Tapestry Conservation: an Annotated Bibliography

by

Camille Myers Breeze
Camille Myers Breeze is Principal of Museum Textile Services in Andover, MA. Prior to that she was an Advanced Mellon Fellow at the American Textile History Museum, Textile Conservation Center, Lowell, MA and is soon to complete the report of her research project entitled "A Survey of American Tapestry Conservation Techniques".

Ms. Breeze spent five years as Assistant Conservator at the Textile Conservation Laboratory, Cathedral of St. John the Divine, specializing in the conservation of tapestries and pre-Columbian textiles. She has published on both subjects, including a 1996 article entitled "The History of Tapestry Conservation and Exhibition at the Cathedral of St. John the Divine".

Ms. Breeze is the editor of the AIC Textile Specialty Group Postprints and the Textile Conservation Group Newsletter. She holds a BA in Art History from Oberlin College and an MA in Museum Studies: Costume and Textile Conservation from the Fashion Institute of Technology.

Author's address:
5 Moraine Street,
Andover, MA
01810,
USA;

Phone: (978) 474-8069;
email: mts@clearsailing.net;
web: www.clearsailing.net/textiles.
Introduction
This annotated bibliography is designed to assist conservators in locating information on specific aspects of tapestry conservation, and provide an historical overview of the development of modern practices. It is organized chronologically, as the comprehensive nature of most articles made listing by subject impossible. Out of necessity, this report is limited to English-language sources only. Tapestry conservation has been documented in almost every European language, and those sources are also of vital importance to this field. The task of bringing together such a volume of literature has been a daunting one, and omissions are inevitable. Additions to the list are gladly welcome.

1912
This manuscript contains not only recommendations for tapestry conservation but also a brief history of tapestry weaving. On the topic of conservation, Marillier complained that France's traditional female tapestry repairers, or tisseuses, had no counterpart at that time in England. Instead, seamstresses performed restoration, often including cutting tapestries up or stitching to patches "as if they were mending stockings". If this type of repair was encountered, Marillier saw no choice but to remove weakened material and old repairs and reweave the tapestry "until the whole surface is once more strong and complete." If there was any way to save original material, however, Marillier recommended a method called piquage, which closely resembles the modern method of daming, or tabby mending. It appears, therefore, that the English preference for repairing tapestries to support fabrics contrasted with the French penchant for full restoration as early as the beginning of this century.

1955
One of the first professional articles written in the United States on the topic of tapestry conservation, it addresses the cleaning, assembly, and mounting of several fragments of an archaeological tapestry owned by the Textile Museum in Washington, D.C. Of particular interest is the early use of Orvus WA Paste (Sodium Lauryl Sulfate), the detergent of choice for many American textile conservators today. Also, wool was used as the support fabric because its sympathetic appearance and "tooth" helped bear the weight of the tapestry.

1964
The 1964 IIC Delft meeting marks the true beginning of the age of modern textile conservation literature. The original conference papers are not easy to find but for those who persevere there are these two articles written in English on the topic of tapestry conservation.

This is an interesting history of the facility, which was set up in 1939 to care for tapestries removed from sites all over Holland at the beginning of World War I.


1966


This article concerns four medieval tapestries, each over 35 feet wide, which were donated to the V&A in 1957. Digby recounts the challenge faced in replacing the early-twentieth-century repair yarns that were connecting the many fragments composing each tapestry. A detailed description of the restoration of three of these tapestries at the Haarlem Workshop is included.


1967


Silver threads on this tapestry were detanished with a thiourea preparation.

1968


Previous treatments of these tapestries are outlined, together with washing, mothproofing, and reweaving.


The article defines terms dealing with humidity, and explains the cause of bubbling in lined tapestries and rugs.

1969


A brief description of damage caused on a 1950s tapestry from the application of a crystalline salt based on ammonium sulfate, which had combined with humid air to form strong acid products.

1970


In this account we learn several interesting things: Velcro was introduced by the V&A in 1970 in place of a sleeve or rings; 1960s repairs consisted of reweaving, stitching to backing, and synthetic resins adhesion to a woven support; A solution of 4% solution of Lissapol N (nonionic surfactant) in deionized water was used for wetcleaning; tapestries were draped over a rod to dry because they were considered too thick to dry safely on plastic without risking mould growth; and drycleaning with white spirits or perchloroethylene
TCN

was recommended if colors bled in water. An excellent A to Z of tapestry conservation standards of the time.

