

EARLY RECOGNITION OF SPELLING PROBLEMS IN STORIES INVENTED BY TWO NEWLY LITERATE PUPILS: WHEN AND HOW THEY HAPPEN

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- **ABSTRACT:** The acquisition of spelling competence is a complex process, involving lexical and grammatical questions. Research, however, almost always places the spelling from an autonomous point of view and disconnected from the other components of writing. In this text, we present the relevance of the Ramos System that captures students in an ecological situation of text production in pairs, allowing access to the processes for solving orthographic problems. Collaborative writing also grants access to comments made by students during the process of textual linearization. Our study focuses on the recognition of spelling problems (SP) and the comments made regarding such problems by two 2nd grade students during the production of six invented stories. More than a quantitative analysis of the types of SP identified in the product, we were interested in making a qualitative and fine analysis of oral recognitions of SP, particularly those SP anticipated by the writers. Our results indicate that: i. Recognition motivates comments that are not always related to the identified SP; ii. Recognition and comments are related to the orthographic contents taught in the classroom; iii. Some of the recognized SP involve the articulation between different linguistic levels. These aspects can contribute for the comprehension of orthographic learning in didactic situations provided by collaborative writing.
- **KEYWORDS:** Classroom. Text production. Spelling. Erasure. Metalinguistic. Learning. Collaborative writing.

Introduction

The path taken by the writers from the first texts onward, until they become autonomous as text producers, is long and complex, depending, above all, on a systematic teaching and reflective activity over their own writing (KELLOGG, 2008; PEREIRA, 2008; PEREIRA; BARBEIRO, 2010). In the beginning of this process, the

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writer has to deal, on the one hand, with a notation system which involves graphic and phonetic representations and its graphic and orthographic distinctions (TOLCHINSKY, 2003; MOREIRA; PONTECORVO, 1996) and confront the relations between rules, norms and irregularities (NUNES; BRYANT, 2014, ZORZI, 1998, PINTO, 1998). On the other hand, this writing sub-system depends on its own text and transcription generation process (BEREITER; SCARDAMALIA, 1987; BERNINGER et al., 1994), which demands knowledge regarding orthographic, semantic, syntactic, morphologic, punctuation and accentuation aspects, all of them tied with the articulation and concatenation between words and sentences in the written text.

Many studies about the acquisition of orthography adopt quantitative methodologies that analyse the orthographic understanding of the child from the analysis of pseudo- or invented words (CASSAR; TREIMAN, 1997; REGO; BUARQUE, 1999), spelled words, short phrases (ROSA; NUNES, 2010), short texts (NOBILE; BARRERA, 2009), known texts that were rewritten (MOREIRA, 1996), or evaluation tests (NUNES; BRYANT; BINDMAN, 2006). Generally, these and other studies adopt different instruments of data collection such as dictations (CASSAR; TREIMAN, 1997; ZORZI, 1998), interviews (DE GAULMYN; LUIS, 1997; MORIN, 2005) or simply collections of texts written in the classroom (CARRAHER, 1985; CAGLIARI, 1989).

However, as Chiss and David (2011b) argue, if writing is a cognitive activity characterised by a series of parallel operations (HAYES, 1996), then the learning of orthography should also be further investigated during processes of textual production. The apprentice writer, while producing a text, simultaneously resorts to multiple information relating to the content, form and function of what is being written, seeking to solve diverse and heterogeneous problems. Their action as a writer is framed by their linguistic knowledge and cognitive capacities such as long term and working memories (KELLOGG, 2001; MCCUTCHEN, 2000; FAYOL; MIRET, 2005), which are activated during the writing process.

Spelling problems (SP), especially in novice writers, run parallel to other components of the writing process, with textual and linguistic questions, making it impossible to write a text that simply reflects on spelling problems. It is also not possible to anticipate at which point of the text the student will have doubts about the way a certain word is written, or in how a spelling problem would relate to other sub-systems or linguistic levels (for example, orthography and the use of the upper-case letter, the division of a word at the end of the line [translineation], grammatical or lexical-semantic knowledge to write homophone words). Thus, to better understand the development of textual production in novice writers and the relation with its inherent components, it is legitimate to value real writing situations, and offer mechanisms to identify those components during the text in course.

In this study, we shall approach that issue, discussing the recognition of spelling problems by a couple of newly literate students, during the writing processes of fictional narratives.

Acquisition of orthography and metalinguistic reflections

Since the 1990s, studies in the acquisition of orthography began to analyse explanations, justifications and comments of novice writers, using interviews or exercises of text production as a methodological instrument. The work of the Linguistics of Writing and Acquisition Research Group (LÉA) is representative of such studies and has influenced several other investigations.¹

Among those investigations, we may highlight studies based on the “metagraphic interview” technique.² This technique was adapted and used by David (2001, 2003), Morin (2005) and Barbeiro (2007). Those studies adopted differentiated methodological procedures, which, nevertheless, allowed analyses of verbalizations of orthographic questions from young writers. David (2001), for example, showed some typologies of what he named “meta-graphical dialogues” established from interactive sequences with the participation of two or three children, in which one of them revises the other’s text, highlighting spelling problems, in the presence and, sometimes, with the participation of, the investigator. The author describes types of components that would, generically, characterise the comments made during the interactive situation: justification x revision, agreement x disagreement, facts x comments, explicit participation x implicit participation, decision x non-decision.

In another type of experimental situation, based on the technique of the individual interview, Morin (2005) presented a list of words in French with specific spelling difficulties and asked 7-year-old students to write them down, questioning them afterwards about the written production. His findings confirmed former studies, demonstrating a variety of metagraphic comments related to phonological and morphological aspects and visual memory. They also indicated the importance and interference which formal instruction had in the way of thinking of these novice writers.

Similar results were also obtained by Barbeiro (2007), who proposed a collaborative writing assignment, in groups of 3, with 4 different levels of education (2nd, 4th, 6th and 8th grade), where each student of the group should write their own text (a fictional report), from a collective oral construction. This is one of the few studies which analysed the recognition of spelling problems that occurred during the production of written texts in real time, in conditions that were closer to the didactic practices of the classroom. For this reason, in the typology of identified spelling problems, the author considered the use of upper-case and lower-case lettering, translineation (hyphenation) and accentuation. Furthermore, Barbeiro proposed 4 categories for the analysis of the types of episodes: manifestations of auto-correction, hetero-correction, indication of

¹ Take a look at, for example, the work of Bousquet et al. (1999), Jaffré (1995), Chiss and David (2011a), Morin and Nootens (2013), Fijalkow, J. e Fijalkow, E (1991) and De Gaulmyn and Luis (1997).

² The metagraphic interviews conducted by the researchers and inspired by Piaget’s clinical interviews are centred on spelling. In those interviews, according to Brissaud and Cogis (2011, p.45), “it is asked that the students comment, from the text they just wrote, on some of the graphemes they produced. The student, reflecting upon their choices, is then asked to explain the linguistic materials they chose and the reasons behind the choices. As with the words metalinguistic and metacognition, the term metagraphic explains the reflexive return, in effect in the graphemes”.

the orthographic form in advance, help request from colleagues to solve a spelling difficulty (BARBEIRO, 2007, p.117).

That typology seems to be more interesting than the one proposed by David (2001) and Morin (2005), mainly because it considers orthographic forms “by the anticipation of occasional difficulties by colleagues” (BARBEIRO, 2007, p.118). In his results, this type of episode was not the objective of the analysis, which was centred on the quantitative aspects of the inaccuracies (faults in transcription, oral transcription, non-observation of morphological and phonological rules, lexical problems, accentuation, lower/upper-case lettering, graphic unity, translineation) and on the types of behaviour of the students (if the student self-corrected himself/herself, if they corrected the other student, if he/she anticipated a difficulty another student might have, if they requested the help of another student to solve a difficulty). Another result obtained in that study concerns what Barbeiro called “justification”, namely, “verbal exchanges between elements of the group, to seek the adoption of a solution. [...] argumentation relative to spelling difficulties, to justify indications, answers to requests, self- or hetero-corrections” (BARBEIRO, 2007, p.120). Only 25 occurrences of “justification” were identified, related to the different spelling problems. The use of audio recording for data collection did not allow us to know exactly what was being written while the students were speaking. As we shall observe below, the author also did not explore the arguments used by the different writers and how their “justifications” differed.

S25: à noite/ vá/ “à”/ now its “á with heich”/ isn’t it?/ “à” noite³

S27: “existe” noite?

