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DRAWING AND GEOMETRY IN ELEMENTARY SCHOOL: A LONG LASTING MARRIAGE THAT ENDS WITH A CONTENTIOUS DIVORCE

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DRAWING AND GEOMETRY IN ELEMENTARY SCHOOL: A LONG LASTING MARRIAGE THAT ENDS WITH A CONTENTIOUS DIVORCE

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Abstract
The article analyzes the history of Drawing and Geometry at the elementary school. As sources of research, we use legislation and pedagogical journals of wide circulation in the period were analyzed. It is concluded that initially there was an important link between the drawing and geometry. At the turn of the nineteenth and twentieth centuries, this will change with the separation between teaching content. Each of them has different goals now.
Key-words: Drawing, Geometry, elementary education.

DESENHO E GEOMETRIA NA ESCOLA PRIMÁRIA: UM CASAMENTO DURADouro QUE TERMINA COM SEPARAÇÃO LITIGIOSA

Resumo
O artigo analisa a trajetória do Desenho e da Geometria na escola de primeiras letras. Como fonte de pesquisa recorreu-se à legislação e revistas pedagógicas de grande circulação no período analisado. Conclui-se que, no início, houve uma importante ligação entre o Desenho e a Geometria. Na virada do século 19 para o 20, isso mudou com a separação entre conteúdo e ensino, quando cada um deles passou a ter objetivos diferentes.
Palavras-chave: Desenho, Geometria, grupos escolares.

DISEÑO Y LA GEOMETRÍA EN LA ESCUELA PRIMARIA: UN MATRIMONIO DURADERO QUE TERMINE CON SEPARACIÓN CONTROVERTIDA

Resumen
El artículo analiza la trayectoria de Diseño y Geometría en la escuela primaria. Como fuentes de la investigación, utilizamos la legislación y las revistas pedagógicas de amplia circulación en el período analizado. Se concluye que en un principio no había un vínculo importante entre el diseño
y la geometría. A la vuelta de los siglos 19 y 20, esto va a cambiar con la separación entre el contenido de la enseñanza. Cada uno de ellos tiene diferentes metas ahora
Palabras-clave: Diseño, Geometría, escuela primaria.

LE DESSIN ET LA GÉOMÉTRIE À L'ÉCOLE PRIMAIRE AU BRÉSIL: UN MARIAGE DURABLE QUI TERMINE PAR UN DIVORCE TURBULENTE

Résumé
L'article analyse la trajectoire du dessin et de géométrie à l'école primaire. Comme sources de recherche, nous utilisons les textes officiels et les revues pédagogiques qui ont eu une large diffusion dans la période. Nous concluons que, au début, il y avait un lien important entre le dessin et la géométrie. Au fil du temps cela change avec la séparation entre les deux contenus d'enseignement. Chacun d'eux, maintenant ont des buts différents.
Mots-clés: Dessin, La Géométrie, les groupes scolaires.
Initial considerations

This article provides continuity from previous studies on the inflow of two knowledge in elementary school on the 19th century, the Drawing and Geometry. The paper analyzes the trajectory of these subjects in the elementary school and discusses the moments of closeness and distance between them. Seeks, in particular to reflect on the conditions and contexts of separation, while teachable knowledge of Drawing and Geometry. Married for hundreds of years, they have been separated within school culture of elementary school. How to explain this rupture? Or rather, what are the reasons that led to the end of a marriage of almost a century between the subjects Drawing and Geometry in the elementary courses? These are the issues that the present article aims to answer.

Previous researches show the entrance context of Geometry in elementary courses. Valente (2007) reports, in details, the debates among congressmen to make the decision to inset or not the teaching of Geometry in the first law which regulated education in Brazil, the law of october 15, 1827. It has shown the content that would be part of the elementary course: “The teachers should teach reading, writing, the four arithmetic operations, practice of the broken, decimals and ratios, the most general concepts of practical geometry, the grammar of the national language” (Moacyr, 1936 apud., Valente, 2011a).

Regarding the Drawing, it has joined a little later in the list of issues of school of first letters, the name used for the elementary school back then. It is with the Brazilian legislation Reform the teaching of Primary and Secondary Court, of February 17, 1854, which noted the possibility, not mandatory Drawing: “The elementary education in public schools can also understand: elementary geometry, linear drawing” (Collection, 1854). On the other hand, the insertion of the Drawing happens, in fact, with the Reform of Elementary and Secondary Education of Court, of april 19, 1879, which contests the subject of Drawing Linear Elements for 1st grade.

