How typeface shouts. Cultural mediation processes and the state of that which is visible

Cómo grita la tipografía. Procesos de mediación cultural y condición de lo visible

Mario F. Benito Cabello. Associate Professor of the Faculty of Communication Sciences at the Rey Juan Carlos University (URJC) and doctoral candidate in the Social and Legal Sciences Programme of the URJC. He holds a degree in Journalism from the Complutense University of Madrid and a Master's Degree in Cultural Journalism and New Trends from the URJC. His lines of work are journalistic design, typography, journalism and visual communication. He has worked as a journalistic designer between 1990 and 2016 in several national and local newspapers (*El Mundo, El Sol, Marca, La Información de Madrid*) and magazines (Grupo Z). He is co-editor of the website www.encajabaja.com about press and journalistic design (reference included in university teaching guides), he has participated as a jury member in the Spanish SND awards and as a lecturer in different congresses (Universidad Pontificia of Salamanca), Universidad CEU San Pablo de Madrid and in the URJC.
Rey Juan Carlos University, Madrid, Spain
mario.benito@urjc.es
ORCID: 0000-0002-3409-7563

Mª José Sánchez Leyva. Professor and researcher at the Faculty of Communication Sciences of the URJC University. Her lines of work are semiotics and discourse analysis, ethics and political philosophy, communication and collective representations and feminism. She has been involved in many congresses, national and international seminars, courses and workshops as a teacher and lecturer. She has organized, coordinated and directed many sci-entific meetings. She has been teaching and researching uninterruptedly for more than 20 years and is the author of several publications. She belongs to the group UCM Cultura visual: imagen, información y discourse. Her work in recent years has focused on contemporary processes of subjectification as means of social control.
Rey Juan Carlos University, Madrid, Spain
mariajosefa.sanchez@urjc.es
ORCID: 0000-0003-4915-226X

Abstract:

Every discourse is intertwined in a complex network of other discourses, institutions, power relations, and symbolic production, the importance of which is decisive in shaping the social realm. The bodies of these discourses are the object of this study, which reflects on the mediation feature of typefaces. Through an analysis of the use of Blackletter characters during the Nazi period and the previous struggle between Blackletter and Roman characters

Resumen:

Cada discurso se entrelaza en una compleja red de otros discursos, instituciones, prácticas de poder y producción simbólica cuya importancia es decisiva en la configuración de lo social. El cuerpo de dichos discursos es el objeto de esta propuesta que reflexiona sobre el carácter mediador de la tipografía y ejemplifica, con el uso de los caracteres góticos durante el nazismo y previamente la lucha entre caracteres góticos frente a romanos en el Renacimiento, la operación

during the Renaissance, the research exemplifies the cultural processes involved in forms of visualization in the digital age. The impact of information technology affects the creation of the modern collective imaginary which modernity uses to justify its own dynamic, its cultural and cognitive narratives, and its historical development. Typography is a central element of this contemporary collective imaginary, and while it is a sign, it becomes the setting for the struggle between different definitions and meanings: a battle for the possession of the sign that extends to the most trivial areas of everyday life. That is the reason why typeface shouts.

Keywords:

Typography, mediation, social imaginary, form and content, visual communication.

cultural de las formas de visualización en la era digital. El impacto de las tecnologías de la información afecta a la construcción del imaginario moderno, con el que la modernidad justifica su propia dinámica, su trama cultural y cognitiva, su formación histórica. La tipografía es un elemento central de ese imaginario contemporáneo y, en tanto signo, se convierte en el escenario de la lucha entre diferentes definiciones y significados: una lucha por la posesión del signo que se extiende hasta las áreas más triviales de la vida cotidiana. Es por eso que el tipo grita.

Palabras clave:

Tipografía, mediación, imaginarios, forma y contenido, comunicación visual.

1. Introduction and presentation: typography as a cognitive device

Steve Jobs, in his famous speech at Stanford University in 2005, stressed the importance of typography in the subsequent development of Apple computers – "and since Windows did nothing except to copy the Mac", now all computers owe a debt of gratitude for at least part of their interface to typography:

> At that time, Reed University offered what was perhaps the best calligraphy program in the country (…) I learned things about serif and sans serif typefaces, about the variable spaces between letters, about what makes a typeface truly magnificent. It was subtly beautiful, both historically and artistically (…) and I found it fascinating. None of this had the slightest hope of practical application in my life. However, ten years later, when we were designing the first Macintosh computer, all of that came back to me. Furthermore, we designed the Mac with that as its essence. It was the first computer with beautiful fonts (…), and as Windows did nothing more than copy the Mac, it is likely that no personal computer would have them today. If (…) I had not taken that calligraphy class, personal computers would not have the wonderful typefaces they now possess (Jobs, 2005).

"Magnificent typography"… and all the current graphics potential. It was necessary for those who developed the first personal computers to use typefaces as images in order to be able to represent them with the precision that Jobs wanted, both in the software of their operating systems and in the hardware of their graphics cards and processors that were capable of encoding images of very high resolution. This guided the development of computers in a specific direction: visual representations (desks, windows, icons… precise letters). It is a clear example of the importance of typography, not as a set of alphabetic signs, but as images themselves. It seems clear that for the basic functioning of characters such as symbols of an alphabet, no more than one typeface would actually be needed, and a growing variety would be senseless; thus, it is evident that we have different fonts because each one expresses something different, although we cannot forget the need for distinct fonts depending on the reproduction technique, the medium in which they are going to be arranged, either in print or on a screen, or depending on the size of the characters themselves, according to authors such as Enric Jardí (2007: 12, 64).

The link between typography and technology, and how the former is undisputedly linked to technological development, allows us to observe not only the way in which typography is one of the fundamental elements of visual culture, but also the way in which the process of cultural mediation takes place by using the technology that makes it possible.

