



University
of Glasgow

Beasley, Jennifer (2013) A hidden agenda: an investigation into a concealed hat. What is the most suitable method for documentation and conservation? [MPhil]

Copyright © 2013 The Author

Copyright and moral rights for this work are retained by the author

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge

This work cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author

When referring to this work, full bibliographic details including the author, title, institution and date must be given

<http://endeavour.gla.ac.uk/34/>

Deposited on: 13 November 2015

A Hidden Agenda: An Investigation into a Concealed Hat

What is the most suitable method for documentation and conservation?

Jennifer Beasley

Dissertation Supervisor Karen Thompson.

Submitted in partial fulfilment of the requirements for the Degree of Master of Philosophy in Textile Conservation in the School of Culture and Creative Arts, University of Glasgow, August 22nd 2013

Abstract

A study of literature on documentation was undertaken to create a method for documenting and conserving a hat found concealed in an 18th Century cottage. From this study a documentation methodology was developed which included documenting all information from the object and non-object specific information, the condition, the cache site and gathering all this information in an assessment of significance including influential factors such as the client's wishes. From the object record and the cache the hat may be dated before 1828 and is made from a hemp fibre in a complex construction of lacing, weaving and knotting. There were no other materials aiding the construction. The silk lining was original to when it was made.

The condition appeared to be caused by three main life stages: From uses and wear, from the concealment and from open display at the house. The assessment of significance identified that the first two key life stages were seen as significant and evidential to the object's true nature. Thus a treatment was proposed to stabilise the object for display and to retain the soiling and damage that is evidence of concealment and manufacturing and use.

Acknowledgements

Veronica Main for initiating such an interesting project

Karen Thompson for her guidance

Bob Beasley for all his patience

Althea Mackenzie, Hereford

Joan Kendall, Hatfield House

Linda Baumgarten, Colonial Williamsburg

Elizabeth Bryan, Costume Institute, Met, New York

Contents Page

Chapter	Page
1 Introduction to the project, with page numbers	8
• Clients brief	8
• Aims and objectives	8
•	
2 Literature review and a comparison of past documentation methodologies	10
• Literature review of documentation	10
• Past treatment methodologies	14
• Conclusion	19
3 Documentation methodology	21
• Documentation format	22
4 Object record	24
• Introduction	24
• Object record	25
○ Plant fibre	26
▪ Dimensions	26
▪ Materials	28
▪ Manufacturing techniques	40
▪ Construction	41
○ Lining	42
▪ Dimensions	46
▪ Materials	47
▪ Construction	47
▪ Manufacturing methods	48
○ Provenance	49
• Conclusion	56
5 Cache site report	57
• Concealed garments	57
• Introduction	59
• Aim and objectives	60
• Methodology	60
• Cache site report	60
○ Site description	60
○ Owners of property	60
○ Provenance of site	63
○ Description of excavated site	64
○ Excavation	65

o Conclusion	70
	74
6 Condition report	76
• Introduction	76
• Methodology	76
• Condition report	77
o Overview of condition	77
o Condition details	77
▪ Soiling	77
▪ Discolouration and stains	80
▪ Creasing and loss	84
▪ Weakness and loss	88
o Material aging graph	93
• Conclusion	93
7 Assessment of significance	94
• Introduction	94
• Identifying objects significance	96
• Conclusion	99
8 Treatment proposal	100
• Introduction	100
• Clients brief	100
• Role of the object	100
• Treatment parameters	101
• Treatment options	102
• Estimates	103
• Recommendation for future care	103
• Conclusion	104
9 Conclusion	105
Bibliography	108
Appendix	
1. Diagram of plant structure	113
2. Sampling for fibre ID	113
3. Risk assessment	114
4. COSHH	115
5. Interview notes with Mr Kipping	116
6. Time estimates	117
7. Contact with finder and curator	119
8. Planning permission	123
9. Listing status	124

Illustrations

Figure	Page
1. Parts of a hat	24
2. Hats before treatment photographs	25
3. Dimensions of hat taken at CTC	26-27
4. Photograph of straw and hemp	28
5. Structure of a stem	30
6. Microscope image: hat sample	30
7. Microscope image: the ring constructions fibre	31
8. Microscope image: wrapping constructions fibre	32
9. Microscope image: lace constructions fibre	32
10. Microscope image: 18 th C straw shepherdess hat	34
11. Microscope image: Ramie sample from Kew	35
12. Microscope image: Hemp sample from Kew	36
13. Microscope image: stain test	37
14. FTIR spectra: hat compared with other fibres	38
15. FTIR spectra: hat compared to straw and hemp	39
16. Striated lines indicating manufacture on fibre	40
17. Diagram: hats construction	41
18. Method wrapping fibre is constructed.	41
19. Method lace construction is joined to wrapping fibres	42
20. Design of hat	42
21. Types of lace design	43
22. Buttonhole Knot	43
23. Stereomicroscope image: knot	43
24. Diagram: of knot	44
25. Diagram: woven lace at join to knotted lace	44
26. Diagram: woven lace at the joins in construction	44
27. Joins in the construction	45
28. Edging decoration around brim	45
29. Linings measurements	46
30. Microscope image: warp and weft of lining	47
31. Microscope image: sewing thread	47
32. Diagram: weave structure	48
33. Reticella lace	49
34. Aemilla Ars Reticella lace	49
35. Teneriffe lace	50
36. Swiss straw lace	51
37. Painting: 'girl in straw hat,' 1723, owned by Tate	55
38. Map: Wickham Bishops	61

39. Map: Maypole road	61
40. Fanners cottage, garden view	62
41. Fanners cottage, drive view	63
42. Map: Fanners 1896	64
43. Cache site location from outside the building	65
44. Floor plan indicating cache site	66
45. Cache site viewed from all adjoining walls	67
46. Other objects found in the cache	68-70
47. Photograph: hat after excavation	71-73
48. Objects timeline	75
49. Microscope image: extent of soiling adhered to fibre	77
50. Stereomicroscope image: loose particulate dusty soiling	78
51. Comparison of soiling increase. Left after excavation. Right at CTC	78
52. Soiling trapped in construction e.g. cobwebs	79
53. Photograph: hat after excavation	80
54. Stain on brim	81
55. White (bird dropping) stain on crown taken after excavation	81
56. Same stain (56) taken at CTC	82
57. Diagram: mould	83
58. Diagram: Stains	84
59. Photograph: crown after excavation	85
60. Photographs: crown after arriving at Luton, A: side, B: Top	86
61. Photograph: side of crown at CTC	87
62. Photograph: breaks in joins soiling comparison	87
63. Diagram: area of loss in plant fibre construction	88
64. Diagram: loss on the edge of crown	89
65. Breaks in fibre soiling comparison	89
66. Diagram: damage to edging of brim decoration	90
67. Damage on lining: soil accumulation	90
68. Photograph: taken after excavation, damage to lining is less	91
69. Diagram: loss on lining	92
70. Graph: identifying when damage occurred.	93

Table	Page
1. Dimensions taken at Luton	26
2. Details of lining	48
3. Details of the four hats	53

Chapter One: Introduction to the Project

In July 2012 Luton Wardown Park Museum (LWPM) received a 'straw' hat. The Museum specialises in straw hats because of Luton's association with the industry. This donated hat is the focus of this dissertation because of its unusual construction, which is unlike any other hat in the museum. The hat is not plaited but knotted in a lacelike design in a circular geometric pattern.

Mr Kipping found the hat concealed in his 1750's cottage and donated it to the museum. The concealment of the hat is similar to other objects that have been found in buildings. These finds are rare and the purpose of its concealment is a mystery. The concept of deliberately concealed garments (DCG) will be explored in chapter five and examples mentioned in chapter two. Concealment added another level of value to this unusual hat.

The museum curator, V. Main, saw the value of this rare hat and built a relationship with the finders of the hat. On researching the hat she found only four other hats of similar construction, located at: Hatfield House associated with Queen Elisabeth, Hereford House known to be owned by Queen Anne, Colonial Williamsburg and the Metropolitan Museum of Fine Art America. Initial research revealed how little was known about this hat. The curator brought the hat to the Centre for Textile Conservation (CTC) to be documented.

Clients Brief

To document the hat using conservation skills, to record the construction, materials, condition and present a treatment proposal.

Aims and Objectives of Studying the Straw Hat

The complex construction and materials present made fulfilling the brief challenging. Documentation methodologies and conservation treatments of past-concealed objects have been varied and inconsistent. Documenting the hat with enough detail to retain essential information and to inform the treatment proposal it is important to conduct a thorough investigation and document every aspect of the object.

Aims:

- To create a documentation methodology for concealed objects
- To understand and contribute to the different forms of documentation of concealed objects
- To create a record of the materials, construction and condition of the hat
- To identify the significance or significant aspects of the hat
- To create a treatment proposal for the object based on these findings

Objectives, to:

- Undertake scientific analysis and visual examination of the construction and materials of the hat
- Research into the concealment by visiting the site and interviewing the finders
- Gather and compare different forms of documentation to inform the documentation methodology
- Understand why garments were concealed, by looking at databases of these objects and the literature written about DCG
- Understand where the hat fits into history, researching into hats between 1650-1900 and manufacturing between these dates
- Look for similarities in the design of the lace on the hat to other lace and therefor if there is any indication of the provenance of the hat
- Compare with the other hats of type. If the style hat is of significance, to compare with photographs and documentation of the other hats. If feasible to examine other hats of the same type located in Hatfield house and Hereford museum
- Examine visually and with microscope the materials and construction of the object.
- Identify the fibres through microscope examination and/or scientific analysis. Compare the results with known sources and literature
- Identify if the soiling is evidential with a visual and microscope examination.
- Examine the condition to identify the damage and when it occurred
- Assess the significance of where the value in the object lies
- Prepare a treatment proposal based on the information gathered in the reports including recommendations for future care.

Chapter Two: Literature Review Focused on Documentation and a Comparison of Past Documentation Methodologies

This chapter gathers the documentation literature to create an ideal documentation methodology for the object. Then it explores past conservation documentation of other DCG, identifying the strengths and weaknesses to influence the documentation methodology for the hat. Full documentation of the object is important in assessing its significance.

Aim: to gather relevant information about the object. This includes: its provenance, materials, construction, condition, etc. to inform a conservation treatment methodology.

Documentation Literature Review

The literature emphasises the importance of documentation, 'Documentation is the first step in any conservation treatment. It imposes structure on the process of examination and recording, which aids observation and gives a better understanding of an object and its condition,'¹ however there is little literature on the role of documentation and what it includes.

Documentation is a preventative measure, by recording information about the object preserves the knowledge of the object despite its inevitable ageing. Documentation acts as an intermediary between handling and knowledge. 'Documentation can act as a buffer between the conflicting stress caused by the twin needs of preservation and accessibility, providing us with information about the collections, without unnecessary handling of the objects.'² Documentation is also a record of treatment carried out over time. Both the condition prior to treatment and the subsequent treatments are recorded, informing subsequent treatments where methods may. 'All

¹ Frances Lennard, *Textile Conservation Advances in Practice* (Oxford: Butterworth-Heinemann, 2010), 141.

² Jennifer Stewart, "Discipline Developments in Archaeology, Anthropology and Ethnography," in *Terminology for Museums Proceedings of an International Conference*, ed. Andrew Robbers, 198 (Cambridge: the Museums Documentation Association, 1990).

conservation treatment changes the object and it is essential to record the condition of the object being treated.³

Finally conservation documentation is a means to gather and record all relevant information know about an object, from its details to its province and attribution.

Two key texts have been useful in structuring a documentation methodology in addition to CTC's guide to documentation.

The main resource *Conservation Treatment Methodology*⁴ is an extensive book on treatment methods and therefore the aspects requiring documentation. The main points were: characterize the object (physical examination, identifying the value of the object and who has a vested interest), reconstruct the history of the object, determine the ideal state, realistic goals for treatment, choose a treatment method and materials, pre-treatment documentation, carry out the treatment and a final treatment documentation. The first few chapters were particularly noteworthy stating the methods used to identify the object's key points and what will influence the treatment proposed. The chapters on the content of the documentation are less relevant to this research compared to the information provided on gathering all necessary information.

Key methods for this research, firstly, they examined the object from two points of view, first the material and then the non-material. The material aspect includes scientific examination of the object, the 'non-material aspects of the object are not intrinsic to the object itself.'⁵ They spit these into object and non-object specific information. This breaks down the information making it more accessible and ensuring all information about the object is identified.

Secondly, they aimed to identify the object's ideal state 'What could an objects 'true nature', 'significance' or 'integrity' be and how exactly would one recognise such a

³ Michael Corfield, "Conservation records in the Wiltshire Library and Museum Service," in the *Conservator*, 7:1(1983): 5-8.

⁴ Barbara Appelbaum, *Conservation Treatment Methodology* (Oxford: Butterworth-Heinemann, 2007).

⁵ Barbra Appelbaum, 65.

thing?’⁶ This involves the information gathered from the object, specific and non-specific, its role, and the views of stakeholders.

In order to preserve the values imputed to objects, we have to figure out how custodians, other stakeholders, and ourselves both as individuals and professionals feel about the object. We have to name those feelings, categorise them, and figure out how they relate to the conservation treatment.⁷

They recommend studying the categories of value, be it culture, artistic etc., why it is valued, or seen as significant, and by whom. The value of the object is important when creating a treatment proposal. (See chapter seven).

Thirdly, they examine the object’s life stages. Based on Kopytoff’s theory that ‘in doing the biography of things, one would ask questions similar to those one asks about people’⁸ such as where does it come from, what has been its career, what are the ages or periods of its life and who made it. Charting the object’s life stages on a timeline can identify its value. ‘An object’s timeline brings together the data gathered during the characterization phase to document the object’s life from creation to the present day and into the future.’⁹ This is a visual way of representing different aspects of the object’s life and guide a treatment if the aim is to bring it back to the ‘true nature’ of the object.

Finally, they used a material aging graph¹⁰. This plots the damage to the object against the timeline showing where most of the damage had occurred, and whether extent of damage is tapering off or remains high on the graph. After treatment the graph can show the benefits of conservation.

⁶ Appelbaum, 7.

⁷ Appelbaum, 66.

⁸ Igor Kopytoff, “The Cultural Biography of Things: Commoditization as Process,” in *The Social Life of Things: Commodities in Cultural Perspectives*, ed. A. Appadurai, 64-92 (Cambridge: Cambridge University Press, 1986) 67.

⁹ Appelbaum, 195.

¹⁰ Appelbaum.

The second source, the *Manual of Curatorship: A guide to Museum Practice's*¹¹ chapter on conservation documentation mentions six stages. These are: documenting the object's data (identity, provenance, manufacture etc.), progressive data (object information while in the studio, e.g. treatment dates), technical (construction, dimensions, etc.), condition and treatment, recommendations for future care and references (methodology, photographs and x-rays). The range of aspects the documentation should cover are: the object's background, how it is made and its condition. This builds a picture of the object to inform treatment decisions.

This chapter is less detailed than Appelbaum. It is focused on identifying the use of conservation reports for curatorial staff in a museum and stresses the importance of not using conservation documentation in isolation but to integrate it into curatorial documentation to create a fuller picture of the object. They indicate the role of conservation documentation is to ensure the knowledge of individual objects is preserved and knowing what needs conservation and how to store the objects helping maintain the collection as a whole.

The chapter emphasises that:

'Condition is central to any conservation documentation, indeed the aim of conservation is to maintain an object in a stable condition or to bring it into a condition considered more acceptable. Treatment records will normally include a statement of the condition of the object before treatment started and may also describe the condition after treatment so that over the years the dossier of information about a particular object will document its changing condition over time.'¹²

The limitation is that isolated from other object information it would not be possible to identify the causes of the condition and therefore how to treat it. In comparison, Appelbaum works from finding non-object specific and object specific and other

¹¹Michael Corfield, "Conservation Documentation," in *Manual of Curatorship: A guide to Museum Practice, second edition*, ed. J. Thompson, 229-233 (Oxford: Butterworth-Heinemann, 1992).

¹² Corfield, Conservation Documentation, 229.

information to deduce the causes of condition. This seems a stronger method of documentation.

Past treatment methodologies

This section develops these methods using a series of case studies of past treatments of DCG, refining successful and less successful aspects.

