# STRIKETHROUGHS CONNECTED TO WORD SEGMENTATION IN WRITING ACQUISITION

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ABSTRACT: Based on the premise that strikethroughs connected to word segmentation consist in important vestiges of conflicts experienced by children in order to limit the (ortho)graphic word, this research aimed at introducing and describing possible factors that contribute to the emergence of strikethroughs. Three hundred and sixty-four strikethroughs (364) were identified in a corpus consisting of one thousand, six hundred and ninetynine (1,699) text productions created by Elementary school children of level one, during 4 years. The analysis allowed to conclude the important influence of literacy for the instauration of conflicts on how the segmentation works. In the strikethroughs connected to segmentation, it is clear that, on principle, even the children's course in oral social practices are interlinked to children's course during literacy practice. Results show that children's writing cannot be interpreted as a mere spoken tracing, but, mainly, as a product of children's traffic by historically constituted social practices.

Keywords: Orality. Literacy. Writing. Erasure. Graphic segmentation.

http://dx.doi.org/10.1590/0102-4698143874

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# RASURAS LIGADAS À SEGMENTAÇÃO DE PALAVRAS NA AQUISIÇÃO DA ESCRITA

RESUMO: Com base no pressuposto de que rasuras ligadas à segmentação de palavras podem constituir indícios importantes de conflitos vivenciados pelas crianças para delimitar a palavra (orto)gráfica, este trabalho teve como objetivo central apresentar e descrever possíveis fatores que concorrem para a emergência dessas rasuras. Foram analisadas 364 rasuras identificadas em corpus constituído por 1.699 produções textuais elaboradas por crianças da primeira etapa do Ensino Fundamental I ao longo de quatro anos. A análise permitiu constatar a influência capital do letramento para a instauração de conflitos sobre como segmentar. Nas rasuras ligadas à segmentação, fica patente que mesmo a circulação das crianças por práticas sociais orais está, desde o princípio, entrelaçada à circulação dessas crianças por práticas letradas. Essas constatações permitem concluir que a escrita infantil não pode ser interpretada como um mero decalque do falado, mas, sobretudo, como fruto do trânsito das crianças por práticas sociais historicamente constituídas. Palavras-chave: Oralidade. Letramento. Escrita. Rasura. Segmentação gráfica.

## INTRODUCTION

One of the tasks children have to face during writing acquisition is the need to need to find out, with or without the help of a teacher, the use or, yet, the meaning of the blank spaces used in conventional writing to limit the (ortho)graphic word. This discovery is not an easy one and, maybe for this reason, several studies are dedicated to the analysis of how children learn to segment in accordance with orthographic rules. Studies such as Abaurre (1991), Silva (1994), Chacon (2004, 2008, 2009), Capristano (2007a, 2007b, 2013, 2014a, 2014b), Cunha (2004), Ferreiro and Pontecorvo (1996), Paula (2007), Capristano and Chacon (2014), Serra, Tenani and Chacon (2006), and Serra (2007), have shown, among other things, the existence of great fluctuation in how children distribute blank spaces to limit the (ortho)graphic word in their written productions.

Most of these studies have analyzed non-conventional segmentation of blank spaces, classified as (a) hyposegmentation: allocation of fewer blank spaces than those prescribed by written conventions, which generate junctions of words in unexpected places, such as in "jalicotei" (já lhe contei – I have told you); (b) hypersegmentation: allocation of more blank spaces than those prescribed by written conventions, as in "a bacaxi"; and, finally (c) mixtures – moments in which hyposegmentations and hypersegmentation coexist, as in "tacon teceno" (tá acontecendo – it's happening).

Serra, Tenani and Chacon (2006), Serra (2007), Capristano (2007b, 2010, 2013 and 2014) and Capristano and Chacon (2014), however, have dedicated themselves to researching how children start segmenting in compliance with orthographic standards, analyzing what we will call *strikethroughs connected to word segmentation*, corresponding to the moments in which writers, for instance, erase and/or strikethrough their written productions, signaling some concern with the distribution of blank spaces<sup>1</sup>. In these papers, strikethrough is understood as the privileged location to observe the relation subject/language and the paths treated by children to limit the (ortho)graphic word.

For Capristano (2013, p. 677), these strikethroughs also signal "a particular moment in the relation subject/language, with a different order than that observed in orthographic 'errors' and in 'hits', acting as an indication of the writer's negotiations with sensitive points of the language. For the author, these would be moments to materialize the writer's enunciative division among the possibilities offered by the language, and which would show "in a constant manner, two segmentation possibilities that collide and expose the *conflict* between the writing subject and the facts that determine (his/her) written enunciation" (CAPRISTANO, 2014, p. 8, *emphasis added*), which are facts associated to children's circulation through oral and lettered sociohistorical practices.

The adoption of the theoretical-methodological perspective proposed by Capristano (especially 2013 and 2014), in this paper, we intend to present and describe possible factors responsible for the emergence of strikethroughs connected to segmentation, present in children's written productions, examining each one of the segmentation possibilities that are exposed by these strikethroughs. Due to the characteristics of this paper's corpus – provided in a subsequent section – and to the relevance of longitudinal studies for understanding children's writing acquisition, we observe, in addition to this, how these factors operate throughout the years/school years investigated.

In order to attain these goals, we start with a bried discussion on how the speech/writing relationship will be considered in this paper and, from then on, we will provide further details on the theoretical interpretation herein attributed to the strikethrough connected to segmentation.

## THEORETICAL FRAMEWORK

In school tradition, the idea that certain oral uses, if spread on writing, are interferences to be eradicated. This way of evaluating relations between speech and writing is based on the common sense that there are pure enunciation modes and that better writing is that which the characteristics of spoken enunciates are not observed.

