

TEMA MONOGRÀFIC

The material turn in the History of Education¹

El gir material en la història de l'educació

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RESUM

Escrit com a introducció al dossier sobre cultura material escolar, aquest article està organitzat en tres parts. El primer apartat, explora les relacions entre cultura i pràctiques escolars, intentant delinear l'escenari inicial d'aquests debats. A la segona part, es delineen tres vessants fonamentals en els estudis de la materialitat de l'escola: museològica o relacionada amb el patrimoni educatiu; tecnològica o relacionada amb la innovació; i bibliotecària o relacionada amb els manuals escolars. Finalment, presenta

1 While this paper was jointly conceived by the two authors, the writing of the manuscript was divided between them as follows: Diana Vidal drafted the Introduction, Sections 1, 2 and the Final remarks, and Wiara Alcântara drafted Section 3. The reflection outlined here is the product of a collective work made possible by the Theme Project Knowledges and Practices in frontiers: toward a Transnational History of Education (1810 –...) (FAPESP process 2018/26699-4), coordinated by Diana Vidal, in which Wiara Alcântara is an associate researcher.

enfocaments recents sobre la història econòmica (que comprèn la història de la indústria, de les patents, del comerç nacional i internacional) i la perspectiva transnacional. Al mateix temps, assenyala nous reptes de recerca sobre els efectes de la cultura material en l'esfera social, la història dels artefactes científics entrelaçats amb la història de l'educació i l'extensió de l'agència humana als objectes.

PARAULES CLAU: patrimoni educatiu, manuals escolars, innovació tecnològica, currículum, història transnacional, història econòmica.

ABSTRACT

Written as an introduction to the this dossier on school material culture, this article is organized into three parts. In the first one, it explores the relations between culture and school practices, attempting to outline the initial scenario for these debates. In the second part, it outlines three seminal strands in the studies of the materiality of school: museological or related to the education heritage; technological or related to innovation; and librarial or related to school manuals. Lastly, it presents recent approaches concerning economic history (comprising the history of industry, of patents, of national and international commerce) and the transnational perspective. At the same time, it points out new research challenges regarding the effects of material culture on the social sphere, the history of scientific artefacts intertwined to the history of education and the extension of human agency to the objects.

KEY WORDS: educational heritage, textbooks, technological innovation, curriculum, transnational history, economic history.

RESUMEN

Escrito como introducción al dossier sobre cultura material escolar, este artículo está organizado en tres partes. En el primer apartado, se explora las relaciones entre cultura y prácticas escolares, intentando delinear el escenario inicial de estos debates. En la segunda parte, se delinear tres vertientes fundamentales en los estudios de la materialidad de la escuela: museológica o relacionada con el patrimonio educativo; tecnológica o relacionada con la innovación; y bibliotecaria o relacionada con los manuales escolares. Por último, presenta enfoques recientes sobre la historia económica (que comprende la historia de la industria, de las patentes, del comercio nacional e internacional) y la perspectiva transnacional. Al mismo tiempo, señala nuevos desafíos de investigación sobre los efectos de la cultura material en la esfera social, la historia de

los artefactos científicos entrelazados con la historia de la educación y la extensión de la agencia humana a los objetos.

PALABRAS CLAVE: patrimonio educativo, manuales escolares, innovación tecnológica, currículum, historia transnacional, historia económica.

In 2020 we published the article «The *Syndicat Commercial du Mobilier et du matériel d'Enseignement* and the transnational trade of school artefacts (Brazil and France in the late nineteenth and early twentieth centuries)». ² That article marks the 25-year-long trajectory of investigation of a research group, which initiated in 1995 with a project entitled «The school and its materiality: strategies and tactics (Federal District, 1927-1930)», authored by Diana Vidal ³. At the same time, it reveals the changes that took place in the reflection about this theme: from a local outlook to a transnational dimension; from the attention to objects taken as indexes of innovation of practices within primary schools to the perception of the external pressures upon the school inner workings placed by commercial and industrial agents within the scenario of mass education; from an analysis of materiality generically considered to a delving into the study of a unique object exemplified by the doctoral work of Wiara Alcântara ⁴ about the school desk.

These changes, however, were not circumscribed to the exercises of a research group. On the contrary, they are indications of the manner in which the field of the history of education approached the so-called material turn, the unifying theme of the texts included in this dossier, which give testimony to how these arches of meaning were attributed to the investigation in this area based on distinct national historiographies. By retracing what have sometimes been individual paths, the articles re-inscribe the itineraries of theoretical and methodological reflection in the history of education into a dialogue with other disciplinary fields and offer axes to the narrative proposed

2 ALCÂNTARA, Wiara; VIDAL, Diana. «The Syndicat Commercial du Mobilier et du matériel d'Enseignement and the transnational trade of school artefacts (Brazil and France in the late nineteenth and early twentieth centuries)», *Paedagogica historica*, DOI: 10.1080/00309230.2020.1796721.

3 The Project was sponsored by FAPESP (process 95/09361-6) and gave origin to the Interdisciplinary Group of Studies and Researches in the History of Education (NIEPHE) (<https://sites.usp.br/niephe/>).

4 ALCÂNTARA, Wiara. *Por uma história econômica da escola: a carteira escolar como vetor de relações (São Paulo, 1874-1914)*. PhD- FEUSP, 2014.

in this Introduction. Before spelling them out, however, it is fitting to establish a point of inflection located in the 1970s, which had impacts both on the historiographical production and on the studies on material culture.

We are referring here to the changes operated in the craft of the historian after the reintroduction of culture as a fundamental element to the interpretation of the social world, as well as to the new contributions from the studies of material culture that prompted the development of a theory of practices as a way to contain the excesses of cultural relativism. In both cases, a decisive movement in the direction of valuing subjects and their experience or agency in society allowed the emergence of categories such as gender, race, ethnicity and generation into constitutive topics in the interpretations, and instigated the enquiry about how subjects construct and create cultural practices.