The following terms are used in conserving DCG: “significance”, “minimal intervention” and “archaeological approach”. Significance is the value placed on the object that in turn will affect its treatment. ‘Significance means the historic, aesthetic, scientific and social values that an object or collection has for past, present and future generations.’¹³ Appelbaum¹⁴ used this concept to assess the different forms of significance stating which categories the object falls into (see chapter seven).

Minimal intervention, in medicine is used to as a treatment approach where the minimum is done to try and solve the problem before any drastic steps are taken.¹⁵ Transferring this to conservation, to accomplish enough to stabilise the object but not treat every area of damage. In comparison, an interventive treatment may remove the causes of damage and soiling.

An archaeological approach seems less clear. Some archaeological conservation takes broken vases and restores them, an interventive approach. Some archaeological textiles are injected with resins to stabilise them, an interventive treatment, and some do the minimum to store the textiles safely in their fragile condition. Today, in textile conservation, the latter seems more widely accepted as an approach to archaeological textiles.

¹³ “Significance- A Guide to Assessing the Significance of Cultural Heritage Objects and Collection 2001,” Collections Australia, http://www.collectionsaustralia.net/sector_info_item/5 (Assessed July 5, 2013).

¹⁴ Appelbaum.

¹⁵ “Minimal Intervention Dentistry,” International Dental, [journalhttp://onlinelibrary.wiley.com/doi/10.1111/j.1875-595X.2000.tb00540.x/abstract](http://onlinelibrary.wiley.com/doi/10.1111/j.1875-595X.2000.tb00540.x/abstract) (Assessed July 5, 2013).

Minimal intervention is therefore considered the appropriate treatment for archaeological textiles in order to preserve both the artefact and information relating to function and survival¹⁶

The first case study is a treatment record. Fiona Hood's¹⁷ thesis examines the characterisation and conservation of a deliberately concealed hat from Scotland. Her clear aims were to investigate the concealed object and the ethics of interventive treatment. Hood used the concept of significance (mentioned in Appelbaum) to identify the ideal state. She intended to bring the object back to the ideal state through conservation. She identified one aspect of significance to be that the hat was worn and therefor intended to follow a less interventive approach to retain this information. But she then goes on to say that:

Soiling was removed from the hat prior to the humidification treatment, which enabled the hat to be unfolded and mounted for handling and study purposes necessary for its long-term role in the Karen Finch reference collection at the Textile Conservation Centre.¹⁸

Through her investigation into the manufacture and provenance of the object she came to the conclusion that the object's value was not the concealment but as a rare example of a workingman's dress and its use for study. This lead to a more interventive treatment.

Of interest in her methodology was that she took into account different aspects of the object's life and stated their importance. However the documentation was undertaken post treatment, "the components were more understandable and obtainable on its three dimensional shape."¹⁹ When looking at the straw hat a different approach may be necessary. The soiling and damage are considered to be important in identifying

¹⁶ Mary Brooks et al., "Artefact or Information? Articulation the Conflicts in Conserving Archaeological Textiles," in *Archaeological Conservation and Its Consequences*, IIC Conference, ed. Roy and Smith, 16-21 (Copenhagen, 1996).

¹⁷ Fiona Hood, "The Characterisation and Conservation of a Concealed Hat From Cupar in Fife, Scotland," (MA Dissertation, Textile Conservation Centre, University of Southampton, 2002).

¹⁸ Hood, 2.

¹⁹ Hood, 34.

the object's true nature. Documentation will retain this information, especially if a more interventive treatment is proposed. Dinah Eastop states:

The point of historical significance may be defined as the period in an object's history when all evidence, including soiling and creasing, is considered part of its 'true nature' and hence needs to be preserved.²⁰

Anna Harrison conserved a baby's cap and a pocket, which were concealed in a wall cavity. In an article published on her dissertation²¹ it was evident that Harrison was aware of the ethical dilemma when conserving concealed objects. Her treatment was guided by two concerns: the concealment and the need for display. She states that these have contradictory treatments, an archaeological textile requires minimal treatment but a more interventive treatment will be necessary for display.²² When treating the objects, she wet cleaned them and in doing so removed some soiling and the creases losing evidence. She also stitched supported the object. This treatment was interventive. However 'interventive' and 'archaeological approach' are very subjective. These terms are not defined in the *AIC code of ethics*²³ or the *ICON Professional Guidelines*²⁴. They state that a conservator should only do what is essential and, if interventive treatment is necessary, it

Should be reversible and should not falsely modify the known aesthetic, conceptual, and physical characteristics of the cultural property, especially by removing or obscuring original material.²⁵

²⁰ Dinah Eastop, "Decision Making in Conservation: Determining the Role of the Artefacts," in *International Perspective on Textile Conservation*, ed. A. Timár-Balázy & D. Eastop, (London: Archetype Publications, 1998), 45.

²¹ A. Harrison and K. Gill, "An Eighteenth-Century Detachable Pocket and Bab's Cap, Found Concealed in a Wall Cavity: Conservation and Research," *Textile History* 33 (2002): 177-194.

²² Harrison and Gill, 184.

²³ "Code of Ethics," AIC,

http://www.nps.gov/training/tel/Guides/HPS1022_AIC_Code_of_Ethics.pdf (assessed June 14, 2013).

²⁴ "Professional Guidelines," ICON,

http://www.icon.org.uk/index.php?option=com_content&task=view&id=121 (assessed June 14, 2013).

²⁵ AIC, Code of Ethics.

In Harrison's dissertation²⁶ itself, the significance and value of the concealment is of secondary importance to the rarity of the object. It was clear that, although the client wanted to display the objects as one that was deliberately concealed (the client is influential on decisions made), the importance of the treatment was to improve the stability for display and help people interpret the object:

Ethical concerns were an important aspect of the treatment. Therefore, although the treatment brief required some intervention in order to make the pocket understandable, a minimally interventive treatment approach was taken.²⁷

Harrison was aware of the ethical decisions of removing evidential soiling and creases. Some of the soiling was retained because the wash bath didn't use detergent. For this reason "It was important to provide detailed documentation and photographic records of its condition before treatment, particularly because some intervention was necessary."²⁸

Her documentation followed the Centre for Textile Conservation (CTC) standard, (formerly the Textile Conservation Centre (TCC) documentation format). It was very detailed and had useful graphs, photographs and tables.

Because the evidence of concealment was to be removed the condition report was very detailed. However documentation into the concealment itself was minimal, for example cache site details, and information about concealment in general was in the appendix. In comparison, other reports included the concealment documentation in the body of the report because the cache site is an archaeological site and therefore to be documented as such.

²⁶ A. Harrison, "The Preparation for Display of an Eighteenth-Century Baby's Cap and Pocket, Found Concealed in a Wall Cavity," (MA Dissertation, University of London, 1998).

²⁷ Harrison, 62.

²⁸ Harrison, 62.

Gabriella Barbieri.²⁹ took an archaeological approach to documentation. She identified the object's damage from use and concealment as important. She states "object documentation therefore forms both the means and the end of this investigation."³⁰ This emphasises the importance of documentation to identify the treatment proposed. She justified why each aspect of the object's life needs be investigated to identify the object's true nature.

She followed an 'archaeological' approach including a cache site report, then followed the TCC documentation format. Although values were documented the report did not show how these affect the treatment.

Barbieri did not have a client or future requirements for the object, which in other reports has significantly influenced the treatment. In the investigation into LWPM hat it is important to develop on Barbieri's documentation format including the cache site report but also to include client and future requirements.

Susan Stanton³¹ followed an 'archaeological' approach when investigating a deliberately concealed doublet. She focused on the long-term role of the object. This was important to her project because future plans of the object were uncertain. She didn't wish to remove anything of importance to the object's future.

The degree of intervention acceptable on this rare archaeological textile was investigated with particular focus on the possible loss of evidence (soiling and creasing) relating to the doublet's "burial"³²

She made a replica retaining the object itself in its current state. She produced detailed documentation of its concealed condition and identified the causes of damage e.g. wear. The documentation focused on identifying key aspects of the

²⁹ Gabriella Barbieri, "Memoirs of an 18th Century Stomacher: a Strategy for Documenting the Multiple Object Biographies of a Once Concealed Garment," (MA Dissertation, University of Southampton, 2003).

³⁰ Barbieri, 2.

³¹ Susan Stanton, "A Seventeenth Century Linen Doublet: The Development of a Strategy for Documentation, Preservation and Display of a Rare Item of Working Dress," (MA Dissertation, University of London, 1995).

³² Stanton, 6.

object to inform the treatment options. She documented all aspects from dress history to cache site information. For LWPM's hat it will be important to include future needs.

Lynn Gibson's³³ treatment methodology is not focused on a DCG but on some garment fragments excavated from a Leicestershire coal mine. These too could be identified as archaeological textiles. The format follows the TCC format but the archaeological aspect was documented separately. The aim of 'the conservation treatment was therefore carried out with the reconstruction of the garments being the principle aim.'³⁴ The interpretation of the garments was really important. Thus an interventive treatment was proposed and 'Anything removed, altered or covered up should be fully documented.'³⁵

Conclusion

AIC code of ethics state that the aim of documentation is 'to aid in the care of cultural property by providing information helping the future treatment and by adding to the profession's body of knowledge.'³⁶ The above documentation has worked to fulfil these aims and it is interesting to observe the different approaches and outcomes when working to the same goal.

Documentation aims to gather all information about the object, specific and non-specific, for example its provenance and document prior to conservation. It is important to identify the true nature, or ideal state of the object (see chapter seven). These aspects will inform the documentation methodology.

A key aspect of the case studies are future requirements of the object and therefore its stability to fulfil these roles. The client's needs influence the evidence retained on the object.

³³ Lynn Gibson, "The Conservation of Garment Fragments Excavated from a Leicestershire Coal Mine" (MA Dissertation, University of London, 1993).

³⁴ Gibson, abstract.

³⁵ Gibson, 116.

³⁶ AIC, Code of Ethics.

Assessing significance has been important. These objects have very complex histories, and their true nature is complex. It is therefore important to look at all the object's life stages. The conservator's interpretation could add value to one aspect at the expense of another.

The concealed objects are seen as archaeological because they were buried. Some case studies have enriched the reports with a cache site surveys (Cache refers to a group of object secretly hidden away).

Chapter Three: Documentation Methodology

The documentation will follow Kopetoff's concept that an object has a biography of its life. Damage will be plotted onto a timeline (use by Appelbum) producing a visual representation of when the causes of the condition occurred, which will influence the treatment proposal.

The documentation will break down all aspects of the object's life including manufacture, ownership and evidence of wear, concealment in a cache site report, evidence of the damage from concealment and the significance of concealment, the post excavation damage and from storage in the house, and damage from after acquisition by LWPM to when it arrived at the CTC. The client and future-use requirements will be considered.

The cache site report will be influenced by archaeological documentation. In archaeological documentation an area survey is undertaken to decide where to excavate³⁷ this includes mapping the area and the type of site. Here, the site has already exists so key aspects of the existing survey will be included; these are: ownership, location, maps and their significance.

The site report or building record³⁸ includes plans for excavations and aims, performed prior and during excavation. This is no longer possible therefore the aims the report will be applied it to the site as is.

Dianah Eastop states that oral testimony is important to build up knowledge about the site 'as a means of understanding more about the circumstances of discovery and concealment, and learning more about the views of the finders, custodians and conservators'³⁹. George Ewart Evens' book *The Days That We Have Seen*⁴⁰ based on oral history records shows that it is important to guide, not influence, the first hand

³⁷ Robert F. Heizer, *A Manual of Archaeological field methods* (USA: National Press, 1950).

³⁸ "Archaeological Building Recording at the forma Killamarsh Central Station Derbyshire," Alvaro Mora-Othomano, www.archaeological-researchservice.com (Accessed May 15, 2013).

³⁹ Dinah Eastop, "Sound recording and text creation: oral history and DCG project," in *Textile and Text: Establishing the Links Between Archival and Objects Based Research*, ed. M. Hayward and E. Kramer, 66-69 (London: Archetype Publications Ltd., 2007) 66.

⁴⁰ George Ewart Evens, *The Days That We Have Seen* (London: Faber and Farer Ltd, 1975).

witness to the excavation. There are limits to documenting this information because it is hard to document native speech. For this reason it should also be tape-recorded.

Heizer's book⁴¹ and the Institute for Archaeologists guidelines⁴² lists of key features to include in documenting found objects for example description and location found. These factors form the Cache site report.

From the information gathered the following documentation format was devised.

Documentation Format

Object Record

Introduction, aims and objectives

Identity

Technical data

Provenance

Timeline of life stages

Conclusion

Cache Site Report

Introduction

Aim and objectives

Methodology

Site description

Provenance of site

Description of excavation site

Description of finding the object

Conclusion

Condition Report

Introduction, aims and objectives

⁴¹ Heizer.

⁴² "Standards for guidance," Institution for Archaeologists, www.arcgaeologists.net/sites/default/files/node-files/ifa_standards_buildings.pdf (Assessed May 9, 2013).

Overview of condition

Methodology

Condition

Material ageing graph

Conclusion

Identifying the Value of the Object, its Ideal State

Introduction, aims and objectives

Identifying sources of value

Relating categories of value to the object

Identify the true nature

Conclusion

Treatment Proposal

Introduction, aims and objectives and realistic goal for treatment

Client's brief

Role of object, true nature

Future of object

Treatment parameters

Treatment proposal options

Conclusion

The dissertation will follow this report format with the intent that this information from this point can be extracted for the client.

4. Chapter Four: Object Record

Introduction

The object record gathers information about the object to help inform the condition report, treatment proposal and piece together the hat's biography. The first step is to identify object specific (dimensions, materials and construction) and then non-object specific information.

Aim:

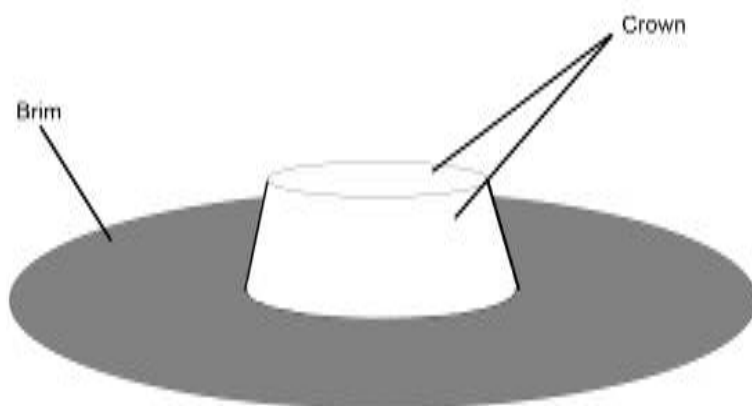
To document what is known about the object, from object-based information to non-object-specific based information (e.g. provenance).

Objectives to:

- Produce a record of measurements, materials etc.
- Examine manufacturing methods and construction
- Compare similar hats
- Research provenance

For orientation, see figure one for the features of the hat.

Figure One: Parts of a hat⁴³



⁴³ "Glossary of hat terminology", Hats UK,

<http://www.hatsuk.com/hatsuk/hatsukhtml/bible/glossary.htm> (Assessed June 24, 2013).

Object Record

Reference number: CTC.181

Owner: Veronica Main, Luton Wardown Park Museum.

Conservator: Jennifer Beasley, Centre for Textile Conservation, University of Glasgow.

Tutor: Karen Thompson.

Description: Hat made from un-dyed plant stem fibre, knotted together in a lace-like design. The hat has an un-dyed silk lining.

Figure two: before treatment photographs © CTC



Plant Fibre Hat

Dimensions:

At LWPM the hat's dimensions were measured, see table one, and photographs were taken.

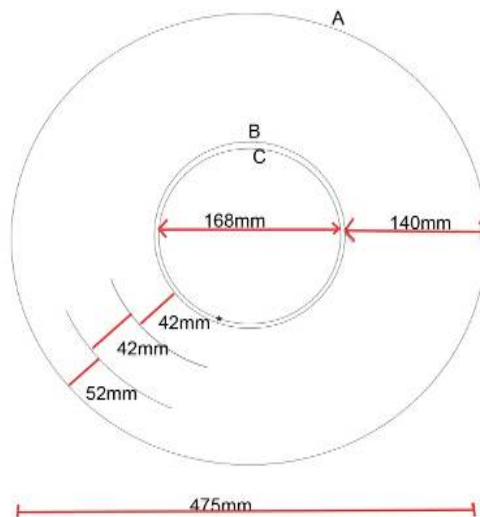
Table one: dimensions taken by LWPM

1700s Hat	Approximate
Overall diameter	1480mm
Crown height	85mm
Diameter top of crown	160mm
Brim distance between canes forming brim	40mm

Dimensions taken at the CTC were similar but not identical; possibly because of human error or damage during transport, for example the height of the crown is smaller. The diagrams below are the measurements taken on arrival at CTC.