1972
Applications of Valdene fluorocarbon drycleaning solvent on three tapestries in the Museum für Kunst und Gewerbe, Hamburg are described.

This text book is the offspring of the 1964 IIC conference held in Delft, considered to be the first modern conference of textile conservators. The chapter on tapestries outlines recommended treatments for cleaning and repairs, including both restoration (rewaving) and conservation (couching of weak areas onto support fabric). Readers are warned to never treat tapestries by touching them up with paint, cutting up one to repair another, or passing threads from the back to the front in order to display the brighter colors preserved on the reverse. Adhesive treatment, however, was still acceptable.


A brief yet detailed technical breakdown of the structural analysis of a medieval tapestry with knotted pile and metal threads.

1973
Considered by many to be the father of American tapestry conservation, Columbus’s seminal article outlines the removal of old lining materials; vacuuming through a fiberglass screen; examination and removal of harmful old repairs; testing yarns for colorfastness; preparation for washing; washing; drying; repairs in the form of reweaving; replacement of galons; strapping; lining (dust cover); and a Velcro hanging system. The use of glycerin and acetic acid as wash additives is uncommon today.

The Pontificia Fabbrica degli Arazzi in the Vatican was first set up 1710, passed into public ownership in 1870, and was reopened in 1916 by Pope Benedict XV. At the time this article was written, tapestries were washed in softened water with soapwort (radix saponariae officinalis). Full restoration using working drawings followed.


1974
This survey of mounting techniques used by North American and European textile conservators shows a greater range of methods than are currently in use. Today, for example, mounting full-sized tapestries by sewing them to a fabric-covered strainer is rare, unless the tapestry can no longer bear its own weight. Other techniques used by participants of this survey, such as suspending tapestries by a pole or rings, are also now outdated.

1975
The recently merged Fine Arts Museums of San Francisco developed tapestry storage and workroom facilities, staffed by volunteers, to conserve their collection of over 100 tapestries.

1976
The solution presented in this paper for raising, hanging, and lowering a tapestry uses stainless-steel wire mesh.

1977


1978

This article contains a case study of a 1966 adhesive-coated, nylon-net treatment using capopolymer polyvinyl acetate and polyvinyl caprate (Vinamul 6525). When reexamined in 1973, adhesion was found to have deteriorated, so it was decided to remove the old net with methylated spirits and remount the tapestry on new Dakron polyester leno-weave net with an emulsion of vinyl acetate and vinyl maleate (Mowlith DMC2, Mowlith DM5 and water). Some support stitching was done after adhesion, and the tapestry was given a dust cover and Velcro.

The method of hanging tapestries is presented, consisting of stitching studded webbing to the top of the tapestry and then nailing it onto a wooden rod.

1979
The following five articles can all be found in a compilation known simply as *Acts*, which contains papers on both tapestry history and conservation given at a
conference in San Francisco in November 1976.


This paper provides fascinating background into the history of tapestry restoration that begs the question “how do tapestries survive at all?”


This is a comprehensive study which, in the words of the author, "emphasizes objective information based on practical scientific and technical work." 


1980


This article addresses the cleaning and remounting of a modern tapestry.

Although the title of the following book is in Italian, it contains many articles in English on various textile conservation subjects, including tapestries.


As its title suggests, this article talks about cleaning tapestries containing metal thread using an electrochemical reaction. The tapestry was washed on aluminum screening using a 5% solution of sodium chloride (to carry the charge) and .5%
Orvus WA Paste. This resulted in the removal of tarnish from the metal threads.


This paper contains excellent scientific information behind how tapestries respond to exhibition and handling.


We can learn as much about the evolution of tapestry conservation from looking back at Karen Finch’s 1980 article as she learned by evaluating the twenty years prior to writing it. In addition to general comments, this article has a detailed description of the reversal of a Vinum resin adhesive treatment on a 17th-century Soho tapestry done in or around 1960. Other past adhesive treatments, along with their relative success, are discussed.


