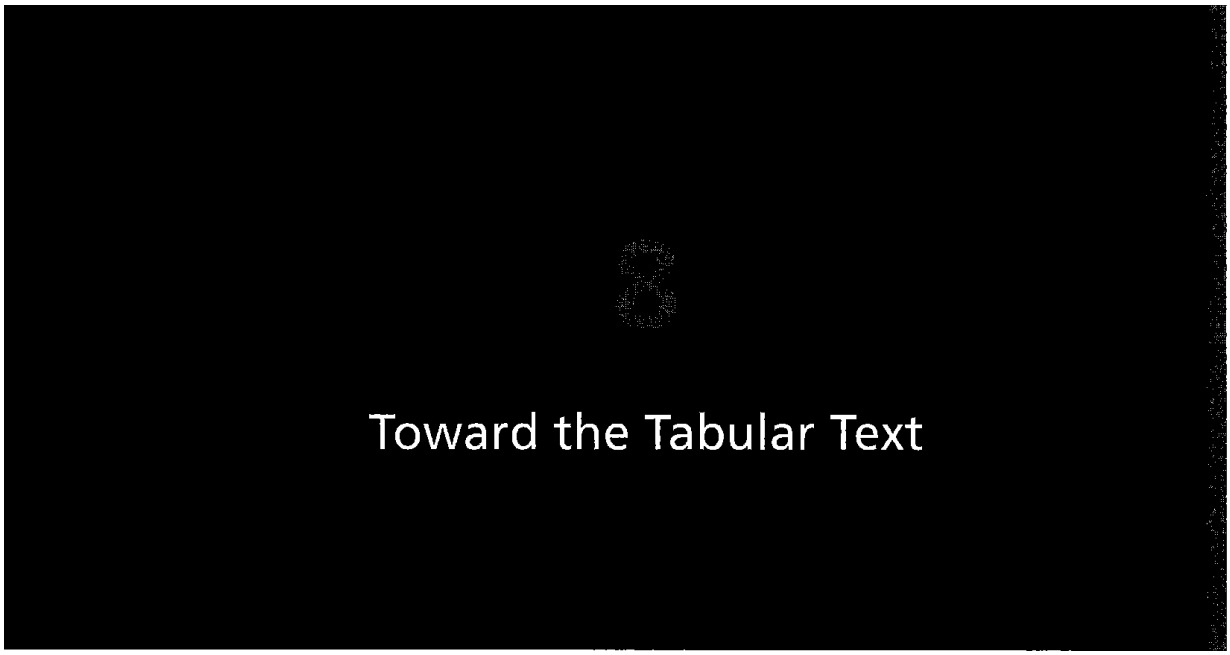


Toward the Tabular Text

Unlike hieroglyphic writing, whose pictographic component gives it a visual, spectacular aspect, alphabetic writing was conceived as a transcription of speech and was from its inception associated with the linearity of orality. This linearity is aptly symbolized in the arrangement used in early Greek writing, in which the characters in the first line were aligned from left to right, and those in the next line, from right to left, with the characters sometimes inverted, imitating the path of a plow working a field, a metaphor that gave this type of writing its name: *boustrophedon*.[1] Readers were supposed to follow with their eyes the uninterrupted movement the hand of the scribe had traced.

Orality thus extended its influence over the medium of text. The scribe lined up columns of text on sheets of papyrus—which had been in use since 3000 BCE—until he came to the end of the scroll. Despite the characteristics that made the papyrus scroll the quintessential book for three millennia, the fact that it was rolled up into a *volumen* placed serious limitations on the expansion of writing and helped maintain the book's dependence on oral language. It was taken for granted that readers would read from the first line to the last and that they had no choice but to immerse themselves in the text, unrolling the *volumen* as a storyteller recounts a story in a strictly linear continuous order. In addition, readers needed both hands to unroll the papyrus, which made it impossible to take notes or annotate the text. Worse still, as Martial observed, readers would often have to use their chin when rerolling the *volumen*, leaving marks on the edge that were rather off-putting to other library users ("Sic noua nec mento sordida charta iuuat" ["How pleasant is a new exemplar unsoiled by chins"].[2]

The advent of the codex was a radical break with this old order, and it brought about a revolution in the reader's relationship to the text. A codex consists of pages folded and bound to form what we today call a book. These pages were made of papyrus or parchment—paper having appeared in Europe only in the 1100s. The codex emerged in classical Rome, several decades before the Common Era, at the time of Horace, who used one himself as a notebook. Smaller and easier to handle than a scroll, the codex was also more economical, because it allowed scribes to write on both sides and even to scrape off the surface and write on it again. But because of its antiquity, the scroll was still considered to have greater dignity and was preferred by the cultured elite, a status the codex did not acquire for several centuries. The transition really took place only in the fourth century in the Roman Empire. And it took even longer for the new medium to free itself from the model of the *volumen*—just as it took the automobile several decades to completely rid itself of the model of the horse-drawn carriage. Such is the inertia of dominant cultural representations.

Christians were the first to adopt the codex, which they used to spread the Gospels. The new format, which was smaller, more compact, and easier to hide and to handle than the scroll, also had the advantage of representing a sharp break with the tradition of the Jewish Bible. Historians find more and more evidence that the latter reason was in part responsible for the choice of the codex format by the Christians, but the wide adoption of the codex over the following centuries was essentially due to "the twin advantages of comprehensiveness and convenience."[3]

The new element the codex introduced into the economy of the book was the page. I will look at the problem of the integration of this important innovation into the digital order in the section "The End of the Page? [chapter 34]" It was the page that made it possible for text to break away from the continuity and linearity of the scroll and allowed it to be much more easily manipulated. Over the course of a slow but irreversible evolution, the page made text part of the tabular order.