The ways in which these problems impacted research and the academic production in the field of history of education are the purpose of this Introduction, which is organized into three parts. In the first one, it explores the relations between culture and school practices, attempting to outline the initial scenario for these debates. In the second part, it outlines three seminal strands in the studies of the materiality of school: museological or related to the education heritage; technological or related to innovation; and librarial or related to school manuals. Lastly, it presents recent approaches concerning economic history (comprising the history of industry, of patents, of national and international commerce) and the transnational perspective. At the same time, it points out new research challenges regarding the effects of material culture on the social sphere, the history of scientific artefacts intertwined to the history of education and the extension of human agency to the objects.

I. SCHOOL CULTURE AND PRACTICES AS SUBJECTS OF STUDY

In 1993, Dominique Julia delivered the closing lecture at the xv ISCHE in Lisbon with the title of «La culture scolaire comme objet historique», which was published as an article in *Paedagogica historica* in 1995.⁵ Translated into several languages, the text became a mandatory reference in the international historiography of education, as pointed out by Bernat Sureda and Gabriel Bar-

5 JULIA, Dominique. «La culture scolaire comme objet historique», *Paedagogica Historica*, Suppl. Series, vol. 1 (coord. A. Nóvoa, M. Depaepe e E. V. Johanningmeier) (1995), p. 353-382.

celó, and Juri Meda and Simonetta Polenghi in this dossier. Despite its importance, and without wishing to minimize the impact it had on the field, the text articulated a debate that was not entirely new. Behind the discussions it proposed was the reflection carried out within the Institut National de Recherche Pédagogique (INRP–France) and, in particular, by the linguist André Chervel, who in a work previously published in the journal *Histoire de l'Éducation*,⁶ as well observed by Marguerite Figeac-Monthus also in the present dossier, had already made use of the phrase «culture scolaire». It harked back to a discussion that preceded it by two decades, in which culture had become a privileged subject for history, as proposed by French, English or Italian historiography, taking on shades of national colors in exponents such as Michel de Certeau,⁷ Michel Foucault,⁸ E.P. Thompson⁹ and Carlo Ginzburg.¹⁰

The decisive interest in cultural practices, and within these in school practices, put forward a change in the hitherto prevalent approach in the historiography of education, which focused on the topics of pedagogical thinking and in their pairs, the great pedagogues; and also, on the school legislation, mirroring educational policies. Contrasting with this outlook that focused on schools from without and presupposed a homology between ideas and laws on the one hand, and the education process on the other, or denounced a constant insufficiency of the two latter with respect to the former, there emerged a new perspective that enquired about the internality of school affairs and recognized the inadequacy of the analysis constructed so far to decipher the school daily life.

Two inflections gave support to this «will to know»¹¹ that popped up in the field, and they related directly to the traditional themes of study mentioned above; or, alternatively, they came from questions concerning the education arena (and not just following historical analysis but emerging in the same period). The first of these inflections, appearing amidst the protests of May 1968, revealed that, despite the judgement that regarded school as the

6 CHERVEL, André. «L'histoire des disciplines scolaires: réflexions sur un domaine de recherche», *Histoire de l'éducation*, nr. 38 (mai 1988), p. 59-119.

7 DE CERTEAU, Michel. *La culture au pluriel*. Paris: Union générale d'éditions, 1974.

8 FOUCAULT, Michel. *Les Mots et les Choses*. Paris: Gallimard, 1969; FOUCAULT, Michel. *Surveiller et punir: naissance de la prison*. Paris: Gallimard, 1975.

9 THOMPSON, E. P. *The making of the working class*. London: Victor Gollancz, 1963.

10 GINZBURG, Carlo. *Il formaggio e i vermi. Il cosmo di un mugnaio del '500*. Torino: Einaudi, 1976.

11 FOUCAULT, Michel, *Op. Cit.*

reproducer of dominant ideology,¹² the institution had a significant role in the social emancipation of the popular classes, and had conceived within it the critique to the ideas that supported its *status quo*.¹³

The second inflection consisted in the diagnostics of the relative failure of the education reforms (and, therefore, of educational policies) promoted since the late 1960s, which would have been incapable of an in-depth change of the teaching work, stimulating investigations about the way teachers teach, paraphrasing the book by Larry Cuban,¹⁴ released in the same year of Dominique Julia's lecture, on constancy and change in north American classrooms between 1880 and 1990. The two observations laid bare the lack of academic knowledge about what happened within the school walls and challenged the community to break into the school «black box», a metaphor recurrently present in the texts during the last three decades.

To gain access to school practices, studies initially focused on teaching and curriculum or school disciplines. Jacques and Mona Ozouf¹⁵ in France, Thomaz Popkewitz¹⁶ and Larry Cuban¹⁷ in the USA, António Nóvoa¹⁸ in Portugal, Ivor Goodson and Andy Hargreaves¹⁹ in the United Kingdom, Agustín Escolano Benito²⁰ in Spain, to name a few examples, were interested in the historical role of teachers. The wave, perhaps originated with Jacques Ozouf²¹ in 1967, as noted by Marguerite Figeac-Monthus, opened up a

12 As already done by the classic text by BOURDIEU, Pierre; PASSERON, Jean-Claude. *La reproduction. Éléments pour une théorie du système d'enseignement*. Paris: Éditions de Minuit, 1970.

13 DE CERTEAU, Michel. *Op. cit.*

14 CUBAN, Larry. *How teachers taught. Constancy and change in American classrooms, 1880-1990*. New York: Teachers College Press, 1993.