The aim of this proposal is to reflect on the mediating aspect of typography, and to illustrate the cultural processes of visualisation modes in the digital era by showing the use of Blackletter characters during the Nazi period and the previous struggle between Blackletter and Roman-style characters during the Renaissance. The fact that certain content is associated with a sign, while understanding that the sign is at the same time form and content, implies the effort to explain the functioning of the elements of meaning: presence, intention and motivation, in the Barthesian perception. Through the analysis of these examples, it is a question of showing how three different but interrelated dimensions, such as visual-aesthetic strategies, the creation of an image, and configuration of a look, interact today in social mediation. Although we have not considered this topic, it must be kept in mind that typefaces, due to their visual characteristics, elaborate a communicative and aesthetic function, which in addition to allowing for the reading process can provide meanings that in a certain way favour the interpretation of a text.

The working hypothesis is that visual reality is neither innate nor inevitable. Everything we see may take a different form, so behind what is seen there are many other visible possibilities that have been rejected. The reasons for the choice of typefaces –a dialogue between presence and absence– tell us that the condition of the observable is arbitrary, and the ways of presenting that which exists and its representations are never complete, and they respond to symbolic processes of the production of meaning that generate aspects related to the social realm. Typography, then, is part of contemporary social imagery.

In order to develop the proposed objectives, and in accordance with the exploratory nature of this work, we have opted for a methodology based on a bibliographic review, on one hand, which due to the nature of an article cannot be exhaustive, but can be rigorous and meticulous. On the other hand, we have carried out an analysis of two typefaces, a selection that has made it possible to illustrate the theoretical considerations; concepts that in turn have been propitiated by these. This work reviews different theoretical perspectives that are framed within semiotics, not so much to sustain closed views as to make a rigorous reflection on the contributions made from different fields to our object of study. The assertion that typeface acts as an intermediary of ideas about the world, that they call the senses into action, and that they imply organization schemes of models and knowledge that represent "ideological guidelines", or in other words, representations that shape a certain vision of the world, has lead us to adopt this perspective as a theoretical and methodological approach.

2. Typography as a grapheme

Typography is a polysemic term that refers to different aspects of graphic arts. Firstly, it can be understood as the complete design of a publication, the correct arrangement of the elements on the page, as well as the choice of fonts, as specified by Stanley Morison in his classic definition included in the Encyclopaedia Britannica, published in London and Chicago in 1929, and which continues to appear to this day:

> Typography can be defined as the art of correctly arranging the material to be printed according to a specific purpose: that of placing the letters, distributing the space and organizing the type for the purpose of giving the reader the greatest help in understanding the text. Typography is an effective means of achieving an essentially utilitarian end, and only accidentally aesthetic, since the visual enjoyment of forms rarely constitutes the main aspiration of the reader (Morison, 1998: 95).

Jan Tschichold, one of the most important and influential typographers of the 20th century, was the driving force behind the "New Typography" (Die Neue Typographie), which originated in Germany in the 1920s and proclaimed the same "functionalist" principles of Bauhaus regarding clarity and the belief that "form follows function". Tschichold also understood typography in this global sense, which he refers to as the "art of writing": "good fonts, and the correct arrangement: these are the two pillars of the entire art of writing" (Tschichold, 2002: 25).

In addition to the composition and choice of elements (the overall design), when we consider typography we also refer to the text composition system prior to the mechanical or digital procedures used in the present day, as well as a printing system, generally used until its current replacement by the technology known as offset. Typographic printing is direct, where the mould or plate in relief is transferred flat against plane to the support (paper, etc.), while offset is an indirect printing system (from a mould or plate to a rubber cylinder and from there to the final support material), as well as planographic (based on xylography). In the latter, in other words, there is no relief on the plates (Bann, 2008).

Thirdly, typography is also the art of designing typefaces, or fonts, exclusively. Strictly speaking, a typographer is a person who creates alphabets, who draws them by previously developing hand sketches. Before digital technology, the typographer engraved type metal pieces from which matrices were later made, and which resulted in the famous moveable lead type. Now this is accomplished by typeset editing software that creates computer files in which each of the fonts and their variants are encoded. The Manual de la Imprenta Española (The Spanish Printing Manual), or Arte de la Imprenta (The Art of Printing) by Antonio Serra y Oliveres, published in Madrid in 1852, distinguishes between the "printer", who would be "the one who exercises the science or art of printing", in the general sense expounded by Morison, and the "typographer", a person who "carries out experiments or seeks to perfect the art of printing" (Serra y Oliveres, 1852: 266), in which we can include the designer or creator of new printing typefaces. The latter term is not currently used, and to distinguish the features of these two denominations, we use the term "typographer" for the person who designs new fonts, or new typefaces -which is the fourth aspect referred to by the term as a synonym for a font type - and "graphic designer" for those who work with typography and compose texts according to the semantic and pragmatic values involved in choosing a font type, or typeface, for use in a particular publication.

Finally, as we have just mentioned, the term typography is currently used in a way that is perhaps not entirely conventional, but is used more and more frequently to refer to the set of fonts in a publication, and even to a particular typeface. Therefore, we use a specific "typography" instead of a "typeface". This use of typography assimilated to typeface is prevalent among professionals in a way that is widely accepted. This is how Laura González and Pedro Pérez Cuadrado understand it in their Principios básicos sobre diseño periodístico (Basic Principles of Journalistic Design): "The first step in graphic design –whatever kind it may be: book, magazine, newspaper, poster, brochure or web page– is the choice of typeface we intend to use in communicating the message" (2001: 77).

This last meaning of typography, understood as typeface, will be our focus as an element of cultural mediation. This refers to a graphic element that is not just a symbol in a writing system to which a sound is arbitrarily associated to later form words with a meaning (in such a case, there would be no variation in typographies). Thus, we are not talking about letters, but about typographies, as Enric Satué distinguishes so clearly:

> In a way [the proposal of his book entitled *Arte en la tipografía y tipografía en el arte* (*The Art of Typography and Typography in Art*)] is an invitation to read. Evidently, not letters, but typefaces; in other words, not the content, but the forms and styles that typographic texts have manifested for more than five hundred years, aspiring to stimulate the knowledge of Joyce's lucid warning: "A word seen is not the same as one that is heard" (2007: 13).

