PART 1

Histories
I. EPOCHS
1. How to Make a Composition
Memory-Craft in Antiquity and in the Middle Ages

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The so-called “arts of memory,” artes memorandi, which were taught commonly in the curricula of dialectic and rhetoric for roughly two thousand years between the fourth century BCE and the sixteenth century CE, belong to a different psychological country from that of the modern Western, post-Enlightenment “memory” that is the concern of most of the rest of this volume. Of course, there are also complex medieval attitudes and practices regarding history and commemoration of the dead, but it is not with these that the artes memorandi are concerned. Academic redefinitions and reclassifications of the old natural and philosophical sciences, especially during the seventeenth century, absorbed much of the craft of memory into the teaching of logic and restricted the mental activity of memory to the retrieval of experiences and previously learned data. Issues of accuracy and completeness of retrieval, of full iteration, became determinant in defining the role of memory: where earlier scholars had understood positive qualities of composition and invention, later ones understood negative ones of failure and error. Rhetoric (and rhetorically conceived poetic theory) was dropped from the rational sciences altogether, answerable only to issues of style, sensibility, and taste. In earlier times, ars memorandi was thought of primarily as a practical instrument of rational investigation and discovery, or “invention,” useful for a wide variety of purposes and—by the thirteenth century—addressed to a greatly varied audience.

The role of memory before this modern reorientation (and conceptual improvisment) occurred is demonstrated in two ancient literary moments. In Greek legend, memory, or Mnemosyne, is the mother of the Muses. That story places memory at the beginning, as the matrix of invention for all human arts, of all human making, including the making of ideas; it memorably encapsulates an assumption that memory
and invention—what we now call creativity—if not exactly the same, are the closest thing to it. In order to create, in order to think at all, human beings require some mental tool or machine, and that machine lives in the intricate networks of their own memories. The requirement of memory for making new thoughts is at the heart of this traditional story.

The other significant ancient moment links memory to prophecy. In the book of Ezekiel, the prophet, a priest who lived in the exiled Jewish community in ancient Babylon (early sixth century BCE), has a series of visions of the nature and habitation of Divine majesty. That habitation is the destroyed old citadel and temple of Jerusalem as described in I Kings 6. Ezekiel’s prophecy consists in reconstructing in exact detail the precincts of Solomon’s Temple, which no longer existed. The angel who guides him carries a rod with which he measures off all the visionary buildings through which they walk (this angel appears again in the Apocalypse of John, for the Heavenly City was regarded as a “remembering”—in the medieval manner—of the old Temple). Ezekiel is told that this exercise for his recollective memory is for the sake of the future: through their activity of remembering the Temple and its offices, God will forgive the sinfulness of Israel and restore the Israelites to their home (Ezek. 43:1–12).³

The Latin word *inventio* has given rise to two separate words in modern English. One is our word “invention,” meaning the “creation of something new” (or at least different). These creations can be either ideas or material objects, including works of art, music, and literature. We also speak of people’s having inventive minds, by which we mean that they have many creative ideas and are generally good at making, to use the medieval English synonym of composition. The other modern English word derived from *inventio* is “inventory.” This word refers to the storage of many diverse materials, but not to random storage: clothes thrown into a closet cannot be said to be inventoried. Inventories must have an order. Inventoried materials are counted and placed in locations within an overall structure that allows any item to be retrieved easily and at once. This last requirement also excludes inventories that are too cumbersome or too indistinct to be useful; consider, for example, the difficulty of locating one’s automobile in a vast parking lot.

Whereas we now think of memory simply as reiteration and repetition, such rote memorization was regarded in the Middle Ages as a necessary but strictly foundational structure laid down in childhood. The true force of memory lay in recollection or memoria, which was analyzed as a variety of investigation, the invention and recreation of knowledge—indeed the very principle whereby new understanding is created by human minds. To achieve this power, people educated themselves by building mental libraries. This meant mastering the basic principles of memory training: the need for divisio, the need to make a clear, distinct location for each piece of memorized content, and the need to mark items uniquely for secure recollection.