15 OZOUF, Jacques; OZOUF, Mona. *La République des instituteurs*. Paris: Gallimard, Le Seuil, 1992.

16 POPKEWITZ, Thomaz. «Organization and power: Teacher education reforms», *Social Education*, 51 (1987), p. 496-500.

17 CUBAN, Larry. *How teachers taught... Op. cit.*; CUBAN, Larry. *Teachers and machines: the classroom use of technology since 1920*. New York/London: Teachers College Press, 1986.

18 NÓVOA, António. *Os Professores e as Reformas de Ensino na Viragem do Século 1886-1906*. Porto: Edições ASA, 1993.

19 GOODSON, Ivor; HARGREAVES, Andy (eds). *Teachers' Professional Lives*. New York: Falmer Press, 1996.

20 ESCOLANO BENITO, Agustín. «Los profesores en la historia», MAGALHÃES, Justino; BENITO ESCOLANO, Agustín (Org). *Os professores na História*. Porto: Sociedade Portuguesa de Ciências da Educação, 1999, p. 15-27

21 OZOUF, Jacques. *Nous les maîtres d'école. Autobiographies d'instituteurs de la Belle Époque*. Paris: Gallimard/Julliard, 1967.

field of studies about the life and work of teachers which is still very active, reinvigorated by the expansion of sources and methodologies with the use of oral history, life history, autobiography, and prosopography.

Another segment of education research that benefited from the use of the categories of school culture and practices was that of curricula and school disciplines. Making reference to authors here is as risky as in the previous paragraph, and we shall restrict ourselves to mentioning two of the most deeply rooted strands in the field, namely: English sociology and history of curriculum represented, among others, by Ivor Goodson,²² and the French history of school disciplines represented, among others, by André Chervel.²³ In both cases we do not intend to present here a genealogy of their works or to identify those with the greatest impact. We do not aim to be exhaustive, but rather to identify strands that help us to understand how the historiographies of education gradually came to terms with the concern with material school culture.

In this sense, it seems to be still necessary to notice that, particularly when associated to the history of curriculum, these digressions raised questions about the school space and time which, in themselves, can already be considered as material aspects of school and schooling. Marc Depaepe and Frank Simon²⁴ saw in problematizing those two elements one of the paths to bring history of education closer to a history of the routine «educational reality within and without schools»: a movement that could already be discerned in works such as those of Jaume Trilla,²⁵ António Viñao Frago²⁶ and Agustín Escolano Benito²⁷ in Spain, just to refer to one national example; and with the repercussion in other countries, as described by Georgios Tzartzas in the present dossier when dealing with a history of education in Greece.

In the wake of these initiatives, the focus of the interpretive lens was adjusted to frame objects of smaller proportions, making a step towards a real interest in

22 GOODSON, IVOR. *School Subjects and Curriculum Change*. London: Croom Helm, 1983.

23 CHERVEL, André. *Histoire de la grammaire scolaire*. Paris: Payot, 1977.

24 DEPAEPE, Marc; SIMON, Frank. «Is there any place for the history of education in the history of education?» A plea for the history of everyday educational reality in- and outside schools», *Paedagogica historica*, XXXI (1995), p. 9-16.

25 TRILLA, Jaume. *Ensayos sobre la escuela. El espacio social y material de la escuela*. Barcelona: Laertes, 1985.

26 VIÑAO FRAGO, António. «Del espacio escolar y la escuela como lugar: propuestas y cuestiones», *Historia de la Educación*, n. 12-13 (1993-1994), p. 17-74.

27 ESCOLANO BENITO, Agustín. «La arquitectura como programa. Espacio-Escuela y currículum». *Historia de la Educación*, n. 12-13 (1993-1994), p. 97-120.

the artefacts mobilized in the daily exercise of the class, not only by teachers, but also by their pupils. The initial interest was in school manuals/ textbooks (and sometimes in school notebooks), giving substance to a history of school disciplines; in technologies, feeding a history of curriculum and teacher work; and in memorabilia associated to school space and time, comprising emphasis on an action of safekeeping the educational heritage. These are the strands we shall look into in the next section.

2. THREE SEMINAL STRANDS IN THE STUDIES OF THE SCHOOL MATERIALITY

When identifying three seminal strands in the studies of the school materiality we have no intention to place them in mutual isolation. On the contrary, their boundaries are perceived as porous and can only be established in hindsight, with the purpose of organizing the narrative, and whose effect is one of conferring certain intelligibility to trajectories in this field. In this sense, we shall be dealing with what we deem as the preponderant aspect of these initiatives both in terms of approach and of geographical demarcation.

By dealing with the way in which the «new materiality» broke into the scene of Spanish history of education, the article by Bernat Sureda and Gabriel Barceló found in this dossier refers to the impulse that the investigation gave to the organization of school museums and to the constitution of training practices within this sphere of educational heritage. This statement also applies to France, according to Marguerite Figeac-Monthus, and to Italy, as recognized by Juri Meda and Simonetta Polenghi. The texts throw light on a movement that extended especially throughout Latin-based language countries with important repercussions in the creation of institutions for the preservation not just of three-dimensional objects, but also of text, iconographic and oral documents, such as museums, centers for the preservation of school memory and archives, and in the incentive to restoration and maintenance of school buildings seen as examples of architectural models.

The conception that the residues of school practices, as ends of the educative exercise, were short lived, since school administrations were only concerned with the keeping of documents related to means, due to their role of proof, led historians of education, either individually or in groups, to propose and conduct projects of safekeeping of the education heritage, as described by Vera Lucia Gaspar da Silva and Gizele de Souza in this dossier, when dealing with the Brazilian case. Simultaneously, and in particular in what concerns Portugal

and Spain, they stimulated the proposal of master and doctorate graduate programs focused on training educators to deal with the education heritage, as pointed out by Bernat Sureda and Gabriel Barceló.

