

Reference materials for Art Technological Source Research

The following list is a compilation of reference materials useful in the field of art technological source research. The titles of books and articles, and the URLs are selected from the information sent around within the ICOM-CC working group ATSR. The present materials are gathered by ATSR participants over the years. The list does not claim to be complete or exhaustive and is updated irregularly. Mind that URLs change or disappear constantly and, although these were found and checked at some point, the working group ATSR does not take any liability for the correctness of the links given.

Contents

Online general library databases

Online databases for special books and manuscripts

Online bookdealers databases

General reference works

 Weights & measures

 Place names

 Terms & abbreviations

General reference works on conservation

General reference works on art technological source research

Artists' materials & techniques

 Pigments

Source research and conservation

Source research and drawing

Source research and painting

Pre-mediaeval sources - reprints, transcriptions, translations, studies

 Pliny the Elder

Mediaeval sources - reprints, transcriptions, translations, studies

Early modern and modern sources

Online general library databases

<http://www.ubka.uni-karlsruhe.de/kvk.html>

§ In case you are in doubt about the existence of a book, or magazine, or of the exact title-description, the largest open cataloguing system is the Karlsruhe Virtual Catalogue. The emphasis is on German, Austrian and Swiss Libraries, but it also covers catalogues of 18 other major European libraries, plus the Australian National Library, the Canadian Union and the CISTI Catalogues, the Library of Congress and the Library of Medicine in the USA.

<http://www.theeuropeanlibrary.org/portal/index.html>

§ Next to the portal of the Virtual Catalogue of the University of Karlsruhe, also the European National Libraries have organised in a network:

Worldcat (<http://www.oclc.org/worldcat/>) offers open websearching possibilities with mainly North-American contacts. Try 'First Search' / 'Try a Search' and more specifically:

<http://www.oclc.org/worldcat/open/partnersites/default.htm>

Online databases for special books and manuscripts

<http://www.archivegrid.org/web/index.jsp>

§ ArchiveGrid helps you on your way for searching through historical documents, personal papers, and family histories held in archives around the world.

<http://www.mmdc.nl/static/site/index.html>

§ This online database contains descriptions of all medieval western manuscripts up to ca. 1550 written in Latin script and preserved in public and semi-public collections in the Netherlands. These include the collections of libraries, museums, archives, collections of monastic orders and some private institutions open to researchers. Although containing a wealth of references, the database is not so easy navigable.

There is also a page with links to digital facsimiles:

<http://www.mmdc.nl/static/site/links/databases/facsimiles/index.html>

<http://www.cerl.org/web/en/resources/hpb/main>

The Heritage of the Printed Book Database (HPB) (previously called the Hand Press Book Database) is maintained by CERL to provide scholars with a source for the multilingual print culture in Europe. The database contains three million records of books from the beginning of printing to the middle of the 19th century, held in national libraries, cathedral libraries and others. You can locate a book through a single search across all of the contributing libraries.

Three well-known, older German encyclopedia can be consulted on-line:

- Krünitz's Oeconomische Encyclopädie (1776-1857): <http://www.kruenitz1.uni-trier.de/home.htm>

- Meyer's Konversationslexikon (from 1888): <http://www.meyers-konversationslexikon.de/>

- Zedler's Universallexikon (1732-1748): http://www.lb-oldenburg.de/externdb/kat_wwi.htm

<http://www.textlog.de/>

§ A collection of digitised historical texts, encyclopaedia and dictionaries, with an emphasis on philosophy, art and aesthetics. The website is in German only and has 41.000 pages available.

<http://www.manuscripta-mediaevalia.de/hs/kataloge-online.htm>

§ The Bayerische Staatsbibliothek has digitised 150 printed manuscript catalogues of German and foreign collections, which catalogues can be browsed page by page. The website is in German only.

The first attempts at ICN to scan historical texts for use in source research date from 1995. Your top desk flat bed scanner was still waiting for its inventor and Leyden University had a prototype. The machine was the size of a large trunk, about two cubic metres, and scanning one page did cost five minutes. Developments went fast and many websites now offer text scans.

But how to change the picture into a searchable text? The average scanner comes with OCR software, which converts the picture into a word file. In its turn this has a search option (Control F). For modern type founts of open design and clearly printed the results will optimize at about 95%, percentages decreasing dramatically for handwritten material. Google Book Search offers a service for tracing books and supplies passages as well as full book scans: <http://books.google.com/>

The university library of Ghent is one of the suppliers of the book scans used by Google and the first 4,000 books went through the scanner. For a recent review see:

[http://www.nrc.nl/wetenschap/article1888380.ece/Google Book Search is nog verre van perfect](http://www.nrc.nl/wetenschap/article1888380.ece/Google_Book_Search_is_nog_verre_van_perfect)

The main difficulty observed is the quality of the converted texts, because of the apparent impossibility to develop software to read abbreviations, ligatures and poorly printed texts. As a result their indexes are clogged with all kinds of nonsense terms. For an illustration see:

[http://www.nrc.nl/achtergrond/article1888379.ece/Een voorbeeld van de tekstkwaliteit van een oud boek bij Google Book Search](http://www.nrc.nl/achtergrond/article1888379.ece/Een_voorbeeld_van_de_tekstkwaliteit_van_een_oud_boek_bij_Google_Book_Search)

It will be a while before databases for text research may safely use converted text scans. Until then various options are available:

- manual transcription of the desired passage in a database with keywords attached and the possibility for full text search
- OCR converted text, which is converted manually; the text can be handled as a word file
- projection of a scan of the desired passage as a picture within the database with keywords attached and no full text search

Reference materials for Art Technological Source Research ⁶

- projection of the full text with the possibility to attach keywords to desired passages and no full text search.

<http://www.arthistoricum.net/index.php?id=332>

§ Not the first website/webjournal you would visit for source research, but scrutinizing the archives you might find some gems.

Online bookdealers databases

<http://www.vialibri.net/>

The online database of online antiquarian databases with links to the larger online library databases. Click the tab '553 years' to search a chronological table of books available.

Usually, doing a search for the publisher in combination with a word from the title or the author's name is enough, although not in all cases publishers have websites. The larger sites for tracing and buying modern and antiquarian books, such as Amazon, Bibliofind and Abebooks are well known, but there are also national and specialised sites.

For French reference materials: <http://www.deboccard.com/francais/Rub/cata.htm>

For German reference materials: <http://www.habelt.de/>

For Italian books academic publications: <http://www.unilibro.com/> (in English)

For Italian reference materials: <http://www.libroco.it/cgi-bin/lista.cgi>

General reference works

Chemisch-technisches Lexikon : eine Sammlung von mehr als 17000 Vorschriften für alle Gewerbe und technischen Künste / Josef Bersch. – 2. Aufl. - Wien : Hartleben, [1894]

§ The 19th century was particularly strong in the publication of technical dictionaries and encyclopaedia, this is a general one with 17,000 entries. For the online version:

<http://diglib.hab.de/wdb.php?dir=drucke/ed000007>

Scroll down the left part of the window to see a table of all entries. Click on an entry to view the page.

Die Pflanzennamen der althochdeutschen Glossen / Erik Björkman

In: Zeitschrift für deutsche Wortforschung, vol. 2 (1901), p. 202–233; vol. 3 (1902), p. 263–307; vol. 6 (1904-5), p. 174–198

An etymologically interesting list of German plant names: The list is in three parts, all three alphabetical, but there is no general index, nor an index on all terms. Nevertheless, very thorough and worth a study for anyone interested in historical plant dyes. For the online version:

http://www.alarichall.org.uk/teaching/bjoerkman_1901-1905_pflanzennamen.pdf

Dictionary of Gnosis & Western esotericism / ed. Wouter J. Hanegraaff ; in coll. with Antoine Faivre ... [et al.]. – Leiden ; Boston : Brill, 2005. – 2 vol.