In the late fourth century, the Christian patriarch Jerome wrote to a correspondent that “by means of careful reading and daily meditation, he should make himself into a library for Christ.”⁴ Two centuries later Cassiodorus (d. 590) described a blind Greek
scholar named Eusebius, who had come to Cassiodorus’s monastery at Vivarium. The man had been blind since childhood, yet “he had hidden away in the library of his memory [in memoriae suae bibliotheca] so many authors, so many books, that he could assuredly tell others who were reading in what part of a codex they might find what he had spoken of.” What impresses Cassiodorus is not that Eusebius knew a great many texts by rote but rather that he could tell someone immediately where to go in the Bible for any citation sought. The example of the early Christian Scriptural expositor Didymus of Alexandria was also known to Cassiodorus, a man whose commentaries were renowned for their subtlety and comprehensiveness, yet who had been blind from birth. Commenting is a skill that depends on more than rote memory, for one cannot just recite words endlessly and identically if one is also commenting on them. One must be able to stop, go to something else, and then take up again where one left off, to go back and forth in the text, to bring in other matters—in short, to compose. There are examples of scholars from the late Middle Ages as well, including Thomas Aquinas and William of Ockham, whose reading and compositional habits make clear that the goal of making a working library of one’s memory was by no means dimmed in an age when written books were far more plentiful, at least to scholars.

But how did they manage to do it? It is clear that, while the accomplishment of men like Didymus and Eusebius is the occasion of near-incredulity for Cassiodorus, it is not the fact of their having such rich and accessible memories that amazes him, but the fact that they accomplished this feat without eyes to see the books they read. The blind Eusebius is able to tell a questioner precisely where to locate the text he desires. This seemingly pointless, if wondrous, accomplishment should indicate to us in fact the key to Eusebius’s success. His memory was designed in accordance with some basic principles of locational memory taught in ancient and medieval schools. To provide some context for these rules, it is helpful to know how the brain was thought to work in the dominant psychology of the time.

In ancient theory, best described in Aristotle’s little psychology treatise De memoria et reminiscencia, a memory was regarded as the end product of sensory perception, and thus as a product of an animate body. To be useful for invention, particular memories must be retrievable instantly and securely. To distinguish among them, to be able find one among all the others, a uniquely marked mental “location” was the key.

Figure 1 shows a diagram of brain function in a mainly French-language manuscript made in England in the late fourteenth century. The various activities involved in thinking are drawn as cellae, compartments linked to one another by channels. It is important to understand that this drawing is a diagrammatic representation, not an anatomical drawing; it was drawn in order to make the functional relationships clear, but the first three activities shown in this diagram as sequential were actually thought to occur nearly simultaneously. The sources of this psychology are medical traditions deriving from Galen, which had located most thought-making and experiential awareness in the brain (not
shared with the heart, as Aristotle had said), and also medieval commentaries on Aristotle’s psychology, both in Arabic and in Latin, by Ibn Sinha, Ibn Rushd, Albertus Magnus, and Thomas Aquinas. The diagram accompanies a short treatise on the brain’s physiology, which quotes Thomas Aquinas.

First, impressions are received from the various senses in the sensus communis or fantasia, located in the forward part of the brain. The various sense impressions are then brought together mentally by the image-forming ability, imaginatio or vis formalis, the ability to form an image from many sensory data. So, raw sense data were thought to be
transformed by the actions of both fantasía (fantasy) and vis formalis (the power of making forms) into images having formal properties that are perceptible and useful to human thought. The Aristotelian criterion of similitude, “likeness,” must be understood in this context—mental images have “likeness” not as exact duplication, but in the way that a schematic drawing can be said to be “like” the object it represents. It is equally important to notice that the resulting mental image was considered to be composed of input from all five of the senses. In the context of thinking, the Latin word imago at this time was not limited solely to the visual sense, though it is also true that the visual was regarded as the primary instrument of knowing for most people.

