How artists, patrons and audiences understand works of art and conceive of new ones is intrinsically connected to their visual memory of both the world around them and of other works of art. Yet, key aspects of visual memory are difficult to assess: how it is informed and transformed by experience, how it is emotionally charged and capable of interaction with an individual’s imagination, how it is affected by specific training and contingent upon historical, geographical and cultural circumstances.\(^1\) The work of visual memory may be crucial for art history, but the question as to which sources are available to the study of visual memory in all its histories and specificities remains open.

The practice of drawing seems to affect long-term visual memory and to enhance visual imagination. What a draftsman leaves on the page records a process that, along with technical skills, involves perception, imagination and memory. Drawings, therefore, and especially collections of drawings by individual draftsmen, offer a starting point to gather material for the study of an artist’s visual memory.\(^2\)

Studies of medieval memory point out that memorization of a vast amount of texts was part of the basic training of pupils in rhetoric and dialectic. Medieval treatises on the art of memory (\textit{ars memorandi}) recommend locative mnemonic techniques that, with the help of an image, made it possible to memorize the sequence, if not the complete wording, of long extracts and complex speeches. According to grammatical textbooks, memorization of this kind was necessary for writers to be able to produce their own compositions. References to the extraordinary mnemonic abilities of such prolific authors as Thomas Aquinas (1225-1274) and

\(^1\) Visual memory has been subdivided in sensory, short-term and long-term memory as well as declarative and nondeclarative memory. Short-term visual memory helps us orient ourselves in space and find objects around us, while long-term visual memory is the ability to recall events that happened some time ago; cf. N. Daw, \textit{How Vision Works: The Physiological Mechanisms Behind What We See} (Oxford Scholarship Online: May 2012).

William of Ockham (c.1287-1347) confirm that scholars at the time were accustomed to committing great quantities of writing to memory.³

Was a similar emphasis on memory common to other kinds of professional instruction? Was something comparable expected from visual artists? Did their training involve the memorization of images in the same way that the memorization of texts was required of those who were becoming scholars? And did the set of skills expected from visual artists include the ability to create new compositions and works of art informed by the memorization of scores of images? If so, how did artists train their visual memory?

Evidence of the use of drawing as a fundamental tool of visual memory comes from the Tuscan painter Cennino Cennini, who around 1390 wrote *Il libro dell'arte (The Craftsman's Handbook)*, an instruction manual on the art of painting. According to Cennini, the process leading to the assimilation of the style of a great master is based on the training of memory through daily drawing exercises:⁴

Having first practiced drawing for a while as I have taught you above, that is, on a little panel, take pains and pleasure in constantly copying the best things which you can find done by the hand of great masters. [...] And, as you go on from day to day it will be against nature if you do not get some grasp of the style and spirit [of the great master you draw from …]. If you follow the course of one man through constant practice, your intelligence would have to be crude indeed for you not to get some nourishment from it. [...] Mind you, the most perfect steersman that you can have, and the best helm, lie in the triumphal gateway of copying from nature. And this outdoes all other models; and always rely on this with a stout heart, especially as you begin to gain some judgment in draftsmanship. Do not fail, as you go on, to draw something every day, for no matter how little it is it will be well worth while, and will do you a world of good.

The whole first section of Cennini’s handbook, from which this passage is taken, confirms that for painters drawing was a vital part of the development of their visual memory. A novelty in Cennini’s text is the invitation to copy from nature, which is seen by a number of art historians as the dramatic change that led to modern art.⁵ There is no evidence that drawing from nature was common practice a century before Cennini; he may well have learned it from his...

training at the school of Giotto (c. 1267-1337). Giotto’s paintings are among the earliest to show clear signs of being inspired not only by artistic traditions, but also by comparison with nature.

There are but few drawings preserved from the century before Giotto, and they show little indication of being made by copying a model directly from nature as recommended by Cennini. The best-known collection of drawings is the portfolio assembled by Villard de Honnecourt between 1220 and 1240. Thirty-three sheets of parchment are filled with an assortment of about 250 drawings of different subjects. After tracing most of the drawings, Villard added captions to the pages in his native Picardy dialect. Villard’s drawings seem to be based on artistic models in front of him as well as memories of other visual sources, and, in the case of architectural drawings, direct knowledge of building sites. Compared with the likely source he used, Villard’s drawing of a lion and a bull offers an indication as to his modus operandi and to connections between drawing and visual memory (figs. 1-2).