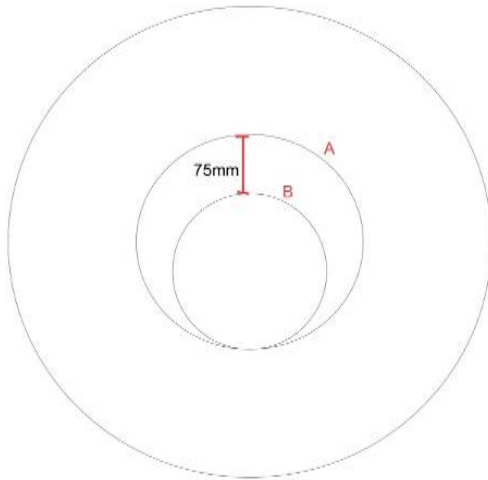
Figure three: Dimensions of the hat on arrival at CTC.

Exterior Measurements, smaller measurements are the construction rings/bands



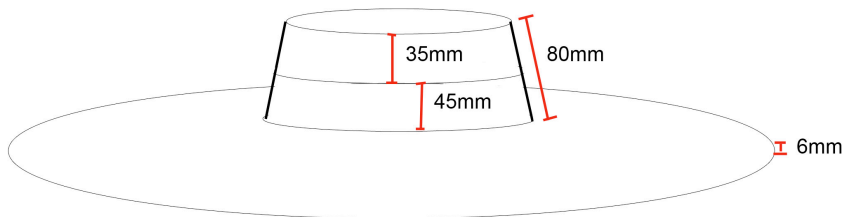
- A- circumference of the brim, 1500mm
- B- Circumference of the bottom of the crown, 650mm
- C- Circumference of the top of the crown, 520mm
- * measured from the base of the first ring to the outer edge of the second.

Interior measurements

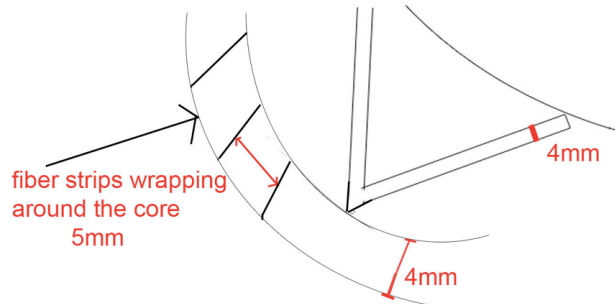


A- Circumference of the outer edge of the crown, 590mm
 B- " " of the inner edge of the crown, 490mm approx.

Side measurements

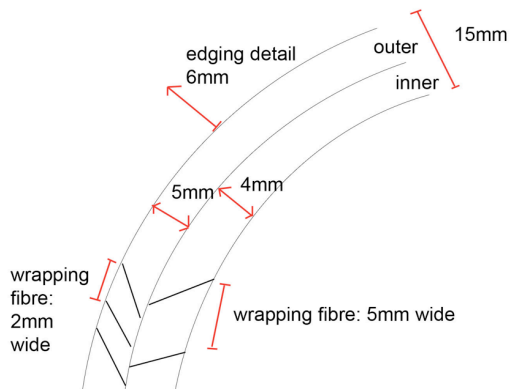


Width of the fibres in inner bands



The lace fibres measure 1mm.

Outer band measurements



Materials:

Visual Examination

The plant fibre was compared to potential hat fibres.

LWPM hat's fibre is not as glossy nor the distinct yellow 'straw' colour as straw from an 18th century Bergere hat (shepherdess), figure four. The term straw is applied to the stalk, a by-product of the any cereal crop usually wheat⁴⁴. This 18th century hat is used for a comparison because it is fine example of what people identify as a classic straw hat. Microscope examination of this straw was very similar to that in *The Conservation of Artefacts Made From Plant Material*.⁴⁵

Comparison was made with fibres in the CTC collection. 19th Century hemp fibre the colouring, feel and matt appearance was recognisable as the LWPM fibre, figure four.

Figure four: left, photograph of straw, right, hemp from 1882 (Kew)



© CTCTAH

Plant anatomy and classification was a starting point to narrow down the options. The plant looks to be from the *Spermatophyta* plant kingdom, 'seed-bearing higher plants',⁴⁶ these have stems, leaves and true roots.

Spermatophyta is split into many types. The fibre is from a flowering plant (Angiosperms). The fibres of the construction are either stem (bast, such as linen)

⁴⁴ "Straw," Wikipedia, <https://en.wikipedia.org/wiki/Straw> (Assessed June 29, 2013).

⁴⁵ Mary-Lou Florian et al., *The Conservation of Artifacts Made From Plant Materials*, ed. Mary-Lou Florian, et al. (USA: The J. Paul Getty Trust, 1990) 60.

⁴⁶ Florian et al. 1.

and leaf (such as grass) fibres. These can be best identified through examination of seeds. Seeds are not present thus it is not possible with this method. However Monocotyledonae (Monocot) e.g. Grasses or a Dicotyledonae (Dicot) e.g. bast fibre have different molecular constructions.

Microscope Examination

The plant fibre characteristics were examined in comparison to known sources and literature.

‘Polarized light microscopy is capable of providing information on absorption color and optical path boundaries between minerals of differing refractive indices.’⁴⁷

Identifying features to look for are nodes on the length of the fibre, cross sections wall thicknesses and the lumen in the middle of the cell (Appendix one).

The hat’s fibre consists of a slice of the plant and therefor only has a subset of identifying features. The fibre is dried; the features are not as defined as plant specimen in literature. This complicates identification of the fibres. Microscope examination literature uses both cross-sections and longitudinal (surface view) to identify the plant. Stains are often used⁴⁸ to illuminate the identifying features.

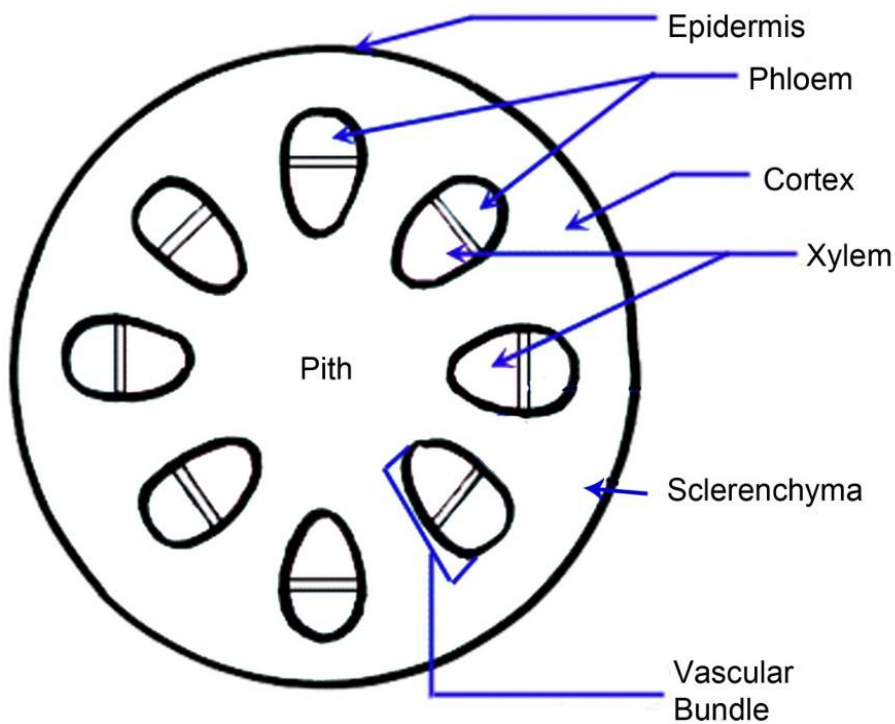
LWPM fibres look to be strips from within the stem of the plant. Plant stems contain an external ring of cells, the epidermal cells, filled with different types of cells that perform functions from making the ridged structure of the stem, sclerenchyma, and transporting water and nutrients through the plant, xylem and phloem, in a vascular bundle.

Each type of plant has a different structure, see figure five, and has different cell shapes depending on the plant.

⁴⁷ “Microscopy,” Wikipedia, <https://en.wikipedia.org/wiki/Microscopy> (Assessed June 15, 2013).

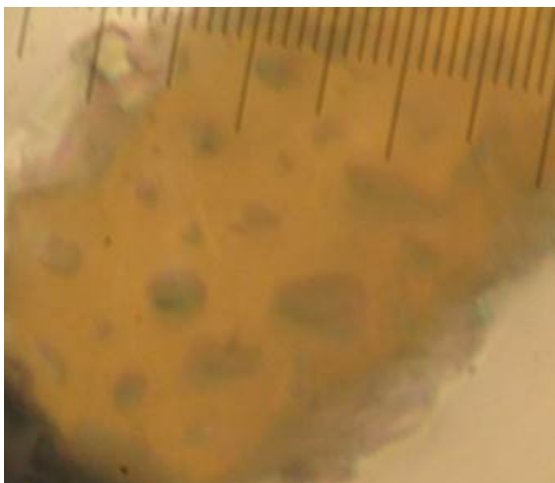
⁴⁸ Florian et al.

Figure five: structure of the stem



The sclerenchyma cells are used in manufacturing bast fibre objects. The Sclerenchyma is made of a thick secondary wall and a lumen⁴⁹ (Appendix). The microscope images (figure six) look similar to sclerenchyma or collenchyma cells.⁵⁰

Figure six: microscope image, X40, A cross-section taken from a sample a LWPM hat under polarized light. Sclerenchyma cells refract light in polarised light.⁵¹



⁴⁹ Florian et al.12.

⁵⁰ Katharine Esau, *Anatomy of Seed Plants* (Canada, John Wiley & sons inc., 1960) 61-82.

⁵¹ Florian et. al.12.

The first step was to identify if the three parts of the construction (lace, ring construction and the wrapping around the rings) used the same fibre (figures seven, eight and nine).

Figure seven: Microscope image of the ring of the construction of the hat. A: longitudinal x40 B: longitudinal x5 and C: cross section.

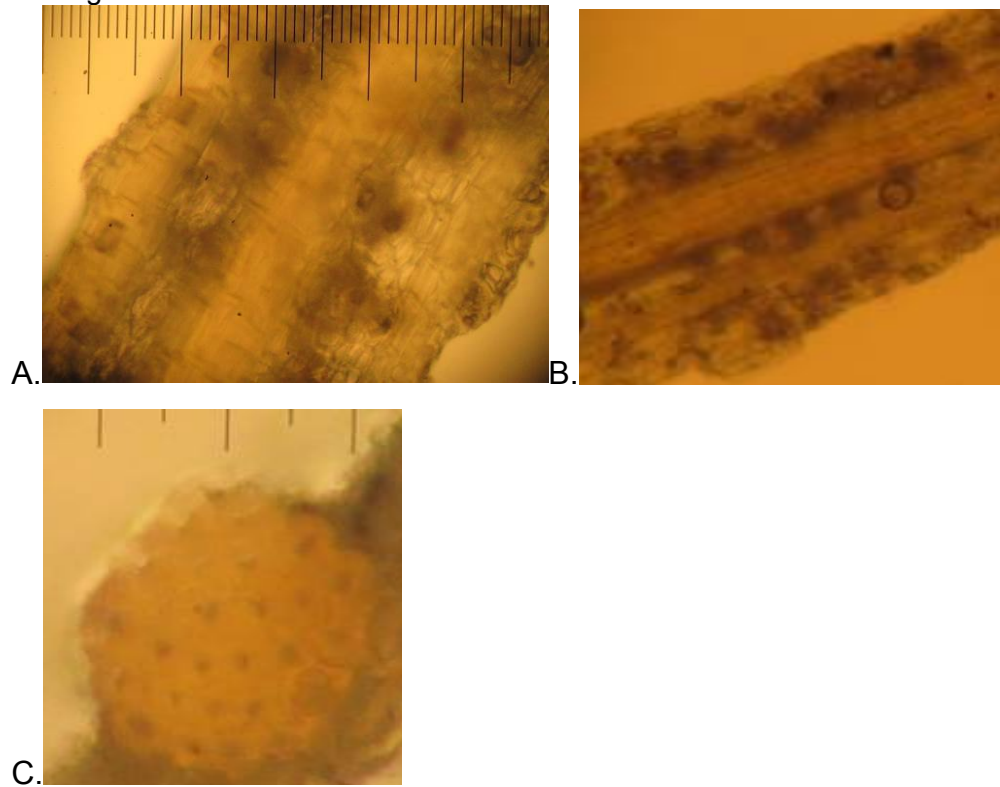


Figure eight: Microscope image wrapping of the construction A: longitudinal X40, B: longitudinal x5 and C: cross section.

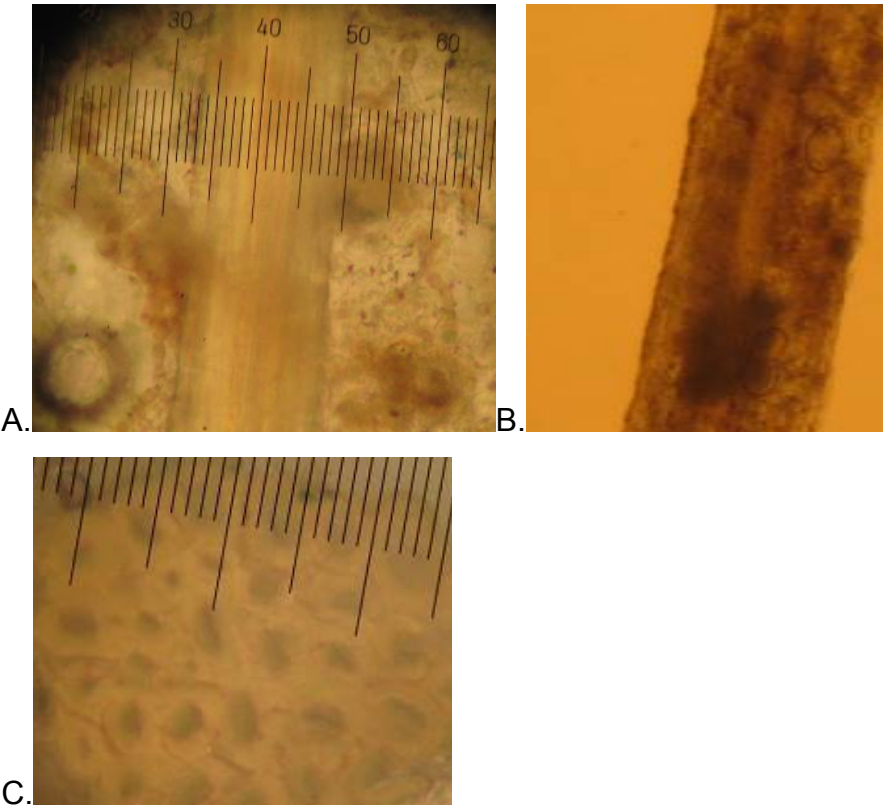
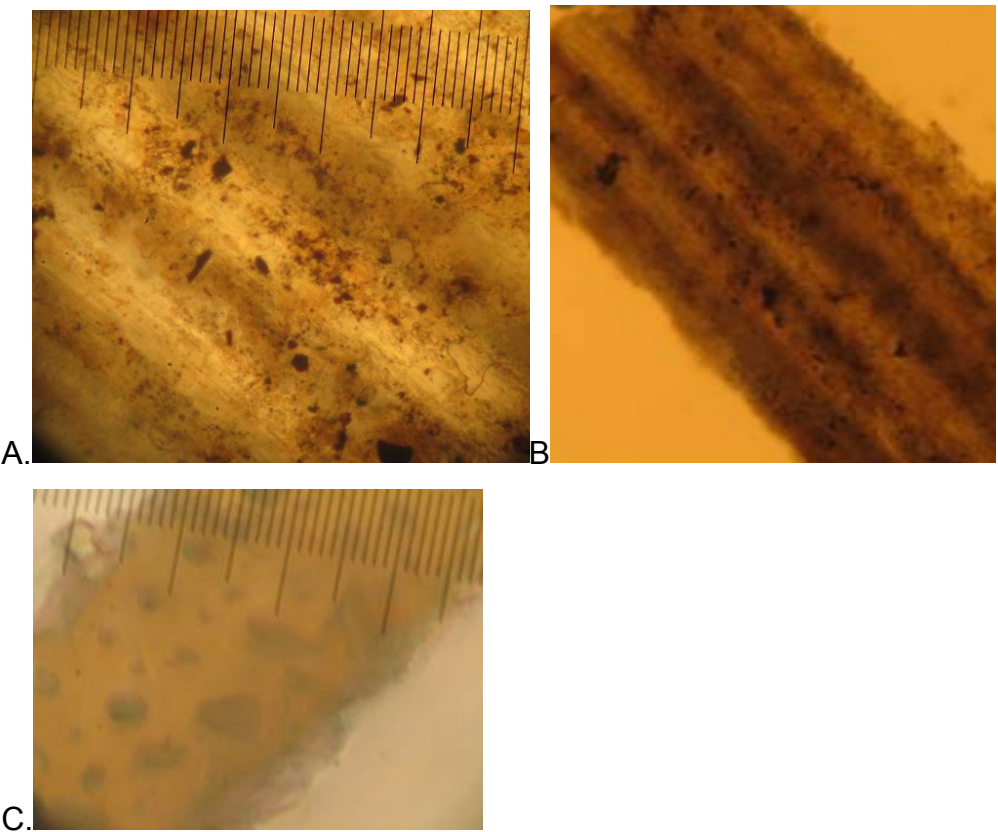