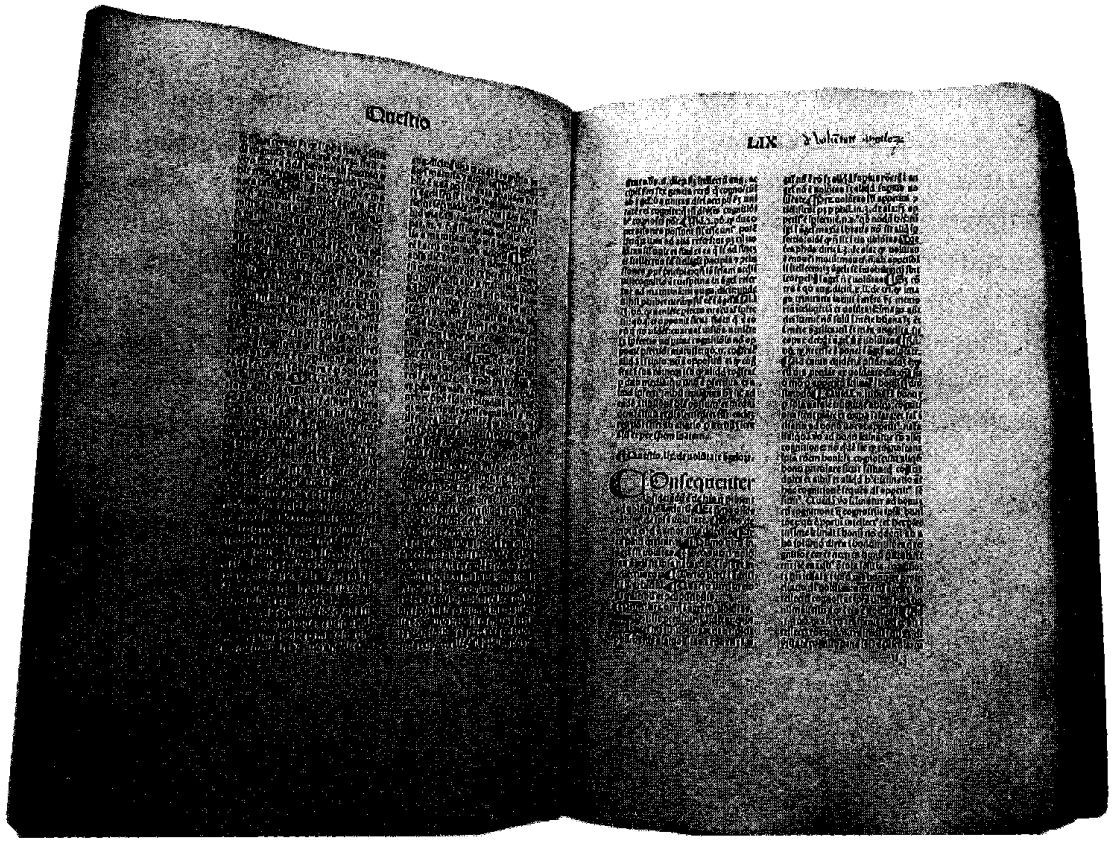
The codex is the quintessential book, without which the pursuit and dissemination of knowledge in our civilization could not have developed as fully as they have. The codex gave rise to a new relationship between reader and text. As one historian of the book writes, "This was a crucial development in the history of the book, perhaps even more important than that brought about by Gutenberg, because it modified the form of the book and required readers to completely change their physical position."[4] The codex left one of the reader's hands free, allowing him or her to take part in the cycle of

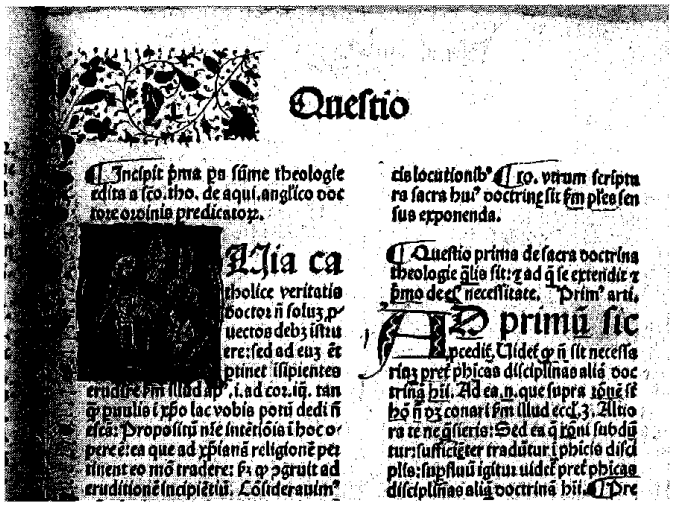
writing by making annotations, thus becoming more than a mere recipient of the text. Readers could also now access the text directly at any point. A bookmark let them take up reading where they left off, further altering their relationship to the text. As another historian notes, it took "twenty centuries for us to realize that the fundamental importance of the codex for our civilization was to enable selective, noncontinuous reading, thus contributing to the development of mental structures in which the text is dissociated from speech and its rhythms."[5]

When the potential of this union of form and content in the page became apparent, various types of visual markers were gradually added to the organization of the book to help readers find their bearings more easily in the mass of text and make reading easier and more efficient. Since the page constitutes a visual unit of information related to the preceding and the following pages, allowing it to be numbered and given a header, it has an autonomy that the column of text in the *volumen* did not. Thanks to the page, it is possible to leaf through a book and quickly know its contents, or at least the essentials.