To be sure, in those two countries the interest was interlocked with the creation of the European Union and, in the wake of the debates that produced the integration of several states since 1993, with the fear of losing national identities, which in turn produced a wave of preservation of local particularities. It was, in that sense, in tune with the perspectives that appealed to the knowledge of school daily life, and that proposed the expansion of available sources for historical research in education. The attention given to materiality also stimulated the organization of exhibitions and even the creation of scientific societies and networks of researchers, such as the Sociedad Española para el Estudio del Patrimonio Histórico-Educativo (SEPHE), in 2004; RIDPHE, Rede Iberoamericana para a Investigaçã e a Difusã do Patrimônio Histórico-Educativo, in 2008; and more recently, in 2018, the Società Italiana per lo Studio del Patrimonio Storico-Educativo (SIPSE); as well as scientific journals and conferences.

The enquiries about material school culture also provoked the engagement with the discussion about nonmaterial culture, fostering a wave of studies on the history of sensibilities, emotions and rituals, either within the realm of a memorialist-commemorative production, as it is denominated by António Viãao Frago;²⁸ or as inspired by historiographies dedicated to this theme, such as the works by Jean Delumeau²⁹ and Peter Gay,³⁰ for example; or still accompanying the discussions about cultural heritage that in the 1980s led to the recognition by UNESCO of the need to preserve the intangible cultural heritage of mankind.³¹

The article by Martin Lawn and Ian Grosvenor in this dossier highlights a different strand of the insertion of the school's materiality in the analysis of the history of education which, we might say, is more associated to the Anglophone context, albeit being disseminated in works also conducted in Mexico, whose focus lies on the relation between technology, teaching work and pedagogical innovation, on the one hand raised by the contributions of

28 VIãAO FRAGO, Antonio. «El patrimonio histórico-educativo: memoria, nostalgia y estudio», *Conciencia social: anuario de didáctica de la geografía, la historia y las ciencias sociales*, 15 (2011), p. 141-148.

29 DELUMEAU, Jean. *La peur en Occident (XIVe-XVIII siècles). Une cité assiégée*, Paris, Fayard, 1978.

30 GAY, Peter. *The Bourgeois Experience: Victoria to Freud*. New York: Oxford University Press, 1984.

31 UNESCO. *Convention for the Safeguarding of the Intangible Cultural Heritage*, Paris, 17 October 2003.

a history and sociology of curriculum, and on the other fed by the discussion about education reforms. The reflection benefited from a long tradition in the English social historiography with contributions from E.P. Thompson³² in valuing the class experience for the constitution of the culture of work during the Industrial Revolution; by Christopher Hill,³³ causing the inversion of the historiographical lens by focusing on the political action of groups constituted by common people defending their interests during the English Revolution; and still by Raphael Samuel,³⁴ in which photography opened up a range of occupations ignored by national statistics but that were important sources of additional income to the seasonal labor in the fields.

The approximation between the world of school and the world of labor raised interest in the in-service training for the teaching profession. It is not an accident, therefore, that in the inter-crossing of those agendas, that is to say, the world of labor perceived through a classroom «making» resulting from the agency of common subjects, we find the mutual method, created by Lancaster and Bell in England, bringing together the research investment of various countries, such as that of Greece, as described here by Georgios Tzartzas. Similarly, the articulation that brought closer photography was a prompting to explore the potential of the visual source for the perception and recording of intraschool relations, within and without the classroom, in courtyards and other institutional spaces, enquiring about the importance of materiality in modelling school practices, as explored by Grosvenor, Lawn e Rousmaniere.³⁵

For this strand of works, the school building was also a subject of study, taken less in its heritage dimension, but rather in the perspective of understanding the material aspects of the distribution of spaces, of employing constructive materials, and of the relation between ideas and functions, as noticed by Lawn and Grosvenor in this dossier, for which the photographic recording played an invaluable role in documenting and understanding the changes operated in buildings through time as a function of changes in use, modifications in disposition and size of classrooms, creation of new spaces

32 THOMPSON, E. P. *Op. cit.*

33 HILL, Christopher. *The World Turned Upside Down: Radical Ideas During the English Revolution*. London: Maurice Temple Smith, 1972.

34 SAMUEL, Raphael. *Village life and labour*. London: Routledge, 1975.

35 GROSVENOR, Ian; LAWN, Martin; ROUSMANIERE, Kate (Eds.). *Silences and Images: The Social History of the Classroom*. New York: Peter Lang, 1999.

and, even, adaptations promoted by the introduction of technologies and change in pedagogical orientations. The modes of occupation gave rise to particular attention being paid to school furniture and to the artefacts employed by subjects in actually conducting classroom activities, either industrially produced or created/recreated by the school community to answer to historically changing educational demands, constitutive of a teaching work culture and of an experience of becoming pupil and teacher that is sedimented in temporal layers.³⁶

The application of visual history implied, beyond the documental aspects, the access to social representations about the school individuals and about the schooling process itself, giving rise to questions about what was documented and about the silences of documentation. At the same time, the focus on school technologies afforded an investigation of the limits of its functionality or even its adequacy to the working relations promoted within schools, inspiring new lines of research, and placing under suspicion the straightforward relation between technological innovation and improvement in the quality of teaching.³⁷ The «question about what teachers carried in school? What was in their pockets and bags which were necessary to teach with?», formulated in 1990 by Tim O'Brien³⁸ and cited by Lawn and Grosvenor in this dossier, remains a stimulating one.

A third and last strand can still be explored. It refers to what is designated by librarial or related to school manuals or textbooks. It should be said that the structure proposed here does not imply a time succession. On the contrary, these perspectives, which have many similarities between them, appeared in the field almost simultaneously as a response to research problems historians of education were faced with as a consequence of new theoretical frameworks, as we have emphasized, emerging both in the seedbeds of history and in the education arena. With regard to investigations about school manuals, this has implied not only the production of academic texts, but as in the educative heritage strand, an important effort to locate, collect, restore, keep, and build databases of textbooks.

