

Introduction: Considerations on the materiality of writing and the three layers of information¹

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Texts are the fruit of intellectual work manifested on physical supports, in the same way that reality is expressed and made concrete in material actions. The immaterial and material dimensions of writings are the result of practices, processes, methods, knowledge, and techniques. Both are inseparable and arise out of human existence. In the last quarter of the twentieth century, scholars of material culture have highlighted this relative indistinction of objects of daily use in societies³ in the perception that these are vectors and products of social relations. In relation to texts, authors such as Donald McKenzie, Armando Petrucci, and Francisco Gimeno Blay⁴ have broken away from a purely technical perspective of disciplines from the field of the material description of texts and their supports. In their studies, the data obtained from these tools was used in reflection on the numerous interfaces of social relations.

Data such as appearance, physical constitution, or the techniques for preparing texts, has been incorporated by authors from various areas of the humanities with the intention of thinking about the social conditions of production, appropriation, circulation, and preservation. Inspired by Petrucci and MacKenzie, Robert Darnton, Roger Chartier,

1. I would like to thank José Newton Coelho Meneses for the academic partnership which has allowed a deeper investigation of these questions. These reflections are the fruit of research carried out under the auspices of the UFMG/UNIWA Academic Cooperation Agreement and the Capes AUXPE 585/2015 project.

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3. Among the authors who should be mentioned are Ulpiano Bezerra de Meneses, Marcelo Rede, Daniel Miller, Arjun Appadurai, Peter Stallybrass, Amanda Vickery e Leila Algranti..

4. McKenzie (1999); Petrucci (1999); Gimeno Blay (1986).

5. Darnton (2009, 2012); Chartier (2007); Bouza Álvarez (2001); Castillo Gómez (2002).

6. Recently Álvaro Antunes made a brief conceptual discussion of the use of the terms 'written culture' and the 'culture of writing.' In both definitions, however, he highlights that for History the "social, political, and cultural effects" are what is looked for, extrapolating the perspective of information technology (Antunes, 2020, p.623).

7. Tanselle apud Daybell (2012, p. 15).

8. Daybell (2012, p. 15). Emphasis added.

9. Antonio Castillo Gómez (op. cit., p. 20) defined the field of the "social history of written culture" relating three key concepts: discourse, practices, and representations. What distinguishes it from other forms of doing history is the "importance given to the materiality of written objects," or in the original: "es la importancia outorgada a la materialidade de los objetos escritos". For a broader presentation of the field of written culture and dissociation between the material and the social, see Chartier (*op. cit.*).

10. Zervos; Koulouris; Giannakopoulos (2011).

Fernando Bouza Álvarez, and Antonio Castillo Gómez⁵ consider the association between the material and social dimensions to be sufficiently evident, with the justification of their methodological or conceptual options being unnecessary, although it is perceptible in their academic productions taken as a whole. Despite these robust references, the material perspective of textual culture did not become consolidated in systematic analyses until the beginning of the twenty-first century, with today an explanation about the connection of the social with the material (and vice-versa) still being necessary in the field of studies about the production and circulation of writing.⁶

This is how James Daybell proceeds in a consistent study of epistolography in England in the sixteenth and seventeenth centuries, dialoguing with the field of textual studies summarized by G. Thomas Tanselle as the "social process of publication".⁷ Concerned with the perception of social realities in which writings exist, this field does not discard the various circumstances of physical interactions of the subject with the work, as in the cases of collaborative authorship through marginal annotations or the participation of spaces of reading and production as conditioning experience. One of Daybell's principal theoretical and methodological tools is the connection of the material elements of letters with social, cultural, and intellectual practices, dialoguing with authors from the field of material elements such as Peter Stallybrass and with linguistic, stylistic, and historical studies. Dissociated from the methods of old disciplines, such as codicology, paleography, sigillography, and diplomacy, materiality gains as an attribute the adjective 'social.' In his words, in a direct reference to Donald Mckenzie, "materiality relates not only to the significance of physical forms, but also to the *social materiality* (or 'sociology') of texts, that is the social and cultural practices of manuscript and print in the contexts in which they were produced, disseminated and consumed."⁸