Faced with the established dichotomy between image and word, typography is an inseparable combination of the two, and their correct choice will depend on the following two factors being in harmony: the meaning of the composed text with a certain typeface; and what is communicated by the form, thickness, balance, and conformity of the drawing of the characters. Thus, the search for coherence determines the choice of font so that the sense produced does not contradict the meaning. It is not only what is summarized in Dondis' classic "a combination of the verbal and the visual in a direct attempt to transmit information" (2004: 188), but also a problem of meaning. Roberto Gamonal, professor of graphic design and image analysis at Complutense University of Madrid, in addition to being a typographer, speaks of a "typographic rhetoric" with persuasive purposes to encourage reading and to generate meaning or enhance textual meaning: "characters can transmit not only textual information, but also multiple sensations through their form" (Gamonal, 2012: 79). The problem with typography is that this type of visual communication goes beyond the linguistic dimension. Thus, the shape of the letters, the endings, the size, the contrast between lines and their modulation, become key elements due to the fact that beyond allowing for the language to be represented, they communicate and allow those who receive the message to experience their relationship with the writing in a different way than the experience produced by receiving linguistic symbols. Artists, typographic designers and poets have approached the semiotic problem in typography precisely for this reason. We only have to look at the poems of Mallarmé and Apollinaire, or the visual poems of Joan Brossa, as examples. What is interesting about this approach is it allows us to address the processes of cultural mediation and the ways of creating shared meaning in the social imaginary.

3. The typefaces of cultural mediation

We believe, together with Abril (1997: 63), that "the historical-cultural ways of knowing and communicating imply specific ways of producing, manipulating and interpreting signs and texts. Thus, we can speak of different semiotic systems to refer to the attitudes regarding the signs and texts that characterize the cultural practices of different societies". From this perspective, the author considers this combination of linguistic and visual features of the "typographic space" as a technique of movable type and the fonts "conveyed, processed or inscribed by the printing press", to be part of what he calls the "synoptic space" when he conceives it, as we do in these pages, as a "cultural and cognitive style". For Abril, synoptic describes the experience of "seeing in one glance" the visual experience that is "synchronous with a set of text that is not possible with the time-bound discourses of narration and oratory" (2003: 108). It is the primary experience of seeing

a page arranged in a certain way and with specific fonts before it is read, or even more precisely, at the same time it is read ("synchronic"). Moreover, printing and typography is the place where this "synoptic space" is born:

> A formidable change took place in the history of semiotic practices when in addition to linguistic logic itself, a new logic was added, already contained in medieval books, but especially from the time of the printing press. This was a new logic determined by the visual presentation of words, their distribution in the two-dimensional space of the page, in the three-dimensional space of the volume, and by their combination with other kinds of graphic and iconic typeface (...). The book is not, as the logo-centric canon usually states, a linguistic artefact, but rather a complex visual machine (April, 2003: 107).

This visual machine activates typography. Investigating the specificity that makes typography a cultural and cognitive form will allow us to attend to the processes of social construction. We believe our examples will serve this purpose. Mediation is the capacity of certain actors to organize the experience that subjects have of the world. These actors propose a series of discourses that guide the vision that these subjects have of social reality by placing themselves between the subject and the world. In other words, discourses are organized that articulate symbolic universes and intervene in organizing our experience of reality. These underlying discourses need a physical body to incarnate and function as mediators; a form that is always necessary but also diverse, of which typography is an example. It is enough to appeal to the commonplace daily experience of selecting a typeface when we want to communicate with different interlocutors. The typeface selected to address an institution is not the same as the typeface selected to address a friend. In the same way, this explains why we often avoid or abandon the use of certain fonts, such as Comic sans, which seem to have fallen into disuse because of their own success. It is clear that the way something is said affects what is said; in our terms, the form is a significant, element that also implies a meaning. This meaning, linked to that of the sign that embodies it, helps to produce its significance. In this regard, our example of the link between a certain typeface and Nazi ideology is highly enlightening.

The scope of this approach as to how typeface shouts goes beyond a mere methodological consideration of the functioning of meaning toward an epistemological approach: Reality is not immune to the rationalities and interpretations carried out by the social agents in their interactions. What appears and what is given to us, and that which we use to orient ourselves toward the certainty of knowing something about the world, do not represent solely what is real. Opposed to naive, absolutist ideas of existence projected by empiricism and positivism, facts are not something simply given or natural, but the result of a social situation, and moreover, by the very nature of this situation, these facts have been created in an inter-subjective way and are always prone to continual creation or transformation. Defining that which is real as equivalent to that which exists is a form of power that is exercised not only through the imposition of force, but through the creation and maintenance of a symbolic space, a space of socially-shared meaning in which we can all recognize each other without conflict. For this reason, we insist that there is no reality that is fully immune to the interpretations, frameworks and rationalities built by social actors in their interaction; nor is it completely different from the linguistic-discursive articulations and categorizations through which it is objectified. Typography is that corpus, an objectification that expresses a concept of the world or that implies narratives about the world that are mobilized through its use. This is precisely what determines its choice; we know that we do not refer to the same consideration of the world if we use Blackletter or Roman type.

Reinhard Gäde, a graphic designer who created the original design of the newspaper *El País* in 1976, together with Julio Alonso and Fermín Vílchez, shouted an anecdote to the attendees of the VI Jornadas de Diseño Periodístico de la Universidad CEU San Pablo, (VI Journalistic Design Conference of University CEU San Pablo), held in Madrid in May 2001, by saying the following: "typeface can shout! It can also whisper, speak quietly, etc.". The organizers of the Conference, Pedro Pérez Cuadrado and Laura González Díez, described in more detail Gäde's words in that gathering in which he detailed his project for the aforementioned newspaper. The two organizers stated that his was "a design that set a precedent and was imitated by numerous print media" in Spain (Vílchez, 2011: 454), and even in Europe:

> We believe that at that time, if the newspaper [*El País*] had stated any barbarity had stated any barbarity regarding Franco's followers, who still existed, in an italicized Times 36 point font, it would have been seen as a very elegant, and even quite fair, atrocity. However, if you had said the same words in the Helvetica or Futura fonts –as was done later by a newspaper of the Juan Tomás de Salas group, shouting Freedom!– it would have been shut down in two or three weeks, and the matter would have been finished (González Díez and Pérez Cuadrado, 2007: 37).