ISBN 90-04-14187-1 (set)

§ Most thorough, serious and up-to-date study of all aspects of esotericism. ‘Alchemy’ (p. 12-58) from Antiquity to the 20th century, biographies per alchemist, ‘Amulets’ has references to materials used, ‘Magic’ (non-Potterian) refers to the ideas of magic from Antiquity to the 20th century, ‘Magical instruments’ has references to materials used (so often magic recipes are found in sources on art materials).

<http://www.alchemylab.com/>

§ Although not generally known, Newton practiced the art of alchemy with a passion. This URL is most thorough on all aspects alchemical

Further reading about Newton *et alii* at:

http://www.alchemylab.com/contents_general.htm#Famous%20Alchemists

Alphabetisches Verzeichnis der Berufs- und Standesbezeichnungen vom ausgehenden Mittelalter bis zur neuen Zeit / Albert Haemmerle. – Hildesheim : Olms, 1966.

§ A slim octavo, but not outdated and handy to find your way through names of professions. Bilingual Latin-German and German-Latin it tells you the terms in the fields of art technology, too. Take care, don't be satisfied with a quick find, but leaf on. 'Bildhauer' indeed gives 'Statuarius', but also 'Scalptor'. Go to 'Scalptor' and find 'Formschneider', which in its turn gives 'Proplastes', the cutter of woodblocks for printing.

Weights & measures

Manuale di metrologia, ossia misure, pesi e monete in uso attualmente e anticamente presso tutti i popoli / Angelo Martini. – Torino : Loescher, 1883

Edizione digitale a cura di Guido Mura. – Milano : Biblioteca Nazionale Braidense, 2003.

§ Here is a wonderful source on historic and local measurements calculated in the metric system, with thanks to Jo and Mark C. The volume can be consulted online per entry or place name: <http://www.braidense.it/dire/martini/indice.htm>

De oude Nederlandse maten en gewichten / J.M. Verhoeff. – Amsterdam : Meertens-Instituut, 1981.

§ This is modern version (not digitised) of the above for the Netherlands only; second edition 1982. The publication is not available anymore.

Place names

<http://www.columbia.edu/acis/ets/Graesse/contents.html>

§ Giving European place names in Latin the Orbis Latinus website is a digitally prepared version of the 1909 edition of Johann Graesse's dictionary. There are two fairly recent paper editions. The web version of Orbis Latinus has the advantage of quick search by word-image,

Reference materials for Art Technological Source Research ¹⁰

which in our case allowed finding what we were looking for. The recent paper publications are more up to date and the 1972 has more names.

Orbis Latinus : Lexikon lateinischer geographischer Namen ; Handausgabe ; lateinisch-deutsch, deutsch-lateinisch / Graesse; Benedict; Plechl. - 4., rev. und erw. Aufl. / hrsg. und bearb. von Helmut Plechl unt. Mitarb. von Günter Spitzbart. - Braunschweig : Klinkhardt & Biermann, 1971.

§ This is a summary octavo edition in one volume, handy to carry about.

Orbis Latinus : Lexikon lateinischer geographischer Namen des Mittelalters und der Neuzeit ; Großausgabe / Johann Georg Theodor Graesse, Friedrich Benedict. Bearb. und hrsg. von Helmut Plechl. Unter Mitarb. von Sophie-Charlotte Plechl. - Braunschweig : Klinkhardt & Biermann, 1972. – 3 vol.

§ This is the full version in three volumes, very detailed.

Other on-line lists of Latin place names:

- the Bibliographic Standards Committee published their list of Latin place names found in the imprints of books printed before 1801 and their vernacular equivalents:

<http://net.lib.byu.edu/~catalog/people/rlm/latin/names.htm> (scroll to the bottom)

- the Cathedral Libraries Catalogue is said to be a ,working document', but the last update was in 1998: <http://www.bibsoc.org.uk/cathlibs/towns/>

- the CERL thesaurus is updated frequently and records also printers and publishers:

<http://cerl.sub.uni-goettingen.de/ct/>

The CERL Thesaurus (Consortium of European Research Libraries,

<http://www.cerl.org/web/>) contains names of persons, corporate bodies, places and

printers/publishers recorded in books or other material printed during the hand-press era

(1450 - ca. 1830). Authority files contributed by CERL member libraries (the majority of the larger European libraries) and other libraries/projects concentrating on the history of the book are brought together and made searchable in one single system. This system can also be used to retrieve modern names for historical place names (with reference to earlier ATSR mailings on the subject). Mind that there is a 'browse' button and a 'search' button, which give different results. For example, browsing with 'argent' and 'truncated' to find both Aiud, Argenteuil and Strasbourg (with its various historic spellings). When you push the search button you get the

place names straightforward, i.e. without the various spellings. Next you could click on 'selected records', for more varieties of the place names and so on. The system is userfriendly and the information available rich, but enhances several aspects and possibilities, thus give yourself some time to browse the links on this site.

Terms & abbreviations

<http://net.lib.byu.edu/~catalog/people/rlm/glossary/glossary.htm>

§ A glossary of common Latin terms found in imprints of Early Printed Books.

<http://www.virtuelles-kupferstichkabinett.de/?subPage=glossary&>

§ A glossary of terms in six languages found underneath prints from the 16th century up to the early 20th century. Open the PDF by clicking on 'Erläuterung von Beschriftungen auf graphischen Blättern'.

Abbreviations and ligatures in manuscripts are a challenge to everyone involved in mediaeval texts. It is therefore not strange to find so little on the subject, but here is one. 'Take a foreign language, write it in an unfamiliar script, abbreviating every third word, and you have the compound puzzle that is the Mediaeval Latin manuscript. For over two generations, paleographers have taken as their vade-mecum in the decipherment of this abbreviated Latin the "Lexicon abbreviatarum" compiled by Adriano Cappelli in 1899.' The man working on a database which completely revises Cappelli's work is Olaf Pluta (University of Bochum, Germany). He designed (C++), built and filled the database with Latin abbreviations, for which he travels and researches widely to cover the complete field. It will be good for institutions, but for individuals may be a step too far. It takes special Mac software and you have to buy the CDs. Nevertheless, it is there:

<http://www.ucalgary.ca/%7Escriptor/papers/pluta/pluta.html>

The good news for Windows users is that it is now published on the Internet, too, per subscription:

<http://www.ruhr-uni-bochum.de/philosophy/projects/abbrev.htm>

Reference materials for Art Technological Source Research ¹²

Encyclopedia of printing, photographic, and photomechanical processes. A comprehensive reference to reproduction technologies, containing invaluable information on over 1500 processes / Luis Nadeau. - Fredericton, NB (Canada): Nadeau, 1989-1990. - 2 vol.

§ 2nd. ed. in 1 vol.: Fredericton 1994.

Authorative encyclopedia of terms and expressions used in printmaking and the graphic industry

General reference works on conservation

Conservation Treatment Methodology / Barbara Appelbaum. - Amsterdam : Elsevier, 2007.

§ The book is a practical guide to decision-making for conservation treatments of all kinds of cultural material and describes systematic ways to address the difficult issues of use, meaning, and values. Chapters are also devoted to the role of long-term preservation in treatments, as well as a paradigm for producing concise documentation that serves the needs of both present and future stakeholders. The methodology set forth in the book assures that treatments are appropriate to their current context while safeguarding their future. The uniform decision-making process that it describes assures the conservator that all relevant issues have been considered before treatments begin.

The journal 'ArtMatters - Netherlands, Technical Studies in Art' presents a collection of lavishly illustrated articles by scholars working in the interdisciplinary field of technical art history. Drawing on the combined expertise of conservators, scientists and art historians, ArtMatters brings together a wealth of information about artists' materials, techniques and studio practice, from different periods and disciplines. For further details see:

<http://www.artmattersjournal.com/>.

Glossary of conservation / Mireia Xarrié. – Barcelona : Balaam, 2005-[...]. - 5 vol.

§ Glossary of art terms and their definitions, emphasis is on terms used in conservation:

<http://www.balaam-art.com/>

This is a dictionary on concepts pertaining to art conservation, materials & techniques, museology. The author has researched various bibliographical English, French, Spanish, Italian and German sources, has translated all to English and has arranged all the renown experts' definitions in alphabetical order.

