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Original written sources for the history of mediaeval painting techniques and materials: a list of published texts
ORIGINAL WRITTEN SOURCES FOR THE HISTORY OF MEDIAEVAL PAINTING TECHNIQUES AND MATERIALS: A LIST OF PUBLISHED TEXTS

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Summary—Original written sources for the history of materials and techniques of mediaeval western art are very important for the scholar who wants to carry out research in this field. The author has selected and commented on those which he considers the most important among those that have been published: the 'Lucca manuscript', the De coloribus et artibus romanorum, the Mappae clavicula, the De clarea, the Schedula diversarum artium, the Breviloquium diversarum artium, the Livro de como se façen as cores, the Coloribus naturalia exscripta et collecta, the Liber de coloribus illuminatorum sive pictorum, the De coloribus faciendis, the De coloris diversis modis tractatur, the De diversis coloribus, the Experimenta de coloribus, Jehan Le Begue's recipes, Jehan Le Begue's Tabula de vocabulis sinonimis, Il libro dell'arte, the Segretti per colori, the 'Strasburg manuscript', the 'De arte illuminandi', the 'Göttingen Model Book' and the Recepte daiffre piu colori. The editions of the original texts containing translations into English, French, German or Italian are listed in the article.

Introduction

There are two main sources that provide us with original information about the techniques and materials of mediaeval art: the technical examination of the work itself, and the written sources which date from the time the work was produced. The former allows us to know precisely which materials were used in each case, and the latter gives a general idea of the technical processes used by artists and craftsmen at the time. Epistemologically, the study of the written sources precedes experimental studies, which are necessary to obtain precise data. On the other hand, analytical results need to be correctly interpreted, and a sound knowledge of the history of techniques and materials is necessary to achieve this.

Thus the systematic gathering of written sources is a complicated but rewarding task. Several important efforts have been made in this direction. The monumental work of Schlosser and the revisions by Kurz and other authors [1] do not deal with technical subjects, even though some valuable references are included. Thompson's "Trial index to some unpublished sources for the history of mediaeval craftsmanship" is a remarkable effort in this direction [2]. However, its practical utility is somewhat limited for the scholar or the conservator because, as the title indicates, it only contains references to unpublished texts, which are rarely accessible. More recently, Alexander has compiled an interesting list of published written sources from antiquity to the late nineteenth century that also includes a short and useful summary of their contents [3]; unfortunately, information about the editions is seldom included. Compilations of recipes according to subject have been attempted (see, for instance, those by Roosen-Runge [4] or Brunello [5]). However, researchers using them are necessarily confined to the categories chosen by the authors, which do not always coincide with their own interests. A very comprehensive effort in this sense is that by Bordini, who has made a comprehensive selection of the most important sources from antiquity to the nineteenth century. A short commentary is included for each source, along with a list of the most important editions and some references to texts where each source is mentioned or discussed [6]. As with any other list, the selection of sources might be debatable, and not every edition of each source is quoted.

This present article may be considered to be a reasonably comprehensive list of the most important written sources for the history of techniques and materials of mediaeval and early Renaissance painting, as well as their editions. In practice, these editions are the actual source from which most scholars draw information. They are much more accessible than their original counterparts, since they do not require extensive palaeographical knowledge and/or extended trips to the archives where they are housed. Many editions also include translations into modern languages.

This article is divided into two sections: the first
section, 'The sources', lists the selected original texts in chronological order, with some comments about the date of composition, contents and editions. The second section, 'The editions', is organized by editor's name and date of publication. The bibliographic information on the editions can be found in this section of the article, where they are listed under the editor's name in alphabetical order.

The sources

The sources are listed individually and have been arranged in chronological order. However, it must be taken into account that, as many of these texts cannot be dated precisely, the sequence cannot be determined precisely either.

