# ALFA Revista de Linguística

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# **ORIGINAL ARTICLES**

### METACOGNITIVE KNOWLEDGE, FRAMEWORKS FOR MEANING CONSTRUCTION AND PORTUGUESE TEACHING-LEARNING

#### Ana Flávia Lopes Magela GERHARDT\*

- ABSTRACT: This paper proposes the concept of frameworks for meaning construction in written texts, related to the dimensions of people's experiences expressed in lexicalgrammatical text structure: genre, register, field, tenor and modality. These frameworks are observed in the analysis of a dissertative-argumentative text which does not correspond to any of the expected frameworks for the type of text required. The same text is presented to 80 High School students, and their comments reveal the level of quality of their metalinguistic knowledge: an understanding of language which is limited to the word level; the perception of register, but not of other frameworks; the limitation to linear-superficial text aspects: orthography, punctuation etc., and the textual perspective as object-language, and not metalanguage. From these facts, we proceed to some claims about the current conditions of the teaching and learning of Brazilian students' mother tongue in Brazil by taking into consideration the knowledge that they have been constructing about language.
- KEYWORDS: Discursive and textual genres. Metalinguistic development. Language teachinglearning. Text production.

#### Introduction

The reflection concerning the teaching of Portuguese as a mother tongue has been experiencing a new and great impetus since the late nineties in the last century in Brazil. This impulse was afforded in 1998 by the National Curricular Parameters (in Portuguese, PCNs) for Portuguese teaching-learning, as the official document to provide a unified national view regarding goals, methods and instruments for the teaching and learning of Portuguese in Brazilian schools.

The PCNs were designed, among other perspectives, from discussions about the need to observe every linguistic materiality related to the social and contextual conditions of language production in written and oral texts. In this sense, the conceptualization of the expression "uses of language" employed by the PCNs would henceforth include the resources and structures required to text construction.

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For the conceptual elaboration of the PCNs, the relationship between the texts as the central tool of language teaching-learning and the choice for the "public uses of language" (BRASIL, 1998, p.24) led to the adoption of the concept of *text/discourse genres*. They were related to the recognition and legitimation of the situated production of language, and incorporated to the new education paradigms subsumed within the PCNs' formulation and implementation. This adoption has come in opposition to the traditional view of Portuguese teaching-learning, guided by lexical-grammatical description, the linear, superficial and rudimentary treatment of the texts, and the lack of connections between language and the discursive practices related to it.

The PCNs were primarily based on the Bakhtinian ideas about language and discourse, and about the genres as the main objects of investigation. Bakhtin's propositions, although not originally constructed aiming at the language teaching-learning process, were added without any problems to the PCNs' proposals of establishing, as a teaching-learning matter, the real life uses of language.

In the PCNs' implementation of the genre perspective for Portuguese teaching-learning, it is possible to identify a process of *re-enunciation* (GOMES-SANTOS, 2004, p.112) of the concept of genre. It means that the concept of genre was transposed from the academic scope to reach a political scope, related to pedagogical and didactic constraints that would guide not only all teaching-learning goals, but also the editorial and educational business. To some extent, this re-enunciation was inevitable, given that the discourse–oriented definition of Bakhtinian theory brings together the idea that every language production is brand new, unique and unrepeatable. In Bakhtin words,

[...] An effective and correct method of practical teaching demands that the form be assimilated not in the abstract language system, i. e., as a form always identical to itself [in other words: never referring to a larger system of meaning]<sup>1</sup>, but in the concrete structure of enunciation, as a flexible and variable sign. (BAKHTIN, 1988 apud RODRIGUES, 2005, p.153).

Bakhtin's proposition is a challenge for researchers on Portuguese teachinglearning didactics as well as for language educators in general: they need to recognize the uniqueness of every discourse event and the language produced while acting with it in the social world, but they also need to operate with a minimum of generalization perspectives in order succeed in their findings.

One of the solutions for this didactic task would be, according to Rodrigues (2005), keeping in figure, in a teaching-learning event, not the *enunciative* facet

<sup>&</sup>lt;sup>1</sup> Additions made by the Author of this paper.

of language uses, which particularizes them, but their *textual* facet, in which the linguistic forms are reiterated and can be also identified in other enunciations.

But this double-facet proposal still keeps one of the greatest defiances to those who address and study the issues related to Portuguese teaching-learning as a mother tongue under the validity of the PCNs: how to optimize teachinglearning within the enunciative context where texts are produced; and, above all, how to proceed to a necessary language opacity and abstraction (GOMBERT, 1990). Therefore, we need to go towards an understanding of the lexicon and the grammar, but without losing track of the fact that what is being analysed is part of a semiotic construction which involves other elements as well.

To the Portuguese teacher, this problem can be materialized in the following questions: how can we observe lexical and grammatical forms of Portuguese, as they constitute an intended enunciation? How can we demonstrate the enunciative and discursive aspects of a text through the choice of a lexical or grammatical form to the detriment of others? Moreover, how can we attest, in discursive terms, whether the use of a specific form is adequate or not when taking the need to consider the great variation of language uses?

The issue that we are discussing in this paper does not emerge if we take, as the PCNs do, the nature of the object to be taught as the focus for teachinglearning. Rather, it emerges if we think about teaching-learning in terms of improving the quality of people's linguistic experiences, and if we deviate the focus of the discussion about language teaching-learning. By doing this, we no longer focus on *language*, as teachers normally do, but focus on who actually uses language, which implies considering knowledges that people construct about it. From this reorientation of perspective, we can identify problems arising from the bad quality of some knowledges caused by the learners' precarious reflection and action over the language features they are employing, and over the variables at stake when they are engaged in linguistic and discursive actions at school. In other words, the problem that we are focusing in this paper concerns the concept of *metalinguistic knowledge* (BIALYSTOK, 1986; GOMBERT, 1990; KARMILOFF-SMITH et al., 1996; TOLCHINSKY, 2000; CORREA, 2004, HOMER, 2009). This concept is related to the metalinguistic development brought about by every new experience with language, be it the learning of a new language (DIAZ, 1983), be it the learning of a new language variant of an already acquired language (RAVID; TOLCHINSKY, 2002).

This paper seeks to frame the issue that we are considering up to this point: the didactic treatment given, in studies of learning and metalinguistic development, to the double facet of language practices mentioned by Rodrigues (2005): the enunciative one and the textual one. We do this in order to outline some actions to help students and teachers overcome their difficulties while

dealing with texts as real life language objects, and in order to undertake didactic procedures to stimulate and keep "the speaker's active stance in this or that field of object and process of meaning-making" (BAKHTIN, 1988 apud RODRIGUES, 2005, p.159).

In order to do so, we propose a discussion about metalinguistic knowledge and text teaching-learning in schools by means of materializing the double facet of language use in the *frameworks of meaning that emerge in text construction*. These frameworks are related to the understanding, by the language user, of how texts come to existence and are included in five validation parameters for the linguistic meanings they convey: the textual *genres*, the *tenor* of the interaction, the *field* of common knowledge among the interactants, the *register*, and the *modality* in which texts are constructed. Although these frameworks constitute an open compilation, in this paper, we identify only those that are systematically representative of the lexical-grammatical structure of texts.

Our approach seeks to discuss the possibility of a language teaching-learning process which can reveal it as a part of the experience of the person with language. It takes into account the fact that the conscious and contextualized linguistic use must rely on the knowledge of the lexical-grammatical composition of texts. This proposal is a possible strategy of acting and facing the challenge offered by Bakhtin's proposition: to develop a way of language teaching-learning which can help learners be aware as much as possible of the interactions among language forms, meanings, and situated relations that we expect language to convey and reveal.

The inclusion of the problem presented in this paper among the studies on language and metalinguistic development allows us to recognize the double facet of language practices – on the one hand, its fortuitous and fugitive facet, relative to the statements as discursive-social actions; and, on the other hand, its facet relative to texts as linguistic manifestations of these actions. From this recognition, we can propose a teaching-learning approach focused not on the knowledge of nomenclatures and categories, but on metalinguistic attitudes, based on a mature observation, by the person, about his/her linguistic actions, as posed by Bialystok and Ryan (1985, p.208-209):

- 1. The "analysis of linguistic knowledge in structured categories": word, argument structure, sentence, text etc.
- The "control of attentional procedures to select and process specific linguistic information" – for grammar: the organization of the categories quoted in 1. For text construction: production, interpretation, judgement, correction, remaking, identification.

Bialystok and Ryan's remarks lie on the idea that, besides the knowledge of linguistic categories and construals, learners have to be aware of how language is produced, and how the lexical-grammatical features are directly related to their conditions of use. We assume this idea as one of the main goals of mother tongue teaching-learning process (as well as foreign language, we need to say). Its corollaries must be valorized in every practice that aims at improving the linguistic skills and metalinguistic abilities of learners. However, to accomplish this task, we must take into consideration that metalinguistic knowledge is not an epiphenomenon of literacy; therefore, we must not naturalize it. Rather, such as happens to other variables involved in literacy development, we must problematize it in terms of how the conditions of possibilities in school enable, inhibit or preclude it.

Keeping these considerations in mind, in this paper we will observe how we can help our students to become capable of evaluating their own texts and the texts of other people. This evaluation would include their knowledge of the linguistic materiality – lexicon, grammar – that constitute every enunciative and discursive action, specifically those linguistic structures studied in school.

In order to fulfill this purpose, we will first present our definition for the frameworks for the linguistic meanings considered in this paper. This definition will lead us to implement two courses of action: first, the evaluation of a dissertative-argumentative text sent to the text examining board offered to students by the Brazilian website *uol (universe on line)*; second, the discussion of this same text, which was afterwards presented to 80 public High-School students of the city of Rio de Janeiro, Brazil. We will focus on the detection of their perception level of the frameworks, as well as their metalinguistic comprehension of the lexical-grammatical aspects of the text. It is necessary to consider their level of metalinguistic comprehension because this capacity is a pre-requisite for them to recognize the frameworks defined in this article. Our comments will be developed upon their analytical actions related to the problem that this article proposes to examine.

# The frameworks for textual meaning construction–genre, register, tenor of interaction, field of knowledge, and modality

Ravid and Tolchinsky (2002, p.424, emphasis added), when proposing the concept of *linguistic literacy*, stated that "Language users do not participate in uniform linguistic circumstances. Rather, they need to vary their production to mark three situationally defined varieties: *register*, *genre*, and *modality*". However, besides those three variables proposed by Ravid and Tolchinsky, if we interrelate the plurality of linguistic experiences to the possibilities of marking

them lexical-grammatically, we will attest that the relative position of the people engaged in a communication event – the *tenor* of the communication – and the amount of common and not common knowledge to the interactants – the *field* of the communication - are contextual conditions which go beyond linguistic materiality. For this reason, they are central elements in this article, given that we intend to observe the didactic perspective of language discursive dimension.

Furthermore, the action of combining these five frameworks is justified by the fact that, although they are not found together in other conceptual prescriptions, we can treat them similarly because they represent linguistic marks of the variable enunciations produced by people, and for this reason, we can see them as playing a very important and constitutive capillary role in communication.

We can enumerate two advantages in assuming the frameworks for linguistic meaning construction as part of teaching-learning didactics of writing and reading texts of all genres:

- 1. Their employment as a didactic instrument allows us to handle the stable facet of texts as discursive actions without losing track of their local facet. However, in order to accomplish this task, we need to change the focus given to language teaching-learning: from discourse, which has been usually done, to the people who produce it. This could help students understand the frameworks that we are discussing, in this paper, as related to their knowledge about language. It means that the frameworks are not things that exist *in* texts; they are forms of insertion, in language, of the meanings that people wish to construct.
- 2. The concept of frameworks does not neglect writing as a social practice, but it allows us to deal with the fact that the linguistic materiality is an important object for us to detect, in the texts produced by our students, the quality of their knowledge about language, and the consistency of their reflections concerning the discursive practices they are engaged in. This makes them recognize themselves as discursive actors in the school institution, and observe the meanings they produce as social and situated actions (GERHARDT, 2013). In fact, the mere act of understanding linguistic meaning, without any appropriate verification of how it is grammatically structured, is not satisfactory for a good linguistic comprehension (BOWEY, 1986).

In the lines below, we will define properly the frameworks presented in this article. What we are going to say about them will be useful for the evaluation of a dissertative-argumentative written text sent to the website *uol*, in order to fulfill the proposal made by the website examination board. After that, we will present and comment what the students wrote about it.

#### Genre

In the amount of textual studies performed by Brazilian scholars, the contemporary view of genres has been able to comprise, without any serious theoretical problem, several perspectives about language and discourse, besides the traditional school understanding of genres (BRAIT, 2000; ROJO, 2005). Despite their differences of focus, these perspectives keep among themselves the premise of the constitutive relationships between language and discourse. Besides Bakhtinian studies, another important source of genre discussion is offered by Halliday e Hasan (1985), who have directed some interpretations about the concept of genres in Systemic-functional Linguistics (EGGINS, 2004) and in Psycholinguistics (TOLCHINSKY, 2000; RAVID; TOLCHINSKY, 2002). Our proposal of thinking about genres lines up with these studies.

Following the basic assumptions of Systemic-functional Linguistics for the study of textual coherence, Eggins postulates the need to recognize the continuity between text and context, establishing genre as the "context of culture in text" (EGGINS, 2004, p.54). Eggins refers to genre as the "dimension of contextual coherence" at the macrossocial level: the dimension that defines the purposes of a given way of saying in the culture in which this saying is included.

Following a slightly different path, Tolchinsky (2000) and Ravid and Tolchinsky (2002) have chosen the focus assumed in this paper, discussing genre as a linguistic experience defined through a microssocial approach, i.e., attached to local contexts. In other words, these authors understand genres by focusing on how the situation in which they were produced and their communicative purposes are expressed in texts. Tolchinsky (2000, p.39) claims, "Genre can be seen as a register plus purpose. That is, it includes the more general idea of what the interactants are doing through language, and how they organize the language event in order to achieve that purpose".

As to metalinguistic development (RAVID; TOLCHINSKY, 2002), the enlargement of the inventory of textual genres available to the person's linguistic understanding and practice is related to the increasing possibility, along his/her school and everyday life, of his/her conscious observation and exploration of the relations among genres.

If we understand genres in the light of the situated perspective of Cognitive Science, which has considered the goals of cognitive actions as one of the structuring factors of meaning construction (GERHARDT, 2014), we can say that the idea of purpose attached to the generic dimension of texts grants to genre the prevalence over other frameworks. In fact, learners, as they engage in the task of understanding texts, can easily define tenor, field, modality and register from the establishment of genre. Therefore, if we take the fact that there is no didactic

consideration about this issue in Portuguese teaching-learning research, the comprehension of the genres studied in school turns out to result very precarious, as we will see in this paper.

## Register

According to Eggins (2004), register is the consideration of the microssocial level in the construction of textual coherence, besides the macrossocial level that defines its genre. Eggins asserts that the constitutive relationship between text and context explores, in a great deal, the scarcity of linguistic materiality, and it permits register to define even the referential, explicit meaning of the enunciation. The author considers the frameworks tenor and field as taking part of the immediate context of the text, as composing the major discussion about register. However, as tenor and field participate in the lexical-grammatical outlines of texts, in this paper we treat them as two independent and different aspects.

For Ravid and Tolchinsky (2002), register, as a framework for text meaning construction, is a feature of the comprehension of how some parameters of interpersonal relationships, such as symmetry/asymmetry, politeness, and degree of intimacy, pervade every text. This idea has led the authors to connect the concept of register to its usual approach: the levels of formality in personal relationships interfering in language construction and communication. It is in this sense that we are observing the term *register* in this paper; we will verify that, given the inclusion of register among the curricular contents for Portuguese teaching-learning, it is a component frequently taken into consideration by students when keeping contact with texts in school.

#### Tenor

Halliday e Hasan (1985) define tenor according to its functional perspective, and in a way similar to Ravid and Tolchinsky's definition of register: the level and the degree of institutionalization of the relationships among people crosses every language production and communication, revealing similarities and differences as well as engendering them. In this paper, we also relate tenor to these factors - not in an institutional sense, assigned here to register, but in a more materialistic and physical sense. We assume the concept of tenor taking into account the relative positions of people when they engage in a given form of communication. It implies a continuous interactional gradation: from the online and real time condition of a conversation, passing through all the possibilities of oral or written communication, to the production and interpretation of texts among people without any visual or auditory contact, and without any synchronicity. Depending on the tenor, the enunciations produced, as well as the interactants, assume different conditions: in oral or written communication more or less online, they are interlocutors; in offline communication, they are writers, readers; in oral events without turn-takings, they are speakers, listeners.

We already know that pragmatics and grammar are closely related (GIVÓN, 1979): the more offline the communication event, the more referential and grammatical elements we must offer in order to accomplish the task of conveying, in a reliable way, the meanings that our absence does not allow us to transmit. Having in mind such conditions is an important feature for metalinguistic research.

#### Field

In Systemic-functional Linguistics, the field concerns the theme and contents of text. The PCNs for Portuguese language teaching-learning have paid attention to this framework in a similar way, naming it *system of reference*, and defining that Portuguese teaching-learning in Brazil should privilege language productions destined to communication among people who do not necessarily share the same systems of reference, in other words, not visualizing the same physical or conceptual objects (BRASIL, 1998). We will see that, in fact, this framework not only defines the lexical-grammatical constitution of texts, but it relates closely to their tenor: the typical online types of communication can prescind from some contents without any loss of what is being transmitted; but the offline written type of communication can bring comprehension problems, if there is scarcity of linguistic information.

#### Modality

Although we can identify other language modalities besides oral and written communication, such as gestural language, we are limiting our observations to the relationships involving experiences with language that admit lexical-grammatical comparisons among each other.

In studies about metalinguistic development, modality plays a central role (GOMBERT, 1990; RAVID; TOLCHINSKY, 2002): the action of defining how we can help a person improve his/her knowledge about his/her experiences with oral and written communication is an essential point in the discussion about literacy in general, and linguistic literacy in particular. As to Portuguese teaching-learning, the discussion about the differences between oral and written communication is the groundwork for the understanding that all experiences with language vary in many ways. This difference has been established in Psycholinguistics

as a *threshold concept* (MEYER; LAND, 2006; WARD; MEYER, 2010), and it is a distinction that must be understood and assumed by the learners in order to proceed successfully in their learning processes.

In fact, some of the worse learning problems identified by Brazilian Applied Linguists are outcomes of students' incomprehension of how the differences between oral and written communication are shown by the lexical-grammatical materiality of texts. In other words, what applied linguists identify are metalinguistic problems, in the sense that we are pointing here. One of the reasons for the lack of any discussion concerning these matters is the fact that, in a traditional perspective of teaching-learning, oral communication is usually discarded as if it were the informal/colloquial register, which is something to be "eliminated" in school, and the didactic-pedagogical actions implemented after the PCNs, unfortunately, could not change this view. The result of this attitude is easily seen in students' written texts, which bring lexical-grammatical problems that place them very closely related to oral texts. In addition, these students, unable to make systematic comparisons between oral and written communication, do not become experts neither in one experience, nor in the other.

The claims we made about the frameworks for meaning construction in texts will be employed for the analysis of the text that we have chosen to discuss in this paper.

#### The text Hypocritical Society

The website known as UOL (Universo On Line in Portuguese) is a Brazilian online service provider and internet service provider that keeps a board composed by teachers who correct dissertative-argumentative texts sent to them. It is a very useful tool for the students who are preparing themselves for examinations and public selections that include text evaluation. Once a month, the teachers elaborate text proposals, and the candidates can send their texts to be assessed. The evaluation of the texts are displayed on the website one month after the submission. The great advantage of the UOL board for teachers and researchers on Portuguese teaching-learning is the fact that the materials produced and presented are not mandatory school tasks. Therefore, they can be seen as a result of the voluntary effort of the candidates in writing an argumentative-dissertative text in standard written Portuguese that deserves to be included among those that are evaluated by the board and displayed on the website UOL.

The text selected refers to the proposal presented in November 2012, which requested that students write an argumentative-dissertative text in standard Portuguese discussing the following topic: *Is it right to auction off virginity? Yes or no?*. This theme was based on the news that two young adults, a Russian man

and a Brazilian woman, were auctioning off their virginity on a reality show. The proposal called for students to discuss the ethical implications of that event.

In relation to the the frameworks for meaning construction, we can say that the texts presented to the board should, in terms of *genre*, be dissertations; in terms of *register*, be formal texts; in terms of *modality*, be written texts; in terms of *tenor*, be offline interactions, with two types of interactants: a writer and a reader; and, in terms of *field*, not to assume the same systems of reference between the interactants. We will employ these pieces of information as parameters for our analysis.

Below, we present the text to be discussed in Portuguese and in English.

#### Sociedade Hipócrita

Não é errado leiloar a virgindade, além disto, cada um tem livre arbítrio pra fazer o que desejar e ninguém tem a ver com isso, paga quem quer e quem tem dinheiro, claro que quem não tem uma situação financeira privilegiada não vai pagar por isso, as pessoas ultimamente estão dando importância demais para a vida alheia e esquecem de cuidar das suas próprias. Elas invés de cuidar da vida de outrem porque não protestam a favor de melhores condições de vida em que vive, garanto que seria bem melhor. Se a menina fez isso foi à vontade dela quem somos pra criticá-la dizendo que o que ela fez é certo ou errado? Há principalmente aqui no Brasil milhares de coisas erradas que todos, sabem veem e ninguém protesta ou quando alguém o faz são minoria que nem é suficiente pra surtir efeito. Garanto que se as pessoas se importassem com os problemas que elas enfrentam na sociedade em que vivem como se importam com a vida dos outros, o nosso país seria muito melhor pra se viver. Porque não vejo criarem páginas pra criticar a corrupção que assola nosso país e que nos envergonha, nem pra má educação que forma pessoas incapazes de entender um texto por completo, a superlotação no transporte público que faz as pessoas desmaiarem e nem a má qualidade da nossa saúde onde pessoas morrem por esperar atendimento médico. Isso são problemas que todo mundo sabe que existe e as pessoas fazem vista grossa! Agora por causa de uma coisa tão simples dessa e normal, fazem um auê daqueles nas redes sociais, emissoras de rádio etc. Deixem a menina em paz que ela não é nem uma criminosa. muito menos cometeu delito a vida é dela tem o direito de fazer o que bem entender, aposto que se alguém oferecer o mesmo valor pra qualquer mulher sendo virgem ou não a oferta é aceita imediatamente, se com ofertas bem menores algumas mulheres já caiem diante delas imagine um valor exorbitante desses. Chega de hipocrisia e perguntem se fosse comigo eu aceitaria?.

Available at: <http://educacao.uol.com.br/bancoderedacoes/ redacao/sociedade-hipocrita.jhtm>. Access on: 26 mar. 2015.

#### Hypocritical Society<sup>2</sup>

There's nothing wrong with auctioning off one's virginity, besides, every one has the right to do whatever s/he wants to and nobody has anything to do with it, pays who has the money and wants to pay for it, of course, the one who does not have a privileged financial position is not going to pay for it, lately people have been giving too much importance to other people's lives and forgetting to mind their own business. Instead of taking care of other people's lives, why don't they protest for better life conditions? I believe it would be much better. If the girl did that because she wanted it to, who are we to criticize her saving that what she did was right or wrong? There are especially here in Brazil thousands of wrong things that everyone knows, sees and no one protests against them or when someone does, they are so few that it is not enough to produce any effect. I believe that if people worried about the problems they face in society where they live as they worry about other people's lives, our country would be a much better place to live. Because I don't see them neither creating pages to criticize the corruption that destroys our country and embarrasses us, nor the bad quality education that unables people to understand a text completely, neither the overcrowding in public transportation that makes people faint nor the bad quality of our health system in which people die waiting for medical assistance. These are problems that everyone knows that are out there and people overlook! Now, because of such a simple and normal thing, they make a big fuss on social networks, radio stations etc. Leave the girl alone because she is no criminal, nor has made any offense it's her own life she has the right to do whatever comes to her mind, I bet that if someone offers the same amount of money to any woman being virgin or not the offer is accepted immediately, if with lower offers some women take it imagine such an exorbitant amount like that. Enough with hypocrisy and ask if it were about me would I accept it?

We will evaluate the lexical-grammatical constitution of the text above by taking into account the five frameworks for meaning construction discussed in this paper. We will reflect upon the metalinguistic comprehension that its author reveals to have from what s/he offered to the UOL board.

In terms of *genre*, we can say that the candidate has presented a text whose characteristics remind us more an informal conversation than a dissertation.

<sup>&</sup>lt;sup>2</sup> Our translation.

Although it is possible to argue that some aspects of the genre *dissertation* can be found in the text, given that its contents are dissertative, we still define it as a *conversation* due to the definition of genre proposed in this paper, and related to how its author has chosen to organize it, or, rather, to structure the linguistic event to address the issue proposed by the board.

We can visualize the conversational nature of the text above by observing the way the sentences are linked. The sentence combination typical to argumentative written texts should bring a thematic continuity facilitated and intersected through the progression of ideas (COSTA VAL, 1990). However, the propositions of the text above are chained in such a way that, in many of its stretches, the idea at stake is related only to the idea previously mentioned, and not to the other ones preceding it. For example, the first sentence has four propositions; the first three share a fragile thematic bond while the last one has no relationship at all with the others:

"It is not wrong to auctinion off the virginity."

"Everyone has free will to do whatever he wants and nobody has nothing to do with that, whoever has money and wants to pay, pay it."

"The one who does not have a privileged financial condition is not going to pay for it."

"Lately people are giving more importance to other people's lives and forget minding their own lives."

It is possible to infer that, while constructing her/his text, the candidate wrote what came to her/his mind, writing down ideas that were mostly connected to the last ones s/he had just written down; they were not connected to the text as a whole, as is expected in written dissertations. As a result, with respect to the combining clauses, her/his text, instead of showing a backbone, can be compared to a chain, in which each link is connected only to the one immediately following it.

In terms of *register*, we can acknowledge the candidate's endeavour to bring the lexicon of the text close to the standard Portuguese, but there are some lexical characteristics related to the genre conversation that structures the text. There are some formal standard words such as the verb Port. *haver* meaning *exist* (*there are*) and the words Port. *outrem* (*others*), *delito* (*misdoing*) and *surtir* (*produce*); the cliché expression Port. *corrupção que assola nosso país* (*the corruption that destroys our country*) together with colloquial uses such as the hyperbole *thousands of wrong things*, Port. *fazer vista grossa* (*people overlook*) and *auê* (*make a fuss*), and the generic Port. *coisas* (*things*).

As to the register, these linguistic forms bring to the text a hybrid character, and the candidate's effort not to sound informal reveals that s/he has gotten some

information when it comes to colloquial speech in her/his Portuguese classes, and s/he is concerned about register. Thus, her/his text reflects the preoccupation of Portuguese curricular projects in keeping the students informed about the issues concerning linguistic variation, especially with regard to formality/informality of language.

In terms of *field*, the characteristics of the genre *conversation* that define the text mentioned are very apparent, in at least one important grammatical aspect: the referential mechanisms. Take, for example, the use of the word *girl* (Port. *menina*), more than once, without any reference to whom this girl is, since the explanation concerning this girl in the text proposal is not enough for the author to dispense with. The polysemous word *page* (*Port. páginas*) without any specification, although not detrimental to the text like the word *girl*, is an evidence that its author counts on sharing systems of reference with her/his reader. This attitude is acceptable only in online and in presence interactions, in which interactants can solve misunderstanding problems that in written and offline communication would not be possible to do. The assumption of sharing systems of reference characterizes the text in terms of field, and this feature, together with the other frameworks already quoted above, keeps the text apart from the proposal of being a dissertation of the type expected by UOL.

At this point of our evaluation, given that what we can see in terms of the *tenor* of the text that it is interrelated to its field and its genre, it is possible to perceive the close relationship among the frameworks for meaning construction. Since the author has produced a text as if it were a conversation, assuming common systems of reference to her/his reader, s/he reveals that s/he has built a textual structural and content organization from the conceptualization of an *interlocutor*, not a *reader*, although it should have been the opposite, as expected from a dissertative written text.

It is not for other reason that, in some points of the text, s/he turns to her/his interlocutor, challenging her/him or requesting a change of attitude by the use of the injunctive *leave the girl alone*, and the suggestion *ask if it were about me would I accept that?* 

More specifically, the author shows that s/he conceptualizes an interlocutor with whom s/he interacts in an online and real time context, since s/he does not mention some important information to clarify the meanings of the text. Instead, the writer pressuposes that whoever is reading the text shares the same system of references related to the fact discussed, and that his/her reader may access that information without any difficulty. However, obviously, this presuppositions are not compatible with the genre required by the proposal; therefore, for the author to be minimally understood, his/her reader must accept the interactional condition established by her/him when s/he wrote the text – this is something

that may or may not occur, though. If the author is pleading to be accepted in a university or public position, this is a risk too great to be taken.

In relation to the features of the text concerning modality, we can also associate this framework to the others and build an important hypothesis about the problems of construction in written texts: together, they can direct the text to oral communication – the specific type of oral communication already known by students when they enter the school system in Brazil: an online colloquial, conversational oral communication. However, at the end of their school years, unfortunately, they do not seem to have broaden their knowledge about written texts. We believe that this problem persists because, among others, there is no didactic and systematic work to help learners develop some metalinguistic comprehension of some basic differences between oral and written communication, let alone the internal differences in oral experience, on one hand, and in written experience, on the other. Not by chance, some researchers establish that modality, or, in other words, the written or the oral nature of a text, is the central parameter, through which the other dimensions are adjusted (BERMAN; RAVID, 2009).

This type of reasoning is reinforced by the fact that the most important structural problems found in Brazilian students' written texts are exactly those related to the lexical-grammatical characteristics that approximate their texts to the oral ones they are used to producing in their everyday lives. The teaching-learning of Portuguese currently practiced in Brazil is based on taxonomies and categorizations, which does not allow students to reflect about these issues. In fact, a proper metalinguistic discussion according to the perspective we are dealing with in this article has not been employed in schools either.

In the next section, we will analyse students' remarks concerning the text above and relate them to the analysis already employed.

#### Students' metalinguistic comments on the text Hypocritical Society

#### Methodology

The text chosen to be analysed in this paper was presented to 80 High School students of two private and two public schools in the city of Rio de Janeiro. Our aim was to discuss their metalinguistic perception about the text they had read. After reading the text, students' should have answered the following question: "If you were a Portuguese teacher, what kinds of comments would you make in relation to that text?". There was a supposition that students would consider themselves in the place of their teachers since they are responsible for framing all reflections and thoughts about language in classrooms through questions intended to motivate students to focus on every metalinguistic statement present in the text.

Our interpretation of their answers will be done according to the following perspectives:

- 1) The frameworks for meaning construction;
- 2) Their metalinguistic capacities, which are pre-requisites for the identification of these frameworks.

## Analysis

- 1) In terms of the frameworks for meaning construction: We can detect, in a quantitative manner:
- a) Register: framework related to a quite large enough quantity of answers 20 students made comments of this type. The terms "colloquial" and "slang" appeared in 17 answers. This can be an evidence of the focus on linguistic variation in Portuguese teaching lessons; besides, some of the comments reproduced below take into account the type of vocabulary used in the text:

"Excessive employment of slang."

- "Employment of non-standard words."
- "Excessive colloquial language."

"Ocasionally, he used slang."

"Some slang is unacceptable."

"There are many punctuation errors and some slang, such as "auê" (Eng. "fuss") and "pra" (Eng. "for"), words which are not allowed in the standard norm."

"Slang, inappropriate to be employed at ENEM, a University entrance exam that requires formal language."

"He used inadequate characteristics, slang."

"I would consider it an informal text, and I would indicate some words such as "pra", which is without questioning the informal variation of "para" (Eng. "for")."

"We have Portuguese mistakes and some kinds of slang." "There are many grammatical mistakes, such as wrong words."

On the other hand, the number of comments on the register can also reveal students' tendency to observe and conceptualize the text in relation to the lexical level regardless of its structural argumentation and clause combination. Thus, observing slang and coloquial uses of language, phenomena quite evident at the lexical level, will be very easy and accessible to students, since reflecting on words is not hard for them. Yet, they were not able to reach higher levels of

analysis as argument structure and clause combination. This idea is reinforced since no one mentions the use of coloquial language structure in other levels of linguistic structure beyond the lexicon, for example, in the sentences "nobody has nothing to do with that" and "people overlook".

b) Genre: only one mention:

"Comments would depend. Is it a text to be disclosed in what kind of media? And by whom? That would make some difference, because even though it is easy to understand, there are indeed some considerations, but, for example, if it is a text with the opinion of a common citizen on Facebook, the text could be more acceptable (or partially). But, for a serious newspaper, it should have been produced more carefully."

This single mention is a fact that receives our attention because it is very strange that students make silence in relation to genre, since the national curricular project of Portuguese teaching-language in which text genres are the focus of classroom teaching has been proposed for many years now, despite the conceptual perspective ascribed to them.

*c) Modality*: likewise, there was only one comment pointing to the inadequate structure of the text:

"The text has only one paragraph, besides some punctuation mistakes, and possibly addresses something that would be spoken."

d) Tenor and field: there were no comments related to these frameworks, which means that students were used to the type of interaction proposed by the author, and for that reason they accessed the system of references employed by the text. From this point of view, we can say that they were engaged not as text readers, but as its interlocutors, having in mind the ideas conveyed in the text while agreeing, disagreeing, and criticizing. They argued whether its opinions were ethically pertinent, excessively critical or not. Among 80 students, 44 fit this profile. As they positioned themselves as interlocutors. they acknowledged the author's interactional proposal without noticing that, as a written matter, the text did not present the necessary basic information to become satisfactorily readable: they even conceptualized the image of the "girl" that the author did not present properly. Concerning this issue, many teachers describe the students's astonishment when they are asked about missing information in their written texts: "But you already knew that...so, I did not have to write that down..."

2) In terms of metalinguistic capacities in general

Most of the students' comments referred back to the descriptive principles held dear by traditional Portuguese teaching-learning. They are form errors such as punctuation, orthography etc. Interestingly, 14 students mentioned that punctuation, orthography and agreement problems in the text caused its coherence problems. Their action can reveal their attempt to connect the contents they have being studying in school, which is an intelligent action that teachinglearning didactics should acknowledge and take into careful consideration:

"The ideas presented are a little confusing, maybe for the lack of commas and adequate punctuation."

"The text has punctuation errors that make it incoherent."

"The girl who wrote it runs away from the theme and shows a certain confusion at employing words, maybe because of punctuation errors."

"The lack of punctuation makes the text complicated and hard to be read and understood."

"It is necessary some punctuation to grant some coherence to the sentences."

The students who observed semantic problems in the text described them as superficial errors. They might have detected other mistakes, but, because of the lack of conceptual resources and apparatus that should have been provided in their schooling, they could not verbalize their impressions. From this supposition we can state that the students might have had some difficulty while reading the text, and handled it with the precarious tools their schools offer them. Despite the effort in offering a better quality Portuguese teachinglearning than the one that students received before the PCNs, these resources still constitute its conceptual basis and influence their traditional comments, without any mention to text genres.

We have previously seen that 44 students have positioned themselves as interlocutors of the text *Hypocritical Society*, and not as its readers, by discussing the author's ideas and interacting with its contents, instead of evaluating its linguistic aspects. In other words: instead of focusing on its metalinguistic dimension, which would have been an attitude proper of a language teacher, students observed it as an object-language, that is, in its transparency, taking for granted both the linguistic forms employed in the construction of its meanings, and the way its contents fit the textual genre required in the proposal. Thus, they did not grant the text the necessary opacity for a metalinguistic observation, which is the specific cognitive action for a text analysis.

Most students have shown not to know how to behave cognitively before a text, which requires them to relate its lexico-grammatical aspects to its intended enunciative insertion. When it comes to knowing the language, students do not know how to metalinguistically analyse the text they are observing. This recognition involves the aspects discussed by Rodrigues (2005) and quoted throughout this paper, and is part of what should be taught in school, so that students develop autonomy while reading or writing texts produced and interpreted in and out of school. Without learning and mastering this skill, they will not be able to identify the frameworks for meaning construction, neither when discussing them, nor when reading or writing them.

In sum, concerning the students' metalinguistic knowledge, we point out that the frameworks for meaning construction that the students were able to detect in the text *Hypocritical Society* are mostly related to register. This can be justified by the ability they employed while observing the linguistic materiality of the text, that is, they were limited to analysing the words.

#### **Final remarks**

These final remarks begin with two important claims: the first one is concerned with our proposal of frameworks for meaning construction as we do not intend to cover all the possibilities of metalinguistic action. Our concern is with only those regarded as close as possible to the lexical-grammatical language organization. For example, a framework for meaning construction more properly related to the concept of multiliteracies (ROJO, 2012) refers to the media in which the texts are presented. In the discussions about metalinguistic development, the perceptions of the different modes of reading that come from the new communication media is an important matter. Therefore, their cognitive implications can and must be object of study, but the comparison among them does not include the grammatical organization of texts; for this reason, the *medium* aspect was not considered in this paper.

The second important claim is that we do not intend to identify or describe any framework that takes into account all types of genres. Although every mode of language, in terms of its grammatical constitution, can be inserted in the frameworks proposed in this paper, the plurality and open-ended nature of textual genres makes it impossible to consider a unique framework that can fit all of them. Moreover, each framework involves textual characteristics in a continuous manner, and new aspects can be added when new discursive possibilities emerge. For example, when it comes to tenor, a framework associated to the relationships that people involved in a communicative event establish from the online and real time situation to the absolutely offline and desynchronized one, there is a myriad of interactional conditions that will influence the linguistic constitution of texts, due to the creation of new communication media and technologies.

For these and many other reasons, the conceptual proposal we have presented is open to new and more refined possibilities of metalinguistic reflections and debates. Obviously, the textual analysis based only in the frameworks for meaning construction is not enough for a good-quality language teaching-learning environment. However, this approach can be useful to draw students' attention to the fact that dealing with the linguistic production of a text is more than just worrying about its lexical-grammatical aspects. Besides, the proposal of the link between linguistic materiality and enunciative dimension can contribute to give sense to those countless descriptions, mostly the syntactic ones, which students have to deal with during their school years. As a result, these actions can lead us to fulfill the PCNs' requirement that the mother tongue teaching-learning should involve the comprehension and production of texts representative of social practices. What this paper shows is the imperious need that these actions be followed by a metalinguistic awareness not only connected to the frameworks for meaning construction, but also connected observing everyday uses of language.

All in all, we do expect that our proposal has accomplished the task of showing that any discussion about language teaching-learning must undertake language as an experience. Didactic actions coherent with this attitude must include, regardless many other accomplishments, comparisons among different genres, registers, tenor, fields and modalitites, in order to promote metalinguistic development. Furthermore, one must abolish grammar studies based solely on taxonomies and activities that do not focus on metalinguistic development, because such tasks do not allow students to see texts as lexical-grammatical accomplishments of discursive properties. The students' comments analysed in this paper could have been much wider, more systematic, and more refined if they had had the opportunity to understand how, beyond the analysis of grammatical data in a text, it could be evaluated as a discursive fact.

Several authors have been legitimating metalinguistic development and metalinguistic knowledge as constitutive of literacy in mother tongue and foreign language, as it provides a strong metalinguistic attitude towards all types of linguistic actions (BIALYSTOK, 1986; FRANCIS, 1999; RAVID; TOLCHINSKY, 2002; HOMER, 2009; BERMAN; RAVID, 2009). The issue that this premise entails is that metalinguistic perceptions cannot be left out of the language teaching-learning curricular projects. It is mandatory to develop a methodological work and a content organization intended for the metalinguistic comprehension of the conditions of text production of different genres. It should also include several investigations dedicated to motivate learners to think about the linguistic mechanisms crossed by the many and multiple possibilities of using language: different modalities,

genres, registers, tenors and fields, observing, in a reversed movement, how these mechanisms make evident the frameworks presented in this paper.

In their everyday life, people engage in metalinguistic actions of many sorts: they plan, select, compare, correct and improve what they want to say. However, only the systematized and oriented practices with language, those of the kind that must be implemented in the school, will allow learners to build generalizations about language construction in a metalinguistic level. This is a necessary capacity for their autonomy as language users, in many semiotic dimensions. For this purpose, the initiative of promoting metalinguistic reflection as a constitutive feature of language teaching-learning is a very important step to help students overcome the limitations of their knowledge about their uses of language. As we have seen in this paper, these students' knowledge does not go beyond its formal and superficial aspects, features and phenomena, which are information legitimated in the traditional school. It is a very serious conclusion to realize that fifteen years of PCNs have not produced any difference in their learning practices.

It is fundamental and indispensable for students to take the text as the axis of observation and of language study, and from this axis they are able to recognize further levels of analysis. It is also fundamental for them to proceed to the interconnection of the two language facets as a discursive phenomenon. Otherwise, as we have considered in this paper, the best that we will have in schools is what we have already detected now: students without any comprehension of what constitutes the act of reading a text, and with a structural perception limited to its lexicon and to its linear and superficial configuration. In other words, they neither observe the text in its discursive facet, reflecting on its metalinguistic aspects, nor produce high quality written texts.

The focus on the development of metalinguistic knowledge in school should be part of didactic projects to help people consciously make their linguistic decisions when they speak and write, having in mind what they want to communicate and with whom; what level of (in)formality they should use, and with what purpose. These capacities will make them better and more mature users of language in the countless frameworks of meaning construction in their linguistic action.

GERHARDT, A. F. L. M. O conhecimento metalinguístico, os enquadramentos da construção dos significados nos textos e o ensino de língua portuguesa. *Alfa*, São Paulo, v.59, n.2, p.225-248, 2015.