Museum Documentation Association: Newsletter:

'New Terminology Source Published: An indispensable new reference tool is available for conservators, curators, archivists and collections professionals. Glossary of Conservation I is a dictionary of conservation and restoration terms. This, the first volume in a series on conservation, contains definitions from a wide range of respected European sources. From canvas to craquelure and from sepia to silica, this publication will guide you with accurate and detailed definitions.'

Reference materials for Art Technological Source Research ¹⁴

Diccionario técnico Akal de Conservación y restauración de bienes culturales / ed. Lourdes Rico Martínez, Celia Martínez Cabetas. – Madrid : Akal, 2003

§ Thorough polyglot in English, French, German, Italian, and Spanish with 10,000 terms on 1122 p., used in art and conservation. Every term in one language is followed by the appropriate terms in all other four languages. Terms only, no definitions, emphasis is on terms used in conservation but it reaches far beyond that.

General reference works on art technological source research

Art of the Past - Sources and Reconstructions / Mark Clarke, Joyce H. Townsend and Ad Stijnman (eds.). - London : Archetype, 2007

§ In October 2004 the Art Technological Source Research study group held its first highly successful symposium at the Instituut Collectie Nederland, Amsterdam: Approaching the Art of the Past: Sources & Reconstructions. The symposium was held to discuss the role of source research and the use of reconstructions in the emerging field of art technological research.

Recipe books, treatises and manuals on artists' materials, tools and methods are of fundamental importance for an understanding of how art objects were made. Historically accurate reconstructions on the basis of these sources provide insight into the original appearance of an object, as well as workshop practices, and provide models for understanding material degradation. The interpretation of artists' intent rests on this kind of basic knowledge. For example: Van Gogh never intended the blossoms in his series of orchard paintings (Van Gogh Museum, Amsterdam) to appear quite as pale as they look today. How would they have looked originally? The recipe sources and reconstructions may answer this and help us understand what has happened.

Thea Burns reviewed these proceedings in *The Paper Conservator* (2007), p. 63-65. She observes an enthusiastic young group covering a large variety of subjects and pinpoints the difficulties encountered. Very rightly she concludes that 'much work remains to be done', which materialised in the following ATSR symposiums.

Art Technology : Sources and Methods / Stefanos Kroustallis, Joyce H. Townsend, Elena Cenalmor Bruquetas, Ad Stijnman and Margarita San Andres Moya (editors). - London : Archetype, 2008

§ The proceedings of the second ATSR conference in Madrid, October 2006.

The study of art technology has gained importance in recent decades as a relevant source of information, not only for determining the material history of an art object, but also for contributing to cultural aspects concerning its creation and use: aesthetic, economic, social, religious, etc. Often the results of such investigations are carried out within a narrow discipline and are only made available within it. The success or failure of multidisciplinary

approaches depends on the capacity to share information. Specialised researchers on sources relevant to the history, technology and production of art object as a whole can overcome this obstacle. But under what disciplinary aegis?

This volume contains papers in either English or Spanish, with abstracts in both languages, which address these issues through case studies, paying special attention to methodology. Different types of art technological sources and the theory of source research are examined. While there is an emphasis on textual sources, which are the most widely available and relatively easy to understand, an extensive range of subjects is covered:

Hispano-Islamic gilding techniques; mediaeval recipe books and Baroque painting treatises; precolonial and colonial Latin American pigments; industrial archives and patents; realia from the 18th and 19th centuries; audiovisual sources for contemporary art; and the importance as a source of laboratory analysis and reconstructions of historic recipes. All the studies are based on an unambiguous working method and accurate interpretation of results.

Study and Serendipity: Testimonies on Artists' Practice - London : Archetype, [publication in progress]

§ The proceedings of the third ATSR conference in Glasgow, June 2008.

<http://www.chass.utoronto.ca/~bhall/articles/meister1.htm>

§ Studying historical texts is common in art technological source research. More difficult is the study of visual sources, because it asks for a discerning eye and a lot of contextual knowledge, and because no training in the area is available. The author explains about the importance and value of imagery in the study of historical technology. With little adaptation it can be applied in our field.

Ateliergeheimen : over de werkplaats van de Nederlandse kunstenaar vanaf 1200 tot heden / Mariëtte Haveman, Eddy de Jongh, Ann-Sophie Lehmann, Annemiek Overbeek (eds.). – Lochem [etc.] : Kunst en Schrijven, 2006

§ A series of articles on studio practices in the Netherlands (but also from elsewhere in the world) from 1200 to the present day. Although emphasis is on historic painting practices, there are also discussions on the historic printmaking business, Vincent van Gogh's The Hague period and on modern artists such as Piet Mondriaan and Willem de Kooning.

Reference materials for Art Technological Source Research ¹⁷

Vivre des arts du dessin, France XVIe-XVIIIe siècle / Martine Vasselin. - Aix-en-Provence: Université de Provence, 2007

§ The author, having gathered material for twenty years, covers about everything related to the arts in France between 1500 and 1800. Emphasis is on the craft aspects, the organisation of guilds, membership of the Académie, Royal Verdicts related to the arts and crafts, the training of artists, the commercial aspects, exhibitions, the daily life of artists and artisan, the studios. You name it, it is there and it is a good read. The book has one main drawback, having hardly any references. Per chapter a short reading list is given and here and there are some footnotes. If you want to know more about certain details you will have to work hard to dig up the source material.

Original patents as an aid to the study of the history and composition of semisynthetic plastics / Sylvia García Fernández-Villa and Margarita San Andrés Moya

In: Journal of the American Institute for Conservation. - (Summer 2005). - P. 96-102

§ The introduction discusses the use and usefulness of (old) patents on plastics.

The body of the artisan, art and experience in the scientific revolution / Pamela H. Smith. - London, Chicago: The University of Chicago Press, 2004

§ This book is about the role of artists and craftsmen with their knowledge of materials and techniques in the Scientific Revolution in the 16th-17th century. From the blurb: 'Since the time of Aristotle, the making of knowledge and the making of objects have generally been considered separate enterprises. Yet during the late sixteenth and early seventeenth centuries, the two became linked through a "new" philosophy known as science. In *The Body of the Artisan*, Pamela H. Smith demonstrates how much early modern science owed to an unlikely source-artists and artisans. From goldsmiths to locksmiths and from carpenters to painters, artists and artisans were much sought after by the new scientists for their intimate, hand-on knowledge of natural materials and the ability to manipulate them. ... Smith shows how artisans saw all knowledge as rooted in matter and nature. With ... vivid examples of this Renaissance synergy among art, craft, and science'.

Uit goede bron. Introductie tot de historische kritiek / Walter Prevenier. - Leuven (etc.) : Garant, 1992

Reference materials for Art Technological Source Research 18

English translation: From reliable sources : an introduction to historical methods / Martha Howell and Walter Prevenier. - Ithaca, N.Y. ; London : Cornell University Press, 2001

§ A handbook on the materials and techniques for source research written for historians. It is fundamental if you start with source research, otherwise a bit old-fashioned. About texts in all their varieties, other kinds of sources are hardly mentioned.

http://fr.wikipedia.org/wiki/Connaissance_technique

§ Informative discussion on the various ideas about technique.

Nature's Workshop : Renoir`s Writings on the Decorative Arts / Robert L. Herbert. - New Haven, Conn. : Yale University Press, 2000

§ From the blurb: ‘This book shows Auguste Renoir in an entirely new light, revealing an artist far more complex and thoughtful than previously believed. Seven unknown and unpublished texts written by Renoir, along with four other writings once published but now largely forgotten, are presented here in both French and English. They identify Renoir as an impassioned critic of architecture, architectural decoration, and the education of artists. These surprising texts were written in 1883–84, when Renoir hoped to found an exhibition society grouping all the crafts, and around 1910, when he prepared several drafts of a preface to a French translation of Cennino Cennini’s medieval treatise on the arts. Robert L. Herbert has uncovered Renoir’s “Grammar of Art,” long believed lost, and has disproved the idea that his reading of Cennini was related to his trip to Italy in 1881.’

www.museion.gu.se/digitalAssets/809/809863_Dissertation_jacob_thomas1.pdf

§ Search with ‘ATSR’ to find the author Jacob Thomas discusses in his dissertation the use of the principles of art technological source research in a museum environment, such as for organizing exhibitions.