(BARBEIRO, 2007, p.121)

According to Barbeiro (2007), this is one of the 6 registered episodes in which the students sought to differentiate the uses of ‘à’ (to the) and ‘há’ (there is). Even though it indicates the importance of the shared action between the students regarding metalinguistic reflection (“justifications”), there was no concern from the researcher to differentiate the types of arguments in relation to the students’ level of education, neither did their methodology allow correlating the oral identification of the SP with the moment of its inscription (that is, whether the comment was made before, during, or after writing a certain word).

Despite the importance of the comments⁴ made by the students, to understand the way they observe, think and solve (or not) certain spelling problems, we still do not have studies dedicated to the analysis of the arguments used, their relations with the text in course and the didactic practices to which the students are subject.

³ The transcription provided by Barbeiro (2007) is not immediately understood by the reader. Here, the student is demonstrating doubt about how to graph “à”, in the syntagma “à noite”. They make an affirmative question saying that the “à” is with an “h”. The utterance from the other student brings the information that refers to the semantic value of “há” (“there is”). However, it is not clear whether the student wrote the “a” with an acute or grave accent.

⁴ We understand the term “justification”, due to its characteristic semantic weight, not to characterise what the writer spontaneously speaks to their colleague. We propose the term “comment” (CALIL, 2016) given its comprehensive semantic scope, which can be explanatory, justificative, or a brief doubt or observation about the linguistic or textual element that is being written.

From a microgenetic perspective, within the field of study of Textual Genetics (FABRE, 1990; BORÉ, 2010; DOQUET, 2011), within an enunciative approach (CALIL, 2012a, 2013), we propose to analyse the comments made by young writers during the manuscript in course. Our analysis unit is the dialogue text (DT) co-enunciatively established during the paired writing process. We identified the DT from the emergence of a recognition and return from the writers in relation to a determined textual element, namely, everything that might potentially belong to the material composition of a text, be it the choice of the character's name, of an upper-case letter, of an accentuation mark or just a line to separate or divide a word. In the text in course, that recognition and return is not operating at every instance, but when it occurs on a certain textual element, it attaches to it the status of "object" or, as we have been calling it (CALIL, 2016), transforming the textual element into a "textual object". What the writers say regarding a recognised textual object (TO) is treated as a "comment" that refers to this object. The enunciated comment may contribute to the maintenance, modification or erasure of the referred TO, changing the text in course and, at the same time, tracing its textual genesis. It is for this reason that the relation between the recognition of textual objects and the comments that relate to them is treated as a "commented oral erasure" (CALIL, 2016). The commented oral erasures (COE) represent points of tension in the flux of writing, relative to the inscription and linearization⁵ of one term or another, involving different linguistic and textual levels (pragmatic, graphic, lexical, semantic, orthographic, syntactic, of punctuation). The comments related to the recognised TO expose arguments of different values, as already indicated in other studies (CALIL, 2013, 2016).

In this study, we shall identify the COE of orthographic textual objects (spelling problems) and analyse the comments that refer to them. In our theoretical and methodological proposition we shall thus consider the student's spontaneous speech in the classroom's co-enunciative and ecological⁶ conditions and the process of inscription and linearization of the text in course.

Scope of the spelling problems using the Ramos System

It is not a simple challenge to obtain information about the way novice writers think during real situations of textual production in a classroom context. Those who

⁵ As was defined in Calil (2016), in line with the genetic perspective which is the scope of this study, these two terms are directly related to the moment when the text is being registered on the sheet of paper (letters, lines, strokes, drawings). The "linearization" concerns the graphic materiality of what the students have orally discussed to write, that is, the moment when a textual element (graphic, orthographic, lexical, semantic, syntactic, textual) is concatenated and articulated to another textual element in the syntagmatic chain of the text in course. Accordingly, we shall assume that linearization results from the dialogue, which necessarily involves the articulation and concatenation between the textual elements inscribed on the sheet of paper, whereas the inscription of a graphic mark may occur with no relation to the linearity of the text in course.

⁶ For the reader unfamiliar with the specificity of our field of study, it is important to specify that this term refers to the preservation of the classroom's daily and interactive characteristics. This is guaranteed by the way the data is registered with the Ramos System, as shall be described ahead.

have or have had professional experience as teachers know how much the classroom is a dynamic, interactive, and dialogical space, especially when dealing with 7-year old students, whose experience as producers of text is still very incipient and the doubts about multiple aspects of writing (spelling, line limits and margins, orthography, separation of words, translineation, accentuation, punctuation, among various others) are still at the surface. Adding to those difficulties, it is not enough to have access to what the student thinks, the way they think what they think, but also to what they are thinking *while* writing.

Considering the importance of collaborative writing to the metalinguistic activity of the student (DAIUTE; DALTON, 1993, SWAIN; LAPKIN, 1998, STORCH, 2013), we elected the proposition of textual production in pairs as a privileged object of study to access the spontaneous way the student thinks. To this end, we accompanied the development of a didactic project, conducted by a teacher from Portugal, of the 2nd grade of elementary school, which involved the textual production of invented stories. We applied the same methodological design, with an ethnographic and ecologic orientation, which had already been adopted in previous studies (CALIL, 2008, 2009), asking Brazilian students, grouped in pairs, to textually produce a single text. Using the Ramos System,⁷ 6 proposals for the production of invented stories within a paired group (B and L, female, 7 years old) were recorded. In each proposal, one student would alternately dictate (dictator), while the other would write (writer). This way, each one of the students wrote 3 stories and dictated the other 3 stories.⁸

Furthermore, we collected a set of complementary materials (the school's curricular proposal, an interview with the teacher, didactic materials adopted and used, students' notebooks, questionnaires to parents, photos of the school and of the classroom) so that we would be able to have the characterisation, contextualisation, and description of the school's daily reality and the educational contents that were valued in the didactic practices.

The material collected offers, on the one hand, information directly related to the writing process: the real-time writing process⁹ and the product of this process (school manuscript). On the other hand, it offers information about the context and didactic practice of the classroom. We were able to observe at least two aspects: 1. What was written and spoken by the students during the text in course; 2. What was taught by

⁷ The Ramos System, developed by the Laboratório do Manuscrito Escolar (CALIL, 2016), allows for a multimodal capture of the writing process in real time (in a classroom). Through the synchronisation of the filmed record of the interaction between the students, the tracing of the pen over the paper sheet and the audio register of the dialogue between participants, during the moment of the manuscript in course, the Ramos System provides a large quantity of information that grants access, in real time, to what the students say while combining, inscribing and linearizing the graphic material of the invented story.

⁸ Despite this instruction, exchanging pens was not forbidden. The teacher was attentive in order to direct the attention between the students and the division of the task in pairs, avoiding that a single student would be the sole responsible for creating and writing the invented story. It is worth noting that, in order to preserve the ecological characteristics of the international dynamic between teacher and students, all other researchers and auxiliaries would leave the classroom during the execution of the task. This favoured the preservation of the interaction between teacher and students.

⁹ The Ramos System generates a synchronised film of the writing process of each participating pair.

the teacher during the weeks leading up to the accomplishment of the proposals of text production. In this article, we shall take the first aspect to be the privileged object of analysis, considering:

- In the school manuscript (textual product), what was inscribed and linearized:
 - a. Words written orthographically.
 - b. Written words with spelling problems, but with no erasure marks.¹⁰
 - c. Marked words or letters, indicating the students' recognition of spelling problems.
- The manuscript in course (textual process), what happened during the inscription and linearization:
 - d. Tension points¹¹ related to the spelling problems recognised by the students, regardless of whether those problems were erased or not, or if they occurred only orally, but with the correct inscription of the word.

If we had only the textual product as an object of study, the student's recognition of the SP could be indicated with an erasure, but we would not know what the student was thinking while erasing. If what the students talked about during the moment they were writing had only been registered in audio, as in Barbeiro (2007), we would not know exactly what was being written while they were speaking. From an empirical point of view, the comments made by the students do not seem to us to be equivalent, during a metagraphic interview conducted by the researcher and the spontaneous comments, enunciated unpredictably, between the students, *during* the production of a text. With the synchronized film, we do not only have a dimension of the simultaneity between what was spontaneously spoken and what was inscribed, but we are also able to know, in real time, where the students were looking or pointing at, what the teacher was doing, with whom she/he was interacting at the time the dyad students were writing, and what she/he was saying to her/his students.

