canonical Imperfective Past



**Diagram 8. Imperfective Past**

Canonically, Imperfective Past expresses a past situation for which there is no indication of completeness. In terms of MSM, in such cases, we have the IMPERFECTIVE and the PAST categories. IMPERFECTIVE has the function of signaling a V-POINT connected to the FOCUS space (here, a PAST space). This aspectual V-POINT is different from the V-POINT in BASE space. According to Cutrer (1994), the BASE space – the space of speech or thought – carries its own strong V-POINT role, which remains available for the interpretation of time.

## 4.2. Imperfective Past with future in past value.

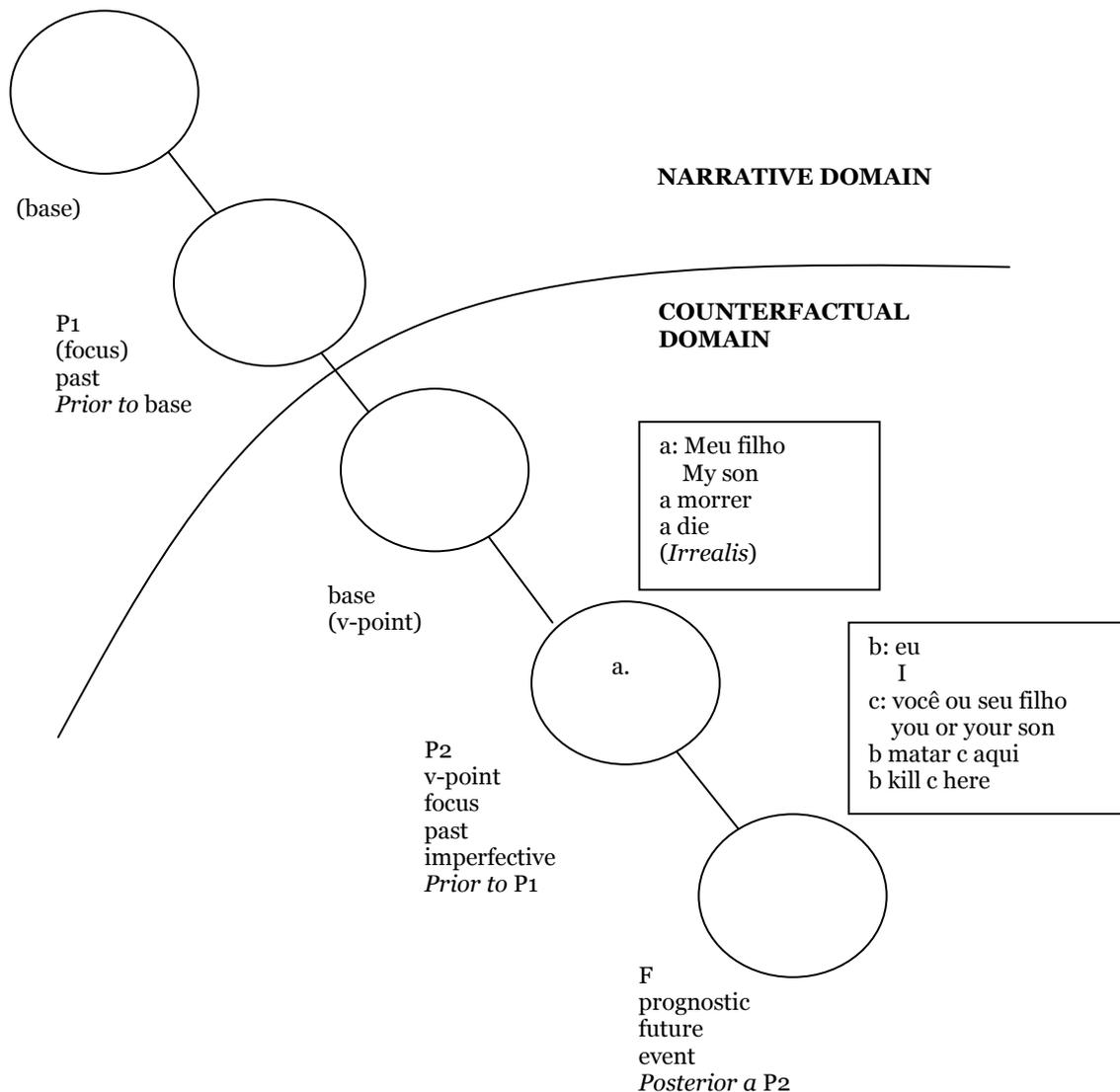
Our study revealed verbal forms of Imperfective Past Indicative with future in past value. Some authors recognize the existence of such a value. Campos et al. (2002a) reported the occurrence of Imperfective Past with future in past value expressing unreality and recognized the need for further studies on the modal values of Imperfective Past. For Cunha and Cintra (2001, p.452), Imperfective Past with future in past value can be used “(...) to denote a fact that would be a certain and immediate consequence of another fact that has not occurred, or that could not occur”. The authors present the following examples: “O patrão é porque não tem força. Tivesse ele os meios e isto virava um fazendão”. (The boss, it is because he is not powerful. Had he the means, this became a big farm); “Se eu não fosse mulher, ia também!” (If I were not a woman, I went too)<sup>x</sup>.

