Managing the written text: the beginning of punctuation in children’s writing

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Abstract

This study aims at understanding the use of punctuation in children’s early writings in connection with the organisation of the written text. Data are drawn from a larger comparative study in which written stories of Little Red Riding Hood were collected from primary school children who speak one of the three Romance languages (Spanish, Portuguese, and Italian). The corpus consists of 134 written stories of second grade children from low income families. Different quantitative and qualitative analysis are presented. Results show that all children, in spite of differences in literacy practices, try to make sense of the conventions of a system of writing, including punctuation marks (PMs). Some children seem to assume a ‘graphic principle’, while others make sophisticated attempts to distinguish the function of PMs for different types of speech genre. Contrastive textual use of PM seems to be critical also for teaching purposes. © 1999 Elsevier Science Ltd. All rights reserved.

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1. Theoretical background

Punctuation marks in the written text developed in Western culture over a long period of time. Thus, punctuation must be studied by looking at its relationships...
with other textual dimensions. The development of punctuation in children’s writing is the topic of this study that aims at understanding the use of punctuation in their early narrative writings. However, in order to avoid a normative attitude, some historical background is required.

In historical terms, the compulsory introduction of punctuation in written texts is rather recent. Punctuation began to be established in Western culture as recently as the 6th century A.D., as Parkes (1992) has shown on the basis of considerable historical data. “Pauses and effects” (as he says in the title of his fundamental book) were originally the responsibility of an expert reader. Indeed original texts were not punctuated and for a long period not even segmented into words. Punctuation was the task of the reader, who was also the interpreter. The reader marked the text with a variety of punctuation marks that were in the process of being developed at the time, in order to read it aloud (Saenger, 1995) and to have good locative pauses related to the interpretation of the text. The function of punctuation changed when silent reading was introduced in that the systematic introduction of blanks between words came into being. From that time punctuation become much more linked to textual organisation and began to be considered the task of the writer.

Basing her study on a long research work with ancient French written texts, Catach (1980) was one of the first linguists to devote herself to the history and systematics of punctuation by analysing the linguistic value of different punctuation marks (PMs) and their modern literary uses in some well known modern writers. As a specialist of Mediaeval literature, Cerquiglini (1989, 1997) points out how modern punctuation that was imposed on Mediaeval texts betrayed the original intentions of the writers and imposed a presumed Cartesian clarity onto original texts that were purposively variant. Nunberg (1990) also opposes the way in which the English texts that were written before the 17th century were punctuated in subsequent times, ignoring the fact that they had an original system of syntactical organisation without explicit graphic signs. The link between modes of text construction and ways of using punctuation is stressed per differentiam by Blanche-Benveniste (1997) who looks at diverse registers of spoken language and shows the falsity of the school transmitted knowledge that anchors punctuation to orality.

Both historians and linguists show that punctuation is far from having been normatised and should be considered in strict connection with the particular organisation, structure, and prosody of the written text (Chafe, 1987).

It is true that nowadays it is almost as difficult for us to read and understand an unpunctuated text as it is to read an unsegmented one. Are these the same problems that young children face when they begin to write texts? Certainly not. Indeed our main aim in this study is to describe their use of punctuation in such a way that leads us to guess the implicit ‘rules’ that children follow in their peculiar use of punctuation, only partially guided by school instruction.

2. Starting points for this study

The development of punctuation is of psycholinguistic and educational importance because it is an aspect of writing that has to do with text construction and it is hard
to submit it to precise norms as is the case for spelling. After centuries of use and particularly after the revolution of printing, word spelling was established in languages such as Spanish and Italian and words that differed from the norms were considered incorrect. On the other hand, punctuation continues not to be subject to similar strict norms. It is true that we can agree on the position of where some punctuation mark might be needed, but usually more than one specific mark may be used in that place. However, punctuation is taught at school as being normative while in fact it is not. It is also true that a text without any punctuation and paragraphation is against our expectations, although it can be accepted as a peculiar stylistic choice of a professional writer.

Many analysts criticise the presumed naturality of punctuation—according to which the speech pauses should be transposed in the PMs of writing—as well as its generalised normativity. However, it is still possible to find a normative approach in some developmental psychologists working in education. For instance, Lurçat (1973) relates the development of conventional punctuation to the development of logical thinking in children and produces a stage-like pattern of children’s texts by using a descriptive type of written task that cannot make possible the appearance of border or limit effects between different genres of text.

Punctuation appears in children’s writings only when their writings are literate. Preliterate children know that in printed texts there are marks “that are not letters but go with the letters”, as children say when they are asked and when they do not yet know the conventional names of these marks (Ferreiro & Teberosky, 1979; Zuchermaglio, 1991). Thus they can use sporadic marks which resemble punctuation, but function as word separators or signs for the end of lines, as Edelsky (1983) and Martens & Goodman (1996) also found.

It has also been ascertained that first grade children disregard most punctuation marks when they are requested to copy a text that contains them. Children tend not to copy commas or full stops, while they reproduce question marks and exclamation marks much more frequently, probably because they are letter-like marks (De Goes & Martlew, 1983). Indeed, PMs do not constitute a homogeneous set from the point of view of either the form or the function (Ferreiro, 1996). Some PMs have a relationship with suprasegmental aspects, such as the question mark that signals the place for a rising interrogative intonation. Other PMs serve to signal changes in the mode of enunciation, such as a colon, hyphen or quotes: changes of speakers, limits between clauses with declarative verbs and quoted speech, limits between narrative and reported speech, etc.

Given this situation, we cannot base our analysis of the first attempts at punctuation by children on shared conventional criteria that allow us to describe children’s acquisition as a development towards the norm. The first task is to establish a proper list of PMs. Although we can agree on a typographic list of usual marks (full stop, comma, colon, hyphen, etc.), there are problems with three specific cases: upper case letters, blank spaces, and the apostrophe.