 RESUMO: Propõe-se o conceito de enquadramentos da construção dos significados nos textos, referentes às dimensões das experiências comunicativas das pessoas, manifestadas na estrutura léxico-gramatical dos textos: gênero, registro, teor, campo e modalidade. Observamse esses enquadramentos na análise de uma redação dissertativo-argumentativa que não corresponde a nenhuma das expectativas esperadas para a natureza do material solicitado pela proposta de escritura. O mesmo texto é apresentado a 80 alunos do Ensino Médio, e a observação dos seus comentários revela a qualidade dos seus conhecimentos metalinguísticos: a compreensão dos níveis de análise linguística limitada à palavra; a percepção do registro, mas não dos outros enquadramentos; a limitação aos aspectos lineares-superficiais e rudimentares do texto: ortografia, pontuação etc., e a visão do texto na sua dimensão língua-objeto, e não metalinguagem. A análise suscita observações acerca das condições atuais do ensino de língua materna no Brasil em termos dos saberes escolares que os alunos têm construído sobre a linguagem.

 PALAVRAS-CHAVE: Gêneros discursivos e textuais. Desenvolvimento metalinguístico. Ensino de língua. Produção textual.

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## THE PORTUGUESE CLASS: ON (NON) FUNCTIONAL EXPERIENCES<sup>1</sup>

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- ABSTRACT: This article broaches the Portuguese class, discussing school language education for social uses of writing. It is an approach based on reflections on *(non)* functionality of Ponzio (2008-2009) which aims to answer the following question problem: 'With regard to Portuguese classes in Basic Education classes located in vulnerable social environments, is it possible to test the elaboration of a didactic process in the teaching of the social uses of writing which is not limited to *functionality*? The theoretical basis is the philosophy of Bakhtin's language, the language of anthropology of literacy studies and the psychology of language of Vigotskian substantiation. This is a case study whose data were generated by means of documentary research on experiences of the Institutional Program for Introduction to Teaching Pibid/Capes –, whose analysis has an interpretive basis. The results indicate possibilities of a didactic action which, taking advantage of the *functionality* that characterizes the school system and the new technologies, open spaces to education for the *global* market .
- KEYWORDS: Teaching and learning of native language. Social uses of writing. (Non) functionality.

#### Introduction

Possibly one of the greatest challenges today in Portuguese classes - and surely in other classes of many school subjects – is embarking on the elaboration of a *didactic process* (HALTÉ, 2008) that relies on student engagement in the proposed interaction (MATÊNCIO, 2001). Additionally, there is also the challenge that this same process converges with the conception of language that is dear to us and with the conception of *subject* intrinsic to it (GERALDI, 1991; BRITTO, 1997); that is, a conception of *language* as a *meeting<sup>2</sup> of the other word with the* 

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<sup>&</sup>lt;sup>2</sup> Meeting, for Ponzio (2010; 2013) implies what the author calls the absolute otherness, based on the concept, also his, of the unindifferent differences. We are sure that such a relationship between the self and the other

*word of the other* (PONZIO, 2010) and a conception of the historicized subject, which is constituted in the relation to otherness (GERALDI, 2010b). And it is also challenging to us, the comprehension that in our condition - as teachers - of more experienced interlocutors, we focus on the representations of the world of our students (VIGOTSKI, 2000), in Portuguese classes that are composed of several *literacy events* (HEATH, 1982), in which we have the task, by the logic of ethics of the profession, of 'horizontalizing' (KALANTZIS; COPE, 2006) the *literacy practices* (STREET, 1988) of our students.

By registering these challenges in the previous paragraph, we make reference, simultaneously in this record, to authors who lay the foundations of our discussions. These are theoretical approaches that we have been proposing to put into dialogism - in what we have been calling *conceptual symposium* (CERUTTI-RIZZATTI; MOSSMANN; IRIGOITE, 2013); approaches we understand on a historical and cultural basis, and which we've been negotiating in the studies that we have undertaken in our research group, the 'Written culture and schooling' group, under the 'Center for Studies in Applied Linguistics' - Nela – at the Federal University of Santa Catarina. This proposed dialogism is established between the philosophy of Bakhtin's language, the psychology of language of Vigotskian and the language of anthropology of literacy studies.

Thus, based on the challenges presented and in the light of the *conceptual* symposium mentioned, it is our purpose, in this article, to broach the topic of the *Portuguese class*, having the (non) functional nature of teaching as a delimitation. Therefore, we start from the (non) functionality concepts proposed by Ponzio (2008-2009), and we move to answer the following research question: In the case of Portuguese lessons in Basic Education classes located in environments of social vulnerability<sup>3</sup> is it possible to test a didactic elaboration process<sup>4</sup> – in

takes place only within the scope of the so-called absolute otherness and, therefore, within that which the author understands as nonfunctional, a concept that will be the subject of discussion in this article. We wish, however, to extend the concept of meeting covered by Ponzio also to relationships he would point out as relative otherness - in this case, relationships between teachers and students - and we do that exactly to propose that the Portuguese class be created on the unindifferent difference, that is, the difference that considers uniqueness and not the individualities. This discussion will not be addressed in this article in the depth it requires due to the limits of a text in this genre of discourse, but we make it a topic briefly in one of the sections to anchor the axis on which the article is based.

<sup>&</sup>lt;sup>3</sup> Based on Érnica and Batista (2011), we understand by *social vulnerability environments* those areas that tend to establish relations of self-regulation among public schools serving the same socioeconomically underprivileged clientele, a process in which one of the establishments creates 'filters' through bureaucratic requirements, such as submission of documents, parents' signature, delivery of pictures and the like, which results in a surreptitious selection process of students, determining that those in the most precarious situation with regard to family organization, and economic conditions end up by being 'poured off' from there and received by establishments with a less strict functional structuring and, in most cases, with a weaker pedagogical action.

<sup>&</sup>lt;sup>4</sup> Based on Halté (2008), we understand by didactic elaboration, the process that in the teacher action, syncretizes scientific knowledge, reference practices and expertise, and not just limited to the mere transposition of scientific knowledge to the school sphere.

the teaching of the social uses of writing - which is not limited to functionality? Our goal, in convergence with this problem/question is to analytically describe possibilities that we have seen for this, in two of these classes, doing it under an interpretive look (MASON, 1996).

For this purpose, this article is structured into three content sections: in the first, we present the theoretical basis for this discussion; in the second, we provide a detailed description of methodological procedures; and, in the third, we present and analyze empirical data from experiences of our research group at the interface with the extension, in seeking to answer the problem/question. This is an approach, according to Ponzio (2010; 2011), committed with the *Language of listening*,<sup>5</sup> in the case of our group, it is committed to a Language with these contours but with an emphasis on the vulnerable social strata, which tends to be characterized by the restricted access to a full education. That is the political dimension of our research commitment.

# Theoretical anchoring in *symposium*: looking towards the use of language in the *meeting* between historicized subjects

Some concepts are essential for the discussion that we propose in this article, and we occupy ourselves with them throughout this section, doing it under the perspective, we reiterate, the management of the *conceptual symposium* (CERUTTI-RIZZATTI; MOSSMANN; IRIGOITE, 2013) mentioned earlier. We highlight then, in the light of this symposium, relationships which we regard as relevant to the focus of this discussion.

#### The Portuguese class held as a meeting

Ponzio (2013) is of the opinion that relations between the *self* and the *other* that occur in the context of what he calls *absolute otherness* are those in which there can be no substitution of any of the interactants: love relationships are good examples. In such cases, singularities are needed – there are no individuals, but unique subjects, who are irreplaceable and not exchangeable. It refers to what the author calls unindifferent differences, that is, the difference exists, but we cannot be indifferent to it, because we are dealing with unique subjects, historicized in their experiences and idiosyncrasies rather than with individuals encompassed in large macro-sociological categories - for the purposes of this article, age, grade, social class, anthropological genre and the like.

<sup>&</sup>lt;sup>5</sup> For the purposes of this article, we understand by *linguistics of listening*, that it has the language as its object of study taken at the meeting between *subjectivity and otherness*, which requires the *auscultation* addressed by Ponzio (2010), based on responsive understanding proposed by the Bakhtin Circle.

Therefore, with awareness that relationships between teachers and students are in the order of *otherness* - that is, in theory the interactants can be replaced, because these are individuals - we advocate here in favor of the contrary: it seems that the Portuguese classes, as well as classes in general, need to become a relationship of a different order to actually signify and re-signify in/the experiences of the subjects. And if it matters who the subjects are, and if the fact that they are different does matter, because these differences are relevant and not only distinct among them, then it seems that we are dealing with *absolute otherness*, no longer *relative*, and with *unindifferent differences*; therefore, we are dealing with *meetings*.

It is a matter of focusing on intersubjectivity, on uniqueness and on mobility (GERALDI, 2010a) that the *meeting* brings to the interactants, because we understand that such mobility that occurs in the particular characteristics of subjects are the reason why the Portuguese class exists - or any educational process - which also stems from our readings of Vygotsky (2000) about relationships between what is interpsychological and what is intrapsychological – that we prefer to treat as *intersubjective* and *intrasubjective* (based on GERALDI; FICHTNER; BENITES, 2006) - and about meaningful learning. For this purpose, we base ourselves on the Vigotskian concepts of sociogenesis and microgenesis (VIGOTSKI, 1997), aimed at understanding the historicity of the development of subjects in the situated context of interpersonal relations that they establish throughout their training.

With regard to the notion of *meeting*, Ponzio (2010, p.40) believes that "[...] there is no other first word for each one and then the meeting of the other word in which one addresses and of which requires listening". He continues: "There is no such thing as before one self and the other, each one with what he or she has to say, and then the relationship between them." And, most importantly for the purposes of this article: "The relationship is not *between* them, but it is precisely what each one represents in the meeting of the other word with the word of the other, and how it would not have been and probably will not be out of that meeting". Therefore, the *meeting* is not 'between' them but 'theirs'.

And we transform ourselves in this relationship, as the author suggests, when writing: "The value of the individual's word is added and enriched by the participatory understanding of the other's word that emphasizes all its precariousness, limitation, temporariness and fugacity; emphasizes its sense of lack, its possibility of absence; and its inseparability [...]", (PONZIO, 2010, p.45-46). Thus conceiving, we propose to address here the Portuguese class, as a *meeting* between teacher and students, subjects who carry their historicity, in the already transcribed understanding of Ponzio (2010), "that which each one is"; hence the singularities that make them irreplaceable in the *meeting*.

However, we acknowledge that this *meeting* we discuss here is historically outlined with defined purposes within the scope of the *functionality* of relationships of the educational institution: the interpersonal relationships that occur therein have institutional training objectives; in the case of the Portuguese class, it has language education objectives.<sup>6</sup> In any case, when we propose to use *meeting* for a dialogue acknowledged as *functional*, we do it exactly with the purpose of putting into question the *unindifferent differences*, about which this dialogue has been historically established.

# The horizontalization of the *literacy practices* of students: taking up points already mentioned

The understanding that we record in this section broadly takes up outlined concepts that we've seen in the aforementioned research group to which we belong, through which we take the *Portuguese class meeting* with regard to writing, designing it as a set of *literacy events* - based on propositions of Heath (1982), Barton (1994) and Hamilton (2000) -, and understanding such *events* as those situations in which the written modality is part of interpersonal relations, playing a specific role therein, whether that role is a prevailing or a timely one. It is also a *meeting* in which each *event* has historically consolidated purposes: according to Kalantzis and Cope (2006), to horizontalize the *literacy practices* of students. And, understanding *literacy practices* based on Street (1988, 2000), as the set of experiments, values, experiences about/with writing that historicizes subjects, this purpose of the school action implies knowing and respecting these *practices* in their vernacular design and acting in the sense that they become horizontalized, so that students should live other experiences that are not given to them in their immediate social inclusion.

Therefore, it is important that, in the *Portuguese class meeting*, teachers routinely exercise the act of knowing the *literacy practices* of their students - their singularities - judging from their condition of interactants (HAMILTON, 2000) in *literacy events* that historicize every *meeting*. And, knowing them gradually with greater accuracy, it is for the teacher to focus on them, seeking their horizontalization. Here, based on Vygotsky's (2000), the teaching function has a skilled dialogue making it possible for students to grasp the issues they have not yet lived, known, or experienced.

<sup>&</sup>lt;sup>6</sup> Our focus is not to immerse in the spectrum of heated discussions about what is to *linguistically educate* speakers of a native language; what is of interest to us here, is to discuss the Portuguese class in the delimited scope of training for the uses of writing, but we record the explicit recognition that neither the Portuguese class, or the language education are restricted to a focus on the written modality. It concerns us due to being our object of research and, in the sections that follow, we will take the *meeting* from that perspective.

We therefore understand that the relationship between *vernacular literacies* and *dominant literacies* (BARTON, HAMILTON, 1998) is certainly the object of attention in the *Portuguese class meetings* because the *functional* action of the school, among other approaches, is to facilitate the appropriation by the students of uses of writing that, evoking the Bakhtinian thought, are historicized in big time, so that is given to them to choose between experiencing these uses only within the limits of its manifestations in the 'immediacy' of time and space, or also to do it in interrelation with other times and spaces, in *big time*.

[...] A work cannot live in future centuries if it doesn't bring together, in a way, the past centuries. If the work was born all and fully today (that is, in its actuality), and were to give no continuity to the past and keep a substantial bond with it, it could not live in the future. All that belongs only to the present dies along with it. (BAKHTIN, 2003, p.363).

We will not concern ourselves here with discussions about what we understand as *vernacular* and *dominant literacies*, because in our group, we did this with Cerutti-Rizzatti and Almeida (2013). We will not also be discussing the complexity of a teacher's action to deal with the relationship between what appears to be *vernacular* and what stands as *dominant*, because also in our group, we covered this aspect with Cerutti-Rizzati, Pereira and Pedralli (2013). Our purpose in this article is to reflect on relations between the appropriation of the uses of writing seen as *dominant* and the right of subjects to non-functionality, because we understand that the appropriation of the uses of writing that transcend the 'immediacy' of time and space largely depends, with respect to such uses, on the exercise of that right.

#### The appropriation of the dominant literacies and the right to nonfunctionality

Ponzio (2008-2009), recognizing that the lexicon of Italian language does not record the words 'infunzionale' and 'infunzionalità', understands that life is not life without the right to what he calls *nonfunctionality*. The author conceives *nonfunctionality* as that which stems from the lack of interest, utilities and defined purposes. To address the concept he often uses the example of affective relationships. He writes:

Ciascuno di noi sa che è alla propria infunzionalità che vorrebbe che l'affetto altrui fosse diretto. In un rapporto che ci coinvolge fortemente, nel senso che è un rapporto decisivo per noi – non un rapporto di lavoro – un rapporto decisivo nel senso affetivo, nel senso del volere bene a qualcuno e del desiderare che anch'egli voglia bene a noi, sappiamo con certezza che il valore di questo rapporto consiste nel suo essere "desinteressato". (PONZIO, 2008-2009, p.32, author's emphasis)

This is a concept that stems from a criticism of the author to the fact that everything today can become merchandise, including the so-called *immaterial labor*, along the lines of what we do in universities. The criticism of the author focuses on how the university operates in favor of *functionality* with a credit system which results in the computation of hours, just like the logic of the labor market, which pays per hour. Universities, Ponzio (2008-2009) notes, are intended 'to qualify for the labor market': graduates must be able to 'sell their immaterial labor'. He observes in his criticism that today, everything can be turned into merchandise.

This discussion leads us to a reflection that appears based on considerations of Silvestri (2013) on the 'modern concentration camps'. According to him, devices like Facebook act as true concentration 'stables' of human herds, which are addressed in ways previously outlined for the purposes of the market, not being for free that managers of such devices today constitute the largest fortunes in the world and fight among themselves seeking to propose new 'stables' that encourage 'human herds' to migrate in droves. We understand that the transition Orkut - Facebook seems to be an example of a consolidated migration as such, opening the way for others that are foreshadowed. Ponzio (2013, p.16) warns us about this when he records that "[...] a livello mondiale, nella globalizzazione attuale, [...] a un mercato universale corriponde una comunicazione universale che veicola gli stessi bisogni, le stesse esigenze, gli stessi desideri, gli stessi immaginari".

It is in the understanding of this thinker that a time when rushing and showing off were 'rendered' human needs for the purposes of a global market. In this wake, we believe that devices like Instagram and Twitter, alongside Facebook, are examples of these new 'concentration camps' and we add, fields that unlike *Auschwitz-Birkenau*, do not retain subjects by force of arms, but by the exacerbation of narcissism, exhibitionism, vanity, voyeurism and the like. Today we are a civilization marked by haste and self-exhibition.

Our discussion does not, of course, dismiss the fantastic revolution of what social networks mean in the manner of how the global interaction happens today, transcending a relationship of 'one-to-many', as it took place in the pyramidal configuration of mass communication, to the configuration of 'many to many', as it occurs with the communication network (DANESI, 2013). We acknowledge the fantastic progress that this represents for more symmetric sociopolitical relations, which are examples of the recent episodes of popular mobilization in the history of Brazil and the world: there is no charismatic catalyst leader; the crowds self-

organize in the relationships between individuals. As a social phenomenon, however, there are many constituent faces of these networks, among which there is the one we deal with here: a strong commitment to a *functional* logic of the global market.

And, in this context, our students are characterized by the need for constant changes in focus of attention, evidence of that seems to be in the manner of how they divide their attention between multiple focuses at the same time, and change such focuses with a speed that adult immigrants in new technologies find difficult to understand. Programmers of massive television and film attractions – the mass media of the 'one-to-many' logic (DANESI, 2013) - have dealt with this challenge in transforming plots and scenes, so that each of the focuses do not take more than two or three minutes, giving place to the next focus, because any extension entails risks of losing the viewer's attention. This is a search, by these media, to approach the accelerated and fleeting logic of the network format.

According to Ponzio (2008-2009), we can understand this as the architecture of the global labor market: keeping changing in order to remain on the market. This market is still characterized by the need to force, as soon as possible, the obsolescence of property already acquired by the consumer, in such a way as to promote the acceleration of the movement of goods: a new software does not 'run' on the hardware that we have; therefore, we need to change both, which leads to the multimillion partnerships between producers of one and other products<sup>7</sup>. This process seems to be twofold: while it is reorganized in attention to these new behaviors, it ratifies them – if it does not produce them - with their commercial propositions.

The consequences of these contemporary changes clearly seem to focus on the school sphere and, with regard to language education, with a focus on writing, seem to lure us into a dangerous training case for *functionality*. We understand as being necessary, here, a longer reflection on this issue and, therefore, we consider initially that studies of *literacy*, especially with Street (1984), have made us realize historically how the uses of writing were associated with erudition, the reading comprehension as a synonym for reading literary works, a sacrosanct and elitist posture about the uses of writing, kept, often, from the condition of humanity inherent to the capacity for abstraction of the real, those preliterate societies or even individuals who didn't take over the writing systems.<sup>8</sup> *Literacy* studies certainly constitute a substantive contribution to a new way of dealing with writing also in the process of schooling and have proven to be fertile in shifting

<sup>&</sup>lt;sup>7</sup> An example of partnership between Nokia and Microsoft (Available at: <a href="http://gizmodo.uol.com.br/microsoft-e-nokia-oficializam-parceria/">http://gizmodo.uol.com.br/microsoft-e-nokia-oficializam-parceria/</a>. Access in: 30 mar. 2015.) and Samsung and Google (Available at: <a href="http://www.tudosobremktdigital.com.br/google-e-samsung-fecham-parceria-contra-apple/">http://gizmodo.uol.com.br/microsoft-e-nokia-oficializam-parceria/</a>. Access in: 30 mar. 2015.) and Samsung and Google (Available at: <a href="http://www.tudosobremktdigital.com.br/google-e-samsung-fecham-parceria-contra-apple/">http://www.tudosobremktdigital.com.br/google-e-samsung-fecham-parceria-contra-apple/</a>. Access in: 30 mar. 2015).

<sup>&</sup>lt;sup>8</sup> An example of studies of David Olson, Patricia Greenfield and Angela Hildyard, mentioned by Street (1984).

conceptions in this field in the school environment, mainly in Brazil, based on the several publications on the subject by Angela Kleiman.

If, however, this contribution is substantial, we must take into consideration that, as tends to be the case when academic theories gain scientific popularization (BORGES NETO, 2004), in this case in the school environment, understandings of all kinds seem to derive from these same theorizations. Britto (2012), along these lines, draws attention to the risk of embarking on a writing conception very closely linked to the everyday *functionality* when we exacerbate our look towards this same daily life. However, we understand that it is up to us to highlight this issue, which we consider delicate, both for the possibility of resuming an understanding of the uses of writing very focused on learning - than Street (1984) and Kleiman (1995) contributed to redeem us - and the possibility of disregarding this same learning in the name of a disproportionate attention to the *ecology of writing* in a corruption of the sense given by Barton (1994). And, in doing so, we often incur in what Street (2000, p.19) warns us not to do: "Nevertheless, I think the *ways* in which the term 'multiple literacies' becomes adopted at times falls into the trap of reification".

We like, in the seminal approach of Barton (1994), the metaphorical look of *ecology* because it raises smooth harmonization; therefore it cannot be held hostage to excesses. The situated uses of writing - in the historical-cultural, socioeconomic and political logic under which they are produced in each of the different human groups – do not compose hermetic universes to changes, because it depends on the movement of historicizing itself; as far as they don't comprise universes so open to the exotic worlds that they lose their own historical references. This *ecological* look - trying to escape the corruptions - pleases us because, in our view, it is constructed on the basis of balancing,<sup>9</sup> which certainly is not due to the impositions of others, but to negotiations taking place in interpersonal relations within those groups, in the healthy tension with what is external.

Balancing these views seem to be the challenge of the school, under penalty of bowing – in the metaphor that Saviani (2008) takes from Lenin - to the opposite side of erudition and - drawing upon the criticism of Ponzio (2008-2009) made on a broader plane of human life - falling into the trap of *functionality* that serves the global market. Let's clarify it: the haste of the focus of attention of our students and the way they deal with new technologies challenge us, which like our earlier discussion, causes changes in the market while at the same time endorses them. Thus, before the incommensurability of these challenges, we find ourselves pressed to organize our classes based on new technologies, on the understanding that adapting Facebook, Twitter and similar to strategies or teaching resources, for

<sup>&</sup>lt;sup>9</sup> The use of *balancing* here aims to denote *movement*, which does not seem as evident in the word balance; we distance ourselves, in that use, of any relations with the Piaget's thinking.

example, we would be moving towards, in fact, the *meeting* with our students in order to obtain a minimum interactional convergence that makes the class happen (IRIGOITE, 2011), because in theory we would be 'using their language'.

In this eagerness of 'technologization' as synonymous with contemporary school action, again, not uncommon, we run into another of the slip-ups that Street (2000, p.21) warns us about:

In developing a multi-literacies view, then, it is important to guard against a kind of determinism of channel or technology in which visual literacy, in itself, is seen as having certain effects which may be different from computer literacy. The focus would then be on the mode, on the visual media and other kinds of channels are actually given meaning. It is the social practices. I would want to argue that give meaning and lead to effects, not the channel itself.

Perhaps, then, we should pay closer attention to the social practices that have electronic devices as mediators and not overestimate such devices in themselves. Possibly, the seemingly intense entry - a data that requires further confirmation in specific research - from devices such as Facebook in our Portuguese classes deserves our attention, while, for example, electronic devices like Kindle and the like, which are suitable for reading materials with a greater density of content, freeing us from the discomfort of the light from computer screens, are still so uncommon in our search for modernizing classes, which obviously has more complex socioeconomic developments.

Anyway, it's worth asking: would such devices imply a time and a gathering that we are no longer used to? Today would we become trapped by the need to *post* things quickly and also to access quickly the answers of others in a rush? Would we have to learn again that to *answer*, as Bakhtin (2003; 2010) wishes, can also be done in silence [of the gathering]? If we think about how we read in-depth texts on ordinary computer screens, with several 'windows' open in parallel, so as not to lose our 'response times' to the demands of another person's haste, it seems that in fact this 'gathering' is an impracticability in contemporary life, in which 'to disconnect' often implies a sense of 'remaining on the sidelines of ' a time of rapid changes.

The question to be taken into account is to what extent we are not reifying the concept of *literacy*, against which Street (2000) warns us, and taking this concept to prioritize the electronic devices themselves - as hostages to a postmodern behavior – and, in occasional exacerbation of this behavior, failing to examine more carefully the nature of social practices to which such electronic channels lend themselves to. Still in connection with this issue, to what extent don't such practices serve a *functionality* that matters to the global market? The entry of devices such as blogs and Facebook at school is on a dangerous slide: from one side, the need to make our classes converge with advances of humanity as civilization and the great benefits that this means from several points of view; from the other, the risk of doing it to service a voracious global market that penetrates these same advances.

Today, in the light of discussions of Ponzio (2008-2009) for human life in its broadest sense, we understand that we must, in the *functionality* of the school action, enable the knowledge of the sacred right to the *nonfunctionality* to our students, which is implied, according to the author, in our human condition. In this discussion, he argues that the most basic terracotta pot, made by human groups from different cultural conformations, is not limited to the *functionality*, showing some sort of fligree ornament, completely 'unnecessary' for their intended functional purposes. Even when eating, food being the basic condition of human survival, the configuration of the 'dish' adds to the mere status of 'food to be eaten', so much so that the cuisine is historically nicknamed 'art'.

We understand that today, in Portuguese class, we walk toward a dangerous servility to what is functional whenever we exacerbate, in our approaches to writing, the 'necessary' uses for the rushed daily life of humans with an abbreviated retirement, attached to the 'immediacy' of everyday life and, above all, of a day by day with the configuration that we referred to earlier, based on Silvestri (2013), times of exhibitionism, narcissism, voyeurism, rush, superficiality and the non-deepening.

According to Ponzio (2008-2009, 2013) among the uses of the word - for us here, the written word – that which least lends itself to *functionality* is the use in literature, because such use does not fit the Orwellian logic of newspeak, which is based on the possibility of control of the tongue, on the absence of double meanings, a logic very close to *functionality*. We understand that when Street (1984) warns us of the need to look at writing from other angles, in order to see more than just the standards, he is possibly bending the rod to the other side in search of a necessary balance because it is inclusive. Perhaps, in the mistaken exacerbation already mentioned earlier, we are bending too much to the other side and again losing the balance in teaching actions, in the uses of writing in Portuguese classes, too committed to *functionality*: Facebook posts, pictures of Instagram, Twitter messages, entries to blog, the listings on hypertext, if not - also out of these devices - the recipe, the label, the classified ad and the like, in a list of genres of discourse - or, based on Geraldi (2010a), in their reifications – are establishing relationships of everyday 'immediacy'.

This undoubtedly concerns uses of writing that require a school approach in a Portuguese class that addresses social practices imposed by the written form, but we understand that *ecology* comes according to Barton (1994), there must be a place for the use of the written form in the exercise of the sacred right to *nonfunctionality*, like the literary expressions which have gained *big time* just because they are not established in response to a market for immediate consumption. According to Bakhtin (2003), as mentioned in the previous section, that which belongs only to the present dies with it, because in order for a work to earn *big time*, it needs to engage with the present and the past. When the uses of writing are restricted to serve the market, they tend to become trapped in the rush of the present and they do not win the horizon of the *big time*.

And we understand that the uses that gain the *big time* tend to do so by a movement of junction of voices, even if by homologations (PONZIO, 2008-2009), approaching them to the *official ideology* (BAKHTIN, 2009) and that reverberates the plane of human ontogeny (VYGOTSKY, 1997), which, in Cerutti-Rizzatti and Almeida (2013), we associate the *dominant literacies*. Still based on reflections by Ponzio (2008-2009, 2013), the literary word does not surrender to the Orwellian logic, because it is full of multiple meanings. Looking for opposing this Orwellian logic, we are concerned with what we believe to be a progressive loss of spaces in Portuguese classes in the meeting with the uses of writing that gained big time, often on the grounds that they are incompatible with the hurry to change the focus of attention, this haste to enunciate and respond to the enunciation of another, with which the *meeting* takes place by written means, because it is not face-to-face any longer; it is mediated<sup>10</sup> by technology.

If this reflection is undertaken minimally, it seems to us that, in fact, many of our Portuguese classes – as pointed out by Ponzio (2008-2009) in philosophical discussion about what makes a man today – are isolated in *functionality* that serves the labor market in the harrowing overall logic under which this market is established. There seems to be no more time for *anything*, for the lack of purposes and objectives, for 'disinterested' human meetings, for, finally, according to the author, what is essentially human and that characterizes man: the right to *nonfunctionality*. There is no more time because time is money. Ponzio writes (2008-2009, p.25, author's emphasis):

Oggi i giovani nell'università lo sanno: devono addestrarsi per il "mercato del lavoro", lasciando perdere e "giustamente" rifiutandosi essi stessi di apprendere tutto ciò che "non è spendibile sul mercato del lavoro" perché sono convinti che "il lavoro rende liberi".

<sup>&</sup>lt;sup>10</sup> Daga (2011), in the light of Vygotsky (2000), conceives mediation as corresponding to the psychological tool of symbolic mediation that provides humans with the intersubjective relations between them: the words. As mediation conceives instruments that provide this same interaction, but in the range of electronic devices. We share this insight because we understand that involves media coverage of a substantive difference from the point of view of how they are shaped culturally.

Time is a condition of competition in the global market [of human relations], which requires that we plug-in the haste of enunciation and of the superficial response, which seems illustrative of the determination that we enunciate in 140 characters;<sup>11</sup> after all, the market for electronic devices probably does not expect more than that of our interpersonal relations. To deal with this new reality in the school environment seems to be a substantive challenge for whose confrontation we must build new intelligibilities, an attempt that we have rehearsed in the sections that follow.

#### Methodological procedures: in search of ways for new understandings

In this section we will deal with registering the methodological procedures underlying the argument made in this article, which seeks to answer the aforementioned question-problem, which we resume here: *In the case of Portuguese lessons in Basic Education classes located in social vulnerability environments, it is possible to test a didactic preparation process – in the teaching of the social uses of writing - which is not limited to functionality?* It is an approach of a qualitative interpretative nature (MASON, 1996), typified as a *case study* (YIN, 2005; ANDRÉ, 2010). The search field is a public school in Florianópolis - SC - to students who are characterized for belonging to socially vulnerable strata (ÉRNICA; BATISTA, 2011). We syncretize, in this approach, actions that interface teaching - Pibid<sup>12</sup> - Portuguese, maintained at the Federal University of Santa Catarina with scholarships from Capes/MEC and coordinated by us from July 2010 to March 2013.

The *case* study is the work of a group of scholars<sup>13</sup> in two high school classes from the same school, in Portuguese classes, in search of ways to deal with the uses of writing of the *big time* with students characterized by the already mentioned haste and contemporary superficiality. Participants, in addition to the scholarships, are the students of the classes in question, interacting in the *Portuguese class meeting* with regard to teaching and learning the uses of writing in the *dominant literacies*.

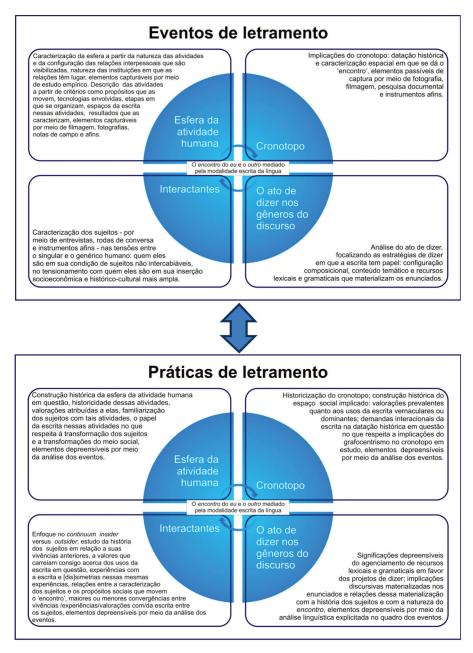
<sup>&</sup>lt;sup>11</sup> As it takes place on Twitter.

<sup>&</sup>lt;sup>12</sup> Scholarship program of the MEC via Capes, whose goal is to qualify the training process of graduates in different areas for teaching, anticipating their entry into the school sphere under the guidance of teachers from areas linked to universities.

<sup>&</sup>lt;sup>13</sup> The experiences that provided the basis for the data presented here, as mentioned in the opening of this article, result from the performance of the following scholars: Suziane da Silva Mossmann, Aílton Pereira Júnior, Natássia D. Alano, Aline Thessing and Glizauda Chaves; and took place at school with high school classes in the years 2011 and 2012.

For the generation of the data analyzed in the following section we use as a base the documentary research, understood as a strategy in favor, here, of the case study and not as a kind of research in itself (YIN, 2005). The documents that we use are the design of performance in classes and lesson plans produced by these scholars. We have also used the documentary memory of classes planning meetings and written notes made from evaluation collective discussions of those classes after their completion, documents we have produced or to which we had access in the role of coordinating the work performed. These two classes were attended in different years, but we combine both experiences here because of the focus of the article; thus, the *case* study brings together the experiences of two groups, but its uniqueness occurs because of the experience of dealing with the *nonfunctionality* in the same educational environment, albeit at different times and classes.

For the analysis process, we make use of redefinition of the analytical framework for practices and literacy events proposed by Hamilton (2000). This redefinition derives from propositions of our research group which resulted in a diagram recorded by Cerutti-Rizzatti, Mossmann and Irigoite (2013). We reproduce below this diagram and avail ourselves of its analytical categories to give treatment to the data generated and seek to answer the question-problem from which this study derives. Considering each of the parts of this diagram - as follows - we take the Portuguese class as *meeting* and analyze it the condition of a set of *literacy* events – first part of the diagram - which constitute in a certain a) sphere of human activity, in a b) chronotopic dimension, and c) historicized interactants that relate d) through the act of enunciating - by writing means. In the contact with the set of *literacy events* that make up the *Portuguese class meeting*, we perceive the *literacy practices* – **second part of the diagram** - with implications in these same four categories: a) sphere of human activity; b) chronotope; c) interactants; and d) specifics of the *act of enunciating*. Below is the representation, as it is mentioned in the article.



Source: Cerutti-Rizzatti, Mossmann e Irigoite (2013).

Having detailed the methodological routing procedure, we set out for the discussion of empirical experiences, in the next and final section, doing it on the basis of analytical possibilities that we see in this diagram, constructed from the aforementioned conceptual symposium between Bakhtin's philosophy of language, anthropology of language of literacy studies and the psychology of language of the Vigotskian basis.

# A look at the *nonfunctionality* of life through the *functionality* of the portuguese class

We are confident that the school is part of the universe of *functionality*, because it serves interests and historically delineated purposes and meets the requirements of the labor market. We teachers are paid per hour, exactly under the overall logic, object of reflection of Ponzio (2008-2009). Thus 'shaped' in this *functionality*, we tend to act in favor of it. There is, however, in our understanding, a dimension that somehow distinguishes us because we deal with human development - and, at least in theory, we should not deal with human *conformation* - and perhaps in this orifice is our redemption of *functionality*, that is, we can exercise the escape - invariably curtailed, but always an escape - to the *nonfunctional*. We will try to be clear about it in this section.

Bearing in mind the first part of the integrated diagram registered in the previous section, we take the Portuguese lessons, in the two classes which we are dealing with here, as a meeting between scholars and students. We do not distinguish between the two classes, not because we understand them as uniform - our conception of the historicized subject (GERALDI, 2010b) does not allow us to do it - but because, for the approach of this article, this distinction does not seem relevant. In this *meeting* between scholars and students, various literacy events (HEATH, 1982) took place, among which we delimit a group of them: the *literacy events* mediated by the story '*O homem da cabeça de papelão*' ('Man with the cardboard head'), by João do Rio,<sup>14</sup> *events* that took place in both classes, each with its idiosyncratic contours.

<sup>&</sup>lt;sup>14</sup> João do Rio is a pseudonym used by João Paulo Emílio Coelho Barreto, a writer and journalist from Rio de Janeiro. The story appears in the work Antologia de humorismo e sátira, of Magalhães Jr. (1957). This is the story of Antenor, who is accustomed to an unusual ethical behavior among his people and because of this, was regarded as 'abnormal' and socially alienated. After pressure from his immediate interactants, he leaves his head with a watchmaker 'for repairs'; a period during which he starts using a cardboard head that has an uniform configuration to everyone, the reason why he subverts his behavior to an entirely opposite conduct which he had until then. This change leads to his popularity, social climbing and the conquering of the woman he loves, who had rejected him before. Sometime later, he is casually faced with the watchmaking place and he goes inside to find out about his head when he is informed that it didn't need any repairs because it was especially perfect. Antenor, however, does not hesitate in refusing his former head, preferring to continue with the cardboard one.

These *events*<sup>15</sup> took place in the <u>school environment</u>, a sphere of human activity in which the reading of a short story is necessarily *functional* because it aims to 'educate for reading short stories'; in this sphere, the (b) <u>interactants</u> were the mentioned scholars of the Arts and Literature Course, historicized by a solid and extensive training in readings with the status of scholars, whose *literacy practices* (STREET, 1988) are characterized by the valuation of the works that gain *big time* (BAKHTIN, 2003) and that we understand as the *dominant literacies* (CERUTTI-RIZZATTI; ALMEIDA, 2013). Further, students from both classes were placed as interactants, historicized for belonging to vulnerable social environments where the school in question is located and is characterized by literacy practices in whose consolidation the erudition of the literary canon does not tend to manifest, because levels of education and access to cultural goods of prestige are not provided to such a segment, as reported by data generated in applied questionnaires and preliminary studies conducted by scholars in tracing the profile of the uses of writing in these groups of students.<sup>16</sup>

As to the (c) *chronotope*, everyone, scholars and students, like us, live - considering the reflections of Ponzio (2013) - under the projection of a contemporary capitalism that is erected on the logic of the labor and consumption globalized market. Our immediate experiences, then, cannot in any way be immune to the global capitalist projection,<sup>17</sup> because our time and space are permeable to it. Hence all interactants of the *Portuguese class meeting* that is the subject of our reflection live this time that Silvestri (2013) characterizes as 'immediacy', voyeurism, narcissism and the like that we referred to earlier, that are perceived as such, or are distinguished from this condition: they live it because like it or not, they project themselves into the chronotope. Anyway, still based on the diagram, as to the (d) act of enunciating, it materializes in the short story 'O Homem da Cabeça de Papelão' (The Man with the Cardboard Head) and, as such, does so in a metaphorical language that certainly does not lend itself to the Orwellian logic of absolute objectivity. Thus, risking a very particular interpretation by us of the propositions of Ponzio (2008-2009), we understand that we have here an invitation to the *nonfunctionality*, although in the *functional* action of the school. The risk remains, and we will open it below.

<sup>&</sup>lt;sup>15</sup> We emphasize with italics and underscores, in this section, the categories of the diagram mentioned in the previous section.

<sup>&</sup>lt;sup>16</sup> In the activities we undertake in this program, the teaching experiences of scholars were always preceded by studies to outline the profile of the class with respect to their effort to understand *literacy practices*.

<sup>&</sup>lt;sup>17</sup> To Ponzio (2013), global capitalism is organized from a wide projection that shapes the processes of production and consumption, with broad impact on social relations as a whole.

The option of the scholars at the time of selecting the short story was faced immediately with a set of concerns, among which the length of the text<sup>18</sup> was initially the more distressing, since the students were not used to longer readings, especially without pictures - again, the rush addressed by Silvestri (2013). An additional challenge was the metaphoric language, the sociopolitical criticism that the story constitutes the relations of meaning and the assemblage of required prior experiences. The question, however, more blatantly disturbing was how to make those students enjoy the reading of the story, they liked doing it; how to make the reading touch them – in the sense of triggering the profound feelings that we have mentioned in our articles based on Geraldi (2012) -, that touched their human condition. In other words, how could we try to invite them to taste the sacred right to *nonfunctionality* in an action marked by the integrity of the Portuguese class itself?

Such afflictions were accompanied by the awareness that education for the use of writing require activities that – based on Kalantzis and Cope (2006) – horizontalize the *literacy practices* of students. In this case, activities that contribute to prevent isolating them in the sociogenesis where its microgenesis is developed (VIGOTSKI, 1997), the scholars being the more experienced interlocutors, in theory, are able to share with those students (VYGOTSKY, 2000) experiences with the literary universe that contribute to the broadening of their own literacy practices. With the highlighting of such challenges, it is considered that, despite all the concerns being, in our view, highly relevant, we will stop then only at the first - the extension of the story - and at the last of them – to prove the possibility of enjoying them.

Considering the *literacy practices* of the interactants and bearing in mind the specificities of the materiality of the *act of enunciating* in the text of the short story in question, we chose, in each class, to test an interface with the image, with the movement, with the fragmentation in "smaller parts", in the certainty that to present the story in print only on white background would be inappropriate for the design of the *literacy event* on the specifics of the *meeting* with those interactants: they would possibly reject it. Thus, both groups of scholars chose to initially resort to YouTube. One of them, took advantage of a more dense<sup>19</sup> and complex version of a Carlos Canela film, as illustrated in Figure 1 below; the other group, relying on a version we understand as less dense, of Victor Prater, as illustrated in Figure 2. The choices were made keeping in mind the grasp of the *literacy practices* that emerged from the profile of uses of writing outlined beforehand.

<sup>&</sup>lt;sup>18</sup> Available at: <http://www.releituras.com/joaodorio\_homem.asp>. Access in: 30 mar. 2015.

<sup>&</sup>lt;sup>19</sup> There is the risk of subjectivity of using an adjective like that.