Artists' materials & techniques

Everybody knows about the materials dealers Kremer Pigmente (<http://kremer-pigmente.de/>), but there is more: <http://www.pigmentmuehle.de/>

For The Netherlands there is the windmill De Kat:

<http://www.nieuwrealisme.nl/verfmolen-de-kat.html>

The artist's illustrated encyclopedia : techniques, materials and terms / Phil Metzger. –
Newton Abbot, Devon (UK) : David & Charles, 2001

§ More books like this one have been published, but this is a fairly recent one. Entries are concise, but with an abundance of pictures to elucidate them. It serves both a quick update on a particular material or technique, as well as informing on modern English terminology.

Pigment compendium, a dictionary of historical pigments / by Nicholas Eastaugh (et al.)
(Amsterdam : Elsevier, 2004)

§ Repertory of historical pigments, with short descriptions per term.

Glossaire des matériaux de la couleurs et des termes techniques employés dans les recettes de couleurs anciennes / Bernard Guineau. - Turnhout : Brepols, 2005. - (De diversis artibus; 73)

§ From the blurb: 'Bernard Guineau n'est pas seulement un pionnier dans l'application des méthodes physico-chimiques aux pigments et aux colorants anciens. Il a aussi scruté la littérature technique de la couleur depuis l'Antiquité jusqu'au XXe siècle. Le présent dictionnaire résulte d'immense recherches documentaires. Il fournit l'identification, et très souvent la formule chimique de plusieurs milliers de termes anciens relatifs à la couleur et aux matériaux de la couleur. C'est un outil indispensable pour l'historien d'art, l'historien des sciences, l'analyste, mais aussi le restaurateur et l'artisan.'

The most thorough dictionary on historical colour terms in its field, comparable to Nicholas Eastaugh's 'Pigment compendium', but more exhaustive. Almost double its size and probably four times the amount of items. Based on 120 historical sources, with short entries per term, non-French terms are added to the French items. Especially good for mediaeval terminology it answers questions like: what is colcothar? When does atramentum means what? Eleven pages on black (noir) with 120 references and a dozen other terms elsewhere.

Reference materials for Art Technological Source Research ²⁰

With a small number of chemical structures, advertisements, recipes and historical samples illustrating the text.

Dictionnaire des matériaux du peintre / Francois Perego. - Paris: Belin, 2005

A 're-edition' of Gettens of Stout, with 20 years research and work to update it to an excellent book as the mother book; very colourfull and even more intelligent devised, lots of sources, images, bibliography first rate - it is more a restaurers material info book than really for painters. Online information: <http://www.editions-belin.com>

Trade in Artists' Materials: Markets and Commerce in Europe to 1700 / Jo Kirby, Susan Nash and Joanna Cannon (eds.). - London : Archetype, [publication in progress]

§ The proceedings of the London 2005 conference.

The journals of naturalists who visited Brazil in the 19th century – sources of information for paint materials and international trade / Luiz A. C. Souza.

In: 15th triennial meeting of the ICOM committee for Conservation, preprints / Janet Bridgland (ed.). - New Delhi : Allied Publ., 2008

<http://www.gutenberg-e.org/lowengard/index.html>

§ 'The Creation of Color in Eighteenth-Century Europe' is the title of the dissertation and now on-line available e-book of Sarah Lowengard. The introduction is promising and the glossary inviting. Try the search engine and take a look at the pictures.

Carriera Rosalba - maniere diverse per formare i colori / Manlio Brusatin, Vittorio Mandelli. - Milano : Abscondita, 2005

§ Full of details, linguistics, intimate knowledge, lots of notes, bibliography.

L'Alun de Méditerranée. Actes du Colloque International (Naples/Lipari, 4-8 juin 2003) / édités par Philippe Borgard, Jean-Pierre Brun et Maurice Picon. - Naples ; Aix-en-Provence : Centre Jean Berard, 2005. - (Collection du Centre Jean Berard)

§ Based on the international colloquium at the French Archaeological Institute in Naples (Centre Camille Jullian, Centre Jean Bérard de Naples et al.), Naples, June 2003.

http://www.nystamp.org/Topic_is_ink.html

§ On recognising various types of writing ink.

<http://www.moma.org/exhibitions/2001/whatisaprint/flash.html>

§ Nicely done animations of the four basic printmaking techniques.

Ancient Egyptian materials and technology / ed. by Paul T. Nicholson and Ian Shaw. -
Cambridge : Cambridge University Press, 2000

§ 3rd printing: 2003.

This a 'massive' book, both in size (702 p.) and in contents. It is divided into three parts: Inorganic materials (stone, soil, painting materials, metals, Egyptian faience, glass), Organic materials (papyrus, basketry, textiles, leatherwork and skin products, ivory and related materials, ostrich eggshells, wood, mummification, oil-fat-wax, resins-amber-bitumen, adhesives and binders, hair), and food technology (cereals, brewing and baking, wine etc., fruits etc., meat). The contents are too wide to describe here, it suffices to say that there is a thorough index to find your way through the wealth of information.

The art of dyeing in the history of mankind / Franco Brunello. – Vicenza : Neri Pozza, 1973

§ Concerning dyestuffs and dying through the ages, this volume will (should) be known to all DHA people. The volume covers the history of dyeing, its materials and techniques from prehistoric times through the ages until the emergence of the synthetic dyes. The author bases himself on a large amount of textual and visual sources (nice pictures) on dyeing techniques, making it a fine example of art technological source research. There is an extensive dictionary of natural dyestuffs at the end of the volume with all plant names in five languages.

For French research into the materials of mediaeval book production see:

<http://aedilis.irht.cnrs.fr/materiaux/>

The sub-heading 'Résumés en ligne, classés par date d'intervention' shows the articles published in relation to the project in the period 2001-2005, either by author or by theme. Click on title for full text.

Artist beware! The hazards in working with all art and craft materials and the precautions every artist and craftsperson should take / Michael McCann. - Guilford, Conn : Lyons Press, 2005

§ The latest edition of McCann's handbook on Health & Safety.

Sand for Roman glass production: an experimental and philological study on source of supply / A. Silvestri, G. Molin, G. Salviulo and R. Schievenin.

In: *Archaeometry*. - Vol. 48 (2006), nr. 3 (August). - P. 415-429

§ According to Mark C. nice piece of interdisciplinary work: materials analysis, text analysis, reconstruction. From the blurb: 'This paper reports the results of an experimental study performed on Campanian littoral sand, together with a careful philological analysis of Pliny's text concerning the production of glass using the above sand in order to verify its suitability. Accurate chemical and mineralogical characterization of sand samples and experimental glasses was carried out, proving the unsuitability of sand for glass production in its original state. Taking into account both the results of the philological analysis of Pliny's text and the mineralogical assemblage of the sand, a new hypothesis regarding Roman glass-making technology is proposed and tested here. The technology implies the production of 'quartz-enriched' sand by means of selective grindings according to the different degrees of hardness and cleavage of the mineralogical phases. Melting experiments, carried out on treated sand and in the temperature range compatible with Roman technology, yielded a glass with composition similar to those of typical Roman glasses. Therefore, new perspectives on the sources of supply of raw materials, hitherto debated, are opened up.'

The following comment is by Jilleen Nadolny.

Measuring Depicted Space – Optical Imaging of Paintings.