Upper case letters are obviously letters and not marks. However, upper case letters may indicate the beginning of a sentence or a paragraph, i.e. a text boundary, and
one of the few clear norms of school teaching is that an upper case letter is compulsory after any full stop.

As regards blank spaces, Catach (1980) argues convincingly that blanks at the beginning or the end of a line, as well as those that produce paragraphs, need to be considered as PMs: “First, what does graphic element mean? Without a punctuation mark, what is left? A blank space, which is already a mark. It is the most primitive and most essential mark, it is a negative symbol.” (Catach, 1980, p. 18, our translation). Lastly, Halliday (1990) surprisingly adds the apostrophe to his list of PMs. We disregard this here because the apostrophe has to do with word segmentation and not textual organisation (Pontecorvo, 1996).

The contribution of developmental psycholinguists and of literacy scholars to the topic of punctuation development—at least as regards the English speaking world—has been recently presented in a useful review by Hall & Robinson (1996) who demonstrate how limited studies about the beginning of punctuation are and “how recent are studies which focus upon the nature of the learning that takes place when people learn to punctuate” (p. 7). We are not considering here the problem of how punctuation could be taught in schools. However, we agree with Hall & Robinson (1996) that more studies are needed concerning the relationships between long-term classroom experiences and the effective learning of punctuation. This is certainly also linked to the task of text revision which is not at all spontaneous in novice writers.

What we propose here is a descriptive study of children’s use of punctuation, starting from the historically-based assumption that punctuation is related to the textual organisation and to the intention to produce a text which is written and different from any oral text. At school children receive some instruction for using PMs as pointers to help them to read aloud well. But when punctuation was used to this end in the Middle Ages, the reader was also a scholar who had carefully studied the text beforehand and inserted the punctuation marks he was ‘reading’ himself! It is extremely difficult for children who are novice writers to approach the text as both writers and readers with the aim of regulating their use of punctuation. Rather, most primary school children are still grappling with morphological, semantical and spelling problems when writing a story and cannot concern themselves with punctuation as well.

Punctuation is probably a constraining and enabling tool only for today’s expert readers and writers who are both reading and writing silently (Pontecorvo, 1997). It focuses attention on text units which are different from phonic elements and from the unit represented by the word. It has to do with units that group together sets of words and that have to follow syntactic and semantical criteria of text organisation. Indeed, the function of most PMs is to define units of text processing. Full stops and commas—the PMs most frequently used by children and adults—have this function, although novice writers are not always aware of the range of uses of these same PMs, as Simone (1996) has shown by analysing the comma and its different functions.

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2 An analysis of the use of upper case letters in children’s early texts does not enter in the limits of this article. T. Weisz (San Paulo, Brazil) has recently finished a Doctoral dissertation on this topic.
Some results of two studies carried out by Ferreiro on children’s narratives (Ferreiro, 1991, 1996) were the basis for the present study:

1. Punctuation begins at the external borders of the text and proceeds towards the internal parts; the minimal realisation is an upper case letter for the beginning of the text and a full stop at the end (Ferreiro & Zucchermaglio, 1996).
2. The punctuation which corresponds more closely to present adult uses occurs between different phases of the story (changes of scenario, appearance of a new character) or at the beginning of the story, after the initial presentation of the main character and the beginning of the action.
3. A significant correlation was found between the quantity and/or variety of punctuation and the identification of the speaker after a piece of quoted speech.

Our general question is: what is the function of punctuation for children who anyway produce a certain number of PMs when requested to write down a well-known story? Indeed, we are dealing with texts of novice writers which show few PMs and not always in the expected places. We will try to clarify the reasons (or motivations in the psycholinguistic meaning) for the use of a particular mark in a particular place, under the assumption that there are no random mistakes.

3. Sample, data collection, and corpus

In a larger comparative study (Ferreiro, Pontecorvo, Ribeiro-Moreira & García-Hidalgo, 1996a, b, c), we collected about 1200 written stories of Little Red Riding Hood (LRRH) from primary school children, ranging from first to fourth grade who speak one of the three Romance languages (Spanish of three Latin-american countries, Brazilian Portuguese, and Italian).

The children were asked to write down the story that they already knew; it was not re-read to them. Data were collected in many schools of different sociocultural backgrounds. The task was administered by a researcher in the presence of the classroom teacher. A time limit of an hour at most was given for writing the story. Children were told that we wanted to compare children’s writing of LRRH in different countries. They were given a blank A4 sheet of paper and a pen; the children could choose the direction of the sheet for writing. They were told that they could correct their texts but without deleting, just crossing out what they wanted to change.

The choice of this story was guided by different motives. First we wanted to get comparable results without taking a reference text. LRRH happens to be a very well known story in all the cultures of the children involved. Second, by using the task

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3 The relevance of direct speech for punctuation is considered also by Perera (1996) who starts from an analysis of the uses of punctuation in direct speech in children’s books and studies how children are able to ‘read’ the punctuation of direct speech. She found evident difficulties and misunderstandings, particularly when there are alternating turns and the declarative verb clause could be attributed to both the preceding and the following piece of direct speech.

4 Although our analysis concerns texts and not children, we will use the two terms synonymously.
of re-writing a story, the children were not being given the cognitive responsibility for inventing a new story while writing a text. Third, the task almost always involves dealing with the difficulties of direct speech, and this has a canonical form in the last and crucial encounter that LRRH has with the wolf. This could help us to detect whether children were sensitive to the differences of speech genre.

In order to understand how children begin to use punctuation, we will examine the written stories produced by second grade children (7-year-olds) of working class families in two languages, Italian and Spanish (a subsample of data that was collected in Uruguay and Argentina). We can assume that these are children who have little out-of-school information about written language conventions. Although this group is far from homogeneous in textual organisation, we assume that it is representative of the beginning of punctuation, which hardly even appears in the writings of first grade children.