Thus, there are innumerable possibilities of interpretation. Regarding our question, we can have an erased SP, but with no explicitation of what the student thought while recognising and erasing the SP indicated in the manuscript. We can have an inscribed SP with no erasure, but that generated reflections between the students during the moment of linearization of a word. We can also have SP that was recognised through what the teacher or another student said. And, finally, we can have a SP that is erased

¹⁰ As shown in the pioneer works by Fabre (1990) and many other researchers that followed, erasure in the school manuscripts marks the recursiveness of writing and indicates metalinguistic reflections which are made effective by the writer. From the point of view of the textual product, it is only possible to identify recognitions of orthographic problems by the writer if they made some type of erasure in the text.

¹¹ The identification of those 'tension points' (CALIL, 2012a) considers the relation between the written record, in the time and space of inscription in the paper sheet, and the interactive and dialogical record made face to face, involving overlapping turns of speech, oral reformulations, body movements, facial expressions, eye direction, the teacher's interventions and interactions with other colleagues.

or not, accompanied by comments, identifying, justifying or making explicit the SP or the reason why the erasure was made.

Differently from studies on the acquisition of orthography, some of them quoted in our introduction, which elect as object of study dictations of words, pseudo-words, evaluation tests, sentences or texts, identifying and describing the errors, inaccuracies or orthographic deviations of the students, our double object (product and process) requires another type of interpretative approach to spelling problems.

A first observation refers to what we shall treat as a spelling ‘problem’. For us, ‘problems’ are not necessarily ‘errors’, ‘deviations’, ‘transgressions’, ‘incorrections’ or ‘difficulties’. In relation to the product, we consider a ‘problem’ to be any inscriptions that differ from the orthographic convention; an occurrence generally analysed by most studies on the acquisition of orthography, which take as object of study what the student effectively wrote. Meanwhile, in relation to the process, ‘problems’ are identified from the recognitions made by the students of orthographic textual objects and the comments that topicalize aspects relating to the way a word is spelled or how a certain sound is orthographically represented, even if its inscription onto the sheet of paper was not made effective or if it was inscribed correctly and without difficulties, a dimension rarely considered by studies in acquisition of orthography. Given the spontaneous nature of the students’ speech while interacting face to face, sometimes these comments present arguments that contain repetitions, hesitations or ironic intonations, and they can be intersected by pauses or interruptions and accompanied by gestures, taking the pen and the sheet of paper, body movements and facial expressions complementary to what is being said.

In our analysis, this double dimension constituted by the process and the product in the interpretation of the ‘spelling problem’ shall be treated in an articulated and complementary manner, with the SP being intercepted from that multi-modal perspective.

A large quantity of studies present a broad range of spelling problems that were faced by students soon after they understood the alphabetic principle (CAGLIARI, 1989; ZORZI, 1998; CARRAHER, 1985, among others).¹² In general, we can basically place them into 2 groups, composed of different sub-groups:

- Lexical SP relative to how the word is presented in the dictionary:
 - Support in orality
 - Homophonic representations
 - M before B/P
 - Mute/sound exchange
 - Nasalization

¹² These and other studies in the areas of Linguistics and Psychology propose various, sometimes conflicting, classifications for the spelling problems in the Portuguese language. Here, we list some of them, in a general way, so that the reader may have an idea of the complexity of the problems faced by recently-literate writers while producing their texts.

- Accentuation
- Segmentation
- Translineation
- Grammatical SP linked to the variations of a word in relation to its context of occurrence:
 - Markings of male and female gender
 - Subjective concordance
 - Verbal concordance
 - Grammatical class
 - Morphological derivations
 - Verbal variations (conjugation, tense and verbal person)
 - Use of upper-case associated to the punctuation subsystem.

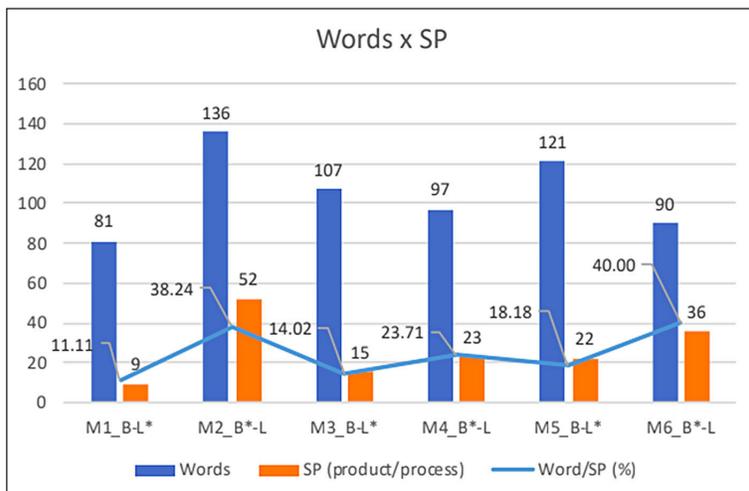
We do not intend to make a quantitative analysis of these types of SP, nor elect beforehand a specific type of SP to be analysed, such as those discussed in David (2008) or by Morin (2005) by selecting the problems according to specific criteria (frequency, mute letter, digraph, among others). Here, this list is used to situate the reader in relation to some of the possible SP recognised in the literature. The literature also indicates what are the most probable spelling problems the students encountered in their first texts. Notwithstanding the fact that we know that double consonants such as the “ss” or the “rr” or the digraphs “nh” and “lh” will be problematized by the students shortly after understanding the alphabetic principle (NUNES; BRYANT, 2014), the fact that the students are writing, in real time, an invented story does not allow us to predict the types of spelling problems that will occur and be recognised by the students. It is also not possible to know which orthographic aspects will be recognised by the students and which will not. However, the synchronised film allows us to identify if the inscription of a SP was preceded by any sort of comment from the students or if the comment occurred after the effective inscription of a certain graphic or orthographic form. In other words, we establish as a point of reference for the identification of spelling problems recognised in advance (SP-RA) the comments uttered in the moments that immediately preceded their graphic recording onto the sheet of paper. Inversely, we can also identify the spelling problems recognised subsequently (SP-RS): those that were identified by the students and commented on only after its graphic recording was performed.

In line with the dynamic of the dialogally-produced manuscript in course, which is subject to the unpredictability of spontaneous and co-enunciative speech, to the associative relations established during dialogue (CALIL, 2012b, 2016) and to the materiality of the linguistic elements concatenated and inscribed linearly in the sheet of paper, our case study shall have a qualitative focus, based on a micro-genetic analysis of the orthographic COE, in order to describe the students’ anticipation of SP and the way these SP are solved (or not)..

Results and discussion

In the 6 school manuscripts written by B and L, a total of 634 words were written and we identified 157 SP. On average, 1 SP for every 4 written words. The graph below shows this relation per process.

Graph 1 – Relation between words x SP per textual process.



Source: Own elaboration.

The difference between the quantity of words and the identified SP in each process and its respective manuscript seems to relate to the student that was responsible for writing. In the processes in which L wrote¹³ and B dictated, we have fewer SP: Manuscript 1 (M1) = 11%, Manuscript 3 (M3) = 14%, and Manuscript 5 (M5) = 18%. In the manuscripts written by B, the SP were greater in number: Manuscript 2 (M2) = 38%, Manuscript 4 (M4) = 23% and Manuscript 6 (M6) = 40%. This difference suggests that L would have greater orthographic knowledge than B, producing, therefore, a lesser number of words inscribed with SP. We shall develop this question in another study, since the current analysis centres only on the early recognitions and their relation with the identified SP.

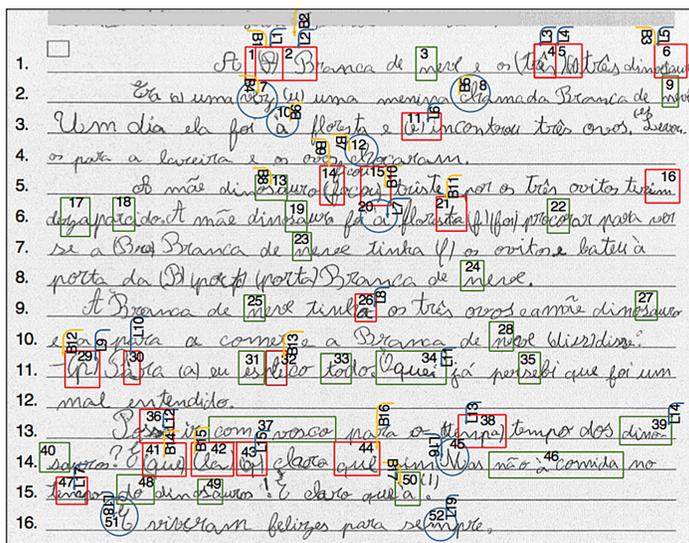
In order to explain and deepen this problematic, we present M2_B*-L, written by B. This was the school manuscript where we found the largest quantity of written words and also highest occurrence of SP. In order to identify the SP, we established the following codification:¹⁴

¹³ The information referring to who wrote what is indicated by an asterisk beside the first letter of the female student's name.