Human life takes place in a multiple ecosystem that Lotman calls a semiosphere, which represents the set of meanings, texts, repertoires of signs, and translations from one sign to another, which constitute the medium in which the existence of human beings as semiotic beings develops. Therefore, saying the same words with different fonts means that they are no longer the same words. Thus, it can be understood that typography is one of those environments that express how human society is symbolically arranged, through common categories, representations, stories and the social imaginary. This is what leads the μ Group to call typographical signs "graphemes" due to the fact that they bear significance (1987:100).

We could then argue that typography expresses a phenomenon of indication, identification and delimitation of symbolic places. It is one of the mechanisms by which societies integrate and store events within systems of conventional beliefs and knowledge that allow for the immediate recognition of common representations as naturally linked to a stable and collective social order. Thus, typography bears a certain rationality that possesses a value for a certain community: that of demarcating a symbolic territory in relation to other discursive positions.

The concept of this visual machine, with the characteristics mentioned, compromises a certain understanding of the world. Its way of expressing meaning allows typography to be experienced as a semiotic problem, and the first thing that must be done is not to naturalise it in order to highlight the fact that it possesses a socio-discursive nature. Only in this way will it cease to be considered as a mere support, more or less effective or beautiful, which is a simple, unanimous reflection of the meaning of the sign, or worse, of the world they refer to. The narrative involving the type of font is the product of a story. It also involves a synthesis of knowledge, exhibits an orientation, and expresses a point of view. For this reason, as we stated above, they imply making a choice.

The assumption that meaning is a method of donation by the referent containing indications has been developed by the analytical philosophy of the Fregean school of thought and the philosophy of ordinary language inspired by Strawson. Semiotics and the Analysis of enunciatory discourse assumes, opting for the debate of Strawson, that saying something is a discursive event by which what is said is not independent of the fact of saying it. The enunciative perspective incorporates considerations of Austin and Benveniste, whereby all signs provide indications concerning the fact of their enunciation,

and these indications form part of their meaning. But most theoretical perspectives consider these indications to be additional or complementary information to the act of saying, sidelining what has been shown. Only pragmatics sees them as necessary, but only in terms of determining the type of action. Structural semiotics is also being debated with regard to the nature of these indications, recognizing their importance in determining meaning. For this reason, we think that instruments are needed in the analysis of meaning in order to reflect on how these singularities become interpretative habits, or in other words, how the indications become necessary. From this point of view, Farias' methodological proposal is extremely useful in order to carry out analyses that reflect the foregoing. This author maintains the following:

> Cruzando estes níveis, e a partir da interpretação da semiótica peirceana feita por Charles Morris, o quadro de análise aqui proposto é completado pelas dimensões sintática, semântica e pragmática dos artefatos analisados. A dimensão sintática diz respeito aos aspectos formais ou denotativos da tipografia, notadamente aqueles vinculados à sua visualidade, estrutura e comportamento. A dimensão semântica refere-se aos aspectos denotativos da tipografia, ou aos significados atribuídos (socialmente, historicamente, estrategicamente), às formas tipográficas. A dimensão pragmática deve ser entendida aqui, em consonância com o pensamento de Charles S. Peirce, como a soma das conseqüências práticas (materiais e ambientais, mas também culturais, sociais e econômicas) resultantes da concepção e uso da tipografia (Farias, 2016: 47).

> Crossing these levels, and from the interpretation of Peircean semiotics made by Charles Morris, the framework of analysis proposed here is completed by the syntactic, semantic and pragmatic dimensions of the artefacts analyzed. The syntactic dimension refers to the formal or denotative aspects of typography, especially those linked to its visual aspect, structure and behaviour. The semantic dimension refers to the denotative aspects of typography, or to the meanings assigned to typographic forms socially, historically, and strategically. The pragmatic dimension here should be understood in line with the thinking of Charles S. Peirce as the sum of the practical consequences (material and environmental, but also cultural, social and economic) resulting from the design and use of typography (Farias, 2016: 47).

This is not the place to propose a model of analysis that would make it possible to formalize the methods and orientations of meaning, but we wanted to be sure to point out how the phenomena we have approached from a speculative point of view are anchored in the real functioning of the texts.

Therefore, the concept of typography makes it possible to reflect on a determining aspect: what the typeface shows is essential for the configuration of meaning in the same way as meaning is. In addition, these indications elaborate or imply a filter due to the fact that when a typeface indicates something, it centres the gaze on some aspect of the designated object. This procedure of meaning proposes certain memory, some associations of specific meaning and certain prospective orientations that naturalise an interpretation.

Moreover, these considerations about the functioning of typeface allow us to reinterpret the traditional consideration about the relationship between language and context, the sign and the world. The representation that typography offers for interpretation is the product of an inferentially-oriented process, which expresses a point of view on the object and the content conveyed.

4. The First Battle (Blackletter versus Roman typeface)

We tend to think that we live in fast-paced times, a new and different era to all previous ones in which changes and events happen without interruption much faster than even the capacity to assimilate them, in contrast to an idealized past in which things happened slowly and social changes were a matter of centuries rather than decades, as we now measure them. However, if we think of the way Europe changed between 1450 and 1500 (in 1449 Gutenberg printed his Constance Missal, the first printed work using movable type in the western world), when incunables ceased to be printed and one could already speak of a publishing industry, perhaps we should revise the term historical acceleration as something that refers exclusively to the current moment.

Furthermore, according to Enric Satué (1998), in those mere fifty years, and with the handcrafted means of the newly invented printing press (it was necessary to compose the lines with the characters by hand, one by one; to print the pages thus formed one by one; to bind by hand, etc.), no less than eight million books were printed and distributed. Thompson goes even further as far as figures are concerned by quoting Febvre and Martin, stating that these authors "estimate that by the end of the 15th century there had been at least 35,000 editions and at least 15 to 20 million copies had been distributed". This was a very high percentage in relation to the total population of the continent –"just under 100 million inhabitants in the countries where the printing technique had been developed" (Thompson, 2010: 82)– and a cultural change of unprecedented proportions, carried out at a speed that may not have been seen until that time. "Around 1480", Satué continues, "there were printing workshops in 110 cities in six European countries. In spite of the aforementioned artisanal nature of this activity, "printing with movable type, which replaced handwritten copies, was the first system of mass production", as correctly defined by Ellen Lupton (2016).