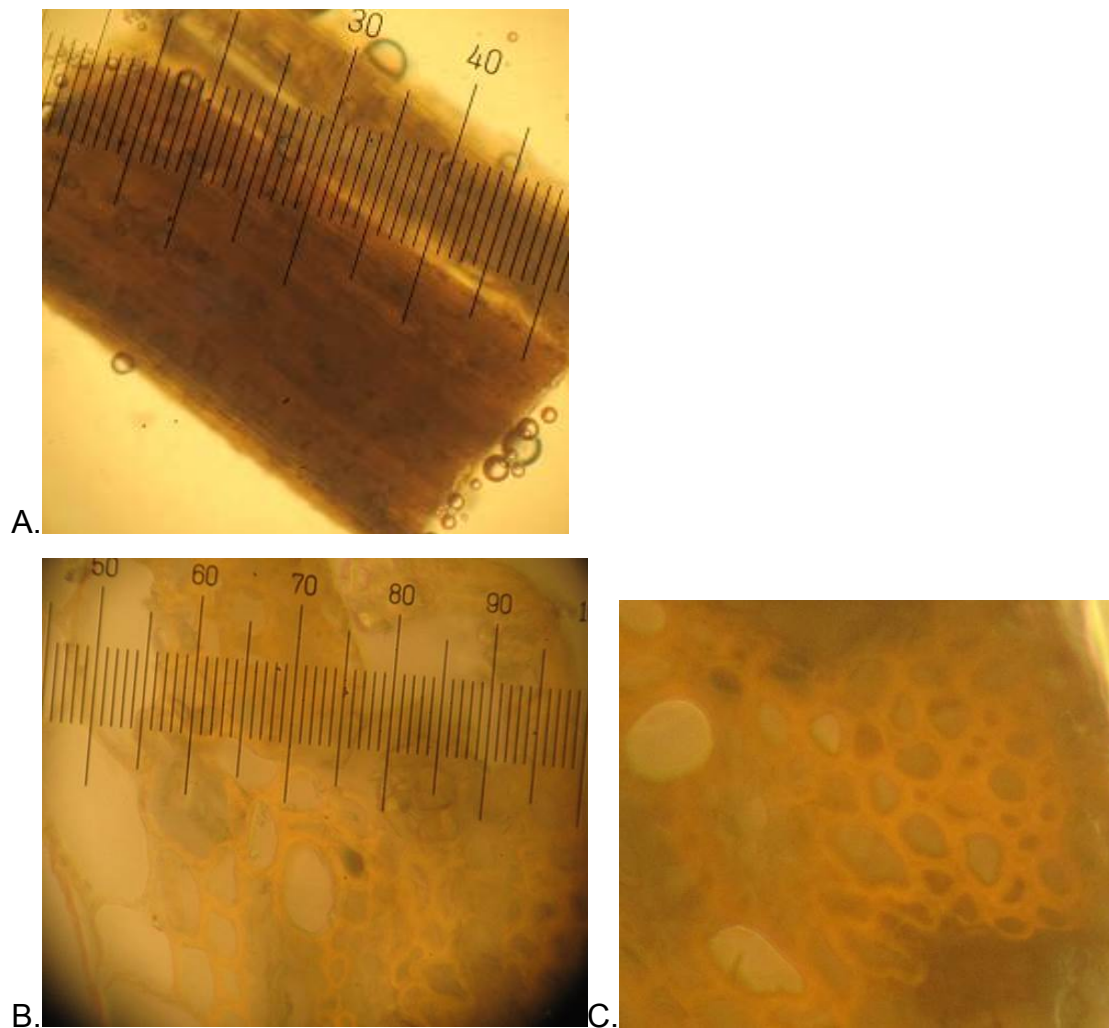
Figure nine: Microscope image of the lace construction. A: longitudinal X40, B: longitudinal X5 and C: cross section.



Soiling on the fibres hindered the microscope examination. The cross sections all have the same shaped lamellas and wall thickness. The identifying features were harder to compare on the longitudinal sample because the fibre strips could be from different parts of the cross-section containing different structures but the striated bands of colour were comparable. The different thicknesses of these samples affected the quantity of light passing through thus affecting the level of detail visible. The three samples looked sufficiently similar to be of the same plant material. From the literature alone it was not possible to identify if the fibres are a monocot or dicot because there are so many similar materials. A microscope examination requires to compare the fibre to reference samples.

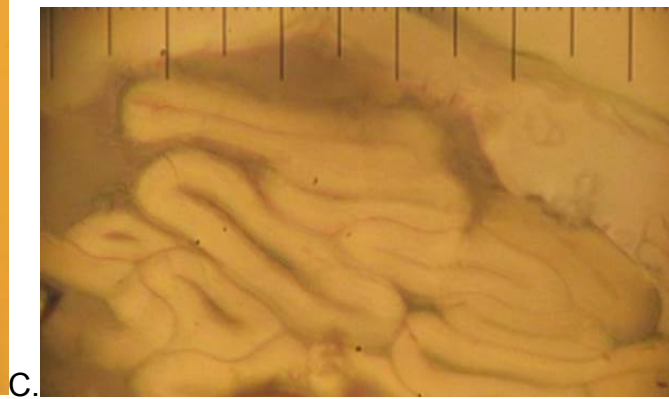
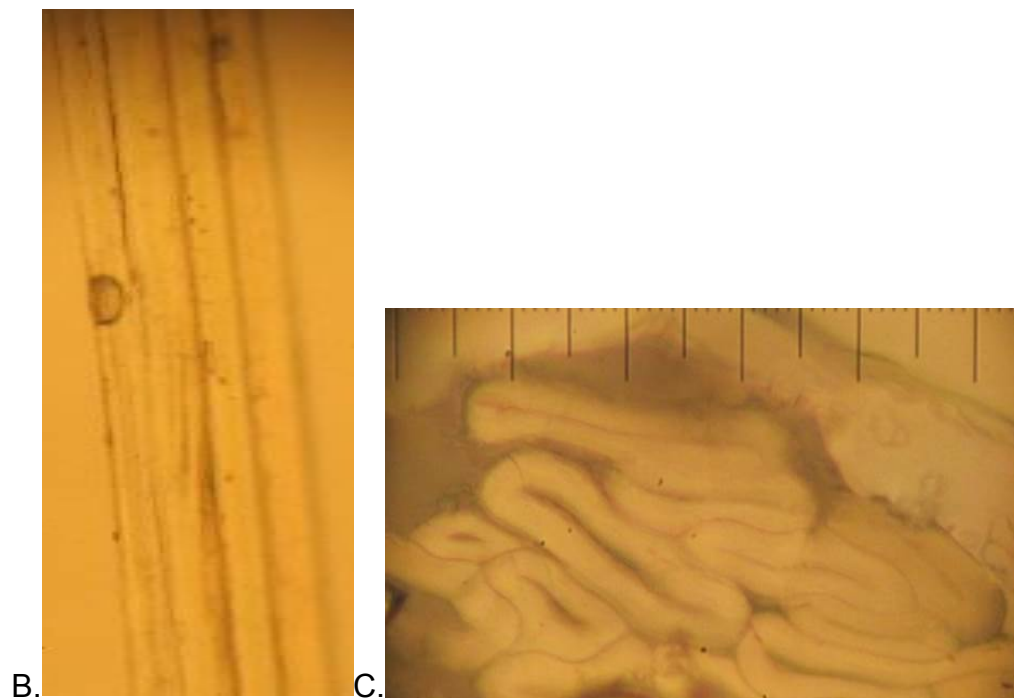
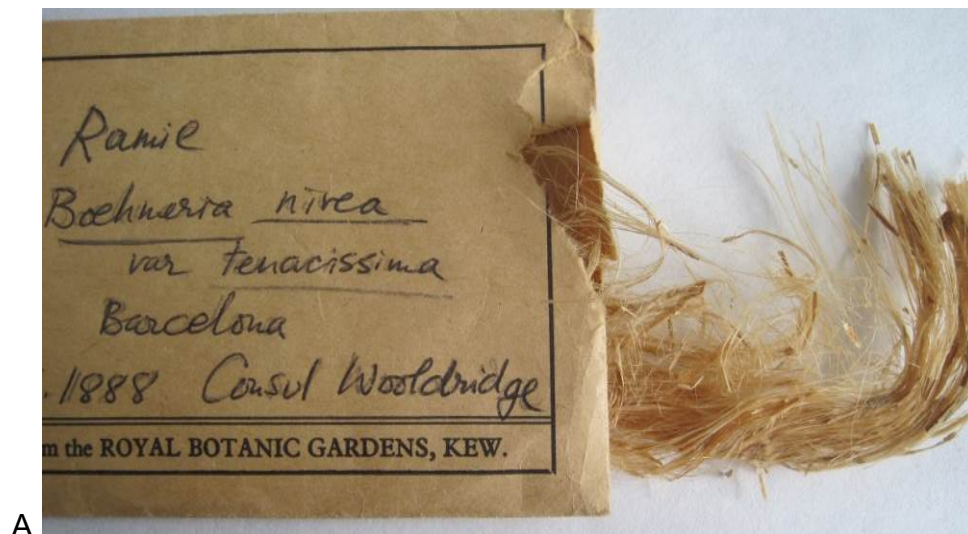
The 'straw' fibre from the 1800's shepherdess hat showed that the LWPM fibre was not the same plant (figure 10). The straw consists of larger sections of the stem and is not split as finely as LWPM fibre and therefore the vascular bundle and other structural parts are identifiable (figure 10B). The structural support cells have a very different shape lamella and the walls are thinner than LWPM's fibre (figure 10C).

Figure 10: Straw sample taken from an 18th Century shepherdess hat A. longitudinal and B/C: cross section.



Ramie was examined under the microscope; it is not comparable to LWPM fibre (figure 11). The cross section has a different shape and a very small lamella. The longitudinal section is a lot smoother in colour and the fibres in the collenchyma are better defined.

Figure 11: Ramie, 1888, from Kew Gardens. A: the fibre, B: longitudinal X5 and C: cross section © Kew Gardens

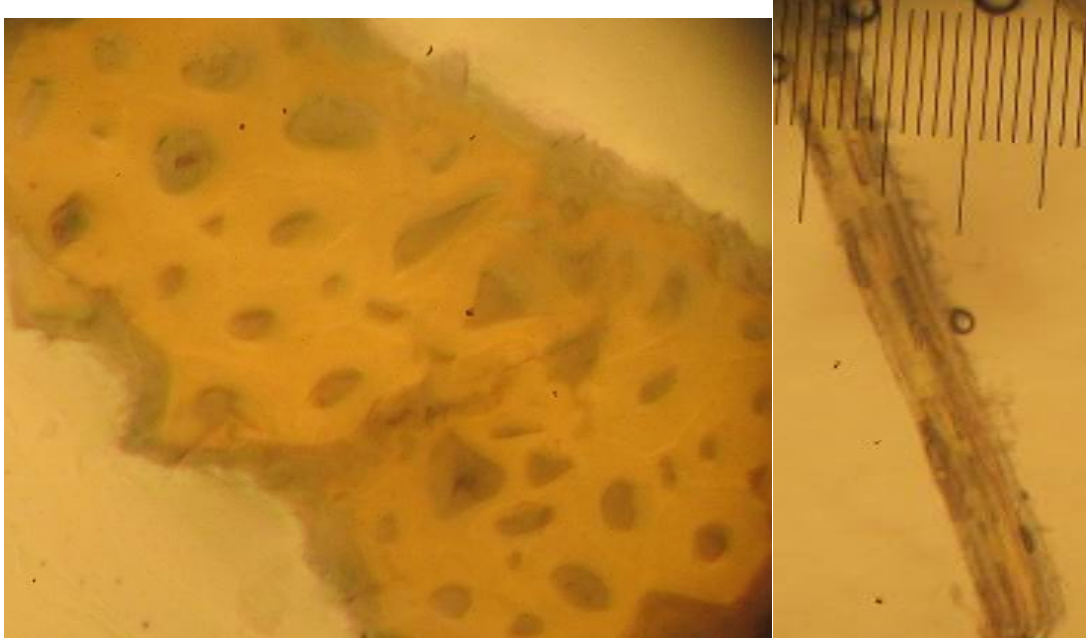


A sample of split cane was unavailable. In the literature⁵² a longitudinal microscope photograph of the split cane revealed the fibre to have nodes along its length, unlike the LWPM fibre.

⁵² "Microscopy," Spectroscopy Now, <http://www.spectroscopynow.com/view/index.html?tzcheck=1&tzcheck=1> (Assessed June 20, 2013).

Hemp looked similar on visual examination. Microscope examination of hemp (figure 12) shows similarities in the lumen and thickness of the walls in the cross-section, and striations on the longitudinal.

Figure 12: 1882 hemp sample from Kew gardens. Left, cross section, right, longitudinal. X5.



Hemp was found to be the most similar fibre. Hemp has similar properties and was used to make 'straw' hats in the 1800's.⁵³ LWPM fibre matches the cell structure description in Cook's *Identification of Textile Fibres*. 'The cells of hemp are thick-walled; they are polygonal in cross-section. The central canal or lumen is broader than that of flax, however the ends of the cells are blunt.'⁵⁴

Stain Test

To confirm this finding the stain Safranin O was applied to cross-sections and viewed under the microscope. The method used a 0.1% ratio of Safranin to water as mentioned in *The Conservation of Artefacts Made From Plant Material*⁵⁵ the excess stain was removed and replaced with water. Safranin stains epidermal cells red

⁵³ Private conversation with veronica main, curator at Luton Wardown Park Museum on the 19th June 2013.