There is a world of difference between knowing that something is wrong and being able to prove it conclusively. I imagine that many ATSR members felt this upon reading David Hockney's *Secret Knowledge: rediscovering the lost techniques of the Old Masters*, 2002. Subsequently, bits of his theory have been disproven, with varying levels of authority. However, recently, scientific tools in the form of optical imaging, applied in an increasingly sophisticated manner, have provided an impressive means to evaluate the lighting sources, perspectival accuracy, and other aspects of the manner that reality is constructed in various

works of art. Indeed, some of our own ATSR group members have been pursuing such solutions:

S. Savarese, R. Spronk, D. Stork, A. DelPozo, 'Reflections on praxis and facture in a devotional portrait diptych: a computer analysis of the mirror in Hans Memling's Virgin and Child and Maarten van Nieuwenhove', *Computer Image Analysis in the Study of Art*. Edited by Stork, David G.; Coddington, Jim. *Proceedings of the SPIE*, Volume 6810, pp. 68100G-68100G-10 (2008): <http://www.rii.ricoh.com/~stork/SavareseetalSPIE08.pdf>

One of the authors of the above article, Dr. David Stork (Chief Scientist at the California Research Center of RICOH), has been particularly prolific in working towards a better understanding of pictorial space in paintings via optical imaging. He presents a number of very compelling arguments against the majority of Hockney's claims, using computer simulations of lighting, reconstruction of painted images in 3 dimensions and simple photoshopping of perspectival lines onto compositions to make his points. A good introduction to his work may be accessed on-line:

<http://www.webexhibits.org/hockneyoptics/post/stork.html>

and extensive bibliographies are also available on the web:

<http://rii.ricoh.com/~stork/>

His work shows, among other things, how accepting our brains can be of what we see; depictions work for us in "real" space even when they are not accurately rendered. Stork's analysis of the 'perspectively accurate' rendition of the brass chandelier in the Aronolfini Wedding provides a fascinating look at what can pass for 'correct' perspective.

Of course, there are rebuttals of some of Stork's work, and some of them employ documentary sources in their arguments. One of the more interesting is Susan Grundy's article on webexhibits (see the conclusion, below):

<http://www.webexhibits.org/hockneyoptics/post/grundy11.html>

And naturally, rebuttals exist as well by David Hockney and Charles Falco, who worked with Hockney - (for example), compare:

<http://www.rii.ricoh.com/~stork/StorkFuruichi.pdf>

with:

<http://www.optics.arizona.edu/SSD/Storkdataerrors.htm>

Beyond debate however, is the fact that Dr. Stork utilises an array of sophisticated analytical techniques to process images, techniques that undoubtedly hold much promise for art research. Also worth noting: at a recent talk at Smith College in Northampton, MA (USA) in

October, he announced to the audience that he welcomes suggestions for worthy research topics.

http://vision.mpiwg-berlin.mpg.de/imageCollection/drawing_instruments/

§ This page deals with drawing with optical instruments; the site offers an interesting Image Collection, Bibliography and an Electronic Library with digitized texts.

<http://www.oberlin.edu/alummag/spring2008/features/transforming.html>

§ This is an article on Sarah Belchetz-Swanson, her work as an artist and her cooperation with Phoebe Dent Weil about the reconstruction of historical painting techniques, Rembrandt's especially.

Pigments

Bleu - l'histoire d'une couleur / Michel Pastoureau. - Paris : Édition de Seuil, 2002

§ The author is the best colour historian of France. Good introduction to the field in terms of full embracing approach and quality of research and richness of sources. Good bibliography and lots of notes.

Processes and pigment recipes : natural ultramarine / Spike Bucklow.

In: Zeitschrift für Kunsttechnologie und Konservierung. - Vol. 20 (2006), nr. 2. - P. 269-277

§ The author first argues that it is the method and not the material that determines whether we are dealing with a work of art. To prove his argument he 'outlines the analysis of ultramarine as a means of understanding the relationship between processes and products'.

Reconstructions of ultramarine recipes in the Bolognese manuscript (in Merrifield) and from Cennini form the base of his study. Basically, all recipes work and it is the handling of the material that makes art.

Giallorino – Storia dei pigmenti gialli di natura sintetica / Claudio Seccaroni. - Rome : De Luca Editori d'Arte, 2006

§ The book belongs to the collection 'Materiali della cultura artistica', directed by the Italian

Reference materials for Art Technological Source Research ²⁵

Central Institute for the Catalogue and the Documentation. The matter concerns synthetic yellow pigments (lead tin yellow I and II, Naples yellow, lead tin antimony yellow) used in painting, glass, enamels, majolica/pottery and porcelains. The analytical data are crossed with historical information and with a lot of recipes. Sources are full printed in original language. Wide apparatus of notes at the end of each chapter. Rich index and bibliography at the end of the volume.

http://www.sfiic.fr/coll_coul/collcoul_annfr.htm

§ The website of the 2006 conference ‘Couleur & temps’ shows the contents and there are some chapters which so nicely combine source research with practical work, such as reconstructions: ‘La production des couleurs au XVe siècle’ (William Whitney), ‘Histoire de la fabrication et de l'emploi des pigment noirs’ (etc., Anna Maria Marinelli [et al.]). Also ‘Les comptes des ducs de Bourgogne à la fin du XIVE siècle, les noms et les prix des pigments’ (Jean Delivré) with indeed a list of colour names and its actual pigments with discussion about terminology (‘cinople’ is not green as one might expect but a kind of red) and prices.

A website on 18th-century English chemical terms, including names of pigments:

<http://www.dur.ac.uk/m.d.eddy/EklundsObsoleteChemistryTermsAtoH.html>

This part covers the terms from A-H, there are two more parts for the rest of the alphabet and an overview, which today could not be approached.

Wikipedia has a nice list of ‘pre-scientific substances’, among them a lot of pigments, with links: http://en.wikipedia.org/wiki/List_of_pre-scientific_substances

Following one of the links you come to pigments only: <http://webexhibits.org/pigments/>

Source research and conservation

Assessment and survey of the Vinland map and the Tartar Relation and Speculum Historiale / René Larsen, Dorte V. Poulsen, Marie Vest.

In: *Zeitschrift für Kunsttechnologie und Konservierung*. - Vol. 20 (2006), nr. 2. - P. 249-260

§ A damage assessment of the much discussed Vinland map, in comparison with damage assessments of the Tartar Relation and Speculum Historiale manuscripts; the map is supposed to have been bound up together with either or both of the manuscripts. The ink and parchment of map and manuscripts are studied visually, but not analysed scientifically. The bindings of the manuscripts are studied. Suggestions are made for further research, but no decisive answer is given about the origin of the map.

Une étude scientifique de la technique picturale de Jean-Paul Riopelle / Marie-Claude Corbeil, Kate Helwig, Jennifer Poulin.

In: *Technè*. - Nr. 24 (2006). - P. 47-52

§ Reports a scientific study of the various painting materials used by the Canadian painter Jean-Paul Riopelle (1923-2002) in the course of his career. The project was performed in relation to the conservation of his works as well as their attribution, but also in order to better understand the creative processes of the artist.

Iron gall inks: on the manufacture, characterisation, degradation and stabilisation / Jana Kolar, Matija Strlic (eds.). - Ljubljana : National and University Library, 2006

§ The concluding reports of the InkCor project, on the effects of iron gall ink corrosion. Discussed are all aspects of iron gall ink, from an art historical, art technological, conservational and chemical/physical point of view. The book contains a wealth of new data on the subject, from the museum point of view to archival damage survey, from a discussion of the corrosion mechanisms to the identification of inks, from the historical background of ingredients to the first successful tests of a newly proposed medium to stabilise ink corrosion. Based on historical paper production new model papers are introduced. Based on historical ink recipes new model inks are proposed. Results of analyses of historical objects are compared to modern references. The newly developed non-aqueous treatments are amply discussed. Any further research into the subject of historical iron gall inks, the mechanism of ink corrosion and its treatment methods will refer to this book.

Textiles and Text / Maria Hayward, Elizabeth Kramer (eds.). - London : Archetype, 2007

§ This publication focuses on the interrelationship between archival and bibliographic research and the study of extant objects. Papers consider how archival and bibliographic research can inform our knowledge of textiles and dress, in terms of their production, consumption, dissemination and deterioration and in turn, how the study of extant objects can give added depth to this analysis. The authors include conservators, curators, historians and conservation scientists.

Natural Dyes - sources, tradition, technology, science / Dominique Cardon. - London : Archetype, 2007

§ This authoritative resource is an expanded, corrected and updated translation of the award winning book: *Le Monde des Teintures Naturelles*. - Paris : Belin, 2003.