¹⁴ In this codification we do not separate the lexical SP from the grammatical SP. For example, SP48, in line 15, indicates a grammatical SP: "do dinosauros" [incorrect plural]. SP49 indicates a lexical SP: "dinosauros" [there is a missing "s"]

- Numerals inside the geometric shapes: indicate all the identified SP not only in the product (school manuscript), but also in the process (the film of the text in course; this means that inscribed and non-inscribed SP were considered, namely when the word was written correctly, but recognised orally, from the comments made by the students.
- Rectangle: marking the SP identified in the product.
 - Red rectangle: SP with a visible erasure in the product.
 - Green rectangle: non-erased SP or with an erasure that is not visible¹⁵ in the product.
- Circle: marking an SP identified in the process.
- Arrow to the right (↗): SP recognised in advance.
- Arrow to the left (↖): SP recognised subsequently.
- Orange arrow: SP commented by B.
- Blue arrow: SP commented by L.
- Numerals in L and B: indicate the quantity of SP recognised by the students.

Figure 1 – Manuscript 2 ‘The Snow White and the three dinosaurs’ (06/02/2015), with identification of the SP.



Source: School Manuscript Lab (LAME).

in the word “dinossauros”].

¹⁵ According to Textual Genetics, the “written” erasure may be defined as any modification or alteration relative to already linearized textual elements. Our methodological drawing, by synchronising the produced text and the text in course, allows for a retrieval of the visible erasures (those that are graphically marked on the paper, as for example, smudges, overwritten letters/words, strokes/lines, bars, etc.) and the erasures that are not visible (those that are not graphically marked, a result of adding a letter or punctuation mark, for example). In order to observe the relation between the SP and the erasure, we indicate with red rectangles the SP that had visible erasures and with green rectangles the SP that were not erased or to which were added erasures, often not visible in the product.

- In this manuscript, we have 16 lines and 136 words, we identified and numbered the occurrence of 52 SP, classified as follows:
 - Erased SP (red rectangles): 21 occurrences
 - SP1, SP2, SP4, SP5, SP6, SP11, SP14, SP15, SP16, SP21, SP26, SP29, SP30, SP32, SP36, SP38, SP41, SP42, SP43, SP44, SP47.
 - Non-erased or non-visible SP (green rectangles): 23 occurrences
 - SP3, SP9, SP13, SP17. SP18, SP19, SP22, SP23, SP24, SP25, SP27, SP28, SP31, SP33, SP34, SP35, SP37, SP39, SP40, SP46, SP48, SP49, SP50.
 - SP that were commented on, but not erased (blue circles): 8 occurrences
 - SP7, SP8, SP10, SP12, SP20, SP45, SP51, SP52.
 - SP recognised by B: 17 occurrences
 - SP-RA (orange arrow to the right): 6 occurrences
 - B1, B3, B4, B7, B8, B17.
 - SP-RS (orange arrow to the left): 11 occurrences
 - B2, B5, B6, B9, B10, B11, B12, B13, B14, B15, B16.
 - SP recognised by L: 19 occurrences
 - SP-RA (blue arrow to the right): 2 occurrences
 - L16, L18.
 - SP-RS (blue arrow to the right): 17 occurrences
 - L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, L12, L13, L14, L15, L17, L19.

These results provide interesting information about the produced SP and the students' ability to recognise them. There was a balanced distribution between the erased and, thus, to some extent, recognised SP (21 occurrences) and those that were not erased or did not present visible erasures (23 occurrences). Through this manuscript production process, we also identified commented SPs that were not erased in any way.

We were also able to observe that there is a strong relation between erased and commented SP. From the 21 erased SP, only SP16 was not accompanied by a comment. This suggests that the erasure, in the production of a text in pairs, strongly favours the oral enunciation of some form of metalinguistic reflection. Inversely, we highlight that only 3 of the 23 non-erased or non-visible SP received comments: SP34, SP39, SP50.

Another relevant aspect to be emphasised concerns the SP-RA and SP-RS. Both students recognised approximate quantities of SP. Student B recognised 17 SP, while student L made 19 recognitions. However, student B, responsible for writing the story, anticipated 6 of the 8 SP recognised in advance, while student L, responsible for dictating the story, made 17 subsequent recognitions. One of our working hypotheses is that such difference between the students would be related to the level of knowledge and information each one of them possesses, as well as to the role of dictator and writer taken on in the task proposed by the teacher. That would be another issue to be explored in future studies.

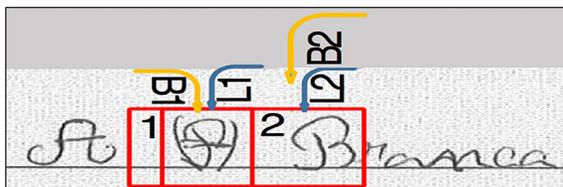
In order to better understand the anticipated and subsequent recognitions of spelling problems and the comments related to them, we shall present a microgenetic and enunciative¹⁶ analysis of 3 words that were inscribed in the manuscript in course, in which their linearization underwent the incidence of erasures and/or were accompanied by orthographic comments enunciated by the students. We chose the SP related to the word “branca” (white), line 1 (SP1, SP2), the word “dinossauro” (dinosaur), line 1 (SP6) and line 5 (SP13) and to the word “há” (to have or exist), line 15 (SP50). We have chosen these SP given the different ways of correlation between the erasures and the comments.

During the inscription of “branca” a visible erasure and four comments occurred (SP-RA B1, SP-RS B2, SP-RS L1, SP-RS L2). The word “dinossauro” was inscribed 5 times throughout the school manuscript. In the first occurrence (SP6) there was an erasure, accompanied by two comments (SP-RA B3, SP-RS L5). In the second (SP13), there was no erasure, but there was an anticipated comment (SP-RA B8). In the other three occurrences of this same word there occurred neither erasures nor comments. In the word “há” (SP50) there is no erasure mark in the product, even though an anticipated comment (SP-RA B17) was identified in the process.

SP with RA in the representation of the syllable “bran” of the proper noun “Branca de Neve”

The two first SP recognised in this process were also the first SP that were erased in the manuscript.

Figure 2 – Stroke across the letter ‘B’ of the word “Branca” (line 1, SP1, SP2).



Source: School Manuscript Lab (LAME).

Indeed, the identification of the erasure of the letter ‘B’ does not explain why the student made such an erasure. Any assertion as to why or what the motive was for the student to make the erasure is mere speculation. The manuscript in itself bears no evidence to this. Through this identification, it is not possible to know whether the student faced a spelling problem or if it was a graphic difficulty, relative to the incomplete

¹⁶ This type of analysis involves the dialogic and genetic character of the manuscript in course, occurring over the tension points identified in the textual flux.

tracing of the upper-case letter ‘b’. Even if we suppose it to be an SP relative to the use of upper-case letters, we still can say nothing about how the student interpreted it. In a similar way, a researcher basing her/himself only on the way the word “branca” was inscribed might suppose, unwittingly, that there was an erasure over the letter “n”. There was not. When the student wrote it, she made the first “leg” of the letter “n”, lifted the pen from the paper sheet and when she came back to writing, started inscribing the letter “n” once more, moving the pen over the initial tracing of the word. This way of writing the letter “n”, recorded by the Ramos System, isn’t even characteristic of a graphic erasure, which might indicate a hesitation about the shape of the letter. There was also no form of comment (which is the object of our study) during the moment that letter was inscribed. For this reason, we do not mark this point of the text in course as associated with the representation of the nasalization or with any other type of SP. This is a good example of how a researcher might make erroneous inferences by accessing only the textual product.

The synchronised film generated by the Ramos System gives another dimension to the written erasure that was produced in “branca”. From our theoretical and methodological input, we can say that in this tension point of the writing process, as well as the visible erasure, we have the occurrence of comments that relate to the word, characterising what we have been defining as a commented oral erasure (CALIL, 2016). As we shall demonstrate, the oral erasure evidences that the TO was brought about by a spelling problem orally recognised in advance by student B, before being inscribed. This occurrence happened right after the article “A” was inscribed, seconds before beginning the inscription of the name “Branca”, which would constitute the story’s title. We may observe in the dialogue below that the comments generated pertain to the recognition of 3 problems directly related with orthography:

- Problem with the orthographic representation of the consonant group “br” at the beginning of “branca”.
- Problem with nasalization, orthographically represented by “an”.
- Problem with the use of the upper-case letter for the proper noun.