For this author, "typeface is the visual manifestation of language" and a fundamental element in the concept we have of what a text is, due to the fact that before printing was invented books were full of errors that were copied from one copy to another, and it was typography that "helped to consolidate the literary notion of text as an original and complete work, as a stable body of ideas expressed in an essential way" (2016: 89). Moreover, in line with Walter Ong, she also speaks of a change in people's mentality due to the way in which the printing press structured words thanks to spacing and standardized punctuation. As she puts it, "writing takes words from the world of sound to the world of visual space, but printing imprisons them in that space".

This is a problem that Walter Benjamin addressed in 1936 when he theorized about the "age of mechanical reproduction", about the changes in the way of thinking that come about with both the mechanization of the last two centuries and the one that occurred with movable type at the beginning of the 16th century:

> During long periods of history, the mode of human sense perception changes with humanity's entire mode of existence. The manner in which human sense perception is organized, the medium in which it is accomplished, is determined not only by nature but by historical circumstances as well (2003: 46).

letras góticas

letras romanas

Figure 1. Fraktur Blackletter typeface (above) and Roman Renaissance typeface, or old, Bembo (below).

Therefore, at that precise moment in history when the technical reproduction of texts was born, what we might call the first battle occurred between Blackletter typefaces and their irreconcilable antagonists and enemies since then: the so-called Roman typographies. The typeface known as gótica in our language (Blackletter and Old English in modern English, and Fraktur in German) includes diverse groups of letters, which according to the reference work of Bain and Shaw on Blackletter can be classified in four basic categories or styles: "Blackletter form (texture or gotisch), Blackletter sum (rotunda or rundgo-tisch), schwabacher and Blackletter fracture (fraktur)" (2001: 30). The first had their origins in the north of France (Bertheau in Bain and Shaw, 2001: 45), and they were the ones that served as a model for the first movable type of Gutenberg, whereas schwabacher and Blackletter fracture are the German "native variants" (Bain and Shaw, 2001: 31). In their formal aspect, they are typefaces that have compact and highly angular characters in common, with "diamond-like features that close the eye of the character and sometimes make its identification difficult" (Martín Montesinos and Mas Hurtuna, 2007: 50). What the first movable type did was to transfer those Blackletter writings of hand-written and medieval origin to matrices made of lead. With these typefaces, Gutenberg composed his 42-line Bible, a masterpiece in the history of culture; but the master printer of Mainz:

> Only wanted to accelerate the interminable process involved at that time in the handwritten production of a book (...) Apart from the novelty of the procedure, Gutenberg made every effort to ensure that the printed pages were as close as possible to the master pages of the hand-written text, while the metallic typefaces had to faithfully reproduce the breaks in the quill of the Blackletter characters (2007: 51).

However, the Blackletter characters were confronted from the beginning with the main problem: legibility. Strictly speaking, this term refers to the greater or lesser ease of a text to be read, but a text is not the same as a typeface. Since the mid-twentieth century, there have been several quantitative studies, such as those of the American pioneers Tinker and Paterson, cited by Richaudeau (1984), based on measuring reading speed with different fonts, sizes, backgrounds, etc., and more recent studies that measure eye movement. Testing of text comprehension has also been carried out because it is obvious that reading a text, more or less quickly, is not the same as understanding it. Laura González and Pedro Pérez Cuadrado (2001) acknowledge that "the issue of legibility is a bit confusing", and correctly point out that in the Spanish language we use the same term to refer to two different aspects that use different words in English: legibility, which these authors translate as something similar to "visibility" (whether a letter is more or less difficult to see), and readability, "which we could be interpreted as 'lecturabilidad' –if the word existed in Spanish– or in English, easy to read, or legible".

Regarding the subject of legibility, for the French researcher there are eight factors that intercede in what he calls "typographical legibility" (Richaudeau, 1984: 13-24). This is different from "linguistic legibility" with reference to texts, which refers "to the choice of words and their combinations within sentences". These factors would be the size of the characters; the spaces between words; the justification of the lines, or their alignment to the left, centre or right; the length of the lines; the spacing between them, or interline spacing; and the ink and paper that serve as supports. According to the aforementioned North American quantitative studies on which the French author bases his ideas, the design of letters has no impact on legibility, if legibility is understood as the speed at which a text can be read. Only the spacing between letters, and above all the size of the characters, has an impact on this skill, although it is not significant. The only element that Richaudeau mentions as decisive in terms of ease of reading is "the habit" of reading with some characters or others, and he cites precisely the Blackletter characters as an example: "A text composed of Blackletter characters [including here the characters a, b, c, d, and e, in Blackletter] will be poorly read by a Frenchman or an Englishman, but easily by a German university student" (1984: 15). We question this assertion because the books currently published in Germany do not use Blackletter typeface, to which another fact must be added. Yvonne Schwemer-Scheddin emphasizes that Blackletter "is no longer taught in schools, and they are therefore very difficult to read" (in Bain y Shaw, 2001: 91). Furthermore, information is provided by Hans Peter Wilberg who states that from 1941 onward "everything printed had to be adapted to the Roman font: textbooks were replaced, and in schools the exclusive teaching of Latin handwriting had to be put into practice" (in Bain and Shaw, 2001: 76-77). It is very different reading a sign, a poster, or different kinds of labelling, than reading a series of small letters in a text. Bertheau also agrees with the idea that use or custom is an essential factor in the legibility of a typeface, "a characteristic that cannot be measured or demonstrated by scientific methods, because first of all, the reader must be familiar with the conventions that allow for reading the text" (in Bain and Shaw, 2001: 45); In the same reference work, Philipp Luidl, who after first speaking of "being well acquainted", later comes to another line of reasoning that contradicts the thesis of usage or custom when he affirms that if "legibility depends on the ability to distinguish the contours of the word with ease, we can affirm that Blackletter fracture offers much more richness than Roman typefaces" (in Bian and Shaw, 2001: 39).