**Figure 1<sup>20</sup> –** Film: '*O Homem da Cabeça de Papelão*' (The Man with the Cardboard Head)



**Source**: Available at: <http://www.youtube.com/watch?v=8n6hOsgSPnc &hd=1>. Access in: 30 mar. 2015.

**Figure 2** – Film: '*O Homem da Cabeça de Papelão*' (The Man with the Cardboard Head)

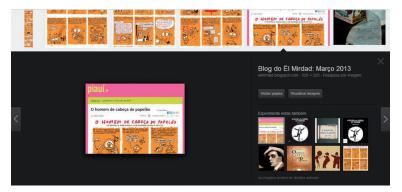


**Source**: Available at: < http://www.youtube.com/watch?v=irjLlSIctuA &hd=1>. Access in: 30 mar. 2015.

<sup>&</sup>lt;sup>20</sup> We inform, in all figures, the address to access in October 2013.

Both groups also relied on the version of the short story in comics, as illustrated in Figure 3 below, always in such a way as to show the story in electronic configurations under which it was taken - the comics were also delivered in paper.

**Figure 3** – Film: '*O Homem da Cabeça de Papelão*' (The Man with the Cardboard Head)



**Source**: Available at: <https://www.google.com.br/search?q=o+ homem+da+cabeça+de+papelão+%2B+quadrinhos>. Access in: 30 mar. 2015.

Based on Street (2000), we try to forward the uses of these electronic resources not taking them on a reification of the devices themselves, but in attention to social practices that were used them to establish themselves, that is, the short story on film and in comics. In order to start the work making use of image and sound in a 'quick' contact with the story, was the way found for the presentation of the story, now in its original version, but still not in whole, just the graphic spot on the white paper. The feature that we used was different in both groups: in one of them, we took the short story in its electronic availability and, with the use of such resources, we presented it to the students, making it in parts – we admit it, almost in a 'homeopathic dose' - as illustrated in the following figure, one of several pieces of cut for presentation in gradual sequence. In the other group, we conducted an almost theatrical oral reading, performed by the three scholars in action there. Thus, either in the 'homeopathic' images, or in the almost theatrical oral reading, we sought to bring the students into contact with the version of the story as a spot on the paper.

## **Figure 4** – Film: '*O Homem da Cabeça de Papelão*' (The Man with the Cardboard Head)



**Source**: Available at: <http://www.releituras.com/joaodorio\_ homem.asp>. Access in: 30 mar. 2015.

In the class that made use of the cutouts of the images, as shown in Figure 4, an identical version on the paper was offered to students, but the process of reading, before being individual, which tends to happen routinely as a first contact of the reader with the author through the text (RODRIGUES: CERUTTI-RIZZATTI. 2011), happened on screen, collectively, or in the dramatization we mentioned earlier, always trying to reconcile the text online, or in oral form, with the text on the paper. As the plot was known in the rereading in the cinema and comics. the reading in its original version, made in parts, accompanied by comments, seemed relatively familiar to students and we admit, in some cases, weary, given the recurrence of the narrative. In this follow-up on the screen or the option for theatrical reading, every part was constructed orally for reading comprehension, considering, as recommended by Kleiman (2001), it is in the interaction with the teacher that the student understands the text. The objective of this understanding, however, contrary to what moves us as teachers routinely, was not the search for the metacognitive exercise of reading skills in itself, but, above all, to understand the story in order to enjoy it, to understand in order to scale the human experience specifically contained in that story.

At the end of this process, the students were then invited to take the story in its textual materiality home and read it again, without compromise, without pretensions, without demands, in the pursuit of further trying to fully understand it. The following follow-up that we did showed us that several of the students had done the reading; many others had not. Some of those who did ended up requesting suggestions for new stories of the author for them to read, now in fact without 'having been forced to do so'. In both classes, the book, with the story published, circulated among students, and in one of them, at the end, several students signed up to take the work home. Evidence of a seeding experimentation of the *nonfunctionality* of the literary word? The hope remains; as without this education cannot survive.

Surely,<sup>21</sup> to *sink in*, just 'architecting the meeting' is not enough, proposing a path to new technologies and from them to the most basic and fluid readings, and getting to read the entire story, acknowledging the *literacy practices* of students and thereby making the *meeting* tangible. If we understand that such *practices* are more volatile, also due to the new technologies, and we risk showing the various representations of the story on internet platforms until reaching the version on paper, in the pursuit of 'touching the student', we do it at the risk of tiring them with the same narrative. The test whose description we substantially abbreviated in this last section, because of the article genre, despite this science, consisted of an invitation to those students to other such experiences, to find authors of other stories and prove their *nonfunctional* way of seeing the world. As for us, the question we set ourselves is how nonfunctional we effectively can be wearing the 'diving suit' that functionality feels like (based on an expression by Ponzio (2013)), which we teachers must wear. Nevertheless, we believe that these experimentations are possible.

# **Final considerations**

Finally, resuming the question-problem that moved this article, we do not see as possible, a teaching action that does not check out who the learners are, how they live in their historical time, how they deal with the uses of writing in sociogenesis. And if our students - like us - protagonize such uses in a chronotope on which the *functional* logic of global capitalism is projected, it seems that it urges attention for us not to reify technologies, because what really matters are the social practices which use them to establish themselves: electronic devices are means and not ends in themselves; so, the attention cannot fall on them. And thus conceiving, we are confident that such practices need not be limited to the universe of *functionality* of the school institution, we can avail ourselves of them to, in the recognized *functionality*, which, like in Ponzio (2008-2009), is what most effectively characterizes humans as such,

<sup>&</sup>lt;sup>21</sup> Our thanks to Ailton Pereira Junior for the content that makes up this final section.

and the school cannot waive the humanity of men because that is exactly what justifies their historical existence.

CERUTTI-RIZZATTI, M. E.; IRIGOITE, J. C. da S. A aula de português: sobre vivências (in)funcionais. *Alfa*, São Paulo, v.59, n.2, p.249-274, 2015.

- RESUMO: Este artigo tematiza a aula Português, discutindo a educação linguística escolar para os usos sociais da escrita. Trata-se de uma abordagem fundada em reflexões sobre (in)funcionalidade de Ponzio (2008-2009) que objetiva responder à seguinte questão-problema: 'Em se tratando de aulas de Português em classes de Educação Básica situadas em entornos de vulnerabilidade social, é possível ensaiar um processo de elaboração didática no ensino dos usos sociais da escrita que não se limite à funcionalidade?' A base teórica é a filosofia da linguagem bakhtiniana, a antropologia da linguagem dos estudos do letramento e a psicologia da linguagem de fundamentação vigotskiana. Trata-se de um estudo de caso cujos dados foram gerados por meio de pesquisa documental em vivências do Programa Institucional de Iniciação à Docência Pibid/Capes e cuja análise tem base interpretativista. Os resultados sinalizam possibilidades de uma ação didática que, valendo-se da funcionalidade que caracteriza o aparelho escolar e as novas tecnologias, abra espaços à educação para o infuncional, para os usos da escrita em que a palavra não se rende à lógica do mercado global.
- PALAVRAS-CHAVE: Ensino e aprendizagem de língua materna. Usos sociais da escrita. (In)funcionalidade.

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## A SYSTEMIC FUNCTIONAL DESCRIPTION OF MODAL PARTICLES IN BRAZILIAN PORTUGUESE: THE SYSTEM OF ASSESSMENT

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- ABSTRACT: This paper aims at describing interpersonal discourse markers in Brazilian Portuguese related to assessment orientation. More specifically, it offers a systemic functional description of the system of ASSESSMENT. In Brazilian Portuguese, ASSESSMENT is realized by Modal Particles. As a consequence, a description of Modal Particles is presented including their class organization and frequency along modes (spoken/written & monologue/dialogue) and text types. The method consists of a corpus compilation based on the language typology in the context of culture, and a trinocular analysis of Modal Particle functions: "from below" separating them out in terms of class and delicacy; "from roundabout", in their interdependency to the interpersonal systems of MOOD and MODALITY; and "from above", describing ASSESSMENT contributions to the unfolding of dialogue. Results suggest ASSESSMENT is a continuity to MOOD, consisting of more delicate MOOD options, and a complementarity to MODALITY, responding for the evaluation of speaker's role and realizing part of ENGAGEMENT.
- KEYWORDS: Interpersonal Discourse Markers, Modal Particles, System of ASSESSMENT, SFL Description of Brazilian Portuguese.

#### Introduction

This paper focuses on the grammar system responsible for organizing the assessment subtype of interpersonal discourse markers in Brazilian Portuguese (BP) – the system of ASSESSMENT<sup>1</sup> (CASTILHO, 1989; RISSO; SILVA; URBANO, 1996; URBANO, 1999; GÖRSKI et al., 2002; FREITAG, 2008). It aims at describing ASSESSMENT under a Systemic Functional framework (HALLIDAY, 2002).

The assessment subtype of interpersonal discourse markers is characteristically deployed by interactants when there is a need for the listener to validate the speaker's move (HALLIDAY; McDONALD, 2004; MARTIN; WHITE, 2005). More specifically, it textualizes negotiation (i.e. interactants' moves) allowing for the 'role-speaker' to be assessed/validated by the 'role-listener' (MARTELOTTA;

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<sup>&</sup>lt;sup>1</sup> Following systemic notation, systems are written with capital letters, grammar functions with initial capital letters, and semantic functions with small letters.

VOTRE; CEZÁRIO, 1996; MARTIN; WHITE, 2005). In BP – as in other languages (CAFFAREL; MARTIN; MATTHIESSEN, 2004) – assessment interpersonal discourse markers are realized by Modal Particles (MPs).<sup>2</sup>

This description draws on previous studies on BP interpersonal domain. Main issues concerning MPs behavior include: (a) a natural difficulty of clearly categorizing discourse marker subtypes, due to their continuity from interpersonal to textual uses and history of grammaticalization (RISSO; SILVA; URBANO, 1996; MARTELOTTA; VOTRE; CEZÁRIO, 1996); (b) the interdependency between assessment interpersonal discourse markers and other interpersonal systems of the clause – MOOD in particular (URBANO, 1999); (c) an account of the diversity of discourse markers in relation to the different grammaticalization processes that generate them (FREITAG, 2008); (d) the distribution of interpersonal discourse markers along spoken/written modes, as well as text typology (CAFFAREL; MARTIN; MATTHIESSEN, 2004; FREITAG, 2009); (e) the role of interpersonal discourse markers in the enactment of dialogue (MARTELOTTA; VOTRE; CEZÁRIO, 1996).

Guided by the systemic aspect of language, focusing on "regularities, where other theories can only see facts"<sup>3</sup> (MARTELOTTA; VOTRE; CEZÁRIO, 1996, p.106), the paper addresses these issues concerning a subtype of interpersonal discourse markers by offering a systemic functional description of ASSESSMENT in Brazilian Portuguese, realized by Modal Particles.

## Discourse markers in orientation of evaluation

This section relates previous studies of interpersonal discourse markers in BP to systemic functional description by locating interpersonal discourse markers within the orientation of evaluation.

Studies of discourse markers in BP describe them as belonging to different ranks (often word or group); they do the task of "tying up the text" (URBANO, 1999). Interpersonal discourse markers operate textualizing – "tying up" – the relationship among interactants, helping to construct text structure (MARCUSCHI, 1989). The subtype of assessment interpersonal discourse marker, in turn, textualizes the "inbetween moves" part of interaction, allowing the role-speaker to be negotiated through functions of ASSESSMENT.

<sup>&</sup>lt;sup>2</sup> Terminology on these Particles may vary (CAFFAREL; MARTIN; MATTHIESSEN, 2004). They can be also called Evaluative, Final, Interpersonal or Clausal. For a technical definition of 'particle' in this paper, cf. Section 2.

<sup>&</sup>lt;sup>3</sup> Regularidades, onde outras teorias vêem apenas fatos.

In BP, these functions are called Modal Particles and are realized by group/ word rank items of particles – né, tá, ó, ué, hein, tchê, ah é, uai sô, etc.; see EXAMPLE 1 below (Modal Particles are glossed in small caps and bold font).

# EXAMPLE 1<sup>4</sup>

SPEAKER	TURN	
А	1	Bonitagente boa ô, aquela ali, viuaquela ali foi vacilo.[she was]beautiful nicethat wasUNDERSTANDa huge mistake
		Terminar com aquela menina foi vacilo. breaking up with that girl João made a huge mistake
В	2	E engraçado que It's funny how
С	3	[ A menina tem a minha idade The girl was my age
В	4	[ todo mundo lá gostava dele, <b>né</b> ? and her family did like João <b>ASSENT</b>
А	5	É. ASSENT
С	6	[ Mas ela tem aminhaidade But she was my age
В	7	A velha,sô,davaos menino ládirigiaHer motherSYMPATHYgaveher kidsused to drive
		maseles eranovo,né?butwereto young to have a licenseASSENT
		Aí pegava aqueles carrão e ia acampar e ela falava They drove those nice cars and went camping and she always said
		"Ó,       João, cê       toma conta deles lá,       víu?"       [risos]         ATTEND       João       you       take care of my children       UNDERSTAND       [laughs]
А	8	[É. ASSENT
В	9	Eles gostava demais dele, tanto a mulher como o homem, <b>né</b> ? Her family really liked him both her mother and her father <b>ASSENT</b>

<sup>&</sup>lt;sup>4</sup> All examples were retrieved from the CALIBRA corpus, the source of data compilation for this paper.

Because they are connected to the process of constructing discourse, MPs contribute to establishing phases or episodes of negotiation throughout the text. In this sense, they also have a part in carrying out interaction (MARTELOTTA; VOTRE; CEZÁRIO, 1996) as the "element of contact among interactants, allowing for the listener's assessment and/or keeping the conversation flowing"<sup>5</sup> (FREITAG, 2008, p.2).

There is also another important aspect of MPs contribution to text/dialogue development, namely their distribution across text types (MARTELOTTA; VOTRE; CEZÁRIO, 1996; URBANO, 1999). Since they are fundamental to the textualization of interaction, their importance is proportional to the degree of interaction. Consequently, their distribution varies according to spoken/written modes and text type (CAFFAREL; MARTIN; MATTHIESSEN, 2004; FREITAG, 2009).

Grounded on the notion of orientation of evaluation, this description accounts for (i) a systemic organization of MPs in the system of ASSESSMENT; (ii) the place of ASSESSMENT in the interpersonal region of BP grammar, showing its interdependency to MOOD and MODALITY; (iii) the job done by ASSESSMENT in enacting negotiation in BP texts; (iv) the distribution of MPs – and resulting functional variation – across text types.

#### Grammaticalization as realization and axis

Each type of discourse marker tends to show a characteristic set of grammatical behavior due to differences both in functionality and grammar items which realize them, each of which related to its generating grammaticalization process. Freitag (2008) states that discourse marker description should include an account of the grammaticalization process for the items realizing them as a way into establishing classification paradigms.

The description of the assessment subtype of interpersonal discourse markers – object of this paper – includes an account of the grammaticalization process for the items realizing ASSESSMENT functions, namely MPs.

From a systemic functional perspective, grammaticalization can be derived from the notion of language as a system of choices, privileging paradigmatic axial relations. Moreover, language functions are motivated by use, "functioning" as a response to contextual demands (HALLIDAY, 2002). As a result, grammaticalization refers both to the process of generating systemic choice (including features, *valeur* and more delicate options – from grammar pole to lexis pole), as well as the organization of grammar items responsible for realizing semantics (see Fig. 1).

<sup>&</sup>lt;sup>5</sup> Elemento de contato entre os interlocutores, pedindo aquiescência do ouvinte e/ou mantendo o fluxo conversacional.

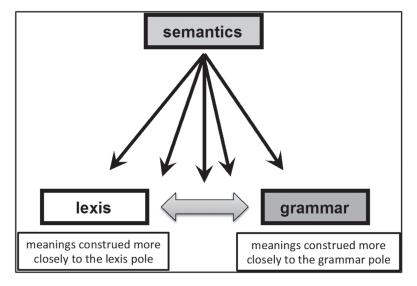
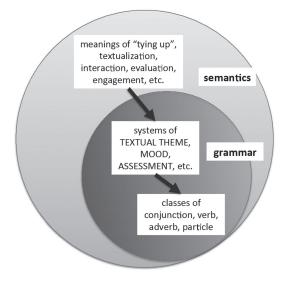


Figure 1 – Complementary perspectives on grammaticalization.

The relationship between the content plane strata (semantics and grammar) determine how a set of meanings is realized by a set of formal relations among functions (HALLIDAY, 2002). Grammatical functions, in turn, are realized by items from a rank below (as structure, prosody, element insertion, etc.). Discourse markers are realized by items from the group rank and word rank; assessment subtype is realized by particles. For instance, the meanings of ["tying up the text"  $\rightarrow$  textualizing interaction  $\rightarrow$  assess interactant's role] are realized by the system of ASSESSMENT. The functions in this system, in turn, are realized by MPs.

In general, descriptions of discourse markers in BP under a functional approach have been successful in showing how discourse makers are gramaticalized along the lexis-grammar continuum, as well as their relation to semantics – the stratum above. Rost Schianotto and Gorski (2011), for example, show how verbal items 'olha [*look*]' and 'vê [*see*]' are grammaticalized as discourse markers, and how the process is motivated by pragmatic/communicative contexts. Assessment subtype of interpersonal discourse markers is also derived from a process of grammaticalization. In order to account for this process, it is relevant to explain the systemic organization of grammar functions for the assessment of interactants' roles that realize semantic functions of texture (see Fig. 2).

**Source**: Created by the author.



## $Figure \ 2- {\rm Grammaticalization} \ as \ realization$

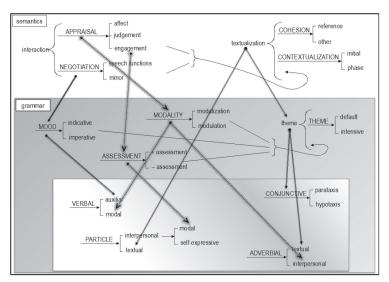
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Function, from a systemic functional view, is related to the notion of language organized by use. Grammatical functions are generated by a special kind of organization called grammaticalization. As a result, the process of grammaticalization is related to the concepts of function and use.

Grammaticalization is associated both to a use of language according to some context of situation – part of social action – and to the internal organization of the grammar stratum (HALLIDAY, 2002). From the point of view of internal organization, specifically, grammaticalization depends on formal relations among items. These relations determine the *valeur* of each item within a system. Thus, grammaticalization means the job performed by an item in the economy of the grammar stratum as well as the manner this item has been organized within a given grammatical system network (MARTIN, 1992).

Discourse markers have been classified in BP as interpersonal, textual, or they fall in an intermediate area (MARCUSCHI, 1989; FREITAG, 2008). Systemic functionally, the description of discourse markers means an explanation for the process of grammaticalization. This explanation includes (a) the relations between grammatical items and meanings (in context) they realize, and (b) the place of functions within a system network according to their *valeur*. (For the assessment subtype, the system of ASSESSMENT; see Fig. 3).





Source: Created by the author.

# Interpersonal grammar systems and assessment

From a systemic functional point of view, 'dialogue'<sup>6</sup> (HALLIDAY, 2002) is a technical term for the semantic structure generated by the systemic resources of interaction. A dialogue is generated by the system of SPEECH FUNCTIONS, which includes the functions for speech roles initiating/responding (give and demand), and the commoditiy: information in the form of propositions; or goods-&-services in the form of proposals. Responding moves vary according to responding speech roles and the need to engage in negotiation.

Interpersonal grammar systems generate a number of resources to realize the relationship between interactants and propositions/proposals. In BP, these systemic resources form part of the Negotiator and realize assessment, probability, usuallity, obligation, comment and polarity.

Interpersonal grammar resources deployed to evaluate interaction (see Fig. 4) cover two main regions (MATTHIESSEN, 1995). The domain of evaluation includes the speaker's evaluation of their own proposition/proposal (in terms of probability, usuality, obligation). The orientation of evaluation includes either the speaker's position towards the move, or a speaker's request for the listener's position. BP uses

<sup>&</sup>lt;sup>6</sup> Due to language's interactive character, any text is, from an interpersonal vantage point, a dialogue. The classification monologue/dialogue is related to textual organization (mode), not to interaction.

MODALITY and POLARITY to manage the domain of evaluation (using functions of Adjuncts and Finites), and some features of MODALITY, COMMENT and ASSESSMENT to manage the orientation of evaluation (using functions of MPs).

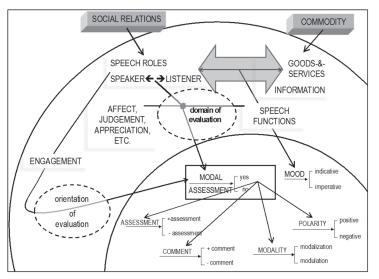


Figure 4 – Dispersion of interpersonal resources.

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The following section presents the methodology for the present research. Based on a corpus of language in the context of culture, it designs the analysis for a detailed exploration and description of ASSESSMENT in BP.

# Methodology

Methodology addresses two fundamental concerns of this research: (1) data compilation and retrieving follow corpus linguistics methods and techniques and (2) ASSESSMENT description follows systemic functional methods and techniques (HALLIDAY, 2002).

Corpus linguistics and systemic functional methods and techniques are taken as complementary in this paper because together they enable the following research steps: (a) corpus compilation of spontaneous production, (b) extraction of language forms realizing ASSESSMENT functions through machine search, (c) machine-aided analysis of forms correct machine search problems, (d) manual analysis grounded on theory and description for classification of ASSESSMENT functions, (e) systemic analysis based on trinocular view, agnation and delicacy to draw ASSESSMENT system network and count frequencies. (a) *Corpus compilation*. The corpus of this research has 100 thousand tokens. It was compiled by extracting texts from the larger 1 million-token corpus CALIBRA – Catalogue of Language in Brazil. Corpus compilation was based on the typology of language in the context of culture (HALLIDAY; MATTHIESSEN, 2013). This typology is defined according to the following variables (see Table 1): *Specialization*: specialized/non-specialized, guided by technicity of a given field or area. *Role of language*: constituting the socio-semiotic situation, or helping it to be carried out. *Mode of production*: written or spoken. *Mode of interaction*: enacts interaction types dialogic/molologic. *Socio-semiotic process*: depending on co-ocurrence of language functions, a text belongs to a given text type.

	PRODUCTION → INTERACTION →		Written		spoken		
			dialogue	monologue		dialogue	
ESPECIALIZA- TION	PAPEL	PROCESS					TOTAL
especialized	constitutive	Expounding	6 texts	6 texts	5 texts	4 texts	21 texts
			3130	3133	3165	3142	12.570
			tokens	tokens	tokens	tokens	tokens
	-	Reporting	4 texts	4 texts	5 texts	5 texts	18 texts
			3131	3138	3148	3134	12.551
			tokens	tokens	tokens	tokens	tokens
		Recreating	5 texts	8 texts	4 texts	4 texts	21 texts
			3139	3127	3150	3175	12.591
			tokens	tokens	tokens	tokens	tokens
		Sharing	6 texts	7 texts			22 texts
			3093	3125	3191	3122	12.531
non-			-	tokens		tokens	tokens
especialized	ancillary	Doing	12 texts	17	8 texts	7 texts	44 texts
ospecialized			3068	texts	3132	3133	12.449
			tokens	3116	tokens	tokens	tokens
				tokens			
	constitutive		5 texts	8 texts	5 texts		22 texts
		mending	3164	3112	3102	3153	12.531
			-		tokens	tokens	tokens
		Enabling		8 texts	5 texts		24 texts
			3101	3015	3081	3137	12.334
		Freelowings	tokens	tokens	tokens	tokens	tokens
especialized		Exploring	6 texts	8 texts	6 texts		26 texts
			3128	3144	3147	3123	12.542
			lokens	tokens		tokens	tokens
		1		198 .	IEVI9	/ 100.099	TOVENS

	Та	ble	1	-The	corpus
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**Source**: Created by the author.

(b) *Extraction of language forms realizing ASSESSMENT functions through machine search.* Machine search was carried out by using programs from the WordSmith Tools (SCOTT, 2007) suite. Using WordList, a list of words was made and compared to items identified as Particles from previous studies: Martelotta, Votre e Cezário (1996) and Urbano (1999). A list of possible candidates to be MPs was then made. It includes 24 items: ah, ai, aí, aqui, bah, é, eh, hein, lá, né, nó, não, nu, ó, ôxe, pô, sô, tá, tchê, uai, ué, visse, vixe, viu.

(c) Machine-aided analysis of concordancing lines generated by machine search. Using Concord, the corpus was searched for items identified as MPs according to the possible candidates list. Here, a combination of machine search and a simple grammar patterning search done manually, based on structure and group/word was carried out. 435 concordancing lines were retrived from the 100 thousand-token corpus.

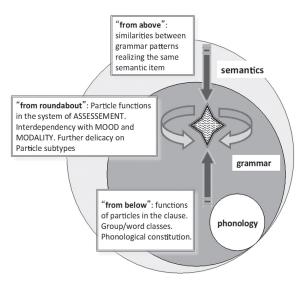
(d) *Manual analysis and classification of ASSESSMENT functions.* It looked for patterns which could elicit (a) different configurations for interpersonal enviroments where ASSESSMENT functions are deployed and (b) the character of each function individually. In order to register each function analysis and their number of occurrence, UAM Corpus Tool (O'DONNELL, 2008) was used. Of the 435 concordancing lines, 121 were excluded. The remaining 314 concordancing lines were analyzed trinocularly.

(e) *Trinocular view analysis*. Systemic functional analysis was instrumental in establishing the relationship between the meanings associated to the orientation of evaluation and the system of ASSESSMENT. In order to locate assessment discourse markers in the interpersonal region of the grammar, they were examined from complementary analytical vantange points (HALLIDAY, 2002).

Trinocular analysis for grammar was carried out: (I) "from below", from expression/manifestation to grammatical organization, examining how functions are realized by structural compositional elements. (II) "From roundabout", examining functional relations, describing how they relate to each other in terms of opposition/contrast in agnation, delicacy and *valeur*. (III) "From above", from semantics to grammatical organization, examining meanings produced by grammatical functions from a text unfolding perspective.

The methodological question driving this description is: "what is the grammar system which organizes the functions realizing meanings of assessment within interpersonal textualization and which, in turn, are realized by Modal Particles?". This question can be further explored when viewed trinocularly. 1) FROM BELOW: how is ASSESSMENT realized? How are different types of functions manifested in different particles? Do differences in particles imply differences in functions? 2) FROM ROUNDABOUT: how are ASSESSMENT functions related in the system?

What are the differences that give them *valeur*? How is ASSESSMENT related to other interpersonal systems (MOOD and MODALITY)? 3) FROM ABOVE: how does the system of ASSESSMENT contribute to the enactment of the orientation of evaluation? Are ASSESSMENT functions deployed differently according to text types? What is the job they do in text development? (see Fig. 5).





**Source**: Created by the author.

Because ASSESSMENT is realized by MPs, the following section explores the system from MPs description trinocularly. First from below, categorizing particles at word rank and the way they operate in the rank above of group as well as how groups of particles operate within clause structure. Then from roundabout, showing how Particles realize features of ASSESSMENT, given emphasis to its relation to MOOD. Finally from above, exploring how they contribute to the unfolding of dialogue. Once the systemic potential is established, a distribution of options – based on corpus occurrences – for the language will be presented.

# Assessment: modal particles "from below"

Traditionally, particle is not taken as a word class (or a group class) in BP. Franco (1991, p.137) states that "this (sub-)class of word has been unknown to most grammarians (and lexicographers)".<sup>7</sup> Consequently, particles are treated in

<sup>&</sup>lt;sup>7</sup> This (sub-)class of word has been unknown for most grammarians (and lexicographers).

several different ways depending on the type of study (FRANCO, 1991; WELKER, 1990). There are no descriptions of BP grouping interpersonal particles as a word (sub-)class. Generally, they are classified as interjections, adverbs or conjunctions. Due to lack of criteria to define and describe interpersonal particles, MPs are only partially identified and may vary in number and function. Franco (1991, p.143, translation by the author), for example, states:

The establishment of the class of higlight particles [...] essentially means dissatisfaction of grammarians in including inadequately a group of lexemes in categories such as adverbs [...]. This class is a rediscovery of what in Latin had been called *expletivae* [...]. Since the begining, this area of study has been fuzzy, with no clear boundaries, and point to what I have been calling the MODAL PARTICLES of Portuguese.<sup>8</sup>

Welker (1990) classifies particles along with other invariable words, and describes particles in opposition to these other invariants. He states particles have no inflexion and are invariable; are short in morphology and opposed to prepositions, interjections, conjunctions and typically the result of some "semantic reduction".

Systemic functionally, particles "from below" are related to the class to which the belong in the rank scale. BP rank scale has 4 ranks: morpheme ~ word ~ group/ prepositional phrase ~ clause. Within this scale, a given class is determined by the way it operates in the rank above. Class is, thus, defined as a set of similar items, mutually exclusive, operating in the rank above (NEVES, 2000; HALLIDAY, 2002).

Because of this framework, particle is defined as a word class in BP, since it forms a set of similar items, mutually exclusive and operate at group rank. Moreover, in BP they may have interpersonal, textual or ideational nature (FREITAG, 2008). The separation of particles in classes is made through their relation with types of systems they are associated.

Textual Particles are associated with the system of THEME, forming part of the function Textual Theme, realized by a particle group. Ideational Particles are associated with the system of AGENCY, being part of Process Type, realized by a verbal group. Interpersonal Particles are associated with MOOD and MODALITY, being part of the function Negotiatory Element (+Subject; +Finite;

<sup>&</sup>lt;sup>8</sup> A constituição do grupo de Particles de realce [...] significou essencialmente uma prova de insatisfação e do reconhecimento, por parte dos gramáticos, de que não era completamente adequada a inclusão de certos lexemas na categoria dos advérbios ou noutra [...]. ela é como que a redescoberta ou o ressurgimento do que foram na língua latina as expletivae [...]. é, pois, de uma área originalmente difusa, de contornos pouco bem delimitados, que considero que emergem, em última análise, o que chamo PARTÍCULAS MODAIS do português.

+Mood Adjuncts; +Particles), realized by nominal, verbal, adverbial and particle groups (see Tableau 1).

	Aí	ela	não	se	fez	de vítima	mais	né?
	Then	she	not	herself	made	as victim	anymore	ASSENT
clause	Them	e		Ergativ	e Process			Modal Assessment
function		Subject	Polar		Finite			Assent
				MOOD Ind	icative: Decla	rative: +Asse	ssment	
group	particle	nominal	adverb.	ve	erbal	prep. phr.	adverb.	particle
class								
group	Continuative			Operat	ive Voice			Assessment
function								
examples	daí, assim, vê, etc.			me, te, nos, etc.				tá, ué, viu, sô, etc.
Word	textual			ideational				interpersonal
class	particle			particle				particle

Tableau 1 – Classes of Partcles in PB.

Source: Created by the author.

Looking "from below" MPs are a distinct word class characterized by morphological invariation and grammaticalization by phonological and semantic reduction. Structurally they operate in the rank above in particle groups. A survey of the corpus shows particle group may have up to 3 elements (ah é sô; ah tá viu). However, most groups have only 1 element. Particle groups tend to appear towards the end of the clause, since they are managing the negotiation of whole propostions/proposals. They may also frequently appear next to an interpersonal element (Subject, Adjunct) being negotiated.

Phonologically, MPs are placed at the end of a tone group. Even when the speaker is in the middle of a clause, but needs to negotiate some element within the clause, an MP will typically end a tone group and split the clause phonologically.

# **EXAMPLE 2**

A avó da menina morava em G. L. quando eu conheci ela. Ela falou: The girl's grandma lived in G.L. when I first met her she said

"Ó,mas que--eu estou feliz,viuATTEND but--IamhappyUNDERSTAND

da minha netaestar namorando com seufilho"that mygrandaugther isdatingyourson

 PHONOLOGICALLY:

 // 1 ∧ eu es/tou fe/liz
 /viu //

 1 ∧ da minha /neta ... //

 // 1 ∧ I
 am happy

 // UNDERSTAND//

 1 ∧ that my grandaugther ... //

#### Assessment: modal particles "from roundabout"

Given MPs's functional behavior – the speaker signaling their degree of envolviment in a proposition/proposal – it is possible to see that ASSESSMENT is a system dependent of MOOD. Considering the orientation of evaluation, the MOOD environment where MPs are deployed, and the role-speaker the possibilities for assessment functions can be determined in a paradigm. On the one hand there are the 4 possible MOOD environments: Declarative, Interrogative Polar, Interrogative Elemental and Imperative. On the other hand, there are the 3 types of move: Initial, Responding Expected and Responding Discretionary. Following this paradigm it is possible to capture the potential for MPs (see Tableau 2).

PARTICLE	ENVIRONMENT	MODAL PARTICLES				
orientation	MOOD	Initial	Responding			
	environment		expected	discretionary		
give information	Statement: Ind. Declarative	Particle type A	Particle type Aa	Particle type Ab		
demmand information	Polar: Ind. Interrogative	Particle type B	Particle type Ba	Particle type Bb		
	Elemental: Ind. Interrogative	Particle type C	Particle type Ca	Particle type Cb		
demmand goods-&-services	Command: Imperative	Particle type D	Particle type Da	Particle type Db		
give goods-&-services	Offer: Imperative ou Ind. Interrogative	Particle type E	Particle type Ea	Particle type Eb		

**Tableau 2** – Functional evironment for MPs in BP.

Source: Created by the author.

Comparing the variables in Tableau 2 to the corpus, it was possible to address the methodological questions: "*how are ASSESSMENT functions related in the system? What are the differences that give them valeur? How is ASSESSMENT related to other interpersonal systems?*" Through this, patterns of MPs were identified and consecutively the systemic organization of ASSESSMENT. When corpus ocurrences are put against the paradigm in Tableau 2, it is possible to find types of MPs as presented in Tableau 3.

<b>Environment for Particles</b>		Modal Particles											
orientation/	MOOD	function	Initial	Re	spo	onding							
commodity environment				expected	discretionary								
		ATTEND	ó, ah (curto)	tá		não							
give	Declarative	ASSENT	né, né não	é, ah é,	ah	né não, né							
information		AGREE	Tá	tá; ah tá		não; ah não							
		INSIST	tchê, ué, sô, pô, né, uai	ah é; ah tá; tá		não sô; não ué; não tchê							
		CONCLUDE	ué, uai, ah	é, é ué, é uai		ãh (curto)							
		UNDERSTAND	viu, visse	viu		não							
		CONFIRM	hein, é	tá (curto), é		tá (longo)							
		SYMPATHIZE	Sô										
		EXCLAIM	bah, nó, uai, oxe, pô, tchê, ah										
demmand information	Polar: Interrogative	CONFIRM	(longo) etc. é, sô, tchê	é		não							
	Elemental: Iinterrogative	EXHORT / answer CHALLENGE	tchê, sô, pô, hein, né	<u>answer</u>		<u>disclaim</u>							
demmand goods-&- services	Imperative	EXHORT / undertake	sô, tchê, pô (ordem) tá, viu	undertake	refuse								
001 11000			(pedido)										
		ATTENUATE p/ undertake	aí, aqui	undertake		refuse							
give Goods-&- services	Imperative or Interrogative	ATTENUATE p/ accept	tchê, sô, aí, aqui	<u>accept</u>	<u>reject</u>								

## **Tableau 3** – Functions of ASSESSMENT in PB

**Source**: Created by the author.

Semantic glossings and examples of MP classes are shown below.

**ATTEND:** this Particle is the only feature not constrained by MOOD choices, and is used in propositions or proposals. It functions as a need from the listener to focus on the proposition/proposal to be further assessed.

### EXAMPLE 3

Ó,depois que eu falar com ele eu te conto o sonho.ATTENDafterI talk to him I tell you my dream

## EXAMPLE 4

Não, isso é só pra quem não tem aquilo ali **ó**, entendeu? No this shoud be used only by people who do not have that **ATTEND** got it

**ASSENT**: requires the lister to take the speaker's proposition as part of "shared knowledge". In this case, there is no need for agreement on opinions, but just an approval from the listener so the speaker can remain performing their role as speaker "the one who evaluates a propostion". For example:

SPEAKER	TURN	
A	1	no dia que eu conheci e fiquei com ele, When I first met him and we hooked up
		ele logo de cara falou que tinha namorada e tal he told me straight he had a girlfriend
В	2	Masagorachega,né?Sonowthat's enough fooling around ASSENT

#### EXAMPLE 5

In this example, speaker (A) asks Speaker (B) for some advice. So Speaker (B)'s function in the text is to try to control the other's behavior, giving advice. In this case in particular, about relationships.

**AGREE**: implies in the speaker asking the listener to share not only knowledge about a proposition, but also values and positions. For example:

## **EXAMPLE 6**

Não	vai	ficar	bonito	igual	0	outro não,	tá?
It is not	going	to come out	as pretty	as	the	last one	AGREE

The contrast between ASSENT and AGREE can be seen on Tableau 4 below.

Proposition	ASSE	SSMENT	negotiation of meaning						
Não vai ficar bonito igual o	né?	ASSENT	sharing information of the proposition						
outro não, It is not going to come out as pretty as the last one	tá?	AGREE	sharing value of the proposition						

**Tableau 4** – Contrast between ASSENT and AGREE.

Source: Created by the author.

**INSIST**: leads the listener to assess the proposition the same way the speaker would expect it to be assessed. It functions to increase chances of the listener to let the speaker keep playing the role of speaker by synchronizing values and positions.

## **EXAMPLE 7**

(A) Não deve de ser para ligar para elas. *I am not sure we should call them.*(B) Eu acho que é sim, sô. *I think we should INSIST*(A) É? *We should*?

**CONCLUDE**: this Particle operates by making the listener to get to the same conclusion as the listener about a proposition, but in terms of the speaker's values and knowledge. In other words, the speakers' values and knowledge about the proposition are considered true (interpersonally) and should not be questioned. For instance:

# **EXAMPLE 8**

(A) Ela não sabe lavar um copo! She doesn't even bother washing the dishes

- (B) Ela não faz nada. She just doesn't do anything.
- (A) Ela não sabe lavar um copo, ué. She simply cannot wash a single glass CONCLUDE

**UNDERSTAND**: requires the listener not only to assent with the speaker, but also the speaker's motivation to put to negotiation a given proposition in face of other possibilities.

# **EXAMPLE 9**

(A) Que vergonha! Vocês nunca mais voltam pro lado de lá, viu?
 What a shame! You must never go back there UNDERSTAND

(B) Viu. UNDERSTAND

**CONFIRM**: when the speaker builds a proposition in a way that the responding move is the expected option, this is the MP used. It needs the listener to confirm the speakers proposition. It may occur both in declaratives and interrogatives.

# EXAMPLE 10 - Declarative

(A) Nós vamos estudar a teoria do delito e nós vamos estudar... We will study crime theory and we'll study
você grava as minhas aulas, é? Are you recording my class CONFIRM
(B) Gravo.

Iam

## **EXAMPLE 11 - Interrogative**

- (A) havia uma possibilidade de ... surgir uma bolha no meu cérebro. There was a chance of a bubble poping up in my brain
- (B) Mas o que que é? Uma possibilidade? Quer dizer que existe uma possibilidade, hein?

What is it	A chance	You mean	there is a chance
CONFIRM			

**SYMPATHIZE**: used when the speaker needs the listener to assess the speaker's emotional affairs in relation to the proposition. It increases the chances of an expected responding move.

## EXAMPLE 12

Hmm, menino, mas aquilome deixou enfezado um tanto, sô.Ohboywhat he didmade meso angrySYMPATHIZE

**EXCLAIM**: signals to the listener an emotional attitude change.

EXAMPLE 13Bah,aqui está tão confortável...EXCLAIMitisso comfortable in here...

EXAMPLE 14Oxente,quem tá ligando pra isso?EXCLAIMwhocaresaboutthat

**EXHORT**: it is deployed when the speaker needs the listener to undertake a Command or give information. It encourages the listener so the success of negotiation is increased. It may also mean a challenge for the listener to undertake or give information to the speaker.

#### EXAMPLE 15 EXHORT to answer:

(A) Ah. Não, não é isso. Oh it is not like that at all

(B) Então o que é, **tchê**? So what is it then **EXHORT** 

#### EXAMPLE 16 EXHORT to undertake:

Sobe logo nesse carro, **tchê**. Get in the car now **EXHORT** 

#### EXAMPLE 17 CHALLENGE:

(A) Teu trabalho é curar esses desgarrado. Your job is to fix people

(B) E tu acha que eu tô pronto, tchê? And you think I'm ready CHALLENGE

**ATTENUATE**: it attenuates Commands, increasing the chance of an expected responding move.

#### **EXAMPLE 18 ATTENUATE to undertake:**

Não, espera **aí**, me dá uma faca **aí**. *No wait* **ATTENUATE** pass me that knife **ATTENUATE** 

#### EXAMPLE 19 ATTENUATE to accept:

Quervercomo é a aparência exterior?Would you liketo seeit fromthe outside

Vemaquicomigoolharcomo é que é o exterior.ComeATTENUATEwith me to see it fromthe outside

When MPs are classified, it is possible to use their paradigm "from roundabout", based on MOOD interdependency to draw the system network of particle classes, or the system network of ASSESSMENT (see Fig. 6).

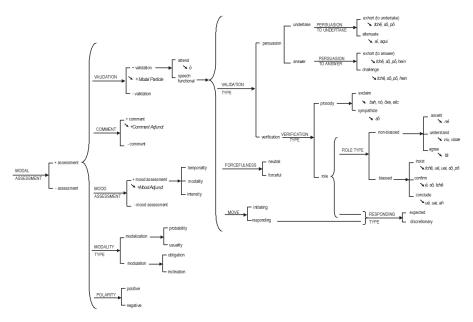


Figure 6 – System network of ASSESSMENT in BP.

Source: Created by the author.

# Assessment: modal particles "from above"

"From above", MODAL PARTICLES realize meanings from the system of ENGAGEMENT. When explaining the functions of this system Martin and White (2005, p.95) state:

[...] when speakers/writers announce their own attitudinal positions they not only self-expressively 'speak their own mind', but simultaneously invite others to endorse and to share with them the feelings, tastes or normative assessments they are announcing. Thus declarations of attitude are dialogically directed towards aligning the addressee into a community of shared value and belief.