The page can be displayed for all to see, inviting monks in scriptoria to combine text and images. While the papyrus was rolled up again after reading, the codex can remain open to a double page, as demonstrated by the big psalters of the Middle Ages that were displayed on their lecterns in churches. The page was thus the place where the text, which was previously seen as a mere transcription of the voice, entered the visual order. From then on, it would increasingly be handled like a painting and enriched with illuminations, something that was profoundly foreign to the papyrus scroll. One cannot see these illuminated manuscripts without being struck by their fusion of letter and image. Reading becomes a polysemiotic experience in which the perception of the image, which is far from a mere illustration, enables readers to recreate in their own mental space the tensions and emotions experienced by the artist. The readable gradually moves into the realm of the visible.[6]

The sight of the codex open on its lectern is emblematic of a religion whose ideal was that all people should be able to read the sacred texts and share the Revelation. Various other innovations gave rise to a change in the reader's relationship to the text and to reading. They include the insertion of spaces between the words in Latin texts, which began about 700 CE in Irish *scriptoria* (*Book of Kells*) and led to decisive changes in the formatting of text.[7] The period from the eleventh to the thirteenth century saw the consolidation of many features that allowed readers to escape the original linearity of speech, such as the table of contents, the index, and the header. Paragraph breaks indicated in the text by a pilcrow (¶) made it easier for readers to deal with units of meaning and helped them to follow the main divisions in the text.

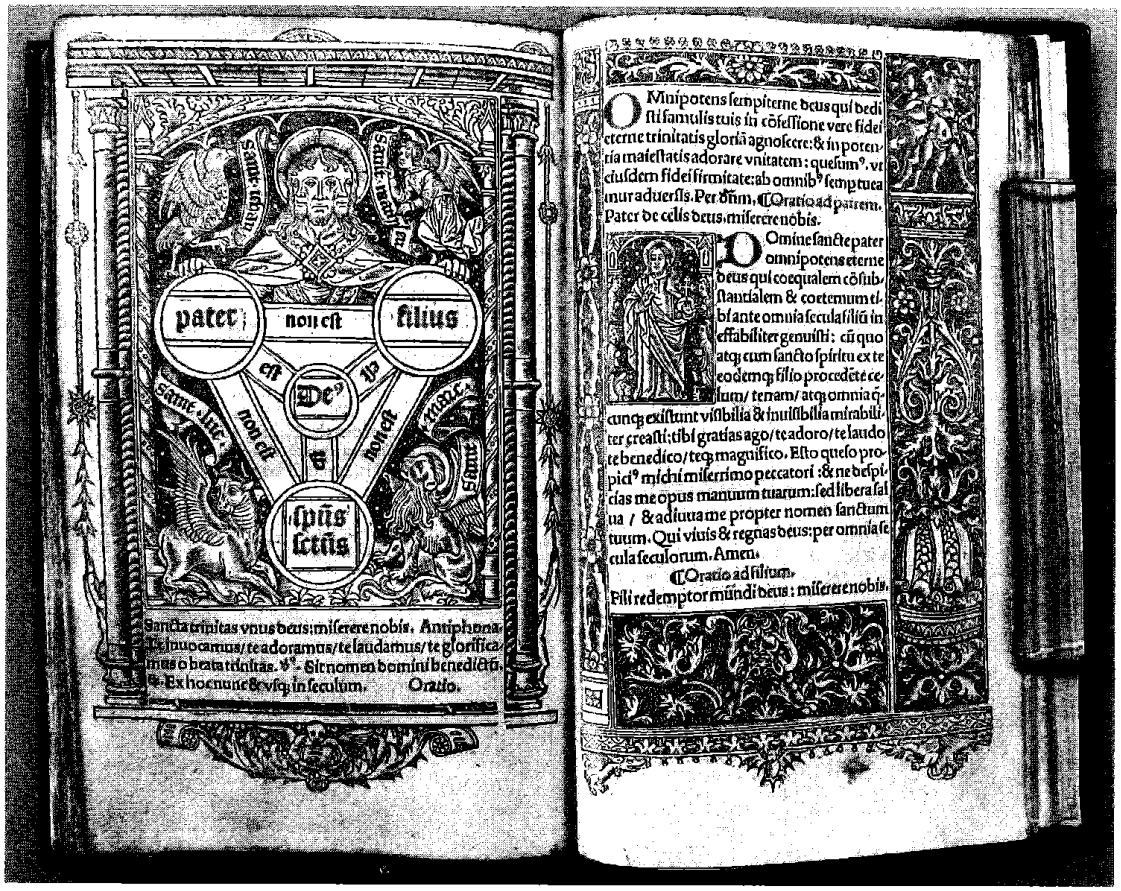




This *incunabulum* from Thomas Aquinas's *Summa Theologica*, printed in 1477 in Venice, follows the manuscript tradition. The decorated initials and paragraph marks are hand-drawn. The first lines are in larger letters. There is no pagination. The layout of the text in two columns and its organization in the form of questions and answers, however, make it very readable. The illuminations are intensely symbolic. The first page (bottom left) is illustrated with an image that depicts the teaching of Thomas Aquinas. At the base of the column, an image depicts the reception of the work by angels (bottom right). (Source: Queen's University.)

In the fifteenth century, the printing revolution was another time of intense reflection on the organization of the book. Febvre and Martin[8] note that the title page made its appearance—finally!—around 1480. After the infancy of the modern book, the period of *incunabula*—books that imitated manuscripts as faithfully as possible—printers quickly saw the full potential of the page as a discrete semiotic space.