Compositiones variae: the 'Lucca Manuscript'

The only known copy of the text is presently kept at the Biblioteca Capitolare, Lucca (MS 490), hence its name. It is an unsystematic collection of recipes, written in Italy in the latter part of the eighth century or at the beginning of the ninth century. However, according to Burnam, the Lucca Manuscript derives from a Spanish text dating from 725, which in turn derives from an earlier manuscript dating from around 650; the latter was probably a translation from even earlier Greek texts (as some of the recipes clearly indicate). This is very common in mediaeval sources, because the scribes felt free to add commentaries or to make additions or corrections to the text they were working on, or simply to ignore some parts of it, so that it is not always easy to identify the original core (or author) of the text. Thus, resemblances or connections between different texts are often found, or parts of one text embedded in another. Many recipes from the Compositiones variae have been copied into other manuscripts throughout Europe (Johnson has found up to 78 other manuscripts containing parts of this compilation [7, 8]), including the Mappae clavicula, see below).

The recipes in the Lucca Manuscript do not deal only with painting; other crafts are also described (including mosaic, dyeing, building techniques and gilding). This work is also known as Compositiones ad tingenda musiva, which is the title given to it by Muratori (in 1739) and Hedfors (in 1932) in their editions. It has also been edited by Pellizzari (1915) and Burnam (1920).

De coloribus et artibus romanorum

The De coloribus et artibus romanorum has been attributed to 'Hercules' or 'Ercules', a writer who, according to Ilg, is fictitious [9]. This work is divided into three parts. The first and second parts are written in verse and can be considered the nucleus of the work. Later additions in prose were made to this nucleus, forming a third part. Its dating is complex; Schlosser and Giry date the first two books to the tenth century [1, 10]. Schlosser believes that these two books were written in Italy, while the third was probably a French addition written in the thirteenth century.

The De coloribus ... is an attempt to recover antique technical traditions in a broad sense: for example, dyes, ivory, gems and glass are dealt with. However, the most important part of the text is probably the third book (particularly chapters XXIV to XLV and L to LVIII), where several kinds of tempera painting technique are described. The De coloribus ... was first published as a part of Raspé's Critical Essay on the Art of Oil Painting in 1781. This edition was made from a partially incomplete manuscript (several chapters from the third book are missing) from Trinity College Library, Cambridge, now held at the British Museum (MS Egerton 840 A). Merrifield's edition of 1849 was based on a more complete manuscript, held at the Bibliothèque Nationale, Paris. Ilg also made a transcription of the De coloribus ... which appeared, along with a German translation, in 1873. The first two books were edited by Pellizzari in 1915. Finally, Roosen-Runge's Farbkunde und Technik frühmittelalterlicher Buchmalerei was published in 1967, including a German translation of many of the recipes, along with technical comments.

Mappae clavicula

The original text of the Mappae clavicula was written in northern Europe in the ninth or tenth century and was expanded by several additions in the twelfth century. It has strong links with the 'Lucca Manuscript', incorporating many of the same recipes. One of the principal manuscripts (MS Phillips 3715, see below) was first published by Phillips in 1847. More than a century later, in 1967, many recipes from this text were annotated, translated into German, and published by Roosen-Runge. In 1974, Hawthorne and Smith published two of the texts from the Mappae clavicula in English translation, with a concordance of the principal manuscripts.

Although there are two manuscripts which may be considered as the core of the Mappae clavicula (the 'Phillips Manuscript' MS Phillips 3715 in the Corning Museum of Glass and MS 5614 in the Bibliothèque Nationale, Paris), most of the Mappae clavicula recipes also appear in other manuscripts.
throughout Europe. An example is a Spanish manuscript known as the 'Codex Matritensis', which is held by the Biblioteca de El Escorial and which was published by Burnam (in 1912) and Pirson (in 1929). It contains recipes from several sources, including the Compositones variae and no less than 70 paragraphs from the Mappae clavicula.

De clarea

This short manuscript deals mainly with manuscript illumination. It also describes the use of glair (egg white) as a painting medium, as well as how to design foliate decorations and other ornaments in book illumination. The only known manuscript of this text is kept in the Burgerbibliothek in Bern (MS A.91.17) and is unfortunately incomplete. It was published for the first time by Hagen ('Anonymus Bernensis über die Bindemittel und das Coloriren von Initialen') as an appendix to Ilg's edition of Theophilus's Schedula in 1874 (pp. 375–400). This edition contains some mistakes in transcription, which were partially corrected in Louymy's edition (published in 1908). As a result of these editions, the De clarea has come to be known as the 'Anonymous Bernensis'. Thompson also published this text in 1932; in his introduction he agrees with Louymy's dating of the manuscript to the twelfth century, while Hagen thinks it was written no later than the eleventh century. A recent edition of the De clarea is that by Straub (1964).