MPs promote solidarity among interactants. It's the speaker's job to invite the listener to 'endorse and share', as well as to establish their degree of commitment to what they are saying. Semantic implications of ASSESSMENT are that the

speaker not only validates what they are saying, but opens opportunities for the listener to assess the speaker's role as the one who evaluates and commits to what is being said. In this sense, the exchange of MPs contribute to the interpersonal building of truth (as interaction).

Example 21 shows MPs working within discourse. The text in this example is an interview conducted by a Researcher (R) and a Subject (S) on an experiment in the laboratory. The experiment is a text production in the computer. The Researcher (R) asks questions about how the Subject (S) produced his text.

SPEAKER	TURN	
Р	1	Ah,agora táno Word mesmo.CONCLUDEnowit is back on Word
S	2	Acho que agora foipro Word. ()I thinkit is back on Word
Р	3	Ah tá aí,acabou.Você não voltou o text pracá,né?AGREE then, you finished. You didn't putthe text back thereASSENT
S	4	Voltei, ué.Eu colei.É o progra eu tenho certeza que eu colei.I didCONCLUDE. I pasted it. And the progra I am sureI did.
Р	5	Não, realmente, colou, só que o programa não pôs. <i>Oh, I'm really sorry, you did, but the program did not.</i>
S	6	Aconteceu issoda outra vez também, né?This has happened beforeASSENT
Р	7	Também, <b>é</b> . <i>It has too</i> <b>ASSENT</b>

EXAMPLE 20

In turn (3), P realizes that the last instruction of the experiment was not followed by S: "Você não voltou o text pra cá [*You didn't put the text back there*]". P imparts modal responsibility on S for this proposition, with negative polarity for following all the instructions. P adds an Assent Particle (né), requesting the listener (i.e., S) to commit to the fact that he had not followed the instructions. However, S decides not to assent to P, since he believes he followed all instructions. As a result, the meaning P was trying to turn into shared knowledge (the truth of interaction) could not be negotiated and was abandoned.

In turn (4), S does not choose the responding discretionary move for the Assent Particle (né não; não), but the responding move for a Declarative, picking

up the Finite with inverted polarity. Not only S does not assess validating the rolespeaker of P in turn (3), but also disregards the Assessment Particle, negotiating only modal responsibility and polarity.

At the end, S adds the Insist Particle (ué), functioning as to increase the chances of the listener to assess the proposition as expected "Voltei, ué [I did]". Following that, he adds two other propositions in elaboration "Eu colei. É o progra-- eu tenho certeza que eu colei [I pasted it. And the progra-- I am sure I did.]". On the first, S is the modal responsible, realized by the Subject added to a subjective modality metaphor "eu tenho certeza que [I am sure]", distancing even more from P's proposition in turn (3).

S's strategy proved successful, since P checked the final part of the experiment and, in turn (5), presented an expected responding move to S's proposition in (4), realized by the Finite (colocou/*did*) and the Comment Adjunct (realmente/*really*), reinforcing the proposition "não, realmente colou [*oh*, *I'm really sorry, you did*]". This is expanded in the following proposition, when P assigns modal responsibility to the computer – realized as Subject – for failing to complete the last instruction, "só que o programa não pôs [*the program did not*]". After the success in this negotiation, S produces a new proposition in (6), stating the computer had made mistakes before, in another experiment, "aconteceu isso da outra vez também [*this has happened before*]". In the end S adds an MP requesting the assent from P.

In (7) P responds to S's proposition as expected, picking up the Adjunct alternatively to the Finite (também/*too*). Similarly, P not only accepts the proposition of S, but also assesses validating his role-speaker, assenting to the proposition, realized by the expected responding Assent Particle (é): "Também, é [*It has too, ASSENT*]".

## Distribution and variation of modal particles

After describing the grammatical behavior of ASSESSMENT, we now turn to showing the distribution of MPs in the corpus. Table 2 shows the distribution for mode variants written (W) and spoken (S); monologue (M) and dialogue (D), and tex types.

	ех	pou	ndin	g	F	Repo	rtinç	J	I	ecrea	ating	J		shar	ing			doi	ng		reco	omm	end	ing	6	enab	ling		6	explo	oring		total
	WM	WD	SM	SD	WM	WD	SM	SD	WM	WD	SM	SD	WM	WD	SM	SD	WM	WD	SM	SD	WM	WD	SM	SD	WM	WD	SM	SD	EM	ED	FM	FD	
ATTEND	-	1	-	-		-	-	-	-	-	7	1	-	-	-	12	-	-	1	6	-	-	-	-	-	-	-	3	-	-	-	1	32
ASSENT	-	1	1	-	-	-	1	6	-	6	3	13	-	-	1	36	-	-	1	14	-	-	-	21	-	-	-	3	-	-	1	21	129
AGREE	-	-	-	-	-	-	1	2	-	2	-	1	-	-	-	6	-	-	-	6	-	-	-	1	-	-	-	2	-	-	-	2	23
INSIST	-	-	1	-	-	1	-	-	-	-	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
CONCLUDE	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	13	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	18
UNDERSTAND	-	1	-	-	-	-	-	-	-	1	-	3	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
CONFIRM	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	2	-	-	-	-		-	-	-	-	-	-	-	7
SYMPATHIZE	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
EXCLAIM	-	-	-	-	-	-	-	1	2	5	4	19	-	-	3	8	-	-	-	2	-	-	-	-		-	-	1	-	-	-	-	45
EXHORT-answ	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	6
CHALLENGE	1	-	-	-	-	-	-	3	-	1	-	2	-	-	-	4	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	12
EXHORT-und.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2
ATTENUATE	-	-	1	-	-	-	-	-	-	4	1	3	-	-	1	7	-	-	-	8	-	-	2	-	-	-	-	-	-	-	1	1	29
total	1	3	3	-	-	1	2	12	2	19	19	53	-		7	91	-	-	2	42	-		2	22				10	-	-	2	25	318

## **Table 2** – Distribution of MODAL PARTICLES in the corpus.

Source: Created by the author.

Table 2 shows how different ASSESSMENT functions contribute to text types. Sharing is the socio-semiotic process that deploys most MPs. Expounding on the other hand deploys the least. This suggests sharing negotiatiates the role of speaker more often, since its role in the context of culture is to present and negotiate values, positions and ideas aiming at testing proximity among interactants. Conversely, expounding texts are used to pass on established knowledge – already validated by the community – in which case there is less need to validade the role-speaker.

For the other variables there are 40 (monologue) and 278 (dialogue) occurrences. These can be explained by the fact that the listener is also a responding speaker, which leaves open the opportunity for negotiating the role-speaker. In monologues there is less MP deployment precisely because the speaker needs not their listener to assess their role-speaker after each proposition, since the own constitution of the text type gives the speaker every move. The continuum spoken/written presents 26 occurrences for written and 292 for spoken, indicating that MPs have a more significant job to play on spoken texts. For the features of ASSESSMENT, the following distribution is found (Tableau 5).

Environment	for Particles	Modal P	Modal Particles								
orientation/ commodity	MOOD environment	Function	Initial	expected	discretionary						
	1	ATTEND	32								
give	Declarative	ASSENT	94	28	7						
information		AGREE	6	13	4						
		INSIST	5	1							
		CONCLUDE	13	4	1						
		UNDERSTAND	5	1							
		CONFIRM	4	1							
		SYMPATHIZE	3								
		EXCLAIM	45								
demmand information	Polar: Interrogative	CONFIRM	2								
	Elemental: Iinterrogative	EXHORT / answer	6								
		CHALLENGE	12								
demmand goods-&-	Imperative	EXHORT / undertake	2								
services		ATTENUATE p/ undertake	28								
give g-&-s	Imperative or Interrogative	ATTENUATE p/ accept	1								

Tableau 5 – Distribution of MPs in ASSESSMENT

Source: Created by the author.

Tableau 5 shows that Indicative: Declarative MOOD is the favorite type of clause, and propositions – give information – is the preferred environment for the functions of MPs, thus in need of assessment. Among these functions, the most frequent is the one needed to ask the listener for "shared knowledge" among interactants. Following that, Imperative MOOD clauses are the most frequent, with the function of Attenuate being the most used. This is explained by the fact that it is used when a command is used and it increases chances of undertaking. Few functions presented a responding move in the corpus, which suggests propositions/proposals are assessed by other means rather than MPs – as for instance by simply undertaking the command; giving the required answer or by just letting the speaker keep their role-speaker (see Fig. 7).

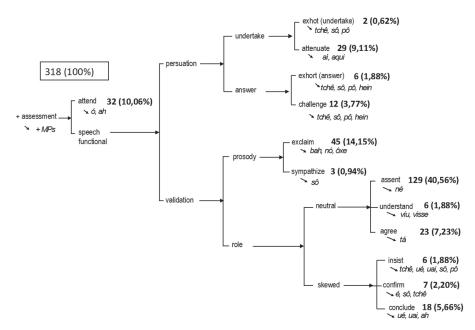


Figure 7 – Relative frequency of ASSESSMENT functions.

Source: Created by the author.

## Conclusions

This paper presented a description of the system of ASSESSMENT in Brazilian Portuguese grounded on previous research (RISSO; SILVA; URBANO, 1996; MARTELOTTA; VOTRE; CEZÁRIO, 1996; URBANO, 1999; FREITAG, 2008; 2009) concerning a subgroup of interpersonal discourse markers related to orientation of evaluation.

It was possible to show how MPs contribute to regulating the roles of speaker and listener via assessment, pointing their interdependency with MOOD and explaining systemically the grammatical behavior of this subgroup of discourse markers in BP.

With respect to the natural difficulty of separating different types of MPs in classes due to their interpersonal/textual behavior, it was shown how the system of ASSESSMENT may be useful to create such distinction through agnation and delicacy. In this description there are 6 levels of delicacy (e.g.: +assessment: speech functional: validation: role: neutral: assent).

The relationship between MPs and other interpersonal systems of the clause shows the systematizing of different classes of Particles in relation to their interdependecies, as to make ASSESSMENT a continuity to MOOD, creating more delicate options, and a complementarity to MODALITY, as a cosselection for evaluation. Because ASSESSMENT is a continuity to MOOD, it may be separated into classes having MOOD options as entry conditions. Imperative generates EXHORT, ATTENUATE and CHALLENGE; Indicative generates ASSENT, UNDERSTAND, AGREE, etc.

Because MODALITY assesses propositions/proposals, ASSESSMENT functions as a complement, assessing the role-speaker. For instance, a proposition may be assessed for probability, and complementarily the role-speaker may be assessed as the one who assesses the probability of a proposition.

The distribution of Particles across text types showed a higher frequency of Particles for the socio-semiotic processes sharing and recreating, and the lowest frequency for expounding and enabling. Dialogic texts also showed a higher frequency when contrasted to monologic ones, with a ratio of 6.9 : 1 (278 and 40). Oral texts showed a higher frequency contrasted to written texts with a ratio of 11.3 : 1 (292 and 26).

Finaly, the job performed by interpersonal discourse markers in the development of text, in particular of the dialogue, shows how MPs operate as part of initial moves requesting responding moves from the listener. In turn, responding moves are a copy of the move being negotiated by the initial speaker, but assessed according to MPs functions. Because of that, Particles create cohesive chains of argument through the dialogue, contributing to the accumulation of interpersonal meaning and realizing part of the modal assessment of the text and socio-semiotic process.

FIGUEREDO, G. Uma descrição sistêmico-funcional dos marcadores discursivos avaliativos em português brasileiro: a gramática das partículas modais. *Alfa*, São Paulo, v.59, n.2, p.275-302, 2015.

RESUMO: Este artigo parte das descrições funcionais dos marcadores discursivos e delimita como objeto o subconjunto interpessoal destes, pertencente à orientação da avaliação – realizado pelas Partículas Modais em português brasileiro. Motivado pela organização gramatical da interação, este trabalho se pauta pelas abordagens do modelo funcionalista, em particular daquele de organização sistêmica, e objetiva descrever o sistema gramatical de VALIDAÇÃO, o qual é realizado pelas Partículas Modais que compõem parte dos marcadores discursivos interpessoais. Para tanto, analisou-se um corpus monolíngue compilado com base na tipologia da língua no contexto de cultura. As Partículas Modais foram descritas segundo sua manifestação na interação, buscando-se as relações sistêmicas da VALIDAÇÃO, incluindo a complementariedade com o MODO e a MODALIDADE. Os resultados indicam que a VALIDAÇÃO é uma continuidade do MODO, separando as Partículas Modais em classes distintas conforme as opções Imperativo e Indicativo. A VALIDAÇÃO é, ainda, complementar à MODALIDADE, relativa ao papel do falante.

 PALAVRAS-CHAVE: Marcadores Discursivos Interpessoais Avaliativos. Partículas Modais. Sistema de VALIDAÇÃO. Descrição Sistêmico-Funcional do Português Brasileiro.

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# **DEFINING A MONSTER OPERATOR**

## Lovania Roehrig TEIXEIRA\* Renato Miguel BASSO\*\*

- ABSTRACT: This article reviews the literature on a particular kind of operator present in natural languages, i.e., "monster operator". This operator can shift the context of evaluation of indexicals in its scope. Its existence was initially denied by Kaplan (1989), but later authors such as Schlenker (2003) and Anand (2006) argue that such operators do exist in natural languages. However, throughout the literature, we see different definitions of that operator. In this paper, after we introduce the concept of monster operator and defend its existence based on data from Brazilian Portuguese (BrP), we argue in favor of a definition that is wider, similar to that first one proposed by Kaplan (1989). Data from the BrP will be crucial to defending our position.
- KEYWORDS: Semantics. Indexicals. Monsters operators. Context shifting.

#### Introduction

David Kaplan's semantic theory of indexicals (linguistic items that encompass the so-called "deictics") is certainly one of the most influential theories of indexicals in Linguistics and in Philosophy. His theory explains, in a comprehensive and elegant way, terms whose treatment by formal systems seemed impossible. Additionally, Kaplan (1989) explains a lot of other phenomena within the same theoretical framework.

Despite the success of his theory, it is not free of criticism, which focuses on the explanations given by it, its scope, its architecture, and some of its central postulates. In this paper, our objective is precisely to investigate one of the main criticisms of Kaplan's model — his thesis prohibiting the existence of a specific operator in natural languages, which he calls "monster"<sup>1</sup>. In his 1989 text, Kaplan argues that there is no such an operator in natural language, but it is possible to build this type of beast in formal language. In the following decades, via studies of poorly understood languages and more careful analysis of languages already described, several authors have criticized Kaplan's statement, claiming that, in

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<sup>&</sup>lt;sup>1</sup> A monster operator is an operator that shifts the context of evaluation of an indexical. In the following section, we present in detail how such an operator is and how it works.

fact, there are monsters operators in natural language. However, in doing so, the great majority of researchers altered the definition of monster operator offered by Kaplan. In this paper, we argue that (i) there are monsters operators in natural language, and (ii) the best definition for this type of operator is still the one offered by Kaplan and not the most recently found nowadays in the literature. The reasons will be exhibited throughout this text.

To achieve our goal, this paper is organized as follows: initially, we present the general outlines of the Kaplan's theory and his thesis against monsters operators in natural language; then, according to the data of Schlenker (1999, 2003, 2011), Anand (2006), Predelli (2008), Basso and Teixeira (2011) and Teixeira and Basso (2013), we argue for the existence of monster operators in natural language; in the later section, we compare different concepts of monsters operators advocating the one offered by Kaplan, mainly because it is more comprehensive; finally, in the conclusion, we resume the theses presented and the points defended.

# Kaplan and indexicals

Kaplan's (1989) approach to indexicals is based on two main concepts: the theory of direct reference<sup>2</sup> and the idea that indexicals are rigid designators (KRIPKE, 1980). Initially, we will present how these concepts work in Kaplan's theory, and as a result, we will detail two other important points — what and how the context is conceived in his theory, and how the two functions – character and content – introduced by Kaplan determine the meaning of linguistic expressions, including indexical.

Kaplan (1989) claims that indexicals are directly referential expressions. Thus, the propositional contribution of an indexical is an entity without any property or description associated with it. Therefore, a sentence like (1), uttered by João expresses a structured proposition<sup>3</sup> such as (1a), composed by an individual and a predicate.

- Eu tenho livros de Semântica.
   'I have Semantics's books'
- (1a) 〈*João, ter-livros-de-Semântica*〉<sup>4</sup> '〈João, have-books-of-Semantics〉'

<sup>&</sup>lt;sup>2</sup> The direct reference concept is attributed to Kaplan and it is originally found in an exchange of correspondence between him and Kripke in the late 1970s.

<sup>&</sup>lt;sup>3</sup> Roughly, structured propositions are complex entities (i.e., having constituents or parts) and its constituents are related in some way. Generally, they are represented by tuples. Available at: <a href="http://plato.stanford.edu/">http://plato.stanford.edu/</a> entries/propositions-structured/>. Access in: 2 apr. 2015.

<sup>&</sup>lt;sup>4</sup> We use, here and throughout the text, representations for structured propositions (tuples of elements) that contain the constituents to which we want to call attention. We do this based on Kaplan (1989). This philosopher

Indexicals are rigid designators in Kaplan's theory because they are directly referential. Being a rigid designator, in this case, is the same as saying that the referent of the indexical 'eu' (I), João in (1a), does not vary when we take different possible worlds into consideration<sup>5</sup>. In this sense, the referent of 'eu' (I) can only vary if there is a change in the relevant<sup>6</sup> context (of utterance). Regarding this aspect, according to kaplanian theory, indexicals are distinguished, for example, from definite descriptions, since referents of these expressions change in accordance with the relevant possible world.

# (2) O namorado da Maria tem livros de Semântica. 'The boyfriend of Maria has Semantics's books.'

In (2), the referent of the definite description can covary with possible worlds: in w1 the description may refer to João, in w2 to Pedro, in w3 to Lucas and so on. This behavior shows that definite descriptions are not rigid designators.

Indexicals have their semantic value determined in relation to the context of use. Thus, in a sentence like (3), below, we identified the referent of the indexical 'eu' (I) because we identify the individual who uttered (3) (the agent of the context, in kaplanian terms). Together with the context of use, one must determine the world of evaluation in which the truth conditions of a sentence will be evaluated. For example, if (3) was uttered by João in the context c1 and in the possible world w1, while he was talking to Pedro, we can say that the sentence (3) is true in c1 and in w1. However, if Pedro utters the same sentence right after João, although we are considering the same possible world w1, we have another context being considered, i.e., c2. The sentence uttered by Pedro is true, in turn, in the context c2 and in the world w1.

(3) **Eu** sou homem. 'I am a man.'

The sentences uttered by Pedro and by João are evaluated in the same possible world (w1), but not in the same context. This simple example shows that if only possible worlds were considered, we would have trouble to define the referent of the indexical 'eu' (I) in each situation: in this sense, how can we determine the referent of indexicals uttered by different speakers in the possible world?

- <sup>5</sup> According to Kripke (1980), a term is strictly referential if it refers to the same individual in all worlds in which that individual exists and has no referent in worlds in which that individual does not exist.
- <sup>6</sup> As we shall see below, unlike other linguistic terms, indexicals have their semantic values fixed by a context.

uses structured propositions as a heuristic tool. In this case, one should not think of "propositions as sets of possible worlds, but rather as structured entities looking something like the sentences which express them" (KAPLAN, 1989, p.494). In this way, the presentation in the form of structured proposition is used simply to represent, in an organized way, the elements of the sentence, for example by distinguishing directly referential items (indexicals, proper names, etc.) from the other kinds of items. Kaplan (1989) made it clear that the design of structured proposition is not part of the formal apparatus of his theory; propositions are always functions from worlds to truth values.

The answer is: we need something more refined than possible worlds. In this point, we need to discuss the kaplanian concept of context. In Kaplan (1989), contexts are formally conceived as a tuple of coordinates, such as: agent (or speaker), hearer, location, time and possible world, i.e.,  $\langle c_a, c_h, c_t, c_l, c_w \rangle^7$ . It should be mentioned that for Kaplan, the relevant context for establishing the referent of indexicals is <u>always</u> the utterance context of the sentence, that is represented as c\* from now on.

Given that contexts are more fine-grained than possible worlds, for each context there is only one possible world; in turn, a possible world can contain more than one context. Therefore, just if we consider the differences in the contexts of use/utterance of (3) we will be able to determine the referent of each indexical. After observe that contexts are structures required in a theory of indexicals and, moreover, that contexts are composed by coordinates, Kaplan has proposed two functions, "character" and "content", to determine the meaning of linguistic items, including the indexicals.

The <u>character</u> is conceived as a function that takes a context as its input and produces a content as its output; in this theory, the character acts in a prepropositional level. On the other hand, the <u>content</u> takes a possible world (and a time) as its input and generates a semantic value; the content is the propositional value. Based on these concepts, we will analyze the sentence in (4).

Considering (4) and setting the utterance context as  $c^* = \langle c_a = Frida, c_h = João, c_t = 2013, c_l = coffee room, c_w = w^{*8} \rangle$ , we can determine its character and content:

### (4) S = **Eu** estou **aqui**<sup>9</sup>

'I am here' Character (S) =  $\lambda c \ \lambda w \ [c_a \ is \ in \ c_1] \ (c) \ (w)$ Content (S) = [Character (S)] (c) (w) ( $\rightarrow$  considering c\* and w\*:) =  $\lambda c \ \lambda w \ [c_a \ is \ in \ c_1] \ (c^*) \ (w^*)$ =  $\lambda w \ [Frida \ is \ in \ the \ coffee \ room] \ (w^*)^{10}$ 

<sup>&</sup>lt;sup>7</sup> This tuple can be increased to include objects present in the context, allowing the analysis of demonstratives.

<sup>&</sup>lt;sup>8</sup> The superscript asterisk refers to the world that we inhabit, and  $c^*$ , as we have seen, refers to the context of utterance. We assume that (i) the world of the utterance context ( $c_w$ ) is the world in which the speaker is; (ii) the world in which the sentence is evaluated (i.e., the possible world used in the context) is the world of the context (i.e.,  $c_w$ ). Thus, we evaluate the truth conditions of a sentence, in principle, in relation to a context and in relation to the world of this context.

<sup>&</sup>lt;sup>9</sup> The formalization offered aims only to illustrate the role of the character and of the content and their interaction with the context and the possible world. Such formalization ignores a number of details (like the place(s) in which the world and the context variables can appear), but it shows the steps of the semantic composition.

<sup>&</sup>lt;sup>10</sup> Notice that the context variable c\* does not appear in the last line of the representation, because as soon as the relevant context (c\*) assigns values to the character of the indexicals 'eu' (I) (c<sub>a</sub>) and 'aqui' (here) (c<sub>i</sub>), the next step is to calculate the content of the sentence, that is a function from (possible) worlds to semantic values. Thereby, at this point, only the relevant world remains in the representation.

Taking into account the definitions above, the character of (4) is the agent of the context being at the location of the context. However, to determine the full meaning of the indexicals expressions in (4) is necessary to define the content. The content of (4) is the character (the agent of the context being at the location of the context) in relation to a possible world (and a time), which generates a semantic value (in this case, a truth value). Therefore, the content of (4), in the context  $c^*$ , is the set of worlds in which Frida is in the coffee room.

According to Kaplan (1989), operators can operate only on the content of linguistic terms, indexicals or not; this is the case of modal operators such as '*possivelmente'* (possibly) and '*necessariamente'* (necessarily). Consider the sentence in (5),

# (5) Necessariamente eu estou aqui, 'Necessarily I am here'

This sentence is true if and only if in all possible worlds w, accessible from  $c_w$ ,  $c_a$  (the agent of the context) is in  $c_1$  (the place of the context). If we apply the context of utterance (c<sup>\*</sup>) already established above, to (5), the result is *roughly*,

# (6) Necessariamente, Frida está na sala do café, 'Necessarily, Frida is in the coffee room'

A sentence that is true if and only if in all possible worlds w, accessible from  $c_w$ , Frida is in the coffee room. As we can see, this theory captures the difference between sentences like '*Necessariamente eu estou aqui*' (Necessarily I am here) and '*Eu estou aqui*' (I am here) — the first one is not true *a priori*, because its semantic value <u>depends</u> on the worlds of evaluation, while the second is true *a priori*, because its value <u>does not depend</u> of the world of evaluation and it is true in all contexts.

As mentioned before, Kaplan (1989, p.511) states that operators of natural language, including all verbs of propositional attitude, operate only on the content of indexicals because only contents are found under the scope of these elements. This suggests that there are no operators "which attempt to meddle with the character"; such operators, nonexistent in natural language, are the "monsters operators". The philosopher is even more radical, and claims that operators that operate on characters are only found in formal language: "[...] no operator can control the character of the indexicals within its scope, because they will simply leap out of its scope to the front of the operator. I am not saying we could not construct a language with such operators [...]" (KAPLAN, 1989, p.510).

In the following section, we present the arguments used by Kaplan to support its position about monsters operators.

# Kaplan: monsters do not exist in natural language

Kaplan (1989) states that, in natural language, there are only intensional operators, acting on the function from possible worlds to semantic values (i.e., the content). To show that this is indeed the case and, therefore, that there are no operators on characters, Kaplan tests an operator similar to '*em alguns contextos é verdade que*' (in some contexts it is true that) which, in theory, when prefixed to a sentence, would operate on the character of indexicals in its scope. The example suggested by the author is:

# (7) In some contexts it is true that **I** am not tired **now**.

Assuming that such operator in fact operates on the character of the indexicals, (7) should have a reading in which the sentence is true if, in some context, the embedded sentence, 'I am not tired now', expresses a content that is true in the world of that context. Thus, (7) is true in the context of utterance c\* if an agent of a context (but not of the utterance context) is not tired at the time of the context (but not in the utterance context). (7) clearly does not present the suggested reading, and this fact supports Kaplan's idea that operators on the character of indexicals do not exist in natural language. Mainly because operators only maintain content in its scope, and never characters.

The same observations, now considering (8), apply to the BrP:

(8) Em algum contexto é verdade que eu não estou cansado agora.
 'In some context it is true that I am not tired now'

We would expect that the sentence (8), uttered by João at 2 p.m., was true if, for example, it is true that Pedro is not tired at 8 p.m.<sup>11</sup>; such an interpretation is clearly unavailable.

In sum, Kaplan shows that even a construction as explicit as 'in some contexts is true that' can not shift the value of an indexical, and therefore he concludes that operators who can do that —monster operators — do not exist in natural language. So far, it is interesting to note that the kaplanian concept of monster operator is wide, because to be considered a monster, a certain operator just should shift the context in which an indexical is evaluated.

 $<sup>^{11}</sup>$  Pedro is 'eu' (I = c\_{\rm g}) and 8 p.m. is 'agora' (now = c\_{\rm t}) in a different context from which João utters (8), i.e., 'eu' and 'agora' receive their semantic value from a different context than that in which the sentence is uttered; therefore, 'eu' is Pedro, rather than João, and 'agora' is 2 p.m., rather than 8 p.m..

However, as mentioned before, some authors have identified gaps in his theory when they analyze (i) non-Indo-European languages, and (ii) phenomena involving indexicals not analyzed by Kaplan<sup>12</sup>. Some reformulations proposed by these authors in relation to the kaplanian theory are detailed in the following sections.

#### Evidences that natural language have monsters

In this section, we will present evidences supporting the idea that there are monsters in natural language discussing cases in which attitude verbs<sup>13</sup> can be followed by characters. After this, in the following sections, we will explore data and definitions provided by some authors who have analyzed indexicals in different languages; later, we will discuss different concepts of monsters operators presented by them.

### The role of attitude verbs in the theory of monsters

Attitude verbs play an important role in the theory of indexicals (specifically in the argumentation in favor of the existence of monsters) since they affect two aspects of Kaplan's theory: (i) there are no operators on the character of indexicals and (ii) in indirect discourse it is possible to report only the content of an indexical (Kaplan's indirect discourse prevision); in fact, (i) follows from (ii). In this section, we show how an operator, i.e., the attitude verb, can indeed be followed by the character of an indexical. As a result, it is possible that characters of indexicals (from the direct discourse) would be retained in indirect discourse — a phenomenon denied by Kaplan's theory. The main argument against the indirect discourse theory of Kaplan is based in cases of *de se* reports and the discussion presented here is based on Schlenker's ideas.

The aspects reformulated by Schlenker (2003, 2011) refer to the claim that attitude operators just keep contents in its scope, and also to the claim that there is no shifted indexicals (therefore, monsters operators) in natural language. In this section, we will only discuss the first point; the other one will be discussed in the following sections, where we will present the analysis of Schlenker and other authors.

First, we will present the arguments used by Kaplan to defend the idea that only contents are to be found in the scope of attitude operators, and then we will see the arguments placed against this thesis.

<sup>&</sup>lt;sup>12</sup> In fact, Kaplan (1989) dedicates a single example, and approximately two pages (510-512), to argue in favor of the inexistence of monsters in a large text of almost 100 pages (481-563).

<sup>&</sup>lt;sup>13</sup> The argumentation takes into account the so-called "verbs of propositional attitude" and "speech verbs", but we will focus only on the last group; the label "attitude verbs" should encompass both categories.

In order to prove that in natural language it is not possible to find operators keeping characters in their scope (and, therefore, operators could never shift the character of these elements), Kaplan says that whenever a sentence containing indexicals is reported, the part of the meaning regarding the character is lost — only the content remains in the report. This actually happens with the pair (9) and (10), considering that (10) reports (9).

- (9) Eu não sei como pintar um quadro [dito por João].
  'I do not know how to paint a picture' [said by João]
- (10) **O João**<sub>i</sub> disse que **ele**<sub>i</sub> não sabe como pintar um quadro [dito por Maria].
  'João<sub>i</sub> said that he<sub>i</sub> does not know how to paint a picture' [said by Maria]

When we report a sentence like (9), the information regarding the character of the indexical 'eu' (I) = 'agent of context' is no longer present in the indirect discourse. More than this, the indexical 'eu' (I) is not in the sentence (10), only its content (i.e., the individual it refers to) and this content is represented by the anaphoric pronoun ('ele' (he)) which picks up the referent of the name João the semantic value of 'eu' in (9). In other words, the proposition (i.e., content) expressed by (9) and by the embedded sentence in (10) in the relevant context is the same, but their characters are clearly different:

Content of (9) and of the embedded sentence in (10):

- (9a) (*João, não-saber-pintar-quadro*), '(João, not-know-paint-picture)'
- (10a) (*Maria, dizer* (*João, não-saber-pintar-quadro*)). (Maria, say (João, not-know-paint-picture))

Character of (9) and of the embedded sentence in (10):

- (9b) (agente do contexto, não-saber-pintar-quadro) (agent of the context, not-know-paint-picture)
- (10b) (*Maria, dizer* (*objeto apontado pelo falante*<sup>14</sup>, *não-saber-pintar-quadro*)). (Maria, say ( pointed object, not-know-paint-picture))'

If the embedded sentence in (10) had the same character of the one in (9), represented in (10c), the proposition would be expressed as in (10d):

<sup>&</sup>lt;sup>14</sup> Here, we consider 'ele' (he) as a deictic that works similarly in anaphoric contexts, i.e., it refers to what the speaker points to (either in physical contexts, or in textual surroundings). The important point, however, is that 'ele' (he) does not have the same character as 'eu' (I).

- (10c) (*Maria, dizer* (*agente do contexto*<sup>15</sup>, *não-saber-pintar-quadro*)) '(Maria, say (agent of the context, not-know-paint-picture))'
- (10d) (*Maria, dizer* (*Maria, não-saber-pintar-quadro*)) (Maria, say (Maria, not-know-paint-picture))

Which clearly does not work as a report of (9); therefore, the author concludes that under attitude verbs only the content of what is reported is found, and not its character.

A more sophisticated situation than this one is provided by Kaplan (1989) to demonstrate the same point. Consider an adaptation from the author's example:

(11) **Situation**: João is in a restaurant, and he observes a TV showing images from security cameras. He notes a man who is with his pants on fire. João's first thought is given by the sentence (11a). After a few seconds, João realizes that the man on TV is himself. At that point, João's thought is given by the sentence (11b).

- (11a) As calças **dele** estão pegando fogo.'His pants are on fire.'
- (11b) As minhas calças estão pegando fogo.'My pants are on fire'

In this case, (11a) and (11b) say the same about the world, i.e., the content of both sentences is equivalent to  $\langle calças-de-João, estar-pegando-fogo \rangle$  ( $\langle paints-of-João, be-on-fire \rangle$ ). However, they have different characters because in (11b) the utterance context generates the information that the speaker's pants are on fire, while in (11a), the context and the use of the demonstrative indicate that the pointed person is in the described situation, i.e., the character here (in prose) is something like "the *demonstratum*'s pants are on fire". The most important thing to note about the situation in (11) is that when we report (11a) or (11b) we use the same sentence, given in (11c).

(11c) O João pensa que as calças dele estão pegando fogo.'João thinks that his pants are on fire.'

These facts lead Kaplan (1989) to claim that attitude operators, such as '*pensar*' (think), operate only on contents, because if they operate on characters the situation in (11) would be reported by different sentences, since (11a) and (11b)

<sup>&</sup>lt;sup>15</sup> Here, as in other cases, the only context that, according to Kaplan, can be used to fix the value of an indexical is the utterance context. Hence (10c) results in (10d).

have different characters. Therefore, according to Kaplan, the character of the indexicals present in the direct discourse does not remain in the indirect discourse.

However, the generalization about the inability of operators, such as attitude verbs, to operate on characters of indexicals is too hasty. This is illustrated by Schlenker (2003, p.61) using examples similar to (12):

(12) **Situation**: João is so drunk he forgot that he is candidate for mayor in the municipal elections. He watches TV, and a candidate gets your attention. For João, this man should be elected because he has good ideas. However, João is watching himself, but he does not realize it due to his state of drunkenness.

- (12a) João espera que **ele** seja eleito.'João hopes that he will be elected'
- (12b) João espera PRO<sup>16</sup> ser eleito.'João hopes PRO to be elected'

According to the situation in (12), the sentence that better reports João's thought is (12a), because when he does not recognize himself on TV, his thought is about another person (in this case, a *de re*<sup>17</sup>reading). The report in (12b) is suitable if João had a thought like (12c) (in this case, a *de se*<sup>18</sup> reading).

(12c) **Eu** deveria ser eleito. 'I should be elected'

The two sentences that describe João's thoughts, (12a) and (12b), have the same content that, *roughly speaking*, can be represented as '*João espera* (*João, ser-eleito*)' (João hopes (João, be-elected)). However, there are two different characters in this situation, which are responsible for the adequacy or not of these sentences to

<sup>&</sup>lt;sup>16</sup> PRO is the unpronounced subject of an infinitive clause under a control structure (embedded). Schlenker (2011, p.1575) makes it clear that (i) "[...] the De Se analysis crucially posits that PRO is not bound by [subject] John" in sentences like (12b), and (ii) his observations about PRO not entail anything about the indexicality of this structure, i.e., there is no reason to treat PRO as an indexical. The only important aspect about PRO in sentences like (12b) is that PRO under the scope of attitude verbs indicates that characters of indexicals can be found in their scope, which demonstrates a *de se* reading. Therefore, there are evidences that the character of linguistic expressions (not only indexicals) can be found in the scope of attitude verbs, and, thus, we can find monsters in natural language (against the concept of Kaplan, 1989).

<sup>&</sup>lt;sup>17</sup> *De re*, from Latin, 'about the thing'; a *de re* attitude is exemplified in the sentence 'Aníbal believes about someone, that he is a Portuguese spy'. This sentence attributes to the individual Aníbal a belief about a particular person (*res*). (BRANQUINHO; MURCHO; GOMES, 2006, p.226-227).

<sup>&</sup>lt;sup>18</sup> The expression was coined by Lewis (1979). Some authors who have studied and discussed the problems arising from this kind of propositional attitudes, which is one of the most challenging topics for linguists and philosophers, were David Lewis, John Perry and Hector Neri-Castañeda (BRANQUINHO; MURCHO; GOMES, 2006).

the case described: (i) the character of a *de re* reading: '*João espera* [ $\lambda$ w(*indivíduo apontado, ser-eleito*) (w)]' (João hopes [ $\lambda$ w (pointed individual, be-elected) (w)]); and (ii) the character of a *de se* reading, '*João espera* [ $\lambda$ w (c<sub>a</sub>, *ser-eleito*)(w)]' (João hopes [ $\lambda$ w (c<sub>a</sub>, *be-elected*)(w)]).

The situation in (12) implies that (12a) is appropriate for the case of the candidate, who does not recognize himself, i.e., in (12a) the item 'he' does not necessarily refer to João, but to a third person. (12b), in turn, is false in that context, because the thought of João was not d*e se* and a sentence with PRO only applies to a *de se* reading /thought.

The semantic restrictions on the use of PRO, observed in relation to (12), provide arguments that this kind of structure serves to indicate, in the syntactic context, that the direct discourse (the utterance/ thought that is being reported) it was *de se*. Due to this sort of condition, it is correct to say that PRO exposes the character of the sentence with indexicals used in the direct discourse or thought, contradicting the prediction of Kaplan (1989).

Things being so, Schlenker argues that it is possible to maintain the indexical nature of direct discourse in the reports, because "[...] PRO in an attitude report can only be interpreted 'De Se': roughly, it can be used only in case 'I' was used in the original discourse" (SCHLENKER, 2003, p.61).

After claiming that Kaplan's conceptions are not completely right, Schlenker's next step is to show that operators can <u>shift</u> the character of the indexicals, i.e., there may have monsters operators in natural language, topic of the next section.

## The pronominal monsters in other languages

As seen in the previous section, Schlenker reformulates some aspects of kaplanian theory of indexicals, demonstrating that some claims made by Kaplan are not entirely correct concerning the natural language. Schlenker's first step was to suggest that it is possible to find characters under the scope of attitude operators. This was exemplified by the *de se* cases. His next step is to demonstrate that it is possible that monsters operators exist in natural language and that they operate on the character of the indexicals, shifting the context of evaluation of theses expressions. This type of data was found by Schlenker in English, French and Amharic. Defending the same conception of Schlenker, Anand and Nevins (2004) and Anand (2006) also argue <u>against</u> Kaplan's idea that natural language does not have monsters operators. To argue in favor of this idea, they bring together data from Slave and Zazaki. In this section, then, cases of monsters operators found in Amharic, Zazaki and the Slave will be presented.

In Amharic, the official language of Ethiopia, there is a monster operator in the following situation:

(13) João Jägna näNN yt-lall
 João hero I-am say-3<sup>a</sup>sg.m
 'João, said that I, am a hero.'

In this case, the monster operator is the speech verb 'yt-lall'; the indexical 'nä' is being evaluated in the context that is being reported (c'), because, as Schlenker (2003, p.32) indicates, the logical formula of the Amharic sentence is: "SAY <sub>(John, now, actually)</sub> c<sub>i</sub> be-a-hero (agent(c<sub>i</sub>), time(c<sub>i</sub>), world(c<sub>i</sub>))", where c<sub>i</sub> represents the reported context.

Monsters operators, according to Schlenker, can shift the context of evaluation of indexicals only to a reported context. In other words, indexicals in natural language "[...] depend[s] either on the context of the actual speech act [...] or on the context of the reported speech act" (SCHLENKER, 2003, p.32). Therefore, only when an indexical, after an attitude or speech verb, is evaluated in the reported context we have an indexical monster. This aspect will be better explored in a later section, in which we compared different conceptions of monsters operators.

Anand and Nevins (2004) and Anand (2006) "[...] argue in line with Schlenker (2003, 1999) that shifting indexicals underneath attitude verbs diagnose the presence of context operators." (ANAND, 2006, p.74). The first data and monsters operators presented in Anand and Nevins (2004) and Anand (2006) are from Zazaki<sup>19</sup>. In this language, the speech verb is a monster operator shifting the context of evaluation of all indexicals under its scope. Consider (14),

(14) Hεseni, (mik-ra) va kε εz<sub>j/k</sub> dεwletia
 Hesen (I-to) said that I rich.be PRES
 'Hesen said that {I am / Hesen is} rich.'

In (14), ' $\epsilon z'$  is the first person pronoun (indexical representing the agent of the context). When this indexical is under the scope of the attitude operator 'va', it can be evaluated either in the utterance context (c\*) and refers to the speaker of the sentence, or it can be evaluated in the reported context (c') and refer to Hensen, the agent of the reported context.

Additional data of monsters operators are collected from *Slave*<sup>20</sup>. In this language monsters operators include verbs such as: 'say', 'want', 'think' and 'ask'. In (15), "[...] both embedded pronouns refer to the author and addressee in the embedded context [...]." (ANAND, 2006, p.77).

<sup>&</sup>lt;sup>19</sup> Zazaki is an Indo-Iranian language spoken in Turkey for 2-6 million Kurds.

<sup>&</sup>lt;sup>20</sup> Slave (or Slavey, Slavé) is an Athabaskan language spoken in northwestern of Canada for approximately 760 people.

(15) [segha ráwǫd'ɨ] sédįdi yįlé [1ªsg-to 2ªsg-buy] 2ªsg-say-1ªsg PAST 'You told me to buy it for you'

As can be observed in the sentences from Zazaki and from Slave, attitude verbs shift the context of evaluation of indexicals. These examples (in the same way as those of Schlenker) show that the shifting of context is always from c\* to c', i.e., from the utterance context to the reported context, although this is not explicitly stated by Anand and Nevins (2004), and Anand (2006).

Another aspect that suggests that data from Zazaki and Slave have monsters operators that shift the context from c\* to c' is that the evaluation of indexicals, according to the authors, occurs exclusively in speech contexts. Of course when we restrict the possible contexts of evaluation of indexicals to speech contexts, what we have are utterance contexts or reported contexts. Precisely because of this, Anand (2006) argues that shifted indexicals result from the action of monsters operators; they are not total or partial quotes.