At a time when more and more plants and animals are threatened with extinction by humanity's ever-increasing pressure on the land and oceans of the planet, this book sets out to record sources of colorants discovered and used on all the continents from antiquity until the present day.

Some 300 plants and 30 animals (marine molluscs and scale insects) are illustrated and discussed by the author, whose passion for natural dyes, with their colours of unequalled richness and subtlety, has taken her across the globe in search of dye sources and dyers. Botanical/ zoological details are given for each source and the chemical structures shown for each dye. Dyes employed by different civilisations, identified by dye analyses, are illustrated and relevant historical recipes and detailed descriptions of dyeing processes by traditional dyers are quoted and explained in the light of modern science.

Other current uses of such colorants, e.g. in medicine and for food and cosmetics, are also noted.

Although natural dyes have been replaced largely by synthetic dyes, increasing worldwide awareness of the harmful consequences of the pollution resulting from the production and use of some synthetic colorants has led to a significant revival and renewed interest in natural colorants. As potential renewable resources, natural dyes are an integral part of the major issue of our time – sustainable development. The aim of this book is to provide a scientific background for this important debate.

Reference materials for Art Technological Source Research ²⁸

<http://www.inside-installations.org/home/index.php>

§ On 20th- & 21th-century art techniques. Check the downloads which have information on the installations collected by means of interviews with the artists.

Source research and drawing

Crayon, Paper, and Paint: an Examination of Nineteenth-Century Drawing Materials /
Kimberly Schenck.

In: The Essence of Line, French Drawings from Ingres to Degas / Jay McKean Fischer ... [et al.]. - University Park : The Pennsylvania State University Press, 2005. - P. 57-85

Hoofdkussens en –brekens. Een onderzoek naar historische tekenmaterialen en –technieken /
Ton de Laat. – Amsterdam : Galerie Petit, [2000]

§ Reconstructions of historical drawing materials and -techniques. Glossary.

The Invention of Pastel Painting / Thea Burns. - London : Archetype, 2007

§ Chalks and pastels are particularly appropriate materials for portraits because they appear effortlessly to convey the warm tones and soft, matte velvety surface of skin. Portraits and head studies therefore figure prominently in histories of pastel. The Invention of Pastel Painting describes the relatively sudden emergence in the later seventeenth century of sets of friable pastel sticks and a new artistic practice of painting in pastel. The author reconsiders the use of natural and fabricated drawing sticks as tools, firmly locating their use in the context of historical function. ‘Artistic techniques have a social history; they are signs endowed with cultural meaning by society.’

The visual, documentary and etymological evidence does not support the concept of a narrative history of pastel gradually progressing from a ‘simple’ original state in the drawings of Leonardo da Vinci, Jean and François Clouet and the Dumonstiers to an increasingly richly coloured and technically complex visual record in the paintings of Robert Nanteuil, Joseph Vivien and Rosalba Carriera, and then continuing to evolve through the nineteenth century.

In considering the history of chalk and pastel, the author argues that the change is aesthetic, not formal, and is grounded in social function and technical response. She has drawn not only on artists’ letters and accounts, documents, critical and theoretical writings, and, broadly, the secondary literature, but also on close visual examination and scientific analysis of selected chalk drawings and paintings in pastel, particularly those created between 1500 and 1750.

Source research and painting

The Artist's Assistant : Oil Painting Instruction Manuals and Handbooks in Britain 1800-1900 with Reference to Selected Eighteenth-Century Sources / Leslie Carlyle. - London : Archetype, 2001

§ Fascinating, accessible and carefully structured, The Artist's Assistant is the first comprehensive and critical analysis of information on nineteenth-century artists' materials. An invaluable resource, not only for conservators and historians of art technology, but also for artists, researchers and teachers who wish to work with authentic materials.

MUSE magazine, Canadian Museums Association, 12 November 2002, volume XX/6:
,This huge volume is a godsend to enlighten professionals and students alike about some of the hidden and complex realities that lie on the surface of 19th century paintings. It provides greater understanding of artist's materials and methods and their evolution, and kindles insight and deeper appreciation for the subtle complexities of their ravishing beauty. No serious art scholar, and certainly no museum or art history department library, should be without it.'

Hans-Christoph von Imhoff, The Journal of The International Institute for Conservation of Historic Artworks, Vol. 47(2002), Nr. 2. p 139-140:

,...a highly useful, easily accessible and very important handbook for those concerned with English or English-influenced painting.'

College Art Association Journal:

,This ... astounding ... book contains remarkable scholarship of the highest order. It provides a wealth of information about the development of English oil painting in an accessible and readable way. This is a reference that should be in every art-history library. It will prove an especially valuable resource for conservators who do research in order to treat nineteenth-century English paintings.'

Looking Through Paintings / Erma Hermens (ed.) ; Annemiek Ouwkerk, Nicola Costaras (associate eds.). - Baarn: Prom ; London ; Archetype, 1998. - (Leiden Art Historical Yearbook; 11)

§ This book presents a collection of articles dealing with various aspects of technical art history. The papers are provided by many important scholars in this interdisciplinary field.

Focussing on different periods and works, the articles all illuminate the role that the study of painting techniques and materials can have within art historical research.

Atelierdarstellungen in der niederländischen Genremalerei des 17. Jahrhunderts : realistische Abbild oder glaubwürdiger Schein? / Katja Kleinert. - Petersberg (Germany) : Imhof, 2006. - (Studien zur internationalen Architektur und Kunstgeschichte; 40)

§ Based on her dissertation (Berlin: Freie Universität, 2003), this study encompasses a detailed introduction to the various aspects of 17th century painter's studio practices in the Netherlands. All aspects are dealt with: tools & materials, lighting & heating, etc. Being rich in references to textual and visual sources, and to a few realia, the second part of the publication contains a catalogue of 76 painting with painters at work in their studio. Some more drawings, and one print, of painters' studios are reproduced in the text.

Técnicas y materiales de la pintura española en los Siglos de Oro / Rocío Bruquetas Galán. – 2nd ed. - Madrid : Fundación de Apoyo a la Historia del Arte Hispánico, 2007

§ Much awaited for, the second edition of Rocío's book on painting materials in Spain's Golden Age. No need to introduce this book, you should have it in your book case.

Theories about the Eyckian painting medium for the late-eighteenth to the mid-twentieth centuries / Elise Effmann.

In: Reviews in conservation. - Vol. 7 (2006). - P. 17-26

§ An overview of the concerns and controversies about the painting medium employed by Jan van Eyck, based on 70 references from Raspe (1781) to the present day.

Greek Painting Techniques and Materials from the Fourth to the First Century BC / Ioanna Kakoulli. - London : Archetype, [publication in progress]

§ This book provides the first comprehensive overview of the techniques and materials used in a range of monumental paintings from the Late Classical to the Graeco-Roman period reflecting the Hellenistic culture.

Information is drawn from scientific technical studies, archaeological and art-historical documents and the surviving texts of ancient writers such as Theophrastus (end of the fourth century BC), Vitruvius (first century BC), and Pliny (first century AD). Based primarily on the technical examination and analyses of wall paintings, painted architectural elements and

marble monuments, the scientific study of materials provides information on the chemical composition of the plasters, the nature of pigments and their microstructure and identifies patterns of trade and methods of manufacture (if synthesised). It further identifies the chemical and physical properties of binding media employed and colour changes in paint layers induced by the alteration of the painting constituent materials and/or external factors. The results suggest a highly developed and cosmopolitan culture, encompassing the entire Mediterranean region and beyond, from the mountains of Macedonia to the deserts of Ptolemaic Egypt and the Eurasian Plateau, throughout which ideas and goods flowed freely.

Jilleen Nadolny, One craft, many names: gilders, preparers, and polychrome painters in the 15th and 16th centuries.