As mentioned in relation to the English translation of “Porque Ada. casô.” (Example 2), we have translated the Imperfective Past form in Cunha and Cintra (2001, p.452) using the simple past, as it is canonically done, both in relation to Perfective Past and to Imperfective Past Indicative of the Portuguese language. However, the meaning of the Imperfective Past form in this example is similar to the meaning conveyed by the conditional tense. This also applies to Example 3, which follows.

### 4.2.1. Imperfective Past with future in past value: Simple Form

See the example:

- (3) Se meu filho morresse /  
If my son died.
- eu matava ou você ou seu filho aqui  
I killed either you or your son here<sup>xi</sup>



**Diagram 9. Imperfective Past with future in past value: Simple Form**

The extract in example (3) is part of a narrative<sup>xii</sup>. In this narrative, this extract appears after a sequence of past events. These events are represented in Diagram 9 by P1. The example itself is a counterfactual situation. In such a situation, there is a change of BASE from the NARRATIVE (DISCOURSE INTERACTION) DOMAIN to a CONDITIONAL / COUNTERFACTUAL DOMAIN<sup>xiii</sup>. This change of BASE results in a change in interpretation of verb tenses: verb tenses should now be interpreted from the new BASE, which becomes a new deictic center in which the discourse is anchored. Thus, the conceptualization of events occurs as if the speaker had moved to this other domain.

The COUNTERFACTUAL DOMAIN is composed of BASE, P2 and F spaces. In the diagram, P2 is a PAST space and it is framed by the event 'a MORRER'. The Imperfective Subjunctive form 'morresse' has been translated as 'died', as it would canonically happen. This verb form, nevertheless, has a Pluperfect Subjunctive non-canonical

value ('had died'). This Imperfective Subjunctive form is diagrammed in P2, a PAST, IMPERFECTIVE space. This space is marked as *Prior to P1* due to this Pluperfect value. Then, P2 represents an event that is narrated later, even though it would have occurred previously to the sequence of events represented in P1. Moreover, the frame that it structures is *irrealis*, showing a degree of commitment on the part of the speaker with the actual occurrence of the event presented. Situations such as this are described in Tenuta (2006, pp. 88-91).

Being also an IMPERFECTIVE space, the PAST space P2 presents a V-POINT linked to FOCUS. Apart from an aspectual dimension, this V-POINT carries the deictic dimension of time. This deictic temporal dimension is the result of a change in V-POINT from the BASE to P2. This change of perspective is needed for the conceptualization of the EVENT in a FUTURE space. That is, the V-POINT in the PAST IMPERFECTIVE space is used for the interpretation of the event as being performed in the future with respect to a past. This FUTURE space is an EVENT space in the diagramming of the non-canonical future in past value of Imperfective Past Indicative. For the canonical value, the event would appear in a PAST IMPERFECTIVE space, as we saw in Diagram 8.

In the definitions of the PAST and IMPERFECTIVE categories, which are involved in the construction of Imperfective Past, V-POINT does not need to be linked to EVENT. This latter can be projected to another space. This principle explains the occurrence, depending on contextual information, of other non-canonical values of verb forms. Due to the independence of this relationship, we find the non-canonical timeless, future and imperative values of the Present Indicative (Tenuta, Moreira, & Lepesqueur, 2010a). In the case of Imperfective Past, this situation allows for the future in past non-canonical value.