There is still a problem on a graphic level, affecting the interpretation made by one of the students, as we shall also see next.

Figure 3 – L pointing to the letter ‘B’ of her name;
B looking to where L is pointing at.



Source: School Manuscript Lab (LAME).

DT1: “Branca” (00:28:24:06 – 00:29:16:00¹⁷)

213. L: (Asking B to continue writing) Come on! (B is finishing writing the letter ‘a’ [A] in the title and L reading) ...aaaa... (Then, dictating)Bran-ca.
214. B*: (Stops writing and is repeating ‘branca’ in a doubtful tone) *Branca...* (Babbling and murmuring) ...*bran... bran...*^{B1}
215. L: (Repeating, with an emphasis on the ‘bran’) ...*Braaaan-ca* :: (L, wearing the badge where her name and surname is written, points to the letter ‘B’, the first letter of her surname). *You want to look to hear ...* ^{L1a}
216. B*: (Whispering.) ...*bran... ca...* (B turns to L and looks at where L was pointing, her badge. B looks at the letter ‘B’, which was being pointed at by L. B goes back to the paper sheet and continues writing, beginning the upper-case letter ‘B’ [B]. Halfway while tracing the line for the upper-case letter ‘B’, B interrupts and says in a tone of disapproval) *Ei...* (Erasing the incomplete capital letter ‘B’ [P] she had started writing.) *I wrote it with a capital.* (Making a parenthesis, as the teacher showed, to indicate that the letter ‘B’ was erased [(P-)])^{B2a}

¹⁷ In the dialogue texts (DT), we highlight in red the textual object (TO). In the case of this DT, the TO is the initial syllable of the word “branca” of the name of the main character that is being written: “Branca de Neve” [“Snow White”]. In blue, we highlight the comments referring to the TO recognized as a problem by B. We numbered the comments, considering their argumentative value. For this reason, the numbering of some of the comments is accompanied by letters indicating the continuity of the comment’s argumentative value.

217. L: *Alright then.* (Making with her index finger the letter's trace across the table.)^{L1b}
218. B*: (looking at L) *It is lower-case.*^{B2b}
219. L: Yeah it is. (Realising her mistake) *No. No. It is upper-case, as well (laughing). It is also... with upper-case. You write it with a capital letter.*^{L2} (B is finishing making the parenthesis and tracing again the letter 'B' in upper-case [B]. L attentively accompanies the tracing made by B) A... bran.... ca...
220. B*: (Writing the rest of the word 'branca', lifting the pen at the beginning of the letter "n" e putting it once more over the paper sheet to keep tracing the word.) Bran... [ran] ...ca [ca]...
221. L: ...ca...

In this DT1, which lasted less than 60 seconds, B's hesitation in turn 214, which is marked by her doubtful tone while repeating the word 'branca' (white), anticipates the SP that refers to the way the sound [brã] of the first syllable of the word should be graphically represented. The way B stammers, murmurs and repeats the syllable 'bran', accompanied by her facial expression, indicates that she recognises problems related to the orthographic representation of that syllable. At the same time that her enunciation (B1) anticipates and recognises the SP to be inscribed, she also expresses doubt about how 'bran' is written, probably an outcome of the consonant group 'br' and the nasalization.

In turn 215 we have the occurrence of L1. This enunciation from L indicated how the student interpreted B's earlier enunciation and action. She understood B's hesitation, not as a doubt relating to the encounter of consonants or to how the nasalization is represented, but as a problem related to the way the capital letter 'B' is inscribed. The evidence of L's interpretation is in the almost enigmatic enunciation L1a ('you want to look to hear...'), along with the gesture pointing to her own badge (Figure 3), pointing at the first letter of her surname, a capital 'B'.

In the video, there is no oral or gestural indication that B was asking about the way the letter 'B' was written. Furthermore, it is highly unlikely that B would not know how to inscribe the first letter of her own name. The description accompanying turn 216 describes B's gesture and movement, indicating that the student began writing the capital letter 'B' without great hesitation and no comment.

However, before concluding the tracing of the letter, B interrupts her gesture, making, in two turns of speech, two simple and inter-related comments (B2a and B2b), with the same argumentative value. Still in turn 216, she recognises as an "error" having started writing the letter in its upper-case form, erasing the upper part of the letter she had started writing. While she is doing it, she comments in a tone of disapproval: 'I wrote with a capital letter' (B2a). L reacts, insisting on the graphic question of the capital letter 'B', drawing an imaginary stroke on the table (turn 217, L1b). In turn 218, B once again denies that 'Branca' should be written with a capital letter, firmly stating:

‘It is lower-case’ (B2b). B’s misconception by thinking that the ‘B’ in ‘Branca de Neve’ is written in lower-case, producing the erasure that stems from this interpretation, is corrected by L (L2), in turn 219; ‘No. No. It is upper-case, as well. (Laughing.) It is also with... with upper-case. It is written with a capital.’

We have in this DT1 a tension point around the way the syllable “Bran” is written, which we consider to be a TO anticipated and recognised by B. Over this TO concur simultaneously, at least, three spelling problems and one graphic problem. Strictly speaking, in B1 (turn 214) we have an anticipation related to the problem of orthographic representation of the sound [brã], even though it isn’t possible to know whether B questions herself about the orthographic representation of the consonant group ‘br’ or the orthographic representation of the phoneme /ã/. The replica contained in L1a and L1b about the tracing of the letter ‘B’ was not directly related to the B’s SP-RA. In the same way, the SP relative to the use of upper-case (B2a and B2b) was also not related to that SP-RA. The recognition of that SP (upper-case) occurred after the beginning of the inscription of the letter ‘B’, generating its erasure and being solved by the comment marked in L2.

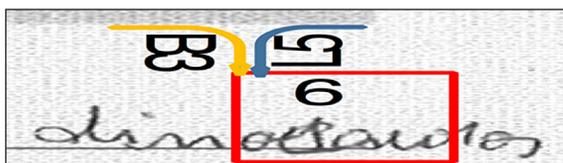
The arguments presented by these 4 comments (B1, B2, L1, L2) are a consequence of the TO being inscribed and linearized (the name of the character). However, the difference in value between those arguments (where the themes are the consonant group or nasalization and the graphic form of the letter ‘B’ or use of upper-casing) evidences the parallel functioning of different problems faced during the writing process, imposing simultaneously and in a concatenated way several questions for the recently literate writer to solve.

In relation to the problematics of the use of upper-case in names, it is worth observing the students’ incomplete orthographic knowledge. This knowledge is based on the visual and graphic aspect of the word ‘Branca’, and not on the knowledge regarding the grammatical class that determines its correct form. In all of the six occurrences of the proper noun ‘Branca de Neve’ (Snow White), the word ‘branca’ was inscribed with a capital letter, while the word ‘neve’ (snow) was inscribed in lower-case.

SP with RA in the representation of the phoneme /s/ in ‘dinossauro’ (dinosaur)

Two other SP recognised in advance by B refer to the representation of the phoneme /s/ in the word ‘dinossauro’ (dinosaur). In the six inscriptions present in the manuscript, the digraph ‘ss’ for the phoneme /s/ in ‘dinossauro’ was represented by just one ‘s’. In its first occurrence we identify SP6, which was anticipated by a comment (B3), followed by the inscription of an erasure of substitution and by a subsequent comment (L5).

Figure 4 – Erasure over the grapheme ‘c’ and substitution by ‘s’ in the word ‘dinossauros’ (line 1, SP6).



Source: School Manuscript Lab (LAME).

In the first inscription of the word “dinossauro” (Figure 4), SP6 occurred. In this SP we can easily identify an erasure of overlap, indicating the competition between the grapheme ‘c’ and the grapheme ‘s’ for the orthographic representation of the digraph ‘ss’. If such an erasure were analysed only through the product we would not have clear evidence about which grapheme was inscribed first. Even though we may suppose that there was the initial inscription of the grapheme ‘c’, so that the distinction between the phonemes /k/ and /s/ in the syllables ‘ca’ and ‘sa’ may be more easily observed by the child, we do not exactly know what was thought by the student when she wrote it, what was the relation she established between the ‘c’ and the ‘s’ and what led her to observe the difference, thus avoiding representing the phoneme /s/ with the grapheme ‘c’ in this position.