Schedula diversarum artem

Theophilus's Schedula diversarum artium is perhaps the most important collection of technical data about mediaeval arts and crafts as practised in northern and central Europe. It is a logically structured work and not just a juxtaposition of recipes from diverse origins. This makes it significantly different from many other similar texts and gives it special value. Theophilus also seems to have been a practising artist himself, hence the importance of his account.

There are several manuscripts of this text: the oldest and most complete are those in Vienna (National Bibliothek, MS 2527), Wolfenbüttel (Wolfenbüttel Herzogliche Bibliothek, Gudeanus Lat. 2º 69) and London (British Museum, MS Harley 3915). Schedula diversarum artium is an expression that appears in the preface of the Wolfenbüttel manuscript. Lessing named his transcription after this expression, and it became a commonly used designation for this text. The Schedula is also known as De diversis aribus, the title of the Schedula manuscript in Vienna.

The text is divided into three books. The first deals with miniature and mural painting, the second with glass techniques and painting on glass, and the third with metal, gems, and ivory techniques. The date of writing has been disputed: Lessing dated it to the tenth century, Leiste, Raspe, Degering [11] and Theobald to the tenth, Hendrie to the first half of the eleventh, Ilg to the second half of the eleventh or the first half of the twelfth century [12], Dodwell, and Hawthorne and Smith [13] to the first half of the twelfth century, Bourassé to the second third of the twelfth century, and Eastlake [14], Guichard (in Escalopier's text) and Texier [15] to the latter part of the twelfth century or the thirteenth century. In this connection, it is interesting to note that some manuscripts of the Schedula have later additions (the earliest is the sixteenth-century Vienna manuscript) that mention its author as being 'Theophilus qui est Rugerus'. This has led some scholars to believe that 'Rugerus' could be the monk Roger von Helmarshausen, a craftsman and metalworker who was active around 1100. In addition to this, palaeographers have dated the Wolfenbüttel and Vienna manuscripts (the oldest known) to the twelfth century. This suggests that the text was actually composed at the beginning of the twelfth century. The most recent studies (those by Dodwell and by Hawthorne and Smith) also support this opinion.

The Schedula has been published many times. The work was brought to the attention of scholars by Lessing in 1774, when he transcribed and published several chapters from a copy of the Wolfenbüttel manuscript. Morelli, who had discovered another copy of the Schedula in Venice, published some parts of it in the catalogue of the Nani Library at roughly the same time (1776). Raspe, who had found two further manuscripts in Cambridge (Cambridge University Library MS 1131 and British Museum Ms Egerton 8404, formerly in Trinity College Library), published the Latin text of Theophilus's first book in 1781. In 1843 Escalopier published a new transcription, which was based on preceding editions and on the Cambridge University Library MS 1131, as well as the Le Buge Theophilus manuscript, see below). Four years later, Hendrie published an edition based on British Museum MS Harley 3915, which he himself had discovered.

These last two editions provided the basis for other publications. Bourassé translated Hendrie's

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*Ilg, Falke and Frauberger identified several works of Roger von Helmarshausen, such as a gold cross (in the Kunsthistorischesmuseum in Berlin), a silver book binding (in the cathedral of Treviso) and two portable altarpieces (in the Franciscan church in Paderborn and in Paderborn Cathedral); see Schlosser [1].

transcription into French; this translation was completed and annotated by Blanc in 1980. Winston translated part of Escalopier’s transcription (the second book only) into English in 1847. Winston’s text was reprinted in 1867, and a translation can also be found in a compilation of glassworking techniques made by Winbolt in 1933.

In 1876, the French translation of the Schedula by Bon temps was published. In addition, there is an anonymous French translation (published in 1924) which seems to be based on Escalopier’s work, though this is not acknowledged. On the other hand, Ilg’s critical edition (published in 1874) takes into account virtually every manuscript, translation and study available at that time and includes a German translation.