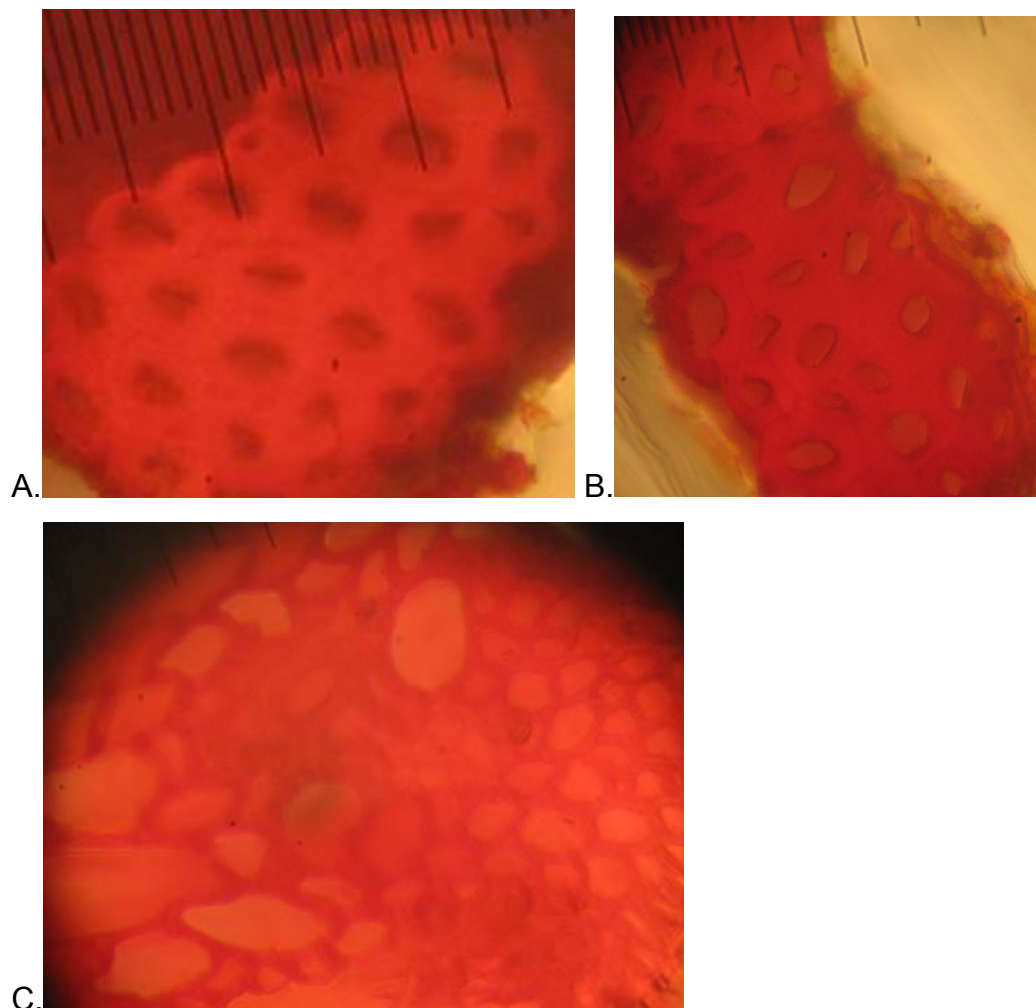
⁵⁴ Gordon Cook, *Handbook of Textile Fibres*, (Watford: Merrow publishing co. ltd, 1959) 17.

⁵⁵ Florian et al. 36.

(appendix one). The stain test confirmed that the three different parts of the hats structure were the same, all stained the same shade of red and the shape of the cells and the lumen clearly showed up (figure 13). The 18th century shepherders straw and the hemp sample went red, suggesting that they are all from the epidermal cell layer. The hemp took the same shade of red as LWPM hat, a different shade to the straw.

Figure 13: results from the stain test, X40 magnification.

A: LWPM hat, B: Hemp, C: Straw.

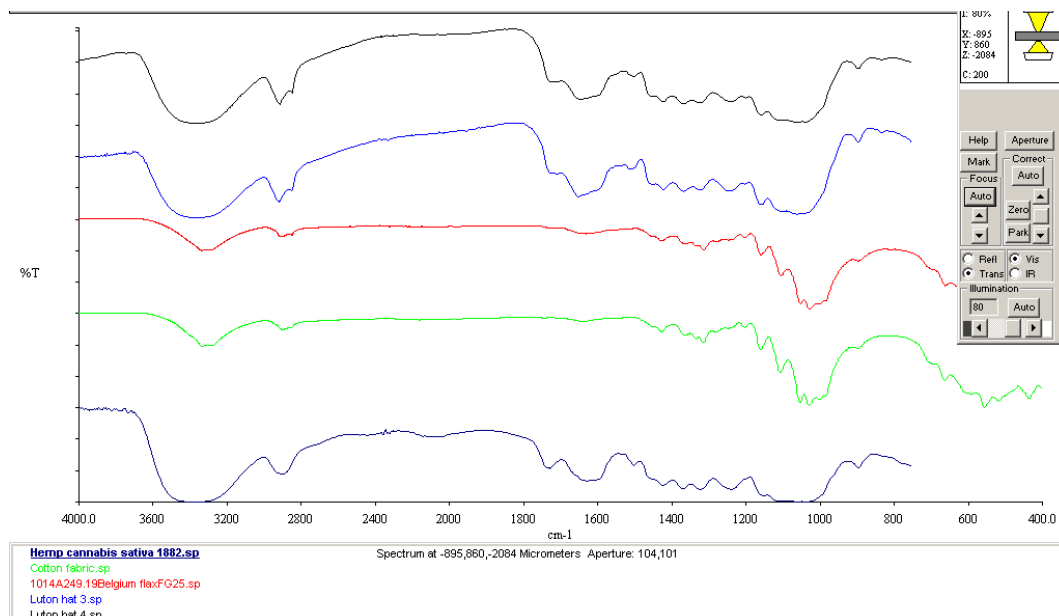


Fourier Transform Infrared Spectroscopy (FTIR) Examination

FTIR examination was conducted to further support this identification. FTIR is an established analytical technique for investigating the chemical composition of historical materials, mainly organics⁵⁶. The analysis involves measuring the energy of infrared radiation of variable wavelengths to stimulate the movement of molecular bonds in the sample material. The resulting graph, a spectrum, provides a 'fingerprint' of the chemical composition of the material.

Historical materials analysed by FTIR are normally identified by comparison of their spectrum to those of known references. This was the approach taken for LWPM fibre, where four pieces of approximately 1-4mm² were sampled with a scalpel and then compressed independently with a diamond window anvil. Each sample was analysed on a single window at a resolution of 40cm⁻¹ for 16 scans over the wavenumber range 4000 – 7000cm⁻¹ using a Perkin Elmer Spectrum One FTIR spectrometer connected to an Autoimage FTIR microscope with an MCT detector. The results were compared to reference samples of cotton, hemp and flax (figure 14).

Figure 14: FTIR spectra of the concealed hat (black and light blue), flax (red), cotton (green) and hemp (dark blue).

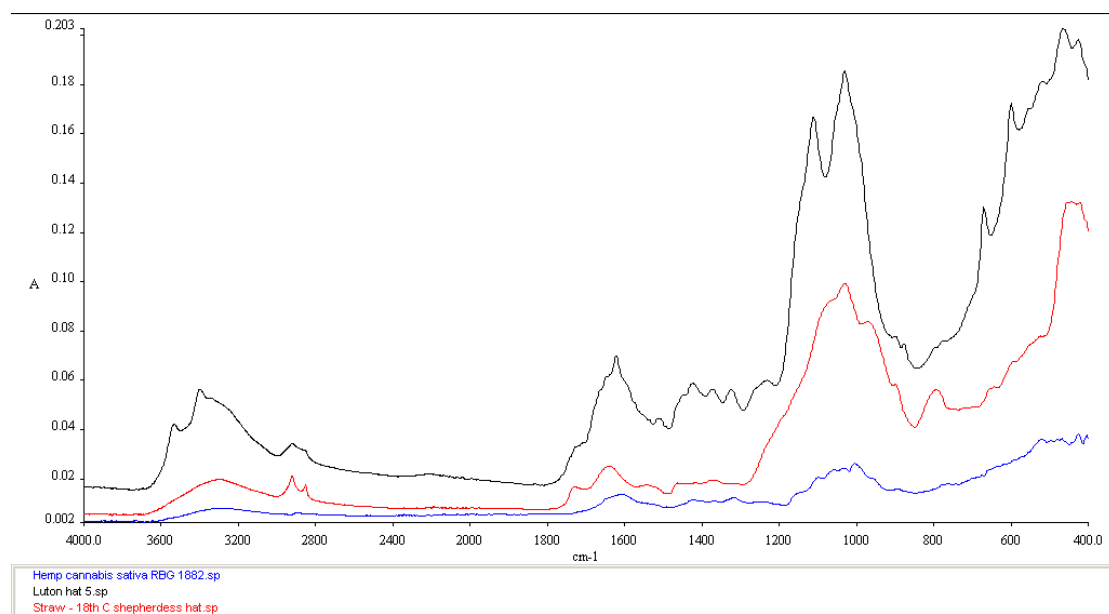


⁵⁶ Michele Derrick, Dusan Stulik, James Landry. *Infrared Spectroscopy in Conservation Science*. (Los Angeles: Getty Conservation Institute, c1999).

FTIR confirmed that LWPM fibre is cellulosic with characteristic spectral features in the 14000-10000 cm^{-1} regions relating to C-C, C-H and C-OH bonds in cellulose. The hemp spectrum is most similar to LWPM spectra.

A sample from the 18th century straw shepherdess hat was analysed for comparison using the Spectrum One spectrometer with a micro attenuated total reflectance (μ ATR) sampling accessory, which required no additional sampling or sample preparation before analysis. From the results (figure 15) it can be seen that the straw has distinctly different spectral features in the 15000-9000 cm^{-1} region. This suggests that straw can be differentiated from hemp by FTIR spectroscopy and indicates that LWPM fibre is composed of a different cellulosic material to the straw. However, it must be recognised that spectral differences can arise from the same material if it has been processed or finished in a different way or has been subjected to ageing or accumulated dirt. It was not possible within the scope of this project to investigate this further.

Figure 15: FTIR spectra of: the concealed hat (black), straw from an 18th century shepherdess bonnet (red) and hemp (blue).



In conclusion, the fibre is a dicot and is very likely from the hemp family, Moraceae, or hemp, Cannabis Sativa.⁵⁷ These were produced in different countries. Further identification to see if it is from another member of the Moraceae family was considered unnecessarily complex and does not affect the conservation of the hat.

Manufacture Techniques

Hemp is produced similarly to straw. The plant fibres are stripped to remove any knots and leaves leaving lengths of hemp at 1.8m long.

Although straw is bleached, hemp is hard to bleach and is normally left its natural colour, 'Italian hems are produced with great care; they are light in colour and have an attractive luster.'⁵⁸

The hemp is wet-retted (a process employing the action of bacteria and moisture on plants to dissolve or rot away much of the cellular tissues and gummy substances surrounding bast-fibre bundles, thus facilitating separation of the fibre from the stem⁵⁹) before the splitting (breaking and scrutching).

Pounding softens the woody tissue of the hemp, possibly not for the hat fibre because the fibres were not made into yarn. The microscope examination showed that the fibres have marks on them, possibly from the splitting process (figure 16).

Figure 16: striated lines in the photograph running vertically could have been from the manufacturing of the thin fibres.



⁵⁷ Cook, 16.

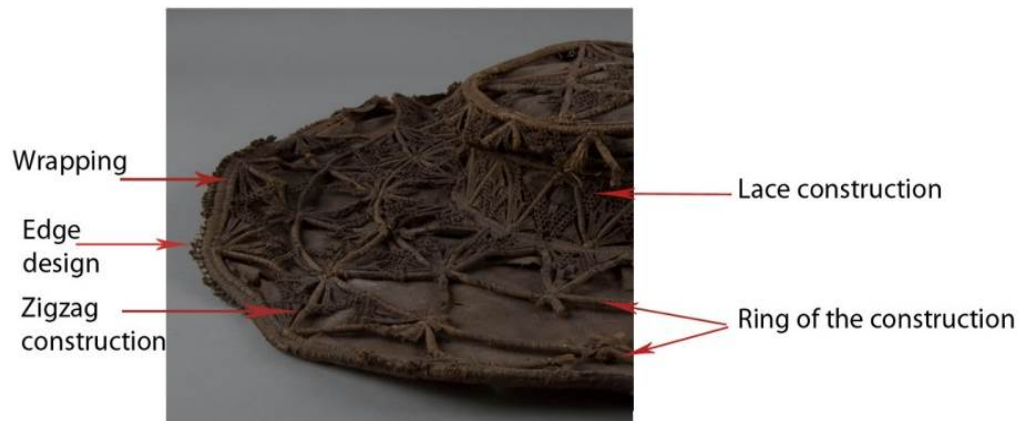
⁵⁸ Cook, 16.

⁵⁹ "Retting," Britannica, <http://www.britannica.com/EBchecked/topic/500159/retting> (June 25, 2013).

Construction of the Hat

The hat constructed from rings wrapped in a length of flat fibre (figure 17). There are diagonal struts between the rings forming a zigzag, interspersed with a knotted and woven lace pattern.

Figure 17: Diagram of parts



The Rings and Wrapping

The rings comprise two fibre lengths bound together with a strip of fibre wrapping (figure 18). The zigzag struts are single lengths, similarly wrapped.

Figure 18: wrapping around the structural fibre. The outer wrapping goes through the inner wrapping to bind the two together.



The Lace

A lace-like pattern fills the gaps in the superstructure (figure 19). This is threaded through the wrapping of the structural fibres to hold it in place.

Figure 19: lace held in place by threading through the wrapping



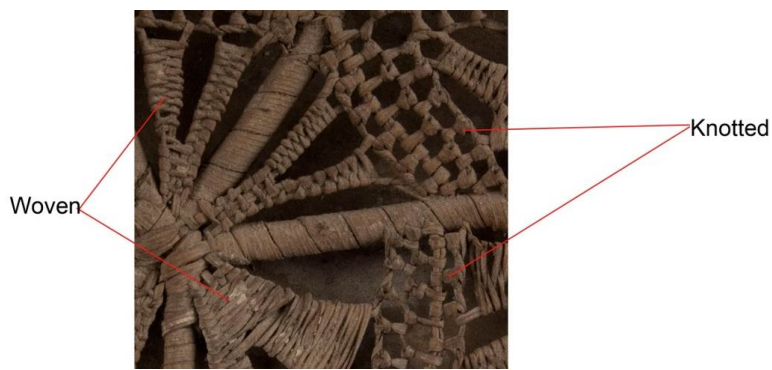
The design is a geometric circular pattern like the spokes of a wheel with woven lace separating the spokes (figure 20). The knotted lace is located at the largest point of the gaps.

Figure 20: close up image of the lace pattern.



The lace is made by knotting and weaving (figure 21).

Figure 21: knotting and woven



Knotted Lace

Using two lengths of plant fibre, the second is repeatedly knotted around the first, figure 23/24. The next row uses another length knotted onto the second. The knot looks similar to the knotted buttonhole stitch used in needle lace making (figure 22).⁶⁰

Figure 22: buttonhole knot

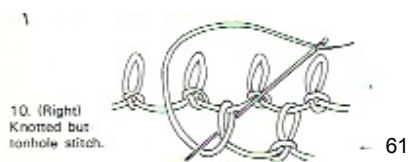
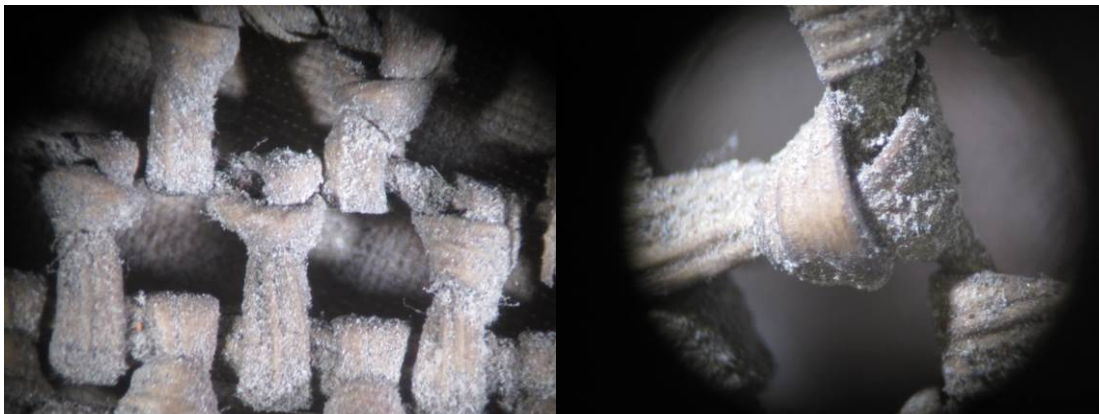


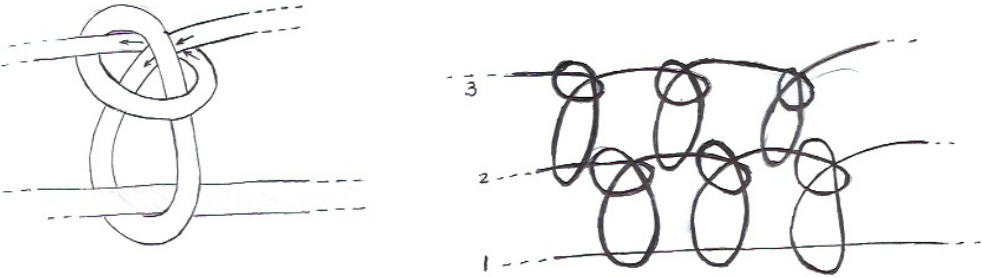
Figure 23: Stereomicroscope images of the knot



⁶⁰ Pat Earnshaw, *Needle-Made Laces: Material, Design and Techniques*, (London: Ward Lock Limited, 1988) 91.