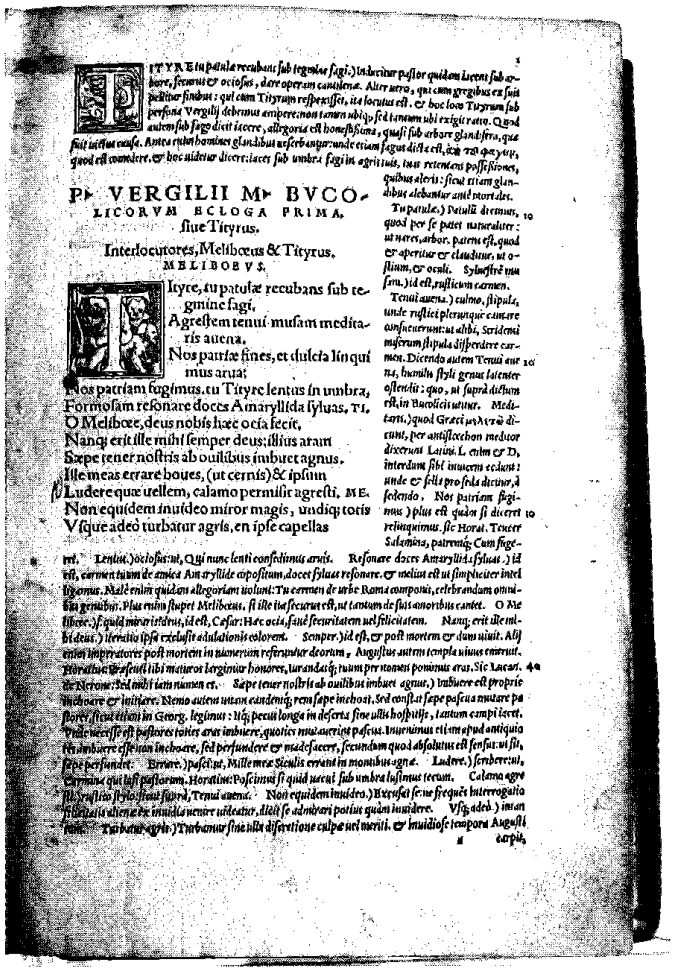
Page numbering, which became common in the mid-sixteenth century, enabled readers to better control the duration and pace of their reading and facilitated the discussion of texts by making it possible for readers of the same



This book of hours published by Thielman Kerver in Paris in 1511 is a cross between an almanac and a prayer book and is still very much in the manuscript tradition, but without its richness and beauty. The page is a space not only to be read, but to be explored visually in its various dimensions. It is lavishly illustrated; the text is framed with borders and contains many decorated initials. Key words are in red ink. The book is not paginated but it contains a table of contents. (Source: *Horae divinae virginis Mariae secum verum usum Romanum cum aliis multis folio sequenti notatis*, Queen's University.)

edition to refer to the same passage. Once this step was taken, the movement toward tabularization intensified, and sophisticated techniques allowing multiple points of entry into the text became widely used, such as paragraph summaries in the margin and the running head. It was now possible for readers to precisely locate the point they had reached in their reading and to compare the relative size of different sections—in short, to control their reading progress. They could also forget the details of what they had read earlier, since they could quickly find them again by referring to a table of contents or index. They could read only the parts of a book that interested them.

Especially if a book is long, readers often construct the meaning on the basis of clues of various types. Typographical markers such as bold, capitals, italics, or color allow them to quickly classify the elements they read and to avoid ambiguity; for example, the italicization of foreign words prevents con-



P. VERGILII MARONIS BVCOLICORVM ECLOGA PRIMA, siue Tityrus.

Interlocutores, Melibœus & Tityrus.

MELIBOEVS.

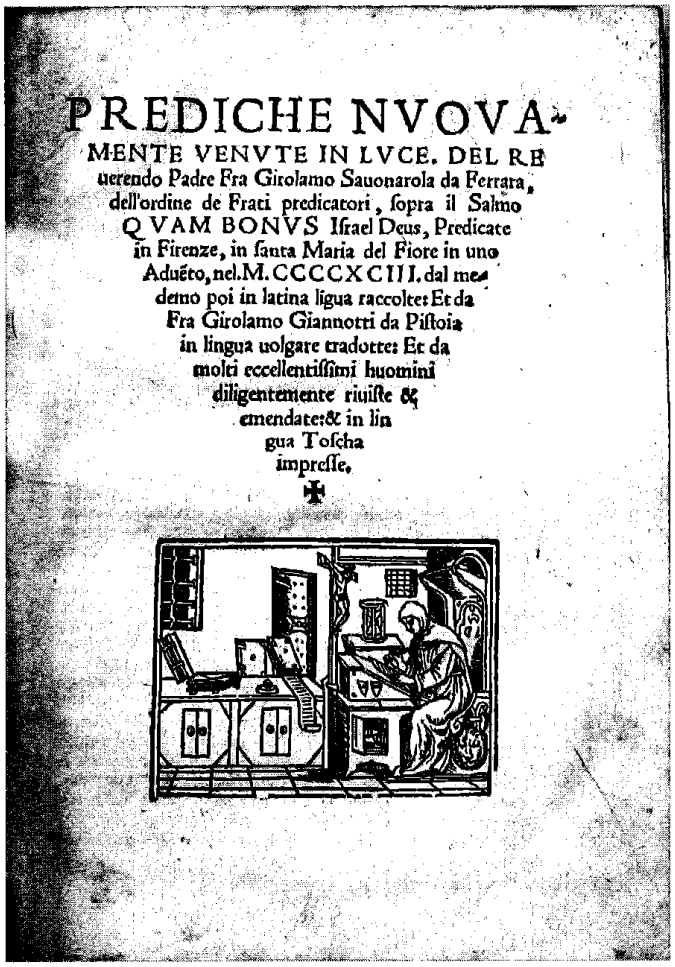
Tityre, tu patulæ recubans sub tegmine fagi,
Agrestem tenuí musam meditaris auena,
Nos patriæ fines, et dulcia linquimus arua;
Nos patriam fugimus. tu Tityre lentus in umbra,
Formosam resonare doces Amaryllida syluas. TI.
O Melibœe, deus nobis hæc otia fecit,
Nanq; erit ille mihi semper deus; illius aram
Sæpe tener nostris ab ouilibus imbuet agnus.
Ille meas errare boues, (ut cernis) & ipsum
Ludere quæ uellem, calamo permisit agresti. ME.
Non equidem inuideo miror magis, undiq; totis
Vsque adeò turbatur agris, en ipse capellas