In the twentieth century, Theobald published an edition that focused on the technical matters described in the second and third books. Dodwell’s excellent and well annotated edition of the Schedula was published in 1961 with an English translation, Hawthorne and Smith’s English edition two years later and finally, in 1987, Brepohl’s edition was published with a German translation.

Breviloquium diversarum artium
Ilg suggested that the monk Theophillus was the author of the Breviloquium diversarum artium, another text on technical matters of arts and crafts [9]. According to him, diverse fragments of this text were included in German fifteenth-century printed copies of the Lumen animae, a work that gathered together a wide variety of late mediaeval scientific and magical knowledge. Raspe, Ilg and Escalopier included this text in their editions of the Schedula, because they believed that the fragments were actually a part of the Schedula diversarum artium. However, as Dodwell has demonstrated in the preface to his edition of the Schedula, Theophillus's authorship of this text is very doubtful. In any case, this text contains much less information about the techniques of mediaeval arts and crafts than the Schedula itself.

Livro de como se façan cores
The Livro de como se façan cores is contained in MS De Rossi 945, held at the Biblioteca Palatina, Parma. This is the only known manuscript of the text. It is written in Portuguese, but using Hebrew characters. Its colophon indicates that the original text was written by Abraham ben Judah Ibn Hayyim in Loulé (Portugal) in 1262, although as Blondheim has pointed out, the existing manuscript may have been written later. It is devoted to the making of pigments and aqueous binding media, and to miniature painting techniques. In 1928, Blondheim published a transcription (in the original Hebrew characters) along with an English translation.

De coloribus naturalia exscripta et collecta
The manuscript Amphonius Quarto 189 in the Erfurt Stadtbibliothek contains a short text entitled De coloribus naturalia exscripta et collecta, which describes the making and use of pigments, primarily for manuscripts and paintings. It is divided into 20 short chapters and was written in the late thirteenth or the beginning of the fourteenth century. It shows close connections with the Schedula and with the De coloribus et artibus romanorum (see above). It was published by Thompson in 1934 with an English translation.

Liber de coloribus illuminatorum sive pictorum
This text is a part of the British Museum MS Sloane 1754 (fol. 142v. to 149r.). The Liber de coloribus ... was probably compiled during the last part of the fourteenth century, perhaps by a French author, and describes the making of pigments and their use in miniature and easel painting. It was derived from earlier texts, including for example the third book of the De coloribus et artibus romanorum; it also bears some similarities to Pietro de Sancto Audemaro’s Liber de coloribus faciendis (see below). It was published by Thompson in 1926 with an English translation.

The manuscripts of Jehan Le Begue
The manuscripts of Le Begue consist of a number of different late mediaeval texts dealing with art and craft techniques. Le Begue was not their author; in 1431 he copied the different texts and put them together in a single codex with a preface and a glossary compiled by himself. Later, that codex became MS Lat. 6741 in the Bibliothèque Nationale, Paris. The codex contains several fragments of the Schedula and was used by researchers such as Lessing, Hendrie and Escalopier when preparing their editions of Theophillus’s text (see above). Following up these references, Merrifield studied the codex and found that it contained several other works of great interest, which she transcribed and translated into English. These were published in her well-known Original Treatises dating from the XIIth to the XVIIIth centuries on the Art of Painting ... (London, 1849) under the general name ‘The manuscripts of Jehan Le Begue’.

*A transcription to Roman characters was made by Fitzgerald and Taylor, Todd Memorial Volumes—Philological Studies I (1930) 71-83.
This book (reprinted by Dover in 1967) continues to be the most widely known source for the study of these texts by scholars around the world; for this reason they are here grouped under Merrifield's well-established headings.

The original Le Begue codex includes some texts which are not listed here, such as the above-mentioned fragments of the Schedula diversarum artium and the entire De coloribus et artibus romanorum. Here, they are not discussed as a part of Le Begue's manuscripts because they are known from other documents, not primarily from Le Begue's texts.