From the general corpus of about 1200 texts, the corpus consists of 134 written stories about LRRH: 56 by Spanish speaking children and 78 by Italian speaking children in the second grade (about 7 years old) from low income families. The texts were transcribed with particular care and with similar norms in both languages. They were inserted in the TEXTUS software program which was developed by the research group for the analysis of written texts of novice writers (not only children), and the computation of different parameters. A child’s text could enter in the data base if it referred to the three main characters of the story (LRRH, the wolf and the grandmother), without elements taken from other traditional stories.

4. Data analysis: a first quantitative look

We are mainly interested in a qualitative analysis with a specific comparative look at similarities and differences between the two languages, given that there are potentially interesting peculiarities. For instance, exclamation and question marks, two major PMs for children, are conventionally repeated in Spanish (at the beginning and at the end of the interrogative and exclamative clause) while in Italian only one is placed at the end. We want to know how this might affect the children’s use of them.

In the following we will offer different types of analysis:

1. A first quantitative look at the whole group.
2. A thorough analysis of two texts in their entirety. Two texts are contrasted and commented on from a textual point of view: one without any punctuation (by
Alessandro, an Italian boy) and one that is very rich in PMs (by Eliana, an Argentinian girl).

3. Specific comments of a large number of examples of peculiar uses of PMs—drawn from the two linguistic samples—by referring to the places of the story and to the layout of the text.

We first present some quantitative data in order to give an overall presentation of the quantitative distribution of PMs and of blank spaces. In Table 1 we present the complete list of what we differentiated as PMs and in Table 2 what we differentiated as types of blank spaces, both with their different frequencies in the two linguistic groups.

Looking at Table 1, it is possible to observe that the most used PMs are the same in the two groups. The various types of full stop comprise 38% in the Spanish group and 45.6% in the Italian group, while commas are almost equally present: 27% in the Spanish group and 28% in the Italian group. The other PMs are present in both groups with percentages much less than 10%. Three more observations can be made:

1. All the PMs, even the ones less frequently used in expert writers’ texts, appear at least once, like the semicolon, dots and brackets.
2. There is a marked feature of the Spanish group and it concerns the question mark (which has to be repeated in Spanish): the two question marks in the Spanish

<table>
<thead>
<tr>
<th></th>
<th>Spanish Raw numbers</th>
<th>Spanish Percentage</th>
<th>Italian Raw numbers</th>
<th>Italian Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full stop (at the end of the</td>
<td>26</td>
<td>5</td>
<td>60</td>
<td>11</td>
</tr>
<tr>
<td>story)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full stop</td>
<td>80</td>
<td>15</td>
<td>94</td>
<td>17</td>
</tr>
<tr>
<td>Full stop (new line)</td>
<td>96</td>
<td>18</td>
<td>96</td>
<td>17.6</td>
</tr>
<tr>
<td>Comma</td>
<td>142</td>
<td>27</td>
<td>152</td>
<td>28</td>
</tr>
<tr>
<td>Colon</td>
<td>13</td>
<td>2</td>
<td>35</td>
<td>6</td>
</tr>
<tr>
<td>Semicolon</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Question mark (opening)</td>
<td>47</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question mark (closing)</td>
<td>48</td>
<td>9</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>Exclamation mark (opening)</td>
<td>22</td>
<td>4</td>
<td>23</td>
<td>4</td>
</tr>
<tr>
<td>Exclamation mark (closing)</td>
<td>19</td>
<td>3.5</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Double quotation (opening)</td>
<td>1</td>
<td></td>
<td>23</td>
<td>4</td>
</tr>
<tr>
<td>Double quotation (closing)</td>
<td>3</td>
<td>0.5</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Dash</td>
<td>7</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Hyphen (opening)</td>
<td>11</td>
<td>2</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Hyphen (closing)</td>
<td>0</td>
<td></td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Dots</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td>Parenthesis</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Total PM                       | 523                 | 100                | 545                 | 100                |
Table 2
List of types of space and frequencies distribution in the two samples

<table>
<thead>
<tr>
<th>Types of Space</th>
<th>Spanish</th>
<th></th>
<th>Italian</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw numbers</td>
<td>Percentage</td>
<td>Raw numbers</td>
<td>Percentage</td>
</tr>
<tr>
<td>Final space ('enter')</td>
<td>92</td>
<td>56</td>
<td>139</td>
<td>64</td>
</tr>
<tr>
<td>Centering space</td>
<td>64</td>
<td>39</td>
<td>69</td>
<td>31</td>
</tr>
<tr>
<td>Initial space (indent)</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Space between graphical lines</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Total spaces</td>
<td>165</td>
<td>100</td>
<td>218</td>
<td>100</td>
</tr>
</tbody>
</table>

sample total 18% of all the PMs, whereas in the Italian sample the question mark appears only 4% of the time. The presence of a compulsory repeated mark seems to be a facilitator for children, perhaps because they use it in order to frame pieces of Direct Speech.

3. Another marked difference is present in the Italian group: quotation marks are present with a percentage of 7% (while in the Spanish group they total only 0.5%). As we will show in what follows, Italian children are using quotation marks (and even dyads of colons) with the same framing function that is assumed by the repeated question and exclamation marks in the Spanish group.

Thus we can say that there are similarities in the prevalent use of full stops and commas. But there are also common functions in the need to frame what is Direct Speech or what accompanies it (such as declarative verbs): functions that are implemented with the tools children find in the specific system of writing (like the repeated question and exclamation marks in Spanish).

Regarding Table 2, we can say that the percentages are very similar and show the same trend, because in both groups the most frequently used space is the one at the end of the graphical line and immediately after comes the use of centring spaces for the title, which seems to be in both cases the effect of school instruction.