By analyzing the similarities between the legal guidelines of Drawing and Geometry subjects, as well as the first textbooks that present proposals for the development of these knowledge in the schools of first letters, highlight a big closeness between them: the Drawing is introduced by geometric figures and the Geometry represented by the drawings, for instance, these are knowledge that follow similar trajectories and related in building a culture of elementary school.

Analyzing books from the 19th century can be observed the presence of graph tracing with geometric instruments for the initial years. The geometric figures, present in Geometry and also in Drawing, are represented and reproduced by observation, freehand. The objective of plotting figures is the training of the observation in the evaluation of measures and precise tracing by the student.

With the arrival of the Republic, in 1889, the Elementary education is reshaped and in the State of São Paulo it is considered cutting edge in drawing a new model for Elementary schools. The legislation that references the new model, school groups, is from 1893, and soon after the decree n.248, June 26, 18941, officiated the program for the subjects that build up the elementary course. The subject named Drawing and no longer

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1 Decree n. 248, july 26, 1894 - Approves the charter of public schools, signed by Bernardino de Campos, president of the State of São Paulo.
Linear Drawing, starts in the 1st year and Geometry from the 2nd year. Once again the affinity between both subjects from the normative point of view is evident by comparing the relationship of contents that is well detailed in the decree n. 248. For example, highlight the contents of the 1st grade, first semester, from 2nd year of elementary school:


Another excerpt that represents the concept of the legislation is the Tolosa's article from 1894, one of the authors of the program in1894, published in 1895 in the journal The Public School, titled First Drawing lessons. Tolosa clarifies that the Drawing is an important support for Geometry and powerful aid to observation. According to him, “these first lessons are a resource for the fruitful beginnings of Geometry, and don’t even think that the reason not also take advantage of the Drawing” (1895, p. 159). The author of the program says the contents of the 1st year and suggests lessons for each one of them, such as parallel lines, perpendicular, right angles. The first figure to be drawn is the triangle and, before setting out the lesson, advises the teachers not to worry about definitions, which is the field of Geometry: It is enough just to know the elements of each figure, learn to name them without invading the domain of Geometry science, which should be taught by more rigorous process.

One of the proposed lessons is the drawing of the perpendicular that before being drawn, is shown in examples in the corners of books, stones, tables, drawing attention to all corners are square. Then the teacher should do, on the blackboard perpendicular drawings, teaching that the perpendicular line is not always vertical, making the children understand that the perpendicular line is a straight line that neither leans to one side nor to the other, and how to make checks with set squares or even with a folded paper (Barbosa, 1895). Activities such as these are the first lessons of Tolosa, probably intended for 1st and 2nd year of elementary school. All drawings must be done freehand and from observation and repetition. It is evident that the proposal for drawing teaching relies on geometric figures without, however, using instruments of construction.

It presents also the book entitled General Drawing - Elementary Course understanding notions of linear drawing, geometric drawing, perspectives, notions of

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2 Oscar Thompson, Benedito Tolosa and Antonio Rodrigues Alves prepared the Program for the subjects of the preliminary course of the decree n. 248, 1894. Oscar Thompson and Blessed Maria Tolosa acted as teachers in the Model School attached to the Normal School and Antonio Rodrigues Alves was teaching inspector.
architecture\(^3\), of Faustino J. de Oliveira Ribeiro Junior\(^4\), published in 1898 by the Editors Laemmert & CIA. The publication bears on the cover the observation methodically compiled for use of elementary school students and can reveal adaptations of the legislation of 1894. In opening remarks about General Drawing, the author reiterates that the Drawing has its origin in Geometry. Drawing to Ribeiro Junior, is divided in geometric, copied with the use of aids instruments and by sight, without any tool.

In the first part, called linear Drawing, it presents the definitions and corresponding figures of geometric figures, starting with lines, angles, polygons until cylinder, cone, sphere. In the second part, called Geometric problems, constructions are made with ruler and compass, which starts with a perpendicular line to draw parallel lines until building ellipse, perspectives, as well as drawings of frames and figures. It is clear the methodological trajectory of the author. The starting point is the Geometry, its definitions and figures. Secondly is worked out the buildings with tools - ruler, compass, and square - and finally, the third step, applying geometric constructions to other drawing such as frames.

In summary, it is possible to say that the close relations between Geometry and Drawing subjects are present in the proposed legislation for the elementary school, in journals and in a few books for elementary education throughout the 19th century.