The complete temporal conceptualization of the event "matava" (Imperfective Past with future in past value) requires a FUTURE space F structured by the event and linked to another PAST IMPERFECTIVE space. There is indication of the posteriority of F relative both to P1 and P2. However, nothing indicates the temporal relationship between F and the counterfactual BASE.

#### 4.2.2. Periphrastic form of Imperfect Past with future in past value

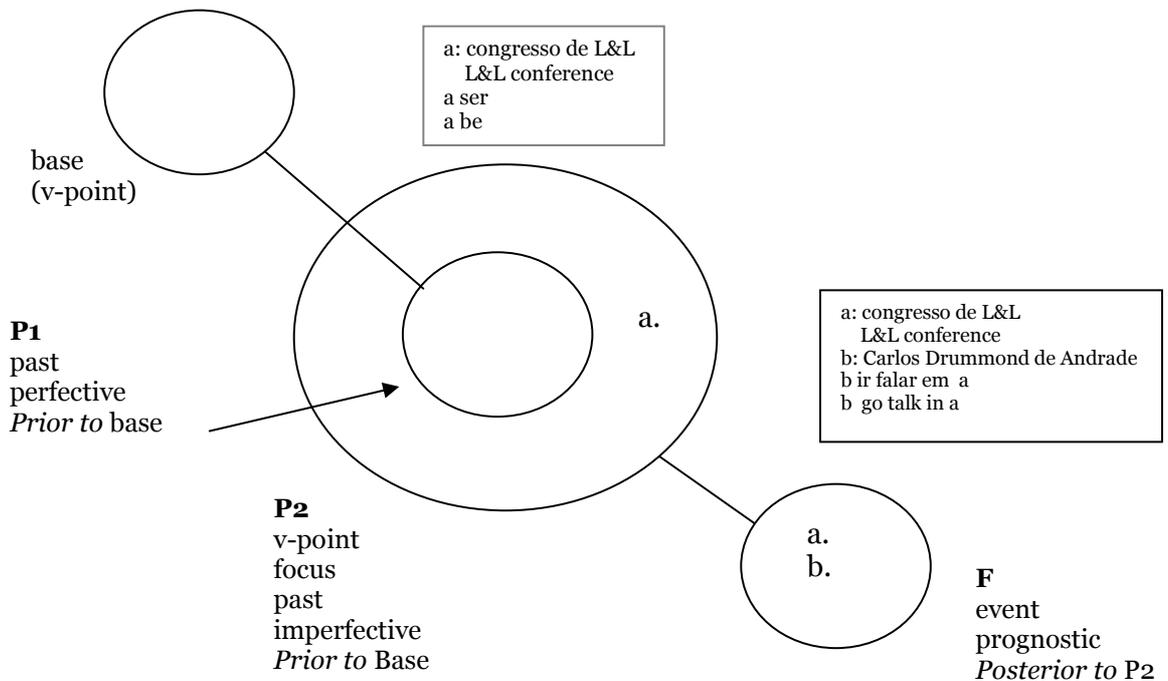
The future in past value expressed by forms of Imperfective Past also occurs in time-aspectual periphrases. See the example below:

(4) Era um congresso de linguística e literatura.

It was a linguistics and literature conference

E nesse congresso ia ia- o Carlos Drummond de Andrade ia  
falá no congresso.

And at this conference was going- Carlos Drummond de Andrade was  
going to speak at the conference <sup>xiv</sup>



**Diagram 10. Imperfective Past with future in past value: Periphrastic Form**

In all cases, simple or periphrastic Imperfective Past with future in past value, counterfactual or not<sup>xv</sup>, the relations between the IMPERFECTIVE PAST and the FUTURE spaces are of the same nature of those relations described in item 4b1. Thus, in the diagram for this example, P2 is an IMPERFECTIVE PAST space, and there is indication of anteriority of P2 relative to another space as well as indication of posteriority of F in relation to P2. As in example (3), there is no indication of the temporal relationship between F and BASE.

In Diagram 10, although the frame "b IR FALAR EM a" structures the FUTURE space F, diagramming the complete time conceptualization of this event requires the F connection to P2, an IMPERFECTIVE PAST space.