De coloribus factendi
De coloribus factendi was written by Pietro de Sancto Audemaro (or Pierre de Saint Omer). Little is known about this person; for philological reasons, Merrifield thought he was resident in northern France. She does not date the text but quotes Eastlake [144], who dated it to the thirteenth or fourteenth century. The De coloribus factendi is a fairly comprehensive compilation of some 60 recipes describing the making of pigments, along with their preparation for artistic purposes. It offers valuable information on pigment cleaning and grinding techniques, on binding media and on varnishes; some information on gilding is also included. Errors in Merrifield's transcription, which is the only one known, have been corrected by Thompson [16].

De coloribus diversis modis tractatur
De coloribus diversis modis tractatur was written by Johannes Alcherius (or Archerius, or Acerius), who lived in the second half of the fourteenth century and the first part of the fifteenth century. During his travels around France and Italy he wrote down recipes on painting and pigment preparation. In 1398, he wrote down the six recipes on miniature painting and gilding that comprise the De coloribus diversis modis tractatur. According to his own account, this work was dictated by Jacob Cona, a Flemish painter then residing in Paris. The text was later corrected by Alcherius himself, who also added some information he had gathered from other sources.

De diversis coloribus
De diversis coloribus is a short text—only four, rather detailed, recipes—describing the making of red lake pigments, some derivatives of copper ethanoate (verdigris), and gilding techniques. This work was also written by Alcherius, this time from the dictation of Antonio di Compendio, an elderly and experienced Italian miniature painter. Its history is very similar to that of De coloribus diversis modis tractatur. It was written in 1398 and corrected and expanded in 1411 (Alcherius added a recipe for making ink).

Experimenta de coloribus
The Experimenta de coloribus is a collection of recipes which Alcherius compiled from several sources while in Italy between 1409 and 1410. Recipes 1 to 88 were taken from a book he had borrowed from Dionisio, an Italian monk. They relate to the making of colours and inks, to gilding techniques and to metalwork. Recipes 100 to 116 were copied from a book lent to him by the painter Giovanni da Modena. These recipes describe the making of pigments and dyes, and some gilding techniques. He also gathered oral information from other practising artists ('Master Johannes, a Norman', 'Theodore, a native of Flanders' and 'Michelino di Vesuccio'). Back in Paris, in 1411, Alcherius corrected the recipes where he thought it necessary. Since some of these recipes were written in Italian, Le Begue (who did not read Italian) had them translated into Latin.

Miscellaneous recipes
In 1431, Le Begue himself added 50 recipes to Alcherius's De diversis coloribus, concerning the making of inks, pigments and glues and on gilding. They are written in French and bear no heading; there is only a short note indicating Le Begue's authorship.

Tabula de vocabulis sinonimis
According to Merrifield, after compiling the above-mentioned texts, Le Begue wrote a dictionary of materials employed in painting, which helps in understanding the meaning of many of the terms employed in his manuscript. The text is in Latin and has not been translated by Merrifield because (according to her) its difficulties render the translation 'impracticable'.

Il libro dell'arte
Undoubtedly, this is the best known source for the history of late mediaeval painting techniques. This treatise was written in the 1390s, or early in the following century, by Cennino Cennini, with the purpose of offering a complete overview of painting techniques as he knew them; other arts are also described in the text in less detail. Cennini himself was a painter who had been trained under Agnolo Gaddi, who in turn had worked with Giotto, and could thus claim to be an heir to the tradition of Giotto—as he does in his text. As a consequence, Il libro dell'arte reflects fourteenth-century painting techniques and materials. It must be remarked that, unlike most other sources included here, Il libro dell'arte is a true treatise and not a mere juxtaposition...
of recipes. As the title shows, the original text was written in Italian, not Latin.

Even though this text was known in the Renaissance, the first printed edition was prepared by Tamborini in 1821, from an incomplete manuscript kept at the Vatican Library (MS Ottoboniano 2974). This edition was translated into English by Merrifield in 1844, and into French by Mottez in 1858. A new, expanded edition was made by the latter's son, Henry Mottez, published in Chartres in 1911 and reprinted in Paris in 1922.