Going through the programs of the School Groups, the next reform is from 1905. Straight changes can be observed in both subjects presented. Regarding the Drawing, geometrical concepts, marks of the previous legislation disappear and are restricted to the subject of Geometry, which also presents changes in its form: it starts with solid, three-dimensional objects in the early years for only the 3rd year, working more specifically the planar geometry, triangles and square.

The geometric content almost entirely disappears of the subject of Drawing: it is left only in 4th year the reproduction of geometric solids. The analysis of the proposal compared to the previous legislation reveals an explicit rupture. Since then the Drawing does not use any more geometric objects and their point of initial support changes: instead of starting the program with points at the top, bottom, division of middle lines, quarters, thirds, right angles, acute and obtuse (1894 Program), the new Drawing (1905 Program) is introduced through simple, everyday objects, such as plants and animals - Geometry is discarded. How to explain this rupture? Or rather, what are the reasons that led to the end of a marriage of almost a century between the subjects of Drawing and Geometry in elementary courses?

To answer these questions the analysis is grounded in the way of making history used by historians and, more particularly, by historians of education. It is considered that the study of the trajectory of school knowledge is a significant element in the understanding of school subjects and their internal dynamics. It is worth considering that for the elementary school analyzed here employs the terminology set of subjects composing a school program. However, from a legal point of view, the subjects have all the content that should be addressed in each school year and accordingly, the concept of

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\(^3\) This book belongs to the collection of the National Library of Rio de Janeiro and was scanned with the funds of the project funded by CNPq, notice 2010.

\(^4\) Teacher graduated from the Normal School of the City of São Paulo and Literary inspector of the 4th District School.
school subject developed by Chervel (1990) is supported by analysis of the subjects of elementary school.

The search for continuities and ruptures of the subjects constituting the program of primary education, over a period, is addressed in comparison with other sources of research, called to the analysis precisely because the school is conceived not only as pure and simple reproducer of external knowledge, but also as a transforming agent active in these changes (Chervel, 1990). Thus, it comes from the identification of a rupture explicitly present in the legislation and seeks to understand and interpret this separation from other sources.

Specially, in addition to the legal requirements, the analysis relies on the pedagogical journals of wide circulation in the period analyzed. According to Nóvoa (2002 apud. Oliveira, 2010), the press is probably the place that facilitates a better understanding of the educational realities: it is hard to imagine a more useful way to understand the relationship of theory and practice, between the processes and realities between tradition and innovation. The search for discussions regarding changes in education programs, either in content or in methods, present in journals, can allow becoming visible continuities and discontinuities in education reforms.

The new Drawing: a subject independent from Geometry

As it has already been said, that the education reform breaks the marriage between the subjects of Drawing and Geometry is regulated by Decree n. 1281⁵, 1905. A new profile is presented from the legal point of view in relation to these two subjects from elementary school. The familiarity of the contents between Drawing and Geometry, as evidenced in the 1894 legislation, crumbles. It is evident the divorce between the two school knowledge in the Program of the early 20th century, as it is seen in the list of contents to be developed in the field of drawing:

1st year - easy objects Drawings on the blackboard and the slates. Drawing of simple objects, plants and animals with pencil and papers of different colors. Original and dictated drawings. 2nd year - Drawing with pencil, groups of objects. Drawing of animals and plants, copied from the original. Decorative drawings, dictated and original. 3rd year - Pencil drawing: simple landscapes. Reproduction of geometric models in different positions. Dictated and original drawing. 4th year - the same exercises from the past years. Drawing of animals, plants, leaves, flowers, landscapes etc. Reproduction of geometric solids. (Collection, 1905 apud., Valente, 2010)

The very next year in which the legislation expresses the rupture in the program of Drawing and Geometry, the Journal of Education⁶, 1906, published an article titled Drawing - Plan of a drawing lesson presented to the lens of the chair of Education, of the Normal School Dr. Cyridião Buarque on June 14, 1905. The education plan, presented by

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⁵ Decree n. 1,281, of April 24, 1905 - Approves and observes the education program for school groups and model schools, signed by Jorge Tibiriçã - J. Cardoso de Almeida.

the future teacher Persio da Cunha Canto\(^7\), announces the new proposal for the drawing education:

Are different [methods], however, the ones by ahi pullulam - but without further ado, they all must be abandoned. Abandoning them, creates the need for another one, lets experience then the modern that came, in a way, opening a new era in the drawing education - the drawing copied naturally. (Corner, 1906, p. 768 apud., Valente, 2010)

And, as always, for the defense of an innovative method for the drawing education it is necessary to justify the problems of the current features. And what are the deviance of the method used so far that should be left on the side?