From a qualitative point of view, the opinion of the most important typographers and designers relates the legibility of typefaces with elements such as the contrast between the different parts of a character, the middle eye (also called the "x-height", which is equivalent to the vertical measure of a lowercase letter without ascending and descending lines), and the counterform, an element being given an increasingly greater role in the design of an alphabet, and which refers to the white spaces enclosed within the characters, the inner circle inscribed on the circumference that draws an "o", as the most clear example. In the case of Blackletter typefaces, these three elements are a clear example of their lower legibility as compared to Roman type (with Times New Roman being the most important modern representative of this group of typographies). Blackletter typeface has excessive contrast between the different parts of the same letter. For example, its middle eye is very large but blurred precisely because of the complexity and even absence of counterforms. What both approaches agree on, both quantitatively and qualitatively, is habit. Eric Gil stated that "in practice, legibility is equivalent to what one is accustomed to".

Now let us move on to the Renaissance. Nicolas Jenson, a French engraver who had learned the art of printing together with Gutenberg himself in Mainz (in fact, he attributed the invention of printing to himself), settled in Venice in 1468, where he developed what is considered to be the first Roman typeface for printing. His inspiration for lowercase letters came from a fusion of the earlier writing called Carolingian and "the ancient lettera, a classic hand-written style with wider and more open forms" (Lupton, 2016: 15), and for uppercase letters he was inspired by the stony characters of the monuments of ancient classical Rome. Jenson's typefaces were of a beauty and a formal perfection that would only be exceeded, shortly after, by the typefaces created as an evolution of those of Jenson, by one of the greatest typographers of all time, Aldo Manuzio, an editor and humanist writer.

If there was anyone who incarnated the ideal of humanism and the Renaissance, it was undoubtedly this one man who set himself the goal of "regenerating society through culture" (Satué, 1998: 67), which was the advertising slogan of his printing workshop. With the financial help of the family of his friend and schoolmate, Pico della Mirandola, he was able to settle in Venice in 1490. There he partnered with publisher Andrea Torresani, who had acquired Jenson's typefaces and printing workshop upon his death, along with Francesco Griffo, who carved the type metal pieces. The most sought-after books in Europe came from Aldo's workshop, both for their content, due to his having recovered some fundamental works in Greek and Latin from classical culture for which he had to create typefaces in Greek characters, and for the quality of the printing. Erasmus of Rotterdam himself praised Manuzio's typefaces and even spent a year in his house in Venice to supervise and admire the printing of some of his works.

To edit the first of his books in Latin, Sobre el Etna (1495), by Pietro Bembo, Manuzio and his engraver Griffo created a typeface that surpassed Jenson's magnificent fonts. It was a typeface that all contemporaries commented on for its "clarity", possibly referring to what we now call legibility. Clarity and beauty in unsurpassed harmony. So much so that this typeface is still used today by the name of Bembo, recovered by the typographer Stanley Morison in the 1920s for the American company Monotype. With these fonts, though modified in an attempt to find an unachievable perfection, Manuzio in 1499 published one of the last incunables: Hypnerotomachia Poliphili (Polifilo's Dream), a mythical work considered by some bibliophiles to be the most beautiful book ever printed. As Benjamin analyses in his aforementioned work, reproducibility confers to the work of art, or to any cultural object in whatever field, a quality that was impossible before this technique made its reproduction attainable: "its capacity to be perfected" (2003: 61).) Aldo Manuzio did this over and over again with typefaces, despite the substantially high cost, in time and money, of casting new and complete pieces of characters.

However, the fame and prestige that Manuzio enjoyed in life is assumed not to have come from the most beautiful book ever printed, but rather from the collection of classics that he launched to the market in the so-called "octavo format". He was the first printer to use this page size for literature, very small for its time (one eighth of the printing sheet, some eighteen centimetres high), which was an innovation that is now considered to be the invention of the pocket book. For these books, Manuzio and Griffo together designed a typeface they called 'aldina' in honour of its creator, which we now call italics. It was a brilliant and risky idea that changed reading habits and the use of books throughout Europe. There are countless oil portraits of rich bourgeois of the time who appear with one of these small books in their hand as a symbol of cultural prestige. We mentioned "habit" earlier as one of the determining factors of the legibility of a typeface, and now that printed characters were travelling throughout all the cities of Europe, Blackletter typographies lost their first battle, because

outside of Germany, away from ecclesiastical circles or the solemnly decorated official forms, most of the new readers were not accustomed to those letters because they were so difficult to read. In addition, humanist typographies personified and transmitted the value systems of the new society, of the new system of thought. Satué states that the matter was "ready for judgment", and cites the expert authority on printed books in the fifteenth century, George Painter:

> The 42 lines of the Bible printed in 1455, and the Hypnerotomachia or Polifilo's Dream, from 1499, constitute in themselves the incunables period in a preeminent way, one at the beginning and one at the end. The Gutenberg Bible is dreary and severely Germanic, Gothic, Christian and medieval; Hypnerotomachia, on the other hand, is radiantly and joyfully Italian, classical, pagan and Renaissance. Both are the most extraordinary masterpieces of the printing art, placed at the two poles of human aspiration and desire (1998: 146-147).

Although Blackletter characters had a great impetus in Germany with the publication of the Bible translated into German by Luther in 1534, which was printed in schwabacher type (Batheau stresses that Luther selected the typeface in clear opposition to the Roman types already associated with the papacy [in Bain and Shaw, 2001: 45-50]). As far as the rest of the continent was concerned, Blackletter typeface had lost the first of its battles, but as Walter Benjamin recalls, the ritual value of cultural objects "does not yield without resistance" (2003: 58).

5. The second battle (Blackletter versus Futura typeface)

Shortly before the Nazis came to power in Germany in January 1933, Paul Schultze-Naumburg, an architect and founding member of the Werkbund (Deutscher Werk-bund, the German League of Labour, an organization created in 1907 in Munich that focused on architecture and design, in a sense a precursor to Bauhaus), organized a series of conferences throughout Germany to disseminate his theories about art and design in relation to race. In the city of Munich, he was so successful that he was forced to repeat the session a few days later. In his paper he presented slides of modern art, as well as Asian and African art, in which he saw the "product of a perverse mind" (Burke, 2000: 125), a precedent of the famous exhibition also held in Munich in 1937 under the title "Degenerate Art".