In: 15th triennial meeting of the ICOM committee for Conservation, preprints / Janet Bridgland (ed.). - New Delhi : Allied Publ., 2008

Le métier de peintre au Grand Siècle / Antoine Schnapper. - [Paris] : nrf - Gallimard, 2004. - (Bibliothèque des histoires)

§ Discusses the prerequisites of the organisation of painters and their societies in 17th-century France and discusses, as first one ever, the costs of paintings, both the ones commissioned and the ones free marketed.

Quellenschriften des 17. und 18. Jahrhunderts zur mehrfarbigen grundierung = Written sources of 17th and 18th centuries on multilayered coloured priming / Adam Raft.

In: Großgemälde auf textilen Bildträgern / ed. Manfred Koller ... [et al.]. – Klosterneuburg : Mayer, 2005. – (Restauratorenblätter ; Bd 24/25). – P. 65-75

§ Study on multi-layered coloured grounds based on references in fourteen manuscripts and printed books from the 17th and 18th century. The sources are of Danish, Dutch, English, French and German origin, the De Mayerne ms. takes care of half of the recipes.

Das De Mayerne-Manuskript, Die Rezepte der Werkstoffe, Maltechniken und Gemälderestaurierung. Diplomarbeit, Institut für Technologie der Malerei, Staatliche Akademie der bildende Künste Stuttgart / Gudrun Bischoff. – München : Siegl, 2002

Reference materials for Art Technological Source Research ³³

§ The recipes related to painting in the De Mayerne ms. are taken from their original order, next ordered by material and technique, translated into modern German and discussed, with an emphasis on conservation practices. Glossary.

Not so much about source research as such, but fun for the paint people and one to underscore the need for source research on painting materials and techniques of the period 1900-1940, because many materials started to change then:

<http://www.tate.org.uk/learning/learnonline/modernpaints/>

Pre-mediaeval sources - reprints, transcriptions, translations, studies

Il papiro di Leida. Un documento di tecnica artistica e artigianale del IV secolo d. C. / Adriano Caffaro, Giuseppe Falanga. - Salerno : Arci Postiglione, 2004

Pliny the Elder

Pliny the Elder's Natural History, the Empire in the Encyclopedia / Trevor Murphy., - Oxford: Oxford University Press, 2004

§ For a review see: <http://ccat.sas.upenn.edu/bmcr/2004/2004-12-23.html>

Pliny's Catalogue of Culture, Art and Empire in the Natural History / Sorcha Carey. - Oxford : Oxford University Press, 2003

http://penelope.uchicago.edu/Thayer/E/Roman/Texts/Pliny_the_Elder/home.html

§ Pliny online.

Naturkunde : lateinisch-deutsch / C. Plinius Secundus d.Ä. ; hrsg. und übers. von Roderich König in Zusammenarbeit mit Joachim Hopp und Wolfgang Glöckner. - Zürich, Düsseldorf : Artemis und Winkler, 1973-2004. - 31 vol. - (Sammlung Tusculum)

§ Most welcome to this new translation of Pliny is the general index, lacking from the older Heinemann edition.

Reviews fo the above:

Naturkunde Lat-dt Buch XXXIV: Metallurgie / P. Rosumek.

In: Gnomon : kritische Zeitschrift für die gesamte klassische Altertumswissenschaft. - Vol. 69 (1997), nr. 8. - P. 725-726

Plinius d.Ä., Naturkunde. Lat.-dt. Buch XVIII. Botanik: Ackerbau / hrsg. und übers. Von P. Rosumek.

Reference materials for Art Technological Source Research ³⁵

In: Gnomon : kritische Zeitschrift für die gesamte klassische Altertumswissenschaft. - Vol. 73 (2001), nr. 3. - P. 210-213

C. Plinius Secundus der Ä. Naturkunde Lateinisch-deutsch. Buch 37. Steine: Edelsteine, Gemmen, Bernstein / G. König.

In: The classical review. - Vol. 46 (1996), nr. 1. - P. 50-52

C. Plinius Secundus der Ä. Naturkunde Lateinisch-deutsch. Buch 31. Medizin und Pharmakologie: Heilmittel aus dem Wasser / R. König.

In: The classical review. - Vol. 46 (1996), nr. 1. - P. 50

Mediaeval sources - reprints, transcriptions, translations, studies

The Art of All Colours / Mark Clarke. - London : Archetype, 2001

§ Much was written in mediaeval times concerning the preparation and use of artists' materials, and we are fortunate that many of the manuscripts containing such writings survive. They vary from lengthy treatises to a few lines scribbled in a margin, and from the accurate and practical to the purely literary. These sources have been used for many years by art historians, practising artists, conservators and restorers as guides to the techniques of medieval artists and artisans.

This book explores the history and interpretation of mediaeval technical treatises on the arts. It examines the nature, variety and content of sources from the earliest times to AD1500, and the relationship between what was written and what was practised. The author seeks to answer questions about how and why the texts were compiled, as well as why they sometimes seem obscure. The book lays out distinctions between practical and alchemical texts and provides a translation of technical terminology. Finally, this book contains a catalogue of more than 400 manuscripts that contain such technical texts, many of them largely unknown. These lesser known texts expand our understanding of medieval painting across a wider range of techniques, countries and centuries than those covered by the few well-known treatises such as Cennino Cennini's *Craftsman's Handbook* and Theophilus's *On Divers Arts*. Detailed descriptions and extracts are given for the more important texts, and a full bibliography of published editions and translations is included.

A valuable source for all those interested in the techniques and practices of medieval artists. *Studies in Conservation*, vol 46 (2001), p. 304:

,'...The Art of All Colours is...a perfect tool, valuable for all scholars of mediaeval craftsmanship.'

College Art Association online, CAA. Reviews (June 2002):

,'...will surely find a niche as a valuable research tool...The sheer usefulness of (Mark Clarke's) index will soon earn his volume an appreciative audience of scholars in the field of manuscript production and other areas of medieval painting.'

Der "Liber illuministarum" aus Kloster Tegernsee. Edition, Übersetzung und Kommentar der kunsttechnologischen Rezepte / Anna Bartl, Christoph Krekel, Manfred Lautenschlager and Doris Oltrogge. - Stuttgart : Steiner, 2005

Reference materials for Art Technological Source Research ³⁷

§ Translated and transcribed edition of the Liber illuministarum, München, Bayerische Staatsbibliothek, Ms. Cgm 821. Better known as the Tegernsee Manuscript. It is a bit exaggerated to say it is worth a study German to be able to read the book, but a rich source on medieval art techniques it is.

Review:

Bartl et al. "Der »Liber illuministarum«" / by Mark Clarke.

In: Ambix. Vol. 54 (2007), part 2 (July). - P. 219-221.

The 'Musterbuch' of Wolfenbuettel and its Position in the Art of the Thirteenth Century / Hugo Buchtahl. - Vienna : Österreichische Akademie der Wissenschaften, 1979

§ The Wolfenbuetteler Musterbuch (Wolfenbuettel (G), Herzog August Library, Cod. Guelf. 61, 2 Aug. 8°) is a 13th-century miscellaneous gathering of copies of Byzantine and Byzantinizing design formulas for Biblical scenes. It seems to have been compiled by a craftsman working in Lower Saxony around and after 1200. That means, the same region where Theophilus was working a century earlier and kept in the same collection which keeps the oldest Theophilus manuscript.

http://penelope.uchicago.edu/Thayer/E/Roman/Texts/secondary/SMIGRA*/Atramentum.htm

l

§ A fine piece of 'classical' source research, a 19th-century essay on the term 'atramentum', as used for writing ink.

<http://dtm.bbaw.de/>

§ Click on HSA and find your way in a universe of German manuscripts. Click on EHZ for digitalised texts.

The most interesting part for art technological source research is:

<http://www.manuscripta-mediaevalia.de/>

§ Click on 'Datenbank', click on 'Expertensuche' to find references to manuscripts on art techniques. It is most useful, although the information given is unbalanced: sometimes detailed, sometimes lacking. With some creative efforts it is possible to trace material not yet found in the FHK database:

<http://db.re.fh-koeln.de/ICSFH/forschung/rezepte.aspx>

Click also on 'Digitalisierte Handschriften' for nice pictures.