The first critical edition, by Carlo and Gaetano Milanesi, appeared in 1859. It was based on two manuscripts kept in Florence, at the Laurenziana Library (MS 78 P 23) and at the Riccardiana Library (MS 2190), written in the fifteenth and sixteenth centuries respectively. Thus, the Milanesi could appreciate the evolution of some of the terms and could complete parts that were missing. Several translations were made from the Milanesi edition; IIg translated it into German in 1871 and Herringham translated it into English in 1899 (this translation was reprinted in 1930).

In 1913 Simi made a detailed critical edition, reprinted in 1943 with some additions and corrections. Verkade's edition was published in 1916, while Thompson's 1932 edition contains an English translation (reprinted in 1960 by Dover). In 1942, Borradale published a handbook for tempera painting based upon Cennini's text. Recent editions include Tempesti (1975), Brunello (1982, but based on Simi's text), Serchi (1991, also based on Simi's text) and Deroche (1991, with comments and a French translation).

De arte illuminandi

De arte illuminandi is an anonymous treatise dating from the fourteenth century which is written in Latin. Only one copy of this text is known to exist, in the Biblioteca Nazionale di Napoli (MS XII.E.27). It has no title and was named De arte illuminandi by its first editor, a name that has become well-established. De arte illuminandi describes the technical processes of miniature painting with great precision. However, it also contains important information about the making of pigments and media that are common to all painting techniques. The text is apparently contemporaneous with that of Cennini, and has similar aims; like Il libro dell'arte this text is a true, logically structured treatise and is intended to be a complete reference.

The manuscript was discovered in 1872 by Caravita and was first published in 1877 by Salazar, who included Italian and French translations. Between 1885 and 1886, Lecoy de la Marche published three articles on De arte illuminandi and a transcription of the text, correcting some details from Salazar's edition. Four years later, in 1890, he published the articles and the transcription in a single volume.

In the twentieth century, Guareschi published the text with some comments of his own in 1905.
Thompson and Hamilton published an English translation of Lecoy de la Marche’s transcription with technical notes in 1933, Brunello published a transcription and Italian translation in 1975 and Guerrero published a facsimile edition with a transliteration into modern Italian in 1979. The Brunello edition includes many technical notes and a study of late mediaeval miniature painting techniques.

'Göttingen Model Book'

The 'Göttingen Model Book' is a small volume kept at the Niedersächsische Staats- und Universitäts-Bibliothek, in Göttingen. It was written and painted in Germany in the middle part of the fifteenth century. It is unique in that it contains both written instructions for the making and use of colours in manuscript illumination and painted examples, showing decorative motifs in several stages of development. Even though the Göttingen Model Book is devoted to geometrical and floriate decorative painting, many of its instructions can be applied to figurative painting. A facsimile of the book, a transcription of the original old German text, and an English translation were published by Lehmann-Haupt in 1972.

Ricepje daffare piu colori

The short Ricepje daffare piu colori ('recipes for making many colours') are contained in MS I.11.19 in the Biblioteca di Siena. It was written by Ambrogio di Ser Pietro da Siena, apparently a practising scribe and illuminator, between 13 April and 18 June 1462, as the explicit informs us. This text was published by Thompson in 1933.

The editions

The editions are listed by editor in alphabetical order.


BERGER, E., Quellen und Technik der Fresko-, Oel-, und Tempera-Malerei, Georg Callwey, Munich (1912).


BRUNELLO, F., De arte illuminandi et altri trattati sulla tecnica della miniatirra medievale, Neri Pozza, Vicenza (1975).


BURNAM, J., ‘Recipes from Codex Matritensis A16 (ahora 19)’, University of Cincinnati Studies, 2nd series, VIII, 1 (1912).


LESSING, G.E., *Von Alter der Ölmalerei aus dem Theophilus Presbyter*, Brunswick (1774). (Several reprints exist, including that published by Leiste, above.)


MERRIFIELD, M.P., *Original Treatises dating from the Xllth to the XVIIIth centuries on the Art of Painting, in Oil, Miniature, Mosaic, and on Glass; of Gilding, Dyeing, and the Preparation of Colours and Artificial Gems; preceded by a general Introduction; with Translations, Prefaces, and Notes*, John Murray, London (1849); reprint: Dover, New York (1967).