All methods until today have given completely nulls results. It is restricted to these geometric figures (refer to Method geometric) which absolutely does not educate the hand and the view. (Corner, 1906, p. 768 apud. Valente, 2010)

It is thus identified the problem of the past methods that should be abandoned: geometric figures. In other words, the study of Geometry, its figures, definitions and applied constructions as initial form in the process of conducting the general layout drawings are reviewed and criticized. The article highlights the importance of the method called natural, characterized by enhancing the daily lives of children and direct the activities to objects and beings that surround them. He argues that the voluminous and colorful objects are which give pleasure in drawing, such as dogs, cows. Finally, it should be encouraged the reproduction of objects of interest of the child, which can develop experiences and gradually approaching to the true imitation (Corner, 1906 apud. Valente, 2010).

The proposal defended by the article is contemplated in the program approved in 1905, which emphasizes the drawing of easy and simple objects, plants and animals and discards for complete list of geometric content. At the beginning it seems to be a strong overlap between the proposed approaches and its immediate insertion from a legal point of view. But could these changes be interpreted in a simple way? In fact, the method of joining the Drawing and Geometry is questioned since the late 19th century in France, as it is seen in Pottier\(^8\):

Le système fondé sur la géométrie, qui devait faciliter les débuts en ramenant les formes complexes du monde extérieur à des lignes simples, qui visait en même temps à donner des habitudes de correction et d'exactitude, a le défaut très grave de ne pas tenir compte du caractère de l'enfant et de paralyser ses aptitudes au lieu de les développer. Loin de l'attirer vers le dessin, il l'en a dégoûté. (Conseil aux instituteurs sur les nouveaux programmes de l‘enseignement du dessin. Paris: Hachette, 1909, p. 2)

It is possible to observe that reformulations either from the Geometry or from the Drawing as it concerns the transformation of the pedagogical ideas. As a proposal takes


\(^8\) Edmond Pottier was a professor at the École des Beaux-Arts.
place of the other, the logic associated with argumentation for changing of approaches and perspectives underpin new education reforms. These proposals of pedagogical models circulate internationally and influence the process of disciplinarization of the subjects Drawing and Geometry in the paulistas school groups.

And the textbooks that almost developed Geometry course with the Drawing. How did they get reorganized in the new proposal? Is was not possible to find a book that expresses the method of drawing education naturally as it shall then be called the new proposal. However, the articles in the Journal of Education bring proposals and examples to teachers.

In June 1907, another article from the Journal of Education entitled The drawing in school\(^9\), enhances the importance of besides objects be part of the everyday life of the child, they should also be copied from natural sources. According to the author,

\[\text{it is necessary that he builds himself according to the precepts of Rousseau: That child measure with the eyes, that the child must always have in front of his eyes the original and not the paper that it represents; nothing that can be traced by memory in the absence of objects; later, then. The view will be fair and the hand flexible and it will finally lead to the elegance of the contours and the light trace. (A. R., 1907, p. 27, apud., Valente, 2010)}\]

The importance of the natural drawing and not copies of printed models is one more element of rupture with geometrical figures: it is not conceived to bring to the classrooms representations of geometric concepts such as polygons or polyhedral, since these are abstract entities.

In 1911 an article by Cymbelino Freitas\(^10\) presents proposals, comments and drawings made by children in school groups from the State of São Paulo. The article is very detailed, contains twelve pages and discusses the natural drawing, the article title. Initially, Freitas highlights the contribution of Drawing in the school education. According to the author “the Drawing discipline the child’s spirit, as well as the eyes and hand; it awakes in them the appreciation for order, for accuracy” (Freitas, 1911, p. 126 apud., Valente, 2010)

As the method, it maintains the relevance of objects that attract the children:

\[\text{The voluminous objects with a nice color are those which get the interest of people who love, domestic animals, everything that is alive, everything that is real. Here is the only true Method: the direct copy of the objects. (Freitas, 1911, p. 128 apud., Valente, 2010)}\]

The article also divides the comments and proposals in two parts: one for the drawing of the natural to the 1st and 2nd year and one for the 3rd and 4th year. Both suggests objects to be copied and presents examples of drawings made by children. A highligh is made to the position of the object to be copied in the classroom and suggests the presence of a frame or shelf model constructed to regulate the proper height for viewing of the entire class.