36 LAWN, Martin; GROSVENOR, Ian. «When in doubt, preserve: exploring the traces of teaching and material culture in English schools», *History of Education*, v. 30, n. 2 (2001), p.117-127; ROCKWELL, Elsie. «Metáforas para encontrar histórias inesperadas», NEPOMUCENO, Maria de Araújo; TIBALI, Elianda. *A educação e seus sujeitos na história*. Belo Horizonte: Argumentum, 2007, p. 15-33.

37 CUBAN, Larry, *Teachers and machines...* *op. cit.*

38 O'BRIEN, T. *The Things They Carried*. London: Collins, 1990.

At times, the two initiatives become connected, as in the case of the Centro Internacional de la Cultura Escolar (CEINCE), in Spain, which collects, apart from artefacts related to a school museum, a significant archive of school manuals; in other cases, a more librarial concern predominates, as in the case of the Georg-Eckert-Institut in Germany. Without constituting specific institutions, but associated to Universities, other projects share similar objectives, such as the LIVRES (Banco de Dados de Livros Escolares Brasileiros), at the University of São Paulo, Brazil; the MANES (Manuales Escolares - Centro de Investigación Interuniversitario) at the Universidad Nacional de Educación a Distancia - UNED, Spain; and the EMMANUELLE, at the Bibliothèque Diderot in Lyon, France. Among these centers and libraries an intense exchange of information has been produced, and associate researchers move not only between the countries mentioned above, but actually come from a variety of other nationalities, comprising common projects, and sharing financial resources. They are also united by the perception that, as artefacts of the school daily life, these objects seldom find space in the shelves of university libraries, and that their safekeeping represents a significant contribution to the history of education and of schooling.

According to Circe Bittencourt,³⁹ while since in the 1960s the school manuals had already raised the interest of historians of education in analyzing their text and imagetic contents within the scope of a history of ideas; in the 1980s the new movement was marked by the conception of these artefacts as cultural products, that is to say, «as merchandise linked to the editorial world and within the logic of a capitalist market; as support for knowledges and teaching methods of the various disciplines and school contents; and still as vehicles of values, either ideological or cultural».⁴⁰ Such movement is described in the articles by Bernat Sureda and Gabriel Barceló, and by Marguerite Figeac-Monthus, in which they discuss the impact of the French production, particularly of the work conducted by Alain Choppin⁴¹ at the

39 BITTENCOURT, Circe Maria Fernandes. «Apresentação». *Educação e Pesquisa*, vol. 30, n. 3 (2004), p. 471.

40 In the original: «como mercadoria ligada ao mundo editorial e dentro da lógica de mercado capitalista; como suporte de conhecimentos e de métodos de ensino das diversas disciplinas e matérias escolares; e, ainda, como veículo de valores, ideológicos ou culturais». BITTENCOURT, Circe Maria Fernandes, *op. cit.*

41 CHOPPIN, Alain. «L'histoire des manuels scolaires: une approche globale», *Histoire de l'Éducation*, n. 9 (1980), p. 1-2.

INRP cataloguing the textbooks in France since the French Revolution for the educational historiography, stimulating studies on the history of the school manuals as an editorial product.⁴² Juri Meda and Simonetta Polenghi display a similar concern appearing in Italy in the same period,⁴³ as do Vera Lucia Gaspar da Silva and Gizele de Souza for the Brazilian case.⁴⁴

The construction of the narrative in this section, still tied to a geographical dimension that largely coincides with the linguistic segmentation, is to be transformed in the next section. The progressive internationalization of the field, as a result also of a more intense circulation of researchers in the history of education brought about by their growing participation in forums such as the International Standing Conference for the History of Education, allowed not just the territorial increase of the dissemination of the production in this area, but also instigated transnational perspectives.

3. RECENT APPROACHES TO THE ISSUE

New approaches and outlooks have been developed during the last 20 years to study and investigate the school material culture. A growing number of works take material culture as their subject in order to problematize questions exogenous to school, such as the emergence of a school industry and of the commerce of school objects; the submission and registration of patents of school furniture; the analysis of catalogues, announcements and advertisements of companies that make teaching objects and other didactic materials. In other words, the studies are making use of contributions from economic history or they are calling attention to the economic dimension of mass schooling.

42 ESCOLANO BENITO, Agustín (Dir.). *Historia ilustrada del libro escolar en España: del Antiguo Régimen a la Segunda República*. Madrid: Fundación Germán Sánchez Ruipérez y Ediciones Pirámide, 1997, p. 69-100; OSSENBACH SAUTER, Gabriela. «La investigación sobre los manuales escolares en américa latina: la contribución del proyecto MANES». *Historia de la Educación*, 19 (2000), p. 193-203.

43 The authors give emphasis to the works by PORCIANI, Ilaria. *Il libro di testo come oggetto di ricerca: i manuali scolastici nell'Italia unita*, in *Storia della scuola e storia d'Italia*. Bari: De Donato, 1982, p. 237-271; BACIGALUPI, Marcella; FOSSATI, Piero. *Da plebe a popolo: l'educazione popolare nei libri di scuola dall'Unità d'Italia alla Repubblica*. Scandicci: La Nuova Italia, 1986; RAICICH, Marino, *Di grammatica in retorica. Lingua, scuola, editoria nella Terza Italia*. Rome: Archivio «Guido IZZI», 1996.

44 In Brazil, it is worth mentioning the pioneering work by BITTENCOURT, Circe Maria Fernandes. *Livro didático e conhecimento histórico: uma história do saber escolar*. PhD, FFLCH-USP, 1993.

In addition to economic history, the utilization of transnational history has allowed the understanding not just of the emergence of a national/local school industry, but also of companies whose networks of influence in various countries have promoted a transnational commerce of school artefacts and furniture since the last decades of the 19th century, fueled by universal expositions, by announcements and advertisements in newspapers, by business catalogues, and by the action of commercial agents and representatives in several countries.