This article discusses textile conservation procedures at the MFA, briefly mentioning that tapestries were rewarped and rewoven if losses were small and stable; larger losses were usually reinforced with ribbed fabric.

1981


Marko describes the large washing and drying cylinder built for tapestries at the V&A in the late 70s to overcome a lack of floor space. Blyth tells how the Burrell Collection had a 5' x 14' aluminum-surface wash table built based on one at the V&A facilities at Osterley Park. Kendall describes the setup of temporary washing facilities on the lawn at Hatfield House to remove an old adhesive treatment.

1982


Columbus, J. V. 1982. Tapestry Wet Cleaning Facility. SSCR Newsletter 40. 11–12.

Describes the newly built wet cleaning facility for tapestries at the National Gallery of Art, Washington, D.C.

This research report discusses the removal of PVA adhesive from an English Chinoiserie tapestry, and the method used for the removal of a heavy nylon net held in place with a thermoplastic adhesive.

The conservation of late-18th-century French tapestries at the Wadsworth Athenaeum in Hartford, Connecticut, by two Belgian textile conservators is described.

The program begun in 1981 for the conservation of Holyrood House's large collection of tapestries is described.

1983

Chapters include: examination of tapestries prior to conservation; taking a tapestry down; equipment in tapestry conservation department; a detergent formulation for washing historic tapestries; washing a tapestry; consideration of colour changes in the conservation of tapestries; conservation methods and techniques; lining a tapestry; hanging a tapestry; and vacuum-cleaning hanging tapestries.

1984
Bennett associated five 14th-century tapestry fragments that were included in a 19th-century tapestry with the famous mediaeval Apocalypse of Angers set.


Smith explains that conservation policies at the MFA Boston were less formalized for tapestries than other textiles. The general policy was to couch weak areas to fabric and not to replace missing elements. Dyed pieces of rep fabric would be placed behind larger areas of loss. In the case of a 15th-century fragment called Penelope at her Loom, however, a more sympathetic repair in the form of a woven inlay was chosen.

The 1984 IFROA volume is not widely found outside of Europe, however a list of some English-language articles it contains appears below.


The 1984 ICOM-CC meeting was the site of several important presentations concerning tapestry conservation, including the three below.


These two authors from the Royal Institute of Cultural Heritage in Brussels state that conservation choices were evaluated according to four criteria: aesthetics, strength, cost, and problems. The result was that very few tapestries are fully rewoven. The preferred method was consolidating to linen patches with occasional reweaving of small, well-documented areas. After repairs, tapestries were strapped for support and lined for protection.

This study asked the following questions: what properties are needed in a good backing fabric; which support method creates the least strain and distributes the strain as evenly as possible; which stitches are best in attaching backings; what arrangement of stitches is best; which combinations of techniques and materials offer best support; and how can strain from vertical exhibition be measured. Test results showed that vertical rows of stitching caused the greatest stress with all other methods of stitching producing little or no distortion.


These two fragments were welded with a 5% solution of Nekanil W in demineralized water before repairs, which consisted of rewarping and reweaving. In one case, weak original linen warps were strengthened by winding fine cotton thread around them before new weft was inserted. The two halves remained separate because they belong to two different museums, and because of concern over stress at the attachment point.

1985


Hidden at the back of the book, this chapter tells the history of the Royal Manufacturers De Wit in Mechelen, Belgium, and its development as a conservation facility.


The chapter on tapestries is still one of the best general descriptions of the processes of tapestry conservation, albeit from a European point of view. Little is mentioned about stitched repairs, however thorough descriptions of applying a full, linen support lining and Velcro hanging system are provided.


This is the most comprehensive text book for students of tapestry conservation, although information is scattered throughout and can be easily overlooked. All major methods are described, with a bias toward full-linings.

1986


This article reviews the 1982 campaign of cleaning, relining and restoration.

The cleaning and washing of this tapestry at the Hamilton City Gallery in Australia is described, including the decision to use fustic, indigo and madder to dye wool repair yarns.