In the process of being perceived as a complete image, sensory experience is also responded to, an activity known as estimation, or vis estimativa. This is a kind of judgment, but pre-rational, an immediate “gut” reaction that accompanies the perception of the image. The example to demonstrate estimation in ancient philosophy is how a lamb knows to fear a wolf even though it has never seen one before. Mental images (imaginēs or phantasmata) are thus constructed by the mind from all the materials of sensation, and they have two characteristics: “likeness,” and also a “feeling” that marks them emotionally. There is thus, in this psychology, no such thing as a completely neutral or objective experience, since all the images with which we think are already colored with some feeling before we can “know” them.

These imagines are made present to the mind as the materials of understanding through the activity called cogitatio, “cogitation, thinking”; and from them, concepts, ideas, and thoughts are constructed. All thoughts must therefore be understood in terms of images, and the other name for cogitation in this picture is vis imaginativa, or “the ability to imagine.” Notice, in this psychology, how imagination is coterminous with all the procedures of rational thinking. Thoughts as mental images are finally stored and recalled in the memory, vis memorativa, the final stage of this constructive process. But the path between memory and thought-making is two-way, because memories must be recalled as well as stored. So a sort of valve was thought to exist that would allow mental imaginēs to pass into memory, and also to be recalled as needed during cogitatio. This was called the vermis, the wormlike creature drawn in the diagram between cogitatio and memoria. It had been observed that people often lower their heads in order to think and raise them when trying to recollect something. This was taken as evidence for the action of the vermis—opening as needed for recollection, and closing for concentrated thinking once one had received from memory the materials one needed.

Memory-images were considered to be most like letters on a written surface, impressed in loci, or “places,” in the brain. Each bit of information, encoded as a seeable image, occupies a particular place; it can therefore be uniquely addressed and so recalled. The various technical memory systems are basically addressing and filing schemes that enable textual information to be recalled in a manner that frees one from the simple reiteration of rote learning and allows one both to recall particular information instantly
and to manipulate, shuffle, collate, and concord it freely. In short, they provide one with a “random-access” memory. The ability only to reproduce items in a series was not thought to be recollection at all, but an adjunct ability of little intellectual value.7

The length of a particular memorized section is set by the requirements of human working memory, which seems to be able to manage seven plus or minus two items at any one time.8 The medieval masters recognized this limitation of human memorative power and refer to one conspectus, or “look,” of the mental eye as measuring the length of one material division stored for recollection. So, there are Seven Wonders in the ancient world, Seven Virtues, Seven Capital Sins, six wings of the seraph diagram, each with five feathers (Figure 2). In memorizing a long text, one was taught to divide it into segments short enough to be easily recalled in one mental conspectus, and then to lay each segment away together with its address in the order of the whole text. Any readily reconstructable order will do, but the most common are numbers and alphabets. The address provides the mnemonic hook that draws in the particular content of the segment. Quintilian describes the result: “However large the number [of these segments] our memory requires, all are linked one to the other [in their order] like dancers hand in hand, and there can be no mistake since they join what precedes to what follows.”9 Because human long-term memory is virtually limitless in its capacities, an enormous amount of information can be stored in this fashion—indeed, one’s entire education can be laid away, readily inventoried in the storehouse of memory.

In Western memory training, a fundamental distinction was also made between memoria verborum, or verbatim word-for-word memorization, and memoria rerum, or remembering the chief words and ideas of a text, its substantive matters. This was also called remembering sententialiter or summatim. Either method was considered to be a legitimate type of memorization, leaving the choice (after elementary schooling in the subject) up to each individual’s discretion, ability, and needs. In the curriculum of the trivium, verbatim memorization was particularly associated with initial schooling in reading—that is, with grammar. It was instilled through the common exercise of recitatio or recitation, as indeed it is to this day. Memoria rerum was learned in the two subsequent studies, dialectic, or the study of the “topics” and “seats” of argument and the relationships of propositions, and especially, the study of rhetoric, the invention of new compositions. It was especially to the investigative and inventive tasks of dialectic and rhetoric that mnemonic techne was addressed. Thus, as grammar provided the foundation upon which the trivium built, so memorized texts were thought to provide the exemplars and the materials for new composition.10