In SP13, line 5, we have the inscription of the same word ‘dinossauro’, however it did not produce an erasure, even though it was accompanied by an other comment indicating the spelling recognition in advance (B8) of this same type of SP.

Figure 5 – Spelling of ‘dinosauo’ for the term ‘dinossauro’ (line 5, SP13).



Source: School Manuscript Lab (LAME).

In the second register of the word ‘dinossauro’ (Figure 5), just like in the other four inscriptions of this term (SP19, SP27, SP39, SP49), the representation of the digraph ‘ss’ with just the grapheme ‘s’ is continued, with no erasure mark that might suggest doubt or hesitation in spelling.

A study by Monteiro (1999) suggested that the contextual rules involving the cases of representation of the grapheme ‘ss’ for the phoneme /s/ are initially represented by the child with a single letter. It should be noted, however, that problems of representation related to the phoneme /s/ go far beyond these contextual rules, since their homophonic character involves multiple representations. The complexity required for the mastery

of the orthographic representations of this phoneme is evident in the student's own manuscript. We either have the correct use, such as in for example, 'três' (line 1), 'vez' (line 2), 'dezaparcido' (line 6), 'disse' (line 10),¹⁸ 'posso' (line 13),¹⁹ 'felizes' (line 16), or an incorrect representation of the phoneme /s/: 'dezaparcido' (line 6), 'esplico' (line 11), 'persebi' (line 11).

In relation to the first two occurrences of the term 'dinossauo', the respective dialogue texts show the anticipation of the spelling problem related to the way the phoneme /s/ is represented, during the linearization of the syllable "ssau".

Figure 6 – B writing the letter 'c' for the 'ssau' syllable.



Source: School Manuscript Lab (LAME).

DT2: 00:30:06:08 – 00:30:23:21

- 254. B*: Dinossauros... (Writing) ...di [di]...
- 255. L: ...nooo...
- 256: B*: ...no [no]... *...ssauu... o cê-só...* (tracing the letter 'c' [c]) (L looking at what B is writing and speaking along with her) *...ssaaaauu...*^{B3} (Interrupting the tracing of the letter 'c', indicating doubt about how to write the 'ssau' syllable)
- 257. L: (Seeing that B wrote the letter 'c') *It is not with that one*^{L5}.

¹⁸ In the word 'disse', registered at the end of line 10, the erasure of the first attempt of inscription does not stem from a SP related to the digraph 'ss'. As it can be observed in the manuscript, there is a poorly defined writing of the letters 's'. The first 's' ended up 'closed' and the second 's' ended up similar to an 'r'. As the synchronised film generated by the Ramos System shows, at 50:46 female student B, right after making the second 's', parenthesises the graphic segment 'diss', indicating the erasure, according to the teacher's orientation. Thereafter, she orally repeats the word 'disse' and inscribes it correctly, not verbalising any problem or doubt regarding the orthographic representation of the phoneme /s/.

¹⁹ SP36, concerning the word 'posso,' refers to the use of the digraph. At first, B had written it with a single 's'. L, observing what her friend did, comments and corrects, saying that an 's' is missing.

258. B*: (Overwriting the letter 's' on the letter 'c' and making the rest of the syllable 'ssau' ...dino... [e sau]) ...ssau...
259. L: ...ro...
260. B*: ...ro [ro]...
261. L: The dinossauros.

[...]

DT3: 00:40:05:00 - 00:40:28:19

414. B*: (Finishing writing "the mother") ...dinossauro... (Writing 'dinossauro'.) di [di]... no [no]...
415. L: Di-no-ssau-ro.
416. B*: Di-no... 'ce' - 'sapo'... ssau!^{B8} (Writing) Sau [sau]... ro [ro]... the mother dinossauro... (Turning to L) And the mother dinossauro... it is written.

Both DT bring similar comments for the anticipation of the same type of SP about the same word. In the first SP (SP6) we have comment B3: 'o ce-sô... .ssaaauu...'. In the second SP (SP13 B8), we have: 'ce-sapo...sau'. These enunciations from B suggest that she is analysing and trying to solve the orthographic representation of that phoneme, which has an intense and complex concurrence in the Portuguese language system, involving the graphemes 's', 'c', 'ç', 'x' and the digraphs 'ss', 'sc', 'sç', 'xc', and 'xs'.

L's brief comment in L5 (turn 257) eliminates B's hesitation, assuring her that the correct form is not with the letter 'c'. Her comment "It is not with that one," even though it does not verbalise which is the correct grapheme, indicates, on the one hand, some metalinguistic knowledge about the different graphemes used to represent the phoneme /s/ and, on the other hand, shows her acting as a reviser of the manuscript in course, contributing to generate the erasure of the 's' over the 'c', at 00:30:17:17. We observe that the revising role assumed by L is associated with the shared attention and directed by the visual aid (eye direction) of what is being written. This aspect seems to have an important role in the shared writing of students of this age group.

Even though the inscription of the word 'dinossauro', with a single 's', was kept in all the occurrences of this word, and that the SPs, in which these graphemes and digraphs used to represent the phoneme /s/ concur, are widely recognised by studies on the acquisition of orthography (NUNES; BRYANT, 2014; ROSA, 2004, MONTEIRO, 1999), the two brief comments made by B are revealing of the way she thinks and solves this tension point. Firstly, as she had already done when faced with the SP in "bran", B anticipates aloud the SP, as if she was speaking and recognising a difficulty to herself. At the same time, such anticipation is accompanied by an attempt of resolution, which is revealed by her spontaneous speech: turn 256, '...no [no]... .ssauu... o cê-sô...' and turn 416 'Di-no... 'ce' - 'sapo'... ssau'.

teaching practise and the didactic material had on student B's way of thinking. By emphasising the occurrences of 's', 'c' and 'ç' in different "syllabic families", either by the identification of the initial letter, or by its occurrences in the middle of words, their homophonic relations are evidenced. B anticipated the SP while writing the word "dinossau^{ro}", using as a resource to solve the problem the emphasis of the first letter of the word "sapo", which was repeatedly emphasised in her school exercises and, probably, in her teacher's speech. To us, more important than describing the student's predictable 'error', is responding when the students identify the SP along the text in course and the way they deal with the linguistic information they have received in order to solve the identified spelling problems. B, by anticipating that type of SP, expresses her doubt in the representation of the phoneme /s/ in this position, indicating a meta-phonological recognition, which is still incipient, since the grapheme 'c' before the phoneme /a/ never receives the phonic value /s/. B's metalinguistic doubt, in turn, makes L verbalise a meta-phonological and meta-graphic analysis, differentiating the graphemes 'c' and 's' in the representation of the phoneme /s/.

SP with RA in the representation of the phoneme /a/ in "há".

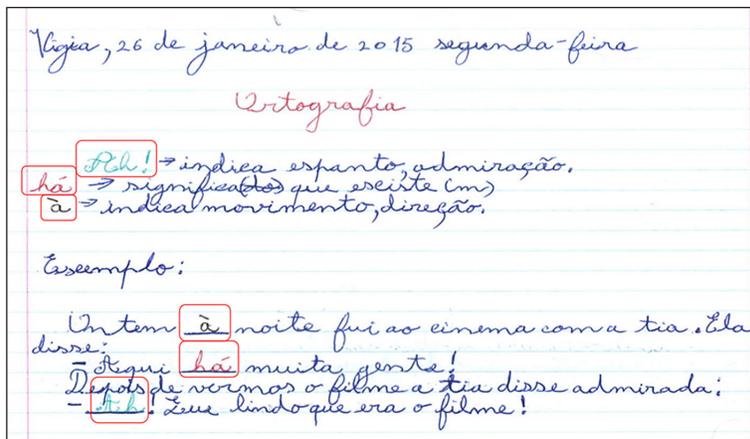
As we know, the spelling problems of students in this phase of the process of alphabetization are many and diverse. And, most likely, the problems related with the homophonic relations are the most frequent, as indicated by Zorzi (1998), Nunes and Bryant (2014) and other researchers. The appropriation of these relations by the young writer seems to depend on different interrelated aspects:

- Information received through social interaction (teacher, parents, classmates, didactic material).
- Frequency of occurrence in the student's reading material.
- Cognitive ability related to long-term memory and the students' working memory in order to understand and retrieve the received linguistic information (KELLOGG 2001, MCCUTCHEN, 2000).

These aspects seem to occur in the early recognition that shall be discussed below.

As indicated in Figure 1, this school manuscript was produced on 6 February 2015. On 26 January, the teacher worked with the students on the difference between 'ah', 'há' and 'á', as shown in Figure 8.

