It is generally agreed that reading is a linear process, and that readers pick up cues as they follow a text line by line. If we look at this process more closely, however, it becomes clear that there are many activities involved in reading a book to which the concept of linearity does not apply. Linearity designates a series of elements that follow each other in an inviolable or preestablished order. Best exemplified by the succession of hours or days, it belongs essentially to the realm of time, but also applies to two-dimensional space, i.e., points on a straight line. This concept contrasts with that of tabularity, in which readers can visually access data in the order they choose, identifying sections of interest beforehand, in much the same way as when looking at a painting the eye may contemplate any part.

Philosophically, linearity, the dominant way of thinking for centuries, came into conflict with powerful trends in early twentieth-century physics, a discipline marked by the desire to eliminate time. For Albert Einstein, time was only an illusion masking the immutability of the fundamental laws. Linearity is also intimately connected with the concepts of authority and constraint: it implies the obligation to follow a certain number of steps in a prescribed order. For this reason, linearity can easily be perceived as an intolerable limitation on the sovereign freedom of the individual. It therefore comes as no surprise that it became the whipping boy for modernity.

Because words are necessarily read in sequence, the book is almost inevitably associated with linearity—which is certainly true for the novel. According to Derrida, “the end of linear writing is indeed the end of the book, even if, even today, it is within the form of a book that new writings—literary or theoretical—allow themselves to be, for better or for worse, encased.”
But if books are to be considered linear, then what about speech, which inevitably occurs over a span of time, since the words must be perceived one after the other by the listener? And linearity has a cost: the frustration one may feel at having to listen to the news on the radio in an order that is not of one’s own choosing, for example, or having to pick up voicemail messages in chronological order when one lacks sophisticated tools for managing voicemail. But written language allows us at least partially to escape linearity, since the eye can take in a page in a glance or can settle successively on various points chosen according to different criteria. Once segmented into coherent blocks of information, a text forms a mosaic that readers can approach as they wish. In the form of the codex, which permits an elaborate use of space, the book acquired many elements of tabularity, which contributed to changes in the nature of text and of language itself, as is shown by the gap that developed between written and spoken language. Any discussion of linearity that fails to take into account this necessary distinction between written and oral language will not get very far. We will therefore examine the concepts of linearity and tabularity in terms of content, the language material, and in another section, the medium.

A narrative that follows a strict chronological order is an example of linearity of content, at least with respect to events. If such a narrative is presented orally, the linearity of the content will coincide with the linearity of the medium. But in written form, it can be arranged in a medium that is more or less linear, ranging from the volumen or papyrus scroll used in ancient Greece and Rome, for example, to the newspaper page, in which the paragraphs are preceded by headings highlighting various information, so that readers can select and read them in the order that interests them—in other words, in a nonlinear fashion.

In terms of thematic and symbolic content, texts are often far from linear. In fact, the term text itself, which comes from the Latin textus, originally referred to the action of weaving, intertwining, or braiding, which implies the existence of several threads in a web and the creation of patterns through the periodic reappearance of these threads. Thus the visual metaphor has been present in the very concept of text from the earliest times. This paradigmatic aspect of text belongs to the spatial order. The process of generating meaning while reading is not necessarily linear, and semioticians such as A. J. Greimas and J. Courtés have shown that “the existence of pluri-isotopic texts contradicts the linearity of signification at the level of the content.”

Second, the language material may also be linear to a greater or lesser degree. Whatever interferes with reading or listening, whatever interrupts the thread of the text, is likely to come from the deliberate use of what might be
called the tabularity of the language material, insofar as this material shows regularities. Anne-Marie Christin notes that among the Dogon, the metaphor of weaving is applied to speech, which is seen as the verbal fabric of the group. Similarly, poetry may be given a "tabular reading," as discussed by Groupe μ, who examined the use of rhythm, sonorities, parallelisms, and isotopies in the poetic text. These elements might be seen as a form of tabularity if that concept were not essentially associated with sight. To avoid any confusion, one should speak here of "auditory tabularity," which is manifested in meter and assonances or rhyme. This kind of tabularity undoubtedly goes back to a very ancient time, when the transmission of human experience depended wholly on the voice.