Because memoria is to such an important extent the basis of an art of composition, the primary goals when preparing material for memory are flexibility, security, and ease of recombining matters into new patterns and forms. Basic to this are the paired tasks of division and collection. A fourth-century Roman grammarian, Julius Victor, whose work was especially influential in the earlier Middle Ages (and who, in turn, was most indebted
to Quintilian), wrote that *memoria* is “the firm mental grasp of words and things for the purpose of invention” (my emphasis). To ensure this security, matter is first cut up and arranged in *divisiones, discretiones, or distinctiones* (the terms are synonymous), segments arranged in a readily recoverable order, such as by numbers. In this way, error is avoided, for if the pieces are securely bound sequentially (and designated one, two, three, etc.), none can be overlooked or forgotten. Each segment should be short (*brevis*), no larger than what your mental eye can encompass in a single gaze. By building chains of such segments in one’s memory, a very long work—such as all of the Psalms or the whole *Aeneid*—can readily be retained and securely recovered, either in its original order or rearranged and extracted to suit a new composition, simply by rehearsing various numerical sequences. Such mnemonically effective means of enumerating the “brief” segments of a long work is, of course, the principle behind numbering by chapter and verse, such as the divisional scheme imposed upon the Bible, reference to which can be found in the commentaries of Augustine and Jerome.

Thus, to divide matter into *distinctiones* in order to preach is not so much a device for objective classification as a means for easily mixing and mingling a variety of matters and for knowing where you are in your composition. A simple, rigorous ordering scheme is critical to the practice of oratory, for it cues the way of a speaker’s principal (or starting) points, in a manner similar to that of any outline, but with the greater flexibility needed for extemporaneous delivery. It enables a speaker readily to enlarge a point, to digress, and to make spur-of-the-moment rhetorical “side trips” of all sorts, because one can always be sure of where one is in the composition—not in the manner of a parrot (which, reciting mindlessly, never knows “where” it is) but in the manner of a pilot who understands his location relative to his goal from distinctive markers in the water and on the horizon.

The complementary principle to dividing and marking is collecting into a pattern. Each new composition can also be conceived as a place, into which culled and recollected matters are gathered. The very concept of reading in Latin is based upon the notion of “gathering,” Latin *legere*, “to read” having as its root meaning “to collect up, to gather by picking, plucking, and the like.” The Greek verb *lege* had a similar range of meaning, from “to lay” something down to “to lay [things] in order,” hence “to gather, pick up,” “to relate,” “to speak purposefully.” The name of one venerable and essential type of ancient and medieval encyclopedic literature puns upon these closely allied verbs: the *florilegium*, or “flower-gathering,” a collection of sayings, maxims, and stories collected from earlier works, sometimes quoted exactly (though in mnemonically “brief” segments), often just summarized. The best known of these through much of the Middle Ages was Valerius Maximus’s *Dicta et facta memorabilia*, but there are many other examples. Indeed, the premodern encyclopedia itself is a variety of memory-book, the flowers of one’s reading gathered up in some orderly arrangement for the purpose of quick, secure recollection in connection with making a new composition.
The schemes used for organizing memory varied greatly. One could choose among using an architecturally modeled plan and section of a large though entirely literary building (for example the Temple), the feathers on the six wings of a seraphic angel (as in Figure 2), a five-story, five-room section of a house, a world map, a columnar diagram, the stones in the wall of a turreted castle tower, the rungs of ladders, or the rows of seats in an amphitheater. Gardens were also popular, the medieval sort of garden, with orderly beds of medicinal plants and fruit trees, separated by grass and surrounded by a wall. Undoubtedly, gardens became popular with monastic and later writers because of The Song of Songs, a preeminent text for mystical meditation. Various other Biblical structures were often used too: the Tabernacle described in Exodus, Noah’s Ark in Genesis, Solomon’s Temple, the Temple citadel envisioned by Ezekiel, the Heavenly City of the Apocalypse. We now would never think to organize an encyclopedia of knowledge on the plan of Noah’s Ark, but for a clerical audience to whom this text was as familiar as the order of the alphabet is to us—why not? It provides a simple, clearly arranged composition site, containing many useful compartments with a straightforward route among them, and thus can serve as a foundational map to use in arranging one’s subjects and materials, gathering them into the location of a new composition from the networks of one’s knowledge, including of course all one’s experience of books, music, and other arts. Thus, in the course of an ideal medieval education, in addition to acquiring a great many segments of Scriptural and classical texts, one would also acquire an extensive repertoire of picture-schemes in which to put them, both to lay them away and to collect them in new arrangements on later occasions.