**1988**


This is a report of a study into the roughness of tapestries and whether chemical softeners could be used to improve their feel. Roughness seemed to be more concentrated in portions of tapestries that were faded, suggesting that roughness, or the presence of broken ends of fiber bundles, is probably caused by a combination of photodegradation and photo-induced iron mordant damage. The conclusion was that the application of a softener would not eliminate the cause of roughness, would reduce the remaining strength of the damaged areas due to the lubrication effect, and would accelerate the loss of the damaged weft during subsequent conservation activities.


This paper describes the structure of corroded metal threads. Cleaning was done with a solution of 2% thiourea and 3% formic acid in acetone. SEM images showed this removed corrosion and left the gold surface visible. Textile materials were soaked in the solution and tested for tensile strength, and were not seen to be effected.


*Textile Conservation Newsletter* Fall. 23–24.
The treatment of an early-sixteenth-century Flemish tapestry is described, from
the removal of some of the 1904 repairs, to thorough tasting for fugitive dyes.
Wet-cleaning, reweaving, and "complete lining" would follow.

1989
The distinction between restoration and conservation are explained for a
general audience, with a warning that "in some eastern European countries"
heat-gluing was still in use.

Newsletter* Spring. 11–14.

Translation Bureau No. 3623308. Ottawa: Department of the Secretary of State of
Canada.

Because of the excellent distribution of this next book by its publishers, The Getty
Conservation Institute, many have benefited from the information it contains. Eight of
the articles are described here.

Conservation of Tapestries and Embroideries*, Proceedings of Meetings at the
Institute Royal du Patrimoine Artistique, Belgium, September 1987. California: the
Getty Conservation Institute. 75–79.
When washing is not a possibility, tapestries such as this German example can
still be thoroughly cleaned. Brutillot describes a method of tweezing and
vacuuming to remove dirt, dust, and mildew, before couching weak areas to wool
patches.

of Two Sixteenth-Century Tapestries at the Institut Royal du Patrimoine Artistique.
*The Conservation of Tapestries and Embroideries*, Proceedings of Meetings at the
Institute Royal du Patrimoine Artistique, Belgium, September 1987. California: the
Getty Conservation Institute. 113–118.
Both of these tapestries were too weak to be immersed, but were filthy and
required cleaning. Damp sponges were applied to the surface and frequently
rinsed, with satisfactory results. Linen support patches were attached using
spaced support stitching with silk thread, and more concentrated tabby couching
with silk and wool was done in areas of loss. A light-weight linen dust cover was
then applied. This treatment aimed to provide the large-scale support of a full
lining while leaving the stronger parts of the reverse uncovered.

*The Conservation of Tapestries and Embroideries*, Proceedings of Meetings at the
Institute Royal du Patrimoine Artistique, Belgium, September 1987. California: the
Conservators at the Palazzo Vecchio developed a method of documenting the
current state of conservation and location of damage and deterioration. A number was assigned to each area according to the following criteria: 1 slight wear; 2 more severe wear; 3 total loss of wefts; and 4 total loss of wefts and warps. A color was used on a diagram to indicate the location of each fiber type, and when this diagram was overlayed with a picture of damaged areas, conservators were able to see the relationship between types of damage, fiber, and color.


In this work, Finch discusses some of the factors that lead to distortion of historic tapestries, such as poor-quality repair materials, patching with pieces of other tapestries, myopic observation of the overall design, and the boredom of working on such large objects. She describes how her choice in the 1950s of using linen support patches to stabilize a tapestry was considered radical at the time. Removing old distorted repairs and couching the tapestry in rows to the support fabric with a neutral thread began to replaced the then-standard practice of rewarping and reweaving. This patching technique evolved into the full-support lining associated today with England.


The contrast between two very different tapestry conservation treatments undertaken at the Cathedral of St. John the Divine in New York are discussed. While Gluttony received the majority of its repairs in the form of spaced darning within the structure of the tapestry, Avarice required a full-support lining. Gluttony got straps and then a dust cover, while Avarice was given a lighter-weight dust cover only. Hutchison stressed that the individual needs of each tapestry must be considered, including local or regional factors to which each tapestry has been exposed.


