

FROM THE PRINTED MATERIAL TO THE DIGITAL AGE – FROM THE INVENTION OF SPELLBOOK TO THE CYBERSPACE

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Abstract

The present work is constituted by the discussion of the master's papers in progress, those are about the spellbooks to the insertion of technologies in situations of the teaching-learning process in a historical-critical analysis. The initial analysis starts from the survey of the first reading textbooks used between the Empire and Republic, passing by the appearing of the press, the structural modifications of the spellbooks, until the inclusion of the digital technologies to the school educational proposals. It is undeniable that, on the field of spellbooks and also on the reading texts more advanced, the last decades correspond to an important transition period: the nationalization of didactic literature, the noticeable improving of contents and teaching methods those incorporate since digital books until learning virtual atmospheres more complexes. In this context, the information and communication technologies position themselves since the basic ways of printing until the organization of the hipertext in the cyberspace.

Keywords: spellbooks, technologies, teaching-learning process, convergence.

From the spellbooks to the spellbooks: the construction of the textbook

The organization of the educational proposal of the school institution is ruled by choosing methodology, contents and resources those will support the didactic transposition of these contents. After oral tradition period, when, at the universities, the textbook was restricted to teachers because the difficulty to produce in large-scale (wrote material was restricted to manuscripts reproduced by copyists), the possibility to print large quantity of material by mobile press democratized the access to writing technology. That is, now it is possible that the textbooks be organized from the common interests to each institution.

We started the research by the period where it was possible to recover the origin of textbooks adopted in portuguese and brazilian printer's, passing by the effativation of production in 80^s and 90^s, of the 19th century, when the primary education started to be expanded between political and social questions.

Understanding the appearing of the spellbook, in the face of this relation of material production and dialectic and their use in the primary education, it is extremely important to the first grade teacher, due to this subject being not much explored. The conception of schooling that we inherited comes marked by the advance in industrialization; by the appearing of the press; by the growth of the cities and eruptions of the individualism; and by the capital system. Like this, we understand that the capital state is built by the society, it is not unlike this. The state does not form the society, but it is formed by interests of classes.

The spellbook has its origin on the alphabet chart of the 19th century, and it is subsequent, obviously, to the appearing of the schooling methodologies, those, according to Barbosa (1990), date back to the ancient times. The teaching methodologies originated themselves from the alphabetic systems, those were very used in the schools of the province and continue being used currently.

To lead all children to success on the reading and writing learning, the school equips itself with a methodologic fundamental that guides a series of teaching strategies, using as base resource a printed support material, whose origin is related to the alphabet charts of the 19th century: the spellbook (Barbosa, 1991, page 54).

Until the 18th century, we had the exclusivity of concise methods. Like this, the "concise way" is the most ancient of all, it has more than 2000 years (Barbosa).

The spellbook, initially, followed the model of concise methods. These see the writing language as an object of the external knowledge to the apprentice, and so, carry out an analysis purely rational of its elements (ditto, page 46).

Passing the time, the spellbooks started to multiply themselves, making concrete and widespread the reading model idealized by the methodologies. Before the appearing of spellbooks of schooling, there was absence or rarity of the textbooks, difficulting the work to teach "the first letters", because the existing books or materials were those that children brought from their home.

Before the appearing of the printed material (spellbook), teachers used on the primary schools the next materials:

“Manuscripts texts drew up by own techers, letters, official letters and office documents were reading and writing material. João Lourenço Rodrigues (1930), student of primary school, who is a result of this teaching method, relates: “(...) the teacherr prepared a manuscript ABC, on a sheet of paper, that was caught with “pega-mão” for do not get it dirty. After the manuscript letter of ABC, came the “B-a-Ba” that was the begining of a long serie of silable letters. So, came the letters of names and, finally, the letters from other place, those served to finish the reading learning off. The method adopted was spelling. The letters from other place, lent to the teacher, served to exercise the students on the difficulties of the manuscript letter... The boys had choice right and they gave preference to some letters, with bigger format and smaller content. They were official letters adressed to the teacher and, some of them brought the signature of General Inspector.” (PFROMM, 1974).

Besides the letters of accounts of travelers, it was used the Impere Constitution (and law of 1827, the first brazilian law, specifically, about public instruction, precibes this), the Code and the Bible to teach the students.

The complaints about the lack of textbook and didactic material in the province, until nearly the end of past century, were frequents. As we will can verify, the teachers themselves drew up the manuscript texts and materials to be used at the schools of reading and writing, counting on the contribution of students.