In that manner, the material turn focused initially on the analysis of intra-school processes that would not otherwise have been problematized. It moved, grounded in economic and transnational history, towards questions that went beyond the sphere of the school itself, gradually approaching an inter- and multidisciplinary perspective.

The approaches outlined above, although recent, have already left their mark in the research and production of a group of historians of education from various countries. Some of them are noted by Bernat Sureda and Gabriel Barceló and by Juri Meda and Simonetta Polenghi. There have been many Italian works emphasizing the economic dimension of mass schooling, such as the publication in 2003 of the first collection of scholastic-educative typographers and editors of the 19th century (TESEO). One of the developments out of this investment, as described in this dossier, was the presentation made by Juri Meda at an Italian conference in 2005 about producers and printers of school notebooks, signaling to a new treatment of the school material culture characterized by the analysis of the economic dimension of mass schooling.

Following a similar economic perspective, the book *Materialities of schooling*, organized by Lawn and Grosvenor,⁴⁵ had as one of its objectives to understand «the economy and method of production of school artefacts». To Lawn,⁴⁶ the widespread use of artefacts in schools since the last decades of the 19th century occurred by the association and convergence of major dominant themes about productive organizations and by actions through multiple and cumulative mechanized tasks.

Such investigations advanced by observing that the study of school material culture would give them access not just to questions hitherto little explored

45 LAWN, Martin; GROSVENOR, Ian. *Materialities of Schooling: Design, Technology, Objects, Routines*. Oxford: Symposium Books, 2005.

46 LAWN, Martin. «A Pedagogy for the public: the place of objects, observation, mechanical production and cupboards», LAWN, Martin; GROSVENOR, Ian (Eds.). *Materialities of Schooling: design, technology, objects, routines*. Oxford: Symposium Books, 2005, p. 145-162.

about school practices and routines. Indeed, the school material culture would also be fundamental to understand issues external to the school, notably how the school immersed itself, and was immersed, in the interplay of the modes of production and commerce of a post- industrial revolution society.

Associating the economic dimension to a transnational perspective, Diana Vidal⁴⁷ has been investigating since 2006 the commerce and circulation of parietal charts by the Maison Deyrolle in and among countries such as Brazil, Portugal and France between the late 19th and early 20th centuries. By extrapolating the analysis beyond a national or local reality, Vidal emphasizes the multilateral and polycentric relations that characterized the worldwide dissemination of the school. She includes in the analysis of school material culture perspectives that emphasize the importance of the interaction and circulation of ideas, people, institutions, and technologies beyond state or national borders and, therefore, the entangling and mutual influence of states, societies, and cultures.

The text was published as a book chapter and, as well noted by Vera Lucia Gaspar da Silva and Gizele de Souza in the present dossier, the mapping out of the Brazilian production of books about school material culture is challenging. Among other reasons, because the title of the work not always includes the phrase «school material culture». It is the case of the book in which Vidal's⁴⁸ text is found. The title proposes a historical understanding of childhood, and the analysis developed by Vidal, making use of the materiality of school and of the transnational circulation of parietal charts, builds a history of school and of childhood that goes beyond national borders.

One of the contributions of studies developed under the perspective of a transnational history is that of clarifying the economic and commerce processes that sustained the expansion of the network of schools within each country since the last decades of the 19th century. Moreover, the transnational approach brings to light individuals such as educators, commercial agents and representatives that operated between worlds, promoting the circulation of ideas, business catalogues and modern objects of teaching. It gives visibility to

47 VIDAL, Diana Gonçalves. «O museu escolar brasileiro: Brasil, Portugal e a França no âmbito de uma história conectada (final do século XIX)», FERNANDES, Rogério; LOPES, Alberto; MENDES DE FARIA FILHO, Luciano (Org.). *Para a compreensão histórica da infância*. 1ed. Porto: Campo das Letras, 2006, v. 1, pp. 239-264; VIDAL, Diana. «Transnational Education in the Late Nineteenth Century: Brazil, France and Portugal Connected by a School Museum», *History of Education* 46, no. 2 (2017), p. 228-41.

48 VIDAL, Diana. «O museu escolar brasileiro... *Op. Cit.*

companies that made and distributed school objects and furniture in several parts of the world. It allows identifying the artefacts that circulated in various countries, and the ways in which they were put in circulation.

The transnational perspective also shows that the meaning of the worldwide dissemination of the school since the latter half of the 19th century was not restricted to the presence or growth of the number of schools in several countries. More than that, it makes clear that the movement drew from networks of economic interdependence among nations in the processes of developing national school systems.

In the words of Pierre-Yves Saunier, the interdependence, the interconnection and its expansion, their deepening or acceleration, are considered as marks of a transnational historical perspective. «Because it stresses the study of connections and circulations, the transnational approach is very much concerned with what make them work, and accordingly allows us to identify their individual and collective protagonists».⁴⁹

Within the transnational and economic approaches, new sources coming from different areas have been examined for a wider understanding of the processes of diffusion of mass schooling. It is the case of materials and documents that were produced within the sphere of commerce, of commercial law, and even of administrative law. These are business catalogues, public contracts, patents, and customs dispatches, sources that have pointed in the direction of an interdisciplinary analysis of school material culture.

Along these lines, Vidal⁵⁰ says that understanding artefacts within the spectrum of the possible materiality, of scientific and pedagogical conceptions, and of commercial negotiations presupposes a knowledge of productive techniques, of school populations and of the wealth of nations (of their public apparatus), and also of the political and managerial choices that determine economic investments. It additionally requires the debate about the existing forms of internationalization, as well as about the ways of building intelligibilities for these multilateral relations in their historical aspect.