Since the experiences of association between the material and social dimensions of writing have been practiced for decades by researchers from the field of the history of written culture,⁹ the use of the concept of 'social materiality' leads us to some thoughts about the existence of other types of materiality: sensorial, political, cultural, physical and chemical, utilitarian, spatial... These qualifications can be numerous. These considerations will be based on the idea of the categorization of layers of information contained in graphic artifacts, as suggested by Spiros Zervos, Alexandros Koulouris e Georgios Giannakopoulos.¹⁰ Generally speaking, the first layer, whether of a textual or visual nature, is the one that is inscribed or printed on the support. It is a message captured directly and its comprehension depends on the intellectual experience of the reader/observer. The second constitutes the form of the object and its material configuration, characteristics determined by the technologies and the materials used for the registration of information. In order to understand it, organoleptic tests and some instruments

capable of increasing the sensorial perceptions of the observer are necessary, as well as knowledge of the technologies used.¹¹ The third layer of information is the physical and chemical layer of the materials used (paper, ink, leather, fabric, etc.), which can be considered the DNA – or the ‘fingerprints’ – of the object, since it contains data about geographic origin and date, allowing authentications, attributions, and studies of the passage of time and human action on the object.

The first layer of information does not only contain elements of a mental or intellectual order, as can be assumed. Also involved are the modes of the perception and reception of the message, to which are added values and meanings which will determine the material conditions of their perpetuation in time.¹² The relationship of the body with writing is necessarily included in these experiences, not only in relation to physical dislocation and the environment favorable to this relationship, but also by the sensorial repercussions raised in the observer by the words or images. Visuality, in other words, the way the object is presented to the world, which is equally a vector of approximation of the body with the text, is the result of these pre-existing material conditions.¹³ Sensorial, visual, and technical in this case are attributes associated with materiality.

The material elements are more evident in the second layer but are never dissociated from social relations. Expressed in them are the connections between materials, techniques, and labor processes, such as the division of activities in a workshop or among workshops, or correspondence and hierarchization among the various specialties of work – such as the functions of the editor, typographer, compositor, engraver and bookbinder. These inter-relations in work activities were dealt with through the materiality of writing in various of Darnton’s works,¹⁴ or more recently in the field of material bibliography by Guadalupe Rodríguez Domínguez and by Ana Utsch,¹⁵ researchers from the area of philology and the preservation of graphic documents. With these studies the material dimension of the object can be perceived as the result of choices and possibilities of the interaction of the techniques used, determinants of its tridimensionality, in the case of books and codices, such as the formats and use of determined typographic devices. In a relationship with interdependent connections, the materials used are a result of the technical and intellectual capacities belonging to historical moments.

Interdependent connection is present not only in the production stage, but also in use and preservation. The consumption of objects leaves material marks imprinted on supports, revealing the different human intentions and actions.¹⁶ The same attention should be given to the modifications imposed on objects in processes of restoration, updating, or renewal. Any intervention is based on the available concepts, necessities, materials, and knowledge; above all it is linked to the

11. Cf. Almada (2018)
12. Cf. Petrucci, *op. cit.*
13. Cf. Elkins (2008).
14. Cf. Darnton (2009, 2012).
15. Rodríguez Domínguez (2018); Utsch (2020).
16. Cf. Correia (2015).

17. Cf. Campos (2019); Castro (2012)

18. *Discurso...* (1720?).

19. Almada; Monteiro (2019). Exams were carried out in the Laboratory of the Science of Conservation in the Fine Arts School of Universidade Federal de Minas Gerais by Professor João Cura D'Arts and the technician Selma Otilia Gonçalves.

20. In Portuguese, the name is "pomada de Saturno". For the term in English, cf. *Encyclopædia...* (1795, p. 436).

demands of the social groups involved and their values.¹⁷ Once again it is evident that physical conditions register, and thus evidence, the relationship of the subject and their body with the writing during making, receiving, and perpetuation.

The least visible level contains data registered in the physical and chemical structures constitutive of materials; these provide non-evident information about biography, from birth to the present. It is the most difficult level to be understood since it is invisible to the naked eye, though evidenced when degradation processes occur and some functionalities of the object start to break down. The original chemical composition and its alterations reveal the deterioration of the object, a factor directly or indirectly related to manufacturing processes and later interventions. From another point of view, the identification of indices of the degradation of the object leads to other human actions, such as the execution of environmental engineering measures to placate the inevitable decomposition of the material.