Like this, the first printed material used in Brazil and in the primary schools came from Portugal, because on that time, before 1808, there was not printed material in Brazil; the country kept a colony system and the activities were more directed to agro-export. The education was not, at that moment, the priority, but the exploration of raw material and the enrichment of metropolis. The State is formed from interests of classes and the class that dominates is that one which arrests the political and economic power, it is not the class of workers, so the State engenders a serie of structures which will make its hegemony perpetuate.

Around the end of 15th century, Portugal used at the schools the *LITTLE LETTERS* those, subsequently, were named speelbooks. They were small books that collected the alphabet, the alphabet chart, and rudiments of catechism. Portugal carried consignements of school books out to the colonies, so that reading and writing were taught at them. In 1515, for example, D. Manuel sent 2,500 volumes to Ethiopia, among them, there were 2,000 LITTLE LETTERS and 42 catechisms (ditto, page 57).

The first reading materials which arrived in Brazil were portuguese spellbooks, we have as example: the João de Barros' spellbook, there was also the comment and the use of the spellbook drew up by Friar João Soares, which was printed in 1539 and published many times. Another work, the *Método Castilho¹ para o Ensino Rápido e Aprazível do Ler Impresso, Manuscrito e Numeração do Escrever* (Castilho's Method to the Quick and Pleasant Teaching of Printed Reading, Manuscript and Numbers of Writing), produced by Antonio Feliciano de Castilho (1850), in Lisbon, it was used in Brasil, too. This work included the alphabet, alphabet chart and reading texts, being marked by phonetics worries (ditto, page 57).

One of the textbooks published and quoted above was the *Cartinha de Aprender a Ler* (LITTLE LETTER to Learn Reading), by João de Barros, in portuguese language, printed in 1539 by Luiz Rodrigues' workshop and used in Brazil. Besides teaching the first letters, it collected the rules and commandments of the Holy Mother Church.

The portuguese spellbooks were the first reading material, bringing, in its essence, questions of morality, obedience to God and respect to the homeland.

Like this, the didactic material appears to supply the desires of a determined class of elite. The manipulation of ideas, rules start to take part, of subliminal way, on the pages of spellbooks.

The story told throught the spellbooks of schooling are not formed by concepts of division of works, relations of production, way of production.

So, we have this fundamental contradiction between the capital and work. There is no way to forget this question as workers that we are of an area of no-material performance, we are intellectual, but all consumed by the question of contradiction between the capital and work. The spellbook was an instrument of manipulation and dissemination of ideas, used by the teacher in the teaching of reading and writing and, at the same time, contributed to keep the presenvation of the State and Church. "To the Church, the moral education of the brasilian people shoud be of its exclusive competence. It was, to catholics, a political attempt, patriot, once that, collaborating to the purity of costoms, it was forming useful and conscious men, with the necessary knowledges to the good citizens." (SHIROMA, 2004, page 20).

The reading learning associated to religion started on the ancient LITTLE LETTERS, because there was a big worry about the conversion of the children. The word spellbook originated itself from the unfolding of the word LITTLE LETTER.

The term spellbook:

(...) Constitutes an unfolding of the word "LITTLE LETTER" that, in turn was used in portuguese language since the begining of Modern Ages, to identify those printed texts whose explicit purpose was to tech reading, writing and counting. They usually presented the alphabet, the construction of words and their subdivisions, some simple excerpts with moralising contentes, nearly always preceded of excerpts of prays or salms, once that religiosity was the mark of that primary teaching which, little by little, constituted itself. The word *spellbook*, that comes from LITTLE LETTER, date back to, in turn, the most ordinary and frequent situations: until 19th century, most of (the majority, many times) wrote texts that children brought from their home to use at school as material of teaching reading were manuscripts: among them, letters were a privileged source (Boto, 1997, page 495).

The ideal spellbook is that which uses social-cultural and linguistic expressions that, when the student reads them, he can comprehend the real. The expression spellbook, according to the dictionary, passes to be: book destined to the teaching of the alphabet's letters and elementary notions of reading and writing (DUARTE, Sérgio Guerra. Dicionário Brasileiro de Educação. Rio de Janeiro. Edições Antares: Nobel, 1986 - page 175).

The material that was printed in Portugal, on that time, passed by a commission which judged the books; this commission appeared in 1875, founded by João José de Sousa Telles. “This suggested the occurrence of public open competition in order to draw textbooks up for the primary and secondary education; open competition that would have as base the preparation of a previous program which showed the list of disciplines that should be contemplated on the text” (Boto, 1997, page 515).