Several studies in the realm of linguistic theories have questioned this common view of speech/writing relations – as, for example, Corrêa (1998, 2004, 2006, 2013a, 2013b), Marcuschi (2001), Signorini et al. (2001) and Tfouni (2010). Among these studies, Corrêa's stands out. For this author, "the presence of speech in writing not only records the relation between two technologies, but the relation between two modes of enunciation that are mutually constitutive" (CORRÊA, 2006, p. 269). In this perspective, speech and writing are the fruit of meetings between oral/spoken and lettered/written practices. The author proposes, therefore, in the opposite direction of more traditional views, that speech observed in writing is a clue for heterogeneity of writing, rather than heterogeneity accidentally present in writing. The argument that heterogeneity constitutes writing is explained considering the relationship between the writer-subject and language in the spoken and written enunciation modes. In the author's word,

[...] the phenomena that refer to the spoken field are not seen as "interferences" from speech on writing, but as constituting written production, that is, conceived as the mode of enunciation, writing goes beyond a merely textualist perspective to paying attention to the subject and his/her relation to language. What is specific to the so-called oral and written modalities becomes, thus, the fact that they are both, heterogeneous, that is to say, they fit in themselves the presence of social practices of different manners of expression, which enables saying that, in each one of them, constitutive alterity is present [...] (CORRÉA, 2013a, p. 504).

In studies on non-conventional segmentations, authors such as Chacon (2004, 2005), Capristano (2007a, 2007b), Paula (2007) and Tenani (2011), supported by Côrrea's proposal, understand these segmentations that diverge from orthographic standards "not as marks of imperfection of a product viewed as a model, or, in the words of Abaurre, Fiad & Mayrink-Sabinson (1997), as 'imperfect manifestations of an 'adult' grammar' (CHACON, 2004, p. 79). On the other hand, they would be marks that "would indicate the learner's circulation through the different language enunciation modes" (CHACON, 2004, p. 79).

In this sense, hyposegmentations, hypersegmentation and mixtures are indications of heterogeneity of writing and, therefore, of the images built by the writer in the writing process, about (his/her) writing. These authors highlight, nevertheless, that, although these non-conventional segmentations arise from the same general principle – as a result of writing's heterogeneity itself -, they operate with specificities. Thus, for instance, hyposegmentations, in terms of

predominance, would indicate writers circulate through oral practices, as, in them, writers, in general, "by appropriating writing (...), tend to take it as the representation of orality term by term" (CORRÊA, 2004, p. 10). Hypersegmentations, also in terms of predominance², would signal the circulation of writers through lettered practices, as they would, generally more connected to the image writers would have of that which is exclusive/characteristic of writing.

We assume strikethroughs connected to segmentation operate quite similarly to non-conventional segmentations. They also result from images formed by the writers about (their) writing; images enabled by the circulation of these writers through oral and lettered practices. However, in the strikethroughs, these images and this circulation are different, because, as we have mentioned, strikethroughs allow view *two* divergent segmentation possibilities, indicating the conflict between the writing subject and the facts that determine (his/her) written enunciation. That is to say, in strikethroughs, as warned by Capristano (2014, p. 8), "one always sees segmentation alternatives in concurrence, coexisting, albeit undivided: one of these alternatives is always favored and the *other*, always refused".

Strikethroughs connected to segmentation would have, thus, the specificity of staging at least two directions that open themselves to the writer at the time of segmentation. Here, these two directions will be conceived as two gestures. The first gesture refers to the writer's first choice, the one observed prior to striking through itself and that, for some reason, is refused. The last gesture, in turn, refers to the writer's final decision, that segmentation option that remains after the strikethrough.

## MATERIAL AND METHODOLOGY

To develop this paper, we had access to a database of textual productions colleted by members of the Research Group *Studies on language* (CNPq), which also subsidizes, nowadays, research conducted by the Research Group *Studies on writing acquisition* (CNPq). These textual productions were collected during four years. Texts were collected in order to organize data on writings of children under schooling process that enable research of longitudinal nature. The composition of this textual production database required monitoring the same groups from the first to the fourth grades in Elementary School, from two municipal schools in the city of São José do Rio Preto (SP).

The corpus for this paper includes 1,699 textual production collected between 2001 and 2004 in one of the schools in this

database, by means of 55 written production activities. In this corpus, 364 strikethroughs connected to segmentation were identified<sup>3</sup>.

In order to identify strikethroughs connected to segmentation, we started from categories created by Capristano (2007b, 2010) based on Abaurre (1991, 1994), Abaurre, Fiad and Mayrink-Sabison (1997), Calil (1997, 2007), and Felipeto and Calil (2007). We consider strikethroughs connected to segmentations, erasures, insertions, overlapping writing and false starts, as signals, in different forms, of children's concerns about limiting blank spaces.

Erasures are related to moments when the writer goes back over the written material, in order to delete a segment. This segment may be a letter, a syllable, a word or even a dash. Erasure is usually done with an eraser, and, in these cases, the analysis also focused on the "shadow" left by the unsuccessful erasure. On occasion, students in the beginner grades, especially those in the former 4th grade, use a pen. In these cases, erasure is done by means of overlapping lines, that is to say a "crossed" strikethrough (CALIL, 2008) that, in our study, was categorized as an erasure. Insertions may be identified in the moments when the writer returns to the written material and adds letters, syllable, words or dashes. In insertion, the fact that the writer did not suppress the previously written materials, but rather changed the flow of his/her say, by means of the added material. The overlapping writing, in turn, refers to moments when the writer returns to the written material and adds letters, syllables, words or dashes. Differently from erasures, the "destroyed" and "constructed" elements coexist. Finally, false starts refer to the moments in which hesitations may be noticed, features that evidence the start of a writing project abandoned in favor of another. In these events, the writer starts recording a letter, a syllable or a word and refuses it.