The most important point to highlight about the aspects presented in this section is that Anand (2006) and Anand and Nevins (2004) share with Schlenker the following points: there are monsters in natural language, the attitude operators are these monsters, and, moreover, the monsters operators modify the context of evaluation of indexicals from the utterance context to the reported context (from c\* to c').

# Predelli: modal and temporal monsters in fiction

Another author who defends the existence and the importance of monsters operators and, therefore, presents data from natural language that promote these points is Stefano Predelli. In his paper "Modal monsters and talk about fiction" (PREDELLI, 2008), the author presents data from monsters operators acting on modal and temporal indexicals in discourse about fiction, i.e., metafictional sentences. A sentence is classified as metafictional if it relates fictional and non-fictional context, e.g., "The Iron Man is funny', as a comment about the movie *Iron Man*.

Intuitively the same sentence when related to fiction and to "real" facts does not seem to convey the same meaning. Thus, from a semantic point of view, the sentence (16), adapted from Predelli (2008), can have different truth values when uttered in different situations.

# (16) O Ataque Doolittle<sup>21</sup> decolou em mares calmos.'The Doolittle Raid took off in calm seas'

<sup>&</sup>lt;sup>21</sup> Attack Doolittle: attack conducted by the U.S.A. troops toward the coast of Japan in 1942. Available at: <a href="http://www.uss-hornet.org/history/wwii/doolittle.shtml">http://www.uss-hornet.org/history/wwii/doolittle.shtml</a>. Access in: 4 apr. 2015.

According to our intuition, (16) is considered true if someone, after watching the movie *Pearl Harbor*<sup>22</sup>, utter the sentence to remember the weather details during the air attack as reported in the film. However, if (16) is said during a debate about the military history of the U.S.A., it is false because the attack occurred in bad weather.

Predelli (2008) proposes that an adequate semantic analysis of sentences that can have different truth values in fictional and non-fictional contexts is provided only when an approach with operators on the character is used — the monsters operators. According to the author the sentence in (16) (which is a comment about the film) can be represented with a sentential operator that affects the context of evaluation of the sentence — the modal monster operator.

Basically, the question that Predelli (2008) tries to answer is related to the most appropriate semantic analysis of the differences between the utterances of (16) in each case described above. He assumes that an utterance is a pair composed by a sentence and a context (s, c) and, because the author focuses its analysis on the indexicals 'now' and 'actually', the context is simply represented as a tuple –  $\langle c_t, c_w \rangle$  – formed by the world and by the time of the context. Overall, Predelli's idea is that in each case, sentences about fiction and non-fiction, there is a different representation of the pair "sentence-context".

Predelli (2008) proposes, to metafictional sentences, the existence of a monster operator (FM), which can sometimes be represented by an expression such as "according to the fiction x" in the surface. This operator is responsible for shifting the world of the utterance context (c<sub>w</sub><sup>\*</sup>) to the world of the fictional context (c<sub>w</sub><sup>#</sup>)<sup>23</sup>. Thus, the sentence will be evaluated in the fictional world (w<sup>#</sup>) and its context will be shifted.

The definition of the FM operator, the modal monster operator proposed by Predelli for metafictional sentences, is presented bellow:

$$\label{eq:generalized_constraint} \begin{split} \left[\left[FM\left(\alpha,\,\phi\right)\right]\right]_{c,\,w} = T \text{ iff } \left[\left[\phi\right]\right]_{c\#,\,w\#} = T \text{, where } c^{\#} \text{ is just like } c, \text{ except that } c_{w} = w^{\#} \text{, and } w^{\#} \text{ is the possible world determined by } \left[\left[\alpha\right]\right]_{c,\,w} \end{split}$$

To Predelli (2008), c would be something like  $\langle c_a, c_h, c_t, c_l, c_w \rangle$  and c<sup>#</sup> something like  $\langle c_a, c_h, c_t, c_l, c_t, c_l, c_w^* \rangle$ ; c differs from c<sup>#</sup> just because  $c_w \neq c^{#}_w$ ; that is, c and c<sup>#</sup> are equal in everything, except in the world coordinate, that in c is the utterance world and in c<sup>#</sup> is the fictional world (BASSO; TEIXEIRA, 2011).

<sup>&</sup>lt;sup>22</sup> American film produced by Jerry Bruckheimer and directed by Michael Bay.

<sup>&</sup>lt;sup>23</sup> We insert here something new in the notation: '#' superscript indicates that we are mentioning a fictional context, e.g., c<sup>#</sup> represents a fictional context.

Taking into account the monster operator and the theoretical arrangements proposed by the author, the sentence (16) is represented as (16a). (16b) is the representation of the sentence as a comment about the movie *Pearl Harbor* (in a tuple sentence-context) and (16c) is a simplification of (16b).

- (16a) (decolar em mares calmos (Ataque Doolitlle)) (take off in calm seas (the Doolittle Raid))
- (16b)  $(c^*, FM (Pearl Harbor, decolar em mares calmos (Ataque Doolitlle)))$  $'(c^*, FM (Pearl Harbor, take off in calm seas (the Doolittle Raid))) '$

(16c)  $\langle c^{\star}, FM$  (16)  $\rangle$ 

Predelli (2008, p.292) proposes a "[...] compositional system with a clause containing a sentential operator *roughly* paraphrasable as 'according to Pearl Harbor'". Therefore, through the monster solution the desired result is achieved, i.e., the sentence is true

$$\begin{split} & [[FM(16a)]]_{c^*,w^*} = T \\ & \text{iff } [[(take off in calm seas (the Doolittle Raid))]]c^*, w^* = T \\ & \text{iff, according to the movie } Pearl Harbor, the Doolittle Raid took off in calm seas. \end{split}$$

If a sentence has an indexical like 'na verdade' (actually) (a modal indexical operating on possible worlds), as in (17), which conveys that, according to the movie, Yamamoto was closer than the Americans thought, the representation with the monster operator will be as in (17a).

- (17) Embora os americanos pensassem que Yamamoto estivesse longe, na verdade, ele estava ao alcance do exército americano.<sup>24</sup>
   'Although the Americans thought that Yamamoto was far away, he was actually within reach of the U.S.A. Army'
- (17a) FM (na verdade (estar ao alcance (Yamamoto))). 'FM (actually (being within reach (Yamamoto)))'

Thus, (17a) is true

iff [[FM (actually (being within reach (Yamamoto)))]] $_{c^*,w^*} = T$ ,

- iff [[actually (being within reach (Yamamoto))]]  $c^{\#}$ ,  $w^{\#} = T$ ,
- iff [[being within reach (Yamamoto)]]  $c^{\#}$ ,  $w^{\#} = T$ ,
- iff, in the movie *Pearl Harbor*, Yamamoto was closer than the Americans thought.

<sup>&</sup>lt;sup>24</sup> Example adapted from Predelli (2008).

With this approach Predelli (2008) argues that an analysis with monsters operators shifting the context of evaluation of modal and temporal indexicals (although the latter have not been discussed here) in sentences about fiction, explains the issues involved in their interpretation. According to him, if "[...] considerations in favor of the role for modal monsters in the analysis of certain phenomena are correct, the arguments put forth [by] Kaplan must be unsound." (PREDELLI, 2008, p.295).

## **Brazilian Portuguese and its monsters**

In this section, we present data of monsters operators and indexicals monsters found in BrP and analyzed in Basso and Teixeira (2011), Teixeira (2012) and Teixeira and Basso (2013). These examples reinforce the argumentation in favor of the existence of monsters in natural language, demonstrating that these elements are present in different families of languages. In the next section, we examine the most appropriate definition of monster operator, evaluating the concepts offered by the authors who have analyzed and defended these elements.

### a) Monsters in the temporal domain

The first cases from BrP discussed here are monsters operators affecting the character of temporal indexicals, i.e., they act on the time coordinate of the context. To observe how they are, consider the situation in (18) and the sentence  $(18a)^{25}$ :

(18) **Situation**: João owes money to Mary. Whenever he meets her, he repeats the same promise: "*Eu vou devolver o teu dinheiro em dois dias*" (I will pay your money back in two days). But the payment never happens. Maria reports this sad situation to a friend with (18a).

(18a) *O João tem me dito, ao longo dos anos, que devolverá meu dinheiro* **em** *dois dias*<sup>26</sup>.

'John has told me, over the years, that will pay my money in two days'

<sup>&</sup>lt;sup>25</sup> Similar examples, with data from English and French, are presented by Schlenker (2003, 2011).

<sup>&</sup>lt;sup>26</sup> We clarify, as suggested by an anonymous reviewer, that there are two possible interpretations of (18a). They are result of ambiguity in the scope relations between the monster operator (speech verb) and the indexical expression ('em dois dias'). One of the arguments used by Kaplan (1989) to deny the existence of monsters in natural language is based on the fact that indexicals always have primary scope and, therefore, operators can not act on their evaluation contexts. So, when 'em dois dias' (in two days) is evaluated in relation to the utterance context of the sentence (c\*) (the indexical is not shifted and the verb is nonster), the indexical has primary scope and its context of evaluation can be shifted to c' (the reported context). Therefore, the ambiguity

A possible interpretation for (18a) is one in which the temporal indexical 'em dois dias' (in two days) has its referent established with respect to João's utterances. Therefore, this expression is evaluated in relation to the time of the reported context ( $c'_1$ ) and the speech verb is a monster operator that can shift the context of indexicals under its scope (from c\* to c'). In this interpretation, (18a) means something like "Sempre que encontro o João ele me diz: 'vou devolver teu dinheiro em dois dias'" (Whenever I meet John he tells me: "I will pay your money back in two days.").

Reviewing the process occurred in (18a), the operation of context shifting triggered by the speech verb is only possible because, as discussed in the previous sections, 'dizer' (say) can have characters under its scope, and in addition, it can operate on those elements of meaning, shifting the context in which indexicals receive their semantic value. What happens in this case is a shifting in speech contexts – from an utterance context ( $c^*$ ) to a reported context (c').

# b) Monsters in the spatial domain

We present, in this section, an example from BrP in which the monster operator acts on indexicals from another domain — the domain of location of the context. For this, consider the situation in (19) and the sentence (19a).

(19) **Situation**: Maria lives with her parents in São Carlos, and his brother, João, lives in Porto Alegre. At least once a week João calls Maria to tell her the news. Maria talks with his mother about his brother and she utters the following sentence:

(19a) O João tem me dito, toda vez que me liga de Porto Alegre, que tá chovendo.
'João has told me, every time he calls from Porto Alegre, that it is raining.'

In (19a), as well as in (18a), the speech verb is the monster operator that operates on the character of the indexical under its scope. Thus, a sentence like (19a) produces an interpretation that can be adequately paraphrased by (19b), and not by (20).

(19b) O João tem me dito, toda vez que me liga de Porto Alegre, que tá chovendo

# em Porto Alegre.

'João has told me, every time he calls from Porto Alegre, that it is raining in Porto Alegre.'

in the reading of (18a) is the result of ambiguities in the scope relations between the speech verb ('dizer') and the indexical expression ('em dois dias').

(20) O João tem me dito, toda vez que me liga de Porto Alegre, que tá chovendo em São Carlos.
'João has told me, every time he calls from Porto Alegre, that it is raining in

'João has told me, every time he calls from Porto Alegre, that it is raining in São Carlos.'

(20) is not an adequate paraphrase of the interpretation of (19a), because it shows a reading in which the predicate 'chover' (rain) is evaluated in relation to the location of the utterance context, i.e., the place where Maria utters the sentence (in São Carlos = c\*). In other words, if we assume that the verb 'chover' (rain) is an indexical that requires a location information ( $c_1$ ), then (19a) should be evaluated in relation to the reported context (Porto Alegre = c') – being interpreted according to the paraphrase in (19b).

In this situation, the monster operator 'dizer' (say) shifts the context of evaluation and the predicate 'chover' (rain) is evaluated in the local of the reported context (c'<sub>1</sub>) (we have a spatial indexical monster); the predicate is not evaluated in the utterance context (c\*<sub>1</sub>)<sup>27</sup>.

In both cases of monsters discussed so far, we observe that the monster operator 'dizer' (say) produces a shift from c\* to c', as a consequence, the indexicals monsters ('em dois dias' (temporal indexical) and meteorological predicates (spatial indexical)) have their semantic values determined in the reported context and not in the utterance context. In the following section, slightly different monsters will be presented.

# c) Monsters in the person domain

We will now discuss cases that do not follow the patterns of monsters analyzed above. The main differences are the following: (i) the monster operator is not a speech verb; (ii) indexicals affected by monsters operators are not evaluated in the reported context; (iii) only one speech context is involved, of course, the context in which the sentence is uttered and (iv) there is a fictional context present (c<sup>#</sup>).

Before moving to the analysis, we should mention that the sentences that are the subject of this section are called "metafictional sentences", already presented in the section about Predelli's approach. Consider the situation in (21) and the metafictional sentence in (21a).

<sup>&</sup>lt;sup>27</sup> The availability or necessity of a space position for meteorological verbs raises complex issues for Semantics and Philosophy. An indexical explanation for some of these problems as the one we offer here is far from consensus and our only point is that if such an analysis is adopted, we find situations where a monster operator is present, as is the case of (18). See Recanati (2007) about issues and alternatives that involve meteorological verbs.

- (21) Situation: imagine that at the end of a theater play, called Maria vai com as outras, a reporter interviews an actress (Ana) that plays the character Maria in the show. The reporter asks the following question to the actress: "What do you think could be changed so the show will be more funny?". Ana answers with (21a).
- (21a) **Eu** acho que **eu** podia ser rica. 'I think I could be rich.'

One interpretation of this sentence is with monsters and can be adequately paraphrased by (22). (23) is a representation in which the different contexts mobilized in the interpretation of the relevant indexicals are explicit.

- (22) *Ana acha que Maria podia ser rica.* 'Ana thinks that Maria could be rich'
- (23)  $Eu(c_a^*)$  acho que  $eu(c_a^{\#})$  podia ser rica<sup>28</sup>. ' $I(c_a^*)$  think that  $I(c_a^{\#})$  could be rich'

In the non-fictional context (c\*), the referent of the first indexical 'eu' (I) is Ana; in the fictional context (c\*), the second indexical have the character Maria as its referent. In other words, the first occurrence of 'eu' (I) refers to Ana (the speaker of the utterance context c\*), and the second 'eu' (I) refers to the character played by Ana in the fictional context (Maria). Note that the first indexical is evaluated <u>in the speech context, but not the second</u>, and because of that, we can not say that the second 'eu' (I) is the speaker of that context. Although in the literature on indexicals often "agent of the context" is equivalent to "speaker of the context"; this is not the case to (21a).

<sup>&</sup>lt;sup>28</sup> It was suggested, by an anonymous reviewer, that the two occurrences of the indexical 'eu' (I) have distinct references because: (i) the interpretation of indexicals depends on possible worlds and (ii) there is a modal context created by the imperfective in 'podia' (could). Initially, we clarify that the indexicals need more finegrained structures (smaller) than possible worlds to be evaluated - such as contexts. A simple example that shows this is discussed below (several examples are presented in the literature, one of the most famous is about Lingens lost in the Stanford Library and it is due to Perry (1993) and Lewis (1983)): if João and Maria utter the sentence (s) 'Eu sou mulher' (I am a woman) in the same world, say w1, we will have difficulty to assign a semantic value to the indexicals, and also to the proposition conveyed by the sentence, because there is no way to distinguish the utterances. To model these meanings we need smaller structures, i.e., the contexts. For example, Maria utters s in c1 and João in c2. From this, to 'Eu sou mulher' (I am a woman) said by Maria, 'eu'(I) = Maria and s is T in c1 and w1; on the other hand, to 'Eu sou mulher' (I am a woman) said by João, 'eu' (I) = João and s is F in c2 and w1. Thus, in the same possible world, w1, there are two different contexts, c1 and c2 (details in BASSO; TEIXEIRA; VOGT (2012)) and this allows s be modeled adequately. Regarding the statement in (ii), if the modal verb were (the only) responsible by the shifting, then we would expect that a sentence like "Eu acho que eu podia tomar um chopp antes da peça' (I think I could have a beer before the play) (where there is no metafictional monster operator as we will claim below) in a context as (21), had a similar interpretation to that shown in (23), i.e., the indexical 'eu' (I) would have two different referents. However, this interpretation is not achieved because the modal + the attitude verb can not shift the context; we claim, therefore, that the presence of a metafictional monster operator is required.

Another aspect to be noted in (21a) is that the work of the monster operator is not performed by the attitude verb (or, not only by the attitude verb). In fact, the attitude verb acts as a boundary between contexts, and the metafictional operator (FM<sup>#</sup>, BASSO; TEIXEIRA, 2011) is the element responsible by the shifting to the fictional context. Because of this process, FM<sup>#</sup> is the monster operator in (21a).

This case shows one of the incompatibilities between the Schlenker's ideas and the data from BrP. Schlenker (2003, p.32) states that "[...] an attitude report manipulates a context variable, whose value may fix the reference of indexicals that appear in its scope". However, in sentence (21a) 'achar (que)' (think (that)) does not have this function, because the attitude verb does not fix the referent of indexicals, it only separates the fictional context from the non-fictional. The role of setting the value of the referent in the fictional world/context is played by the monster operator FM<sup>#</sup>.

We can show that  $FM^{\#}$  is responsible for shifting contexts when we introduce the expression that explicit the monster operator work in the sentence, consider (24).

(24) **Eu** acho que, na peça 'Maria vai com as outras', **eu** podia ser rica. 'I think that, in the piece Maria vai com as outras, I could be rich'

In (24) the expression 'na peça *Maria vai com as outras*' (the explicit FM<sup>#</sup>) controls the variable of the context and, therefore, and it fixes the semantic value of the indexicals under its scope (in the relevant show).

Formally, the monster operator proposed by Basso and Teixeira (2011) is very similar to the one presented by Predelli (2008), however, instead of just changing the coordinates of world and time of the context, it can change other coordinates, as the agent coordinate ( $c_a$ ).

$$\begin{split} & [[FM^{\#}\left(\alpha,\phi\right)]]_{c,w} = T \;\; \text{iff} \;\; [[\phi]]c^{\#}, w^{\#} = T \text{, where } c^{\#} \; \text{is just like } c, \text{ except that (i) } c_{w}^{} = w^{\#}, \\ & \text{and } w^{\#} \; \text{is the possible world determined by } [[\alpha]]_{c,w}, \text{ and (ii) } K(c^{\#}), \text{ where } K \; \text{is some relevant coordinate of the fictional context (such as } c_{a}^{}, c_{b}^{}, c_{b}^{}, e_{c}^{}). \end{split}$$

With FM<sup>#</sup> the world of the context is the world established by the fiction. However, other contextual coordinates (the relevant ones) can also be modified. In such cases, the coordinates of the fictional context are used for setting the value of indexicals, because the monster operator brings the fictional context c<sup>#</sup> into consideration. Hence, the value of the second 'eu' (I) of (21a) is fixed, and the correct semantic values of the indexicals, is, respectively, Ana and Maria.

# Suitable notion of monsters for natural language data

In this section, taking into account the data presented so far especially those related to the BrP, we present next the concepts of monsters operators defended by the authors mentioned in this paper. These conceptions can be verified (i) implicitly, by examples and by explanations presented by the authors, or (ii) explicitly, by the definitions provided by them. After this, we will analyze the concepts presented and verify which one is the most appropriate for the natural language data.

Before we do this let us recall the authors' data in the following summary table:

Authors	Languages	Monsters operators	Remarks					
Kaplan (1989)	English	There are not in natural language.	Monsters operators shift the character of the indexicals.					
Schlenker (1999, 2003, 2011)	English Amharic	'tell' 'yt-lall'	Monsters operators operate on speech contexts. The shifting occurs from c* to c'.					
Anand and Nevins (2004) and Anand (2006)	Zazaki <i>Slave</i>	'va' 'sédidi'	Operators operate on speech contexts. The shifting occurs from c* to c'.					
Predelli (2008)	English	'FM'	Operators shift the character. The shifting occurs from c* to c# in modal and temporal indexicals.					
Basso and Teixeira (2011), Teixeira (2012) and Teixeira and Basso (2013)	BrP	'dizer' 'FM#'+ 'achar'	The shifting occurs: (i) from c* to c'; (ii) from c* to c#.					

Frame 1 – Summary of literature

## Source: Created by the author.

Observing the frame above, we note that natural language have instances of monsters operators acting only on speech contexts and instances of monsters acting on the speech context plus another kind of context. In other words, the examples presented demonstrate that monsters operators shift the character of indexicals, and this shifting takes place in two ways: (i) from the utterance context to a reported context; (ii) from the utterance context to a fictional context.

From this first observation, it is necessary a concept of monster operator comprehensive enough to include the different contexts (c\*, c', c#) where indexicals are evaluated. In order to determine which definition of monster is more adequate, we compare the conceptions offered by the authors cited here; when this concept is not clearly defined, we try to capture their ideas based on the examples analyzed by them and based on the contexts that appear in these analyses.

Kaplan (1989), as noted, denies the existence of monsters operators in natural language, but the author offers a conception of this kind of element as: "Operators [...] which attempt to meddle with character [...]." (KAPLAN, 1989, p.511). This definition brings a broad conception of monsters, since there is no restriction on the nature of the context handled by a monster operator. It requires just that indexicals are set in a context c, where  $c \neq c^*$ .

Regarding Schlenker (1999, 2003, 2011), the definition of monsters operators is much more restrictive, because according to him an indexical "depend[s] either on the context of the actual speech act [...] or on the context of the reported speech act" (SCHLENKER, 2003, p.32), *i.e.*, a monster operator can modify the context of evaluation of indexicals from the utterance context to a reported context. Therefore, the range of contexts for the monster operator to act upon is restricted to two types of contexts — two speech contexts.

Anand and Nevins (2004) and Anand (2006) do not present an explicit concept of monster operator, but when we look at their examples and analysis of monsters in Slave and Zazaki, we see that indexicals monsters always have their context of evaluation modified from c\* to c'. We note that the authors only analyze with speech contexts through the following quote: "for any two shiftable indexicals ind1 and ind2 in a domain D, ind1 may be dependent on <u>speech-context</u>  $C_A$  different from ind2's <u>speech-context</u> only if ind2 is not c-commanded by  $C_A$ ." (ANAND, 2006, p.107, our emphasis). This quote makes it clear that only speech contexts are involved in the evaluation of the indexicals (as a consequence, c\* and c'). Additionally, they do not present examples in which the monster operator shifts the context of indexicals to another context that is not a speech reported context. Because of this, Anand and Nevins (2004) and Anand (2006) are included in the group of authors that advocates for a restricted conception of monster operator, as well as Schlenker.

Predelli (2008), in turn, presents a concept of monster operator similar to Kaplan, since for him the appropriate semantic treatment of metafictional sentences requires "operators on character" (PREDELLI, 2008, p.277). However, the author restricts the scope of monsters operator, because he states that they are "[...] modal (and temporal) operators on character, that is, in the current jargon, modal (and temporal) monsters" (PREDELLI, 2008, p.277). Despite the restriction on the indexicals that can be monsters, Predelli's conception of a monster operator is close to the broad conception by Kaplan (1989), because it does not restrict their contexts of action. This idea reflects the cases examined by Predelli, where monsters operators shift the context of evaluation from c\* to c#. In these cases, unlike the situations analyzed by Schlenker (1999, 2003, 2011), Anand and Nevins (2004) and Anand (2006), there are not two speech contexts.

Finally, Basso and Teixeira (2011), Teixeira (2012) and Teixeira and Basso (2013) claim for a conception of monster operator that follows Kaplan. This is because we found data showing that BrP indexicals, in general, may depend on the utterance context, on the reported context and on the fictional context ( $c^*$ , c',  $c^#$ ). Thus, a monster operator can shift the context of evaluation of indexicals from the utterance context: to the reported context or to the fictional context.

If we take the data from BrP into account, the concept of Schlenker, and those who follow him, is too restrictive especially for cases of metafictional sentences, because the author only provides c' to indexicals modified be evaluated and, in sentences like (21a), a fictional context ( $c^{\#}$ ) is required. Therefore, if we compare the conception of monsters (indexicals and operators) of Kaplan and of Schlenker, we can say that the first is too restricting, while the second is comprehensive. Which one would be the best?

Because monsters in metafictional sentences behave differently, the concept of monster presented by Schlenker, in our view, is too restricted. For this limitation, we discard this view, since it does not address all cases of monsters found in BrP. The concept of monsters presented by Kaplan (1989) (presented in the second section of this paper), in turn, is wide enough to include the monsters found in sentence (21a) and in all other sentences in all languages presented here. Therefore, the conception of monsters proposed by Kaplan (1989) is the best for the cases analyzed here.

### Conclusion

Having discussed the concepts and data of monsters (indexicals and operators) that authors like Kaplan (1989), Schlenker (1999, 2003, 2011), Anand (2006), Anand and Nevins (2004), Predelli (2008), Basso and Teixeira (2011), Teixeira (2012), and Teixeira and Basso (2013) have presented, we can say that:

- there are (at least) three kinds of contexts in which an indexical can be evaluated in natural language: the utterance context, the reported context and the fictional context (c\*, c', c<sup>#</sup>);
- (ii) there are two relevant concepts of monsters operators presented: (a) the concept of monster operator of Schlenker (1999, 2003, 2011) that is so restricted that says that a monster only can shift the context of evaluation of indexicals to the reported context (c') and (b) Kaplan's notion of monster that is so broad that it does not restrict the contexts of evaluation of indexicals.

Among a narrow proposal (Schlenker) and a broad proposal (Kaplan), there are enough arguments to defend Kaplan's concept of monster as the best one. As

we have seen, Kaplan's conception does not limit the evaluation of the indexical monster to certain contexts. For him a monster operator is simply a structure that is able to shift the context (the character) of indexicals.

So, even though Kaplan (1989) did not accept that there are monsters in natural language, he presents a concept of monster operator that fits all the data presented, i.e., the author introduces the best concept of monster proposed so far.

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- RESUMO: O presente artigo revê a literatura relacionada a um tipo particular de operador, supostamente presente em línguas naturais, chamado de "operador-monstro". Esse operador tem a característica de poder mudar o contexto de avaliação de itens indexicais sob seu escopo. Sua existência foi inicialmente negada por Kaplan (1989), em seu famoso texto sobre a semântica dos itens indexicais, e, posteriormente, autores como Schlenker (2003) e Anand (2006) argumentaram que tais operadores de fato existem em línguas naturais, com base tanto em dados de línguas indo-europeias quanto de outras famílias linguísticas. Contudo, analisando com cuidado a literatura, é possível notar, nos vários autores que se debruçaram sobre o tema, diferentes definições desse operador. Neste artigo, após apresentar o conceito de operador-monstro conforme postulado por Kaplan (1989) e defender sua existência com base em dados do português brasileiro (PB), argumentamos a favor de uma definição para esse operador que seja ampla, nas linhas daquela primeiramente proposta por Kaplan (1989). Os dados do PB serão crucias para defender nossa posição.
- PALAVRAS-CHAVE: Semântica. Indexicais. Operadores-monstros. Mudança de contexto.

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# SEMANTIC CHANGE OF *ĀTMÁN*- IN THE *RGVEDA* AND THE *ATHARVAVEDA*

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- ABSTRACT: This paper studies the use of *ātmán* in the *Rgveda* and the *Atharvaveda*, and aims to show an ongoing semantic change through the period of composition and compilation of these texts. A cognitive and typological-functional approach is used here and all cases where *ātmán* appears in the corpus have been analysed both grammatically and philologically. The results of this research show that *ātmán* acquires new meanings and uses during the course of this process ('being, 'self'), without losing the previous ones ('vital breath', 'breathe'). The systematisation of the different uses into a semantic map leads to the conclusion that: 1) the directionality of this semantic change is similar to that of equivalent words in other languages, and 2) this change is closely connected to that previously experienced by *tanú*-'body, 'self'. Thus, this research aims to provide specific evidence for cross-linguistic studies on grammaticalisation and the directionality of change.
- KEYWORDS: Semantic change. Diachronic linguistics. Semantic maps. Vedic.

### Introduction

*Ātmán*- is one of the most meaningful concepts found in the philosophical and speculative texts of ancient India, of particular relevance to Buddhism and Hinduism. The question of its essence, its intrinsic nature, has been the subject of innumerable research papers, as has been the difficulty in establishing a uniform meaning throughout the different periods of the Vedic language and classical Sanskrit (WILLMAN-GRABOWSKA, 1930; RENOU, 1997; GARDNER, 1998; ELIZARENKOVA, 2005). From a linguistic perspective, this difficulty is due to the changes experienced by the word through a continuum across the various periods of this Indo-Arian language as well as within the whole of the hymns that make up the corpus analysed in this research paper.

Particularly, an important antecedent for the present analysis has been the work of ELIZARENKOVA (2005), focussed on the values and usage of this word in the *Rgveda*, that is, the most ancient collections of texts preserved in this language. The author claims that the meaning of this term in the earliest texts

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differs significantly from that found in the later texts. Trying to articulate the present work with that of ELIZARENKOVA (2005), the research objectives that originate this paper have been the following: a) generally, to obtain an overview of the different uses and meanings of this word in the *Rgveda* and the *Atharvaveda Śaunakīya* (excluding data from the AV *Paippalāda* due to the more difficult access to complete editions as those existing for the *Śaunakīya* recension), hereinafter referred to as the RV and the AV respectively; b) and more specifically, to determine the way in which semantic changes occur from certain values to others in light of the existing methodologies in the study of the directionality of semantic change, grammaticalisation and semantic maps, in line with proposals by Hopper and Traugott (2003), Heine and Kuteva (2002), Haspelmath (2003) and François (2008).

This research will attempt to show, firstly, that certain semantic changes can be identified from the earliest texts of the RV to those more recent and on to the AV; and secondly, that these changes do not occur randomly but rather across contiguous zones of meaning. This paper will show that the semantic development of  $\bar{a}tm\dot{a}n$ - is closely related to that of  $tan\dot{u}$ -, as the semantic changes of the latter appear to influence the changes in the former. Finally, given that one of the functions of  $\bar{a}tm\dot{a}n$ - within the AV is to act as a reflexive marker, the acquisition of this role will be explained using semantic-syntactic criteria; this explanation is also directly linked to the development of this word in conjunction with that of  $tan\dot{u}$ -.

The research was conducted in the following phases:

- 1) All passages in the RV and the AV containing *ātmán* have been compared and analysed to determine the most accurate meaning in each case.
- 2) The methodology of semantic mapping has been applied, analysing the process of semantic change according to a specific directionality in order to contrast the evidence with existing cross-linguistic proposals.
- The change occurring in *ātmán* has been compared to that of *tanú*-, in order to identify similarities and differences.

In order to illustrate the main premise of this work, that semantic change occurs in a specific direction and across contiguous areas of meaning, this analysis is structured to present the different meanings independently, later relating them to each other using a semantic map. There are diachronic implications to the notion that semantic change necessarily occurs over time. However, it should be restated here that the principal aim of this work is not to argue in favour of a specific periodisation of the Vedic language, and therefore will not present the different uses of *ātmán*- in a chronological order.

## Language of the RV and the AV

The RV and AV constitute the most ancient texts of any Indo-European language preserved in India, and as with other ancient languages of this family, it is a highly flexive language, with a very rich morphology and a large case system.

Generally speaking, the hymns of the RV and AV are liturgical texts, recited at different moments of the Vedic ritual. Many of these texts are repeated in both the RV and the AV (many hymns from one appear partially or entirely in the other), but it can be said that the RV contains a greater number of hymns alluding to rites of a public nature, while the principal texts of the AV are cosmogonic and theological hymns, used in *saṃskāra* rituals ("sacraments"), rites for women, rituals related to the king, prayers for health and long life, incantations for prosperity and luck, texts to atone for sins, texts to cure illness, and incantations against demons and sorcery (LUJÁN, 2010a); broadly speaking, it can be claimed that the AV largely consists of hymns of a private nature.

It is impossible to establish precise dates, but it is estimated that these hymns were composed between the middle of the second millennium B.C. and the end of the first millennium B.C. The most accepted chronology of these texts divides their composition into the following stages (WITZEL, 1989):

- a) **Early Vedic period**, the central language of the *Rgveda-samhitā*: RV 1.51-191, Books 2 to 7, that is, the "Family Books" (collections or *mandalas* distributed according to priestly families to which each is attributed), 8.1-66 and perhaps parts of Book 9.
- b) Later Early Vedic period, consisting of the language of RV Books 1.1-50, 8.67-103, Book 10 and perhaps parts of Book 9.
- c) **Ancient Vedic period**, corresponding to the language of the late Mantra period, representing the language of the *RV-Khila* (a series of apocryphal hymns), *Sāmaveda*, *Atharvaveda* (*Paippalāda* and *Śaunakīya*), *Yajurveda*.

Some observations should be made regarding the periodisation of the AV and its relation to the RV. Firstly, there are not merely chronological differences between the hymns of the RV and the AV, but dialectal differences as well (PARPOLA, 2002; WITZEL, 1997). Secondly, the AV can be considered as later than the RV, not because of its antiquity but essentially because of the process of compilation and canonisation, closely linked to the most recent linguistic characteristics of some of its hymns (WITZEL, 1997).

## Distribution of *ātman*- in the RV and AV

The term *ātman*- is of Indo-European origin and etymologically related to the German *Atem* 'breath' and the Gothic *uz-anan* 'exhale' (MAYRHOFER, 1986-

1992, p. 164; PUDDU, 2005, p. 91). There is a wide disparity in the frequency of its use, appearing just 22 times in the RV, and in 48 passages in the AV. The distribution of its use according to the language periods indicated above is as follows:

	RV 2-7	RV 8-9	RV 1 & 10	AV
N° of passages	2	5	15	48

Table 1 – Distribution of *ātman-* in the RV and AV

Source: Author's elaboration, based on Lubotsky (1997) and Whitney (1881).

The conclusions drawn here cannot be considered absolute but merely an approximation as there is no precise word count for each specific case. But, given the current lack of any quantitative database of the frequency of word use in the RV and the AV, it is not possible to provide more information at present. However, with this caveat, it may be instructive to note the distribution of its endings:

	N.SG	AC.SG	LOC.SG	ABL.SG	INS.SG	DAT.SG	LOC.PL	TOTAL
RV	15	4	1	2	-	-	-	22
AV	12	12	8	4	6	3	3	48
TOTAL	27	16	9	6	6	3	3	70

**Table 2** – Distribution of *ātman*- in the RV and AV by morphology

**Source**: Author's elaboration.

Although merely exploratory, these figures point to a possible extension from direct towards oblique cases in the AV and not in the RV, which has both morphological and syntactic implications.

# Uses and meanings

Traditionally, scholars have highlighted the polysemy of this term. Among the most frequently attributed meanings are 'vital breath', 'spirit', 'being' or 'soul', although this concept should not simply be understood as separate from the physical and corporal aspect of one's being. Thus, notes Grassmann (1976, author's italic): 1)*Hauch* tritt mit der ausdrücklichen Parallele *vāta* klar hervor (...); mit ihr in naher Berührung steht, 2) *Athem, Odem, Lebenshauch*; weiter 3) *Lebensgeist, Lebensprincip*, auch 4) vom *Geiste* der Krankheit (*yákşmasya*) wird es einmal gebraucht; 5) der *lebendige Leib*, als Einheit aufgefasst.<sup>1</sup>

In addition to the different lexical values mentioned above, related literature often makes reference to its possible reflexive use (MENDOZA, 1984; KULIKOV, 2007; HETTRICH, 2010) although there is no consensus among specialists in this matter. Mayrhofer (1986-1992), for example, believes this value already occurs in the RV while other authors, such as Delbrück (1888), maintains that it only appears from the AV on.

Additionally, and in relation to the question of its essence, in studying the concepts referring to the English term *self*, Gardner (1998) maintains that  $\bar{a}tm\dot{a}n$ -is related to a vital and dynamic element that remains to a degree unspecified. Thus, the term is closely connected to elements characterised by their animacy features.

Considering the semantic description found in standard reference texts, and based on a painstaking analysis of all passages in which the term occurs, the following panorama can be offered, classifying the different meanings and uses encountered, first in the RV and later in the AV.

## **Rgveda**

### Vital principle

This is the most frequently cited meaning and is found throughout the entire corpus. Translations may vary between the notions of 'spirit', 'vital breath' or 'vital principle', but what appears clear is that this concept makes reference to some element related to respiration and from this to life itself (ZYSK, 1993). Using this meaning, the texts make reference to that which is full of life or vitality in the most recent Books (examples 1 & 5), as well as the two sole cases found in the "Family Books" (examples 2 & 3) and in more complex Books such as 9 (example 4):

<sup>&</sup>lt;sup>1</sup> "Breath clearly occurs with the explicit parallel vāta (...); and is in close contact with this, 2) vital breath, respiration, breath of life; even 3) spirit of life, vital principle, and 4) it is used once as spirit of the illness (yákşmasya); 5) the living body, considered as a whole." (GRASSMANN, 1976, our translation)

- $(1)^2$  dákşiņā<sup>3</sup>ánnamvanuteyáh<sup>4</sup>nahātmáreward-N.SGfood-ACC.SGprocures-3SG.PRS.MEDREL.N.SG1PL.GN.SG'The reward procures food, which [is] our vital principle' (RV 10.107.7c)
- (2) ātmā te vātah rajah ā-navīnot
   N.SG 2G.SG wind-N.SG sky-ACC.SG roar.towards-3SG.INT
   'The wind, your vital principle, roars once and again towards the sky' (RV 7.87.2a)
- (3) Tásmin ātmá jágatah tasthúşah ca
   DEM.LOC.SG N.SG moving -G.SG fixed-G.SG And
   'In him is the vital principle of what is moving and what is fixed' (RV 7.101.6b)

(3) should not be interpreted to mean that the vital principle belongs to something that is not alive but rather that inanimate objects also have their own vital principle. A similar case appears in (2), as the wind, an element of nature, is deified as an animated element. From this, it seems logical to apply this concept to elements which are initially not alive but animated. For example:

(4) ātmā yajňásya
N.SG sacrifice-G.SG
'The vital principle of the sacrifice' (RV 9.6.8a)

Within the scope of animated elements, this term serves for both human and divine beings:

(5) ātmá devánām bhúvanasya gárbhaḥ
 N.SG god-G.PL world-G.SG embryo-N.SG
 'The vital principle of gods, the embryo of the world' (RV 10.168.4a)

Given the paucity of evidence in the most ancient texts of the RV, it is impossible to affirm categorically that the term was initially used to refer to animated beings and was then extended to inanimate objects. However, this hypothesis cannot be ruled out as this direction is closely related to the proposed hierarchy of animation in many languages (CROFT, 2003).

 $<sup>^2</sup>$  Throughout the work only  $\bar{a}tman$ - is not translated in the glosses to avoid conditioning the semantic interpretation in each case.

 $<sup>^3</sup>$   $D\acute{a}ksina$  is the remuneration or payment to the priest paid by those requesting the rite or sacrifice to be performed.

<sup>&</sup>lt;sup>4</sup> The use of the masculine here despite *dáksiņā* being feminine may be a case of attraction by *ātmán*-

While this meaning is present throughout the entire RV, it is only in the most recent hymns that this vital principle is identified as one of the parts of the being and, as such, in a close relationship with other parts of the being. But this particularity may merely be due to a lack of evidence, for example:<sup>5</sup>

(6) bhắmyāḥ ásuḥ ásrk ātmấ kvà svit
 earth-G.SG life-N.SG blood-N.SG N.SG where IP
 'Then, where is the life, the blood, and the vital principle of earth?' (RV 1.164.4c)

 $\dot{Asu}$  and  $\bar{atmán}$ - are two components of the being that have a strong interrelation (KAHLE, 2012) and both are involved in this process of semantic change. Some translations present the two as almost synonyms although there is a fundamental difference found in these texts:  $\bar{atmán}$ - is located within the subject, while  $\dot{asu}$ - is a state into which the subject enters; thus,  $\dot{asu}$ - is an element associated with death and the Afterlife, at times approaching the notion of  $\psi v \chi \dot{\eta}$  (ELIZARENKOVA, 2005, p.127); in other words, the concept of  $\dot{asu}$ - corresponds to that part of life that extends beyond death. It is no coincidence that these types of references appear in Books 1 and 10, which are precisely those which begin alluding to death and scatology.

Another element of the being linked in these texts with ātmán- is tanú- 'body':6

(7) ātmā pitúḥ tanúḥ vắsaḥ ojodāḥ abhyáñjanam
 N.SG nourishment-N.SG body-N.SG dwelling-N.SG strengthening-N.SG unguent-N.SG
 'The vital principle [is] the nourishment, the body [is] the dwelling, the unguent [is] strengthening' (RV 8.3.24ab)

The parallel between these clauses suggests a difference between  $\bar{a}tm\acute{a}n$ - and  $tan\acute{u}$ -: the character of "holder" or "container" of  $tan\acute{u}$ - ("dwelling", a place where one resides) is contrasted with the character of "content" or "contained" of  $\bar{a}tm\acute{a}n$ -("food" or "nourishment", which enters into the dwelling and fills it with life).

As noted by Elizarenkova (2005), the relation between this concept and words related to 'food' or 'nourishment' in the RV should come as no surprise; it also occurs in RV 7.101. 6 (*pitú*-) and in RV 9.85.8 (*dhāsi*-). This frequent relation leads the author to suggest that the vital principle may be understood as something physical in relation to the human body (ELIZARENKOVA, 2005). However, we must recall, firstly, the presence of this concept in relation to animated elements (although not necessarily animate), and, secondly, the importance of ingestion in

<sup>&</sup>lt;sup>5</sup> Similar to AV 9.9.4c.