I now want to look briefly at two such dispositive schemes. Figure 2 shows one version of the seraph image (also called the Cherub, for complex exegetical reasons), drawn in a manuscript made at the Cistercian abbey of Sawley in England in about 1190. This figure was initially the summary picture or diagram for a famous homiletic text called “A Tractatus upon the Six Wings” (De sex aliis) that was widely, but wrongly, attributed to Alan of Lille. The work is more probably the composition, around 1170, of Clement, Prior of a foundation of Augustinian canons at Llanthony in Gloucestershire. The text of On the Six Wings begins with a meditation on the divine throne vision from Isaiah 6, copied from Hugh of St. Victor’s commentary on Noah’s Ark. The second half of the treatise concerns the seraph drawing itself. It gives a terse, at times almost notational, exposition of the legends on the various wings and feathers of the angelic creature and was clearly written in conjunction with the drawing.

It is often assumed that a picture such as this was made after the composition was completed, essentially as a help for students and unlearned audiences. But when one reads On the Six Wings, it is clear that as a whole this text could be of little use except to someone who already knew enough about the subject to be able to amplify its extreme meagerness. In other words, it is useful not to a beginner but to one already adept—not to a student but to a teacher, specifically a confessor, a chaplain, a preacher, people whose
FIGURE 2. The Seraph (or Cherub) figure, used in recollection. Cambridge, Corpus Christi College MS 66, p. 100; English, c. 1190; from Sawley Abbey (Cistercian), but probably made in Durham. (Reproduced by permission of the Master and Fellows of Corpus Christi College, Cambridge.)
offices required their being able to speak ex tempore and flexibly to various audiences on
the large topic of penitence. On the Six Wings is not truly a sermon (as it is now classified)
but an ars inveniendi, in which the seraph or cherub device itself is what is essential, while
the accompanying words serve as its brief aide-memoire. Indeed, the picture was soon
separated from the treatise and often occurs alone, suggesting that the text was thought
to be unnecessary to its function.

To use such a compositional device as the Seraph/Cherub, a person would need to
internalize the picture, remembering the divisiones of the subject, as major headings of
“wings” and sub-headings of “feathers.” With this figure in mind (literally) one could
readily have the gist of as many as thirty sermon-meditations, nearly a whole Lent’s worth,
on the general topic of penitence. Each preacher would readily able to adapt the scheme
to the specific occasions of his own speaking. Adapting and amplifying an exemplary
scheme, after all, is the way most medieval sermonizing was done.

Figure 3 reproduces an opening in one of the earliest and best manuscripts of the
fully glossed Psalter, presented there with the commentary of Peter Lombard. This manu-
script was made in Paris around 1170 for Herbert of Bosham, secretary to Thomas Becket,
Archbishop of Canterbury. The pages clearly measure out the psalm texts in brief, conspec-
tus-length divisiones, each in a large script. The commentary, in a different script, sur-
rounds these pieces of text, punctuated and rubricated so that its subjects can readily be
identified. Surrounding the main commentaries are margins of yet other commentary,
and in the outermost margins, brackets indicate the sources of the texts: Augustine, Cassi-
odorus, Jerome, and Ambrose. The page is indeed an early version of hypertext, its links
and networks securely fashioned for ready reference and recollection.15