In analyzing each one of the 364 strikethroughs identified in this paper's corpus we observed the two gestures signaled by erasure named, as previously mentioned, the *first gesture* (prior to the erasure) and *last gesture* (after the erasure), as described in the sequence, by means of the analysis of some examples (Figures 1 to 4):

**FIGURE 1** − São José do Rio Preto<sup>4</sup>

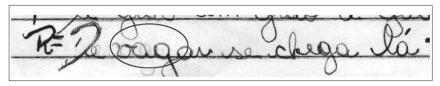


Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

In the erasure shown in Figure 1, the first gesture by the writer was that of recording "do" and "rio" using hyposegmentation. However, the writer returns to the written material, erases the grapheme "R", visible through the residual writing left, recording, as the last gesture "do rio", in accordance with conventional writing. Events such as that shown in Figure 1 show us that: (a) the first gesture signals the option for hyposegmentation of two words in the language ("do" and "rio"), a hyposegmentation probably caused by the action of oral practices through which the child circulates; and (b) the last gesture (after the erasure) signals the option for the separation of the words "do" and "rio", complying with orthographic conventions, a separation probably caused by the action of lettered practices, school related or non-school related, through which the child circulates.

In addition to cases such as this one, in other events, the gestures denote other directions taken by the writer, as the erasures below exemplify:

FIGURE 2 - Devagar<sup>5</sup>



Source: Research group (CNPg) Studies on Writing Acquisition and Studies on Language.

FIGURE 3 - 0 preso (2004)6



Source: Research group (CNPg) Studies on Writing Acquisition and Studies on Language.

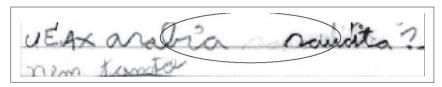
The erasure in Figure 2, to record the word "Devagar", the writer first records "Devagar", in consonance with orthographic conventions; the writer, then, refuses this record, erasing it. The first gesture may be identified by observing the mark left by means of an unsuccessful erasure. After the erasure, the word "devagar" is recorded in a hypersegmented manner, as "de vagar".

In the erasure shown in Figure 3, the writer records "o preso", in consonance with orthographic conventions, an option that may be considered, due to the visible recording of the article "o" and the start of

the letter "p" (well separated from the article record). For some reason, the writer returns to the written material, inserting a dash to link both words ("o" and "preso"), producing, in the last gesture, a hyposegmentation.

In other cases, not as frequent, the writer records the first and the last gesture in a conventional manner, as in the example provided below:

FIGURE 4 - Arábia Saudita7



Source: Research group (CNPg) Studies on Writing Acquisition and Studies on Language.

In this example, the writer seems to have returned to his writing to record both words "Arábia" and "Saudita", with more space between them, an action that seem to ratify the existence of *two* words rather than a single *one*. From a different theoretical perspective, erasures such as this one could be excluded, as there seem to be no changes in the direction of the segmentation, and the words were and remained separate. In spite of this, events as this one are considered in this paper because, after the erasure, according to our interpretation, it is not the same word, but rather the "word itself, altered by this *slip* in the middle, of the unlimited alanguage body" (AUTHIER-REVUZ, 2011. p. 662, *emphasis added*), pointing to a possibility of the say to be other.

In summary, as we consider it may be observed, each one of the gestures implied in the erasure may take three directions: hyposegmentation, hypersegmentation or conventional record. To analyze these gestures and the directions they took, we have also performed a quantitative analysis, to identify the factors that are responsible for the emergence of these gestures throughout the grades/years researched. In the next section, we provide the main results obtained by means of these analyses.

#### RESULTS AND DISCUSSION

# The first gesture: hyposegmented, hypersegmented or conventional

In the 364 strikethroughs connected to segmentation, the examination of the first gesture in relation to the possibilities of record (hyposegmented, hypersegmented or conventional) provided the following results:

Record of the first writing gesture 90 80 70 **♦** 66% 60 HYPO 50 Axis title **HYPER** 40 30 CONVENT 20 10% 10% 10 11% 7% 0 1st grade 2nd grade 3rd grade 4th grade

CHART 1 – Record of the first gesture: hypo, hyper and conventional writing.

Source: Prepared by this article's authors.

Chart 1 shows that, along the four grades researched, the first gesture by the writer was predominantly that of hyposegmentation. In the first grade, 66% (69) of the strikethroughs started by this gesture, and this percentage increased in the subsequent years, recording 69% (82) for the second grade, 79% (66) for the third grade and, finally, 83% (49) for the fourth grade.

This trend is compatible with results obtained in the research developed by, for instance, by Ferreiro and Pontecorvo (1996) on the segmentation of words present in texts written by children in Brazil, Mexico, Uruguay and Italy. In their study, the authors pointed out that "the trend to hyposegment seems to dominate the trend to hypersegment, regardless of the language" (FERREIRO; PONTECORVO, 1996, p. 49).

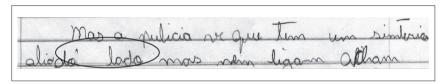
The fact that segmentation errors and the first gesture observed in strikethroughs connected to segmentation tend to involve the allocation of fewer blank spaces than those prescribed by the written conventions may be connected to the more general characteristic of hyposegmentation. As previously mentioned, they are characterized for indicating, in terms of predominance, the circulation of writers through oral practices. In hyposegmentations, children seem, in general, to construe the image that writing works "as a term by term representation of orality" (CORRÊA, 2004, p.10). The predominance of hyposegmentations, in light of this, seems to be connected to the fact that, at the start of writing

acquisition, oral practices constitute an important reference, albeit not exclusive, for children's written production and, consequently, for their circulation through lettered practices.

Also regarding the strikethroughs in which the first gesture is a hyposegmentation, Chart 1 enables observing the similarity between the percentages obtained for the first two grades (66% and 69%) between the percentages for the final grades (79% and 83%). Based on this similarity, it is possible to infer a difference regarding the representation of word segmentation between initial and final grades. It is possible to notice, in the latter, that refusal of hyposegmentations is intensified, that it, the presence of hypo as first gestures in striking through is increased.