Information about the third layer is revealed in the practice of interdisciplinary research, since the methods of the sciences of nature are required to present data, which can be interpreted jointly with the methods of the human sciences, since often the 'visible' is not explicable through empirical evidence, nor the 'invisible' understood without historical interpretation. In a paleographic analysis of the manuscript *Discurso Histórico sobre a sublevação que nas Minas houve no ano de 1720...*¹⁸ a previously unknown method for correcting letters or words that had already been written on the page was discovered: the use of a white paste on the paper. The consultation of writing and calligraphy published in the eighteenth and nineteenth centuries was not sufficient to indicate the procedure, in fact it led to mistaken initial conclusions. The revelation of the technique was only possible with the discovery of the materials used through an optic microscope and X-Ray fluorescence (EDXRF):¹⁹ a paste made with wax and a white lead pigment, a combination used in a curative ointment for skin problems, known at the time as a 'Saturnine Ointment'.²⁰ With this data, through historical research other sources used by the graphic author of the document were located – the pharmacopeias – unveiling not only the invention of a way of acting by an agent of writing to resolve a determined problem, but adding other informative data about their intellectual culture. A further example of interaction between scientific methods is the research of chemists and conservation scientists into the chemical constitution of the old inks used for writing to understand their deterioration process; historians use the same data to interpret the operative capacities of subjects in determined epochs. The difficulty found by the former is the existence of a great variety of combinations of materials, undoubtedly resulting from the human choices made at determined moments. Is the separation between the

'physical and chemical' materiality and 'social' materiality possible? Does any object exist and survive without human action in a determined historical situation?

The approach given to the material dimension of the object is defined by the subject: the investigator, scientist, or poet. Why qualify the materiality if the dissociation between the material and social is impossible? Some of the discussions about the relations between text, material, and social life are perceptible in the articles of this thematic dossier on the "Material Dimensions of Written Culture." The articles are divided into three groups: a) the physical relationship between readers and writing; b) printing resources as shapers of reading; c) material options for textual transmission.

The opening article is by Rafael Climent-Espino. In "Object-Books and Exposed Writings: New Textual and Literary Landscapes in Latin America and Spain," he discusses the limits of visions of the materiality of texts through the necessary distinction between objects-books and books-objects. Climent-Espino starts with the idea that writing does not exist without its material supports; in this way, there is no text without an object and the perception of content depends on this connection. However, while since Antiquity the literary text has the capacity to exist in different supports, such as stone, ceramics, fabrics, bones, etc., the primacy of the codex format and paper support reduced our understanding, forcing a separation between objectbook and book-object. The surprise in Rafael Climent-Espino's article resides in his defense of the capacity of contemporary literary to exist outside the codex format without the loss of its status as literature. His explorations present objects created to transmit texts, which can thus be considered 'books' in the broadest understanding of the term. They are actually 'objects-books' with various material forms, such as matchboxes, food, or housing, and call on the reader to make dynamic and multidirectional readings. In some of these experiences, reading demands not the manipulation of the object, but of the body itself.

'Objects-books,' or writing outside the codex, already existed in Spanish Golden Age. Teapots, glasses, bowls, lamps, tureens, helmets, armor, jewels, necklaces, scarves, dresses, clothes, shoes, buildings, walls, tombs, without forgetting paper, are witnesses of this practice. At that moment, *cancioneros* expanded the concept of the text support and with this approximated textual culture to material culture. "Poetry out of the Cancionero Book: the Inscription of the everyday and the sublime," the article by Ana María Gómez-Bravo, invites us to perceive the intimate relationship between written, material, and visual culture by looking for the connections existing between text, image, objects, and corporal sensations in fifteenth century poetry. Her reflections highlight the capacity of the text to represent and propagate sensations caused by objects, and, on the other hand, to modify the symbolic status of artifacts with the simple presence of writing. In addition to the numerous examples of relations established between objects

21. For a more profound study about the maintenance of the production of illuminated manuscripts until the modern age, see Almada (2012).

22. Petrucci, *op. cit.*, p. 283.

and places through graphic elements, another two foci of written culture highlighted her need to be mentioned. One of them is the plural technical capacity of writing professionals to deal with supports as different as glass, metal, paper, and stone; the other is the promotion of the book-object as a vehicle for strengthening social relations. Gómez-Bravo discusses some examples of how the use of graphic elements, such as royal monograms on various types of private objects (architectural, decorative, or utilitarian), reveal relations of fidelity between the members of the nobility. She uses the term 'biblio-political' to refer to when books were the vehicle of this social practice.

The strengthening of social relations between the nobility through books is perceptible in orders of illuminated manuscripts, - supporting the production, commercialization, and preservation of this type of work,²¹ - which later came to be part of royal bibliographic collections. This is the theme of the article "From hands to vaults: reflections on material transformations and ownership transference of devotional books in the late middle ages," by Márcia Almada. After discussing the circumstances of the production of illuminated codices in Central Europe, she presents examples of how objects were materially transformed to meet the demands of the new owners, whose distinctive ownership marks can be included in the concept of 'biblio-political' used by Ana Gómez-Bravo. The galleries of Mafra Library in Portugal are presented to understand how physical location and conditions of access at the beginning of the nineteenth century, as well as occasional alterations made over time, are concrete elements to reflect on the various attributions of meanings and the possible sensorial experiences of bibliographic ownership. After all, as Armando Petrucci has stated, the models of libraries accompany the modes of reading and writing²² and the spatial disposition of bookshelves which hold the books reveals much about the ways they are used.