But were they so used? The evidence is largely indirect, in accounts of the reading
and composing habits of medieval scholars. For instance, in 1330 the Franciscan friar
William of Ockham, isolated from the intellectual community of Western Europe by Pope
John XXII for his teachings challenging papal power, was banished to the Franciscan
convent in Munich. There he spent the rest of his life. Having been a member of university
communities at Oxford, Paris, and in Italy, where he had access to the best libraries in
Europe, Ockham found his isolation at Munich distressing, not least because there he had
virtually no books, nor means of obtaining them, for the Pope had stipulated that nothing
was to be sent to him, nor was he to have visitors. Ockham’s situation as a scholar is an
extreme case that demonstrates quite clearly the necessary role that memorial training
and transmission continued to play in both education and scholarly dialogue throughout
the Middle Ages, even as the number of books multiplied greatly.16

While at Munich, Ockham composed a dialogue on the limits of papal power, a work
which continued the debate that had gotten him into trouble in the first place. In the first
part of this dialogue, the master (Ockham himself) tells the pupil that he needs various
books and materials he cannot get, a theme sounded frequently throughout the work. For
example, he complains in the prologue to the third part of not having the books he wants:
“I can in no way introduce [my subject] beyond the preface since I am unable to come by precisely the books I consider necessary.” To which the pupil responds that he is sure this fear will not restrain his master. And it did not.

The master counsels his disciple to extract and memorize material from a wide variety of sources; indeed, if he himself had not done so when he had the opportunity, he would now have no hope of access to even the most fundamental texts, the Bible and the collections of canon law. The pupil asks how one gets knowledge of subjects like imperial rights and papal powers. Ockham replies, “Complete knowledge about them—which you recall is to be drawn out of books of sacred theology and of both kinds of law, that is, canon and civil, and of moral philosophy, and from the histories of the Romans, and especially of the emperors and of the greatest pontiffs and of other peoples—should be most patiently extracted and solidly built up. By which means alone I have hope of obtaining the Bible and the books of church law.”

Ockham did not educate himself with the idea that he might one day be exiled, nor as a student was he the captive of provincial schools and, in consequence, deprived of ready access to libraries. His whole scholarly life until 1330 was spent in the greatest of European universities, his circle the most academic of the time. And still it is clear that he read to memorize and that in composing he drew extensively on the resources of his mental library. He asks those with access to a full library to complete and fill out his work. He apologizes for only skimming the surface in his analyses and expositions of his subject, for if he had the latest material he would be able fully to expand what he had earlier stored in his memory. This incomplete and prefatory work composed from memory fills five hundred and fifty-one folio-sized manuscript pages with material that is certainly not of an elementary nature.

Ockham’s situation was by no means unique in the later Middle Ages. In 1382, the dissident theologian John Wyclif was condemned for twenty-four of his opinions and exiled from Oxford, where he had taught and lived for many years. He was confined to the small parish of Lutterworth, some eighty miles to the north. Here he continued a prolific schedule of writings, despite the fact that he had no library except perhaps for some books brought to him by those few friends who dared to visit. His writings from this period, which include many sermons, an extensive commentary on parts of the Gospels, and a great number of polemical works, are filled with quotations from a variety of sources, too many to possibly be accounted for by the few books he had available. As with the exiled Ockham, Wyclif evidently was forced to consult principally the library of his own memory. And it is also evident from the extent of his citations that his mental library was of remarkable scope. Undoubtedly, the bulk of these citations appear to modern scholars to be of the length and type found in florilegia. Indeed, this fact confirms what we know from other sources about the manner in which students were taught to memorize their reading, as sets of extracts, marked and coded in readily recoverable mental files with cross-references, each the length of a single glance of the mind’s eye. Out of
FIGURE 1.3 (opposite and above), Psalm 58, from the glossed psalter of Herbert of Bosham. Cambridge, Trinity College MS. B. 5.4, fols. 146v-147; made in Paris, c. 1170. (Reproduced by permission of the Master and Fellows of Trinity College, Cambridge.)
the multitude of such basic divisiones and summaries in their memories, major portions of philosophical tractati were composed by university theologians like Ockham and Wyclif.