The Gospels of St. Medard of Soissons is one of the most lavish manuscripts produced under Charlemagne in the Palace school at Aachen. It was given to the Abbey of St. Medard in Soissons, France in 827 and remained there for almost a thousand years, until it was moved to Paris in 1790. Its 235 parchment folios bear the text of the Gospels and a beautiful set of miniatures. Renate Friedländer has identified an illuminated page from this manuscript as the model used by Villard for one of the two drawings on folio 13v of the portfolio. In the miniature (fig. 1), a round-headed arcade-like frame structures the canon table that shows the concordance for the parallel texts of the Gospels of Mark and Luke. The symbols of the two evangelists inhabit the lunette over the columns. On a bright blue background, the lion of Mark confronts the bull of Luke. They are holding a purple roll with the number and title of the canon table in golden letters. The painter used a colorful palette: the bright blue of the lunette and outer columns contrasts with

---

6 Cennini proudly states that he belongs to the third generation of Giotto’s pupils (*Il libro dell’arte*, chap. I).


the gold of the round arch and the haloes, with the intense white of the bull and with the red, purple and greenish blue of the other columns and capitals.

A comparison between the miniature and the drawing shows striking similarities as well as differences. In both works, lion and bull face each other standing on their back paws, their front paws holding rolls, their tails coiled around their frontward leg. A number of details diverge in significant ways: the position of the back wings, the halos, the expression of the snouts and the necks (much longer in the drawing), the attachment of the tails to the bodies and the coiling of the bull’s tail around his left leg. If the miniature was indeed the model used by Villard as Friedländer maintains (and as seems likely), the result was an image remarkably different from the original. The beautiful colors of the miniature as well as the context and meaning of the pairing of the two animals are lost in the drawing. In Villard’s portfolio, the two symbols of the Evangelists stand unframed on the reverse of the same page that shows a Descent from the Cross.

Friedländer’s proposal is supported by circumstantial evidence. The village of Honnecourt lies outside Cambrai, in Picardy, only about 60 miles north of Soissons. The Gothic Cathedral of Soissons was being built at the time and it is reasonable to assume that Villard, with his keen interest in Gothic architecture and extensive travelling in northern France, would have visited Soissons during one of his trips. Access to the famous Abbey of St. Medard and to the renowned Carolingian Gospels in its library was something that Villard was likely to seek out and achieve, as indicated by other of his drawings made during visits to prominent sites. The differences between the miniature and the drawing might suggest the existence of intermediaries between the two works, but the precise match in position, proportion and attributes of the animals makes it hard to think that Villard could have created the image in his drawing all by himself, independently of the miniature in the Gospels of St. Medard.

Whether he had made a direct or indirect copy, Villard was struck by those two symbols of the Evangelists and decided to draw them. Tracing them on the page implied a process of close observation and a form of memorization. It is the method that, a century and a half after Villard, Cennino Cennini would advocate in his handbook as effective training for aspiring artists. The drawings in the portfolio offer a glimpse of how Villard purposefully tried to inform and train his long-term memory by way of drawing. The lack of other forms of visual reproduction at the time made the memorization of images by way of drawing a more urgent practice than it was to become after the spreading of prints. And yet, the drawing of the two symbols of the Evangelists

gives a vivid example of how the memorization of an image could be selective. Drawing, like memory, transforms from the start the works of art that are being observed, thus making assimilation a process at once inevitable and creative.

Captions
Fig. 1 – The Gospel Canon Table Tenth in Mark and Luke, Gospels of St. Medard of Soissons (Paris, Bibliothèque nationale de France, Ms. Latin 8850, fol. 12r); c. 37.5 x 28.5 cm, parchment, c. 800.
Fig. 2 – Villard de Honnecourt, Descent from the Cross and Symbols of St. Mark and St. Luke, portfolio (Paris, Bibliothèque nationale de France, MS Fr 19093, fol. 13v, reversed); 24 x 15.6 cm, parchment, 1220-1240.

Short Bio
Ludovico Geymonat is Marie Curie Fellow at the Bibliotheca Hertziana - Max Planck Institute for Art History in Rome, Italy. He graduated in art history from the Università di Torino and Princeton University (PhD, 2006). He has published on painting in early fourteenth-century Venice, on the Baptistery at Parma and on the Wolfenbüttel Musterbuch. His research focuses on medieval drawings, monumental painting and the role of space in visual communication.
Figure 1. Villard Drawing, Bibliothèque Nationale.

Figure 2. Canon Table of St. Medard, Bibliothèque Nationale.