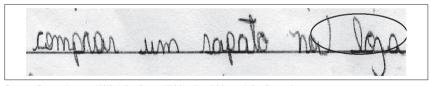
In the qualitative analysis of strikethroughs in which the writers choose hypersegmentation first, it is ascertained that the emergence of these strikethroughs is caused, mainly, by the conflict clitics cause to the writing subject<sup>8</sup>. In fact, in a large part of these strikethroughs, the writer seems to be in doubt as to the graphic status of these language units, as the examples below demonstrate<sup>9</sup>:

FIGURE 5 - Do lado<sup>10</sup>



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

FIGURE 6 - Na loja11



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

In the strikethrough shown in Figure 5, by spelling "ali do lado", the writer seems to have intended to spell "dol[ado]", hyposegmented, a fact that may be observed by the erasure mark in the letter "l". After the erasure, the writer spells "do lado", in consonance with orthographic conventions. Similarly, in the strikethrough shown in Figure 6, the writer spells "nal[oja]", insinuating a hyposegmentation, which is retrieved by the dash that indicates the origin of a letter "l" that is subsequently abandoned by the writer, who spells "na loja" 12.

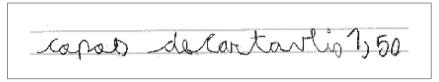
Both examples pinpoint a conflict generated for not recognizing the graphic autonomy of the clitics "do" and "na". In these strikethroughs, the writer, at first, seems to interpret these clitics as pretonic syllables in trisyllable words: "dolado" and "naloja". That is to say, they seem to recognize the phonologic dependence of these clitics in relation to their host words and, on the other hand, they do not seem to notice these clitics' graphic autonomy. In this sense, these strikethroughs signal, in a predominant manner, the moments when the writer assumes the characteristics of spoken enunciates — namely, the dependence of phonologic clitics such as "do" and "na" in relation to their hosts — could be transferred to written enunciates with no changes. They show, consequently, that the image the writer has of (his/her) writing is, at this moment, shaped in the oral enunciation mode.

Chart 1 also enables us to ascertain the lower occurrence of hypersegmentations as a first gesture by the writers. If we go back to this chart, we may notice that, in first grade, these occurrences represent 22% (23) of the total number of strikethroughs, in second grade, 20% (23), in third grade, 10% (8), and, finally, in fourth grade, 7% (4). The data identified indicate that, starting in first grade, occurrences in which the initial gesture is hypersegmentation are much less frequent than those in which the first gesture is that of hyposegmentation and, as the literacy process advances throughout the years – consequently, with greater participation of children in institutionalized lettered social practices, school related or non-school related –, this percentage is reduced.

The lower number of strikethroughs in which the writers' first gesture is hypersegmentation, from the first grade on, may be motivated by the preferred association between hypersegmentation and lettered practices. It is also important to keep in mind that the first gesture implied in strikethroughs is always *refused*, a segmentation possibility abandoned by the writer. Therefore, the writers, in this first gesture, refuse information connected to their circulation through lettered practices less often. This leads us to suggesting that the lower number of occurrences of these strikethroughs is associated to the fact that, at the start of the writing acquisition practices, lettered practices constitute an important reference, although not exclusive, in children's written production.

In the qualitative analysis of strikethroughs in which writers choose hypersegmentation first, it is noticed that the emergence of such strikethroughs is caused, above all, by the recognition of words within other words. That is, strikethroughs usually establish themselves in moments when "a letter or a short sequence of letters may both be part of a word and correspond to a whole word" (CHACON, 2005, p. 83). The following example illustrates this behavior:

FIGURE 7 – Copos descartáveis<sup>13</sup>

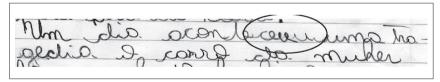


Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

In this strikethrough, the writer's initial gesture generated the hypersegmentation "de cartaveis". The sequence of letters "de" may be used, at least, in two writing forms: (a) as part of a word, as, for instance, "descartáveis" or "padecer"; (b) as a word (preposition) "cheguei de Recife" (I have arrived from Recife). In the strikethrough shown in Figure 7, therefore, it seems the writer first considered that the pre-tonic syllable "de" would graphically work as a preposition and, thus, should be limited by blank spaces.

An analogous operation may be observed in the strikethrough provided in Figure 8 below. In it, while spelling "aconteceu", the writer first records "aconteceu", signaling that he/she interpreted "ceu" as a word in the language (seu or, not as likely, céu):

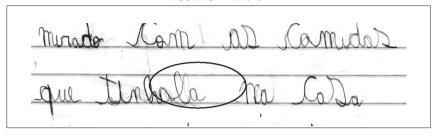
FIGURE 8 - Aconteceu14



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

Chart 1 allows us to view, lastly, that throughout the grades researched, in a quite regular manner, the initial spelling was conventional: in first grade, 12% (12), in second grade, 11% (13), in third grade, 10% (09), and, in fourth grade, also 10% (06). The strikethrough shown below exemplifies this operation. In it, the writer spells "tinha" and "lá" in a conventional manner and, after the strikethrough, the writer uses a hyposegmentation, spelling "tinhala":

FIGURE 9 - Tinha lá15

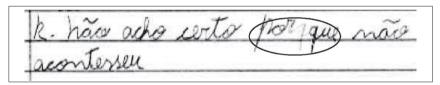


Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

The lower number of strikethroughs in which the writer's first gesture corresponds to the prescribed by lettered practices. Similarly to what had happened to strikethroughs in which the first gesture corresponds to hypersegmentation, these strikethroughs indicate that the writers, in this first gesture, refuse less often the information connected to their circulation through lettered practices and show, therefore, that, at the start of writing acquisition, lettered practices are a strong reference for these children's written productions.