The relation of the Press and Brazilian education with Portugal is due to, obviously, the narrow ties those united the former colony to Portugal, during all 19th century and even during the first decades of 20th century. The Press arrived in Brazil only in 1808, with D. João, who wanted to impose to all people his culture, manners and education. For that this happened on an appropriate way, the government needed of a press in Brazil, that was created in May 13th, 1808.

Considering the period between 1810 and 1910, it is possible to verify a change in the profile of the authors. “A first group started its production from arrival of the Portuguese royal family in Brazil, and its works were produced by *Impressão Régia*, but we can identify a first *generation*, from 1827 on, authors worried with the organization of the secondary and higher courses, only outlining some contributions to the teaching of first letters” (BITTENCOURT, 2004, page 480).

There was a slow increase, however, constant, of the number of bookstores, that passed from two, in 1808, to five, in 1809, seven, in 1812, and twelve, in 1816; a lot of them were, obviously, small establishments, TANTO QUE in Rio, between 1817 and 1820, there were only four bookstores in the city.

With the Brazilian press, the textbooks started to present modifications in relation to cover and graphics. In the textbooks started to appear colorful pictures. There was a significant change on the format, on the very pages, however they were not so different of European model. Appeared the first organizations of a kind of hypertext in the textbooks, that are subsidiary of search and preparation of formal knowledge at the school.

The development of techniques to improve the use of technology resources at school – characterize until that moment by the organization of writing in textbooks – is expanded by the subsequent discoveries and inventions those were being integrated on the analysis of educational discourse. We will deal with them on the next item.

Convergences of language, writing and image – inclusion of digital technologies at school

The digital technologies, since the invention of the mobile press in 1450 by Gutenberg, contribute to the dissemination of the information which can, now, be compared, contrasted, gathered and questioned due to the easy access to it. The daily newspapers and political series (the first manifestations of hypertext) constitute the first impact on this “democratization” of communication, followed by great inventions as the telegraph in 1845; the telephone in 1860; the radio around 1919 and the TV in 1931. In 1991, Tim Berners-Lee spreads the informational code that he called *World Wide Web* which enlarges the digital access to information.

The school kept itself, during significant time period, distant from the discussion about inclusion of these events in the educational dynamics that organized itself under the traditional paradigm where teachers kept sovereignty about the erudite knowledge and passed it only to students – those, generally little informed. This fear of technology of the educational institutions (maybe, fear of replacement of human labor in the teaching by machine or even by the attitude of NOORMOSE as for the changes that the setting required of the educational posture) made with that there was not syllabus reorganization to attend to the social demand by conscious people of the fast transformations of the space where they live; transformations that do not concern to the way of communicate and expanding the information only, but, especially the new demands of productive market. In this context, according to Arruda (2004, page 59), “education as a way of emancipation and, consequently, integrated to new ways of information and communication presupposes, at least, deep discussions about the economical-political-social systemic model where is founded the school system”. It is necessary to think on education under many views, among them, access opportunity, permanence and productivity of students in appropriate age group, adaptation of the models of formal education to illetrate or functional illetrate youngs and adults; continued formation to lay teachers; professional formation to youngs and adults excluded from formal relations of work.

The capitalist system, face to the technology explosion, determines new social positioning as for the way of production, what implies in consequences in the organization of the educational system on relation of the formation of people who are able to work with the information in order to become it an instrument of their social practice. According to Arruda (2004, page 83) “it is not about to create conditions to the school only answer to the productive system, but also insert it into reality lived by its representative individuals, so that it know to answer to the needs of its students and teachers”; denying the access to the technologies or the discussion about their impacts would be enlarge the movement of social exclusion of men and women whose access to the formal knowledge and new ways of production only happen at school atmosphere. Then, it is possible consider that “it is not a question of being prepared and preparing the students to be integrated to the “informatized” work, but using the educative potentiality of the NTIC, espeacially the enlargement of knowledge, through the universalization of their use” (ditto, page 83).

The computer appears as something to give strength to the didactic practice and add value to the relations of learning once that offers specific tools to develop different cognitive functions. Through educational softwares there is the possibility of expanding the universe of research in the classroom of the textbook to an infinity of structural, conceptual and procedural possibilities; educational softwares are, according to Kampff (2006, page 61), “all those which, even did not conceived with a educational purpose, can be used in this context”. Among these interfaces we can point out the text editor as tool capable to motivate the production of texts with insertion of pictures, graphs, tables – what evoke the interdisciplinary and dynamic character of the classes. Also there are graph editors that stimulate the criativity, valueing the criation and spontaneity of student ally to the production of formal knowledges, once that activities and traçar difficult to be

carried out only using pencil and paper are easily digitalized and improved through these resources; the computer games also usually attract the attention and can be explored according to the educational intention of determined grade or unit subject (puzzle; strategy games; schooling games; attention etc).