The diagramming of P2 (IMPERFECTIVE PAST) as encompassing P1 (PERFECTIVE PAST) in Diagram 10 represents a narrative situation in which the event in P2 ("era um congresso de linguística e literatura") is considered Ground for the events in P1. More specifically, the event in P2 has the discourse function of contextualizing the events in P1. P1 is therefore structured by frames of events that, despite not appearing in this extract, compose the narrative Figure from which it was extracted<sup>xvi</sup>.

## **5. 5. Conclusion**

In this study, we reported the results of analyses of some non-canonical verbal values found in a Brazilian Portuguese corpus, specifically the countersequencial value of

## Past Perfective Indicative and the future in past value of Past Imperfective Indicative.

We presented diagrams representing discourse excerpts in which the investigated phenomenon is found. These diagrams are consistent with MSM in Fauconnier (1994, 1997) and Cutrer (1994). MSM integrates the broader theoretical framework of CL, a framework wherein linguistic expressions are treated as the surface manifestation of cognitive processes. In this view, language is considered an integral part of cognition and its use requires general cognitive resources.

The application of MSM to the analysis in this study enabled, therefore, the understanding of cognitive motivations behind the use of the non-canonical verbal values under investigation. As a result of the investigation, we can explain the non-canonical countersequential value of Perfective Past Indicative as a change in the original V-POINT of BASE (NARRATION / DISCOURSE INTERACTION DOMAIN) to a PAST space, from which the countersequential Perfective Past is accessed and interpreted. In that context, a situation expressed by means of Perfective Past is visualized from that V-POINT PAST space. Then, in order for a Perfective Past form to be interpreted as past in relation to another past, it is necessary that, in the configuration of spaces representing that situation in the diagram, there is a previous PAST space that can function as the V-POINT mentioned. In the unfolding of narrative events, the effect we obtain is the one of countersequentiality.

The future in past value conferred to an event by a form of Imperfective Past Indicative, in its turn, may be cognitively sanctioned because there is no indication of a relationship between V-POINT and EVENT in the definitions of PAST and IMPERFECTIVE. Therefore, the V-POINT from which we interpret the value expressed by the verb must not necessarily be linked to EVENT expressed by the verb. This means that the EVENT realization itself can occur outside this PAST space. In this case, we have a future interpretation, since the event takes place in a FUTURE space, seen from the IMPERFECTIVE PAST space.

When we analyze language in use data, it is important to adopt a discourse perspective. The analysis should not be restricted to the sentence level. Taking linguistic and discourse-pragmatic contexts into consideration was essential in this work for the observation of the emergence of the non-canonical verb form values.

MSM proved very useful for the analysis of language in use phenomena, specifically, the investigation, at the conceptualization level, of cognitive aspects related to the use of non-canonical values of verb tenses. It is thus relevant that MSM operates with a definition of verb tense that is more comprehensive than the traditional definition, since it encompasses, more realistically, uses of verb forms made naturally by speakers. Also, MSM makes theoretical resources available, such as discourse categories, which originate from the general human cognitive visual perception, as well as tense-aspect categories, which were proposed based on large crosslinguistic studies. All these arguments reveal the potential of MSM for the investigation of issues related to the verbal element.

## Notes

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- i This research has generated analysis of various non-canonical verb values, and, therefore, there has been publication related to it: Tenuta & Lepsesqueur (2010), Tenuta, Moreira & Lepsesqueur (2010a), Tenuta, Moreira & Lepsesqueur (2010b).
- ii See Cienki (2007).
- iii Authors' translation.
- iv Values such as those were found in: oral narratives in Tenuta (2006)'s *corpus*; conversation transcriptions kindly provided by GREF/NELU (Grupo de Estudos Funcionalistas/Núcleo de Estudos da Língua em Uso - FALE/UFMG): transcriptions from tapes AV and MFA, and from Matta (2005)'s *corpus*, representing the oral modality of the Portuguese language in use in Brazil. Also, they were found in UNIPAC's 2006 vestibular essays, also kindly provided by UNIPAC Vestibular Commission for this study, representing the written modality.
- v Narrative 1 (15-17). This notation, as others in this article, means *lines 15 to 17 of Narrative 1* in Tenuta (2006).
- vi The definition of the PERFECTIVE aspect category implies a relation in which V-POINT is different from FOCUS (see Diagram 8).
- vii Campos, Rodrigues and Galembeck (1996a) analyze Perfective Past and Imperfective Past in spoken Portuguese; however, they do not register the countersequential value of Perfective Past, since they deal with sentence level data. The authors recognize the importance of the “meanings of inflected verb forms in terms of discourse-pragmatic characteristics or in terms of the meaning constructed in the textual or discourse relations” (Campos, Rodrigues e Galembeck 2002a:39). In this work, even though the authors take into consideration the textual level, the countersequential value of Perfective Past is not discussed.
- viii Narrative 6 (25-31). In this example, ‘casô’ is the reduced form of ‘casou’.
- ix The complete narrative is found in Tenuta (2006).
- x Cunha & Cintra, 2001, p. 452.
- xi Narrative 7 (lines 25-26).
- xii The complete narrative is found in Tenuta (2006).
- xiii There are two types of conditional structures: the hypothetical and the counterfactual.
- xiv Narrative 13 (lines 19-20).
- xv In this example, the value of Past Imperfect with future in past value does not occur in the field of counterfactuality.
- xvi The complete narrative is found in Tenuta (2006).