Table 3 shows the total numbers and the means of PMs, with and without blank

Table 3
Total and mean value of punctuation marks and types of space in the two samples

<table>
<thead>
<tr>
<th>Types of Mark</th>
<th>Total</th>
<th>Mean</th>
<th>Total</th>
<th>Mean</th>
<th>Total</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italian</td>
<td>n = 78</td>
<td>545</td>
<td>7</td>
<td>218</td>
<td>763</td>
<td>9.8</td>
</tr>
<tr>
<td>Spanish</td>
<td>n = 56</td>
<td>457*</td>
<td>8.2</td>
<td>165</td>
<td>622</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Note: we have already eliminated from this total the exclamation mark that opens and the question mask that opens, which is a peculiarity of the Spanish orthography.
spaces. As Table 3 shows, the two groups are very close as regards the mean quantity of PMs, which is slightly greater in the Spanish sample. Since subsamples are incidental ones, we have no specific hypotheses for the two languages regarding the quantity of PMs and textual spaces.

We then considered each single text, separating out the ones that did not have any internal punctuation, a criterion which was crucial in previous work (Ferreiro, 1991). We found that 44% of the texts of Italian and Spanish speaking children did not have any internal punctuation (see Table 6 below). Some of these texts had a title and used graphic devices (such as centring spaces) to differentiate it from the beginning of the story, e.g. using blanks to the left and to the right of the title to produce a shorter line and a centring effect. Some texts use a similar device for the word ‘END’ to signal the end of the writing. This group also includes texts that have a single full stop after the title and/or a final full stop at the end of the story, and a few that have only one other internal PM of any type.

5. Two contrasting texts: with or without punctuation

We must be aware that children are able to use many syntactical and lexical devices to articulate the text, with the result that the reader is not bothered by the lack of punctuation. In other words, their stories may be considered very well written, complete, fully understandable, even regarding the wolf’s deceitful behaviour (as analysed in Martines & Pontecorvo, 1996). This is the case of the Italian example 7 represented in Table 4. Only the beginning and the end of the story are highlighted with space centring. Alessandro’s story is good because it is linguistically and cognitively refined and full of descriptive and mental details, which efficiently resolve difficult parts of the story which other children cannot do despite their use of punctuation!

As we see in Table 4, Alessandro wrote an interesting text without any punctuation and with a lot of simple coordination connectives (e = and). But his text does not look repetitive and he uses good textual strategies for continuing the story development. He makes considerable use (in lines 7, 14, 15, 17, 21, 24, 25, 27 and 29) of the written narrative form of the Italian passato remoto (Pontecorvo & Rossi, 1998), an inflected past form which has almost disappeared from the spoken language of most Italians and is reserved for written narrative. This form is used for the development of the action, while the imperfetto is correctly used for verbs with a continuative aspect (e.g. the description of LRRH and the reason for her name). Moreover, he introduces a conditional phrase to express what the mother had forbidden: LRRH

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7 Since we are not focusing here on the peculiar problems of spelling of early literate children, we will reproduce children’s texts by normalising the spelling to the conventions of the system of writing of each language. A thorough discussion of this topic is presented in Ferreiro, Pontecorvo, Ribeiro-Moreira & García-Hidalgo, 1996a, b, c. A presentation in English of the problems of transcription and normalisation of children’s texts is included in a forthcoming special issue of the International Journal of Educational Research (Pontecorvo, 1999).
<table>
<thead>
<tr>
<th>cappuccetto rosso</th>
<th>Little Red Riding Hood</th>
</tr>
</thead>
<tbody>
<tr>
<td>L01: c’era un volta una</td>
<td>L01: Once upon a time there was a</td>
</tr>
<tr>
<td>L02: bambina molto</td>
<td>L02: very poor girl</td>
</tr>
<tr>
<td>L03: povera e aveva</td>
<td>L03: and she had</td>
</tr>
<tr>
<td>L04: un cappuccetto</td>
<td>L04: a red riding hood and</td>
</tr>
<tr>
<td>L05: rosso e un vestitino</td>
<td>L05: also a little dress</td>
</tr>
<tr>
<td>L06: lo stesso rosso e un giorno</td>
<td>L06: also red and one day</td>
</tr>
<tr>
<td>L07: la mamma le disse di</td>
<td>L07: mummy said her</td>
</tr>
<tr>
<td>L08: andare dalla nonna</td>
<td>L08: to go to the grandmother</td>
</tr>
<tr>
<td>L09: a portarle da mangiar =</td>
<td>L09: and to bring her to ea =</td>
</tr>
<tr>
<td>L10: e di prendere la stra-</td>
<td>L10: t and to take the long =</td>
</tr>
<tr>
<td>L11: da più lunga e se avesse</td>
<td>L11: er way and if she had</td>
</tr>
<tr>
<td>L12: preso quella più corta</td>
<td>L12: taken the shorter one</td>
</tr>
<tr>
<td>L13: avrebbe incontrato il lupo</td>
<td>L13: she would have met the wolf</td>
</tr>
<tr>
<td>L14: e prese la strada più corta</td>
<td>L14: and she took the shorter way</td>
</tr>
<tr>
<td>L15: e incontro il lupo nero</td>
<td>L15: and met the black wolf</td>
</tr>
<tr>
<td>L16: e il lupo con</td>
<td>L16: and the wolf with</td>
</tr>
<tr>
<td>L17: viso di inganno disse</td>
<td>L17: a face of deceit said</td>
</tr>
<tr>
<td>L18: facciamo una gara</td>
<td>L18: let us do a race</td>
</tr>
<tr>
<td>L19: chi arriva prima alla</td>
<td>L19: who arrives first</td>
</tr>
<tr>
<td>L20: casa della nonna e</td>
<td>L20: to grandmother’s house and</td>
</tr>
<tr>
<td>L21: il lupo prese la strada</td>
<td>L21: the wolf took the shorter</td>
</tr>
<tr>
<td>L22: più corta e cappuccetto</td>
<td>L22: way and LRRH</td>
</tr>
<tr>
<td>L23: rosso quella più lunga</td>
<td>L23: the longer one</td>
</tr>
<tr>
<td>L24: e il lupo mangiò la nonna</td>
<td>L24: and the wolf eat the grammy</td>
</tr>
<tr>
<td>L25: e e si mise addosso i vestiti</td>
<td>L25: and and he put on the dresses</td>
</tr>
<tr>
<td>L26: della nonna e mangiò anche</td>
<td>L26: of the grandmother and he eat also</td>
</tr>
<tr>
<td>L27: cappuccetto rosso e il</td>
<td>L27: LRRH and the</td>
</tr>
<tr>
<td>L28: cacciatore liberò la nonna e</td>
<td>L28: hunter made free the</td>
</tr>
<tr>
<td>L29: cappuccetto rosso</td>
<td>L29: LRRH</td>
</tr>
<tr>
<td>L30: fine</td>
<td>L30: end</td>
</tr>
</tbody>
</table>