Everything indicates that the new proposal for Drawing education - drawing the natural - follows its defense and, therefore, does not include the study of Geometry anymore. The last article in the Journal of Education and here analyzed is entitled Theory and practice of Drawing is signed by N. M. E. N. S\textsuperscript{11} and dates from 1913. Despite eight years after the new legislation, it resumes the discussion on the method to be used in the Drawing.

Considering the drawing methods inserted into general education methods, NMENS, comparing to reading, argues that we should start from the whole to the part, in other words, adopting the analytical method:

A serious mistake resulted from a false analogy; it is to assume that the geometric development process is similar to the gradual exercises applied to the art of drawing. Geometry is an entirely abstract science, whose purpose is to measure the extent and all its figures are constructed in space. Its points, lines and surfaces are theoretical elements without real existence. (N. M. E. N. S., 1913, p. 24 apud., Valente, 2010)

The separation is guided in the division between real and abstract. On the one hand, the Drawing starts to engage with the natural representation of concrete objects and on the other hand, the Geometry, science that has always committed to the abstract geometric elements and the rigor. But it is not just a division: one does not assist the other. The previous justification, that the Geometry is a support for the Drawing, the method starts with tracing of geometric drawings then applying to other general drawing, it is no longer claimed:

The drawing gives assistance to the practical geometry, and it is not the one that leads us to learn the drawing. A good geometer might be a great theoretical calculative and not knowing how to draw. And vice versa, a good draftsman can know nothing about Geometry. There is nothing to justify this bad system making the child to draw straight lines and curves, angles, ellipses or oval only then to introduce the objects to them. (N. M. E. N. S., 1913, p.24 apud., Valente, 2010)

All the articles reinforce the new approach to the Drawing and its disassociation of geometry education: a new conception is in vogue and was confirmed in the next reformulation of the programs for school groups in the State of São Paulo. The decree of 1918\textsuperscript{12}, thirteen years after the previous one, has almost the same drawing program:

1st year - Drawing of simple objects on the blackboard, paper, by pencil or chalk colors. Original drawing or invented. 2nd year - Drawing by pencil: Animals, plants and groups of natural objects. Decorative drawings, dictated and original. 3rd year - Drawing by pencil: simple landscapes reproduction of models in various positions. Invented and dictated drawing. 4th year - drawing of animals, plants, leaves, flowers, landscapes, etc. Dictated and original drawing. (Collection, 1918 apud Valente, 2010)


\textsuperscript{12} Decree n. 2.944 of 8 august 1918 - Approves the regulation for implementation of the law n. 1.579, of december 19, 1917, various provisions about the State's public statement, signed by Altino Arantes - Oscar Rodrigues Alves.
The decree of 1918 also represents the disruption of the previous legislation and consolidates the separation. What about the Geometry? How has it been developed during this period? What are the changes evidenced in the two laws dealt in this the period?

The decree of 1905 also changed in relation to the Geometry education, as it has been said. The first change is that the Geometry, which was started in 1894 from the 2nd year, became in 1905, to be proposed since the 1st year of elementary school. In fact, in the 1st year of school groups the basics of Geometry were present, however, in the subject of Drawing. Content such as division lines in half, quarts, right angles, acute and obtuse, circle, square, are part of the program of Drawing of the 1st year of elementary school in the decree of 1894.

The second significant change is the reversal in the sequence of the concepts: before Geometry began with concepts of plane figures and then presented the Spatial Geometry. By the decree of 1905 was reversed this order: the first two years is addressed to the spatial geometric figures and in the last two is given priority to plane figures.

However, contrary to the evidence presented in the education of Drawing, that the journal of Education confirms the changes, in the case of the Geometry education it does not happen. The Journal of Education presents a series of articles on the subject of Geometry, which starts in August 1902 and goes up to April 1904. The articles are all written by Antonio Penna and establish a proposal for Geometry education.

Antonio Penna presents a set of 26 lessons of plane geometry, which constitute an educational proposal for the early school years. According to the author, the lessons are intended to publicize the education method of Plane Geometry imagined by him, with the purpose of assisting the teachers.