<sup>&</sup>lt;sup>6</sup> Given that this article is focussed on the semantic behaviour of  $\bar{a}tm\dot{a}n$ - rather than  $tan\dot{u}$ -, the latter will be glossed in each case.

Vedic ritual, not simply as a habitual action but as the performance of a religious rite (MALAMOUD, 1996): the priest can be regarded as a cook and the oblations are the substance that is prepared and consumed. The main gods of the Vedic pantheon are invited to eat and drink, and are petitioned to lend their strength and actions to those making the offering (PATTON, 2005). Ingestion is essential to the rite and for relations of reciprocity and the food can also be considered as the "essence" of the sacrifice, which explains the parallels between these two kinds of concepts.

From the idea that *ātmán*- refers to what is full of life, it seems that in certain contexts the meaning has shifted from "that which fills with life" to "the being with life", including both corporeal and incorporeal aspects. This becomes especially evident in passages that mention the extraction of an illness from *ātmán*-. In other words, a change takes place due to metonymy, in which the point of departure is that *ātmán*- is that which fills with life and the finishing point is that *ātmán*- is a being full of life, an animated being.

## Animated being

The translation of the concept of 'being' is highly complex and has given rise to a great deal of discussion and debate in both Western and Indian thinking. The concept of *ātmán*-lies at the heart of this debate, although it is difficult to maintain that in the RV and AV there is the same degree of ontological speculation. On the contrary, within this corpus 'being' can be understood fundamentally as the idea of the unity of the being, connecting the corporeal and incorporeal aspects, either of oneself or of another. Most probably, given the emphasis found in the following passages, a better translation could be 'sameness'. It is in this sense that the following passages should be understood although the translation as 'being' has been kept for the sake of clarity:

- (8) yákşmam<sup>7</sup> sárvasmāt ātmánaḥ tám Idám ví vṛhāmi te yákşma-ACC.SG all-ABL.SG ABL.SG DEM.ACC.SG DEM.ACC.SG remove-1SG.PRS.ACT 2SG.G 'This yákşma I remove from all your being / from yourself' (RV 10.163.5c = 6cd)
- (9) sómam indrah pibatu .... bálam dádhāna ātmáni soma-ACC.SG Indra-N.SG drink-3SG.IMPTV.ACT strength - ACC.SG put-PTC.MED.N.SG LOC.SG
   'May Indra drink soma, putting strength in his being / on himself' (RV 9.113.1c)

<sup>&</sup>lt;sup>7</sup> Name of an illness, possibly a type of tuberculosis (ELIZARENKOVA, 2005).

In (8) and (9), the value of  $\bar{a}tm\acute{a}n$ - goes beyond the idea of 'vital breath' and involves the corporeal aspect of the being. This is not the case in those few instances that can be included within the Family Books of the RV, nor in a large number of the remaining passages. Note that (8) forms part of the texts containing medicinal incantations, a frequent occurrence especially in the AV. Example (9), however, is more difficult to place since Book 9 is a later compilation of hymns dedicated to Soma. For reasons to be discussed below (see " $Tan\acute{u}$ - and  $\bar{a}tm\acute{a}n$ -"), these can be considered as later texts.

To provide a broad summary of the uses of  $\bar{a}tm \acute{a}n$ - in the RV, one could say it is principally used to mean 'that which fills with life', 'vital breath' or 'vital principle', referring to human beings, to gods or to certain animated elements such as the wind. This use can be found in 16 of the 22 passages: 7.87.2a, 7.101.6b, 8.3.24ab, 9.2.10d, 9.6.8a, 9.85.3b, 10.92.13c, 10.97.11c, 10.107.7c, 10.168.4a, 1.34.7d, 1.73.2d, 1.115.1d, 1.162.20a, 1.163.6a and 1.164.4c. In the majority of passages, this term is used in direct cases (nominative and accusative).

In some of these cases, especially when it is connected to other key concepts such as  $tan\dot{u}$ - or  $\dot{a}su$ -, the term  $\bar{a}tm\dot{a}n$ - makes reference to one of the parts of the being. In contrast, it refers to the self or being in a more general sense in those passages in which it makes reference to the extraction of an illness or part of a funeral hymn (situations which are less typical in the oldest hymns): 10.16.3a, 10.97.4d = 8d, 10.163.5c = 6c and also 9.113.1c.

### Atharvaveda

#### Vital principle

Both of the values appearing in the RV are present in the AV, particularly that of 'vital breath', 'vital principle':

(10)	ātmā	jágatas	tasthúṣas	ca
	N.SG	moving-G.SG	fixed-G.SG	And
	'The vi	tal breath of what	t is moving and	of what is fixed' (AV 13.2.35d)

As occurs with the most recent hymns of the RV, and more frequently in the AV,  $\bar{a}tm\dot{a}n$ - is combined with other elements referring to the animated being, as for example with  $\dot{a}su$ -, and also with  $tan\dot{u}$ -:

(11) ásur ātmā tanvàs tát sumát guḥ
 life-N.SG N.SG body-ABL.SG DEM.N.SG together gone-3PL.AOR.INJ.ACT
 'The vital breath, the life are gone together from the body' (AV 5.1.7b)

## Animated being

As in the RV, there are passages in the AV in which the concept does not refer to just one of the components of the animated being, but to the being as a whole, in which the corporeal or material aspects converge with the incorporeal aspect. This is in line with the observations of Gardner (1998) regarding the degree of imprecision or non-specificity of *ātmán*- in certain contexts. Among the cases in which *ātmán*- is combined with other elements referring to the whole of the animated being, are the following:

- (12) yát te ātmáni tanvām ghorám Te ásti
   REL.N.SG 2G.SG LOC.SG body-LOC.SG frightful-N.SG 2G.SG be-3SG.PRS.ACT
   'That which is frightful in your being / yourself / in your body' (AV 1.18.3a)
- (13) yád ātmáni tanvàh me víriştam
  REL.ACC.SG LOC.SG body-G.SG 1G.SG broken-ACC.SG
  sárasvatī tád á pṛṇad ghṛténa
  Sarasvati-N.SG DEM.ACC.SG complete-ACC.SG clarified.butter-INS.SG
  'That which is broken in my body, let Sarasvati [become] complete with clarified butter' (AV 7.57.1c)

The genitive of (13) reveals a distinction between  $tan\dot{u}$ - and  $\bar{a}tm\dot{a}n$ -, as "container" and "content". Additionally combinations with another key element  $pr\bar{a}n\dot{a}$ - are found in the AV:

(14) pŕthak sárve prājāpatyáh prāņán ātmásu bibhrati
 separately all-N.PL Prājāpati's.descendant-N.PL vital.breath-ACC.PL LOC.PL carry-3PL.PRS.ACT
 'All Prājāpati's descendants carry separately their vital breaths in their selves'<sup>8</sup> (AV 11.5.22ab)

This term,  $pr\bar{a}n\dot{a}$ , merits particular mention given its semantic proximity to  $\bar{a}tm\dot{a}n$ , which can perhaps be explained by a common etymology (*an*- 'breathe' + prefix *prá*) (MAYRHOFER, 1986-1992). The appearance of  $pr\bar{a}n\dot{a}$ - is notably infrequent in the most ancient texts of the RV, only occurring on five occasions (KAHLE, 2012), four of which belonging to the most recent texts (ELIZARENKOVA, 2005). It can also be noted here that, as opposed to those passages in which  $\bar{a}tm\dot{a}n$ - appears (and thus, the "content"), here this meaning is expressed by  $pr\bar{a}n\dot{a}$ -, displacing the other concept of "container".<sup>9</sup>

 $<sup>^{\</sup>rm 8}$   $\,$  Note the strangeness of a literal translation '[...] in their own selves'.

<sup>&</sup>lt;sup>9</sup> Note that the change of contained/container is one of the most frequent cases of semantic change by metonymy. See Luján (2010b).

Considering the etymological relation and the internal chronology of the texts, this may explain the lack of interrelation between the two concepts in the earliest texts. As noted by Elizarenkova (2005), if the common etymology had existed at the time of composition of the earliest texts, it may have been difficult to consider both elements as differentiated components of the being. In the AV, however, this distinction can be made through the loss of this semantic association (ELIZARENKOVA, 2005). If we regard this as a possible semantic development, it seems logical that this distinction would be even greater in the *brāhmaņas*, generally later than the RV and a large part of the hymns of the AV. This would be the case to the degree to which  $prāná-^{10}$  assumes the ancient meaning of  $\bar{a}tmán$ - as the 'vital breath' when  $\bar{a}tmán$ - comes to be specifically associated with the concept of 'animated being', 'selfhood', "assuming the aspect of *ásu*- as the spiritual component of man that transcends death" (KAHLE, 2012). In fact, this appears to be the meaning pointed to in example (14).

### **Interior being**

Taking the idea of 'full of life' as a point of departure, it is possible to reach the notion of 'being (full of life)', as seen in the RV. In the AV, this semantic change appears to go further towards encompassing an idea that distinguishes between the two aspects of the being: the interior and exterior. This is absolutely crucial if we recall the conception of  $\bar{a}tmán$ - as that which is able to enter into the being:<sup>11</sup>

(15) yakşmodhám antár ātmánah bahír nír mantrayāmahe
 seat.of.desease-ACC.SG within ABL.SG out far speak-1PL.PRS.MED
 'We call out and far the seat of the yakşma, from within your own self'(AV 9.8.9cd)

As can be seen, this is also closely related to the idea of the interior and the animated being understood as a whole, that is, including the corporeal and incorporeal aspects:

(16)  $y\acute{a}t$  te dyuttám ásti péştram Te ātmáni REL.N.SG 2G.SG broken-N.SG be-3SG.PRS.ACT bone-N.SG 2G.SG LOC.SG 'That bone<sup>12</sup> which is broken in your being / in yourself' (AV 4.12.2b)

 $\bar{A}tm\acute{a}n$ -, understood as the 'interior being' is now in opposition to the 'exterior being':

<sup>&</sup>lt;sup>10</sup> For an excellent study of the relation between *ātmán*- and *prāņá*-, especially in later literature, see Zysk (1993).

<sup>&</sup>lt;sup>11</sup> Note that Willman-Grabowska (1931) maintains that the idea of the 'soul or inner principle' or 'oneself/ the self' is more frequent that that of 'vital breath' in the AV.

<sup>&</sup>lt;sup>12</sup> Péştram probably makes reference not only to the bone structure by to a section of bone with the surrounding flesh due to its possible etymological relation with pes- 'strain, grind' (MAYRHOFER, 1986-1992, p. 70), who translates it as Fleischstück (literally, 'piece of meat').

 $R\bar{u}p\dot{a}ni$  and  $\bar{a}tm\dot{a}nam$  are antithetical:  $r\bar{u}p\dot{a}ni$  'the outer form of things';  $\bar{a}tm\dot{a}nam$  'thy own nature'. It is a controlling characteristic of Vedic conceptions that the inner, true nature of any divinity, or instrument of power, must be understood in order to control its influence or power. (BLOOMFIELD, 1897, p. 402-403).<sup>13</sup>

This may gradually lead to a reflexive interpretation, as is evident in the following passage:

 (17) āviş krņuşva rūpáni má ātmánam ápa gūhathāḥ manifest make-2SG.IMPV.MED shape-ACC.PL not ACC.SG hide-2SG.INJ.MED
 'Make manifest your (outer) shapes, do not hide your (inner) being' (AV 4.20.5ab)

At this point is seems clear that the interior and that which forms an intrinsic part of the being, its quintessence, are merged:

(18) adbhír ātmắnam abhí sám spršantām water-INS.PL ACC.SG to bring.into.contact-3PL.IMPV.MED 'Let [the grains] bring into contact with the waters' (AV 12.3.30ab)

### **Reflexive marker**

Through the notion of 'being' understood as a whole (corporeal and incorporeal aspects), it is a simple matter to extend its use to that of a reflexive marker, as seen when  $\bar{a}tm\acute{a}n$ - is co-referent to another element in the clause:

- (19) śréyāmsam enam ātmánah mānayet
   superior-ACC.SG DEM.ACC.SG ABL.SG consider-3SG.OPT.ACT
   'He, should consider that one, as superior to himself,' (AV 15.10.2a)
- (20) *índrah* yắm cakrá Ātmáne
   Indra-N.SG REL.ACC.SG make-3SG.PF.MED DAT.SG
   anamitrắm śácīpátih
   having.no.enemies-ACC.SG lord.of.might-N.SG
   'To that [i.e. Earth] which Indra, lord of might, made with no enemies for himself (for his

'To that [i.e. Earth] which Indra, lord of might, made with no enemies for himself (for h own self)' (AV 12.1.10cd)

<sup>&</sup>lt;sup>13</sup> "Rūpáni and ātmánam are antithetical: rūpáni 'the external form of things'; ātmánam 'its own nature'. It is a determining characteristic in Vedic that the internal nature, the true nature, of any divinity or instrument of power must be understood in order to control its influence or power".

According to the data obtained here, it is difficult to support that the reflexive meaning is already present in the RV given that there is only one passage that exhibits the properties of a reflexive (RV 9.113.1c), attributed to the most recent period.

Generally speaking, cross-linguistic studies of reflexivity largely focus on direct cases, that is, those in which co-reference is established between the first and the second actants, typically subject and direct object (accusative case). However, the phenomenon of reflexivity can be extended to indirect cases as well, that is, when there is a third actant, generally in oblique cases, as in (19) and (20).

Examples from different languages help to understand how this term comes to be interpreted as a reflexive, since there are plenty of cross-linguistic evidence for reflexives that develop from elements meaning 'spirit', 'being', 'person', 'body' (SCHLADT, 2000; KÖNIG; SIEMUND, 2000; HEINE; KUTEVA, 2002), with possible intermediate stages in which the element intensifies the co-reference. In fact, this emphatic value can also be found in passages of the AV, emphasising co-reference (fundamentally with accusative) and in situations of nominal intensification (generally oblique cases, especially instrumental and locative), in which *ātmán*produces an effect similar to that found in the emphatic expressions "himself/ herself", "in person" or "in the flesh":

- (21) nír evā bhrấtrvyasya śríyam ápriyasya thoroughly indeed unkind -G.SG enemy-G.SG prosperity-ACC.SG dahati bhávati ātmánā destroy-3SG.PRS.ACT become-3SG.PRS.ACT INS.SG 'Indeed, [he] destroys completely the prosperity of his unkind enemy, [he] turns to be by himself' (AV 9.5.31-36ef)
- (22) jarásā śatáhāyana ātmánā Bhújam aśnutām decay-INS.SG hundred.years-LOC.SG INS.SG curve-ACC.SG reach-3SG.IMPV.ACT 'May [he] reach the curve by himself with his decay and in hundred years' (AV 8.2.8cd)

An interpretation merely based on the lexical sense of the word would be very peculiar: ?'Becomes by his own vital breath', ?'May he reach the curve with his vital breath'. But if we consider an emphatic reading applied to the idea of the whole being, similar to what occurs with the emphatic expression "him/herself", the text becomes much clearer. Further, it is consistent with the development of a reflexive grammatical element, which often develops through the need to intensify the co-reference between two elements in a clause.

In summarising the uses in the AV, we find, firstly, that many are maintained in the RV in certain contexts; secondly, that with this meaning the combination of *ātmán*- with other concepts referring to parts of the being are more frequent; and thirdly, there is a degree of expansion in the range of possible meanings ('being', 'interior being', reflexive and emphatic).

Although many passages are more difficult to classify in a single meaning (there are many ambiguous cases), the following distribution of passages according to meaning can be offered:

'Vital principle': 13.2.35d, 5.1.7b, 11.8.31cd, 5.5.7cd, 5.9.7ab, 12.2.34cd, 3.29.8cd, 10.8.44cd, 5.9.7cd, 19.51.1ab, 9.9.4cd, 16.3.5, 9.4.10ab, 7.111.1, 7.67.1ab, 6.53.2ab.

'Being': 1.18.3a, 7.57.1cd, 11.5.22ab, 19.48.5cd, 9.1.11-13cd, 9.1.16cd, 8.6.13ab, 3.15.7cd, 11.5.15cd, 5.29.5ab, 4.18.6cd, 19.33.5ab, 18.2.7ab, 6.16.2cd, 4.9.7cd.

'Interior being': 9.8.9cd, 7.53.3cd, 4.12.2b, 4.20.5cd, 12.4.30ab.

Reflexive: 15.10.2a, 12.1.10cd, 15.1.2, 12.3.54ab, 9.6.21, 19.17.1-10cd, 12.3.51cd, 9.5.30ab, 16.7.5ab.

Emphatic: 9.5.31-36ef, 8.2.8cd, 5.29.6-9c.

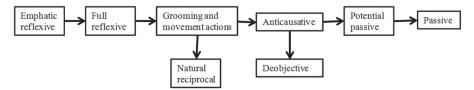
### A semantic map

The use of  $\bar{a}tm \acute{a}n$ - throughout the corpus points towards an increasing frequency of use and an extension of the range of contexts from the earliest hymns of the RV to the series of hymns in the RV 10 and on to the AV. Although it is beyond the scope of the present work, it would be interesting to study the continuation of this extension into later texts, possibly into Vedic prose, in order to confirm the affirmations of several authors as to the consolidation of a reflexive meaning (GARDNER, 1998; KAHLE, 2012).

This process of change connects their synchronic and diachronic aspects. On one hand, there is a clear set of differences between the three nuclei that are not only dialectal but also of content. The hymns of the RV and AV where we find an extension in the range of uses are often related to the practice of medicinal and funeral incantations. Furthermore, although not a definitive or irrefutable argument, the differences found may point towards a relative chronology where the semantic changes occurring over time in the three nuclei generally coinciding with the broad phases of these texts. The first phase generally coincides with the most typical meaning of 'vital breath' or 'vital principle'; the second phase, with texts where the meaning extends to 'being', 'person', in general terms, especially in Book 10 of the RV, and the most recent, the third phase, corresponds to the AV, where there is an extension to a much broader range of uses ('interior being', emphatic, reflexive) and towards the rest of the nominal paradigm. This semantic change may be related to a morpho-syntactic development as in the majority of cases the meaning 'vital principle' are direct cases (nominate and accusative), while the other meanings are generally associated with indirect cases.

It is essential to identify different meanings and their interrelation in order to understand the process of semantic change. This process is not random but occurs across contiguous zones of meaning. A useful tool for analysis is a graphic representation using a semantic map that also allows synchronic aspects to be linked to diachronic aspects. A semantic map can be defined as "A geometrical representation of functions in a 'conceptual/semantic space' interrelated through connecting lines, thus creating a network." (HASPELMATH, 2003, p.213). That is, a semantic map represents a selection of meanings and their interrelation and thus helps to create a network of shared semantic features. In order to understand the interrelation between different meanings, it is essential to understand the properties of each. As an example, Haspelmath (2003) proposes the following semantic map applied to the development of the reflexive:

Figure 1 – Semantic map of the reflexive and middle functions.



**Source**: Haspelmath (2003, p.235).

Although one may object to certain aspects of this map, particularly the development of grooming actions from full reflexives and not the reverse (see SCHLADT, 2000), it serves to show that semantic change does not occur randomly but rather through the shared features of contiguous functions. Thus, the contiguity between the emphatic reflexive and full reflexive is connected to a simple change from one meaning to another and not a large jump from the emphatic reflexive to an anticausative.<sup>14</sup>

The following semantic map<sup>15</sup> has been created based on the evidence of the uses and functions of  $\bar{a}tm\acute{a}n$ - in the RV and AV:

<sup>&</sup>lt;sup>14</sup> I am especially grateful for the comments of one of the peer reviewers regarding the presentation of the semantic maps. I have altered the original by inserting directional arrows (absent in the model by HASPELMATH, 2003) in order to make clear that semantic change occurs in a particular direction.

<sup>&</sup>lt;sup>15</sup> It should be noted here that the map has a special nucleus for emphatic values ('the person themselves'). This does not necessarily mean that there are passages in which this is the function, but rather a semantic nuance.

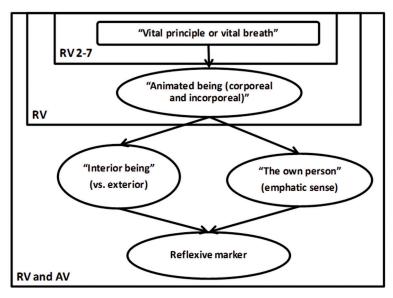


Figure 2 – Semantic map of *ātmán*- in the RV and AV

Source: Author's elaboration.

This map reflects the semantic change produced from one set of hymns to another. In the process, the term does not acquire new meanings in detriment to others but simply adds an additional layer of meaning. This change occurs across contiguous zones of meaning. In this case, the direction of the change is from 'vital principle' to 'animated being' and from there to other values due to the shared features of the contiguous zones of meaning. It would be difficult to explain an emphatic use, for example 'the person themselves' developing from the idea of 'vital breath', without an intermediate point of meaning as 'the person as a whole'. Similarly, it is unexpected that a reflexive value would develop from the idea of 'vital principle' and towards a later meaning of 'animated being'.

The direction of change seen here fully coincides with proposals for a similar change applied to various other languages with a similar development of reflexives from vocabulary related to the soul, the body or its parts, and through intermediate emphatic meanings which arise through a need to create co-reference (SCHLADT, 2000; KÖNIG; SIEMUND, 2000; HEINE; KUTEVA, 2002). This change is generally categorised as a case of grammaticalisation, that is, the term passes from a purely lexical element to having, in certain contexts, a grammatical function. During this process of grammaticalisation, contexts frequently become more generalised, that is, the element expands its range of meaning and possible contexts for use, resulting in cases of polysemy (HOPPER; TRAUGOTT, 2003), as shown in this research.

With our semantic map of  $\bar{a}tm\acute{a}n$ - in the RV and AV, it can be instructive to compare this to the map of  $\bar{a}tm\acute{a}n$ - in classical Sanskrit by FRANÇOIS (2008), in which the data are not drawn directly from the texts but from secondary literature:

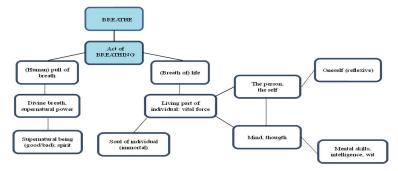


Figure 3 – Semantic map of *ātmán-* in Sanskrit.

Source: François (2008, p.203).

This map also indicates a direction of change across contiguous features of meaning. The reflexive does not develop directly from the idea of 'vital breath', but through a series of intermediate points, the most essential of which is 'the person themselves, the own being'. The development of the meaning 'soul' from the idea of 'life force' is also coherent within this process, although this value was not found in the texts of the RV and AV.

Note, however, that there are some significant differences between the two maps. These differences demonstrate the importance of philological research for a rigorous analysis of a language that, in turn, allows for more effective cross-linguistic comparisons. Firstly, when dealing with an ancient language as in this case, research that does not include a detailed study of the primary source material is less precise: the Sanskrit found in reference works tends to have an excessively broad temporal margin that may obscure the data that can be gathered from the diachronic process. Note that several of the meanings in this map are not really found in the texts of the RV and AV while the distinction between 'breath of life' and 'life force' can seem rather unnecessary.

Secondly, a detailed philological work can more exactly determine intermediate values to be taken into account in semantic development. Particularly, the RV and AV reveal the essential intermediate reading of 'person', understood both in its corporeal and incorporeal aspects, allowing the development of the meaning 'the own self', 'oneself', 'him/herself'.

# *Ātmán*- and *tanū*-

Beyond the cross-linguistic evidence, we can look to possible internal factors affecting the semantic change in  $\bar{a}tm\dot{a}n$ . As shown, this word is generally associated with others that also make reference to parts of the being and which may at times share a similar meaning. This is particularly the case with  $tan\dot{u}$ -, a feminine noun originally meaning 'body' that has also undergone semantic and syntactic changes in the corpus, moving from a much more lexical function to that of a reflexive marker. While it is impossible to provide a detailed analysis of this word and its semantic changes here, this subject has been exhaustively explored in a number of works (PINAULT, 2001; HOCK, 2006; KULIKOV, 2007; HETTRICH, 2010; OROUEDA, 2013).

Succinctly put, the lexical meaning of  $tan\hat{u}$ - as 'body' is predominant, especially in the earliest texts and continues to be used throughout the corpus:

(23)	tanvā	те	tanvàṃ	sám	piprgdhi
	body-DAT.SG	1G.SG	body-ACC.SG	with	join-2SG.IMPV.ACT
	'Join your body wi	ith my body	y' (RV 10.10.11d)		

From the most recent books of the RV on, we find the addition of the meaning of 'being', also understood in an integral manner, as a conjunction of the corporeal and incorporeal aspects. For this reason, Gardner (1998) chooses to translate this word as 'presence'.

The term later acquires a reflexive value (25, 26), but before reaching this point it is found in a number of different contexts in which its interpretation lies ambiguously in between a lexical and a reflexive value (24):

- (24)sứraḥupākétanvàṃdádhānaḥsun-G.SGbefore-LOC.SGbody/himself-ACC.SGput-PTC.MED.N.SG'Putting your body/yourself in the proximity of the sun' (RV 4.16.14a)
- (25) svayám<sup>16</sup> yajasva<sup>17</sup> Tanvàm prthivím utá dyấm
   by.yourself worship-2SG.IMPV.MED yourself-ACC.SG earth-ACC.SG and sky-ACC.SG
   '[Viśvakarman], by yourself, worship yourself, earth, and sky' (RV 10.81.6b)

<sup>&</sup>lt;sup>16</sup> Svayám functions here as an adverbial intensifier: emphasising that the action is performed by Viśvakarman's own means.

Yaj- is habitually translated as 'to sacrifice' due to its relation with yajñá- 'sacrifice'. However, there is a crucial difference between the behaviour of yaj- in Vedic and 'sacrifice' in Spanish: in the clause of the Spanish verb,

(26)	ŗtāya	saptá	dadhişe		Padā́ni	
	order-DAT.SG	seven	put-2SG.PF.MEI	D	step-ACC.PL	
	janáyan	n	nitrám	tar	ıvè	svāyai
	produce-PTC.N.	SG f	riend-ACC.SG	yo	uself-DAT.SG	own-DAT.SG
	'You have put se	ven step	os for the order, m	akir	ng a friend for you	urself' <sup>18</sup> (RV 10.8.4cd)

During the course of development towards a reflexive use, there are frequent contexts in which  $tan\dot{u}$ -functions as an intensifier. This is due to the familiar pattern of semantic change in which an intermediate stage of intensification is required:

(27) ágne yájasva tanvàm táva svấm
 Agni-VOC.SG worship-2SG.IMPV.MED body-ACC.SG 2G.SG own-ACC.SG
 'Agni, worship your own body / worship yourself' (RV 6.11.2d)

In (26) and (27),  $tan\dot{u}$ - is used as a reflexive and, in both cases, this interpretation arises from an intermediate emphatic situation: a simple reflexive interpretation can be achieved from the use of the middle voice. Thus,  $tan\dot{u}$ - (especially when reinforced with  $sv\dot{a}$ -) intensifies the situation of co-reference.

The existence of ambiguous (for example, lexical and reflexive) passages is fundamental to proposing the possibility of semantic change (SCHLADT, 2000). In fact, in very few cases (and never in the earliest hymns of the RV) can  $tan\hat{u}$ be understood solely as a reflexive, with a complete loss of its lexical meaning. However, ambiguous passages in which both interpretations are possible do appear in the RV, raising the possibility that the process of semantic change undergone by  $tan\hat{u}$ - towards becoming a reflexive marker with an intermediate stage with an emphatic nuance is older than the similar process undergone by  $\bar{a}tmán$ . The process of semantic change undergone by  $tan\hat{u}$ - may have led to a superimposition over  $\bar{a}tmán$ - for certain meanings and a close relation between both terms. Thus, semantic change may have occurred to  $\bar{a}tmán$ , partly as a result of the model provided by  $tan\hat{u}$ -. Furthermore, this may explain how some of the uses of  $tan\hat{u}$ - are assumed by  $\bar{a}tmán$ - while some uses of  $\bar{a}tmán$ - are assumed by  $pr\bar{a}n\dot{a}$ -.

Returning to (9), the only passage in the RV in which  $\bar{a}tm\dot{a}n$ - approaches a reflexive use, this may be explained as a late case and repeat of what occurs with  $tan\dot{u}$ - as similar earlier contexts for this word can be found. Note the parallel with the following passages from Book 3:

the only second argument possible is that of the object of sacrifice, the oblation in Vedic, in addition to this construction, *yaj*- permits a second argument as the beneficiary of the sacrifice (BAUM, 2010). In these cases, the term is translated as 'to worship'.

<sup>&</sup>lt;sup>18</sup> Literally: 'creating a friend for your own being'.

- (28) bálamdhehitanúṣunaḥstrength-ACC.SGput-2SG.IMPV.ACTbody-LOC.PL1G.PL'[Indra], put strength in our bodies' (RV 3.53.18a)
- (29) ádhi śrávāṇṣi dhehi nas tanǘṣu upon fame-ACC.PL put-2SG.IMPV.ACT 1G.PL body-LOC.PL '[Agni], put fame upon our bodies' (RV 3.19.5d)

In all of these cases Agni or Indra is invoked and these gods are related to the capacity to give (or give oneself) strength. While this semantic and syntactic structure appears with  $tan\hat{u}$ - in the earliest texts of the RV, a similar situation with  $\bar{a}tm\dot{a}n$ - is found in later texts and with a corporeal meaning added, precisely the lexical value originally attached to  $tan\hat{u}$ -.

Consequently, one could offer the hypothesis that the passage with  $\bar{a}tm\acute{a}n$ - was in some way constructed using structures proper to  $tan\acute{u}$ -, after assuming part of its meaning. This is not surprising if one considers the process mentioned previously whereby the notion 'that which fills with life' evolves into 'the being full of life', and then finally to 'being', given that  $tan\acute{u}$ - also changes from the idea 'body of a being' towards simply 'being' through metonymy, with the same observations made for  $\bar{a}tm\acute{a}n$ - regarding the ontological problem of translating this term. An additional argument for this hypothesis may be the fact that in (9)  $\bar{a}tm\acute{a}n$ - is in the locative, as occurs in (28) and (29). Interestingly, the use of oblique cases of this word can be found relatively late. Furthermore, there is a clear ambiguity in (9) between a lexical interpretation and a reflexive, which relates it perhaps even more closely to the development of  $tan\acute{u}$ - towards a reflexive value through ambiguous situations.

### **Final comments**

The results of this research show that, in line with current cross-linguistic proposals, *ātmán*- is not limited to a single meaning but includes a range of different meanings, such as 'being', 'vital breath', 'oneself', etc. But this range of meanings cannot be explained solely as a case of polysemy at a synchronic level, as this semantic change appears to be related to diachronic development throughout the hymns of the RV and AV. Although there is limited data for the earliest RV language (Books 2 to 7), one can postulate a certain diachronic variation connected to the emergence of specific features and semantic meanings in each stage:

- 1) Early RV, the oldest nucleus of the RV and part of the most recent, in which the principal meaning is that of 'vital breath or vital principle', 'breath'.
- 2) Late RV, consisting of some more recent hymns from the RV and part of the AV, in which the term assumes a meaning similar to 'interior being' and 'animated being' or 'person'. Through this, we can interpret a degree of emphasis on the idea of the self, similar to the meanings attributed to *tanú*<sup>2</sup>, which appears to indicate the uses of *tanú*<sup>2</sup> being partially assumed by *ātmán*-.
- 3) Finally, and in parentheses given the difficulties in establishing the chronology of the AV, the greatest part of this collection can be classified as a third stage, understood as a series of passages in which the word acquires a more clearly reflexive value. This is possible through the assumption of the meanings recently attributed to *tanú* and may explain the fact that once *ātmán* fully assumes a reflexive role, to be continued into future texts, *tanú* stops its incipient development towards the role of a reflexive marker and never become fully grammaticalised.

The texts provide vivid evidence of semantic change. In order to be fully understood, it requires an analysis of the interrelation between each of the elements during the different periods of the language. This also leads to a reflection on diachronic and synchronic studies: a change in one of these aspects is intrinsically linked to changes in the other. In turn, a diachronic change in one of the elements of a language may result in a lexical reorganisation at the synchronic level.<sup>19</sup>

Finally, and in defence of philology, it is evident that an exhaustive analysis of the text is essential to providing a precise linguistic description and must be taken into account in the field of linguistic typology.

ABL	Ablative	IMPV	Imperative	PF	Perfect
ACC	Accusative	INJ	Injunctive	IP	Interrogative Particle
ACT	Active Voice	INS	Instrumental	PL	Plural
AOR	Aorist	INT	Intensive	PRS	Present
DAT	Dative	LOC	Locative	PTC	Participle
DEM	Demonstrative	MED	Middle Voice	REL	Relative
G	Genitive	OPT	Optative	SG	Singular

## Abbreviations

<sup>&</sup>lt;sup>19</sup> In some way, in the spirit of the now classic proposal by Trier, beyond any criticism that linguistic historiography may make.

## Acknowledgements

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OROUEDA, V. Variación semántica de *ātmán-* en el *gveda* y el *Atharvaveda*. Alfa, São Paulo, v.59, n.2, p.329-353, 2015.

- RESUMEN: Este artículo analiza el uso de ātmán- en el Reveda y el Atharvaveda y tiene por objetivo demostrar la existencia de una situación activa de cambio semántico a lo largo del período de composición de estos textos. El marco teórico utilizado es cognitivo y tipológico-funcional, y para llevar a cabo la investigación se ha analizado gramatical y filológicamente todos los pasajes en que se utiliza esta palabra dentro del corpus seleccionado. Entre los resultados más relevantes se encuentra que durante este proceso de cambio ātmán- adquiere nuevos valores ('ser', 'sí mismo'), sin perder necesariamente los anteriores ('principio vital', 'hálito'). La organización de los diferentes valores en un mapa semántico permite concluir, en primer lugar, que la dirección del cambio semántico de ātmán- es similar a la experimentada por términos equivalentes en otras lenguas del mundo y, en segundo lugar, que este cambio se encuentra estrechamente relacionado por aquel experimentado previamente por tanúr' (cuerpo', 'sí mismo'. Así, el presente trabajo pretende ser un aporte individual a propuestas interlingüísticas acerca de la gramaticalización y la direccionalidad del cambio.
- PALABRAS CLAVE: Cambio semántico. Lingüística diacrónica. Mapas semánticos. Védico.

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## ESTABLISHMENT OF PHONOLOGICAL CONTRASTS AMONG FRICATIVES BY CHILDREN WITH A PHOLOGICAL DISORDER: ACOUSTIC CUES MANIPULATION

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- ABSTRACT: The present study focuses on the presence of covert contrasts in the speech of children with a phonological disorder. The hypothesis is that children with phonological disorders manipulate secondary acoustic cues in an attempt to distinguish the phonological contrasts. We used five audio recordings of the speech of five children with speech disorders, between four and five years of age, who showed the so-called "phonic substitution" involving the sound group of the fricatives. The data were edited and analyzed using the software PRAAT. A phonetic transcription of the first repetition of each child was performed by three evaluators, reaching a 66% agreement level. After the transcription, we carried out a contrastive phonological analysis of the production of the five children and, finally, an acoustic analysis of all the "substitutions", based on six parameters. We discovered the existence of covert contrasts in the productions auditorily regarded as homophones by the evaluators, representing a total of 54% of total substitutions identified through an impressionistic approach by the evaluators. Children with phonological disorders are seen to rely on secondary acoustic cues in an attempt to distinguish fricative phonemes. The data obtained in this study allow us to reflect on the importance of considering the phonetic detail within the phonological models.
- KEYWORDS: Phonological Acquisition. Phonetic. Phonological Disorder. Acoustic Analysis. Fricatives.

### Introduction

Every language shows specific sets of phonological contrasts which provide informative aspects of the language system. Language contrasts are perceived and produced whenever certain perceptual and articulatory skills are mastered by learners.

The phonological contrast can be regarded as being equivalent to "musical chords" or to a "constellation of cues", as designated by Scobbie et al. (1996),

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resorting to several "notes" or "stars". The "notes" composing the chord (contrast) are known as acoustic cues. Such phonetic cues show varied interdependence and perceptual significance (SCOBBIE, 1998).

In detail, each phonological contrast is composed of a set of acoustic cues. Therefore, speakers of a given language are expected to be aware of which cues are relevant in their language and how to use them correctly, since the same cue might be present in different phonological contrasts (MUNSON et al., 2010).

As the same acoustic cue may compose different contrasts, it is necessary to master a type of hierarchical cues, that is, to ponder which of them are primary (fundamental to promote phonemic distinction) and which are secondary.

Let us see an example. As previously reported by Scobbie (1998), the Voice Over Time cue (VOT)<sup>1</sup> may be, at the same time, considered a primary cue in the establishment of voicing contrast among stop consonants and also a secondary cue in the establishment of the place of articulation among stop consonants.

Regarding phoneme acquisition, a child needs to master and organize primary and secondary cues so as to enable listeners to effectively perceive a certain contrast.

Although most seven-year-olds master the target phonological system, some of them are seen to differ from their peers regarding awareness of phonological rules and phonetic repertoire, without organic causes that justify developmental differences. Children who are not capable of adapting their production to the target production until they reach the expected age are seen to show the so-called phonological disorder (GRUNWELL, 1981; YAVAS; MATZENAUER-HERNANDORENA; LAMPRECHT, 1992; MOTA, 2001; WERTZNER, 2003; MUNSON et al., 2010).

Phonetically speaking, the lack of adaptation to the production might occur due to children's problems involving acquisition and/or manipulation of acoustic cues (SCOBBIE et al., 2000; BERTI; MARINO, 2011). Children may resort to phonetically inappropriate cues for a given language (that is, inappropriate use of acoustic cues) and/or may use appropriate phonetic cues for the given language, but with an unexpected magnitude: with insufficient or exaggerated values, characterizing the so-called covert contrasts (SCOBBIE et al., 2000).

The term "covert contrast" was coined by Hewlett (1988) to describe what is categorized as phonemic contrast – auditorily unperceivable, yet acoustically and/or articulatorily detectable. Hence, a production which is auditorily perceived as either omission or category substitution may reveal, from the acoustic and/or

<sup>&</sup>lt;sup>1</sup> VOT is regarded as being the "[...] interval between the articulatory opening of a plosive consonant and the start of vocal chords vibration." (KENT; READ, 1992, p.108).

articulatory analysis, that the speaker is systematically producing differences to distinguish two phonemes (MACKEN; BARTON, 1980; SCOBBIE, 1998; HEWLETT; WATERS, 2004; BERTI, 2006; FREITAS, 2007; RODRIGUES, 2007; BERTI, 2010; MELO et al., 2011; BRASIL et al., 2012).

Scobbie (1998) performed an extensive bibliographic survey of all the authors who described the presence of the covert contrast, both among children with typical development and among children with a phonological disorder. The results show that covert contrasts were seen in the syllable structure, in the articulation mode, in voicing, in the place of articulation. It can be inferred that parameters involved in the contrast of a given phonological contrast are not immune to covert contrasts.

In the Brazilian literature, authors such as Berti (2006, 2010), Freitas (2007), Rodrigues (2007), Melo et al. (2012) and Brasil et al. (2012) described the presence of covert contrasts in the productions of children – with and without phonological disorders –, corroborating international studies on the omnipresence of covert contrasts (SCOBBIE, 1998). In general, the findings obtained from these studies revealed that acoustic cues used by children to mark contrasts may vary in terms of type and magnitude. There are essential and secondary cues. Furthermore, essential cues should be used within a certain magnitude so as to become effective in the perception of a given contrast. The presence of covert contrasts, identified through an acoustic analysis, proves that children have already started the process of establishing contrasts between two phoneme categories, and also provides evidence on which acoustic cues are primarily used by the subjects.

It is possible to understand from the reviewed literature that the use of an instrumental tool, acoustic and/or articulatory, in a speech production analysis, turns out to be necessary in order to investigate how children manipulate the cues before they can differentiate the contrasts.

However, it should be pointed out that studies in the Brazilian literature are still scarce when it comes to the exploration of different types of populations and also details of cues used by speakers. The investigated populations, the analyzed contrasts and the parameters used are not enough, neither to minutely describe the steps taken by children throughout the phonological acquisition process nor to promote rehabilitation of children with a phonological disorder, considering the types and magnitudes of the cues used to mark language contrasts.

Thus it is important to further descriptive research that focus on an instrumental approach so as to identify natural (or primary) and secondary parameters throughout the acquisition process. Based on a consistent description, it is possible, on one hand to propose a fast and effective treatment for children diagnosed with a phonological disorder, and on the other hand to observe the phonetic detail and its relevance in the scope of linguistic theories.

Hence this paper aims at verifying whether the covert contrast phenomenon is present in the speech production of children diagnosed with a phonological disorder, seeking to answer the following questions:

- (i) Which are the acoustic cues that children with a phonological disorder manipulate when attempting to establish phoneme contrasts involving fricative sounds?
- (ii) Do children with a phonological disorder prefer to use any acoustic parameters?

Our hypothesis is that children with a phonological disorder rely on secondary acoustic cues when attempting to establish language phoneme contrasts.

The fricative sounds were chosen in this investigation because they are seen to show a high incidence of problems for children with a phonological disorder (substitutions and omissions) (PATHA; TAKIUCHI, 2008).

# Method

# Sample

In order to perform this study, we used recordings belonging to a databank organized by the members of GPEL (Language Study Group), constituted of audio recordings of children in the process of typical and deviant language acquisition, attending full-time classes in the Children Municipal School Sítio do Pica-Pau Amarelo, located in Marília-São Paulo.