should take the longer route to get to her grandmother’s house, because if she took the shorter one, she would meet the wolf (lines 11–13). This conditional construction, in which the negative consequence of a forbidden action is presented, is the one most often used by parents in family conversations (Pontecorvo, 1995). Alessandro introduces the issue of the short and the long way, and he rightly attributes the intention of deceiving LRRH to the wolf using an original mental expression (con viso di inganno = with a face of deceit, in line 17). Moreover, although he uses very short lines in a vertical sheet, in two subsequent lines he divides two words into segments, one in an idiosyncratic way (mangi-ar-e = to eat) and another one in the accepted way (stra-da = way). This is perhaps an effect of school instruction.8

8 These dashes, that indicate that a written word continues on the next line, are not considered PMs.
In this relatively short text all the main events of the story are vividly told without any PMs, but with careful control of the referents. These are always rendered by their full name (perhaps in order to avoid ambiguity) and with many repetitions, similar to the ones identified by Ferreiro & Ribeiro-Moreira (1996).

The texts containing a lot of punctuation, even in unexpected places, are very interesting because they offer some hints as to the different principles of organisation. This is the case of the Spanish text that we present in Table 5 (Eliana, a001). The text produced by Eliana shows many attempts to use several PMs (there are 40 PMs). The text has a centred title and starts with an upper case letter. The next upper case

---

**Table 5**

The story of Eliana (a 001)

---

Caperucita Roja

L01: Habia una vez una niña llamada.
L02: dijo que vaya a darle unas empanadas y torta para la abuela Caperucita fue a darle todo eso
L03: y la madre le dijo que tome el camino mas corto para que llegue mas
L04: rapidó y ella iba cantando, un lobo se acerca, el lobo la que
L05: ria agarrar pero Caperucita saltaba, saltaba.
L06: ra el otro camino asi el tomaba un atajo y llegaría mas,
L07: rapido a la casa de su abuela, el lobo llego mas primero.
L08: Escondio y el lobo se disfrazo de la abuela
caperucita toco la puerta
L09: que sono asi toc, toc, toc. ¡ el lobo le L08: - pasa dice el lobo caperucita entro dijo ¿
L10: - pasa dice el lobo caperucita entro dijo ¿
L11: - para verte mejor ¡ que ¿ orejas tan grandes tienes?
L12: mejor - ¿ que olfato tan grande tienes? - para escucharte
L13: boca tan grande tienes? para comerete mejor Caperucita Roja
L14: corria, corria, corria, saben en, donde
L15: la escondio en el en, el armario, la abuela
L16: armario y llamo un cazador. El cazador,
L17: y la comio y se fue no volvio nunca mas
(line 1) is preceded by a full stop, motivated perhaps by the rule concerning the link between upper case and the full stop.

Let us first examine the cases in this text where the location and the choice of PMs are acceptable. There are six commas positioned between repeated words or onomatopoeics (lines 5, 9, 14). Two full stops followed by capital letters (lines 7 and 16) as well as two commas (line 4) are located at borders of the episode. The seven hyphens (lines 9–12) are located immediately before a piece of quoted speech. The five sets of question marks are all located according to convention.

Now let us look at the positioning of the other PMs. The first hyphen (line 5) occurs at the beginning of a piece of reported speech. Even though we do not conventionally use any mark in such a case (contrary to the case of quoted speech, i.e. ‘the exact wording’), the use of the hyphen here is perfectly understandable. The only exclamation mark is placed at the beginning of a piece of dialogue (line 9), for which a number of hypotheses are possible. Two commas appear in rather unexpected places (lines 14–15) in which the child attempts to carry out a very unusual operation that involves introducing herself as a commenter, inside the narrative, to talk (indirectly) about an episode of the story that was omitted in line 8. At that moment she clearly loses control. The last comma comes after the introduction of the last character (the hunter). Finally, the comma in line 6 may be linked to the ‘end of line effect’ (see below).

The latter example shows why it is so difficult to assign a single category of PM use to each text. Several principles may be at work at the same time because children are learning by doing and they do not usually return spontaneously to revise the text.

6. Places, forms and functions in punctuation

Knowing how to use punctuation means knowing how to coordinate at least two conditions. The first is the list of the available marks (what are the forms?); the second is their position within the text (what functions do they have to accomplish?). Children may have some, albeit unsystematic, knowledge of PMs, but more probably they are just practising where to place them while writing, and they are learning about them at the same time.

For this reason we prefer to refer to the points in the story in which punctuation appears. In order to make the children’s texts comparable we divided the possible ideal story into episodes and different types of speech genre, mainly narrative and quoted speech. The episodes are defined by change of location of the action and/or by the introduction of a new character.

Only as regards onomatopoeic devices did we find that the children tried to represent (perhaps) sounds by using unexpected marks (all the following examples refer to the knocking on the door of the grandmother’s house).