From a qualitative standpoint, those strikethroughs in which the first gesture is conventional are characterized by their uniqueness, as the factors that enable the emergence of each one of them are quite particular. We have identified only one trend: 9 (22.5%) out of the 40 strikethroughs analyzed relate to the spelling of homonyms, as, for example, in:

FIGURE 10 - Por que16



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

Among these night events, eight referred to the use of the word "porque", one of them referred to the word "Bonfim". Both are homophones (porque/por que/porquê/por quê and Bonfim/bom fim), whose graphic instability contributes to the installation of the conflict, as they may be spelled in different forms, maintain the phonic similarity. In this case, as well as in other previously analyzed cases, the conflict seems to be motivated by the writers' circulation through lettered information, especially the ones that dictate that these words may be spelled differently<sup>17</sup>.

If we summarize the results regarding the first gesture, we may state that writers, most times, resource to hypersegmentation. This trend increases throughout the grades, denoting the strong influence of the writer's circulation through oral practices. As the occurrence decreases, the first gesture became hypersegmented or conventional, evidence the role played by children's circulation through lettered practices in the decisions they make on how to segment.

## The last gesture: hyposegmented, hypersegmented or conventional

In their last strikethrough assumed gesture, writers could head or be lead towards three different directions: hyposegmentation, hypersegmentation, or conventional record. In order to verify the writers' choices, we have quantified the data considered as the last gesture, similarly to what we did for the first gesture. Based on this quantification, we have arrived to results shown in Chart 2:

Record of the last writing gesture 100 87% 83% 90 80 70 ast writing gesture. 60 HYPO 50 **HYPER** 40 CONVENT 30 20 <del>10%</del> 9% 6% 5% 10 5% 0 1% 1st grade 2nd grade 3rd grade 4th grade

CHART 2 - Record of the "last gesture": hypo, hyper, conventional writing

Source: Prepared by this article's authors.

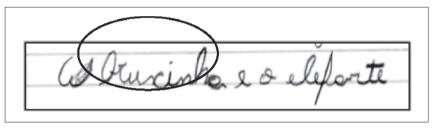
Chart 2 enables noticing that, in first grade, in 83% (86) of the strikethroughs, final writing corresponded to what is prescribed by orthographic conventions. This percentage increased throughout the years, and records show, for second grade, 87% (103 strikethroughs)

and, for third grade, 93% (77 strikethroughs). In fourth grade, we notice a slight decrease: 90% (53) of the records.

The fact that, regardless of the grade researched, most times, the last gesture corresponds to conventional writing may be interpreted as important indicator of the alphabetization process and of the literacy of these writers. We should keep in mind that the last gesture corresponds to the child's final choice, that is to say, the direction chosen for segmentation. In these strikethroughs, thus, it is clear that these writers' final choices are product of their circulation through lettered practices (school related or non-school related).

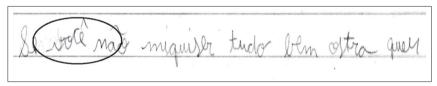
A qualitative analysis of strikethroughs in which the last gesture is conventional shows us that, most times, the writer's decision involves the graphic status of clitics, as evidenced by the examples below:

FIGURE 11 - A bruxinha18



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

FIGURE 12 - Se você19



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

In the strikethrough shown in Figure 11, the writer first chose to hyposegment "Abruxinha" and, later on, as the last gesture, the writer spells conventionally "A bruxinha", demonstrating being affected by the graphic autonomy of the article "a", corresponding to an unaccented monosyllable, therefore, a clitic. Similarly, the strikethrough shown in Figure 12, "Se você (...)", in the last gesture, the writer seems to have been affected by the graphic autonomy of the conjunction "se". In this last example, it is important to highlight that the writer spells the conditional conjunction "se" with an "e", although it is pronounced with an "i". In the same sentence, the writer spells the pronoun "me"

as "mi", in "miquiser". The conventional spelling of "se", contrasting with the non-conventional spelling of "me", demonstrating, once again, the heavy lettered influence on this child's written production.

Chart 2 also shows that, not as frequently, the last gesture was either a hypersegmentation or a hyposegmentation. We notice that, in first grade, 10% (11) of the events were hypersegmentations. This percentage decreased throughout the two subsequent grades: in second grade, 9% (11) and, in third grade, 1% (1). In fourth grade, we notice an increase to 5% (3). However, this increase happened because two of the three events are related to homonyms "porque". As mentioned before, data such as these have a special behavior, given their graphic instability, already given in the language (cf. note 19).

Regarding the strikethroughs in which the last gesture correspond to hyposegmentations, Chart 2 allows us to ascertain that, in 2001, 7% (7) of the events operated as such. This number remained pretty much the same in the subsequent years: 4% (4 strikethroughs) in 2002, 6% (5 strikethroughs) in 2003 and 5% (3 strikethroughs) in 2004.

The low number of events in which the last gesture is a hypersegmentation or a hypsegmentation may be equally explained by the child's circulation through lettered practices. More specifically, on the one hand, this circulation enables children, regarding segmentation, pull away from oral practices and, therefore, move towards canonical ways of limiting ortho(graphic) words, and hyposegmentation becomes a possibility of segmenting. On the other hand, the movement towards the canonical ways of limiting orthographic words also leads children to avoid hypersegmentation, as, although hypersegmentation is interpreted in this work as predominantly determined by children's insertion in literacy practices, it is still an orthographic error, and, therefore, is still divergent from what is prescribed by orthographic conventions.

In qualitative analysis of strikethroughs in which the last gesture is a *hypersegmentation*, most part of the records – 9 (34.6%) out of the 26 records identified – works as the example provided below:

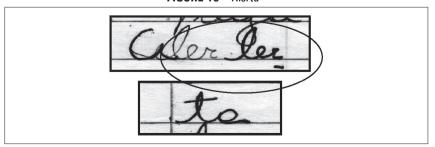


FIGURE 13 - Alerta<sup>20</sup>

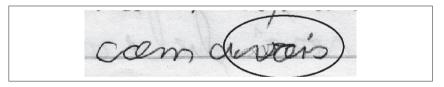
Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

In the last gesture explained in Figure 13, the writer inserts a blank space between "a" and "lerta", creating a sequence that could correspond to a clitic and a pseudoword<sup>21</sup>, which enables demonstrating that circulation through lettered practices does not lead the writer to being correct. This type of event signals the recognition of words within others, as "a", in writing and in language, may both be the pre-tonic syllable in a word (alerta), and a grammar word, as in, for instance "a casa"; therefore the isolated syllable keeps a homonym relation with a clitic in language.