In this edition of Virgil printed in Basel in 1544, glosses by Servius and Donat surround the text as in a manuscript. The commentary is continuous so as not to waste space, but the numbering of the lines provides tabular information that is useful for shared reading. (Source: University of Ottawa.)

fusion with homonyms. When justified by the material, an index of proper names, a detailed index, or a bibliography permits readers to choose the way of accessing the text that best suits their information needs of the moment. These reading aids did not come into use all at once but were slowly refined, in a process that culminated in the golden age of print in the nineteenth century, when the progress of mechanization heralded the triumph of the printed page. The table of contents, for example, appeared in the twelfth century. The paragraph break, the concept of which had been expressed through the use of the pilcrow in manuscripts of the eleventh century, was finally indicated by a line break, as seen in an edition of *Gargantua* printed in Lyon in 1537. Thus shaped by the ergonomics of the codex, the text was no longer a linear *thread* that was unreeled, but a *surface* whose content could be perceived from various perspectives. These reading aids, which allow readers to consider the text the same way they look at a painting or tableau, are here called tabular.

With the introduction of printing, the art of publishing fluctuated between the temptations of textual continuity and those of pictorial page layout. On the one hand, an austere layout in which the text was rigidly aligned within the frame of the page was best for emphasizing the mechanical perfection of printing and the linear aspect of language and reading; on the other hand, publishers could also be tempted by a complex layout in which the text was presented in different visual blocks among which readers could pick and choose as they wished, exploring their relationships in nonsequential order. These fluctuations in the ideal of the book can be observed across different periods. In this regard, it is informative to compare some of the printing manuals studied by the typography expert Fernand Baudin. A manual published by the printer Fertel in 1723, entitled *La science pratique de l'imprimerie*, is a model of complex layout in which marginal glosses sometimes spill over into the space of the main text. In contrast, a manual published forty years later, written by Fournier, presents the text in a single, rather narrow column and seems to have gone back to the linear order. As for the book by Baudin, who was himself a typographer and wished to give an account of an art that was the passion of his life, it is in large format, with a column of glosses and cross-references systematically running down one side of the main column and sometimes even framing it, as Fertel's glosses do.

The challenge of printed text, in short, is to strike a balance between semantic and visual demands, the ideal obviously being a combination of these two modes of access to the text around a coherent focus. We can still observe the naïve triumph of the visual over the semantic in even the titles of