49 SAUNIER, Pierre-Yves. «Globalisation», IRIYE, Akira; SAUNIER, Pierre-Yves (Eds.). *The Palgrave Dictionary of Transnational History. From the mid-19th century to the present day*. Basingstoke: Palgrave Macmillan, 2009, p. 461-462.

50 VIDAL, Diana. «A invenção da modernidade educativa: circulação internacional de modelos pedagógicos, Sujeitos e objetos no oitocentos», CURY, Cláudia Engler; MARIANO, Serioja Cordeiro (Org.). *Múltiplas visões: cultura histórica no oitocentos*. João Pessoa: Editora Universitária da UFPB, 2009, p. 39-58.

This interdisciplinary analysis is also suggested by Juri Meda⁵¹ when he takes catalogues of Italian industrial companies, distributed in large scale, to deal with the means of mass education. Meda points out the importance of an approach that establishes a dialogue between different sources. This procedure is conducive to bringing to the fore not only the economic processes of conception, production and consumption that put objects in circulation, but also the processes of training and the school practices that the artefacts stimulated.

The use of sources originating in different areas is a procedure employed by Frederick Herman, Angelo Van Gorp, Frank Simon, and Marc Depaep⁵² when they develop a biographical study of the school desk. The authors analyzed advertisement leaflets, public contracts, and patents with the objective of investigating the life cycle of the school desk, from conception to construction and selection for school use. With that, they shed light on the negotiations between makers and clients (public authority/school) to define the design of the product, and the criteria employed in the selection process, including price, quality of material, and durability, among others.

An economic and interdisciplinary approach to the school desk was also developed by Wiara Alcântara.⁵³ The school desk, as a vector of relations, is taken as the running thread of the analysis about the expansion of schooling in the 19th century São Paulo. For that, the author works by contrasting different sources, such as purchase receipts of school material and furniture; catalogues of American and French makers of school desks; customs dispatches; advertisements; inventories of goods; patent records of school desks in the USA, France, and Brazil. Paying attention to questions of medical-hygienic, pedagogical, technological, juridical, administrative, and economic natures, Alcântara circumscribes aspects of the emergence of the industry of school desks, highlighting the specificities of the ways of purchasing these novel pieces of furniture by the public administration of São Paulo between 1874 and 1914.

In the more recent analyses, the challenge facing historians of education is to operate at the intersection of sources of different provenances in order

51 MEDA, Juri. «Mezzi di educazione di massa. Nuove fonti e nuove prospettive di ricerca per una storia materiale della scuola tra XIX e XX secolo», *History of Education & Children's Literature*, vi, 1 (2011), p. 253-279.

52 HERMAN, Frederik; VAN GORP, Angelo; SIMON, Frank; DEPAEPE, Marc. «The school desk: from concept to object», *History of Education*, 40/1(2011), p. 97-117, DOI: 10.1080/0046760X.2010.508599

53 ALCÂNTARA, Wiara. *Op. cit.*

to observe relations and connections, while avoiding the risk of merely juxtaposing and fragmenting aspects of the same process. When analyzing a public contract to supply school objects or furniture, for example, the contribution of different disciplines can evince the role of intra- and extra-school relations in school culture. This does not mean neglecting the importance of the segmentation and delimitation of the research object, but rather it means understanding artefacts in social interaction. In other words, it means understanding the relations that produce them and put them in circulation, as well as the relations they constituted and gave rise to.

In the case of the public contract mentioned above, the source consists in a document prepared within the sphere of administrative law as an instrument of public administration to procure goods and services from private entities. It is a source whose analysis can happen at the intersection of areas. From the point of view of the content, the object of the contract is targeted at the school. From the formal viewpoint, there are elements of administrative public law in its interaction with private business law.

Not by accident, the interdisciplinary approach has also been moving closer to a new political history that considers the administrative choices of governments and the economic investments in public instruction. For that reason, the history of the materiality of school is, to some extent, the history of how the public authorities, the States, have been organizing themselves bureaucratically and administratively to take on the responsibility for the creation and maintenance of official institutions of education, and to supply materials and furniture to the schools throughout their territory. It is, at the same time, the history of the relation between public and private sectors in offering services to the population.

Similar observations can be made regarding patents. A patent is generated within the sphere of commercial law with the aim of recognizing and conceding industrial property, and the exclusive use of a discovery or invention, to its maker. The discussion about patents has been present since the universal expositions, such as the 1873 International Patent Congress in Vienna, and the 1878 International Congress on Industrial Property in Paris.

If, on the one hand, the Expositions favored the advertising, dissemination, and commercialization of products, on the other, they made the producers vulnerable to unauthorized reproductions. It was not unlikely that, having acquired a catalogue from a particular maker, instead of buying the products therein a company simply started to reproduce models, competing in the mar-

ket. Hence the considerable number of patents identified in several countries as a juridical instrument to ensure the privilege of exclusive use of an invention.

The analysis of patents allows us to identify both the companies that since the last decades of the 19th century have become prominent in making school furniture and artefacts, and the relation established between the design of such pieces and the medical-hygienist discourse; and also the techniques and technologies they employed and deemed as inventions; the appreciation of the jury of the Universal Expositions about the models displayed; the adaptations of products to the demands of specific clients, private institutes of education or of the State itself.

The case of the *Syndicat Commercial du Mobilier et du matériel d'Enseignement*,⁵⁴ mentioned in the initial paragraph of this Introduction, open a window onto still other aspects of this transnational economic enterprise by giving visibility to the action of a commercial entity with headquarters in Paris but with a network of businesses spanning several countries. The *Syndicat*, through commercial agents and representatives, stimulated the expansion of French culture and commerce with the commercialization of the school museum and other didactic materials produced by French companies. For that, it made use of strategies such as the creation of cartels and the technical standardizing of products, so as to obtain control of the school market within a new world order characterized not only by globalization and industrialization, but also by mass schooling.