Contemporary textual evidence for the use of pigments in Anglo-Saxon England in the absence of technical descriptions / Mark Clarke.

In: 15th triennial meeting of the ICOM committee for Conservation, preprints / Janet Bridgland (ed.). - New Delhi : Allied Publ., 2008

De clarea. Manuale medievale di tecnica della miniature (secolo XI) / Adriano Caffaro. - Salerno : Arci Postiglione, 2004

Memorie genovesi. Gli annali di Caffaro (1099-1163) / a cura di Gabriella Airaldi ; traduzione di Marina Montesano. - Genova : Frilli, 2002. - (Collana storica. 1)

Scrivere in oro. Ricettari medievali d'arte e artigianato (secoli IX-XI). Codici di Lucca e Ivrea / Adriano Caffaro. - Napoli : Liguori Editore, 2003

§ A transcription of the Lucca Codex from around 800 AD, containing the oldest known recipe for making a linseed oil varnish. With a transcription of the Codex Ivrea.

<http://www.gutenbergdigital.de/gudi/eframes/index.htm>

§ You will find here a complete copy of the important Göttingen model book. You can also see Helmasperger's notarial instrument, which upon retrieval once and for all settled the discussion whether Gutenberg did invent printing books or not: facsimile, transcription, German translation, English translation. And for the lovers of a beautiful book there is an integral copy of the Göttingen vellum copy of B42, the 42-line Bible printed on vellum by Gutenberg. At the time of appearance it was already famous, because it was faultless and because it could be read without glasses.

Paulerinus (Pavel Zídek), Liber Viginti Arcium (ff. 185ra-190rb) / Alena Hadravová (ed.). - Praha: Koniasch Latin Press, 1997

§ A Bohemian manuscript written by Pavel Zídek from Prague, also know as Paulerinus (c. 1413-1471), in the 1460s. It is kept in the Jagiellonian Library of the University in Cracow, under the signature BJ 257. The ms., a kind of encyclopedia, is famous for linguistics, because he writes neo-Latin with a number of self-invented terms and the text has glosses in

old-Czech and German explaining his terms. For art technological source research there is the part called 'Liber Viginti Arcium', the text of which is a treasure trove as he gives terms for about two hundred craftsmen and craftswomen, with their activities and the tools they use. Per artisan he spends between six and twelve lines. Main crafts concern wood working, metal working, leather working, construction working, the various people active in scriptoria, sculptors, painters, a paper maker, a printmaker, a producer of toys and playing cards, in short every mediaeval craft you can think of. The ms. became known when J. Muczkowski wrote his dissertation about it in 1835, where after it stirred the 19th-century intellectual world, among others because of the references to writing and early printing. The integral annotated text of the 'Liber Viginti Arcium' was recently published again with a bilingual Czech-English introduction and Latin-Czech indices.

Il Libellus di Chicago. Un ricettario di arte, artigianato e farmaceutica (secolo XV) / Caffaro Adriano, Falanga Giuseppe. - Salerno : L'officina dell'arte, 2005

Early modern and modern sources

Illustriertes Haushaltungs-Lexicon : eine Quelle des Wohlstandes für jede Familie. Ein vollständiges Recept-Handbuch für alle Bedürfnisse des Haushaltes in der Stadt und auf dem Lande, sowie sicherer Rathgeber und bequemes Nachschlagebuch ... [etc.] / Luise Wilhelmi. - Strassburg : Schultz, 1884

§ This is a massive household encyclopedia. In between shoe polish and wine refining are recipes for cleaning prints and preparations for dyestuffs. For the online version see:

<http://diglib.hab.de/wdb.php?dir=drucke/ed000009>

The left part of the screen has thumbnails for navigating, which takes some time to peruse the 1188 pages.

Libro per secreti varij 1793 / P. Baraldi, R. Baroni Fornasiero, E. Sgarbi. - Bologna : Pitagora Editrice, 2005

§ Reprint of the original.

Li tre libri dell'arte del vasajo nei quali si tratta non solo la pratica, ma bevemente tutti I secreti di essa / Cipriano Piccolpasso Durantiono. - Forni, 2004

§ Reprint of the original.

With the aid of numerous drawings the greatest of the 16th-century Italian treatise writers describes the central Italian tradition of ceramic work: the preparation, the use and measures of materials and colours. The present edition contains contributions by G. Lazzarini (18th-century) on the making of fine majolica and others by various authors on 'coloured glazes'.

Espingarda perfeytea, or, The perfect gun / edited and translated by Rainer Daehnhardt and W. Keith Neal. - London: Sotheby Parke Bernet; Cascais: Sociedade Portuguesa de Armas Antigas, 1974

§ 1974 reprint of an 18th-century Portuguese manual on gun making with an English translation. Of course, it is about metal and probably well-known to the metals people, but one can also look at it from the point of view that the same materials, tools and machines are used in various arts and crafts. For example, there are references to armenian bole, brazil wood, charcoal, a lot about iron, some things about gold and wood. The illustrations show tools and machines and how they are worked with, with detailed explanations in the text.

On 17th-century art techniques: John Bate, 'Mysteries of Nature', 1st ed. 1634, this is the 2nd one of 1635: <http://special.lib.gla.ac.uk/exhibns/month/nov2003.html>

Further editions: 1634 (2 issues?), 1635 (2 issues?), 1638 (?), 1654, 1977 (repr. of the ed. 1634).

Sir Isaac Newton, in his youth, ardently studied The Mysteries of Nature by John Bate. He copied large parts of it in his notebook, especially the recipes on drawing and painting. A complete transcription can be read at:

<http://www.newtonproject.ic.ac.uk/texts/viewtext.php?id=NATP00001&mode=normalized>

The Painter's Manual of Dionysius of Fourna / translated into English by Paul Hetherington.
- Repr. - Torrance, Cal. : Oakwood, 1996

§ Still available English translation with commentary of the Hermeneia after the ms. cod. gr. 708 in the Saltykov-Shchedrin State Public Library in St. Petersburg, Russia.

1st ed.: 1974.

Ricette per la colorazione dei legni impiegati nelle tarsie rinascimentali / Claudio Seccaroni.

In: Bollettino ICR. – Nova serie, nr. 12, (2006), (Jan./June). – P. 29-35

§ Summary: 'Recipes for colouring the wood used in inlays of the Renaissance period.

A previously unknown recipe for colouring the wood used in inlays was recently discovered in a 16th-century manuscript kept at the Marciana National Library in Venice. The discovery was the starting point for an examination of Renaissance recipes in this field, many of which are still in use today. The survey revealed a very meagre corpus within which the Venetian recipe stands out for its detail and completeness; however, a general description of the various techniques used for colouring and treating wood is contained in the short chapter on wooden inlays forming part of the preamble to Giorgio Vasari's Lives of the Artists. In the case of red colouring for wood, the recipe in the Venetian manuscript suggest using 'cimatura di grana', a colouring agent obtained from red-dyed fabric with 'kermes', and also used to make a red laquer for painting. The ingredients and procedures described in this and other recipes show that there was a close link with contemporary techniques for dyeing yarns and fabrics.' The appendix has transcriptions of recipes from four Italian and German sources.

<http://www.arthistoricum.net/en/epublishing/fontes/>

Electronic-Sources and -Documents for the History of Art 1350-1750. FONTES presents sources and documents for the early modern history of art in electronic form, together with commentaries and illustrations. The website is hosted by the University of Heidelberg, Germany, with financial support of the Deutsche Forschungsgesellschaft. The majority of the digital texts available are related to early and modern art historical research; updates are quarterly. Actual historic texts related to art techniques can also be found here. The modern texts are digitised as PDF, some historical text photographed without anything more, there is no database, nor keywords to further search the material, just the usual search functions. For recent references to e-journals, sources and further art historical information, see the right side of the page. For the archives click on 'Full texts' on the left. Further entry through 'Autoren' (authors) and 'Textgattungen' (subjects). The project seems to have started last year, seeing the oldest entries are dated 2007. Consequently not so much material is available here, but the more technical sources and the studies related to technical issues look promising.