We add to that the fact that "lerta" is a possible disyllable in the language. On this topic, Abaurre (1991) had already explained the fact that children seem to privilege paroxytone disyllabic words. For this author, events such as this one allow us to infer that "children may be operating with some type of canonical form of the word in the language, and the perception they already have on the rhythmic and prosodic organization of enunciates may be contributing to establishing it" (ABAURRE, 1991, p. 208).

If we examine qualitatively strikethroughs in which the last gesture is a *hyposegmentation*, we observe that this gesture occurs mainly in moments when the writers must record clitic elements, as exemplified by the strikethrough below:

FIGURE 14 - A voz 22



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

In the task of spelling 'a voz', the writer performs the first record in consonance with orthographic conventions; the last gesture, in turn, is the hyposegmented record: "avois". In this event, the clitic 'a' seems to be considered the pre-tonic syllable of the noun preceding it.

As a summary of the works relative to the *last gesture*, we may highlight that writers tend to choose the record that is in accordance with orthographic conventions, and this happens in all grades researched. From this paper's standpoint, prevalence of these events, which equal being "right" and, as a counterpart, the fact that a small portion of the events have an "error" as last gesture, signal a strong influence of lettered practices on the subject/language relation, ratifying, among other things, the inexistence of a "literacy level zero", or "non-literacy" (TFOUNI, 2010) when considering the initial stages of writing acquisition.

## Circulation: oral and lettered practices

In this study, we were also interested in examining the crossing between the first and the second gesture, in order to determine the paths treaded by writers as they strikethrough. Separate analyses of the first and last gesture, performed in the previous sections, have provided us with indications on how this crossing takes place. In this section, we will only address that which, as we see it, may have been implicit in the previous analyses.

In order to analyze the crossing between the first and last gesture, anchored on the studies developed by Corrêa (2004, 2013a, 2013b), Chacon (2004, 2005), Capristano (2007a, 2007b) and Paula (2007), we start with the assumption that: (a) hyposegmented initial or final records would signal, in terms of predominance, influences from oral practices; (b) hypersegmented initial or final records, in terms of predominance, would signal the influence of lettered practices; and, finally, (c) conventional initial or final records, in terms of predominance, would indicate, similarly, the influence of lettered practices.

Based on this assumption, the paths identified were: from *oral* to *lettered*, from *lettered* to *oral*, and from *lettered* to *lettered*<sup>23</sup>. These paths are distributed as follows throughout the years:

Predominant circulation between oral and lettered pratices 90 80 74,5% 76% 70 67,3% 60 ORAL > LETTERED 50 LETTERED > ORAL 40 30 LETTERED > LETTERED 24% 22,1% 16,8% 20 17% \_8,7% 10 7,2% 3,4% 0 3.4% 1st grade 2nd grade 3rd grade 4th grade

CHART 3 – Trends in strikethrough directions (lettered practices and oral practices)

Source: Prepared by this article's authors.

As it is possible to notice in Chart 3, the  $oral \rightarrow lettered$  path was the most recurrent in all grades analyzed, increasing throughout the years, as, in first grade, the percentage of strikethroughs with this trajectory was 67.3% (70), and reached, in fourth grade, 79.6% (47). The path  $lettered \rightarrow oral$  was the least frequently treaded path, and records showed, for first grade, 8.7% (9), for second grade, 3.4% (4), for third grade, 7.2% (6) and, for fourth grade, 3.4% (2). Lastly, the path  $lettered \rightarrow lettered$  was more frequent in the first grade, in which we identified a percentage of 24% (25), a percentage that is reduced to 22.1% (26) in second grade, and reaches, later on, in third grade, a rate of 16.8% (14) and, in fourth grade, 17% (10).

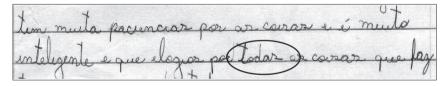
In the  $oral \rightarrow lettered$  path, as exemplified in Figures 15 and 16, the first gesture is anchored in oral practices, and, after strikethrough (erasure, insertion, overlapping writing, or other analogous gesture), writers show they have circulated through lettered practices:

FIGURE 15 - A carta<sup>24</sup>



Source: Research group (CNPg) Studies on Writing Acquisition and Studies on Language.

FIGURE 16 - Por todas<sup>25</sup>



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

When writers spell "a carta" (Figure 15) and "por todas" (Figure 16), they initially seem to assign the article "a" and the preposition "por" the status of pre-tonic syllable in the words "carta" and "todas". This type of event, as we anticipated, has been interpreted as anchored on oral practices, as, in them, in general, writers record the clitics amalgamated to content words that serve as their hosts, transforming these clitics into pre-tonic syllables of these words. After erasure, writers seem to deal with and/or recognize the graphic autonomy of the article and the preposition, inserting blank spaces in a conventional manner.

Strikethroughs shown in Figures 17 and 18 exemplify the cases in which the path taken went from *lettered* to *oral* practices:

FIGURE 17 - Estou com<sup>26</sup>



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

FIGURE 18 - No trânsito<sup>27</sup>



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

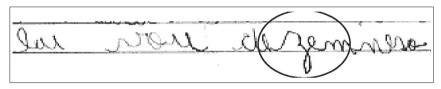
In Figure 17, the writer needs to spell "estou com dor". As a first gesture, the writer spelled "estou com", in consonance with orthographic conventions, separating the lexical item "estou" from the preposition "com", probably anchored on lettered practices. However, the writer strikes through it, spelling "estoucom". The last gesture may have been motivated by the conflict the writer has with the clitic "com": a syllable in a word (as in comprido) or an independent autonomous element (as in com certeza)?