In addition to the two approaches described in this section, three other perspectives little developed within the history of education about material culture could be mentioned. The first one has to do with the extrapolation of the school materiality onto the social. Following the example of Chervel⁵⁵ who, taking the case of orthography in France, analyses the effects that the school institution has on society and culture, it would be profitable to enquire about the double movement of materiality. On one side, to question how the processes through which the artefacts are created for school use extrapolate the school walls and take on other social functions. And on the other side, to enquire about how the artefacts created for purposes alien to the school, as is the case of scientific objects, are incorporated to it in movements of constant adaptation and appropriation, which leads us to the second perspective.

54 ALCÂNTARA, Wiara; VIDAL, Diana. *Op. cit.*

55 CHERVEL, André. *La culture scolaire. Une approche historique*. Paris: Belin, 1998.

It relies on the relation between history of education, history of scientific artefacts, and history of science and science teaching. This dimension emerges both in the article by Vera Lucia Gaspar da Silva and Gizele de Souza, and in the article by Marguerite Figeac-Monthus, as a subject of study still rare, whose investigation implies interdisciplinary approaches with focus on themes that hark back to the 19th century, such as for example, the object lessons. According to Heather Ellis,⁵⁶ this distancing between the history of science and technology and the history of education «is linked to broader divisions in the history of knowledge, which has, for many years, been carved up into sections reflective of the academic subject divisions that structure modern universities and higher education in the West». She also states that most significant «is the division of the history of knowledge into the history of science, on the one hand, and the more recent history of humanities, on the other».

Although there are a few works that tend to overcome these divisions, as for example those by José Pedro Marin Murcia⁵⁷ in Spain; by Katya Braghini⁵⁸ and by Reginaldo Meloni and Wiara Alcântara⁵⁹ in Brazil; by Johann-Günther Egginger⁶⁰ in France; and by Heather Ellis⁶¹ in England, the production is still scarce. In this sense, as noted by Marguerite Figeac-Monthus, the connection that can be established between the artefact, its use in the classroom, and the makers of scientific instruments still has much to contribute to the study in this field.

The third perspective relates to the agency of school objects. The recognition of the agency of material things is based on the refusal to restrict the analysis of artefacts considering just what people do with them. In this sense, Nicole

56 ELLIS, Heather. «Editorial: science, technologies and material culture in the history of education», *History of Education*, 46/2 (2017), p. 143-146. DOI: 10.1080/0046760X.2016.1274056.

57 MARIN MURCIA, José Pedro. *El material científico para la enseñanza de la botánica en la región de Murcia (1837-1939)*. Tese de Doutorado: Universidad de Murcia, 2014.

58 BRAGHINI, Katya Zuquim. «As aulas de demonstração científica e o ensino da observação», *Revista brasileira de história da educação*, v. 17 (2017), p. 227-254.

59 MELONI, Reginaldo; ALCÂNTARA, Wiara. «Scientific didactic materials and the history of the Natural Science teaching in São Paulo (1880-1901)», *Educação & Pesquisa* [online], vol. 45 (2019).

60 EGGINGER, Johann-Günther. «Matérialité de l'enseignement des sciences naturelles à l'école: de la chose en classe à un objet de collection muséale, XIX^e-XX^e siècle», FIGEAC-MONTHUS, Marguerite (Dir.). *Éducation et culture matérielle en France et en Europe du XVII^e siècle à nos jours*. Paris: Honoré Champion, 2018, p. 294-312.

61 ELLIS, Heather. *Science, Technologies and Material Culture in the History of Education*. London: Routledge, 2020.

Boivin⁶² denounces that the dichotomies subject-object, cultural-natural, and mental-material still characterize the analyses of contemporary social sciences. To the author, the question is not one of unifying, but of clarifying the material aspects of human social and cultural existence. More than that: to understand how the properties of the material world shape human experience, mind, society, and history. Thus, the physical world and the human mind would not be separate realities, but united in different forms in the social practice.

Nevertheless, one of the obstacles to the development of these analyses lies in the difficulty to define what constitutes the agency of material things. According to Malafouris⁶³, agency is not defined by the existence of an intentionality in material things. It is a causal and relational phenomenon that is, therefore, defined by the effects of meaning produced in the subjects. This is the strand that makes pertinent a study of the agency of objects in the constitution of schooling processes and individuals under schooling.

4. FINAL REMARKS

By the end of this narrative, we have to recognize that all explaining effort carries faults and omissions. We are aware of the risks incurred in writing this Introduction, in proposing an interpretation of the history of incorporating school material culture in this field. On the one hand, our effort was guided by the dialogue with the articles included in this dossier. On the other, it was wrought from our own international circulation in this area. It amounts, therefore, to a partial outlook resting on a specific locus of production, and that flows onto or contrasts with other possible views in the composition of the mosaic of the studies and analyses carried out during these last 30 years in the history of education.

Thus, the strands underlined here do not encompass the whole investment of research made in this field. At the same time, these strands do not appear as successive stages of approximation in dealing with this problem. On the

62 BOIVIN, Nicole. *Material Cultures, Material Minds: The Impact of Things on Human Thought, Society, and Evolution*. Cambridge: Cambridge University Press, 2009.

63 MALAFOURIS, Lambros, «At the potter's wheel: An argument for material agency», KNAPPETT, Carl; MALAFOURIS, Lambros (Eds.). *Material agency: Towards a non-anthropocentric perspective*. New York, NY: Springer, 2008, p. 19-36.

contrary, they constitute layers of understandings about school material culture that have been settling and of reconfiguring investigation as new theoretical approaches are incorporated, as the international exchange among historians of education has increased and as interdisciplinary dialogue has intensified.

The collection of articles of different provenances, comprising a reflection about the history of school material culture proposed in this dossier is an example of this movement. May it stimulate many other dialogues and promote new developments!