This article outlines the tapestry conservation program at the Metropolitan Museum, from management and administrative considerations, to washing, restoration, hanging preparation, and housekeeping. Of particular interest is Ms Kajitani’s thorough breakdown of restoration (reweeding) and conservation (local stabilization using auxiliary fabrics) procedures, including guidelines for selecting the appropriate treatment.


Maes begins this paper by pointing out that private conservation facilities such as the Royal Art Tapestry Workshop Gaspard De Witt often were able to spend only
10 to 25 percent of the time public institutions are allowed for conserving tapestries. While initially this seems like a restriction, Maes argues that it has actually provided conservators with the freedom to develop new hybrid treatments. Repairs to the Gathering of Manna, consisting of couching to large support panels, are thoroughly described.


In the first case history, a 1978 treatment using painted patches and adhesive was reversed with dry-and wetcleaning. The painted patches were replaced with cotton ribbed fabric, and repairs to silk areas were made with cotton thread on linen support patches. The author mentions having used several techniques over the years to support weak silk, including laid-couching, rows of stitching passing over and under several warps at a time, and replacing silk repair thread with polyester. In the second case study, a strand each of silk and polyester were used, with the goal of combining the strength of the later with the quality of the former.

1991


This paper defines cleaning, as well as explaining surfactant classification, the difference between surfactants and detergents, how to choose a surfactant, test methods, cleaning procedures, and a discussion of cleaning results.


The technique described in detail here is almost identical to the English method of full tapestry lining.


This paper describes tests in which two different 18th-century silk threads were tested for tensile strength before and after wetcleaning. The belief of most tapestry conservators that washing in water is beneficial to most tapestries is backed by the results of this study.


An intriguing look at the beginnings of tapestry conservation in the United States.


Meeting, Albuquerque, NM. 7–16.
Tapestries are often hung in hard-to-reach places, and this article describes how a set of ten early-twentieth-century Baumgarten tapestries were fitted with vertical straps and perimeter supports of Velcro-compatible fabric, and raised and lowered into place with the aid of pulleys.

1992
This book was first issued in 1976 in conjunction with the exhibition of the same name. It was one of the first to address the concerns that so many major art museums in the United States had about their collections of European tapestry, which were rapidly aging.


Reps of this 15th-century Flemish tapestry begun in 1984 and consisted of removing some of the older repairs and filling in the areas by horizontal warp couching (also called self couching or spaced tabby).


1993
This article includes an outline for a training program and instructions on constructing a cotton sateen dust cover.

This is a report of tests comparing the dustproofing ability of four fabrics for use in lining tapestries using a vacuum table: fine linen, cotton sateen, waxed cotton cambric, and downproof cotton cambric.


Hidden within this exhibition catalog is a thorough description of conservation practices at the Royal Manufacturers De Witt, including their aerosol-suction table for cleaning and drying tapestries. Three methods of repairs are outlined: restoration (reweaving); conservation (stitching a linen patch to weak areas in a check pattern before couching down loose elements); and integration/conservation
(warp couching in a spaced tabby pattern).

This tapestry was wet cleaned with a solution of Synperonic N and sodium carboxymethylcellulose in deionized water before receiving a full linen scrim, or support lining. Wool yarn was used to consolidate areas of lost wool; cotton thread for lost silk; and Guttermans polyester thread for slits. Missing warps were replaced with custom-dyed wool yarn stitched to the lining. A cotton-sateen dust cover was placed over the scrim.


This article describes a departure taken from the procedures usually followed at the Centro Restauro Manufatti Tessili (Centre for the Restoration of Textile Artifacts) in Milan.

The following volume of Studies in the History of Art contains two conservation articles given at a symposium in honor of Joseph V. Columbus, who retired from the National Gallery of Art in 1989.

Conservation of tapestries began at the Institut Royal du Patrimoine Artistique in the early 1970s, at which time classic reweaving techniques were used. By the time this article was written in 1993, conservation treatment had become the norm. Masschelein-Kleiner gives five reasons for this change: incompatibility of new wool yarns with old ones; tension at sites where new warps were anchored; uneven fading of original and new material; difficulty in reversing modern reweaving treatments; and uncertainty of original image in areas that were completely missing. More explanations of material and technique preferences are given.

In contrast to the previous article, this work by Nobuko Kajitani gives an extremely detailed description of a state-of-the-art, full restoration treatment.