The students whose audio recordings were used in our investigation were attending a full-time class known as Infantil I. Initially, 23 audio recordings were selected from 23 monolingual boys and girls, four and five year old. The informed consent form was read and signed by their parents or guardians, complying with the demands of the Committee of Research Ethics. We chose to study this age group because this is a period when, according to Wertzner (2010), children are making the phonological system stable, which leads them to be more prone to errors, especially regarding some required adjustments in the production of fricative phonemes.

The audio recordings of the children were selected according to the following criteria: parents and/or guardians had to agree to participate in the research by reading and signing the informed consent form; children showing phonetic-phonological disorders in the phonoaudiological assessment; having at least three repetitions of the 96 words that compose the Instrument of Speech Assessment for Acoustic Analysis. Among the exclusion criteria were: information indicating any anatomical and/or physiological abnormality in the speech mechanism; information reporting any general speech impairment, such as difficulty to understand simple commands or lack of attention.

Then the speech therapist in charge of data collection managed to raise student-related information during the phonoaudiological and audiological assessment.

Among the 23 files that were selected in the beginning of data collection, 15 were dismissed because they did not meet the established criteria, which eventually left eight audio files for the research.

Among them, four files refer to boys and four to girls. Every child showed the so-called substitutions involving the fricative group.

After the audio files were selected, the recordings were edited by the researchers using the *software* PRAAT, separating each production in individual files, totaling 2,304 files (eight children x 96 words of IAFAC x three repetitions).

### **Experimental Procedures**

The recordings used in this research were carried out by a speech therapist phonoaudiologist, a child at a time, in an acoustic booth set up in the Municipal School (EMEI), with a digital recorder (Marantz, model PMD 670), coupled to a cardioid dynamic vocal microphone (SHURE, model 8800).

In order to elicit the children's speech sample, we used the IAFAC (BERTI; PAGLIUSO; LACAVA, 2009). It is an instrument made up of 96 words, which is based on linguistic criteria, targeting specific aspects, namely phonetic-phonological context of words, accent pattern, grammatical category, number of syllables and syllabic pattern of the words. Such an instrument enables the analysis of the phonological system, since it contemplates all the 19 consonant phonemes of Brazilian Portuguese with a vowel context [i, a, u] in initial and middle syllable positions, complex onset and ordinary codas. In our instrument, each word is represented by a corresponding picture. Through a recreational activity, the words and pictures were shown to the children. Each child was asked to say the target word within the following sentence: "Say *target word* beautifully".

The sentence was used so as to control the intonation curve of each word, smoothing the ascending curve and certain features that the words might show, for example, a decrease in intensity, an increase in absolute duration, in case they were repeated isolated in a list.

The recordings were saved in individual files, and afterward each word was edited so as to enable the acoustic analysis.

Each recording was performed at least three times, and each child repeated the 96 IAFAC words. The recordings occurred in different days because this procedure is time-consuming and tiring. However, the time lapse between the first and third recording did not exceed a month. Among the edited files, we selected only those containing a fricative syllable onset with vowel contexts /i,a,u/ (8 children x 3 repetitions x 6 fricatives x 3 vowel contexts = 432 files), which constituted the corpus of this research. Table 1 shows the selected words:

Fricatives	Context with [i]	Context with [a]	Context with [u]
[f]	Fita [ribbon]	Faca [knife]	Fuça [muzzle]
[v]	Viga [pillar]	Vaca [cow]	Vuba [grass]
[S]	Sica [proper nom]	Sapo [toad]	Suco [juice]
[/]	Chica [proper nom]	Chave [key]	Chuva [rain]
[Z]	Ziper [zipper]	Zaga [defense]	Zurro [braying]
[3]	Jipe [jeep]	Jaca [jackfruit]	Juba [mane]

**Table 1:** Words of the IAFAC used in this research.

Source: Own elaboration.

## Analysis

### Perceptive-auditory assessment of productions

After the audio files were selected and edited, we performed a phonetic transcription of the first repetition of the 96 IAFAC words, through a perceptive-auditory assessment done by three evaluators.

The edited audio files were recorded on a CD-ROM and handed to the evaluators along with forms for notes regarding each transcription, containing 96 written words. The transcription task was explained orally the moment the material was handed out and consisted in phonetically transcribing the words produced by the children. For the final transcription of each word, at least two (66%) evaluators had to agree on the analyzed production.

The perceptive-auditory assessment was a fundamental step for this research, since it was the starting point for other analyses: contrastive analysis of the children's phonological system and also the acoustic analysis.

### Contrastive analysis of children's phonological system

Based on the final transcription, we performed the contrastive speech analysis of the eight children.

The contrastive analysis was carried out according to Yavas, Hernandorena and Lamprecht (1992), who state that children's phonological systems can be compared to those of typical adult speakers (whose first language is Portuguese and not showing any phonological or phonetic impairment identified by native listeners). By resorting to children's speech variation, related to each contrastive phoneme of Brazilian Portuguese, we surveyed which of them were acquired effectively by children; which were being acquired; and which had not been acquired by children. This categorization was structured following these criteria: less than 50% correct answers – the child did not show to have the contrastive phoneme; 51% to 75% correct answers – the child showed to have the contrastive phoneme occurring with a substituting one; 76% to 85% correct answers – the child already acquired the contrastive phoneme; 86% to 100% - the contrastive phoneme was effectively acquired.

This analysis was followed by a characterization of the phonological profile of the eight children from the observation and characterization of deviant productions (incidence of omissions and substitutions) in simple attack.

#### Acoustic analysis

Finally, we performed an acoustic analysis of all the "phonemic neutralizations" involving the fricatives produced by children, according to acoustic parameters related to four spectral moments (centroid, variance, asymmetry and kurtosis), spectral peak minimum values and fricative relative duration.

For all the spectral parameters adopted in the analysis, we selected an approximate 40ms window in the middle part of the fricatives, which is seen to be less affected by the transition of other sounds, that is, the co-articulation effects are less observed, as shown in Figure 1.

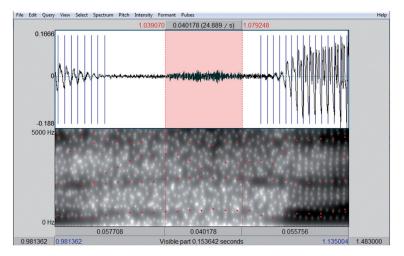


Figure 1 – Selection of 40ms of the more stable part of the fricative [s].

Source: Own elaboration.

After selecting the gap, we extracted automatically the Fast Fourier Transform (FFT) following these parameters: **view range** (Hz): 0 to 11025 Hz; **window length** (s): 0.002; **dynamic range** (dB): 70. Next, we returned to the window **Objects** of PRAAT and selected the option **Query, Get central moment** in order to automatically obtain the relative values of the spectral moments.

It is worth mentioning that the peak value that precedes the ascending frequency of the minimum limit of the spectral peak was manually extracted from each fricative, from the FFT.

Concerning the measures of relative durations, that is, the measures that correspond to the percentage that a sound occupies within a greater unit, for example, a word, the following criteria were used: for voiceless fricatives, we selected the part that corresponds to the last regular pulse of the post-stressed vowel up to the first regular pulse of the stressed vowel; for the voiced fricatives, the middle part between the post-stressed vowel and the stressed vowel.

The normalization (or relative duration, in this case) was carried out to neutralize prosodic features, such as speech speed. This allows for a more precise comparison involving durational data coming from distinct speakers.

#### **Statistical Analysis**

The software used in the statistical analysis was STATISTICA, version 7.0. The statistical analysis used in our study was the one-way ANOVA, having as dependent variables all the acoustic parameters adopted and as independent variables the phoneme contrast analyzed.

We established a significance level to be 0.05. Values ranging from 0.05 to 0.1 were considered outliers.

The statistical analysis relied on the comparison of the values obtained for each parameter for each repetition, both for the so-called substituted phoneme and for the actual corresponding phoneme.

Thus, an example of a comparison can be seen in Table 2. The selected example shows a child replacing [s] with [f] in all the vowel contexts.

Words with a substituted phoneme	Words containing a phoneme to be compared
<u>S</u> APO [toad]	<u>CH</u> AVE [key]
SICA	<u>CH</u> ICA
<u>S</u> UCO [juice]	<u>CH</u> UVA [rain]

**Table 2:** Words used in data collection. The phonemeanalyzed is in an initial position of the words above.

**Source:** Own elaboration.

#### **Results and discussion**

#### Perceptive-auditory analysis

By resorting to the perceptive-auditory analysis of the first repetition (R1) with the eight children, performed by the three evaluators, we surveyed all the substitutions identified by the evaluators, eventually reaching 121 substitutions involving the following groups: stops, fricatives, affricates, nasals, lateral liquids and non liquids in all syllable positions (attack and coda).

Nevertheless, we decided to select only the occurrences of substitution involving simple attack positions, focus of this research, which resulted in 81 substitutions, as shown in Table 1.

Sound group Children	Stops	Fricatives	Africates	Nasals	Lateral Liquids	Non Liquids
C1	5	14	1	6	2	3
C2	0	0	2	2	2	0
C3	0	6	0	1	0	0
C4	1	5	1	0	0	0
C5	0	3	0	0	2	2
C6	0	1	0	6	2	1
C7	0	1	0	1	1	0
C8	3	2	0	1	1	3
TOTAL	9	32	4	17	10	9

**Table 1:** Occurrence of substitution in simple attack according to sound group.

**Source**: Own elaboration.

According to Table 1, there is a prevalence of substitutions involving the fricative sounds, with 32 substitutions in simple attack; followed by the nasal group, with 17 substitutions; lateral liquids, with 10 occurences of substitutions; and non lateral liquids and stops, with 9 substitutions; and affricates with a low incidence of substitutions.

The prevalence of substitutions involving the fricatives was also observed in a study developed by Keske-Soares et al. (2009), who found out that the fricatives were the most affected sound group while studying the speech of five children with phonological disorders.

Since the acoustic analysis required not only the first repetitions but also three or more repetitions for each child, it was important to perform the perceptiveauditory assessment of all the recordings so as to check whether the substitution identified in the first recording would be maintained in the remainder. During this phase, we observed that the 8 substitutions, out of the 32 identified in the first repetition, were not seen in the others, which indicates a contrast stabilization process in some children. Hence, the productions of 3 children (C2, C6 and C8) were excluded from the study.

After hearing and characterizing the substitutions, there were 24 occurrences of substitutions involving the fricatives, which were identified in the 3 repetitions.

Out of 24 substitutions, 17 (71%) involved the place of articulation (for example:  $[s] \rightarrow [J]$ ), 6 (25%) involving voicing ( $[v] \rightarrow [f]$ ), 1 (4%) involving both the place of articulation and voicing ( $[z] \rightarrow [J]$ ).

The substitution relation performed by the children involving the fricatives can be seen in the Table, organized in function of the substitution pattern.

Child	Substitution	Substitution	Substitution
	involving place	involving	involving place
Type of subst.	of articulation	voicing	and voicing
C1	3	6	-
C3	5	_	1
C4	5	-	-
C5	3	-	-
C7	1	-	-

**Table 2:** Number of substitutions of fricatives infunction of substitution type for each child.

Source: Own elaboration.

# Acoustic analysis of the so-called "substitutions"

The data shown here are organized according to the categories described previously, that is, "substitutions" involving the place of articulation, voicing, place of articulation + voicing, and, also, separated according to the vowel context [i, a, u].

# Substitutions involving the place of articulation

The mean values found for each parameter in the so-called substitutions involving the place of articulation are displayed in Table 3. The values in bold refer to p-values less than 0.05; the underlined values, the outliers, refer to p-values between 0.05 and 0.1, obtained after the statistical analysis, separated according to the vowel context.

**Table 3**: Mean values found for each parameter considering the "substitutions" involving the articulation point (\*standing for substituted, \*1 standing for target).

Child	Subst. of place	Vowel	Spectral peak (Hz)	M1 (Hz)	M2 (MHz)	М3	M4	Rel. Dur. (ms)
		[a]	1671.60	5873.88	3.40	0.25	-0.19	143
	[S] *	[i]	1705.14	5518.96	2.40	0.48	0.57	140
		[u]	1421.51	4935.20	4.40	0.22	-0.19	155
		[a]	1765.02	5436.82	2.69	0.82	<u>0.58</u>	158
<b>C</b> 2	[ʃ] *1	[i]	1757.10	5063.05	2.69	0.82	0.58	157
C3		[u]	1413.08	1087.32	4.30	0.87	1.18	122
	[_] *	[a]	1618.23	1684.66	<u>1.69</u>	3.92	<u>21.85</u>	118
	[Z] *	[u]	1397.05	4216.96	3.94	0.12	-0.09	110
	F 1 *1	[a]	1405.24	3254.06	<u>5.84</u>	1.08	2.14	128
	[3] *1	[u]	1463.34	3190.39	3.52	5.49	54.58	133
	[-1*	[a]	1642.12	5182.04	3.86	0.44	1.82	255
	[s] *	[u]	1615.92	4165.14	2.58	0.77	1.66	149
ar	[ c] *1	[a]	1798,17	5034.34	2.56	0.81	4.99	110
C5	[ʃ] *1	[u]	1650.60	4021.46	2.99	0.62	2.15	135
	[Z] *	[u]	1583.56	392.76	0.93	1.03	23.68	127
	[3] *1	[u]	1555.81	2798.72	1.38	4.60	64.37	158
	[Z]*	[u]	2222.28	753.97	1.32	<u>9.25</u>	129.64	100
	[3] *1	[u]	2272.48	1120.64	3.14	3.52	15.11	107
	[ʃ] *	[a]	<u>1637.06</u>	2056.42	6.02	1.86	4.69	98
		[i]	2142.31	2696.63	5.21	3.33	29.54	149
~ -	[S]*1	[a]	2214.30	1104.47	4.85	3.06	11.60	110
C4		[i]	2077.47	4814.25	5.77	-0.31	5.26	160
	[3]*	[a]	2501.35	748.70	2.58	4.56	144.36	122
		[i]	1908.53	1443.35	1.71	10.09	193.96	114
	r 1*1	[a]	1547.88	2799.25	6.77	10.73	321.59	138
	[Z]*1	[i]	1393.60	712.77	2.87	12.60	323.58	180
C7	[Z]*	[u]	1548.55	3842.96	6.54	4.97	<u>1.02</u>	125
	[ <b>3</b> ] *1	[u]	1434.61	2796.78	4.14	1.61	<u>4.03</u>	105
		[a]	2862.74	4174.67	8.60	0.35	-0.38	255
	[S] *	[i]	2128.97	5934.30	5.62	-0.26	-0.54	147
01		[u]	2003.69	5764.37	5.64	-0.23	-0.54	137
C1		[a]	2182.65	5545.56	6.45	-0.15	-0.49	138
	[ʃ] *1	[i]	1834.69	5627.49	4.84	-0.29	0.35	149
	U1	[u]	1641.57	3691.85	3.04	1.37	2.16	129

Note: C: child; M1: Centroid; M2: Variance; M3: Asymmetry; M4: Kurtosis.

Bold: p<0.05; \_: outlier value: 0.05

**Source**: Own elaboration.

In Table 3, the mean values can be seen for each parameter obtained in the acoustic analysis, by comparing the productions evaluated as "substituted" (indicated by \* in the white cells) and the productions evaluated as target (indicated by \*<sup>1</sup> in the gray cells). For example, C3 shows that the mean value of the spectral peak of [s] evaluated as [J], in the vowel context [a], was 1671.60 Hz, whereas the mean value of the spectral peak of the target production [J], in the same vowel context, was equal to 1765.02 Hz, not showing statistically significant difference. On the other hand, we see significant difference when the mean value of the spectral peak of the production [z] evaluated as [3] of the same child, in the same vowel context – 1618.23 Hz – and compare to the value obtained in [3] produced as target – 1405.24 Hz.

Overall, the analysis of the Table above shows 17 occurrences of substitutions involving the point of articulation: six occurred in the vowel context of [a]; four, in the context of [i]; and seven, in the context of [u].

Concerning the presence of covert contrast, out of the 17 substitutions involving the place of articulation (seen in the white cells), 10 (58%) revealed the presence of covert contrasts. Even though children identified them as homophones, they distinguished the fricatives investigated by manipulating at least one acoustic cue (seen in the Table in bold and underlined values).

These findings corroborate the data available in international and national literature. According to a bibliographic survey performed by Scobbie (1998), covert contrasts were identified when establishing the voicing contrast, of place and mode of articulation, among children with typical development and among children with a phonological disorder. Li, Edward e Beckman (2009) studied the speech production of two and three-year-olds (with typical development) and found covert contrasts accounting to 26% among English speakers and 11% among Japanese speakers. Concerning Brazilian studies, a higher percentage was found by Berti (2010): 80% of productions evaluated as category substitution  $[t] \rightarrow [k]$  show, after the acoustic analysis, the presence of covert contrasts in children with a phonological disorder, and 57% in children at the acquisition phase. However, despite the high percentage of identification of covert contrasts, the range of percentage variation might be explained thanks to the effect of age group in the population under investigation. It is possible to infer that the higher the subjects' age group, the higher the percentage of identification of covert contrasts.

Regarding the type of acoustic cues used to mark differences among the fricatives and the point of articulation, we found that children relied not only on cues that refer to spectral details of the fricatives, but also on cues that refer to the temporal pattern (relative duration).

The results in Table 3 show the occurrence of manipulation of the parameter regarding the minimum limit of the spectral peak by C1, in an attempt to distinguish [z] and [3] only in the vowel context of [a]. Nevertheless, Berti (2006) analyzed the contrast between the fricatives [s] and [J] and concluded that this parameter is appropriate so as to differentiate the analyzed phonemes in all the vowel contexts, which corroborates the findings of Freitas (2007) and Jongman, Wayland and Wong (2000).

Concerning the mobilization of the first spectral moment (centroid), only two productions proved to show covert contrasts. The parameter was manipulated (in the distinction of [s] and [ʃ] by C3 in the context of [i] and C1 in the context of [u]). In a study performed by Berti (2006), tackling the same contrast, it was found that M1 was appropriate to differentiate voiced coronal fricatives, in the contexts with [a] and [i] among children with a phonological disorder. In a previous study, Rinaldi (2010) concludes that children with typical development manipulate the centroid parameter to differentiate the point of articulation for fricatives of Brazilian Portuguese. Jongman, Wayland and Wong (2000) also report similar findings while dealing with fricatives in the English language. Hence, in this study, centroid does not seem to be the preferred parameter among children with a phonological disorder.

As for the parameter of variance, we had only one outlier when attempting to differentiate [z] and [3] by C3, corroborating the results of Berti (2006), in which variance does not differentiate [s] and [ $\int$ ] in vowel contexts, among children with and without a phonological disorder. These data differ from those reported by Jongman, Wayland and Wong (2000), who did not find difference between [v] and [f], and Freitas (2007), who found variance for the places of articulation of [s] and [ $\int$ ] in the contexts of [i] and [u], among children with a phonological disorder.

For the asymmetry parameter (M3), in two productions characterized as covert contrasts coming from C3 and C1, the parameter was manipulated in an attempt to promote distinction between the place of articulation of [z] and that of [3] in the context of [a] for C3, and [s] and [J] for C1 in the context of [u]. This result is similar to that of Freitas (2007), in which children with a phonological disorder also manipulated such a parameter with variation in the vowel context of [i] and [u], whereas children without a phonological disorder manipulated the asymmetry parameter in all the vowel contexts. The investigation carried out by Berti (2006), and further investigations, verified that children with a phonological disorder manipulated such a parameter in the vowel context of [i] and [a].

Regarding the parameter of kurtosis, it is likely to have happened in two productions of C1 to differentiate the place of articulation of [s] and [f]

in the context of [a] and [u]. Nevertheless, the studies carried out by Berti (2006) and Rinaldi (2010) revealed that such a parameter was not appropriate to differentiate the place of articulation between [s] and [J] for Brazilian Portuguese-speaking children, which is different from the studies in English performed by Jongman, Wayland and Wong (2000), where kurtosis was not found to differentiate [v] and [f], [z] and [s]. Therefore, such a parameter does not seem to be fundamental to guarantee distinction among Brazilian Portuguese fricatives, since typical children who participated in the studies – despite the lack of reliance on kurtosis – produced them allowing for identification of two fricatives by the listeners.

Regarding the parameter of duration, four occurrences of manipulation of this cue were found in the attempt to establish contrast between fricatives in the investigated productions. However, according to Rinaldi (2010), the parameter of duration is not appropriate to differentiate the fricatives in terms of place of articulations, which suggests that these children with a phonological disorder rely on secondary cues in order to distinguish Brazilian Portuguese fricatives.

In short, out of ten occurrences of covert contrasts, four occurred in the vowel context of [a], two in the context of [i] and four in the context of [u]. The influence of the vowel context in the manipulation of acoustic cues has been previously described in the literature by authors such as Berti (2006) and Freitas (2007) and has been corroborated in our investigation. Furthermore, the type of acoustic cue manipulated by children with a phonological disorder seems to be the non-preferred in the language, that is, those cues described in the analysis of productions of children with a typical language development.

#### Substitutions involving voiced stops

Only C1 showed productions evaluated as substitutions that involved voicing contrast between fricatives. In Table 4, the mean values of each parameter obtained in the acoustic analysis can be seen, when comparing the productions evaluated as "substitutions" (indicated as \* in white cells) and the productions evaluated as target (indicated as \*1 in the gray cells). We point out that the values in bold refer to p-values less than 0.05; the underlined values refer to p-values ranging from 0.05 to 0.1, called outliers, obtained after the statistical analysis, sorted in function of the vowel context.

**Table 4:** Mean values found for each parameter considering the substitutions involving voicing (\*standing for substitutions, \*1 standing for target).

Child	SoundSubst.	Vowel	Spectral Peak (Hz)	M1 (Hz)	M2 (MHz)	М3	M4	Rel. Dur. (ms)
		[a]	2071.47	5717.09	6.17	-0.31	0.12	124
	[3]*	[i]	2158.97	5381.58	4.46	0.30	0.73	134
		[u]	1813.88	4048.15	2.57	1.35	5.18	122
		[a]	2182.65	5545.56	6.45	-0.15	-0.49	133
	[ʃ]*1	[i]	1834.69	5627.49	4.84	-0.29	0.35	144
		[u]	1641.57	3691.85	3.04	1.37	2.16	125
01		[a]	1409.80	2396.90	4.08	1.55	3.06	96
C1	$[v]^*$	[i]	<u>1272.66</u>	1744.37	4.88	2.19	5.44	117
		[u]	1091.26	4040.94	7.10	0.10	0.57	138
	[f] *1	[a]	1622.90	1809.23	3.88	2.78	13.40	94
		[i]	<u>1651.66</u>	2185.15	6.38	2.43	12.73	103
		[u]	1457.00	3225.40	5.25	1.09	2.95	145

Note: C: Child; M1: Centroid; M2: Variance; M3: Asymmetry; M4: Kurtosis.

Bold: p<0.05; \_: outlier: 0.05 < p < 0.1

Source: Own elaboration.

Based on the Table above, it can be seen that out of six "substitutions" involving voicing, three revealed the presence of covert contrasts. Phoneme distinction between voiceless and voiced fricatives was primarily marked by the parameter related to spectral limit of the minimum peak.

However, Rinaldi (2010) showed that typical children differentiated fricative voicing through the following acoustic parameters: centroid, asymmetry and duration. Likewise, in the English language, Jongman, Wayland and Wong (2000) found out that the four spectral moments differentiate the fricatives when it comes to voicing. Hence, C1 is likely to rely on secondary parameters – less appropriate for the language, since C1 does not manipulate cues commonly used by typical children to mark voicing distinction among fricatives.

# Substitutions involving place of articulation and voicing

In C3, only one "substitution" was found, involving both the place of articulation and voicing. The mean values of each parameters are shown in Table 5:

**Table 5:** Mean values found for each parameter consideringthe substitutions involving the place of articulation + voicing.(\* standing for substitutions, \*1 standing for target).

Child	Child place + Vowel p		Spectral peak (Hz)	M1 (Hz)	M2 (MHz)	М3	M4	Rel. Dur. (ms)
C3	[z] *	[i]	1724.58	3830.37	3.03	2.16	7.99	144
03	[ʃ] *1	[i]	1757.10	5063.05	2.69	0.82	0.58	155

Note: C: child; M1: Centroid; M2: Variance; M3: Asymmetry; M4: Kurtosis.

Bold: p<0.05; \_: outlier p: 0.05 < p < 0.1

**Source**: Own elaboration.

The observation of Table 5 does not point at the presence of covert contrasts for the substitution involving the place of articulation and voicing, even though Rinaldi (2010) indicated that the parameters regarding spectral moments M1 e M3 were appropriate to differentiate the interaction between the place of articulation and sounds of Brazilian Portuguese fricatives.

# **Concluding remarks**

Our research has sought to identify the presence of covert contrasts in speech production among children with the so-called phonological disorder. More specifically, we have aimed at answering the following questions:

- (i) Which are the acoustic cues that children with a phonological disorder manipulate when attempting to establish phoneme contrasts involving fricative sounds?
- (ii) Do children with a phonological disorder prefer to use any acoustic parameters?

After the data analysis, it was possible to see by means of acoustic and statistical analysis that several substitutions identified as homophones, by the evaluators, revealed subtle and unperceivable differences in hearing: the so-called covert contrasts. Such differences account to 54% of the total "substitutions" identified through an impressionistic approach.

Regarding the type of acoustic cues manipulated by the children with phonological disorders, we hypothesized that they are likely to rely on secondary acoustic cues in an attempt to establish phoneme contrasts in the language. The hypothesis was confirmed after data analysis, since the parameters of kurtosis and duration, which, according to Rinaldi (2010) and Berti (2006), are not fundamental in the distinction of fricatives in the Brazilian Portuguese, were the most commonly used cues by the children, in an attempt to differentiate the fricatives in the productions. As for the centroid parameter, for example, reported by Berti (2006), Freitas (2007), Rinaldi (2010) as being appropriate in the distinction of fricatives in Brazilian Portuguese, it was, along with the variance, the least used parameter used to distinguish the fricatives among children with a phonological disorder.

Furthermore, there is a need to use a bigger sample, a wider variety of sound groups and check whether the preference over secondary cues is maintained.

Finally, the data in our study indicate the importance of considering phonetic features in the construction of the phonological system by children. When a phonological contrast is believed to be the result of a set of cues that are differentiated in type and magnitude, this becomes fundamental in the manipulation process of individual cues by the children until they reach an effective contrast.

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CORRÊA, A. P. dos S.; BERTI, L. Estabelecimento do contraste entre as fricativas por crianças com transtorno fonológico: manipulação de pistas acústicas. **Alfa**, São Paulo, v.59, n.2, p.355-374, 2015.

RESUMO: O presente trabalho versa sobre a presença de contrastes encobertos na fala de crianças com transtorno fonológico. A hipótese perseguida é a de que as crianças com transtorno fonológico se ancoram em pistas acústicas secundárias na tentativa de estabelecer contrastes fônicos da língua. Para tanto, foram utilizadas cinco gravações em áudio, advindas de cinco crianças entre 4 e 5 anos com transtorno fonológico, que apresentavam as chamadas "substituições fônicas" envolvendo a classe de sons das fricativas. Os dados foram editados e analisados com o uso do software PRAAT. Foi realizada uma transcrição fonética da primeira repetição (R1) de cada criança, por três juízes, e considerada a concordância de 66%. A partir desta transcrição, foi realizada a análise fonológica contrastiva acústica de todas as "substituições" envolvendo a classe de sons das fricativas, a partir de seis parâmetros.

Verificou-se a existência de contrastes encobertos nas produções tidas como homófonas auditivamente, representando um total de 54% do total das substituições identificadas pelos juízes. As crianças com transtorno fonológico ancoram-se preferencialmente em pistas acústicas secundárias na tentativa de distinguir os fones fricativos. Os dados obtidos neste estudo permitem reflexão acerca da importância de se considerar o detalhe fonético no interior dos modelos fonológicos.

 PALAVRAS-CHAVE: Aquisição Fonológica. Fonética. Análise Acústica. Fricativas. Transtorno Fonológico.

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#### THE PROSODY OF SINTATICALLY AMBIGUOUS SENTENCES IN BRAZILIAN PORTUGUESE: LENGTHENING CUES<sup>1</sup>

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- ABSTRACT: Using syntactically ambiguous sentences involving local and non-local readings, this paper investigates the role of duration effects as cues to prosodic mapping in Brazilian Portuguese (henceforth BP). Based on Nespor and Vogel's (1986) prosodic theory, we aim to discuss whether BP speakers differentiate the readings by making a syllable longer according to the prosodic domain of the intended meaning. We carried out a comparative experiment on the production of 9 NP1-V-NP2-Attribute sentences by 30 BP speakers, in which one interpretation leads to a phonological phrase boundary between NP2 and the Attribute, while the other interpretation does not. The results have not shown a relevant statistical difference in lengthening when only the readings were considered, but have indicated a strong correlation between each interpretation and individual speakers. In addition, in all significant cases, the duration was longer when the attribute was related to NP1, that is, when there was a phonological phrase boundary inserted between NP2 and the Attribute.
- KEYWORDS: Prosodic boundaries. Phonological phrase. Attribute. Local and non-local readings. Lengthening.

#### Introduction

As Albano et al. (1997) point out, the discussion on the relation between grammatical structure and its specific production is not new "[...] é preciso rediscutir a Fonologia buscando uma metalinguagem que permita constituir uma interface ótima entre os números da Fonética e os símbolos da Gramática." (ALBANO et al., 1997, p.8). The segment, syllable, or pause lengthening effect

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that results from prosodic motivations, not only illustrates this, but is also an example of interface with other grammatical components. Many studies have in fact used phonological/phonetic phenomena to shed light on the syntactic structure of sentences (LIGHTFOOT, 1976; CHOMSKY; LASNIK, 1978; JAEGGLI, 1980; MAGALHÃES; MAIA, 2006, 2007; SANTOS, 2003; NUNES; SANTOS, 2009). In this paper we discuss the interface between Phonology and Syntax by investigating the use of duration in the prosodic mapping of ambiguous sentences. The focus of our study is whether speakers make use of duration in segments, syllables or pauses in order to disambiguate sentences. This topic has already been explored by Magalhães and Maia (2006) and Fonseca and Magalhães (2007), but their results were not related to prosodic mapping. Based on Nespor and Vogel's (1986) proposal for Prosodic Theory, our goal is to discuss lenghtening in the duration of syllables and/or pauses when ambiguous sentences are involved.

The organization of the paper is as follows: In section 1, we present a brief overview of Nespor and Vogel (1986) theory for the Phonology-Syntax interface. In section 2, we present the findings on phonetics realization by prosodic studies. In section 3, we review a number of papers on syntactic ambiguity which consider local and non-local readings and prosodic domains in BP. In section 4 we put forth the hypotheses and the methodology of this study. In section 5 we describe the results followed by a discussion in section 6. Finally, in section 7 we present our final considerations.

#### Prosodic theory and interfaces: the interface with syntax

That the phonological and syntactic components interact is a point of consensus in the literature. The question that remains is how direct or indirect this interaction is. Can phonological rules refer to syntactical information such as the kind of phrase (DP, VP, NP, ...) or phrases boundaries, for instance, or is the interaction more indirect and mediated by other constructs? Here we will take the second approach (SELKIRK, 1984; NESPOR; VOGEL, 1986) and assume that there is an interpretative component which maps information from other components to the Phonological domain. From this perspective, the domains created by the interpretative component are the loci for the application of phonological processes that refer to other grammatical components. Concretely, we will assume Nespor and Vogel's (1986) theory, according to which 7 levels can be identified in the prosodic structure: syllable, foot, phonological word, clitic group, phonological phrase, sentence, and intonational phrase. According to the authors, syntactic information is mapped at the phonological phrase level (f), through mapping rules, as can be seen in (1) - (NESPOR; VOGEL, 1986):

- (1) Phonological Phrase formation:
  - I. domain:

The domain of  $\Phi$  consists of a clitic group (C) which contains a lexical head (X) and all Cs on its nonrecursive side up to the C that contains another head outside of the maximal projection of X.

II. construction:

Join into an n-ary branching  $\Phi$  all Cs included in a string delimited by the definition of the domain of  $\Phi.$ 

 $\Phi$  Restructuring (optional):

A nonbranching  $\Phi$  which is the first complement of X on its recursive side is joined into the  $\Phi$  that contains X.

Some studies on BP assume that this restructuring is possible in the language (ABOUSALH, 1997; SANTOS, 2003; SANDALO; TRUCKENBRODT, 2002). Assuming this to be so, a sentence like (2) is prosodically mapped as in (2a) and restructured as in (2b), since *o bolo* (the cake) is the complement of *comeu* (ate) and forms one phonological phrase with it. Accordingly, once *ontem* (yesterday) is not the complement of *bolo* (cake), it is not possible to restructure them (cf. (2c)).

- (2) *A Maria comeu o bolo ontem.* Mary ate the cake yesterday.
  - a) [a Maria  $\Phi$ ] [comeu  $\Phi$ ] [o bolo  $\Phi$ ] [ontem  $\Phi$ ] [Mary  $\Phi$ ] [ate  $\Phi$ ] [the cake  $\Phi$ ] [yesterday  $\Phi$ ]
  - b) [a Maria  $\Phi$ ] [comeu o bolo  $\Phi$ ] [ontem  $\Phi$ ] [Mary  $\Phi$ ] [ate the cake  $\Phi$ ] [yesterday  $\Phi$ ]
  - c) \* [a Maria  $\Phi$ ] [comeu  $\Phi$ ] [o bolo ontem  $\Phi$ ]
    - \* [Mary  $\Phi$ ] [ate  $\Phi$ ] [the cake yesterday  $\Phi$ ]

This mapping generates structural differences in ambiguous sentences in BP as in (3) below. If the meaning is that the son is happy, *feliz* (happy) is associated with *filho* (son) and, then, both phonological phrases can be restructured (cf. (3a)); if the meaning is that the father is happy, there is no relation between *filho* (son) and *feliz* (happy), so the restructuring is not allowed (cf. (3b)):

(4) *O pai visitou o filho feliz.* 

The father visited the son happy

- a) meaning: The son is happy  $[o \text{ pai}_{\Phi}] [visitou_{\Phi}] [o \text{ filho}_{\Phi}] [feliz_{\Phi}] >> [o \text{ pai}_{\Phi}] [visitou_{\Phi}] [o \text{ filho feliz}_{\Phi}]$   $[\text{the father}_{\Phi}] [visited_{\Phi}] [\text{the son}_{\Phi}] [happy_{\Phi}] >> [\text{the father}_{\Phi}] [visited_{\Phi}]$  $[\text{the son happy}_{\Phi}]$
- b) meaning: The father is happy.
  [o pai <sub>0</sub>] [visitou <sub>0</sub>] [o filho <sub>0</sub>] [feliz <sub>0</sub>] >> \*[o pai <sub>0</sub>] [visitou <sub>0</sub>] [o filho feliz <sub>0</sub>]
  [the father <sub>0</sub>] [visited <sub>0</sub>] [the son <sub>0</sub>] [happy <sub>0</sub>] >> \*[the father <sub>0</sub>] [visited <sub>0</sub>]
  [the son happy <sub>0</sub>]

# Phonetic implementation in prosodic studies

In recent years, the phonetic implementation of segments in prosodic boundaries has been investigated in many languages. It is known that phonemic contrasts are maximized or better implemented in the beginning of prosodic limits (CHO; KEATING, 2001; KEATING et al., 2003) and that there is lengthening in the production of the segments in initial boundaries (OLLER, 1973) or final ones (OLLER, 1973; KLATT, 1976; WIGHTMAN et al., 1992; FOUGERON; KEATING, 1997).

One interesting finding that has consequences for the discussion of the relation among many grammatical components is that these effects vary according to the prosodic levels in which they appear. Specifically, these studies have shown that the production of phonemic contrasts were maximized and the lengthening was increased depending on how high the relevant prosodic domains were. This means that lengthening in a phonological phrase boundary is shorter than in a sentence boundary, but longer than in the boundary of a clitic group. This lengthening effect was found in the initial boundary of prosodic domains (BYRD; SALTZMAN, 1998; CHO; KEATING, 2001; FOUGERON, 2001; CHO, 2006; TABAIN, 2003; KEATING et al., 2004), as well as in the final one (BYRD; SALTZMAN, 1998; BYRD, 2000; CHO, 2006; TABAIN, 2003; TABAIN; PERRIER, 2005).

Other relevant results for our paper are the ones from Fougeron and Keating (1997) and Byrd, Krivokapic and Lee (2006), who discuss what the lengthened syllables in the prosodic domain boundaries are. According to Fougeron & Keating, in the final boundary of the utterance not only is the last syllable lengthened but also the stressed one – because it bears the intonational accent. However, to Byrd, Krivokapic & Lee, the lengthening in the final boundary occurs not only in these contexts, but also in the three last syllables before the prosodic boundary, and the lengthening effect decreases as the distance with respect to the boundary gets larger.

Santos and Leal (2008) investigated whether the same effects are found in BP by designing an experiment with words inserted in boundaries of different prosodic domains (phonological word, clitic group, intonational phrase) in non-ambiguous sentences. Their results have shown that in the left boundary of the prosodic domains (filled by the first syllables of the words), there was a significant difference in the duration of syllables only between the intonational and phonological phrase.<sup>2</sup> With regards to the boundaries on the right (filled by the last syllables of the words), syllable duration was longer only in the intonational phrase boundary. In all other levels, including the phonological phrase, there was no statistically significant difference in the durations (cf. Tab. 1). This suggests that once there is no difference in the duration of syllables between the phonological phrase and clitic group boundaries, it should not be possible to find differences that indicate a phonological phrase boundary between *filho* (son) and *feliz* (happy) in (3). However, Santos & Leal conjecture that this lengthening effect may happen when the speaker intends to disambiguate a sentence, leaving the issue open for future investigation.

	Post-tonic								
	Prosodic level	Intonational Phrase	Phonological Phrase	Clitic group	Phonological word (clitic group)				
Pre-tonic Intonational phras		-	<0.001	< 0.001	<0.001				
Phonologic	Phonological phrase	0.016	-	0.34	0.11				
	Clitic group	0.60	0.06	-	0.54				
	Phonological word	0.09	0.48	0,25	-				

Table 1 – Pre and Post-tonic syllables in prosodic de	omains boundaries in BP.
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Source: Santos and Leal (2008, p.153).

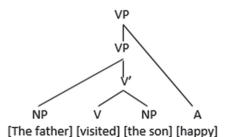
# Ambiguity between Local and non-local readings and prosodic domains in BP

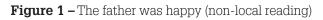
There have been a number of papers on the interpretation of sentences in BP and its phonetic correlates in recent years (for example, LOURENÇO-GOMES, 2003; FINGER; ZIMMER, 2005; LOURENÇO-GOMES; MAIA; MORAIS, 2005; MAGALHÃES; MAIA, 2006; PRESTES, 2006; FONSECA; MAGALHÃES, 2007). In this paper, we concentrate specifically on duration by measuring the final and initial syllables in NP2 and atribute, respectively, in ambiguous sentences with local and non-local readings, as in (3) above. Magalhães and Maia (2006)

<sup>&</sup>lt;sup>2</sup> Interestingly, there was no difference between the intonational phrase and the levels below in the prosodic hierarchy.

and Fonseca and Magalhães (2007) have investigated this kind of structure by performing a series of experiments to determine whether there was a preference of interpretation for one of the meanings in the sentences. These authors base their analysis on the Implicit Prosody Hypothesis – IPH – (FODOR, 2002) in which there is a default prosodic phrasing pattern. The basis for the study were adjectival predicate constructions from BP, as in (4), in which the adjective (attribute) may modify the first NP, *o pai* (the father), or the second one, *o filho* (the son). In the first case, there is a non-local reading (Fig. 1), and in the second case, there is a local reading (Fig. 2):

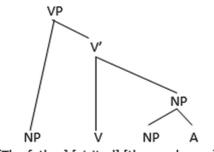
(4) O pai visitou o filho feliz. The father visited the son happy.





**Source:** Authors' elaboration.

Figure 2 – The son was happy (local reading)



[The father] [visited] [the son happy]

Source: Authors'elaboration.

As seen in the first section, these two structures are mapped differently by the phonological component. For local readings there is a restructuring of the phonological phrase domain (cf. (5)) which does not occur in non-local readings (cf. (6)):

- (5) *O* pai visitou [o filho feliz  $\phi$ ]
  - The father visited [the son happy  $\phi$ ]
  - ✓ The son was happy (*feliz* (happy) is associated with *filho* (son))
- (6) O pai visitou [o filho φ] [feliz φ]
   The father visites [the son φ] [happy φ]
  - ✓ The father was happy (*feliz* (happy) is not associated with *filho* (son), then it cannot be restructured in the same phonological phrase).

Using 24 sentences with the structures seen above, Magalhães and Maia (2006) designed a production and comprehension experiment to investigate the preference of interpretation and its correlation with prosodic cues - subjects were shown sentences and asked about their interpretation. The presented sentences were manipulated in 4 ways: with a bar segmentation between the verb and NP2 (for silent reading), with a bar segmentation between NP2 and the attribute (for silent reading), without segmentation for silent reading, and without segmentation for oral reading. The sentences were recorded for a prosodic cue analysis. The perception results pointed to a preference for the local reading when there was no segmentation in the presented sentences or when there was segmentation between the verb and NP2. However, whenever there was segmentation between NP2 and the attribute, there was a greater preference for the non-local reading. With regard to oral production, Fonseca and Magalhães (2007) showed that the chosen interpretation varied according to some prosodic cues observed (specifically, F0 rise in NP1, silent pause between NP2 and the attribute, or lengthening of the stressed syllable of the attribute). Relevant to our study is the fact that in cases of non-local readings, some speakers lengthened the stressed syllable of the attribute (*feLIZ* – happy).