## References

- Back, A. C. P. (2007). A expressão verbal a serviço do efeito de sentido metafórico. *Revista de Estudos da Linguagem*. v. 15(1), (pp. 39-56). Belo Horizonte: Faculdade de Letras da UFMG.
- Campos, O.G.L.S., Rodrigues, A.C.S. & Galembeck, P. (1996a). A Flexão modo-temporal no português culto do Brasil: formas de pretérito perfeito e imperfeito do indicativo. In: *Gramática do português falado*. Vol. IV. (pp. 35-78) Campinas: Editora da UNICAMP/ FAPESP.
- Campos, O.G.L.S., Rodrigues, A.C.S., & Galembeck, P. (1996b). Formas de pretérito perfeito e imperfeito do indicativo no plano textual-discursivo. In: Ingedore G. Villaça Koch (org.) *Gramática do português falado*. Vol.VI. (pp. 415-462) Campinas: Editora da UNICAMP/FAPESP.
- Cienki, A. (2007). Frames, Idealized Cognitive Models and Domains, in: Geeraerts, D., Cuyckens, H. (eds.). *The Oxford handbook of cognitive linguistics*. Oxford: Oxford University Press.
- Coscarelli, C. V. (2009). Poussin em muitas telas. TxT. Leituras transdisciplinares de telas e textos. Retrieved october, 2009 from <http://www.letras.ufmg.br/atelaetexto/revistatxt2/coscarelli.htm>.
- Cunha, C. (1971). *Gramática do português contemporâneo*. Belo Horizonte: Bernardo Álvares S/A.
- Cunha, C. & Cintra, L. (2001). *Nova gramática do português contemporâneo*. 3. ed. Rio de Janeiro: Nova Fronteira.
- Cutrer, M. (1994). *Time and tense in narrative and in everyday language*. (Doctoral dissertation). San Diego: UCSD.
- Dancygier, B., & Sweetser, E. (2005). *Mental spaces in grammar: conditional constructions*. Cambridge: Cambridge University Press.
- Fauconnier, G. (1994). *Mental spaces: aspects of meaning construction in natural language*. Cambridge: Cambridge University Press.
- Fauconnier, G. (1997). *Mappings in thought and language*. Cambridge: Cambridge University Press.
- Fauconnier, G. (2007). Mental spaces. In: Geeraerts, D., Cuyckens, H. (eds.). *The Oxford handbook of cognitive linguistics*. Oxford: Oxford University Press.
- Goldelaers, S., Geeraerts, D. & Speelman, D. (2007). A case for a cognitive corpus linguistics. In: Gonzalez-marquez, M., Mittelberg, I, Coulson, S., Spivey, M. J. (eds.). *Methods in Cognitive Linguistics*. (pp. 149-170). John Benjamin Publishing Company.
- Gries, T. S. (2006). Introduction. In: Gries, T. S., Stefanowitsch, A. (eds.). *Corpora in cognitive linguistics: corpus-based approaches to syntax and lexis*. (pp. 1-18.) (Trends in Linguistics: Studies and Monographs) Berlin: Mouton de Gruyter.
- Lakoff, G. (1987). *Women, fire and dangerous things: what categories reveal about the mind*. Chicago: Chicago University Press.
- Langacker, R. W. (1987). *Foundations of cognitive grammar*. Vol. I: Theoretical prerequisites. Stanford: Stanford University Press.
- Langacker, R. W. (1990). *Concept, image, and symbol: the cognitive basis of grammar*. Berlin: Mouton de Gruyter.