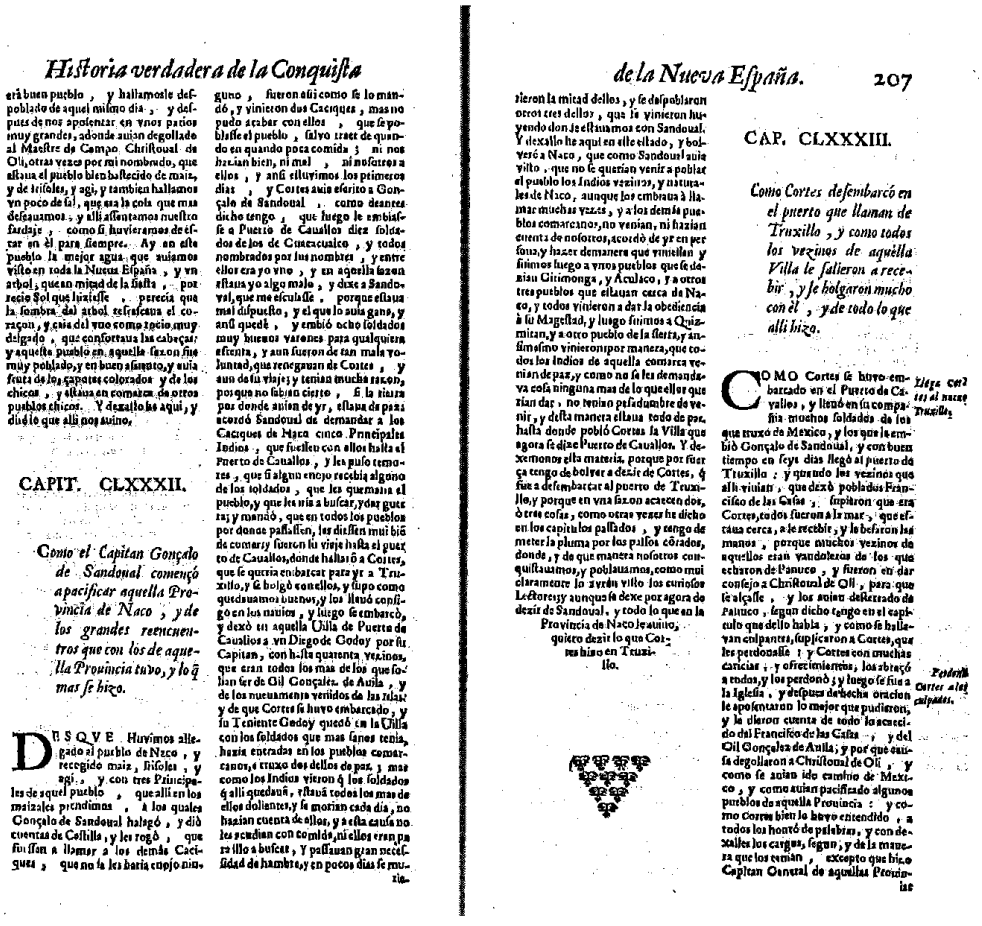

PREDICHE NVOVA-
MENTE VENVTE IN LVCE. DEL RE
uerendo Padre Fra Girolamo Sauonarola da Ferrara,
dell'ordine de Frati predicatori, ſopra il Salmo
QVAM BONVS Iſrael Deus, Predicate
in Firenze, in ſanta Maria del Fiore in uno
Aduẽto, nel M. CCCCXCIII. dal me-
deſmo poi in latina lingua raccolte: Et da
Fra Girolamo Giannotti da Piſtoia
in lingua uolgare tradotte: Et da
molti eccellentiſſimi huomini
diligentemente riuiſte &
emendate: & in lin
gua Toſcha
impreſſe.

A collection of Savonarola's sermons published in 1543. The layout of the title is governed by purely visual considerations, which is typical of books printed in this period. The arbitrary word breaks suggest an oral form of reading that was not far in the past. (Source: *Prediche nuovamente venute in luce del reverendo Padre Fra Girolamo Savonarola da Ferrara*, Queen's University.)

sixteenth-century books, in which printers did not hesitate to cut out words in order to create a symmetrical effect.

For Walter Ong, this segmentation shows that reading did not focus on the visual aspect of the words grasped globally, but was still based on oral practices; the presentation of the text was independent of its semantic aspect. It is also likely that such practices involved a kind of playful allusion to a way of reading that was already seen as outmoded.

Today, publishers make such effort to enable the reader to perceive complete words that they sometimes hesitate to break a word at the end of a line, and thus to use justified text, although that was the typographical ideal for centuries, beginning in the time of the *volumen*. This concern with matching the semantic unit with the unit of visual perception is also evident in



Historia verdadera de la Conquista

erá buen pueblo , y hallamosle deſpoblado de aquel miſmo dia , y deſpues de nos apoſentar en vnos patios muy grandes, adonde auian degollado al Maeſtre de Campo Chriſtoual de Oli, otras vezes por mi nombrado, que eſtaua el pueblo bien baſtecido de maiz, y de frifoles, y agi, y tambien hallamos vn poco de ſal, que esa la cosa que mas deſeauamos , y alli aſſentamos nueſtro ſardaje , como ſi huvieramos de eſtar en el para ſiempre. Ay en eſte pueblo la mejor agua que auiamos viſto en toda la Nueua Eſpaña , y vn arbol, que an mitad de la ſiesta , por recio Sol que hiziesſe , parecia que la ſombra del arbol refrescaua el coraçon , y cria del vno como tocio muy delgado , que conforraua las cabeças: y aquello pueblo en aquella ſazon eſtaua muy poblado, y en buen eſtado, y auia frutas de los carnotes colorados y de los chicos , y eſtauan en comarca de otros pueblos chicos. Y dexallo las aqui, y diré lo que alli nos auino.

CAPIT. CLXXXII.

Como el Capitan Gonçalo de Sandoual començó apacificar aquella Prouincia de Naco , y de los grandes reencuentros que con los de aquella Prouincia tuvo, y lo q̃ mas ſe hizo.