Figure 8 – Class exercise about the differentiation of ‘ah’, ‘há’ and ‘à’.



Source: School Manuscript Lab (LAME).

This orthographic²⁰ task concerned 3 forms of manifestation of the phoneme /a/, present in 3 grammatical categories: ‘ah’ (exclamatory interjection), ‘há’ (3rd person singular of the present tense of the indicative of the verb ‘haver’ (to be/to have), and ‘à’ (contraction).

In the story ‘Snow White and the three dinosaurs,’ produced 10 days after this task was completed in the classroom, the orthographic form ‘à’ was inscribed in six points of the manuscript:

- 1st. Line 3, SP10: ‘Um dia ela foi **à**^{B6} floresta.’ (‘One day she went **to the** forest’)
- 2nd. Line 6, SP20: ‘A mãe dinossauro foi **à**^{L7} floresta...’ (‘the mother dinosaur went **to the** forest)
- 3rd. Line 7-8: ‘...e bateu **à** / porta da Branca de Neve.’ (‘and knocked **at** / the door of Snow White)
- 4th. Line 11, SP30: ‘**P**à^{L10}, eu explico tudo.’ (‘**Stop**, I will explain everything’)
- 5th. Line 14-15, SP46: ‘Mas não **à** comida no / tempo dos dinossauros!’ (‘But **there is** no food in the / time of the dinosaurs’)
- 6th. Line 15, SP50: ‘É claro que **à**^{B17}.’ (‘Of course, there **is**’)

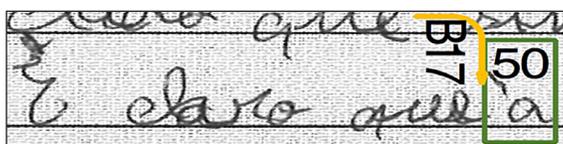
There are no visible erasure marks in any of these six inscriptions of the accentuated grapheme ‘à’, which would also lead us to suppose that the students did not recognise

²⁰ It is not the objective of this study to analyse or discuss the school exercises that were proposed to the students. From an ethnographic and ecological point of view, the presentation of these documents has the function of describing the didactic context, so that it enhances access to the received information, correlating them to what is said and written during the text in course.

any orthographic problem upon their inscription. In the first three inscriptions, located in lines 3, 6, and 7, the use of the ‘a’ with a contraction accent is orthographically graphed, a surprising fact, given that the correct use of the contraction does not seem to be common in texts by Brazilian students of this age. In Brazilian Portuguese, the most likely construction for those enunciations would be: ‘ela foi na floresta’ (she went in the forest), ‘ela foi para a floresta’ (she went to the forest) or ‘ela bateu na porta’ (she knocked on the door). At the 4th point the occurrence of ‘à’ in the first ‘a’ for ‘a’ (‘to’) is surprising. All the comments identified in SP10 B6, SP20 L7 and SP30 L10, respectively, 1st, 2nd, and 4th points, were subsequent and for this reason we shall not analyse them in this study.

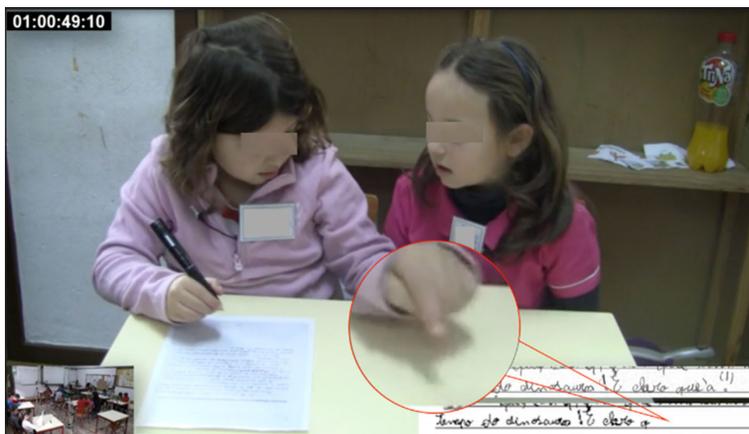
In the 5th point, even though there is a SP (SP46), there was neither erasure nor comment, which indicates that the students did not recognise it as a SP. In the last inscription of ‘à’ (6th point, line 15, SP50) there was the early recognition B17, which we shall discuss next.

Figure 9 – Inscription of ‘à’ (SP50) for the verbal form ‘há’ (haver - to be/ to have) in the phrase ‘É claro que há’ (Of course there is) (line 15).



Source: School Manuscript Lab (LAME).

Figure 10 – Moment when B gestured on the table, tracing the grapheme “a” with a grave accent.



Source: School Manuscript Lab (LAME).

728. L: (B finishing writing ‘É claro’, in line 15. L dictating the continuation ‘que há’.) ...que...
729. B*: ...que [q]...
730. L: ...hááá.
731. B*: ...háá? (Stops writing, turning to L with a doubtful expression and making a gesture with the index finger, tracing over the table the letter ‘a’ and the grave accent; speaking in a low voice) ...de ‘à à à’...? B17a
732. L: (L, not seeing the gesture made by B on the table, and not seeming to have heard her question; L dictating and repeating what she said before.) É claro que há. Que há! (B makes the gesture once more, drawing with her index finger the letter ‘a’ on the table. L is not looking at the gesture made by B, repeating yet again what is to be written.) É claro que há.
733. B*: (turning to the page and whispering about whether it has an accent.) *Should I put an accent after?* B17b
734. L: (Not hearing and dictating again) ‘É claro que há’ (Impatiently.) ‘Come on! Write!’
735. B*: (Writing again.) It is [u]... Of course...
736. L: (Emphatically speaking.) Que há!
737. B*: Que há. (B writing [e].) Que há [a]...
738. L: (Rereading) É claro que há. (B inscribing the grave accent above the ‘a’ [à].)
739. B*: (Rereading.) Que há.
740. L: (Indicating where to put the period.) Now, you put...
741. B*: Exclamation?
742. L: No. Full stop. (Indicating on the sheet where to inscribe the period)

As mentioned above, the students, especially writer B, faced with the SP she recognised during the manuscript in course, is responding to what has been taught in class. Here, she seeks to differentiate the different grammatical forms that have a representation corresponding to the phoneme /a/. The gestures made over the table during turns 731 and 732, more than the actual enunciations that accompanied those gestures (B17a and B17b), clearly evidence it. Even though the differentiation between the forms of representation of the phoneme /a/ involves lexical and grammatical knowledge, we assume that, in the initial development of writing, the search for differentiation happens visually, retrieving visual-graphic information stored in the long-term memory and offered by the literary social context. In the case of these students, this context is strongly represented in the didactic practises and school exercises performed. The school fulfills its role by giving the information and emphasising the spelling problems that arise from the multiple representations (in this case, homophony) of phonemes. What is most

relevant to us is not whether the student understood or not the differences between the different ways of representation. What is relevant is the way how she, by anticipating the SP and recognising the TO, not only recovers the requirement to use a grave accent, by remembering it, as indicated by the gesture made over the table, but also the fact that she places in relation its homophonic representations. Such sensitivity to the SP will certainly lead her to learn the linguistic categories associated to the phoneme /a/ in its multiple and distinct orthographic occurrences, in the different linguistic levels (vowel, verb, article, pronoun, interjection, contraction).

The same ‘há’ in SP46 was not recognised as a spelling problem by the student.

It is worth noting that the fact that SP46 – also written as ‘à’ just a few minutes before, but not recognised as a SP – and the fact that SP50 addresses the same SP, but was recognised as a SP – illustrates the linguistic complexity involved in the process of learning orthography. Strictly speaking, in the representation of the phoneme /a/ in each of them, we have the simultaneous occurrence of two SP, related to the phenomenon of homophony,²¹ which circumscribes it. On the one hand, the SP involving the representation of the silent letter ‘h’, which requires, in addition to the knowledge of its morphemes in the composition of verbal forms, the knowledge of the radical ‘hav’ from the verb ‘haver’, both, radical and morpheme, presenting great irregularity. On the other hand, the SP related to the orthographic accentuation of the verbal form ‘há’, a tonic monosyllable, where the acute accent does not mark any phonic difference, thus being also “mute”. In none of the two inscriptions did the students observe or try to inscribe the grapheme ‘h’ which, as indicated by Nunes; Bryant (2014) is a late acquisition. However, the grave accent, present in the Portuguese language only in contractions, is over-generalised, that is, the grapheme ‘à’ served as much to represent the two SP related to the verb ‘haver’, in its verbal form ‘há’, as it was used, unpredictably, for the recording of ‘pàra’ (4th point, line 11, SP30). The recurrence of the same graphic form six times in a row may be related to the working memory activated during the text in course. Student B, by anticipating the SP50 related to the phoneme /a/, would resort to the previously written graphic form ‘à’. Even though it was incorrectly used, there is an initial metalinguistic reflection from the student, even if only based on the graphic aspect of the contraction, and not in its function in relation to the linearization of the sentence ‘É claro que há!’ (‘Of course there is!’).