1994
Adelson, C. 1994. Introduction to the Collection. In European Tapestry in the...
Anna and Ralph Bennett were brought over from San Francisco to assess the needs of the MIA collection and draw up a conservation plan. The outline of this plan and a great deal of useful information for both institutions and individual conservators can be found in this book.

1995


An international group of conservators attended a meeting in Amsterdam in 1994, and the resulting publication contains no fewer than eight papers addressing various aspects of tapestry conservation.


In order to reverse some of the unfortunate past restoration work and provide a clearer version of the original intent of the weavers, conservators at the Rijksmuseum in Amsterdam supported this tapestry on a full lining and used false warps to bridge cuts and losses. In areas of weft loss, horizontal warp couching was used.


In this extensive, personal tour through forty years of tapestry conservation history, Karen Finch stresses the importance of remaining open to new ideas and research within this continually developing field.


The compromise between providing structurally sound and aesthetically pleasing repairs is discussed in this paper, with a good description of different ways to use stitching and embroidery to camouflage losses.


In addition to containing an interesting catalog of past restoration techniques found in the Bridal Chamber of Herse, this paper illustrates how both visual unity and structural stability can be achieved with conservation stitching instead of restoration.


Examples are given of both historic paint applications and modern uses for paint in tapestry conservation.


Textiles in Trust is an engaging book containing thirty-two articles given at a symposium in honor of the 100th anniversary of the founding of Britain's National Trust. Four articles refer to tapestry conservation treatments:


A 25-step procedure used for the treatment of each of the 17th-century Scenes of Country Life tapestries is presented. It consisted of an English-style, full-support lining to which spaced support stitching connects the tapestry to the lining at even intervals, and self couching, or securing weakened areas to the lining with rows of cotton thread passing over and under warps in a tabby pattern, was used. Information on stitching intervals is given.

Abstracts of some of the Poster Session papers include:


The UKIC volume Lining and Backing contains two articles that deal specifically with tapestry lining:

Ballard, M. 1995. How Backings Work: The Effect of Textile Properties on Appearance. Lining and Backing: The Support of Paintings, Paper and Textiles, papers delivered at the UKIC conference, London, November 1995. London: UKIC. 34–39. Ballard explains that elongation of hanging tapestries is caused by several factors: the weight of the object; the nature of the fiber under stress (normally wool); the fabric structure (usually hanging in the thinner, weft direction); and the presence or absence of restraining materials such as straps, backing, or lining. A glossary of terms relating to mechanical properties of fibers is included.

Marko, K. 1995. Tapestry Conservation—A Confusion of Ideas? Lining and Backing: The Support of Paintings, Paper and Textiles, papers delivered at the UKIC conference, London, November 1995. London: UKIC. i–iv. This article begins with a definition of some commonly confused terms used in tapestry conservation. The term "support fabric." Marko explains, refers to material that is applied to the reverse of the tapestry for purposes of localized or overall stabilization; "lining" should be restricted to an overall dust cover that is applied after any stabilization is complete. With these terms defined, Marko then provides an overview of support methods used on tapestries and the philosophy behind several techniques, including restoration, strapping, adhesive supports, stitched supports, and lining.

1996

Bonini, G. 1996. The Laboratory of the Sala delle Bandiere in Palazzo Vecchio, Ten Years of Experience in Tapestry Restoration. Florence: Sala delle Bandiere. This dual-language exhibit catalog has wonderful historical, and technical information. Washing at the Palazzo Vecchio was still done with an ancient recipe of soap wart, or saponaria, in purified water. The main objective stated is the restoration of tapestries back to their original textural and narrative form. Losses are rewoven even if there is no trace of the original image, in which case the colors of the surrounding area provide guidance for a sympathetic infill. The excellent illustrations are as informative as the flowery text.


In response to the need for further investigation into how to best support a tapestry, a team of conservators from the Instituut Collectie Nederland in Amsterdam published three reports. In the first, dating from 1996, researchers Hofenk de Graaff and Boersma report on the results of a questionnaire distributed to an international body of textile and tapestry conservators. Twenty-eight questionnaires were returned, showing that conservators can still be grouped into restoration and conservation categories, with the majority employing conservation approaches.