The tabular formatting of sound material expresses the same purpose and has the same function as visual tabularity: to provide listeners with sound patterns that will help them mentally process the data by giving these data a mnemonic resonance. As Walter J. Ong, who specialized in the study of oral culture, aptly stated: "In a primary oral culture, to solve effectively the problem of retaining and retrieving carefully articulated thought, you have to do your thinking in mnemonic patterns, shaped for ready oral recurrence. Your thought must come into being in heavily rhythmic, balanced patterns, in repetitions or antitheses, in alliterations and assonances, in epithetic and other formulary expressions, in standard thematic settings . . ., in proverbs." Let us recall, for example, that ancient Greek poetry had developed extremely sophisticated metrics, which took into account the lengths of syllables as well as the tonic accent. It had also developed specialized types of meters for various poetic genres. These extremely constraining sound patterns helped the itinerant bards to remember thousands of verses. Even today, the structure of sayings and proverbs—"A friend in need is a friend indeed," "No pain, no gain"—shows this close affinity between meaning structure and sound structure, with the former being based on the latter in order to facilitate memorization and produce a truth effect.

As long as poetry was dependent on speech, sound remained dominant. But when print extended its sway, heralding the triumph of visual tabularity over the auditory domain, poets such as Paul Verlaine rebelled against the dictatorship of meter. Poetry then took new directions, with Stéphane Mallarmé maintaining that the mystery of the poem lay not only in sonorities, but that the written medium must also play a role: "Yes, I know; Mystery is said to be Music's domain. But the written word also lays claim to it." In "Un coup de dés" ("A Roll of the Dice"), he sought to write a poem that could be scanned visually, using the size of the characters and the arrangement of the words on the page, thus initiating a movement of experimental typography.
Although this movement came up against the limits imposed by our modes of perception, a new paradigm was established in which the material indication of poetic language is the arrangement of the text on the whiteness of the page rather than conformity to a code of versification. But sonorities still play an important role in songs and certain specialized languages, such as political discourse and advertising. Where there is an obvious interest in creating a lasting memory of the message, auditory tabularity—e.g., “I like Ike”—continues to be much sought after.

Linearity and tabularity are closely dependent on the kind of text and the type of work. The encyclopedia and the dictionary, quintessential reference works, do not call for linear reading, insofar as that involves reading from the first page to the last. In this type of text, which functions implicitly on the semidialogic model of the question and answer, the context is not created very elaborately, since it is already present in the need to consult of the reader formulating the question.

In the case of an epic or a novel, on the other hand, the mode of apprehension normally expected by the reader is undeniably linear and continuous. At first glance, the narrative is the prototype of a linear verbal mass with little or no tabularity. To tell a story means essentially to unwind a temporal thread: a narrative exists as soon as a given situation can be linked to a previous state and related to a succession of events and actions. To stimulate interest and suspense, the story is most often told in order from beginning to end (without precluding the possibility of prolepsis or analepsis), since this order allows the reader or listener to clearly grasp the order of events and the narrative links. In most stories told by children, only two or three connectives—“then,” “and,” “so”—are used to mark how actions are related. Some contemporary narratives are not divided into chapters or paragraphs, so that the reader has no choice but to follow the thread of the text from the first page to the last.

In favor of linearity, it should be recalled that it makes reading highly automatic. Since each sentence provides context for understanding the following one, readers have only to let themselves be carried along by the thread of the text in order to produce meaning. In reading highly tabular texts, and aphorisms or fragments in general, the automatic reflexes of reading may become less effective and play a lesser role, because of the fact that the context for understanding has to be recreated by the reader for every new block of text.

In the case of canonical narratives, the resonance of the linear thread is such that the paradigmatic aspects have become evident only relatively recently, with the appearance of structural studies by Vladimir Propp, Roland Barthes, A. J. Greimas, and others. Although these works at first had little influence on the writing of novels, there have since been increasing numbers
of books that lend themselves to a tabular reading process, or even encourage or require it. This is the case, for example, for Life: A User’s Manual, by Georges Perec, in which a very detailed index allows readers, if they wish, to read in sequence all the chapters in which a particular character appears. Pale Fire, by Vladimir Nabokov, invites readers to make all the connections possible between an introduction written by a fictitious character, a 999-line poem in four cantos, a commentary on the poem, and an index. Dictionary of the Khazars, by Milorad Pavić, offers an extreme example of a tabular narrative, in which the elements are organized in the form of dictionary entries, in alphabetical order. And when speaking of tabular narrative, one must obviously cite its masters, Italo Calvino and Julio Cortázar, as well as their common ancestor, Laurence Sterne, author of the extraordinary Life and Opinions of Tristram Shandy, Gentleman (1760).