⁶¹ Pat Earnshaw, *A Dictionary of Lace* (Aylesbury: Shire Publications, 1982) 14.

Figure 24: diagram of the knot



Woven lace

Made by threading the fibre through the wrapping of the structural fibres. These parallel fibres are then woven around with a length of fibre, figure 25/26.

Figure 25: diagram of the woven area where it is joined onto the knotted lace (red)

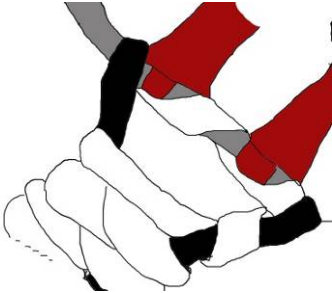
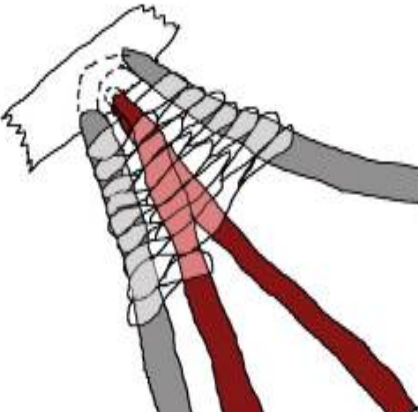


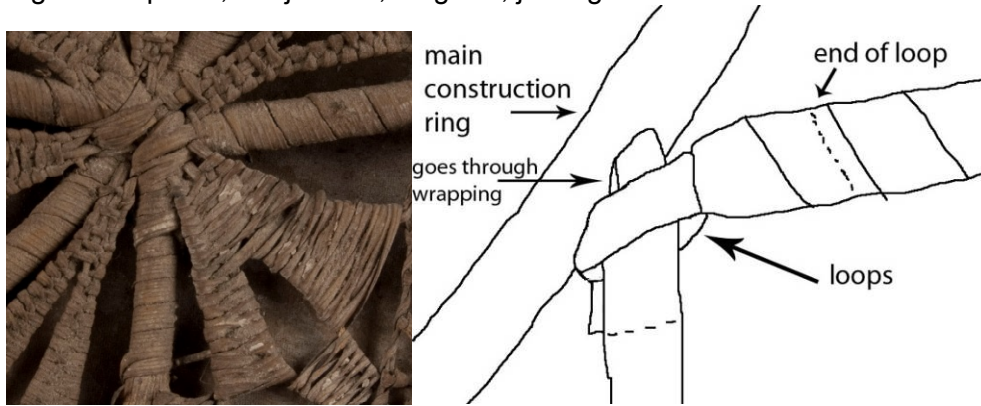
Figure 26: diagram of the woven area where it joins onto the ring of the construction. Pale areas are where the weave goes over the structural fibres coloured red and grey.



Joins:

The zigzag struts are joined to the ring. The struts end in loops held in place with wrapping fibre. One loop goes through the construction and wrapping of the main ring (figure 27). The other goes through the first loop.

Figure 27: photo, the join left, diagram, join right



Edging decoration around the brim:

The decoration is attached by piercing the wrapping of the outer ring in the same way as the lace (figure 28). Knotted fibres forms the decoration.

Figure 28: detail of the edging of the brim



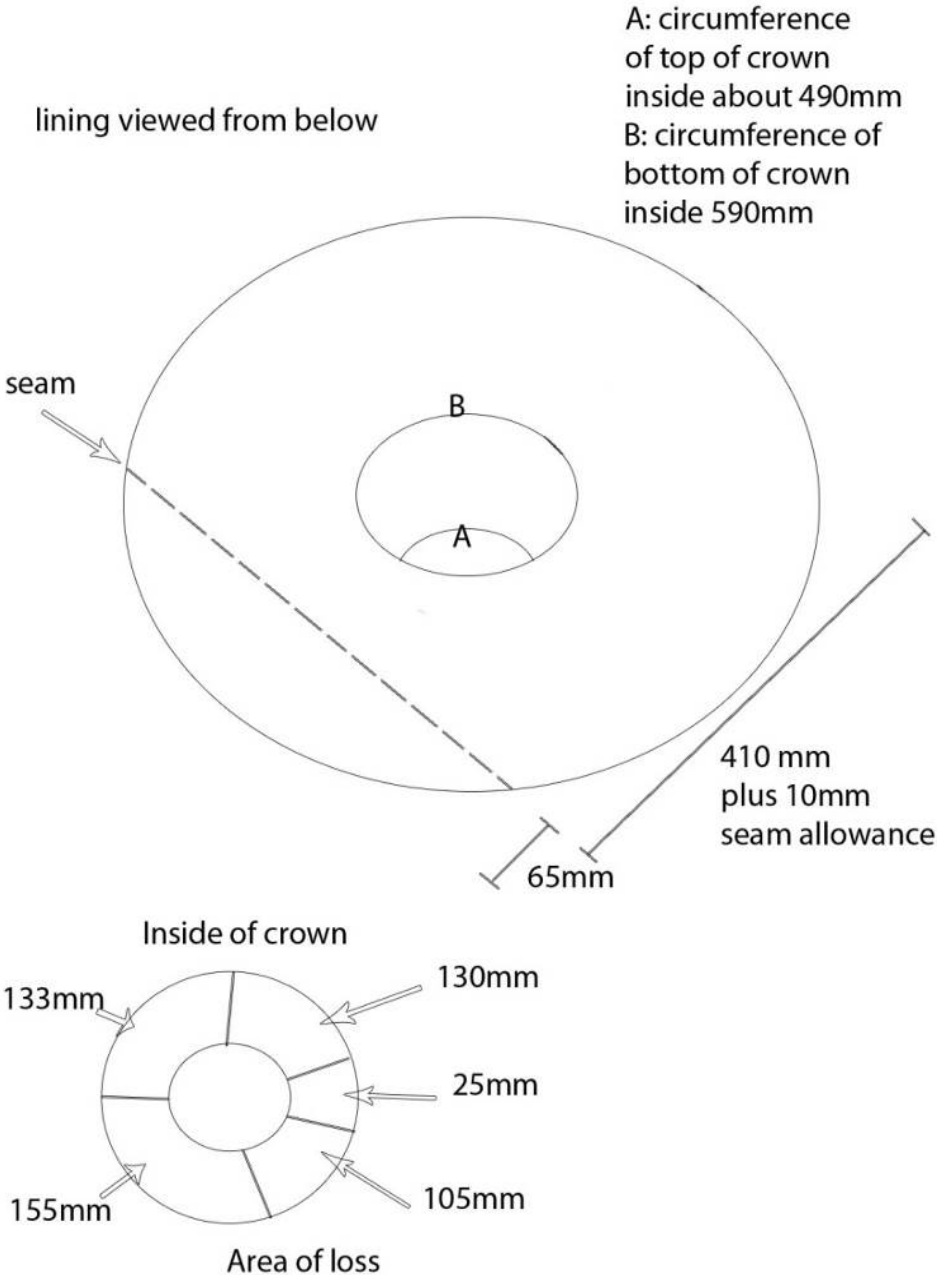
Lining

The lining is original because it is held in place with the plant fibres and this is only feasible if the hat were made around it.

Dimensions

The lining consists of four main parts (figure 29): two lengths of fabric line the brim, a circle forms the base of the crown, and a length edges the crown (itself made of smaller pieces of fabric).

Figure 29: diagram, lining measurements

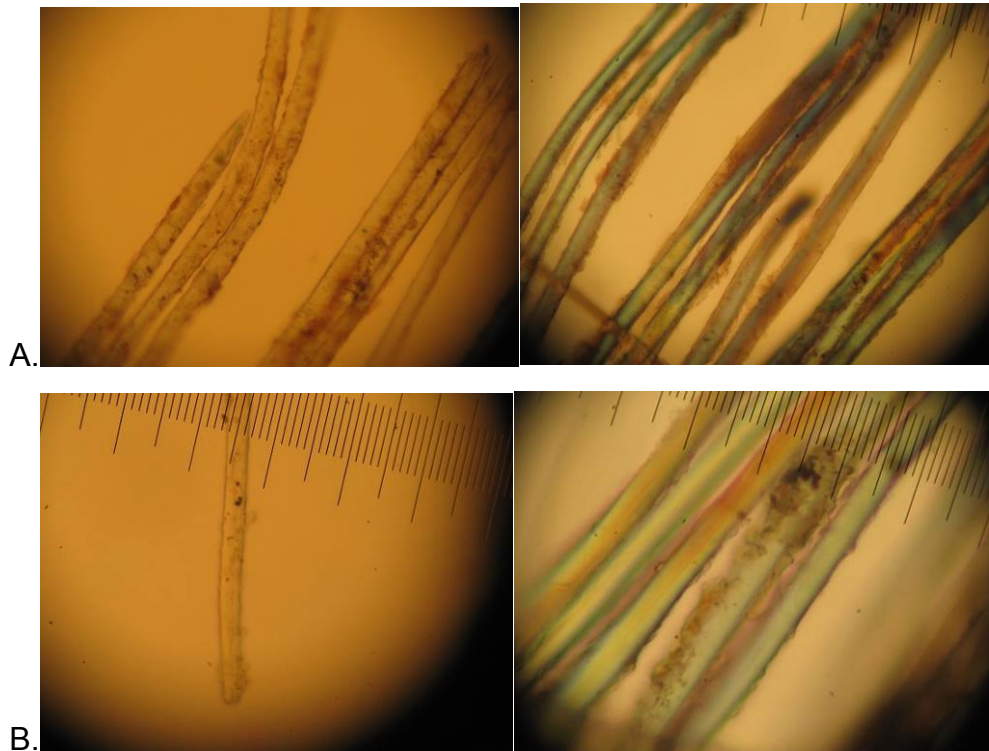


Materials

Examination identified the fibre as un-dyed silk (figure 30) (appendix two: where samples were taken).

Figure 30: microscope image of the warp (A) and weft (B).

Under bright and polarized light.



The seams of the lining are joined with silk sewing threads (table two). The image below (figure 31) shows the sewing thread.

Figure 31: microscope view of the sewing thread.



Construction

Plain weave (figure 32) but there are more and smaller warps than wefts. A salvage edge is present which indicates the warps.

Figure 32: diagram: weave structure

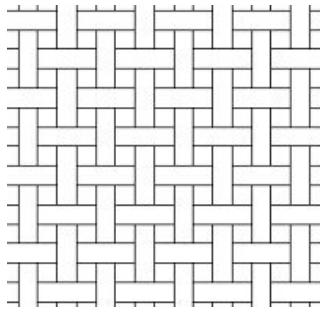


Table two: details of the lining

	Weft	Warp	Sewing thread
Material	Silk	Silk	Silk
Average threads per square cm	60.3	62.67	N/A
Ply	2	1	2
Twist of the ply	Z	N/A	S
Spin of the single ply	l	l	l

Manufacture techniques:

The silk is reeled⁶² a process where the silk is taken from the cocoons of the silkworm. This is degummed and spun to form useful lengths of thread.⁶³ The weft is two threads spun together but the warp is single. The threads are woven to form lengths of fabric roughly 420mm wide. This is deduced from the salvage, one would not have a seam unless necessary.

The concealment dates towards the end of the industrial revolution (mid 18th to mid 19th century)⁶⁴. The width of the fabric is wider than usual for hand weaving and is tightly woven, with minimal inconsistencies. The salvage is very small, more like hand-woven than machine⁶⁵. This could indicate the fabric was made at time when looms were being developed.

⁶² Elizabeth Gale, *From Fibres to Fabrics* (London: Allman and Son, 1968)19.

⁶³ Cook, 132.

⁶⁴ Eric Broudy, *The Book of Looms* (New England, University Press of New England, 1979) 146-147.

⁶⁵ "Salvage," Wikipedia, <http://en.wikipedia.org/wiki/Selvage> (Accessed July 3, 2013).

Provenance

Provenance is object specific information but it is non-material.

Reticella Lace

The lace-like design is like reticella lace made in the 15th to early 17th century where it was associated with Italy, France and Greece (Figure 33). This needle lace, worked in a grid design, creates patterns on the diagonals as with LWPM hat.⁶⁶

Figure 33: reticella lace.

67

A form of reticella lace from the Aemilia Ars Society commonly has the circular design seen on the crown on the hat⁶⁸ (figure 34).

Figure 34: Aemilla Ars Reticella lace

69

⁶⁶ "Reticella lace," Lace, www.lace.lacefairy.com/lace/ID/ReticellaID.html (Accesses May 20, 2013).

⁶⁷ "Laces of Different Kinds," Encyclopaedia of needlework, http://www.gutenberg.org/files/20776/20776-h/chapter_14.html (Accessed July 5, 2013).

⁶⁸ Earnshaw, *Needle-Made Laces*, 42.

Teneriffe Lace

The pattern is also similar to Teneriffe lace (figure 35). The lace, strongly associated with the Canary Islands, is another form of needle lace in circular geometric designs.⁷⁰ The lace is produced with knots and has been made since the 16th century and in the 19th century became less fine and delicate.

Figure 35: Teneriffe lace purchased in the Canary Islands.

The circular design and spokes radiating from the circle are comparable to the hat.

Straw Lace

There are examples of straw lace manufacturing, e.g. Swiss straw lace (figure 36). This is significantly different to the lace on LWPM hat. It is made by plaiting straw into bands of lace, which are stitched together in the method of traditional straw-hat manufacturing.

⁶⁹ "Needlepoint lace," Textile Dreamer, www.textiledreamer.wordpress.com/2007/01/02/star-in-needlepoint-lace/ (Accessed July 2, 2013).

⁷⁰ Earnshaw, *Needle-Made Laces*, 102.

Figure 36: straw lace from Switzerland

71

To conclude, it is not clear where the hat was made. Hemp was produced in many places across the world and shipped as a raw material. The product could have been made in a different country to the source material. The best hemp was supposedly from Italy. The lace design looks European.

Object Non-Specific Information:

There are four other hats of the similar construction. These are from Colonial Williamsburg and The Metropolitan Museum of Modern Art (MET), USA, and Hatfield House and Hereford Museum, England. Table three compares the hats. Although based on the same construction they have different complexities of design.

⁷¹ "Straw Art," Straw art Museum, <http://www.strawartmuseum.org/amsahistory.htm> (Accessed June 12, 2013).

Table three: comparison of the hat

Measurements	Taken from mount. Diameter 500mm (hat is ~40mm less) Width of brim 150mm Height of crown 105mm Diameter of crown 160 Circumference of crown: Top 510mm Base 600mm	Overall diameter 22" (560mm) Depth of crown 2" (50mm)	Diameter 460mm Circumference of brim 1340mm Circumference of base of crown 620mm Circumference of top of crown 480mm Diameter of crown 155mm Height of crown 102mm Height of rings on crown 51mm Depth of brim 5mm	Diameter 19 ¼" (490mm) Depth of crown 3 ½" (89mm)	Diameter 475mm
Construction	Evidence of lining (blue and red threads present). Present lining is later addition. Finer fibre used on woven areas. Wrapping and construction fibres similar to LWPM.	Lace: just woven. Made by filling the space in the construction with fibres radiating from one point and weaving between them.	Flattened fibres, 1mm wide. Rings of construction with lace and woven design between the rings and zigzag structural fibres. Very fine. Extra loop between the knots compared to LWPM. Lace has extra structural cross bars held: Cross join wrapped repeatedly. Width of wrapping is 4mm. (outer ring of the brim, the inner wrapping 1.5mm). On reverse, joins have thread holding structure in place. (2ply, Z-twist) Potentially held a lining(?)	No sign of lining	
Acquisition to museum	Left by Queen.	Museum purchase.	Donated by Captain Foley of Stoke Edith.	Brought at Christie's 1988(?)	Donation

Proven- ance	Owned by Queen Elizabeth.	Owned by the Kennet Family, Shillington, Kent, England (?) Sold at Christie's 1968(?)	Reputedly owned by Queen Anne. 1665-1714. Left at Stoke Edith after visit.	Owned by the Kennet Family, Shillington, Kent, England(?)	Concealed in a building. Unknown.
Any other inform- ation				Hatbox made to fit, lacquered wood. Suggested to be from Manila in 1700's	
Compar- ison	Very similar to MET and LWPM except for the small cross shapes on the points of lace and last ring of brim has additional knotted design.	Paler fibre and smaller crown. Very different design to the other hats.	Fibre is single yarn as opposed to LWPM and therefore finer design. Only 4 sides star on crown.	Almost identical to LWPM.	