Luciana (u014) uses single quotation marks twice for:

pum‘ pum’

Juan Carlos (a020) uses dots twice perhaps in order to represent the lengthening of the sound:
Renato (i326) also uses dots in two different places, in order to represent perhaps the permanence of the sound, when first the wolf and then LRRH knock at the grandmother’s door:

toc...
pong...

These children are mainly learning in school settings, but we cannot exclude that their representation of non-linguistic sounds is also influenced by comics. In other children’s texts we found the duplication or triplication of the exclamation mark or of a letter, which is typical of writing in comics. For instance, when the grandmother discovers the identity of the wolf, Rita (a005) makes her say:

¿ AAAAA? es el lobo
¿ AAAAA? it is the wolf

Apart from the confusion between question and exclamation marks, this device seems to be taken directly from comics. Indeed most children discriminate correctly between exclamative or interrogative intonation by using both the question mark and the exclamation mark, as in the following excerpts from Rita’s text:

¿ donde vas?
¿ where are you going?
¡ a la casa de mi abuelita!
¡ to my grandmother’s house!

Another preferred place for using PMs in a rather unexpected but comprehensible way is the area of Quoted Speech. Children seem to be sensitive to the problem of representing a change in speech genre. However, the positioning is not consistent, particularly in Spanish in which the first mark of the pair indicates the beginning of the change of the illocutive part and the second the end. In the following example the quoted speech of the wolf is addressed to the grandmother. The girl does not know exactly where to end with the exclamation mark, but the intention is clear.

Rita (a005)
¡ Soy Caperucita te vengo! a hacer compañía
¡ I am LRRH I am coming! to visit you

Another Spanish speaking child provides a similar example:
Gonzalo (a011):

e el lobo feroz le ¿ dijo donde vas?
the wicked wolf (to her) ¿ says where are you going?

And a little later the same boy writes:
¿ el lobo qué llevas adentro de esa canasta?
¿ the wolf what are you bringing in this basket?

We found a similar problem with the introduction of quoted speech in some Italian texts.

Marta (i026)
la mamma gli “ disse ” stai attenta
the mummy (to her) “ says ” be careful
(....)
il lupo che gli “ chiese ”
the wolf that “asked” her
gli “disse” che occhi grandi
(to him) (she) “said” what big eyes

Marta is quite consistent in associating quotation marks with the quoted speech, but she does not yet know the conventional placement of them. Instead of framing the quoted speech, she frames the declarative verbs.

In the following example it is the colon which is used twice to frame the declarative verb:

Valentino (i238)
Cappuccetto Rosso : dice :
LRRH: says:
A similar but more developed case is the following:
Francesco (i024)
e gli chiese : dove stai andando bambina mia disse
and (he) asked her: where are you going my child said
il lupo a Cappuccetto Rosso : e Cappuccetto Rosso
the wolf to LRRH: and LRRH
rispose: sto andando dalla mia nonna
answered: I’m going to visit my grandmother

It seems clear that for this second child the colon has to do with declarative verbs, quoted speech, and turn taking, but that there is also a need to frame or close what has already been said. Indeed, the first two lines show a repetition of the declarative verb clauses and repetition is a lexical device most children use to frame quoted speech (Ferreiro & Ribeiro-Moreira, 1996).

7. Punctuation in narrative and in reported speech

How can we categorise the texts with PMs in spite of a large variation in the quantity of PMs? Leaving aside the texts without any internal PMs, the remaining 56% shows a large variety of marks and of locations. Indeed, in this sample of working class children all PMs are present although with varying frequency.

We categorised the children’s texts into three groups according to the textual locations of the punctuation. Although Alessandro’s example above shows that it is possible to write a good story without any punctuation, most of the children in our sample (56%) use some internal punctuation. Generally speaking, they did not use enough, but punctuation was put mainly in the appropriate places. This has already been demonstrated in our larger research (Ferreiro, 1996).

The punctuated texts can be grouped into three main categories:

Texts in which punctuation is used only when different characters are speaking (through quoted and/or reported speech) or close to the declarative verb clause.

Texts in which punctuation is used only in narrative fragments, i.e. when the narrator tells the facts of the story in an impersonal way.
Texts in which the punctuation is both in narrative and in reported speech.

Table 6 shows the consequent distribution of the texts in the two languages. This quantitative distribution also covers a qualitative one. In group B (PM only in Narrative) there is a predominance of full stops and commas, whereas in group C (PM only in Q-R Speech) there is a preference for question and exclamation marks. Group D (PM both in Narrative and Q-R Speech) texts generally show a larger variety of marks and graphical devices, including blank spaces and layout devices.

Some children in group D make a distinctive use of PMs. In these cases punctuation appears as a means for organising and framing the different speech genres of a text, by distinguishing marks according to the main distinction: Narrative versus Reported Speech. In the story of LRRH this difference also corresponds to different parts of the story, in which there is a predominance of one or another speech genre.

For group D children, i.e. children who use PMs both in Narrative and in Reported Speech, we found cases of distinctive use in 38% of Italian children and 22% of the Spanish. Let us consider some examples of this distinctive use. Simone (i329) uses six full stops in Narrative and none in Reported Speech, in which he uses two exclamation marks and two question marks in their proper places. Similarly, Stella Maris (a019) uses six full stops and seven commas for Narrative, but only question marks (three pairs which open and end the question) for Reported Speech.

The more interesting cases are those in which the distinction between the two textual spaces is achieved by using marks which could be easily interchanged. For instance, Antonio (i315) uses only commas and full stops which are associated with a change of line: full stops are reserved for Narrative, whereas commas are used for Reported Speech. Vanesa (a022) does the opposite: she uses 16 commas for Narrative and three full stops for Reported Speech.