All the resources listed above are composed as tools those can be operated without connection with world web of computers. Referring to the possibility of access to the web, the perspectives of teaching work with the technologies of information and communication are widened since the quick and easy access to the researches spreaded until the interaction with varied simulator. The web, as aid on the development of teaching and learning relations, gives opportunity to interactivity expanding the communication between students and teachers, and both with the world. The barrier related to the educational space and time are exceeded by possibility of, for example, rebuilding historical setting, remounting the vegetation from different territory and socialize all these informations simultaneously. The projects of work with computer connected to the web must be developed in a dynamic and intelligent way, that incites the curiosity of student in the meaning of expanding the sources of research and the resources used, as resort to sources of oral history and original textbooks. The role of the pages of web is bring again the pleasure for discovery through the systemic learning, therefore collaborative, the interactivity and the organization of critical thought about what is propagated in the hipertexts offered in the cyberspace.

When the digital potencial is defended, it does not mean legitimize the capitalist incorporation of these technologies, but, incorporate them to the formation of the teachers and students with intention of analysis and investigation of real motivations of these ways, ending the myth of the sovereignty nature of power exercised by them, focusing on a critical reflection about this mechanism that can be to service of capital in the meaning of to oppress and alienate, because, according to Adorno, "in a period when the public opinion reach a condition when the thought inevitably turns itself into merchandise and the language into its clarification, (...) the liberty in the society is inseparable of the clarifying thought" (1986, page 12).

In this field of analysis, it is up to the educative sphere verify the impacts of the new electronic medias on the organization of the syllabus and knowledges that intend to teach. The purpose is the preparation and implementation of educational proposal capable of overcome the limitations of educational formal space and incorporate to the school discourse the critical- reflexiva analysis about technologies, considering the decodefication of messages in a pluralist ambit, when the intentionality of the issuing and the ways be allied. The "treatment" of the information, in this context, will become the receiver a lucid decoder, capable to select what he listens and reads in functional knowledge in order to transform his social pactice, once that, according to Fialho and Matos (2000, page 154), "the machine, when inserts itself as attacker in the men's world, defines new models of how to be in group (...). The cyberspace with its psycovirtual ways of liberation, or big utopias". Therefore, it is necessary to plan in an organized way the didactic action having in mind a society of information that do not hold more traditional techniques of pure "transmission" of concepts ready. Moran (2000, page 19) mentions that "there are three important fields to virtual activities: the research, the

communication and the production”, so, with the appropriate syllabus, the technologies of communication and information of contemporaneity favor the collaborative and critical building of knowledge in spaces delimited by physical presence and spaces created on the web.

Final considerations

The school institution is, in the present social context, privileged atmosphere to dissemination, clarifying and critical reparation of the culture. In this meaning, there is the need of encourage reflexive analysis about the ways by whom this institution will give condition to the students and teachers discuss culture in a space-time that submerges in a new organizational structure, called Information Age. The society of information makes emerge the new educational problematic which includes since the treatment of informations propagated by several ways of mass communication until the way and intensity with that information will be presented in classroom and configured in everyday of the individuals of the teaching-learning process.

In this way, the lecture notes and text books become themselves less dogmatic and massed and the action of the teacher disconnected of the apathy of fulfilment of determined didactic unit proposed by the book and/or lecture notes, can be more intentional and promising. The computer and the internet appear as huge reference to research and even to continued formation to studentes and also to teachers; however, there is the need of, besides the access, offer condition to the student select, treat and socialize the informations that he collects. That is, it is necessary to subsidize educative quality for that the informations be prepared in a convenient and lucid way. However, it is considered relevant mention that the way of presential education or semipresential are essentials, next to the criterious analysis of all discourse propagated by ways of media, educational or not, propagated by printed or virtual material.

Notes

¹ The complete title of Castilho's work is “Método Castilho para o Ensino Rápido e Aprazível do Ler impresso, Manuscrito e Numeração e do Escrever”. It was printed in Lisbon (National Press in 1850). The work appeared in second edition, REFUNDIDA and AUMENTADA in 1853. It included the alphabet, alphabet chart and reading texts, being marked by phonetic worries.

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