Medieval accounts of the actual process of composing new work are scattered and few, but they also exist, providing additional insight concerning how scholars were taught to read and to design their minds in order to retain and recollect what they had read—how the library of one’s memory was accessed and investigated. Most frequently invoked is the image of a written page, rectangular in form, laid out in lines and columns, written upon as though with a mental stylus, in the manner of a material book, complete with rubrics and punctuation, glosses keyed to texts, and even marginal notes and markers. In antiquity, Quintilian counseled that grammar students learning to read should always memorize their textual passages using the same wax tablets on which they had previously written them out, as though following the tracks (vestigia) of a hunted animal: “He thus pursues his memory along a trail, as it were, and sees in his mind’s eye not only the pages but almost the actual lines: and so, when he speaks, he is almost in the position of a person reading aloud.” Designed memory is thus described as most closely resembling rectangular written pages, even (and this is most remarkable) at a time when books were written onto scrolls, and not in codices.

This pedagogical advice has had a long duration in the West. In the twelfth century, the Parisian master Hugh of St. Victor counseled his novices that “it is of great value for fixing a memory-image that when we read books, we strive to impress on our memory through the power of forming our mental images not only the number and order of verses or ideas, but at the same time the color, shape, position, and placement of the letters, where we have seen [the extract] written, in what part, in what location (at the top, the middle, or the bottom) we saw it positioned [on the page], in what color we observed the trace of the letter or the ornamented surface of the parchment.” Two and a half centuries later, similar advice was given by another French school master, Jacques Legrand: “One best learns by studying from illuminated books, for the different colors secure recollection of the different lines [of text] and consequently of that matter which one wants to learn by heart.” Advice somewhat like this can be found as early as Quintilian (c. 35–c. 100), who counseled that a student should always learn text from the same wax tablet upon which he had written it, so that, in recollecting it, he will see the material in his mind almost as though he were reading it aloud.

The model of the page of memory was not confined, of course, to novices or grammar students, as is shown by two accounts of the composing habits of mature scholars, two of the greatest medieval authors of all, Thomas Aquinas and Dante Alighieri. Both accounts emphasize that composing is itself the end product of the deliberate, concentrated, meditative reading that could make one’s memory into a proper library. Thomas Aquinas is described by his biographer, Bernardo Gui, as dictating his works to his secretaries “as if a great torrent of truth were pouring out of him from God. Nor did he seem to be searching for things as yet unknown to him; he seemed simply to let his memory pour
out its treasures. . . . When perplexed by a difficulty he would kneel and pray and then, on returning to his writing or dictation, he was accustomed to find that his thought had become so clear that it seemed to show him inwardly, as in a book, the words he needed.” When Thomas dictated, his words “ran so clearly that it was if the master were reading aloud from a book under his eyes.”

Thus the page of memory serves also as the page on which one creates new composition. Dante’s use of the trope that the mind is a book occurs almost everywhere in his work, but one occasion is perhaps particularly revealing. At the beginning of his Vita nuova, he wrote that “In that part of the book of my memory before which little can be read is found a heading in red ink that says: Incipit vita nova. Under which rubric I discovered written the words that it is my intention to assemble in this little book, and if not every one, at least their substance.” Dante then describes words written in his memory under large paraphs (¶). Indeed, he presents himself in this work both as the scribe and commentator of previously existing poems that he had also composed. For Dante, the author was also the reader, rememberer, editor, and re-author of his own ongoing text, and in the process of composing his work Dante saw it in his mind in visual form, written upon his memory as pages with text, rubrics, and punctuation.

Thus the ornamentation of a European manuscript book was thought to be integral to its usefulness to readers. The drawings, the colors, the punctuation divisions, the differences in script between main text and gloss, indeed the array of the whole page was instrumental to its reading. But not solely or even primarily as an aid to understanding the contents. Indeed, as many historians have pointed out, the decoration of the pages in some late medieval devotional books has nothing whatsoever to do with their content and can even seem to quarrel with it. The page decoration of manuscript books has instead to do with dividing and arranging the matters on the page for recollective meditation; it is punctuation of a sort, providing readers with tools that answer to their needs for thinking. And the most compelling proof that this was so is not only that several people at the time commented exactly on this usefulness but that the most accomplished and creative authors of the time composed their new works in their minds’ eyes by making use of organizational schemes that imitated the decorated pages of their books.