However, one problem in the experiment acknowledged by the authors is that only thirteen out of twenty-four sentences were interpreted by the informants as being ambiguous, while the other sentences were considered pragmatically unacceptable. Besides, another problem we can point out involves the measuring of the duration of the syllables: some of the relevant contexts where string restructuring can occur may allow external sandhi – more specifically, elision – or have occlusive consonants, both of which making measurements less reliable. In the first case, measuring gets unclear due to the elision of the non-stressed syllable. For example, in "*O pai visitou o filho embriagado* (The father visited the son drunk)", the speaker can produce [ $\Lambda \tilde{e}\tilde{j}$ ] instead of *lho em*, making it difficult to distinguish if the produced syllable was elongated because of the prosodic boundary or because of two fused syllables. In the second case, the occlusive consonant generates silent pause (the voice onset time (VOT) from the second syllable consonant), which can also alter the duration of the syllables and hinder measuring. To illustrate this, in "*O* assessor auxiliou o presidente preocupado (The aide helped the president concerned)", it is difficult to measure the duration of the syllable *pre* in *preocupado*, since it can be preceded by silence. If this is the case, how is it possible to distinguish the silence between words from the one of the occlusive VOT? As we show in the methodology below, these cases as well as the sentences that were not recognized as ambiguous were excluded or modified in our experiment.

Moreover, Santos and Leal (2008) call attention to the fact that the lengthening result found in Magalhães & Maia's experiment cannot be explained by current prosodic theories. For Nespor and Vogel (1986), phonological processes take into account the prosodic domains that are constructed in the interface with other grammatical components. Specifically for phenomena that take into account syntactic information, the relevant domain is the phonological phrase. Thus, if the relevant syllable for the analysis is not mapped differently depending on the prosodic (phonological phrase) domains for both interpretations, there should not be any preference for a given interpretation. In the case of the adjective *feliz* (happy), for example, the fact that [lis] is elongated should not point to any interpretation, because in both of them this syllable is the final stressed one in the phonological phrase domain. Indeed, what would be expected is lengthening of the final syllable from the preceding phonological phrase, namely, from *filho* (son). This indicates that the phonological phrase in which this word is inserted is not the same as the one in which the attribute is (cf. (7)):

(7) O pai visitou [o filho] [feliz].The father visited [the son] [happy].

Yet, these strings were not measured in Magalhães and Maia's (2006) study.

# Hypotheses and Methodology

Although Santos and Leal (2008) have not found syllable lengthening effects in BP similar to what was found in other languages (OLLER, 1973; KLATT, 1976; WIGHTMAN et al., 1992; FOUGERON; KEATING, 1997), here we will rely on Magalhães and Maia's (2006) results to further explore Santos and Leal's suggestion that when sentences are syntactically ambiguous, speakers use phonetic cues to single out each of the relevant meanings. Our speficic hypotheses for this study are the following:

- a) Speakers will display differences in duration depending on the local or non-local interpretation.
- b) The relevant strings will be longer under non-local readings (type A) than under local ones (type B), due to the presence of a phonological phrase boundary.

To test these hypotheses, we designed an experiment based on Magalhães and Maia (2006), so that we could compare our results with theirs. We used the sentences tested in Magalhães and Maia (2006), excluding or modifying the ones speakers did not identify as ambiguous, the ones with occlusive consonants in the first syllable of the attribute, and the ones that began with vowels. As discussed above, the silent pause and the possible elision in these cases could interfere in the measuring results.

Thus, our experiments comprises the following sentences:

- 1. *O pai visitou o filho feliz.* The father visited the son happy.
- 2. *A babá ninou a menina chorando.* The nanny rocked the girl crying.
- 3. *A mãe encontrou a filha suada.* the mother met the daughter sweaty
- 4. *O réu* encontrou o advogado nervoso. The defendant met the lawyer nervous.
- 5. *O aluno consultou o monitor cismado.*<sup>3</sup> The student consulted the monitor worried.
- 6. *O sobrinho cumprimentou o tio sonolento.* The nephew greeted the uncle sleepy.
- 7. O assessor auxiliou o presidente furioso. The aide helped the president furious
- 8. *O repórter entrevistou o político sozinho.* The reporter interviewed the politician alone.
- 9. *A mãe procurou a filha magoada.* The mother looked for the daughter hurt.

<sup>&</sup>lt;sup>3</sup> A reviewer asked whether this sentence is indeed recognized as ambiguous, and not exclusively with a non-local interpretation. Despite being considered unambiguous by Magalhães & Maia's (2006) subjects in its previous format, it was taken as ambiguous by the subjects in our experiment. In order to confirm this analysis, 5 other subjects were asked to find ambiguity in this sentence, and not only all of them considered it ambiguous, but also two of them said that the local interpretation was their first interpretive option.

These 9 sentences were inserted in 18 narratives that prompted only one of the interpretations. These narratives were divided into 2 lists, each of which containing only one of the versions for each sentence, so it was never the case that one speaker was tested on both readings for the same sentence. We also added 6 distractor sentences in each list. In (8) we show the two narrative versions for the following sentence: '*O réu encontrou o advogado nervoso* (The defendant met the lawyer nervous)':

(8)

a) Bruno estava sendo acusado de matar o próprio tio devido a uma possível herança que receberia. Seu advogado o defendia acreditando realmente que o réu era inocente, pois Bruno sempre jurou estar em outro lugar no dia da morte do tio. Faltavam dois dias para o julgamento final quando o réu decidiu ir atrás de seu advogado com o intuito de contar que era culpado, e estava com muito medo do advogado desistir da defesa. Marcaram um encontro no escritório do advogado, que estava tranquilo, crente que Bruno queria apenas umas últimas informações antes do julgamento. O réu encontrou o advogado decidiu mesmo abandonar o caso.

Bruno was being charged with killing his own uncle because of an inheritance he would come into. His lawyer defended him because he believed the defendant was innocent. Bruno had always claimed he was somewhere else on the day of his uncle's death. Two days before the final judgment the defendant decided to look for his lawyer and tell him he was guilty, but he was afraid the lawyer would give up defending him in court. They met at the lawyer's office. The lawyer was calm, believing Bruno just wanted some additional information before the trial. **The defendant met the lawyer nervous**. Shaking a lot, Bruno confessed he was guilty and the lawyer decided to abandon the case.

 b) Pedro era um ótimo advogado e exercia sua função há mais de 10 anos. Ele não aceitava perder nenhuma causa e, de fato, raramente perdia. Quando acontecia, ele não se perdoava e ficava irritado com tudo e com todos. Hoje, era dia de mais um processo. O réu estava muito ansioso. Porém, antes do réu chegar ao fórum, o advogado ficou sabendo da existência de uma testemunha do lado oposto que poderia atrapalhar toda a sua defesa. Chegando no fórum, o réu encontrou o advogado nervoso. O advogado não sabia como contar a novidade ao rapaz. Pedro was an incredible lawyer, who had been working for more than 10 years. He did not like losing any lawsuit and, in fact, he had almost never lost. When this happened, he did not forgive himself, getting angry at everyone and becoming nervous for anything. Today he was defending a client against a lawsuit. The defendant was anxious. However, before the defendant arrived at the court, the lawyer had discovered a new witness from the prosectution side who could destroy all his defense arguments. At the court, **the defendant met the lawyer angry**. The lawyer didn't know how to tell his client the bad news.

Even though the target sentences are highlighted in the text above, in the experiment, there were not any marks to show which the analyzed sentences were or how they should be read.

The experiment was conducted with 30 subjects (men and women, all adults and undergraduate students who were born in São Paulo). They were divided into 2 groups with 15 people each. Each group read one of the lists with the 9 target sentences. They were asked to read the narratives in silence at first (to make sure they knew the intended interpretation) and later, aloud, in the most natural way.

The readings of the narratives were recorded using the software *Audacity 1.3 Beta Unicode* and the duration from the final syllable of the object to the first syllable of the attribute of the relevant ambiguous sentence was later analyzed with the software *Praat.* The idea was that this string span should allow us to register any differences of duration around the potential phonological phrase boundary between NP2 and the Attribute (in the last syllable of the object, in the first syllable of the attribute, in the pause between them, or even in all of them together). Thus, in the sentence above *Oréu encontrou o advogado nervoso* ("The defendant met the lawyer angry"), the string [do.ner] was measured.

#### Results

In Table 2 below, we present the overall results for type of sentence, that is, all sentences A (non-local readings) *versus* all sentences B (local readings). Graphic 1 shows the distribution of the measures for each sentence read by all 30 subjects.<sup>4</sup> The numbers identifying the sentences should be read in the following way: the first digit indicates which presentation list the sentence belongs to and the second digit, the sentence itself. Thus, "11" corresponds to list 1 and sentence 1 (in this

<sup>&</sup>lt;sup>4</sup> The dashed line refers to the overall mean and the continuous line refers to the mean per sentence. The grey diamonds indicate the specific mean of each sentence; its top and bottom edges are the 95% confidence interval (CI) for the mean.

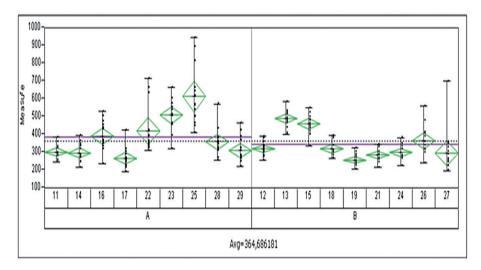
case, interpretation A), which is to be compared to "21", which correspond to list 2, sentence 1 (interpretation B).

		Standard	Average	95	% CI	Maximum	Minimum
	Mean	deviation	standard error	lower	upper		
Measure (ms.)	364,7	121,8	7,4	350,1	379,3	190,1	946,0
Sentence A	385,2	139,7	12,0	361,5	409,0	190,1	946,0
Sentence B	344,1	96,9	8,3	327,6	360,6	196,7	700,1

Table 2 – Duration difference between sentences A vs. B

Source: Authors' elaboration.

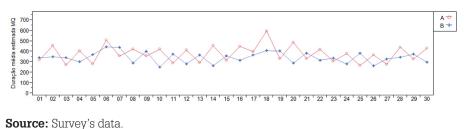
**Graphic 1** – Sentences A vs. Sentences B durations (<del>a</del>ll subjects)



Source: Survey's data.

As can be observed, there is a great variation in the duration of the relevant context for each sentence. This is particularly noticeable with respect to sentence 25. This variation hampers our evaluation of the significance of the difference between the average duration of sentences A and B. What can be seen is that sentences with interpretation A show more dispersion - 139,9 miliseconds of standard deviation, with mean of 385,7 miliseconds (CI 95% [361,5; 409,0]), against a standard deviation of 96,9 miliseconds from sentence B, with mean of 344,1 miliseconds (CI 95%; [327,6; 360,6]).

In a follow-up analysis, an analysis of the variance (ANOVA) was conducted by considering the sentence, the speaker, and the interaction sentence-speaker. This second analysis of variance shows that the interaction of the sentence and the subject is highly significant, 1% (prob > F = 0,0101), which means that we cannot analyze the sentences without taking into consideration the subjects. Graphic 2 below shows the estimates for the least-squares (LS) of the mean of each sentence A and B for each subject.

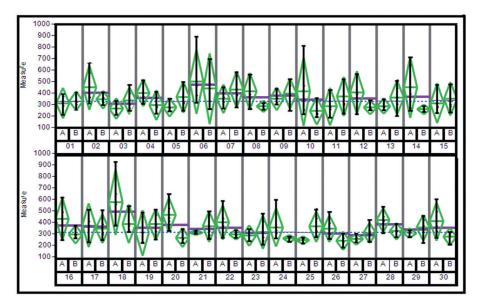




In the graphic above, it becomes evident that the duration estimates from each sentence vary from subject to subject, as well as the relation between sentences A and B. These results also show that speakers 2, 4, 6, 8, 10, 12, 14, 16, 17, 18, 20, 22, 24, 26, 28 and 30 produce longer durations in the interpretation of A, while speakers 3, 5, 7, 9, 11, 13, 19, 21, 25, 27 and 29 produced longer durations in the interpretation of B, and speakers 1, 15 and 23 produce practically the same duration in both interpretations.

In a subsequent investigation, we examined whether there is a statistically significant difference in the subjects' productions showing that sentences A are longer than sentences B for each subject. The results of this investigation are shown in Graphic 3 below:

bource. Burvey B data.



Graphic 3 – Duration differences between sentences A vs. B for each subject

Source: Survey's data.

The results above show (i) a tendency for sentences A to have longer duration than sentences B – despite an inversion of this result for some subjects – and (ii) a considerable variability in the observed contexts. In our next analysis, we investigated whether there is a significant difference between the two readings. Table 3 below shows the p-values for each subject. The p-values highlighted in dark grey (for subjects 10, 14, 18 and 20) show a statistically significant durational difference (p < 0.05); the ones highlighted in light gray (for subjects 8, 12, 16 and 30) also show a significant difference (p < 0.1), but not as high as the previous ones; the p-values not highlighted are not significant. If we cross-tabulate these results with those from Graphic 3, we can see that in all the cases in which there is a significant difference, interpretation A is longer than B.

Subject	1	2	3	4	5
Prob>  t	0,785	0,164	0,363	0,163	0,242
Subject	6	7	8	9	10
Prob>  t	0,409	0,278	0,082	0,554	0,024
Subject	11	12	13	14	15
Prob>  t	0,264	0,086	0,333	0,013	0,599
Subject	16	17	18	19	20
Prob>  t	0,08	0,673	0,014	0,337	0,009
Subject	21	22	23	24	25
Prob>  t	0,492	0,178	0,712	0,199	0,124
Subject	26	27	28	29	30
Prob>  t	0,169	0,508	0,204	0,547	0,082

**Table 3 –** Prob> |t| for the duration between sentencesA vs. sentences B for each subject

Source: Authors' elaboration.

#### Discussion

We have worked with two hypotheses in this paper. The first one predicted that there would be a significant difference of duration in the relevant contexts depending on the local or non-local interpretation of the sentences. As reported in Table. 3, it is not possible to analyze this durational difference without taking into consideration the subjects. When considering this correlation, we see that 27 subjects show a difference in the duration of the context depending on the interpretation, revealing a strong interaction between the subject and the sentence. However, only 8 of them show a statistically significant difference and for all of them, the relevant context for the non-local reading (A) is longer than the local one (B).

Our second hypothesis predicted that context A would be lenghtened due to the presence of the phonological phrase boundary. Based on the results which did not consider the subject, we observe that there is no difference in duration. This means that there is no difference between the duration of the segment in phonological phrase boundaries (non-local readings) and clitic groups (the domain immediately below in which there is no phonological phrase boundary), corroborating Santos and Leal's (2008) results. However, it is interesting to note that the contexts in sentences A were always slightly longer (but not statistically significant) than B, indicating that there is a tendency for the speakers to resort to lengthening where there is a phonological phrase prosodic boundary, which is in accordance with Santos & Leal's suggestion. Finally, with regards to the analysis of each subject (without considering the kind of sentence), it must be pointed out that almost 1/3 of the 30 speakers did show a significant difference between the readings of sentences A in comparison with sentences B. Interestingly, the longer duration is always in non-local readings (A), as our hypothesis predicted, following Santos and Leal (2008).

Given these results, we would like to make some remarks regarding the experiment conducted in this study. First, the results were not biased by sentences that were later questioned (as happened with Magalhães & Maia 2006). In fact, none of the subjects has made any comments about the unambiguous sentences as being pragmatically poor. Secondly, as mentioned above, the sentences to be analyzed were inserted in narratives which prompted the intended interpretation. This may have induced speakers to believe it was not necessary to disambiguate the sentence in speech.

Finally, another aspect that must be considered is that speakers have read just one version of the sentences. This means that it was not possible to compare the readings of the same speaker for the same sentence in order to check differences in production that could be accounted for by the segmental aspects of each context (which is different according to the sentence). Thus, these observations indicate that further investigations should be conducted.

#### **Final Considerations**

In this paper, we have investigated whether speakers use duration as a lengthening process in order to disambiguate syntactically ambiguous sentences in a situation where the phonological phrases can be restructured and form a unique domain or be kept in two different domains, according to the interpretation. This lengthening in the relevant context would be accounted for by (i) the tendency of lengthening the syllable in the higher prosodic domain (OLLER 1973; KLATT, 1976; WIGHTMAN et al., 1992; FOUGERON; KEATING 1997, but not in BP (SANTOS; LEAL, 2008)) or (ii) a longer pause inserted between the relevant prosodic boundaries.

In our experiment, we have tested sentences of the same kind as the ones used in Magalhães and Maia (2006). They are formed by Noun Phrase 1 - Verb - Noun Phrase 2 - Attribute, in which the attribute can modify either the first or the second NP, and we measured the context that included the last syllable from NP2 and the first syllable from the attribute. This context allowed us to observe any possible differences in the production of what is around the phonological phrase when it is restructured (the syllables before and after the boundary as well as the pause in it). Our results did not show any statistically significant difference in duration in the measured context. What we have found is that the production

of differences in duration is highly correlated to the speaker. This means that some informants make this difference, while others do not. Importantly, in all cases where this difference in duration was correlated to the speaker, it was statistically significant: the reading where the Attribute modified the first NP (non-local reading) was the longest one.

We call attention to some issues that may have influenced the results: The sentences being part of the narratives that disambiguated them may have guided the speaker not to produce the durational differences we expected. In addition, the non-production of the two versions of the sentences by the same speaker may have biased the use of duration as a cue to the interpretation, as we could not compare the production of the two readings for each speaker.

ANGELO, M. C.; SANTOS, R. S. A prosódia em sentenças sintaticamente ambíguas do Português Brasileiro: pistas de duração. **Alfa**, São Paulo, v.59, n.2, p.375-394, 2015.

- RESUMO: Utilizando sentenças sintaticamente ambíguas pelas posições local e não-local do atributo, este artigo discute o uso da duração como pista do mapeamento prosódico de sentenças no português brasileiro. O que se questiona é se os falantes diferenciam as leituras via alongamento conforme o domínio prosódico do significado pretendido. Para isso, o presente trabalho é baseado em um estudo comparativo da produção por 30 falantes do PB de 9 sentenças do tipo SN1-V-SN2-Atributo onde, conforme a interpretação, pode haver uma fronteira de frase fonológica entre SN2 e o Atributo. Para efeitos de discussão acerca do tema, a teoria prosódica de Nespor e Vogel (1986) foi adotada. Os resultados encontrados não mostraram uma diferença estatística significativa na duração do contexto analisado (da última sílaba de SN2 até a primeira sílaba do atributo) quando apenas as leituras são consideradas, mas apontaram para uma forte correlação entre interpretação e informante, e em todos os casos significativos havia uma duração maior dos contextos analisados quando o atributo se referia a SN1, isto é, quando havia uma fronteira de frase fonológica
- PALAVRAS-CHAVE: Fronteiras prosódicas; Frase fonológica; Atributo; Aposição local e não-local; Alongamento

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# **INTERVIEW**

# WHICH ROUTE TO DISCOURSE ANALYSIS?: AN INTERVIEW WITH JEAN-JACQUES COURTINE<sup>1</sup>

#### João KOGAWA\*

- ABSTRACT: It's commonly known among researchers the importance of Jean-Jacques Courtine's route in the Discourse Analysis of French tradition and his contributions to the theory. As it is common to the great thinkers, the thought of this scholar of the humanities has not remained the same, nor the spaces through which he circulated academically (France, USA and currently New Zealand). From the work done about the communist discourse addressed to Christians to the recent work *History of virility*, Courtine has faced many problems. In this unprecedented interview, the author tells us about his story in the field of Discourse Analysis of French tradition; aspirations, expectations and common perspectives from the 1960s that influenced Discourse Analysis; he tells about aspects of his relationship with Pêcheux and the paths that their work has taken from the 1980s on. All this leads us to reflect upon the complexity, importance and relevance of the discourse as an object of investigation.
- KEYWORDS: Discourse analysis. Historical anthropology. Epistemology. Historical semiology.

João Kogawa: We can consider Automatic Discourse Analysis, published in 1969, as the inaugural mark of Discourse Analysis (hereafter AD) in France. However, there are other texts by M. Pêcheux in which he does not seem to have the same concern. Here I draw on Ideology and the history of sciences, in collaboration with M. Fichant, and the articles published under the pseudonym of Thomas Herbert ("Reflections about theoretical situation of the social sciences, especially Social Psychology" and "Notes for a general theory of ideologies"). What is the relationship between these texts?

J-J. Courtine: To answer this question we need to consider the following fact: in what is still left of Pêcheux's work, which is valid not only for France but probably also for Brazil, his activity as discourse analyst somehow smashed the rest of his bibliography. Thus I am impressed with the extensive and

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<sup>&</sup>lt;sup>1</sup> This interview was carried out with Jean-Jacques Courtine at the Sorbonne in December 2010, upon completion of my PDEE stage. Initially, I recorded audiovisual material. After that, I did the transcript of the French audiovisual material. All this work was monitored and reviewed by professor Courtine. This English version was based on the Portuguese version.

intensive use made in Brazil of all the texts dealing with DA, rather than the philosophical work itself. Well, Pêcheux was a philosopher and that is what we must remember. He had two faces: while part of him was a philosopher, he had this other side to him that loved to fabricate and mix machines with linguistics and computing. Then, he performed the critical work of the philosopher from a Marxist perspective - as a student of Althusser he had been and continued to be: he also held another job that entailed certain forms of linguistic-computing mixing that led to conceiving the Automatic Discourse Analysis. For him, the two activities were linked. The ADA was the practical extension – the method and the armed wing - somehow, of the philosophical work. Well, it's this second activity that remained, it seems, as his essential legacy. We must not forget that he was an Althusserian Marxist philosopher and that is why, evidently, he wrote his critical works on the history of science reinterpreting some historians or philosophers of science - in particular Bachelard. That is why the notion of "epistemological break" gained a particular place. Pêcheux seeks to show that the works of Saussure, first, and Chomsky's have also operated in such manner. Apart from linguistics itself, he fought, as a Marxist philosopher, for what was then called a "class struggle in theory" and it is in this context that his work with Fichant – his comrade of Normal School and philosopher – fits in. The memory of the use of this expression, expired today, explains the erasing of the philosophical work of Pêcheux: the work of the Marxism itself in the world of ideas. Pêcheux did not work, as we tend to believe, only with linguists and computer scientists. This idea – which omits the philosophical dimension of his iob – serves to give more meaning to his engagement in DA. He produced at that time an entire critical activity in the field of humanities and social sciences. which attacked what was being done at the university on behalf of disciplines such as Social Psychology, for example: Pêcheux saw in that particular aspect the foremost point of capitalism in the humanities. The writings of "Thomas Herbert" fall under this perspective. However, as he should at the same time join in as a researcher at CNRS – and appearing as a Marxist philosopher was not a royal road to get there – he used that nickname - which comes from a family story – to sign his texts. Thomas Herbert was, if I remember correctly, a friend of the family and a memory that had to do with the war. Literally, "Thomas Herbert" was, at the same time, a name of war and a "pen name". That says a lot about the environment that reigned in the University political confrontations. Either way, it is necessary – in this kind of posthumous biography that was constituted about Pêcheux – that this part of DA does not have full precedence over his philosophical, critical and political work to the point of deleting it. It is important to remember that Pêcheux had, at any given time, to choose to rename "Thomas Herbert" and to understand why.

João Kogawa: What is the conception of discourse that seems most appropriate for an understanding of your current work?

J-J. Courtine: This question concerns the nature of the work we can do when we undertake a historical perspective – which has been the case for a long time - as much as it concerns the things that I could learn throughout the period in which I practiced DA. I can say in this regard that there is no absolute continuity between these two moments, but also that there is no radical discontinuity. It seems to me that what I learned while doing discourse analysis prepared me for the critical work of texts to which the historian must, of course, be open. In other words, when I studied issues concerning the medical and physiognomic tradition of expression of emotions between the sixteenth and nineteenth centuries, the reading of all this vast corpus of texts benefited, I believe, from what I learned by doing discourse analysis. When we have to establish genealogies of statements. designing an archeology of large sets of discourses and we are confronted with masses of documents, we recognize the importance of concepts such as pre-built or inter-discourse. However, this is only part of the work to be carried out. That is, the work of the historian must make full use of the material in history. And in all of this, of course, there is not just text, not discourse alone. My perspective is very close to that of Foucault in The Archaeology of Knowledge (2004), on the condition that we understand well that the term "discourse" which he employs does not mean, at best, "text". He respects the historical materials in general. This implies that the historical work I could do in the long term, whether it is about emotions and facial expressions, the deformed body, or virility, was only partial. It is necessary to figure out the texts, understand the pictures, play lists and tables, rebuild and give new life to gestures and practices. In sum, one has to make sense of everything that constitutes the diversity of the materials of history. Thus, my old discursive concerns are to engage in a historical and genealogical perspective that, it seems to me, is much closer to what I learned to do by reading The Archaeology of Knowledge than to the DA itself, in the strictly linguistic sense of the term.

João Kogawa: In *Mitologias* (BARTHES, 1980), a bit like what you say in *Metamorfoses do discurso político* (COURTINE, 2006) (with texts chosen and translated by Carlos Piovezani and Nilton Milanez), there is the idea that, with the emergence of the big media, it was essential to build a science of semiology. How do you see your work in relation to Barthes?

J-J. Courtine: I am not sure that I truly understand that it was "essential to build a science of semiology". And I only made use of the term semiology, when I did it, accompanied by the adjective "historic" because, in my view, the objects of semiology, the signs with which it is concerned have, above all, a historical existence. However, if you ask me about the semiological project as formulated by Roland Barthes, particularly in the view of the semiology of the image – because that is what interested me in the first place – what strikes me is that the birth of semiology is a kind of historical mystery. How can a project dating from the late nineteenth century, which was formulated in the early twentieth century in the Course of General Linguistics by Saussure, without attracting any interest worthy of being noticed for about half a century, suddenly reappears after a long silence in 1960, i.e., at the beginning of what the cultural historians consider the "second twentieth century"? What is certain is that this rebirth has only partly to do with the internal genesis of the history of linguistics and structuralism so often evoked. It depends on other factors; in particular, the way through which society was suddenly flooded by the media's more massive scale than it had been before. It was necessary to think and forge tools to understand it. I think the semiology of images, especially as it appears at this time, can only be explained in this way. Why did the development of the semiology of images start in the 1960s? Because we became aware, initially in a vague and then in an increasingly precise way, that advertising invades everything; advertising messages spread across the corner; television penetrates the homes and in our homes, in private life, we are confronted with what previously was restricted to the public sphere. So, there are two reasons that, in my view, explain the emergence of semiology. There is the need of structuralism itself and its development (that we see in Barthes, Elements of Semiology (1999) in particular, and in his inaugural texts), and the fact that new objects are imposed on the analysis, especially advertising in all forms. Indeed, it is the same reason that, at the same time, gives birth to an analysis of textual form of ideologies, i.e., a discourse analysis. All these things are connected. We see that his genealogy, in part, takes matters concerning the disciplines themselves - the way the disciplines are "conquered" by structuralism - but also factors that are outside the realm of science and that most commonly concern the ideological context and the profound transformations in the 1960s.

João Kogawa: Nilton Milanez does studies under your supervision in 2003 and, since then, in Brazil, he uses the concept of intericonicity. I know it is a part of your work and one of your concerns. Would it be possible to assimilate this concept of "interdiscourse" in Pêcheux?

J-J. Courtine: The idea comes from here, yes. But intericonicity cannot be directly superimposed on what we mean by "interdiscourse." When I started working on this issue in 2003-2004, I had for a long time been skeptical about the possibility of applying linguistic models to the image. I realized that a semiology of image could not be linguistic inspiration; that the attempts made in the perspective of a rhetorical image, as Barthes thought, did not work and was not suitable; that the definition of the linguistic sign does not conform to the nature of iconic materiality and could only be applied in this domain with considerable distortions. Then I

wondered if, in the background, the image would not combine better with the discourse than with the model of the language, as conceived by semiology at the time. It is from here that, trying to understand the image from a discursive model, I wondered, of course, if the concept of interdiscourse, i.e., the fact that there are always words under the words, discourse under the discourse - there is "always one already-there of the discourse", as we then said- could not be applied to the image. Undoubtedly, there is "always one already-there of the image" and there are images under the images. And it is from this moment on that I began to consider images in the genealogical and memorial dimension. This means that every image resurrect other images. That would be true for exterior subject images - images that we can document as they have material existence, they were seen and realized on the external media to the subject itself - or mental images, those which inhabit the subject's imaginary in guestion. It is in these terms that I conceived the intericonicity. Every image is a relationship of images; it subscribes to network with other images, whether external or internal images to the subject. Others, who developed that independently and in their own way, shared this intuition: in a recent book by Clément Chéroux (2009), entitled Diplopie, we find a very similar use of the same notion. However, Chéroux considers that it is among the external images - whose trail he strives to document as an art historian - that we can see intericonicity relations being produced. Under the images of September 11, he caught a glimpse of those of Pearl Harbor. That seems fair to me, but, in my view, we need to provide the place of internal images, the place where the images come to mind in the imaginary of the subject. There is, in the mental landscape of each subject, in the memory of the images of which each one has, an individual and a collective part - something of the order of intericonicity. In the same way that in order to read texts we need to resurrect the memory of the texts - this is what we call interdiscourse; little does it matter if we make these texts appear in its documentary form or as simple memory trace – there is a memory of the images: images that can be simultaneously on the wall here before you, and in your head.

João Kogawa: Pêcheux, in *The role of memory* (1999), proposed, somehow, different perspectives for this question. In Brazil, [with the discussions made in some groups such as GEADA, LABOR and Nilton Milanez studies (LABEDISCO)] we see his research as a pathway to AD. How do you see these Brazilian studies that consider your research as a possibility of changing DA?

J-J. Courtine: I've already partially answered this question on another occasion, but I will approach it differently. For the Brazilian DA, I would say I am probably one bad example, because my journey was to stop doing DA. So, if DA or some Brazilian discourse analysts want to be inspired by my example, I strongly believe they run the risk, like me, of stopping being discourse analysts. Unless we take, which seems to be the case in Brazil, a very broad meaning to the term discourse analysis. I understand that we want to give the DA a broader sense than it had and continues to have; we want to bring into our field materials that are not purely textual. In this case, if these concerns strongly enter the field of history, the materials on which it works are not strictly and solely linguistic documents; then yes, why not? Perhaps the perspective that I develop can engage in the field of DA. But we must see what this implies: there are heavy conditions that can distance us considerably from a reduced linguistic discourse analysis. At the same time, I answered this issue otherwise, saying that in historical work – what Foucault calls genealogy or archeology -there is a place for linguistic work. There is probably, punctually and occasionally a place for it in terms of objects, objectives, corpus of research, but not systematically. I do not think the bulk of the work should focus on linguistic methods when the object of history largely surpasses that approach. I think that Linguistcs may possibly act as a tool. Why not? It is similar to when we do documentarian work in history. We criticize sources; we do it for the image. for practices, for statistical series, and then, of course, for the textual materials of history. However, this makes strictly linguistic questions secondary or auxiliary methods among others. The choice is then, right there. If we truly want to make history, if we consider that the object is primarily historical, we cannot attach it only to the linguistic considerations. Because the materiality that we have to account for largely surpasses the question of the text and this forces us to think, on the contrary, about the relationship between different types of materiality. Lists, tables, images, photographs, texts, but also practical, gestures, expressions... That is, it seems to me, the answer we can give. So, I fear that those who are ready to follow this route will give to the DA content that is very close to cultural history or historical anthropology.

João Kogawa: You often say, in your course *The anthropology of images*, "we can not be afraid to move on", i.e., we should not radically enclose ourselves in disciplinary boundaries. Why, after Pêcheux's death we watched a kind of "redisciplinarization" of DA in which nomadism does not seem to take place?

J-J. Courtine: Both answers lay in DA. There was originally a strong air of interdisciplinary freedom that Pêcheux – Marxist philosopher and curious man, passionate for Linguistics and by computers – largely embodied. That is why I insisted earlier on the philosophical work in which Pêcheux was fully involved. We should not think that he was, above all, concerned with founding a discipline that was called "Discourse Analysis." It was not the case; this was only one aspect of his work; perhaps one of his additional work, being even one of the important elements. But that was not all. As a philosopher, he was extremely open to many areas and the exchanges involving philosophy, politics, linguistics, mathematics, computing and history. You need not erase

it, any more than the political project that crossed this conception of DA that I highlighted before. So I was professionally a linguist at the time, and he was professionally a philosopher. Claudine Haroche did social psychology at the CNRS. Marandin was a linguist and worked with formal languages; Francoise Gadet was also a linguist and was interested in sociolinguistics. There were also computer scientists and logicians working with us. But these specializations, these professionals' reasons did not outweigh the need to find common and unprecedented ground. And there was, of course, historical issues that were placed, and performed works of historical nature. In my case, for example, the work I did about the discourse of the French Communist Party was a way to put in historical issues. So everything that coexisted in the same project and interdisciplinarity was central in founding something new. We were in a context, as Deleuze would say, of "deterritorialization" of forms of circulation that reshaped the roles and redistributed the boundaries of disciplines. Then, very quickly, everything ceased to be like that: the DA quickly became a discipline and the movement itself made use of Pêcheux's life. There were also those whose concern was disciplarization of DA and who were not part of the group that I have spoken about. They were, moreover, fully occupied with writing manuals introductions, and with dreaming up dictionaries... There was then a pedagogical and disciplinary project developed in parallel to this initial foundation. That was not my purpose, nor the original purpose of Pêcheux, yet he, in my view, little by little – especially in the spring –subsided, somehow, to this. However, we would need to see the issue closely because he tried to get to the end of his critical work as a philosopher. What is clear, however, is that for some, the DA interested only as a linguistic component, like a discipline inside Linguistics. I think that since things are re-territorialized effectively, this interdisciplinary spirit stopped breathing. This is the reason why I distanced myself. I believe, indeed, that nomadism, on an intellectual level, is something precious. Michel de Certeau, who I was close to, would say, "Thinking is to go beyond". This seems to be to me an essential truth. In other words, the work of thinking is to move. I interpreted this as well as in the realm of the geographic space. This is the reason why I reply to this interview. Since what is happening in Brazil leaves me not indifferent. In fact, I could find there a deep mark left by DA and Pêcheux's works. I believe in the theoretical virtue of travel and displacement, and I have spent fifteen years of my life – almost half of my career – in the United States for this reason. This allowed me to think, work, search, and change. But we can be a great traveler staving at home, as Montaigne in his tower... we can travel without ever leaving Paris, this office, the Sorbonne. There are forms of displacement, flexibility, intellectual plasticity, that make us move without moving... It is a mark that the ideas cannot stay in one place, but that they exist in movement. People who believe that they own their ideas are always wrong.

João Kogawa: On September 30 2010, at the Sorbonne, in a cocktail opening the school year, you made me a very interesting point when I talked to you about my research. This happened when you introduced me to one of your department colleagues. I told you that I was interested in the history of DA and Pêcheux's early texts. You told me at the time that I was looking for "dinosaur bones". In your view, does the DA as conceived by Pêcheux have enough analytical device to understand the domination forms in our present?

J-J. Courtine: This is a good question, João. Firstly, my joke was unjust with the dinosaurs: it is not because they are very ancient that they are not interesting. However, would it be fair to discourse analysis? Probably not as well. After all, it is part of the history of Linguistics and also part of the history of Marxism and structuralism in the humanities. It raises the same interest as any other object of our intellectual history of the last fifty years. But the question is quite another: would the tools developed by the DA at the time bring understanding of what is happening today? I tend to answer this question both affirmatively and negatively. We can certainly find in the analysis of linguistic forms some evidence to partially understand the forms of discursive domination in contemporary history. However, I think we need to go much further. The discursivities against which we are confronted today do not have such characteristics anymore - or very rarely present themselves well – as purely linguistic discursivities from. We see very well that the forms of domination are exerted through mixed communication modes where images, speeches, writings discourses and spectacular effects are interwoven. So I do not think the statistical word counts, as it still operates on political discourse, or, the exclusive attention to syntax or lexical analyses clarifies what is produced actually.

These mixed discursivities are also "liquid", as Zygmunt Bauman suggests; they present themselves in streaming and they are characterized by their speed, instantaneity and obsolescence. This implies that the collective memory of words and images is today an essential political game. The DA would have a role in deciphering the contemporary forms of domination firstly, if the theory insists on taking on the critical original role that it first had; if, secondly, it is open to the diversity of verbal materiality, whether oral or written, and image, which are woven forms of communication that traverse and organize the public sphere; finally, if its historical anchor allows for DA to maintain the filiation of pictures and words, i.e., if it can restore the memory of the collective representations, ever more fleeting. Thus, DA will contribute to the present of our societies not to delete their history by making them unintelligible.

## Thanks

I'd like to thank CAPES, for the scholarship that allowed me to carry out the doctoral stage in France and Professor Jean-Jacques Courtine not only for giving me the honor to do this work but also and especially for giving me a warm welcome in France. I'd like to thank Sonia Lee, my wife, for the first reading of this English version.

Quelle voie pour l'analyse du discours: un entretien avec Jean-Jacques Courtine

RÉSUMÉ : Le parcours de Jean- Jacques Courtine dans le domaine de l'analyse française du discours ainsi que les contributions de l'auteur à la théorie sont bien connus par les chercheurs de ce domaine. Comme il est courant pour les grands penseurs, la pensée de ce savant des sciences humaines n'est pas restée la même, ni les espaces dans lesquels il fit le tour académique (France, USA et actuellement Nouvelle Zélande). De L'Analyse du discours politique: le discours communiste adressé aux chrétiens jusqu'à L'histoire de la virilité, de nombreux problématiques ont été rencontrés par Courtine. Dans cette interview inédite, l'auteur nous raconte son histoire dans le domaine de l'analyse française du discours; sur les aspirations, les attentes et les perspectives communes du structuralisme des 1960 qui ont influencé l'analyse du discours; sur les aspects de leur relation avec Pêcheux et les chemins qui ont eu leur travail après les années 1980. Tout cela nous amène à réfléchir sur la complexité, l'importance et la pertinence du discours comme objet d'investigation.

KOGAWA, J. Mots-Clés: Analyse du Discours; Anthropologie Historique; Épistémologie; Sémiologie Historique. **Alfa**, São Paulo, v.59, n.2, p.397-406, 2015.

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#### PAPER SUBMISSION INSTRUCTIONS

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Authors should ensure that their electronic copy is compatible with PC/

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### 3.2. Paper format

The format below should be followed:

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## **3.3. Further instructions**

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AUTHIER-REVUZ, J. **Palavras incertas:** as não coincidências do dizer. Tradução de Cláudia Pfeiffer et al. Campinas: Editora da UNICAMP, 1998.

CORACINI, M. J.; BERTOLDO, E. S. (Org). **O desejo da teoria e a contingência da prática.** Campinas: Mercado das Letras, 2003.

LUCHESI, D. **Sistema, mudança e linguagem**. Um percurso na história da linguística moderna. São Paulo: Parábola Editorial, 2004.

## Book chapters

PECHEUX, M. Ler o arquivo hoje. In: Orlandi, E. P. (Org.). **Gestos de leitura: da história no discurso**. Tradução de Maria das Graças Lopes Morin do Amaral. Campinas: Ed. da UNICAMP, 1994.

## Thesis and dissertations

BITENCOURT, C. M. F. **Pátria, civilização e trabalho**: o ensino nas escolas paulista (1917-1939). 1988. 256 f. Dissertação (Mestrado em História) – Faculdade de Filosofia, Letras e Ciências Humanas, Universidade de São Paulo, São Paulo, 1998

# Papers in journals

SCLIAR-CABRAL, L.; RODRIGUES, B. B. Discrepâncias entre a pontuação e as pausas. **Cadernos de Estudos Lingüísticos**, Campinas,n.26, p. 63-77, 1994.

## **Online papers**

SOUZA, F. C. Formação de bibliotecários para uma sociedade livre. **Revista de Biblioteconomia e Ciência da Informação**, Florianópolis, n.11, p. 1-13, jun. 2001. Disponível em: <...> Acesso em: 30 jun. 2001.

### Newspaper articles

BURKE, P. Misturando os idiomas. **Folha de S. Paulo**, São Paulo, 13 abr. 2003. Mais!, p.3.

EDITORA plagiou traduções de clássicos. **Folha de S. Paulo**, São Paulo, 4 nov. 2007. Ilustrada, p. 6.

### **Online publications**

UNIVERSIDADE ESTADUAL PAULIS-TA. Coordenadoria Geral de Bibliotecas. Grupo de Trabalho Normalização Documentária da UNESP. Normalização Documentária para a produção científica da UNESP: normas para apresentação de referências. São Paulo, 2003. Disponível em: <...>. Acesso em: 15 jul. 2004.

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MARIN, A. J. Educação continuada. In: CONGRESSO ESTADUAL PAULISTA SOBRE FORMAÇÃO DE EDUCADORES, 1., 1990. **Anais**... São Paulo: UNESP, 1990. p. 114-118.

#### Films:

**Macunaíma**. Direção (roteiro e adaptação) de Joaquim Pedro de Andrade. Filmes do Serro/Grupo Filmes/Condor Filmes. Brasil: 1969. Rio de Janeiro: Videofilmes, 1969. Versão restaurada digitalmente, 2004. [DVD]. (105 minutos), colorido.

## *Paintings, photographs, illustrations, drawings:*

ALMEIDA JÚNIOR. **Caipira picando fumo**. 1893. Óleo sobre tela. São Paulo, Pinacoteca do Estado de São Paulo.

### Music CDs (as a unit or tracks)

CALAZANS, T. **Teca Calazans canta Villa Lobos** [CD]. Rio de Janeiro: Kuarup Discos, 1999.

CALAZANS, T. Modinha. In: CALAZANS, T. **Teca Calazans canta Villa Lobos** [CD]. Rio de Janeiro: Kuarup Discos, 1999.

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