In the 18th century, hats were secondary to wigs and therefore became small and decorative.⁷² Although in the painting (figure 37) it is evident that hats also had large brims like LWPM hat. The painting shows that straw hats at this time were lined. Microscope and visual examination of LWPM hat does not show dye as in the painting. This painting indicates that the hat could have been worn with a coif.⁷³

Figure 37: painting owned by the Tate 624x544 1723 'Girl in Straw Hat'⁷⁴

© Tate

The shepherdess hat, the Bergère, a large straw hat, was worn from the 1730's for about a century.⁷⁵ Throughout the century this style of hat remained popular and growing in size, with a deeper crown, and extravagance as time progressed.⁷⁶ LWPM hat has a large brim and crown suggesting that it was from later in the century.

⁷² Colin Mc Dowell, *Hats status, Style and Glamour* (London: Thames and Hudson, 1992) 13.

⁷³ Georgine De. Courtais, *Woman's Headdress and Styles in England From AD600 to Present Day*, (London: BT Batsford Ltd. 1986) 68.

⁷⁴ "Girl in Straw Hat," BBC My Paintings, Tate, <http://www.bbc.co.uk/arts/yourpaintings/mypaintings> (Accessed June 25, 2013).

⁷⁵ Willell, Cunnington and Phillis Cunningham, *Handbook of English Costume in the 18th Century* (London: Faber and Faber, 1964)

⁷⁶ De. Courtais, 88.

Conclusion

The object is made from the same fibre throughout and this is likely to be hemp. The only thing holding the whole structure together is a complex method of knotting and weaving. The lining is original.

The four hats of similar construction are different in design and materials and could be made in different places. The MET hat is almost identical in design and is very similar to the Hatfield hat.

The manufacturing date is estimated to be from the 18th century.

The chapter has documented relevant background information about the object. The methodical analysis of the object and gathering information about this style of hat has given a clearer understanding of the object. The information obtained from the object may form a foundation for further historical research.

Chapter five: Cache Site Report

Concealment of Garments

Concealment of garments and other objects within buildings has occurred over centuries, with some finds dating back to the 14th century⁷⁷ and which have been recorded from all over UK and across Europe, Australia and America. The concealment sites are found a variety of buildings and locations:

Garments found deliberately-concealed within the structure of buildings are commonly found in two locations: firstly, near openings to buildings, for example near doorways and chimneys. The Second common location is in voids, for example under floorboards or within walls.⁷⁸

The DCG (DCG) project was established in 1998 'to locate, document and analysis garments hidden within buildings.'⁷⁹ Dinah Eastop said 'it is largely a matter of chance whether once-concealed garments are recognised as being of historical significance'⁸⁰ and therefore it is reliant on the finders to decide this. Many finds may not be recorded.

The DCG database has collected all finds fortunate enough to be identified as of historical significance. The objects include shoes⁸¹ to children's hats, doublets and others. These are normally found as a collection of objects such as coins⁸² in what has come to be known as a cache site. Cache refers to the French for treasure

⁷⁷ Dinah Eastop and Charlotte Drew, "Secret Agents: DCG as Symbolic Textiles," in *Tales in the Textile: the Conservation of Flags and Other Symbolic Textiles, preprints*, 10-11, (North American: New York State Museum, 2003).

⁷⁸ Dinah Eastop and Charlotte Drew, "Context and Meaning Generation: The Conservation of garments Deliberately Concealed Within Buildings," in *The Object in Context: Crossing Conservation Boundaries. The 21st IIC International Congress*, eds. Saunders, David et al. 17-22, (London: IIC, 2006) 17.

⁷⁹ Dinah Eastop, "Outside In: Making Sense of the Deliberately Concealment of Garments Within Buildings," in *textile volume 4 issue 3*, 239 (UK: Burg, 2006).

⁸⁰ Dinah Eastop, "Garments Deliberately Concealed in Buildings," in *A Permeability of Boundaries? New Approaches to the Archaeology of Art, Religion and Folklore*, ed. Robert wallis and Kenneth Lumer, 79-84 (Oxford, BAR international press, 2001).

⁸¹ Largely documented by June Swann

⁸² Eastop, Outside in, 245.

trove.⁸³ The case studies in chapter two are some of these objects. A few of the garments found have been identified as being purposely damaged before concealment (there is literature on this damage⁸⁴) and most are heavily soiled.

The practice of concealment is thought to be on going;

In 1974 a woman in Lincoln was pestered for an old shoe by her builder, and when she eventually gave him one, it was found that the builder's old Irish labourer had already put an empty bottle between the chimney and the wall lining,⁸⁵

Merrifield gives another example.

A child who saw his father and a workman put an old worn-out boot, that significantly did not belong to the family, in the rubble when laying the kitchen floor, as Wareham St Mary, Norfolk, in 1934-5. He could get no reason for this from his father, who seemed slightly ashamed of what he was doing.⁸⁶

Nevertheless there is very little or no documented evidence of this practice or why it happens. There are theories that the garments are hidden in spaces as a protective practice against evil. *Archaeology of Ritual Magic*,⁸⁷ suggests that the ritual concealment of garments comes from Roman and Iron Age foundation sacrifices and the protection of thresholds. The practice has developed, especially in times when understanding of illness and disease was unknown, for example the Dark Ages, when people looked to magic. This has continued to the present day 'as a matter of habit.'⁸⁸ Merrifield mentions that people took the opportunity to protect the house not only when constructed but in times of redevelopment:

⁸³ "Dictionary definition," Oxford dictionary

<http://oxforddictionaries.com/definition/english/cache> (assessed 16.07.13).

⁸⁴ Miriam Duffield. "Interpreting Evidence of Wear and Deliberate Damage in Four DCG," MA Dissertation, University of Southampton, 2004.

⁸⁵ Dinah Eastop, *Garments Deliberately Concealed in Buildings*, 81.

⁸⁶ Ralf Merrifield, *The Archeology of ritual and magic* (London, BT. Batsford LTD, 1987) 134.

⁸⁷ Merrifield.

⁸⁸ Merrifield.107

When open hearths were replaced by smaller fireplaces in the seventeenth century, the opportunity was often taken to enclose a protective deposit in the new structure.⁸⁹

In addition to the evil spirits theory is the theory of protecting your home against witches, and thus cats were concealed to protect the house. 'The great obsession of the seventeenth century was with witchcraft and witches were supposed to work their evil by means of familiar spirits, that often took the form of rats or mice.'⁹⁰

The garments are thought to represent a person therefore filling the void, stopping evil spirits getting in.

'Most DCG are heavily worn and bear the imprint of the wearer; this retaining of the body's imprint explains why worn garments were chosen for such a protective practice'⁹¹

Whatever the reason for the concealment, most objects are not found in the most ideal situations. Although the finds are archaeological the finders are not normally archaeologists and are unlikely to be aware of their significance and may cause damage to the objects during excavation. The site and condition are unlikely to be documented, leading to loss of information. The DCG project aims to promote these objects to address these problems.

Revisiting the site and recording the finder's testimony will regain some lost information and contribute to knowledge of DCG.

Introduction to Report

The cache site report records information from an archaeological excavation site. IN this case the documentation relates to the "excavation" of a standing building thus a building site survey report structure will be taken (see chapter three). The cache site report will be limited because it will take place twenty years after the actual

⁸⁹ Merrifield, 128.

⁹⁰ Merrifield, 131.

⁹¹ Eastop & Drew, Secret Agents: DCG as Symbolic Textiles, 5.

excavation. Therefore has to be noted that it will not be possible to record all the information from the excavation. There is still sufficient information to make it worth while carrying the report now.

Aim and objectives of report

Aim: to gain insight into how the hat was found, the site itself and the process of excavation, and inform the true nature of the object.

Objectives:

- Identify the history of the house though maps, records and the finder's oral testimony
- Record the cache site from oral testimony of the finder and visiting the site
- Gain an insight into the excavation through oral testimony of the finder

Methodology

Visit and research the site and interview the finders. They still live in the property but are in the process of moving. This is the last chance to view the site with them. A list of questions and details were prepared before the visiting to optimise learning from the visit (appendix five).

Cache Site Report

Site description

The house is located in Wickham Bishops village, Essex (figure 38). Situated near the coast, it was know for its import and export shipping trade. 'Up to the 18th century, the River Blackwater continued to grow in importance and, during this period, it became the main supply route for imports along the East Coast.'⁹² The first mention found of the river Blackwater was of smuggling.⁹³ Surveillance of the river Thames made the Blackwater attractive to smugglers.

⁹² "Discover your district," Gov.UK, http://www.maldon.gov.uk/info/200139/explore_the_district/365/the_blackwater_estuary/2 (accessed May 27, 2013).

⁹³ "Smuggling in Britain," Gazetter, http://www.smuggling.co.uk/gazetteer_e_11.html (accessed May 27, 2013).

Figure 38: map of Wickham Bishops (A) located near London, the river Blackwater and the North Sea.⁹⁴ (c) Google maps

Figure 39: Maypole Rd, Wickham Bishops⁹⁵ © Google maps

The house is on the edge of the village, surrounded by fields and countryside (figure 39). The archaeological site is located in the centre of a building, between two styles of building construction. According to the owner the building was built in stages. There are two defined parts: the original wooden structure built in 1750's and the

⁹⁴ "Wickham Bishops," Google maps, <http://maps.google.co.uk> (accessed May 27, 2013).

⁹⁵ "Maypole rd," Google maps.

later rear half made of brick (figure 40/41) built in 1828. The Essex Records Office⁹⁶ has a record of planning permission in 1895 by the then owner, H. Foster (appendix eight). The record viewed does not go into details of the extension.

Figure 40: Fanners' cottage: left the 1828 extension, and right the original wooden structure.

⁹⁶"Records office," Gov.uk.
https://secureweb1.essexcc.gov.uk/SeaxPAM2012/result_details.aspx?ThisRecordsOffset=3&id=75666 (assessed, May 27, 2013).

Figure 41: Fanners' from drive. The site is directly underneath the chimney

Owners of the Property

Not all the owners of the house are documented. The current owners are the Kipping family; they are also the finders of the cache site. The family has lived in the property for about 40 years and have completed many renovations of the property, changing the layout of the ground floor and plastering walls on the first floor.

The previous owners, names unknown, may have worked in the timber trade. Their housekeeper still lived in the village at the time of the current owners but died before they could talk to her.

Censuses from 1911 to 1851⁹⁷ recorded that the Fosters lived in Fanners cottage and farm (the original says Fanners farm but has been digitised as 'Farmers farm').

The Foster family appear in photographs taken in South Africa⁹⁸ in the mid 1800's and were therefore well travelled. It is quite possible that they concealed the objects.

⁹⁷ "Census," ancestry.com (assessed May 28, 2013).

Provenance of Site

The Kippings said that there was record the house was at onetime alehouse⁹⁹; fixtures of the house support this. On an 1896 map of Essex¹⁰⁰ (figure 42) an inn is marked.

Figure 42: Fanners house identified as an inn on 1896 map, blue arrow.

The earliest date of the house is unknown but the house appears on maps through the years. The earliest is:

'The map I was trying to find was Chapman and Andre's Atlas of Essex, 1777, the first large-scale (2-inch or 1:31,680) map of the county comprising 25 sheets. As 'Fanners' appears on the map, its inclusion gives proof of some kind of building being on the site by the time of publication. It remains unproven when it was actually built.'¹⁰¹

In 1975 the building, was listed by English Heritage¹⁰² for its historical significance (appendix nine).

⁹⁸ Ancestry.com (assessed May 28, 2013).

⁹⁹ According to the current owner of the house but he could not remember where the source was from.

¹⁰⁰ "National Archives," Gov.UK, <http://www.nationalarchives.gov.uk/imagelibrary/> (assessed May 28, 2013).

¹⁰¹ Email conversation with Mr. Kipping dated May 21, 2013.

¹⁰² "Listing status," English Heritage, <http://list.english-heritage.org.uk/resultsingle.aspx?uid=1122120> (assessed May 24, 2013).

Description of Excavation Site

The site is located in the centre of the building (figure 43/44/45), the cache was in a void in the structure of the building, found on the first floor behind the curved landing wall to the right of the stairs. Possibly a void created when the building was extended, then filled as with other DCG.

Figure 43: the site is located directly underneath the chimney

Figure 44: floor plan on the house. The X marks the cache site.

Figure 45: the cache site seen from each adjoining wall. The site is now inaccessible because of new plastering work.

- A. The curved wall behind the clock conceals the site.
- B. The cupboard behind the curved wall where the excavation took place.
- C. The cupboard in the bedroom backing onto the cupboard seen in B. This cupboard contained a small hole, through which the finders felt the toys found were inserted.

A.

B.

C.

The cache site (figure 45) contained a collection of objects (some of them pictured in figure 46). These included a small ceramic figurine, a broken yellow ceramic vessel, a postcard, a leather shoe, a cat and the 'straw' hat. These objects appeared to the finders to have been placed in the void during construction and they noted some plasterwork from building work when found. There was also a collection of toys, which the finders thought to have been pushed into the void through a gap in the cupboard in one of the bedrooms because of their location. These included a jack-in-the-box.

Figure 46: The objects retrieved from the cache site.

- A. Small figurine
- B. Vase found broken in the cache site
- C. Shoe found in cache site
- D. Postcard from cache site

A.

B.

C.

D.

Excavation

The finders pulled out what they could by hand then used fishing lines to retrieve the rest. The hat was placed at the bottom of the cache site therefore it was retrieved with the fishing line. Visibility was restricted and they did not know what they were retrieving.

Figure 47: Photograph of the object after excavation taken by the finder © LWPM

Documentation of the Finding of the Object

The finders found the site after renovation work plastering the wall. They expressed their excitement in finding the object and the fact that, after finding one, they kept finding more. One person was in the cupboard in the bedroom and the other pulled out objects through the top of the hall cupboard.

When asked why they thought the objects were hidden they supposed it was builders but hadn't thought much about it.

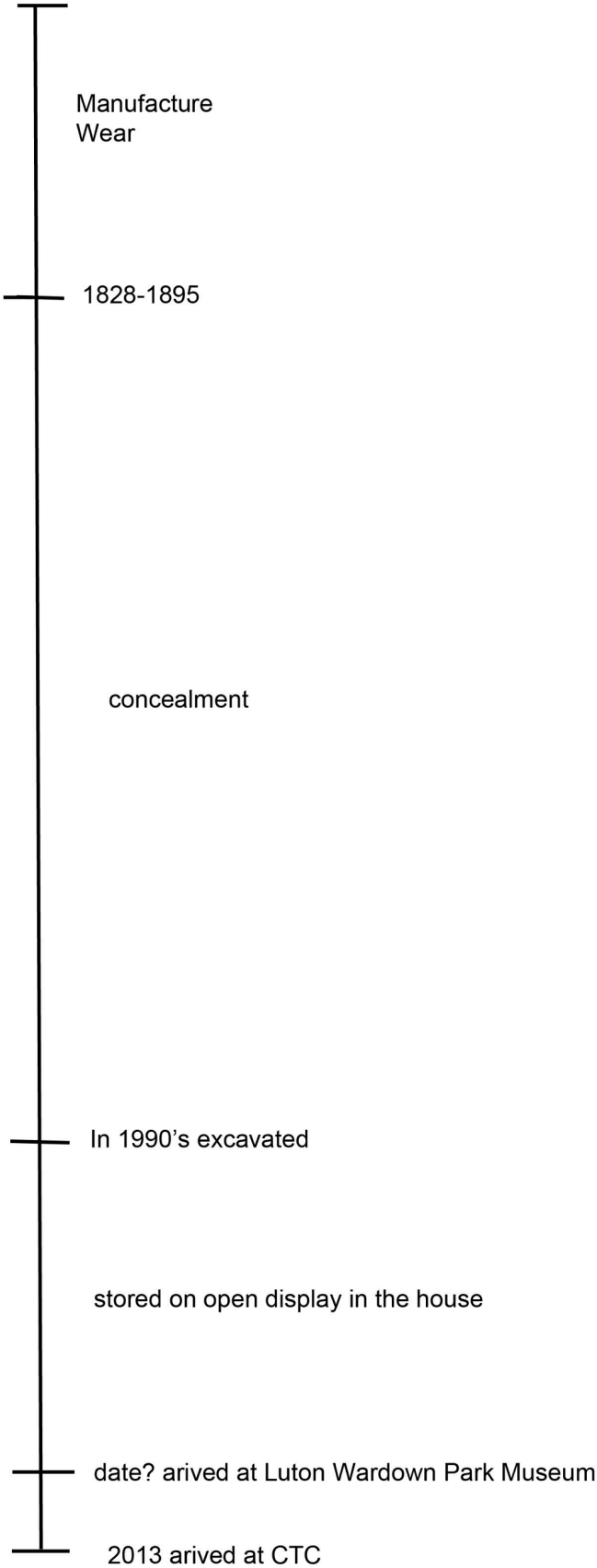
Interesting they had differing reactions to the objects found. Another cache site found in the building contained a copy of the Chelmsford Chronicle newspaper, reporting of a Queen's funeral. They felt it was important to replace these in the wall, as a time capsule, with a copy of the Times newspaper of princess Diana's funeral and a note explaining what they had found and added. They kept some objects, donated the hat to LWP museum and disposed of others depending on what they felt was of value or whether they should not leave the house. For example, they felt the figurine should not leave the premises.