8. Possible effects of the end of the written line

In order to better understand the children’s intentions and their initial difficulties in the use of punctuation, we should remember that PMs have a graphical existence

### Table 6
Percent distribution of punctuation according to text genres

<table>
<thead>
<tr>
<th></th>
<th>A (Absence of internal PM)</th>
<th>B (PM only in Narrative)</th>
<th>C (PM only in Q-R Speech)</th>
<th>D (PM both in Narrative and Q-R Speech)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Percentage</td>
<td>Total</td>
<td>Percentage</td>
</tr>
<tr>
<td>Italian</td>
<td>n = 78</td>
<td>41</td>
<td>52.5</td>
<td>8</td>
</tr>
<tr>
<td>Spanish</td>
<td>n = 56</td>
<td>18</td>
<td>32</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>n = 134</td>
<td>59</td>
<td>44</td>
<td>17</td>
</tr>
</tbody>
</table>
that can be recognised without understanding their textual function. Indeed for a
novice writer, punctuation is an additional task rather than a helpful tool.

Division into parts can be implemented through graphical devices other than PMs:
layout and graphical lines, blanks after certain parts (or even indentation), upper
case letters, and sometimes lexical devices (such as repetitions: Ferreiro & Ribeiro-
Moreira, 1996).

However, a clear distinction seems to have been acquired by quite a few of these
children: a written narrative has a title at the beginning, and a device to indicate the
end. In many cases the word FIN (Spanish) or FINE (Italian) was used. The interesting
thing is that both the title and the end-word are located at the centre of the line.
This creates a graphic effect: the margins of the text itself are regular, with no empty
spaces (no paragraphs, no indentation, etc.) while the title and the end-word are
surrounded by empty spaces (wider left and right margins). This does not mean that
the title and/or the end-word cannot be distinguished from the narrative by other
devices (capital letters, underlining, and even a dot at the end), but the main graphic
device seems to be the modification of margins leading to a ‘centration’ effect.

This seems to have consequences for the utilisation of PMs. In fact, if the narrative
itself must constitute a ‘graphical block’, it is then necessary to fill up all the spaces.
The left margin is ‘self-controlled’ because we write from left to right. The right
margin, however, depends on the length of the words that have to be written. As
children have great difficulties in anticipating the space needed for writing a given
word, their writing could produce undesired empty spaces at the end of the graphical
line, which are out of the children’s control. These spaces can be eventually filled
by PMs (related or non-related to the text that precedes or follows it).

Thus, we can perhaps postulate a ‘graphical principle’ that, in some cases and
under certain circumstances, controls the use of graphic (i.e. punctuation) marks not
related to syntactic or discursive borders. This is illustrated in the following
examples. In transcribing the examples, we have used a vertical line (|) to indicate the
end of the graphical line while each punctuation mark is always presented between a
left and right space.

Cecilio (a009)

y salía saltando . | y cantando por el bosque
(and she went out jumping up . | and singing in the wood)

Francesco (i024)

e si avviò . | Per la strada della casa della sua nonna .
(and (she) began to go . | Along the street of her grandmother’s house.)

In both cases the full stop at the end of the graphic line does not have a syntactic
function. It could, however, be claimed that both children had suddenly changed
their writing plans: a phrase could end perfectly at the first full stop; they then
intended to add something else and, without going back to delete the full stop, they
continued the sentence.

The mark at the end of the line was sometimes a comma as in the following
excerpts:

Silvia (a015)

se disfrazó de la abuelita y . | sonó la puerta
((the wolf) disguised himself as the grandmother and, | (LLRH) knocked on the door)

The first part involves the episode where the wolf is the actor, whereas the beginning of the following line corresponds to the starting point of LRRH’s arrival at her grandmother’s house. It could also be the case that the child may have intended to mark more clearly the frontier between both episodes, replacing the conjunction by a comma. However, the same child had used another comma at the end of a previous line, when LRRH is explaining to the wolf why she is going to her grandmother’s house:

   porque está enferma y necesita , | acompañante
   (because she is ill and needs , | company)

   In this second case it is very difficult to imagine any other reason than the need to fill up the line. The same could be said of the following examples:

   Giorgio (i016)
   Cappuccetto Rosso . | Disse
   (LRRH . | Said)
   Noelia (u012)
   la mamá . | había hecho pastelitos
   (mummy . | had made cakes)
   Eliana (a001)
   llegaria mas , | rapido
   (she) would arrive more , | quickly)

   In other cases it seems that the child is in some way anticipating a sign that will appear in the next line:

   Elisa (i243)
   e gli chiese “ | ” dove vai bella bambina ? ”
   (and (he) asked her “ | ” where are you going my pretty child?”)
   Carlos (u005)
   encontró la casa . | de la abuelita .
   ((he) found the house . | of the grandmother.)

   In the Spanish sample there are two texts that make extensive use of these end of line marks. Pamela (u013) uses them four times in the same episode (encounter of LRRH with the wolf):

   y - | el lobo le dijo
   (and - | the wolf told her)
   (...)
   y - | Caperucita Roja le dijo
   (and - | LRRH said to him)
   (...)
   a la casa de - | mi abuela
   (to the house of - | my grandmother)
   (...)
   pero - | vas por el camino largo
   (but - | go the long way)

   The choice of the mark at the end of the line seems strange. However, hyphens
are good PMs for indicating the turn taking and it should be noted that all these hyphens, as well as being located at the end of a graphic line, are within a piece of quoted speech or when a speaker is introduced. So, perhaps these marks fulfil a double function: indicators of being in a ‘dialogue space’ and, at the same time, of completing the graphic line.

The other case is Emilia (a018), who uses an end of line full stop three times in the same episode (LRRH’s first encounter with the wolf). This child uses a total of eight full stops, and only two of them correspond to syntactic borders.

It could be claimed that, when this end of the line effect is found more than twice in a given text, we are probably dealing with the first attempts to use PMs on purely graphical grounds, without taking into consideration syntactic boundaries. However, the same procedure appears from time to time in otherwise well punctuated texts, illustrating the child’s difficulty in controlling the empty spaces at the end of a line in a written story.