DESQVE Huvimos allegado al pueblo de Naco , y recogido maiz , frifoles , y agi , y con tres Principales de aquel pueblo , que alli en los maizales prendimos , à los quales Gonçalo de Sandoual halagó , y diò cuentas de Caſtilla , y les rogò , que fuſſen à llamar à los demàs Caciques , que no ſe les haria eſpoſo ninguno , fueron aſſi como ſe lo mandó , y vinieron dos Caciques , mas no pudo acabar con ellos , que ſe poblaſſe el pueblo , ſalvo traer de quando en quando poca comida ; ni nos hazian bien, ni mal , ni noſotros a ellos , y aſſi eſtuvimos los primeros dias , y Cortes auia eſcrito a Gonçalo de Sandoual , como deantes dicho tengo , que luego le embiaſſe a Puerto de Caualios diez ſoldados de los de Cuzcacualco , y todos nombrados por los nombres , y entre ellos era yo vno , y en aquella ſazon eſtaua yo algo malo , y dixe a Sandoval, que me eſcuſaſſe , porque eſtaua mal diſpueſto, y el que lo auia ganado, y aſſi quedè , y embió ocho ſoldados muy buenos varones para qualquiera efrenta, y aun fueron de tan mala voluntad, que renegauan de Cortes , y aun de ſu viaje, y tenian muchas razon, porque no eſtaban ciertos , ſi la tierra por donde auian de yr , eſtaua de paz, acordò Sandoual de demandar a los Caciques de Naco cinco Principales Indios , que fueſſen con ellos haſta el Puerto de Caualios , y les puſo temores , que ſi algun enojo recebia alguno de los ſoldados , que les quemaria el pueblo, y que les iria a buſcar, y dar guerras y mandò , que en todos los pueblos por donde paſſaſſen, les diſſen mui biẽ de comer, y fueron hi viaje haſta el puerto de Caualios, donde hallaro ̃ a Cortes, que ſe queria embarcar para yr a Truxillo, y ſe holgò con ellos, y ſupo como quedauamos buenos, y los llevò conſigo en los navios , y luego ſe embarcò, y dexò en aquella Villa de Puerto de Caualios a vn Diego de Godoy por ſu Capitan , con haſta quarenta vezinos, que eran todos los mas de los que ſolian ſer de Gil Gonçalez de Auila , y de los nueuamente venidos de las islas: y de que Cortes ſe huvo embarcado , y ſu Teniente Godoy quedò en la Villa con los ſoldados que mas ſanos tenia, huvo entradas en los pueblos comarcanos, e truxo dos dellos de paz, y mas como los Indios vieron q̃ los ſoldados q̃ alli quedaua ̃, eſtaua ̃ todos los mas de ellos dolientes, y ſe morian cada dia , no hazian cuenta de ellos, y a eſta cauſa no les acudian con comidà, ni ellos eran parte para buſcar, Y paſſaua ̃ gran neceſſidad de hambre, y en pocos dias ſe murieron la mitad dellos , y ſe deſpobla ̃ron otros tres dellos , que ſe vinieron huyendo con Je eſtuuimos con Sandoual. Y dexallo he aqui en eſte eſtado , y bolveré a Naco , que como Sandoual auia viſto , que no ſe querian venir a poblar el pueblo los Indios vezinos, y naturales de Naco , aunque los embraua à llamar muchas vezes , y a los demàs pueblos comarcanos, no venian, ni hazian cuenta de noſotros, acordò de yr en perſona, y hazer demanera que viniellan y ſiñimos luego a vnos pueblos que ſe dezian Citimonga , y Aculaco , y a otros tres pueblos que eſtauan cerca de Naco, y todos vinieron a dar la obediencia à ſu Mageſtad, y luego ſiñimos a Quizmitan, y a otro pueblo de la ſierra, y aſſimeſmo vinieron por manera, que todos los Indios de aquella comarca venian de paz, y como no ſe les demandava coſa ninguna mas de lo que eſtos querian dar , no tenian peſadumbre de venir, y deſta manera eſtaua todo de paz, haſta donde pobló Cortes la Villa que agora ſe dize Puerto de Caualios. Y dexemonos eſta materia, porque por ſuer ça tengo de bolver a dezir de Cortes, q̃ fue a deſembarcar al puerto de Truxillo, y porque en vna ſazon acaeçen dos, ò tres coſas , como otras vezes he dicho en los capitulos paſſados , y tengo de meter la pluma por los paſſos cõtados, donde , y de que manera noſotros conquiſtauamos, y poblauamos, como mui claramente lo verán viſto los curioſos Lectores: y aunque ſi dexe por agora de dezir de Sandoual, y todo lo que en la Provincia de Naco le auiuio, quiero dezir lo que Cortes hizo en Truxillo.

de la Nueua Eſpaña. 207

CAP. CLXXXIII.

Como Cortes deſembarcò en el puerto que llaman de Truxillo , y como todos los vezinos de aquella Villa le ſalieron a recebir , y ſe holgaron mucho con èl , y de todo lo que alli hizo.

COMO Cortes ſe huvo embarcado en el Puerto de Caualios , y llevò en ſu compañia muchos ſoldados de los que truxo de Mexico , y los que la embiò Gonçalo de Sandoual, y con buen tiempo en ſeys dias llegò al puerto de Truxillo : y quando los vezinos que alli vivian , que dexò poblados Francisco de las Caſas , ſupieron que era Cortes, todos ſuerom a la mar , que eſtaua cerca , a le recebir , y le beſaron las manos , porque muchos vezinos de aquellos eran vandoleros de los que echaron de Panuco , y fueron en dar conſejo a Chriſtoual de Oli , para que ſe alçaſſe , y los auian deſterrado de Panuco , ſegun dicho tengo en el capitulo que dello habla , y como ſe hallavan culpantes, ſuplicaron a Cortes, que les perdonaſſe : y Cortes con muchas caricias , y ofrecimientos, los abraçó a todos, y los perdonò ; y luego ſe fue a la Igleſia , y deſpues de hecha oracion le apoſentaron lo mejor que pudieron, y le dieron cuenta de todo lo acaeçido del Francisco de las Caſas , y del Gil Gonçalez de Auila ; y por que auia degollaron a Chriſtoual de Oli , y como ſe auian ido camino de Mexico , y como auian pacificado algunos pueblos de aquella Prouincia : y como Cortes bien lo huvo entendido , a todos los honrò de palabras , y con deſalles los cargos, ſegun, y de la manera que los tenian , excepto que hizo Capitan General de aquellas Prouincias

Llega Cortes al puerto Truxillo.

Perdonà Cortes a los culpados.

Bernal Diaz del Castillo, *Historia verdadera de la conquista de la Nueva España*, Madrid 1632. The text is arranged in two rather narrow columns. The detailed chapter titles and the summaries in the margins enable readers to go directly to passages that interest them. Because of the division into columns, the basic unit is the double page, with one page number and a header extending across the two pages.

magazines, which tend increasingly to make the text of articles fit into the space of the page or double page.

It is now commonly acknowledged that the revolution of the codex was not limited to ergonomics, but that it also had an impact on the nature of content and the evolution of mentalities in general. Indeed, once a text is perceived as a visual entity, and no longer as primarily oral, it lends itself much more readily to criticism. The eye, given the richness of optic nerve endings in the cortex, can mobilize the analytical faculties more easily and more precisely than the ear. As historian Henri-Jean Martin notes on the revolution of printing in the sixteenth century: "By the same token, any

reasoned argument was as if detached from the realms of God and men and took on an objective existence. The written text became amoral because it detached from the writing process and no longer demanded that the reader take on responsibility for it by reading it aloud. This may have facilitated heretical propositions."[9]

The process by which the text became an autonomous object crossed a new threshold during the Enlightenment, when the last barriers to its generalized objectification collapsed. That era coincided precisely with spectacular growth in reading in Europe. We will come back to this question.