In this context, the spelling of the preposition "com" poses barriers to the writer, as, from the morphosyntactic standpoint, this preposition is provided with meaning, as it is a grammar word, but, from the phonologic standpoint, it is a dependent form, a clitic. When Brazilian children find it difficult to recognize phonologic clitics as words to be limited by blank spaces in writing, they usually link the clitic to the phonologic word after it (cf. CUNHA, 2010). However, in the occurrence "estoucom", the child subverts this general trend, linking the word "com" to the word preceding it "estoucom", possibly challenged by the fact that the word following the preposition "com" is the central topic of the text from which this strikethrough was cut out: the word "dor" (ache). That is to say, our hypothesis is that the option for linking estou and com (uncommon in textual production by Brazilian children) may signal a strong influence of the textual production theme in defining how to segment.

In the strikethrough shown in Figure 18, the writer spell "no trânsito", separating the clitic "no" from the prosodic word "trânsito". In this strikethrough, as in the previous one, the writer's lettered experiences seem to echo. However, subsequently, the writer adds an insertion dash, in order to link both words, forming "notrânsito". The last gesture seems to assume writing as a representation of spoken sequences, as the clitic gains the status of initial syllable for the word "trânsito".

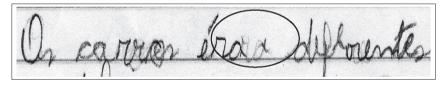
Lastly, the strikethroughs shown in Figures 19 and 20 exemplify the most infrequent path, through which the writers seem to circulate from *lettered* practices to *lettered* practices:

FIGURE 19 - Dezembro<sup>28</sup>



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

FIGURE 20 - Era<sup>29</sup>



Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

In these strikethroughs, the writers need to spell the words "dezembro" and "era". In the first gesture, writers spell these words in a hypersegmented form ("de zembro" and "é ra") and, in the last gesture, they spell in accordance with what is prescribed by orthographic conventions. Both gestures emerge, probably, from knowledges originating in the lettered experiences lived by the writer.

Hypersegmentation, could be considered, by unwary readers, an indication of "lack of knowledge"; however, from the standpoint assumed in this paper, these hypersegmentations enable observing the writers, as they spell "de zembro" and "é ra", seem to assign the status of words to their initial syllable (preposition "de" and the verb "ser", conjugated as "é"). That is to say, writers seem to deal with the possibility of autonomy of these elements, which would motivate them to propose the non-conventional spacing. The junction done with a dash, and the erasure of "ra" and its rewriting close to the

word "é", in turn, indicate the writers may have recovered a memory that the words era and dezembro need to be limited by blank spaces. Not by coincidence, these are rather common words in institutional school practices: the first one is frequent in children's tales (*Era* uma vez...- Once upon a itme...) and the second one is commonly object of teaching, as it refers to one of the months of the year.

Other strikethroughs that show the writers circulation from *lettered* practices to other *lettered* practices involves the graphic space of the school notebook and, more specifically, the margins that limit the space reserved to the written production:

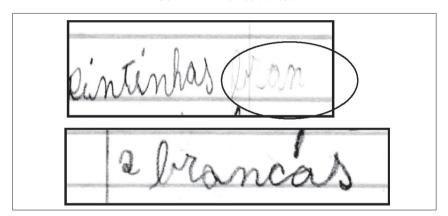


FIGURE 21 - Pintinhas brancas<sup>30</sup>

Source: Research group (CNPq) Studies on Writing Acquisition and Studies on Language.

The writer spells "branc" and, given the impossibility to continue spelling the word "brancas" on the same line, as the writer recognized the margin as a graphic limit to be observed, erases, and spells this word on the following line. We interpret occurrences such as this one as indexes of a movement which leads the writer from *lettered* practices towards other *lettered* practices, as, in them, information on the need to comply with the school notebook margins (lettered information) and an attempt to ratify that "brancas" is a unit, i.e., a single word coexist. In the entire corpus, 11 events were found involving conflicts between margins and the limits of graphic words, which represent 3% of the occurrence of strikethroughs connected to segmentation.

The observations made here about the crossing between the first and the second gestures enable determining that the strikethroughs are connected to segmentation emerge as products of the intertwining between oral and lettered sociohistorical practices. They allow ascertaining even more that the preferred circulation by the writer, in

these strikethroughs, is that from *oral* practices to *lettered* practices, that is to say, conflicts experienced by the child on how to segment are installed in the crossing/intertwining of oral practices and lettered practices.

### FINAL CONSIDERATIONS

In this paper, developed under the theoretical-methodological perspective open by Capristano's studies (especially, 2013, 2014a and 2014b), we intended to present and describe some factors that are responsible for the emergence of strikethroughs connected to segmentation present in children's written productions. We sought to detail factors that determine the emergence of each one of the gestures presupposed in the strikethrough action, which, here, have been named first and last gestures. As a more general result, we noticed that strikethroughs connected to segmentation signal that children learn how to segment in accordance with what is prescribed in orthographic conventions, guided by information obtained in their circulation through oral and lettered practices, preferably having, in the first gesture, strong influence of the first and, in the last gesture, strong influence of the latter.