9. Discussion and conclusions

The texts we have analysed here were obtained through the very general instruction given to the children to write the story of LRRH as best as they could. Under writing conditions that do not suggest a focus on PMs, some children make extensive use of them. So, the presence of a given PM in a particular text space is also revealing of the child’s intention to punctuate. We do not mean that children who do not use PMs under these circumstances are unable to use them in general.

The texts were produced and collected without making explicit suggestions regarding the need to revise them. All primary school teachers know that revision is not a spontaneous attitude in children. It can be encouraged by careful teacher intervention, but it is not as spontaneous as writing or reading. Children’s difficulties in adopting the role of a reviser are perfectly understandable. In order to revise a text a change of enunciative position is needed because of the writer’s need to assume an external perspective and to act as a critical reader of their own text. This decentration—in Piagetian terms—implies a real cognitive effort, particularly in children who need to coordinate so many aspects of a written production at the same time. No doubt it is important to look at what happens in a classroom context where children are encouraged to revise their own texts (in small groups). However, the teacher’s interventions should be based on some knowledge about the difficulties children face with PMs. Our data do not offer ready-made solutions for educational interventions, but they may help educators to think about them and to try to understand what children have in mind when they write.

The texts we have analysed here were produced not by middle-class children but by children from low-income families, that generally have few opportunities to have books at home and to be exposed to reading aloud. Moreover, some of these children were making their first attempts to write an entire story with us because we did not pick experimental classes but the more common traditional ones where teachers share the supposition that the writing of 7-year-old children rarely goes beyond a very
limited number of juxtaposed sentences. In fact, the teachers themselves were surprised by the length and complexity of the stories produced by the children, who had not yet received any explicit teaching about how to write a story.

We collected these texts in diverse countries with an aim to compare. Different languages that have a common origin offer excellent opportunities to estimate the weight of variables that cannot be manipulated through a single language. For instance, the fact that Spanish children had to deal with two more additional signs (those that mark the starting point of interrogative and exclamative clauses) could be conceived as an additional difficulty. On the contrary, comparative data demonstrates that, instead of being a difficulty it is a facilitator, because Spanish and Italian children seem to look for marks that frame the quoted speech and Spanish children had the repeated exclamation and question mark available to frame types of speech. We have presented some examples where Italian children doubled the colon as a framing device, whereas the Spanish children were using the repeated exclamation and question marks at the same aim.

Commonalities across languages help researchers to build up hypotheses that lead to new research designs that can be observational, experimental (Fayol, 1993), clinical or case studies, depending on the nature of the hypothesis. Moreover, all children, in spite of differences in culture, literacy practices and accessibility to reading materials, are faced with the many conventions of a system of writing and try to make sense of them. Commonalities in children’s uses and interpretations across languages help us to imagine new perspectives that have both theoretical and practical consequences.

Some of the results we have obtained that could be of help in thinking about the way to deal with the teaching of punctuation marks in school settings can be summarised as follows:

1. Taking a sample of children of the same age and of similar socio-cultural background does not produce a homogeneous corpus. At the same time, narratives from two different (though historically related) languages do not lead to different results. The most interesting results are related to this mixture of similarities and differences observed in the data, related to shared traditions and to specific features. For instance, there are the specificities of Spanish orthography, but both languages belong to the Western tradition of punctuation that started in the Middle Ages and was fixed by Renaissance printers.

2. Since children are writing a well-known traditional story, they do not have to invent an action-frame while doing, at the same time, what is expected of a writer of an original text: taking the appropriate decisions concerning lexical and syntactic choices, orthography, graphic segmentation between words, as well as punctuation and layout. Many indicators—such as the use of a literary lexicon, the declarative verb clause put after the turn, the preference for a formal register—suggest that children try to distinguish the written narratives they produce from oral ones. And punctuation marks are clearly written marks. However, PMs are not available from the beginning to all children and it is possible to write a well organised text without any
PMs. Some texts present punctuation in rather unusual places. Others still present punctuation only at the very beginning or at the very end, leaving the bulk of the text without PMs. Quantitative data alone cannot offer a reasonable picture of children’s efforts in taking into account this set of non-alphabetic marks.

3. One of the first graphic displays the majority of these children show is the following: a written narrative has a title at the beginning, and some device to indicate the end. The interesting thing is that both the title and the end-word are located at the centre of the line. So, the text itself appears as a compact block, contrasting with the graphical devices that indicate the beginning and the end. The need to avoid spaces at the end of the graphic lines could perhaps be a reason for the use of some commas, points and dashes that are not related to syntactic frontiers. So, we can perhaps postulate a ‘graphic principle’ that in some cases and under certain circumstances, controls a use of graphic marks that is attracted by the ‘end of graphic line effect’.

4. Children made sophisticated attempts to understand the function of PMs. For instance, they might use some marks for one type of text genre and others for a contrasting one (Narrative and Reported Speech). This is even more surprising when children succeed in doing it using only two signs that, in fact, can be used in both cases, such as full stops and commas.

5. The teaching of PMs in Western countries shows two main trends: to teach that PMs correspond to pauses for breath (an instruction for the reader) and to teach that PMs correspond to the notion of ‘complete sentences’, ‘the end of an idea’ or the ‘logical structure’ of the text (an instruction for the writer). However, children’s attempts to use PMs do not seem to be guided by either of these two classical positions.

6. In this study we have concentrated mainly on deviant cases to illustrate a main methodological issue. The development of punctuation cannot be understood through a normative perspective: first, because punctuation does not have the same normative character as word spelling; second, because information about punctuation comes from various sources (school and comics seem to be the main ones) and, last but not least, because it is methodologically more productive to look for the reasons why a novice writer has put a given mark in a given place than to classify it as a mistake.

7. Each PM probably has its own developmental history, but none of them can be studied in isolation, because contrastive use seems to be one of the keys to the problem. Punctuation marks cannot be studied outside the processes of text production either, because the only place for PMs is a written text.

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