A brief description of how the DIA accomplished its large-scale tapestry conservation project is provided.

As the title suggests, this article compares the results of three methods for the removal of animal glue—pre-treatment with paper a poultice, and washing with two different solutions of Synperonic N and carboxymethylcellulose. Recommendations include reducing the amount of netting, pretreating with paper poulticing, maintain a warm wash bath, and light toweling followed by application of blotting paper.

The ICOM-CC 11th Triennial Meeting in Edinburgh was host to three presentations
related to tapestry conservation.


The issues of strength, exhibit methods, and relative humidity are discussed.


A study held at the Historic Royal Palaces, Hampton Court, monitored the effects of humidity on the weight of a tapestry hung with Velcro. Change in weight was found to occur, even though the literature suggests that the materials should change about 8% in the conditions replicated. One explanation is that soiling affects the moisture change.


The challenges of applying conservation principles to two tapestries that had been abandoned in the middle of a full restoration are discussed, with background information on the history of the Textile Conservation Studios at Hampton Court Palace, now known as the Historic Royal Palaces.

1997


A thorough history of the Historic Royal Palaces can be found here, including details of their wet-cleaning setup.


Support of textiles with supplementary fabrics can reduce gravitational stress and protect them during storage. Tapestries are often perceived as needing support more than other textiles, and these authors used a model tapestry to find some answers to questions about the usefulness and affordability of tapestry support methods.


The second of three reports, this 1997 two-part publication by Hofenk de Graaff and Boersma contains excellent background information on tapestry conservation history, techniques, and types of damage found. The development of conservation and its divergence from restoration is thoroughly documented, along with the
practices of spaced repairs within the structure of the tapestry, and the use of strapping.


Landi, S. 1997. A Fresh Approach to the Problem of Support for Tapestries. Textile Conservation Newsletter 33: Fall. 5–13. Perhaps the most revolutionary approach to the support of tapestries in recent years, Landi's new method consists of stitching tapestries to a leno-weave polypropylene fabric while the tapestry is suspended sideways on a custom-made apparatus. Areas of loss are filled in using the support fabric as a base, and additional repairs can made in the future as necessary. This type of full-support lining allows both washing and partial access to the reverse, which are two complaints of traditional linen scrims.

1998


Bosworth, D. 1998. Wet-Cleaning a Fragile Tapestry Using the De Wit System. Conservation News 65. 49–51. The De Wit method begins by laying the tapestry face up on a foam-like fabric to protect it from the steel mesh of the wash tank. Light suction keeps the tapestry in place, limiting the necessity for temporary netting. A 0.5% solution of nonionic Nonylphenol Ethoxylate detergent in water is used. Constant flushing of solution through the tapestry means that it never sits in a dirty, acidic bath. Toweling and gentle suction quickly dry the tapestry.

de Graaf, A. J., F. Boersma, and W. G. Th. Roelofs. 1998. Tapestry Conservation: Support Methods and Fabrics for Tapestries. Part III—Scientific Research: 'Linen Versus Cotton'. Amsterdam: Instituut Collectie Nederland. In order to further explore the topic of fabric choice for tapestry support, more research was undertaken by de Graaf, Boersma, and Roelofs, resulting in the a third publication in 1998. It is by far the most comprehensive study of materials for tapestry conservation, and shows that cotton and linen have similar tensile strength and aging patterns. The team hopes to continue research into the behavior of both tapestries and their support fabrics.

The ICOM-CC Textiles Working Group meeting held in 1995 had three speakers who presented their research on tapestries.


1999


Haldane, E. 1999. So That's Why Textile Conservation Has Such a Big Studio!—Tapestry Washing at the V&A. *V&A Conservation Journal* 32. 17–20. The many incarnations of the wetcleaning system at the V&A are described, including the newest setup for large textiles, which takes up approximately one third of the floor space of the entire textile conservation studio. Plastic tubing and sheeting are used to construct a temporary tank that can be drained right onto the tiled floor. An outline of current washing methods is also given.

2000


Findings from a survey of American tapestry conservators are presented alongside historical background on the development of modern tapestry conservation techniques.

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