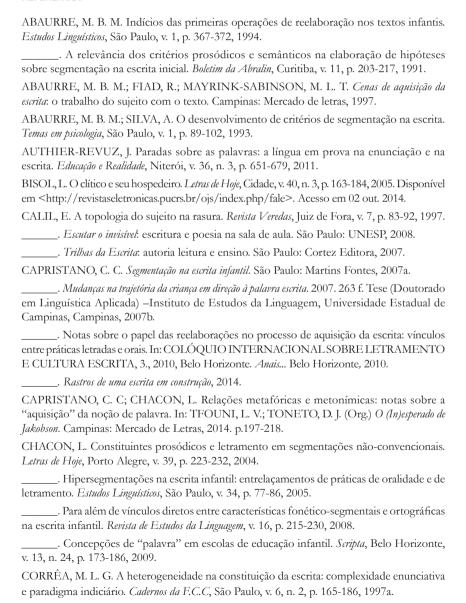
This article's corpus also enabled determining how these factors behaved throughout the grades/years researched. On this topic, we identified great similarity in the behavior of strikethroughs, if observed longitudinally: from the first grade, the writer's first gesture tends to anchor in their oral practices, whereas the last gesture, also starting in first grade, tends to arise as the result of the writer's circulating through lettered practices.

By means of these results, it was possible to determine the capital influence of literacy for installing the conflicts on how to segment. In strikethroughs connected to segmentation, it is clear that, even the circulation of children through oral practices is, from the start, crossed by and/or intertwined with the simultaneous circulation of these children through their lettered experiences. These findings authorize us to conclude that children's writing, in its incipient steps, may not be interpreted as a mere tracing of speech, but, above all, as the result of children's circulating through oral and lettered social practices, historically constituted.

We expect the reflection developed in this article may be added to other research studies intended to acknowledge the heterogeneity of writing, opening up possibilities for a different gaze on enunciates written by children: no longer as the space of "error", of "interference from speech", but rather as a sociohistorical event, marked by the relation between subject and language.<sup>31</sup>

Finally, we also hope to have contributed to the demystification of the dirt status usually attributed to the strikethrough, as the discussions entailed in this article corroborate the thesis that strikethroughs indicate conflicts the writer have with tongue/language, and which stage one of the different facets of the complex subject/language relationship.

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## NOTES

- <sup>1</sup> In these papers, there is a variation in how these marks erasing, strikethroughs, etc. are named (*strikethroughs, re-elaboration, correction marks*) and, as a consequence, in how they are interpreted from a theoretical standpoint.
- <sup>2</sup> We choose to use the word "predominance" because we assume hyposegmentations may also result from a child's circulating through lettered practices and, likewise,

hypersegmentations may be the product of child's circulating through oral practices. On this topic, refer to Capristano (2007a, 2007b).

- <sup>3</sup> In the identification of the strikethroughs, the corpus was identifies three times by different people, so as to enable the actual identification of strikethroughs connected to segmentation. In addition, the identification work was done with the help with a magnifying glass LL-975 (2X magnifying power, with light).
- <sup>4</sup> Preferred reading: São José do Rio Preto, 09/05/2001.
- <sup>5</sup> Preferred reading: Devagar se chega lá.
- <sup>6</sup> Preferred reading: O preso.
- <sup>7</sup> Preferred reading *Ué Arábia Saudita?* Nem tanto.
- <sup>8</sup> Clitics are unaccented monosyllables that comprise a large part of the so-called function words. As they do not have accent, they are, phonologically, dependent forms that are attached to the accent of a subsequent or preceding host word (cf. BISOL, 2005, p. 163).
- <sup>9</sup> This behavior by the strikethroughs connected to segmentation is also observed in studies on non-conventional segmentations on this topic, refer to, for instance, Tenani's research (2010).
- <sup>10</sup> Preferred reading: Mas a polícia vê que tem um cemitério ali do lado mas nem ligam acham.
- <sup>11</sup> Preferred reading: Comprar um sapato na loja.
- <sup>12</sup> These two strikethroughs exemplify what we have called *false start* in the *Material and Methodology* section.
- <sup>13</sup> Preferred reading: Copos descartáveis.
- <sup>14</sup> Preferred reading: Um dia aconteceu uma tragédia o carro da mulher.
- 15 Preferred reading: Admirado com as comidas que tinham lá.
- <sup>16</sup> Preferred reading: Não acho certo porque não aconteceu.
- <sup>17</sup> Paranhos (2014) highlights the influence of homonyms in non-conventional segmentation events detected in textual productions by students in 5th to 8th grade. According to the author, hypersegmentations in which the writer faces a conflict generated by homonyms "result in graphic representations of sequences in which a prosodic clitic corresponds to function words or grammar items" (PARANHOS, 2014, s.p) as is the case of "por" (preposition). For this author, these hypersegmentations must receive a specific theoretical and methodological treatment, given its morphosyntactic and semantic specificity.
- <sup>18</sup> Preferred reading: A bruxinha e o elefante.
- <sup>19</sup> Preferred reading: Se você não me quiser, tudo bem outra quer.
- <sup>20</sup> Preferred reading: *Alerta* (entre linhas)
- <sup>21</sup> In Cunha (2004) and Tenani (2011) studies, data such as "lerta" are named *pseudowords*, as, although they do not have a known meaning in the language, in terms of structure, they are equipped with primary accent and, therefore, could configure a word.
- <sup>22</sup> Preferred reading: com a voz.
- <sup>23</sup> We have not identified, in any of the grades, strikethroughs in which the writer treaded the path from *oral* to *oral*. This information, in itself, is significant enough and is in tune with the conclusions in this paper, presented in the final section.
- <sup>24</sup> Preferred reading: O rato recebeu a carta do rato.
- <sup>25</sup> Preferred reading: tem muita paciência pelas coisas e é muito inteligente e quer elogios por todas as coisas que faz.
- <sup>26</sup> Preferred reading: 3<sup>a</sup> ai mãe estou com dor de ouvido.

- <sup>27</sup> Preferred reading: as pessoas no trânsito.
- <sup>28</sup> Preferred reading: eu vou dezembro.
- <sup>29</sup> Preferred reading: os carros eram diferentes.
- <sup>30</sup> Preferred reading: *pintinhas brancas* (final de linha).
- <sup>31</sup> cf. CORRÊA, 2013.

**Received:** 11/12/2014 **Approved:** 23/11/2015

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