At the second Schultze-Naumburg conference in Munich, a young painter from the same city, Wolff Panizza, had the audacity to ask where the good modern art was located at the time, and he was answered with a brutal beating by the Nazi guards watching over the conference. They kicked his stomach with their boots and smashed his face with their iron fists so that he would have "time to reflect on his question and the answer received" while he was in hospital (2000: 125). The incident was reported in the brochure Kulturbolschewismus? (Bolshevik-culture?), published in 1932 by the typographer and prominent member of the Werkbund, Paul Renner, a paper that resulted not only in his arrest but in losing his position as director of the German School of Printers in Munich. Shortly before his arrest on 31 March 1933, he had received a visit in his office from a senior official of the Ministry of Foreign Affairs to supervise Renner's work as commissioner for the international exhibition for the V Triennial in Milan. "Several objects were considered to be unsuitable" and Hanfstaengl (director of the National Gallery in Berlin) "specifically complained that the sample was unbalanced in favour of Roman typeface to the detriment of Blackletter fonts" (2000: 130).

The aforementioned Werkbund association was inspired in its beginnings by the English Arts and Crafts movement of William Morris. A school of thought that advocated a return to manual labour, to men versus machines, in the face of the growing dehumanization caused by the process of industrialization in the last years of the nineteenth century and the beginning of the twentieth. The English Arts and Crafts movement gave an extraordinary push to typography and everything related to the printing of books, posters and graphic arts in general.

One of its most important followers was Stanley Morison, creator of the Times New Roman font, which were Roman characters in their most praised expression, and one of the most successful typefaces in history. He also did this in order to completely redesign The Times newspaper it is considered to have been the first newspaper ever to be completely redesigned, including its typeface), which was printed on Monday, October 3, 1932 with these completely new, immortal fonts. However, the German Werkbund movement had some divergent characteristics, highlighted by the fact that rather than going against industrialization, its proposal was to harmonize the two sides, industry and art, in order to reconcile quality craftsmanship with mass production. "In the debate on technology, the machine became the main topic of the struggle between traditional and vanguard ideas" (Burke, 2000: 26).

Figure 1. Blackletter Fraktur typeface (above) and Futura typeface designed by the German typographer Paul Renner in 1927 (below).

Within this context of strain between traditional and modern, the New Typography movement also emerged in Munich with typographers Paul Renner and Jan Tschichold as prominent figures. Although the term was coined by Moholy-Nagy for the catalogue of the historic Bauhaus exhibition in 1923, the most important theorists were the aforementioned Tschichold, mainly in his work of the same name, Die Neue Typographie (The New Typography) of 1928, as well as Paul Renner himself with his Mechanisierte Grafik (Mechanised Graphic Design). Además, como el título del libro en alemán viene enit published in 1931. The principles of the New Typography can be summarized as simple and plain, completely without ornamentation, with a so-called asymmetrical design (texts always aligned to the left instead of centred, as happened in a classical way with titles), and the use of sans letterform type (without extending features at the end of strokes or san serif), such as the Futura typeface, which during those years was being developed by Renner himself. This is graphic design closely related to architecture, to functionalism (although less radical in its approaches in this sense than in the case of Bauhaus), and to the avant-garde. In relation to Bauhaus, some authors, including Burke himself (2000: 59), maintain that the Weimar School of Arts and Crafts has historically been overrated in terms of graphic design and typography, since all of its proposals are in fact the work of the New Typography of Munich, but due to the exile of the main figures of the Bauhaus to the United States as a consequence of Nazism, they expanded more internationally.

In the summer of 1924, Paul Renner sketched a type of serif –"the queen of the "dry serif", according to Satué (2007)– inspired by geometry, using pure symmetry and elementary figures (circles, squares and triangles). It was encouraged by Jakob Hegner, editor of a publishing and graphic arts company, who was looking for a modern typeface with those characteristics. In 1927, design of the font that launched the Bauer typeface foundry in Frankfurt was completed. The rest is history, as this undoubtedly became a classic typeface of the twentieth century, along with the Times of Morison in 1932, and the Helvetica of Miedinger and Hofman in 1957. Burke points out that the first words Paul Renner wrote, or literally sketched, with his new typeface in the summer of 1924 were Die Schrift unserer Zeit (the typeface of our time), a motto that later accompanied the commercial launch of the Futura typeface (2000: 82). This implied that his typography emerged from the Zeitgeist (the spirit of a time), which seems to corroborate authors like Satué when he affirms that "without a doubt, the Futura typeface was the most emblematic depiction of the rationalist period" (Satué, 2007: 42). But that was not the only reason, as Renner had also insisted his entire life that this alphabet was nothing more and nothing less than the German typeface.

The national identity or "spirit of an age" is thus made up of languages amongst which the visual language of typography can undoubtedly be found, which is why the modern typefaces of Renner were confronted by traditional Blackletter fonts that the Nazis clung to in the beginning in order to identify themselves as "genuinely German". "Typeface is one of the most eloquent means of expression of every era and style", said Peter Behrens, architect, interior designer, painter, engraver, and designer, as well as a member of the Werkbund. He continues, "It is close to architecture, provides the most characteristic portrait of a period and the most implacable testimony of a country's intellectual level" (Satué, 2007: 28). A view shared by the vast majority of typographers, and even by those in charge of recreating other eras who often use typography, printed material, and posters of each historical moment. Son Ellen Lupton, who in addition to mentioning its historical aspect (she mentions "the ongoing tradition that connects you with other designers, past and future" (2016: 8), also includes typography in a "social flow of messages" determined by the typeface chosen to produce them:

When choosing a typeface, graphic designers take into account the history of typography, its current connotations, and its formal qualities. The objective is to find the desired harmony between font style, the specific social situation, and the content of the project being carried out (2016: 32).