PHILLIPS, T., ‘Letter addressed to Albert Way, Esq., Director, communicating a transcript of a manuscript treatise on the preparation of pigments and on various processes of the decorative arts practised during the Middle Ages written in the twelfth century and entitled “Mappae Clavicula”’, *Archaeologia* XXXII (1847) 183-244.


TEMPESTI, F., Il libro dell'arte, Longanesi, Milan (1975).
THEOBALD, W., Technik des Kunsthandwerks im zehnten Jahrhundert des Theophilus Presbyter Diversarum artium schedula, in auswahl neu herausgegeben, übersetzt und erläutert, V.D.I. Verlag, Berlin (1933).
VERKADE, W., Das Cennino Cennini Handbucbtei der Kunst neuübersetzt und herausgegeben, Heitz, Strasbourg (1916).
WINBOLT, S.E., Wealden Glass, the Surrey-Sussex Glass Industry (1226-1615), Cambridge (1933).

Conclusion

There are, of course, other written sources which contain information that could be of interest for the history of western medieval painting techniques and materials, as well as many short notes and references of a miscellaneous nature scattered throughout other mediaval documents. Many of these have, however, not been published; others are versions of, or unacknowledged quotations from, the published sources listed above. This article includes those which are, in the opinion of the author, the most important published sources. As such, the list cannot be considered definitive, but it may prove helpful to those who require an introduction to the original written sources on mediaval painting techniques.

Acknowledgements

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References

1 SCHLOSSER, H., La literatura artística. Manual de fuentes de la historia de la historia moderna del arte, 3e edición puesta al día por Otto Kurz, con adiciones de Antonio Bonei Correa, Cátedra, Madrid (1976); first German edition: Vienna (1924).
5 BRUNELLO, F., De arte illuminandi et altri trattati sulla tecnica della miniatura medievale, Neri Pozza Editrice, Vicenza (1975).


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Résumé—Les sources écrites originales relatives à l’histoire des techniques et matériaux anciens de l’Occident médiéval sont très importantes pour les étudiants qui veulent mener des recherches dans ce domaine. L’auteur a sélectionné et commenté celles qu’il considère comme les plus importantes parmi toutes celles qui ont été publiées: le ‘manuscrit de Lucca’, De coloribus et artibus romanorum, Mappae clavicula, De Claraea, Schedula diversarum artium, Breviloquium diversarum artium, Livro de como se façan as cores, Coloribus naturalia exscripta et collecta, Liber de coloribus illuminatorum sive pictorum, De coloribus faciendis, De coloris diversis modis tractatur, De diversis coloribus, Experimenta de coloribus, les recettes de Johan Begue, Tabula de vocabulis sinonimis, Il libro dell’arte, Segreti per colori del me no auteur, le ‘manuscrit de Strasbourg’, De arte illuminandi, Gottingen model book, et Receipe daffare piu colori. L’article présente une liste des éditions du texte original avec des traductions en anglais, français, allemand et italien.


Resumen—Las fuentes originales escritas sobre la historia de los materiales y técnicas del arte del medievo occidental son muy importantes para los especialistas que inten tan llevar a cabo investigación en este campo. El autor ha seleccionado y comentado aquellas que ha considerado más importantes entre las que han sido publicadas: el ‘Manuscrito de Lucca’, el De coloribus et artibus romanorum, el Mappae clavicula, el De clarea, el
De coloribus diversarum artium, el Breviloquist diversarum artium, el Livro de como se façen as colores, el De coloribus naturalia excripia et collecta, el Liber de coloribus illuminatorum sive pictorum, el De coloribus faciendis, el De coloris diversis modis tractatur, el De diversis coloribus, el Experimenta de coloribus, las recetas de Le Begue, la Tabula de vocabulis synonymis de Jehan Le Begue, Il libro dell'arte, el Segreti per colori, el 'Manuscrto de Estrasburgo', el De arte illuminandi, el 'Libro de modelos Göttingen' y el Riceptie daffare piu colori. En este artículo se presenta una lista de las ediciones de los textos originales conteniendo las traducciones al inglés, francés, alemán o italiano.