The second group of articles discusses how the use of printing resources shape reading. In "The first page of history: material configuration and functions of the title page in German 18th-century history books," André de Melo Araújo reinforces the voices of Gómez-Bravo and Almada in the biblio-political perspective of the ornamentations and techniques used on the coatings of codices. However, this is only the introductory argument, since the article is interested in highlighting the importance of the title page as the witness of the numerous problematics involved in publishing work and the function of this typographic device in qualifying a work commercially, socially, and intellectually. He elucidates with concrete examples how the material forms of printed books served to reinforce the connections of the book-object with the cultural tradition to which it was referenced and with reading practices, since formats, dimensions, styles of types of letters were adapted to the various demands of consumers, with these choices being determined by the editor or by the author. Araújo connects the visual, material,

and social analysis in dealing with printed works in the modern era, supported by theories which see technical and material choices as cultural and historical dimensions. Bibliographic references from the German tradition predominate, providing an opportunity to expand the experience of reading in the field of the history of book, which is predominantly built on a French or British/US perspective.

Kleber Clementino, in "Secret mine, forceful battering ram: the book in the historicizing of the Portuguese-Dutch war (1625-1660)," equally investigates history books. However, his focus is on publications about the Dutch War printed in the Iberian Peninsula. His problematic refers to the use of the historical genre as a means to propagate reports about the war, to the use of the book as a 'metaphorical bellic artifact,' and the perception of publishing activities as an event of the war. This battle was fought between the Iberian military *fidalgua* who had returned to Europe and the elite linked to the tropics; similarly, it existed between two textual genres: the list of successes and historical literature. These conflicts were typified materially by the competition between the publication of pamphlets or books and the use of these two printing products reveals the discontinuity not only of discursive formulas, but equally of political forces, favoring the socio-economic promotion of social groups in ascension in overseas territories. Books guaranteed the lasting perpetuation of reports, a more restrictive circulation to the elitist circles of society, and the formation of symbolic layers. However, by requesting a political judgement and submitting themselves to censorship, a text or article could be involved in a publishing dispute, preventing the printing or circulation of a work.

The theme of a publishing war is also explored by Verônica Calsoni Lima in "Edition & censorship: the materiality of Sir Roger L'Estrange's pamphlets in the early 1660s." In this case, the battle was fought between a writer and the censor and his opponents. The person in question, in association with his editor, skillfully manipulated printing resources to emphasize passages and move the emotions of readers during the text. Through the textual and material examination of the works of L'Estrange, the article is constructed on the perspective of the latter's dual literary action, as well as his ascendancy over the printing choices for his publications. According to Calsoni Lima's, the manipulation of these devices allows a transit between the forms of textual, visual, and oral communication, impacting on the absorption of the discursive content used in political-religious conflict. Another transit of interest is the movement of the body in the exercise of professional activities. Assessing L'Estrange's opening of an office in the region of London which had numerous print shops in the seventeenth century, Calsoni Lima seeks to understand the physical relationship between the censor and those they investigate and between the author and their editor. She also highlights the necessary interaction between an author's conditions of production,

and the material, visual, and textual genre analysis, as well as some considerations on the functions of the author and the censor.

The third theme of the thematic dossier refers to the availability of materials and techniques for textual transmission. In "An eighteenth century text in three centuries: the contents, forms and meanings of the *Notícia Primeira Practica* written by João Antonio Cabral Camello (18th – 20th centuries)," Jean Gomes de Souza traces the biography of a textual report about a river journey from Sorocaba (SP) to Cuiabá (MT) in 1727. The history of this text runs from 1734, date of the first known version, to 1953, when it remerged in a work organized by Afonso d'Escragnole Taunay – *Relatos monçoeiros* stands out among other publications of the report because it became a reference for subsequent publication in the twentieth century. The comprehension of the conditions of production of each of the editions is based on the biography of their producers, preventing the dislocation of the textual work from the historical situations in which it is conceived, appropriated, and preserved. Gomes de Souza notion of version allows the text to be perceived as an open work, subject to dismemberment, reworking, and reorganization which will give the content different conditions of fruition and use. The methods and concerns of disciplines such as Material Culture, Written Culture, Paleography, and Material Bibliography are coordinated to perceive the written text as historical, social, linguistic, and material representation.