- Langacker, R. W. (1991). *Foundations of cognitive grammar*. Vol. II: Descriptive application. Stanford: Stanford University Press.
- Langacker, R. W. (2001). Viewing and experiential reporting in cognitive grammar. In: Da Silva, A. S. (ed.), *Linguagem e Cognição: A perspectiva da linguística cognitiva*. (pp. 19-49) Braga: Associação Portuguesa de Linguística e Universidade Católica Portuguesa, Faculdade de Filosofia de Braga.
- Langacker, R. W. (2008). *Cognitive grammar: a basic introduction*. USA: Oxford University Press.
- Liddell, S. K. (2000). Blended spaces and deixis in sign language discourse. In: McNeill, D. (ed.) *Language and gesture*. (pp. 331-357). Cambridge: Cambridge University Press.
- Luft, C. P. (1987). *Moderna gramática brasileira*. 8. ed. Rio de Janeiro: Globo.
- Marcuschi, L.A. (2000). A Coerência no hipertexto. I Seminário sobre hipertexto, Centro de Artes e Comunicação. UFP. Retrieved December, 2008 from:  
[http://64.233.163.132/search?q=cache:TLdC16kjl\\_4J:bbs.metalink.com.br/~lcoscarelli/Marcuschicoerhtx.doc+mental+spaces+hypertext&cd=7&hl=pt-BR&ct=clnk](http://64.233.163.132/search?q=cache:TLdC16kjl_4J:bbs.metalink.com.br/~lcoscarelli/Marcuschicoerhtx.doc+mental+spaces+hypertext&cd=7&hl=pt-BR&ct=clnk).
- Matta, B. A. (2005). *Ressonâncias léxico-estruturais no discurso conversacional em Português*. (Master's thesis) Programa de Pós-graduação em Letras: Estudos Linguísticos, Faculdade de Letras, Universidade Federal de Minas Gerais, Belo Horizonte.
- Moreira, R. L. (2007). *Uma descrição de dêixis de pessoa na língua de sinais brasileira: pronomes pessoais e verbos indicadores*. (Master's thesis). Universidade de São Paulo, Faculdade de Filosofia, Letras e Ciências Humanas (FFLCH), São Paulo.
- Neves, M. H. M. (2000). *Gramática de usos do português*. São Paulo: UNESP.
- Nicola, J., & Infante, U. (1997). *Gramática contemporânea da língua portuguesa*. São Paulo: Scipione.
- Rocha Lima, C. H. (2003). *Gramática normativa da língua portuguesa*. 43. ed. Rio de Janeiro: José Olympio.
- Sweetser, E. (2007). Looking at space to study mental spaces: co-speech gesture as a crucial data source in cognitive linguistics. In: Gonzalez-Marquez, M., Mittelberg, I, Coulson, S., Spivey, M. J. (eds.) *Methods in Cognitive Linguistics*. (pp. 201-224) John Benjamin Publishing Company.
- Tenuta, A. M. (2006). *Estrutura narrativa e espaços mentais*. Belo Horizonte: Faculdade de Letras da UFMG.
- Tenuta, A. M., Moreira, L., & Lepsqueur, M. (2010). Valores expressos pelo tempo verbal presente do indicativo: uma análise de caráter cognitivo. In: Fonseca, M. E., Marinho, J. H. C. (orgs.) *Estudos da língua em uso: da gramática ao texto*. (pp. 65-91) Belo Horizonte: Ed. UFMG.
- Tenuta, A. M., Moreira, L. & Lepsqueur, M. (2010) Uma análise cognitiva do valor contrassequencial do pretérito perfeito do indicativo. *Revista Scripta*, Linguística e Filologia, v. 14 (pp. 107-120), Belo Horizonte: Editora PUCMINAS.
- Tenuta, A. M. & Lepsqueur, M. (2010). Os espaços mentais como modelo para análise de valores verbais da língua em uso. *Revista Portuguesa de Humanidades*, Estudos Linguísticos, 14(1), (pp. 119-150). Braga:

Universidade de Filosofia da U.C.P.  
Turner, M. (1996). *The literary mind*. Oxford: Oxford University Press.