With the advent of newspapers and the mass-circulation press, which underwent rapid expansion in the nineteenth century, the formatting of text became even more tabular. In a radical departure from the original linearity of speech, text was now presented in the form of visual blocks that complemented and responded to each other on the eye-catching surface of the page. McLuhan gave a name to the metaphor implicit in this arrangement: the "mosaic" text. Indeed, newspapers provide a textual mosaic, in which the reading of various types of information is subtly influenced by the surrounding news, as has been pointed out by analysts of newspaper layout: "For about a century, newspapers have been laid out in such a way that each item of information, though flat on the page, stands out by virtue of the mere fact of its coexistence with other items of information on the page, which in turn acquire their value from this competition."[10] The same authors note that until the end of the nineteenth century, newspapers consisted simply of vertically aligned columns, each of which theoretically constituted a page that went on without interruption. "This type of layout naturally favored a temporal sequence of discourse: there were no interruptions for turning pages, no illustrations to create a break or suspension of reading, and no lead or subheading introducing secondary material. This form corresponds exactly to the temporal logic of discourse: It is the presentation of logos in movement, and not the staging of an event."[11]

The sudden appearance of banner headlines was the beginning of a new kind of layout, one no longer guided by the logic of discourse, but by a spatial logic. "The number of columns, the use of rules, the weight of the type, the font, the position of illustrations, and the use of color make it possible to bring together or move apart, to select, and to separate the units that, in the newspaper, are units of information. Layout then emerges as a rhetoric of space that destructures the order of discourse (its temporal logic) to reconstitute an original discourse, which is precisely the discourse of the newspaper."[12]

Today, there is no doubt that tabularity meets the formatting requirements of information texts in that it allows the reader to apprehend them most effectively. This is especially apparent in magazines, where the dominant model involves framing textual material by means of a hierarchy of titles: section heading, main heading and subheadings. A more substantial article will often be presented in the form of a feature story that, in addition to the main text, includes one or more sidebars elaborating on points raised in the main text. Such fragmented layouts are sometimes criticized. Their primary function is clearly to hold on to readers whose attention span is unsteady or short, unlike a linear format, which is intended for the "serious reader." This way of breaking up text into different elements is also very well suited for communicating a variety of information that readers can select according to their interests. On the other hand, popular magazines may diverge a bit from this ideal and give predominance to glossy ads and photographs in order to entice the reader to leaf through their pages and absorb the discourse of advertising.

When tabularity is taken into account, then, printed text is not exclusively linear and tends to incorporate characteristics of the visual realm. Readers are thus able to free themselves from the thread of the text and go directly to relevant elements. A book may thus be said to be *tabular* when it involves the simultaneous spatial presentation and highlighting of various elements that may help readers identify the connections and find information that interests them as quickly as possible.

The concept of tabularity thus covers at least two distinct phenomena—in addition to designating an internal arrangement of data. On the one hand, it refers to the various organizational means that facilitate access to the content of the text: This is *functional tabularity*, as shown in tables of contents, indexes, and division into chapters and paragraphs. On the other hand, tabularity also suggests that the page may be viewed in the same way as a painting and may include data from various hierarchical levels: This is *visual tabularity*, which enables readers to switch from reading the main text to reading notes, glosses, figures, or illustrations, all of which are present within the space of the double page. This visual tabularity, which is seen primarily in newspapers and magazines, is also found in varying degrees in scholarly books, which may present various types of text juxtaposed on a single page. It is obviously highly developed in electronic publishing, as seen on the Web pages of major newspapers, magazines, and encyclopedias. In addition, through a hybridization of publishing techniques, the layout of books or magazines increasingly borrows from the methods of electronic publish-

ing, such as the use of color, underlining, and marking of text elements, with cross-references to thumbnails or sidebars. In this type of tabularity, the text is shaped like visual material, with blocks referring to each other on the page surface and sometimes incorporating illustrations.

The spatial projection of the thread of the text obviously depends on the format of the book. The smaller the book, the less manipulation of the visual blocks is possible; readers are confined to a continuous movement through a single column of text with no interruption. This format, which was adopted, for example, by the famous French collection Bibliothèque de la Pléiade, tends to reinforce the ideal of a linear typography with nothing to break its regularity. It is especially well suited to novels, which are read for content. National traditions prevent French publishers from placing the table of contents at the front of the book as it is in the English-speaking world, a position better suited to the tabular ideal and to readers' needs.

It should be added, however, that the degree of tabularity of a book will also depend on its content and intended use. Thus, children's books often do not have page numbers: young readers have no need for them, since these books are designed to be read or looked at from cover to cover and there is no expectation of a reflective reading with note taking or references. Scholarly books, which are intended for readers for whom time is valuable, have many tabular guideposts: volumes, chapters, sections, paragraphs, headers, notes, introductory summaries, detailed index, index of proper names, and bibliography. But the linear thread may still be a justifiable choice for developing an argument, insofar as the author wishes to ensure that the reader follows the entire proof. On the other hand, the novel, which is derived from the ancient art of the storyteller, generally demands sustained reading and does not require elaborate tabular clues. The large number of chapters and the hierarchy of sections in Victor Hugo's novels, which often have a very linear narrative thread, may be explained by the fact that these novels were initially published in serial form in newspapers. Today, some writers, anxious to make their readers read continuously and to have their work seen as high literature, as different as possible from the tabular format of the magazine, dispense altogether with chapters, and even paragraphs and punctuation.