Although the canonical narrative is quite far removed from a hypertext structure, one should not conclude that it is totally linear. Many writers do indeed provide a constraining sequential thread that necessitates reading a book from beginning to end. But in so doing, they also aim to create a nonlinear structure in the reader’s mind and to force the reader to carry out operations of reorganization that are sometimes very complex, as is the case in works as varied as Balzac’s “Sarrasine,” Proust’s À la recherche du temps perdu [Remembrance of Things Past or In Search of Lost Time], and Garcia Marquez’s Chronicle of a Death Foretold. According to Georg Lukács, “one can almost say that the whole inner action of a novel is nothing else but a struggle against the power of time.” It is precisely because the basic fabric of the narrative is time that the time of the narrative rarely coincides with the time of history. From the Iliad on, the literary narrative has distinguished itself from the folk narrative by beginning in medias res. Since then, the novel has explored most uses of achronia that could be invented, as is shown by Gérard Genette in his works on narratology.

But other elements come into play in a novel. Going beyond the old metaphor of the fabric, Proust conceived of his work as a cathedral, a three-dimensional space in which all the elements were organically linked and associated through complex symbolisms. Any writer aims essentially to create in the reader’s mind a web of associations among dozens, or even thousands, of elements—hypertext avant la lettre. As Roland Barthes pointed out, “The classic text, therefore, is actually tabular (and not linear), but its tabularity is vectorized, it follows a logical-temporal order.” This internal tabularity has become more pronounced in works by many contemporary writers, who juxtapose the stories of various characters and alternate competing narrative threads constructed so as to periodically bring in certain elements. Some-
times, the change from one thread to another occurs with a minimum of transition, abruptly forcing the reader to reorganize the context.

In this quest for an increasingly emphatic and obvious tabularity, the modern novel has tended to borrow its methods of composition from painting. As Claude Simon observed in an interview with Philippe Sollers: “[Once] the novel is no longer considered a means of instruction, social instruction as in the case of Balzac, a didactic text, . . . methods of composition emerge that are those of painting, music, or architecture: repetition of a particular element, variations, associations, oppositions, contrasts, etc. Or, as in mathematics, arrangements, permutations, combinations.” Elsewhere, Simon showed how he used color references to order a series of narrative tableaux in *La Route des Flandres* [*The Flanders Road*] in order to produce a cyclical effect. It must be recognized that such effects would be destroyed if the paragraphs were read in random order—just as a Bach suite would lose its essential beauty if it were played in random sequences of notes through the clicks of a mouse. Even in the visual realm, in which syntax is very lax, a painting cannot be reduced to a conglomeration of basic elements provided by the creator to be arranged by the viewer.

In spite of strong trends toward freedom for the reader and toward the use of hypertext techniques, we cannot simply dismiss the concept of a work of art as a whole that is more than the sum of its parts, which was already one of Aristotle’s criteria of tragedy: “Now, according to our definition Tragedy is an imitation of an action that is complete, and whole, and of a certain magnitude; for there may be a whole that is wanting in magnitude. A whole is that which has a beginning, a middle, and an end. . . . A well constructed plot, therefore, must neither begin nor end at haphazard, but conform to these principles.” If the narrative of linear content has been so successful until now, it is because it implicitly promises a maximum of meaning for readers who follow the thread of the text: We learn very young that being given the solution to a mystery before reading the book is a sure way to spoil our fun.

It should be noted, furthermore, that while a novel on paper is far from being automatically linear, a hypertext is not necessarily nonlinear. The pages or segments may be rigorously sequential, forcing the reader to read them in a fixed order, one even more fixed than that of the pages of a book, because it is always possible to open a book to any page one wishes while a hypertext can be programmed to totally control the reader’s path. This said, hypertext by nature lends itself ideally to a variety of reading paths and to multisequential navigation. In the light of what can be done with these media, it no longer seems possible to maintain the dichotomy between linear and nonlinear media, and more and more theorists now reject this distinction.