The articles are examples of classes, describing how the teacher should lead the class in the presentation of geometric concepts, ask questions to the students, asking them to approach to the blackboard, creates dialogues between students and teachers. The first six lessons are practically dialogues and examples of geometric concepts found in everyday life. As an example, follows an extract of the 2nd lesson:

- Who always needs to make horizontal lines, Cassio?
- The carpenter, the mason.
- Have you ever seen a mason making a brick wall? Have you seen that he is always putting a string with weight in the end, on the same wall? Why does he do that, Nestor?
  It is to see if the wall is in good standing. (Penna, 1902, p. 417 apud., Valente, 2010)

The geometric constructions are introduced in the 7th lesson - Division of line in two, four, eight, etc. equal parts, last lesson intended for the 1st year of elementary education, with the use of instruments of construction, such as ruler and compass. In the Lesson 7 Pena simulates a dialogue with the student and details the steps of the construction:

- Mario, take this compass and open it in a way that its opening is noticeably larger than half of the line ab. Perfectly: apply one of the ends of

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the compass in the point of the line and describe two curved lines, one above and one below the line: do the same thing from the point b, in a way that the new curves you will trace, cut the first two. The two curves will be cut determining the points c and d, as you can see in this picture. Now joining the point c to point d, you will find the point, it is the middle of the line. (Feather, 1902, p. 849, apud., Valente, 2010)

In the 26th lesson Pena considers that the set of lessons includes the entire plane geometry taught in schools, except from the part referring to the areas of the figures. It emphasizes that other lessons which gives continuity to the proposal are perfectly explained in Geometry by Olavo Freire.

The work of Olavo Freire called First notions of practical geometry, was published in 1894 and is a reference for the education of geometry in school groups. It is a book with 226 pages, including 490 exercises, 92 problems solved and 381 pictures, information which is highlighted on the cover of the book. The Geometry is distributed in 21 chapters, which the first thirteen are directed to the study of plane geometry, ending with the polygon area calculation. The remaining chapters are reserved for spatial geometry and include the calculation of areas and volumes of polyhedral and round bodies.

The work of Freire was analyzed by Leme da Silva (2010), who concluded that the proposed Geometry has a predominantly practical approach. From chapter 2 starts the study of geometric constructions with ruler and compass throughout the study of plane geometry.

The geometric constructions predominate in the Freire’s book, always as a sequence of steps to follow to get the final object constructed. Altogether 92 problems are presented, and the vast majorities are geometric constructions. Few are used in calculating areas and volumes. In chapter 23 the figures of ellipse, oval, spiral, helix, parabola and hyperbola are constructed.

Olavo Freire's work had many editions, crossed the first half of the 20th century and, despite not having proximity of the drawing anymore, his proposal for Geometry education survived the reform of the programs of the school groups. Regarding the Drawing it can be said that the book teaches Geometric Drawing, building with instruments, ruler and compass, all geometrical figures. A conceptual geometry and geometric constructions is established, without relying on the collaboration of freehand Drawing, preparatory method and preliminary to the study of Geometry. These are times of a Geometry already recognized in elementary school - its presence is no longer questioned in the school culture.

**Final considerations**

The study of the legal normatizations referenced in the Programs of São Paulo School Groups, particularly in the early decades of the Republic, reveals a rupture between two subjects - Drawing and Geometry. The analysis of other documents reinforces the separation and shows distinct trajectories for Drawing and Geometry education from the 20th century. A new phase begins for these two school knowledge regarding to elementary school. Certainly the arrival of the intuitions, the lesson of things and the importance of observing things contribute to a new educational method of drawing,
which prioritizes the real objects of the students interest and abandonment of abstract aspects of geometry.

It should be noted that this research focuses on the education proposals, whether present in the legislation, in textbooks, which translate and interpret the rules, or in journals directed to teachers, in which he discusses and suggests alternatives of how to develop official educational program. Therefore, it is always important to say that it is not about the effective pedagogical practice, in analyzing proposals of education. However, it is necessary not to think in a dichotomous way, theory and practice. If it is true that the realm of practice is not entirely expressed in the legislation, books, and guidelines for teachers, it would be also true that the speeches contained in these research sources remain an inseparable relationship with the actions of teachers.

A macro analysis allows us to infer that the drawing as school knowledge, by joining the programs of the elementary school in the mid-19th century, promotes, encourages and contributes to the permanence and consolidation of Geometry in the elementary school. The Drawing during the Empire and the first Republican legislation in the State of São Paulo is assumed as a support to the geometry education. The freehand tracings of geometric figures, studied in the subjects of drawing, play reinforcement to the Geometry of the initial years. Besides the practical importance of geometrical knowledge, geometrical figures assume the role of conductor for the methodology of the Drawing education and, thus, gain more recognition.

With the crisis pointed out to the method of teaching Drawing using geometric tracing, the dependency relationship between Drawing and Geometry breaks. A new conception settles, however, the Geometry is already established with its own proposals. It is possible to say that the Geometry gained its independence to follow its own trajectory of recognition in the elementary education.

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