Somehow, the school exercise that differentiated ‘à’, ‘há’ and ‘ah’ seems to have had interfered in the student’s metalinguistic activity. We may question whether the teaching of that spelling problem would be appropriate for this level of education (2nd year of Basic education in Portugal). But perhaps such a question might not be pertinent, since during the text in course the words being enunciated and linearized by the writers cannot be controlled. What strikes us as relevant from a learning perspective is that the student recognised a spelling problem in that point of the text in course. Even if

²¹ Analyses of the interference of homophony in the generation of unpredictable spelling problems are also present in Felipeto (2013), Calil and Felipeto (2008) and Calil (2007).

that recognition is intermittent and limited to the accentuation mark, it indicated the student's cognitive ability to retrieve received information and her metalinguistic ability to relate the different orthographic representations for the same phoneme.

Conclusion

This case study clearly shows that recently literate students bear different strategies and information relative to orthography. They respond to the recognised SP during the text in course according to the linguistic knowledge and cognitive resources they possess. This indicates that, despite this being one of the first written texts produced by the students, they already have relative autonomy for the resolution of those problems. The metalinguistic activity related to the recognised spelling problems justifies the necessity of valuing such didactic situations involving collaborative writing in pairs. On the one hand, the didactic explanation of specific orthographic content has great importance for the learner of orthography. On the other hand, the didactic practise of production, particularly in pairs, seems to contribute to the educational content to be recognised and articulated in the text under construction.

As is characteristic of students in this stage of education, spelling problems are great in number and the identified difficulties are related to what the literature has already been describing. In the six manuscripts that were produced, we found, on average, one SP for every three words written, involving a significant diversity of problems. In the case of the invented story 'Snow White and the three dinosaurs', 136 words were written, and 52 SP occurred. Considering the 21 erased SP, and the 8 SP that were not erased but commented on, we can state that the students recognised little more than half of the SP. The presence of these SP in the manuscript indicates the knowledge level they possess and the way they resort to the information received to solve the identified SP.

The adopted methodological design, based on the theoretical foundation offered by Textual Genetics, articulated the process (text in course) with the product (written text), while respecting the ecological conditions of the classroom. The synchronised film generated by the Ramos System favoured an ethnographic, qualitative and microgenetic analysis, the main characteristic of which is in the association between the identified SP, the erasures inscribed in the sheet of paper relating to those SP and the comments enunciated by the female students. From this procedure, the paired writing of a single text stands out, favouring dialogue and strengthening the metalinguistic activity, whether in the form of comments that anticipate SP, or in the form of comments that seek solutions for the SP that were recognised after being inscribed, aiming to ensure continuity in the writing of the text.

Regarding this aspect, we found interesting behavioural characteristics in the pair of students studied, which would have to be developed in future studies involving other pairs, and even with other writing processes but the same pair, in the same classroom

conditions. We observe that SP were predominantly anticipated by the writer, while the subsequent recognition SP came from the observations made by the dictator, taking on the role of reviser of what was being inscribed and linearized. Regarding this aspect, the visual follow-up, namely, accompanying what was written with the eyes, seems to be of paramount importance. Another characteristic that may have an important impact for didactic practise and the assessment of students' knowledge within this age range refers to the fact that, on the one hand, the recognitions in advance expressed doubts, as in the case of the inscription of 'bran' in the word 'branca', of 'ssa' in the word 'dinossauro' and of 'há' for the verb 'haver'. On the other hand, the subsequent SP recognition made by L provided answers and information for the B's doubts, as for example, explaining that 'bran' starts with a 'b', that the 'b' in 'Branca de Neve' is upper case or that the grapheme 'c' is not equivalent to the grapheme 's'.

We were also able to point out two other aspects that differ greatly from other studies on the acquisition of orthography. The first refers to the presence of SP with comments, but that did not have a visible erasure mark, as was the case with 'dinossauro' (SP13 B8) and 'à/há' (SP50 B17). The second, which is not explored in this study, refers to the fact that even words that were written correctly (with no SP) and no erasures had their inscription accompanied by orthographic comments, such as 'vez' (SP7 B4), 'chamada' (SP8 B5), 'à floresta' (SP10 B6; SP20 L7), 'chocaram' (SP12 B7), 'Mas' (SP45 L16), 'E' (SP51 L18) and 'sempre' (SP52 L19).

This analysis also allowed intersecting the comments made by the students and the instruments and activities developed by the teacher and recorded in the students' notebook, evidencing that the comments they produced contain metalinguistic reflections about the taught content.

Taking these aspects into consideration, and perhaps contributing to other work on this subject, we may begin to elaborate an answer for the question stated on our title.

- Despite not knowing when the child will interrupt the textual flux when faced with a SP, since it is not possible to predict beforehand what words will emerge during the text in course, the anticipation of a SP seems to coincide with the difficulties faced from the understanding of the alphabetic principle, namely, we can expect students to recognise in advance a SP *when* these SP refer to vocal or consonant digraphs, to the accentuation or use of mute letters.
- At this still initial stage, the way *how* recognition emerges seems to be intermittent, i.e., in the present case, it does not occur in every digraph, accentuated letter or mute letter. However, its occurrence may indicate the educational content to which the students are exposed. This challenges pre-conceived ideas that the teaching of grammar has no effect on a student's textual production.
- It is difficult to know *why* the early recognition of a specific SP happens instead of another, given the cognitive and subjective dimension of each writer. However, even though we cannot respond to that just yet, we might argue that

they emerge because the student is given the opportunity to produce texts early in their school years.

These three points justify the importance of the professional gestures of the teacher, in this pathway of alphabetization, in that they contribute to students' progression in the written production in a reflective way, creating situations for them to comment, reason, and explain through their writing or that of their colleagues. This *démarche didactique* of constant questioning of linguistic phenomena shall lead them to a double confrontation: a progressive resolution of problems encountered in the text in course, among them spelling problems, and to the mastery of that system, which is undoubtedly very complex, with a learning process that shall take years to be concluded.

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CALIL, E.; PEREIRA, L. Reconhecimento antecipado de problemas ortográficos em escreventes novatos: quando e como acontecem. *Alfa*, São Paulo, v.62, n.1, p.87-120, 2018.

- *RESUMO: A aprendizagem da ortográfica constitui um processo complexo, envolvendo questões lexicais e gramaticais. Muitos estudos sobre essa aprendizagem tratam os problemas ortográficos de modo independente e separado da produção textual. Neste estudo defendemos a importância de se analisar a aprendizagem da ortografia a partir da perspectiva proposta pela Genética Textual, colocando em destaque a gênese do processo de escritura e criação textual. Apresentamos o Sistema Ramos, metodologia de investigação que registra o processo de escritura em tempo e espaço real da sala de aula. Esse Sistema oferece informações multimodais (fala, escrita, gestualidade) sobre o que alunos, em duplas, reconhecem como problemas ortográficos (PO) e os comentários espontâneos feitos quando estão escrevendo o texto. Este estudo analisa justamente o momento em que aconteceram esses reconhecimentos e os comentários de duas alunas no 2º ano de escolaridade, durante a produção de seis histórias inventadas. Mais do que uma análise quantitativa dos tipos de PO identificados no produto, apresentamos uma análise enunciativa e microgenética de*

reconhecimentos de PO e seus comentários, particularmente aqueles PO antecipados pelas escreventes. Os resultados indicam: i. Reconhecimentos ensejam comentários nem sempre relacionados ao PO identificado; ii. Reconhecimentos e comentários estão relacionados aos conteúdos ortográficos ensinados em sala de aula; iii. Alguns PO reconhecidos envolvem a articulação de diferentes níveis linguísticos. Esses aspectos podem contribuir para a compreensão da aprendizagem da ortografia em situações didáticas propiciadas pela escrita colaborativa a dois.

- **PALAVRAS-CHAVE:** Sala de aula. Produção textual. Ortografia. Rasura. Metalinguístico. Aprendizagem. Escrita colaborativa.

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