Therefore, it is not surprising that in the historical context described, the Nazis used Blackletter characters as an element of "national identity" in their propaganda. There were also antecedents: in 1813 with the Napoleonic invasion; in the Franco-Prussian war of 1870; and in 1914 during the prelude to World War I, when Blackletter typeface, "the German type, was imbued with nationalism" (Willberg, in Bain and Shaw, 2001: 71). Satué also mentions another master of power manipulation in the personage of Cardinal Richelieu in the 17th century, who was the creator and organizer of the state-run French Royal Printing, "aware of the importance of typography as an instrument for government and propaganda" (2007: 27). In the case of Germany in the 1930s, those responsible for the communication (propaganda at that time) of the National Socialist Party associated the historical virtues of the idealized German citizen with a certain typeface, and political party leaflets and announcements also used the same typeface (the very cover of Hitler's *Mein Kampf* (1925) was composed in Blackletter type). As a result, the message was being reinforced in a way that was also somewhat "invisible", despite the evident paradox due to the fact that we are talking here about visual language. When Mauro Wolff speaks of "creating culture", he is referring to the way in which knowledge and consciousness are structured, so this is why, as he puts it:

> Those who experience it tend to be unconscious, in exactly the same way that one is not aware of the development of knowledge, or is not aware of the very fact of being aware of something (…). This does not mean that this kind of process is invisible, but rather it has to become invisible, because its invisibility is a condition for its effectiveness (1994: 118-119).

Moreover, this kind of invisibility as a condition for effectiveness is what fostered the use of typography by National Socialist leaders. Seen another way, this is a type of behaviour that Viktor Klemperer generally attributes to his entire speech. In his book *LTI* (*Lingua Tertii Imperii*), or the Language of the Third Reich, published in 1947, Klemperer writes about "the poverty of uniform slavery", "a collection of typical clichés", and "the language of mass fanaticism", in relation to the discourses of Nazi Germany's authorities.

His analysis places the extra-linguistic elements of LTI, especially Hitler's own speeches, at practically the same level as the content of his words: short, poor phrases in which volume, voice inflection, etc., stand out. Elements that we can compare with typography in the written language. Thus, by using typefaces one can tell lies:

> A sign is anything that can be considered a relevant substitute for any other thing. That so-called 'any other thing' must not necessarily exist, nor must it in fact survive at the moment when the sign represents it. In this regard, semiotics is, in essence, the discipline that studies everything that can be used to tell lies (Eco, 2000: 22).

We have already mentioned that when we speak of Blackletter characters we are actually referring to a set of several typefaces of letters with common characteristics (form, sum, *schwabacher, fraktur*). According to authors such as Luidl (in Bain and Shaw, 2001: 37-43), these would adapt to the very characteristics of the spoken German language (its greater emphasis on words as sound units rather than on syllable structure, or the predominance of consonant sounds), "and the typeface is the visible language" (Shaw and Bain, 2001: 32). These types of letters are mainly associated with the time period from the Lutheran reformation until the era of German culture, but Paul Renner himself pointed out their authentic origin:

> Whenever reference is made to the Gothic style, and also in the case of Blackletter characters, the term Gothic should be replaced by the word franc, since the Gothic style is not of the Goths, but of the Franks. Carolingian lowercase letters underwent a stylistic transformation before becoming the universal typeface: the semicircular arch became an ogival arch (2000: 233).

Thus, Renner was saying nothing less than the fact that those typefaces that epitomized the German spirit were of French origin! French, as is well known, is the preeminent enemy of all that is German. That is why he insisted that his typeface, *Futura*, was an entirely German font. And he was right. But he could not put an end to such a deep-rooted tradition. Once again, the undeniable enemy of Blackletter typeface, the lack of legibility, became a decisive weapon in its loss in the second battle. With the international expansion that Hitler had in mind, those characters were useless for communicating rules to occupied populations, because as we have already seen, the habit, or custom, of using certain characters is decisive in reading a typeface with greater or lesser ease, and in no other country except Germany were texts generally read using Blackletter characters in the 20th century. On January 3, 1941, after having signed the pact with Italy and Japan in the previous year to establish the new world order, and having already occupied part of France, the Netherlands, Belgium, Denmark and Norway, Burke points out that a German government decree was published banning Blackletter writing with the delusional argument that it used "Jewish letters" (2000: 167). So delirious was the situation that the decree was

circulated after being written with a typewriter on Nazi Party letterhead in Blackletter typeface. The new "explanation" to justify this action was that in the past Jews had apparently owned many of the German printing presses for the purpose of transmitting their culture... and their typefaces.

6. Conclusions: The shapes of signs are the forms of the world

In line with the thoughts of Nietzsche, we understand that any "non-rhetorical" functioning of language does not exist (since what we usually call "rhetoric" refers to nothing less than the entire normative and conceptual framework of language, grammar, and thought), and therefore we cannot share the reflections that resolve and finalize the question of typography and meaning as a problem of persuasion.

Typefaces have a function that is constructive-communicative, aesthetic, didactic and persuasive in the sense that it wishes to be read and to have coherent content, but this does not imply being able to describe the mechanisms that explain why a typeface is associated with, and contributes to, the development of a given social discourse. We believe our proposal, which focuses on the idea that the meaning of a sign, or typeface, is not provided by its physical aspect, but by its interpretation and the effects it produces, is more clarifying.

A sign has the capacity to allow several, or even all gazes towards the object, but only activates one, which is the one that shows its naturalised feature, the prevailing meaning that is established. Furthermore, the examples shown provide confirmation. The forms and laws of our worlds are not found there, but are imposed by our vision of the world. Moreover, the forms, or signs, that we use to reflect on and name those versions determine the forms of the world. Knowing what the words of a language mean (form and content) requires understanding the way in which they are used, or said another way, how the beliefs contained in those words are anchored. The signifier points to a story that is a mediator in the sense of our relationship with the world, and of our relationship with the word that supports it. Typography is an epistemic process. It is a way of knowing and at the same time a legitimizing practice of the stories it incorporates. Its reading is not innocent. It seems to make us its followers. Using it, or interpreting it, forces us to take sides.

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