The material question is evident in the archives when dealing with the large documentary mass produced by the public administration of modern states. Given this evident and copious material, very few have asked: where did all this paper come from? Were there regulations about the sale of this material? Did the administration control the sending of paper to the colonies? Were the quills and inks produced locally or purchased? Who had this knowledge: all those capable of writing or only the specialists? Who was responsible for the production of books for notes, annotations, and registers, and who bound the 'various papers'? There is much to be researched about bookkeeping activities and the knowledge involved as well as reading and writing. With a perspective related to the recognition of the material dimensions of human activities, Régis Quintão found in the documentation of the *Erário Régio* (Royal Treasury) of the *Arquivo Histórico do Tribunal de Contas* in Portugal substantial information to begin a path to answer some of these questions. In " 'Paper, quills and drugs for ink: ' office supplies in the diamonds administration in the 18th century" he focuses on the textual registers related to the raw materials used in administrative writing. As mentioned, although it was in current use and was necessary for administrative, social, cultural practices, paper is rarely mentioned in research about international trade, nor even in travel accounts. Perhaps because it is too obvious and, as José Newton Coelho Meneses²³ has stated, there is a need

to say the obvious. Those interested in these issues will find some surprises in Régis Quintão's article. These are possible problems to mark a necessary research agenda in the field of the material dimensions in written culture.

A constant discussion in the academic field, since the predominance of digitalization of collections as a policy for the preservation and diffusion of content, refers to the restriction of onsite access and the impact of these actions on the material analysis of the object. This question became more evident in 2020, when the public health crisis provoked by SARS-COV-2, the new coronavirus, prevented the physical presence of researchers in archives. The principal question is: how can we materially analyze an artifact through digitalized images? Without denying that contact with the object propels questions and taking into account the experiences of the articles published in this dossier, some possibilities can be outlined. When the area of study is conceptual/theoretical reflection on the material possibilities of the expression of the human and the fruition of products, physical contact with the object is voluntary; thus, the use of visual registrations of artifacts is not prohibitive. Theoretical support will define the problematics of the investigation. This is the case of the studies of Rafael Climent-Espino, Ana María Gómez-Bravo, and Kleber Clementino, who observe the existence of poetic and narrative texts in different material supports. Régis Quintão makes use of documentary sources to research the material possibilities of writing. In this case, the inventories, purchase registration books, revenue and expenditure books are great sources on the material conditions existing in determined epochs.

Another research path is the one followed by André Araújo, Verônica Calsoni, and Jean Gomes, using visual analysis to capture the material conditions of the technical and functional choices of the agents responsible for textual production, even if they have had the opportunity to stand before the artifacts studied and possibly have made their own image documentation. Using visuality as material data requires from the researcher profound knowledge of the technical processes and conditions of production in order to see in the final product the actions implemented and to find in it the desired information.

A final opportunity to extract data about the material conditions of an artifact is to consult library catalogues and descriptive cards, as done by Márcia Almada. According to Armando Petrucci,²⁴ during the nineteenth century national libraries became laboratories of investigation in the field of written culture. In the meticulous descriptions made of the methods of material bibliography consistent information was obtained on the technical and constitutive aspects, on provenance, possession, and interventions made over time. The use and preparation of these catalogues should be stimulated. On the other hand, recent research has generated monographic works on objects in particular and can be used in paradigmatic analyses. The consultation of areas

25. The laboratory has numerous publications in the field, including Nabais *et al.* (2020).

26. Cf. Morais (2017).

dedicated to the production of knowledge about constitutive aspects of objects can be an extraordinary resource. Some research centers make available the results of projects and exams aimed at material analysis, as in the case of studies of the color of Portuguese medieval manuscripts made by the Associated Laboratory for Green Chemistry (LAQV-REQUIMTE), formed by an interdisciplinary group of chemists and conservation scientists²⁵ and the Institute of Medieval Studies of *Universidade Nova de Lisboa*, who recently made available the database on medieval manuscripts with open access to the scientific records of the manuscripts.²⁶ The reports of restoration treatment also supply valuable information about the biography of objects and can be used as sources.

The set of articles presented in the thematic dossier *Material Dimensions of Written Culture* presents us with the results of recent reflections and research on the material presence of writing in history and the contemporary era. Similarly, it invites us to visit the methodological supports of authors connected to the theory who defend materiality as a fundamental requisite for the existence of texts and for the creation of specific conditions for the reception of the message. As was discussed, the three layers of information are interlinked and there is no way to dissociate the material from the mental or the social, since the creative human process is concomitantly made concrete in these dominions. It thus becomes unnecessary to qualify the noun 'materiality.'

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