They kept the hat and the shoe in various places in the house for over 15 years. The interview occurred some time after the excavation and it was a process of recollection. Thus the emotions recalled of finding the objects were not as vibrant and not expressed with as much enthusiasm as if fresh.

Conclusion

It was intended to tape-record the finders' views and feelings but this was not felt appropriate at the time of the visit. The visit was informal and a range of information was covered. It was considered that more was to be gained than if it were recorded. The finders are really interested in finding out more about the objects and are active in researching into the history of their house. For them the objects were not seen as precious, as they would have been if they were in a museum, and this helped with understanding more about the hat. The information gained about the house indicates that the object can be dated to before the mid-1800s. This information has been combined to create the object's timeline (figure 48). The information gained about the hat, e.g. that it was a lot paler when found, and that they thought a lot of the damage had been from the excavation itself will be useful when identifying the causes of damage and the treatment proposal.

Figure 48: Object's timeline



Chapter Six: Condition Report

Introduction

Progressive data is used to identify the different aspects of the object's condition, from the soiling and stains to distortions and loss. It is important to document the object in this condition before conservation. 'Before any intervention, the conservation professional should make a thorough examination of the cultural property.'¹⁰³ Interventive treatment could lead to some loss of information. The report will record the object's life stages to date. Duffield's¹⁰⁴ research into identifying the causes of condition of DCG and if this will get worse over time will be followed, This will inform the object's true nature (chapter seven) and the treatment proposed (chapter eight).

Aim:

To identify the condition of the hat, what caused it and at what stage of the object's life this happened.

Objectives:

- To use visual and microscope examination to identify the condition and the causes of the condition.
- To use Duffield's¹⁰⁵ work to identify the causes.
- To compare the damage to that on past photographs of the object to identify when the damage occurred.
- To plot this on the lifeline graph to help identify at what stage the damage occurred.

Methodology

The report will be split into sections for ease of understanding: soiling and discolouration, creasing and distortions, weakness, and loss. In some sections the outer plant fibre structure of the hat will be documented separately to the lining.

¹⁰³ AIC.

¹⁰⁴ Duffield.

¹⁰⁵ Duffield.

Condition report

Overview of Condition

The object is very fragile. The fibres are brittle and easily damaged and very heavily soiled and discoloured.

Condition Details

Soiling

On both plant fibre and the silk are large quantities of ingrained soiling and particulate soiling.

Visual Examination

Where the fibres have broken their original colour can be seen showing the extent of the soiling. Soiling that lifts off when the object moves, even slightly, demonstrating dark particulate soiling and dust.

Microscope Examination

There are two types of soiling: a dark finer soiling that is more ingrained and adhered to the fibre (figure 49) and dusty particulate soiling that sits on the object (figure 50).

Figure 49: microscope picture of silk fibre at x40 magnification in polarized light. The extent of soiling adhered to the fibres is clear.

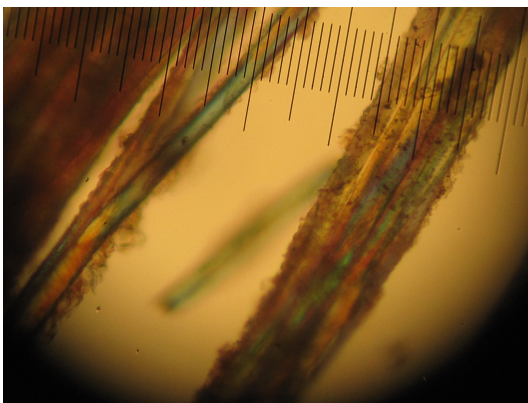
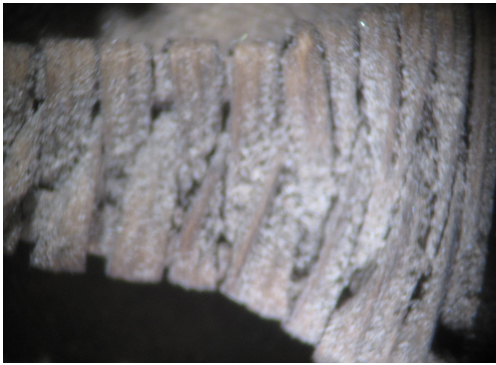


Figure 50: stereomicroscope image of particulate soiling.



The Cause of Soiling

The most ingrained soiling looks to be from the concealment because smaller particles adhere to the fibres themselves and look to be from building and products of concealment than from open display. The dusty soiling is most likely from 20 years of open display. The finders mentioned that the hat was brighter when they excavated it (figure 51). This could either be because of the accumulation of dust over the years or from exposure during open display. In the uncontrolled home environment it would have been exposed to fluctuating relative humidity. This would have caused the soiling from concealment and the dust post excavation to become ingrained. The fibres may have naturally darkened in a photochemical reaction common in cellulose.

Figure 51: photograph left, hat, taken by the finder after excavation. The dusty soiling is not as prolific as the photograph taken at CTC but the ingrained soiling and the stains are still present and therefore from the concealment. © LWPM, © CTC

Soiling adhered to the object will cause the fibres to split; with different relative humidities the soiling will expand pushing apart the fibres. This soiling is also abrasive causing damage to the fibres¹⁰⁶.

The particulate and dusty soiling could become ingrained and cause damage to the object. The hygroscopic nature of the dust could attract water leading to mould growth.¹⁰⁷

There are large quantities of large dust particles trapped between the plant construction and the lining. This is very noticeable on the sides of the crown (figure 52). On close examination it looks to consist of feathers, seeds, cobwebs, muddy soiling and fluff (figure 52). This has strongly adhered to the fibres and is pushing the lining from the outer construction. This soiling looks to be from the concealment because it has accumulated over a long period of time, and the extent, position and type of soiling is unlikely to have accumulated on open display.

Figure 52: large amount of soiling trapped in the construction showing cobwebs and feathers etc.



¹⁰⁶ Ágnes Tímár-Balázs and Dinah Eastop, *Chemical Principles of Textile Conservation*, (Oxford: Butterworth-Heinemann, 1998). 158.

¹⁰⁷ Museums and galleries commission, *Science for Conservators: Cleaning*, (London: Routledge, 1992). 14.

This soiling is food for pests and will attract them to the object. The soiling could become further ingrained. The muddy/dark soiling is disfiguring, making the fibres very brittle and could damage the construction of the object, eventually causing loss. Removing the soiling adhered to the object may further damage to the fibres¹⁰⁸; this has to be considered when deciding to clean the object. This soiling, on the photographs taken by the finder, appears a lot darker (figure 53); this photograph was taken after excavation and therefore shows the colour of the soiling before the accumulation of dust from open display.

Figure 53: photograph taken by finder on excavation, soiling is a different colour to present.

© LWPM

Discolouration and Stains

Plant fibre construction:

Overall the object is discoloured from ingrained soiling, which could have caused acid hydrolysis discolouring the fibres¹⁰⁹, more so on the side where there is loss on the lining. Many of the stains match the stains on the lining.

These look to be liquid stains (figure 54), appearing to be from concealment because they are present on the excavation photographs. In these areas the soiling is greater possibly because the liquid helps the soiling stick. In the stained areas, the outer

¹⁰⁸ Tímár-Balázs and Eastop, 157.

¹⁰⁹ Tímár-Balázs and Eastop, 158.

edge decoration seems to be more intact. This may be because the substance has caused the fibres to stiffen.

Figure 54: stain visible near the loss in the lining.



© CTC

There are apparent bird droppings noticeable on the crown and on the lining (figure 56). This is likely from concealment because it is present on the photographs taken after excavation (figure 55). The droppings are acidic and therefore damaging to the fibres, they are also stiffening and could cause the fibres to break.

Figure 55: taken by finder after excavation. There is more of white 'bird dropping' soiling present © LWPM



The white liquid drops could be the plaster from the cache site (figure 56). These are also noticeable on the lining. It is hard to differentiate between the plaster and bird droppings. The finder mentioned noticing plaster on the hat when it was found and there may have been more.

Figure 56: the crown (A) and the lace near the area of loss in the lining (B) where either plaster or bird dropping has adhered



A



B

© CTC

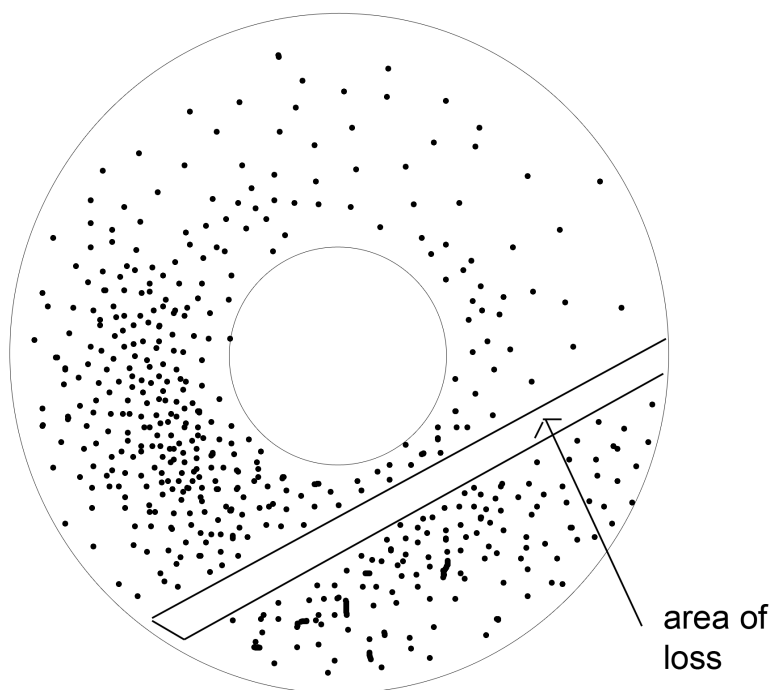
The Lining:

From the top, the lining is discoloured with soiling. It looks also to have water/liquid stains because of the visible tide lines. These all look to be from concealment and match the stains on the plant fibres.

The lining looks to be blotchy and this could be from mould while concealed because of the damp environment. The soiling could also attract mould¹¹⁰.

The underside of the lining has a very uneven colour with many stains. Speckles of mould stains are found all over and are concentrated one side (Figure 57). These could be from concealment. Mould has caused stains on the fabric.

Figure 57: diagram of concentration of mould.



Dark brown stains could be from liquid dropped onto it (figure 58). The long white stain looks to be bird droppings from concealment. These would be acidic if bird droppings and therefore damaging¹¹¹.

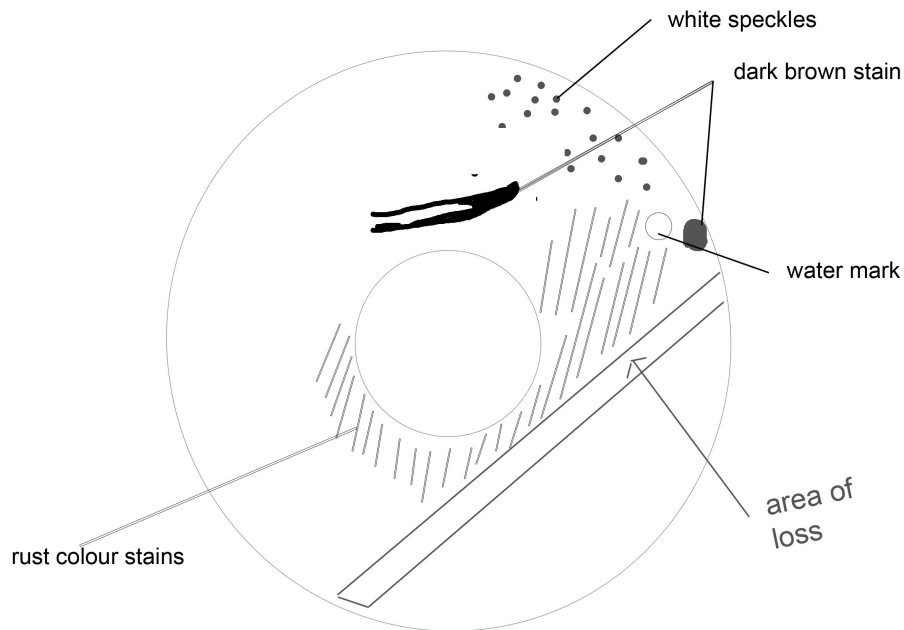
¹¹⁰ Museums and galleries commission, 14.

¹¹¹ Tímár-Balázs and Eastop, 158.

Brown coloured stains could be watermarks from concealment in a damp environment (figure 58).

White speckles (figure 58) could be from plaster accumulating during concealment. These are stiffening and could cause the fibre to break.

Figure 58: diagram of stains



The inside top edge of the crown is glossy this could be from being worn. There are no other stains suggesting wear.

Creasing and Distortions

Plant Fibre Structure:

The brim of the hat does not lie flat, caused by the fibres drying and curling. The joints have broken because of the distortions; this could worsen. Images taken by the finder (figure 59) show that the brim was not lying flat just after excavation. It is hard to identify the extent of the distortions in the photographs although these may have worsened after excavation when it was stored in an uncontrolled environment in the house.

Figure 59: photograph taken by the finder after excavation © LWPM

The crown of the hat has been crushed causing reduction in the height of the crown (figure 60). This looks to have occurred prior to the museum (figure 59). The image taken just after excavation shows that the crown was crushed at this point and may have happened any time from concealment to excavation. It could have become more crushed when transported from the museum; there are differences in dimensions recoded at CTC and LWPM but it is hard to identify from photographs, (figure 60/61).

Figure 60: Photographs of the hat taken on acquisition at LWPM. A, side view, B, viewed from top © LWPM

A

B

Figure 61: side of the hat taken on arrival at CTC. It is apparent that the hat's crown is crushed more on one side © CTC



This crushing has caused some fibres to bend inwards, some to fold outward and some joins to split. Some of the split joins are clean in comparison to others and it could be deduced that these occurred later, e.g. during the excavation (figure 62); whereas those with the same amount of soiling as the rest of the hat could have split before or during concealment.

Figure 62: breaks in joins. The left has more soiling than the right.



The crown is very fragile and could get worse with the slightest weight or pressure applied to the top. This in turn would damage the lining.

The lining documented from underneath:

The fabric undulates with the construction of the hat and is stiff holding it staying in position. The zigzag pattern of the plant fibre is imprinted on the lining.

Around the areas of loss the fabric is creased. These could crack because the weight of the object is on them. In the creased areas of the lining the soiling does not match and therefore these have occurred after soiling. This suggests that this creasing happened after excavation.

The fabric in the crown is creased because the plant fibre construction has collapsed. These are sharp and are more likely to deteriorate because of their severity.

Weakness and Loss

The Plant Fibre Construction:

The fibres are brittle and crumble easily. The lace design is weak and much has broken, has become unattached, and lost (figure 63/64). Microscope examination shows how fragile the knots and folds are. This could be from age or from dryness causing the fibres to crack. There are large areas of loss in the lace design and the plant fibre construction.

Figure 63: diagram of areas of loss on plant fibre construction

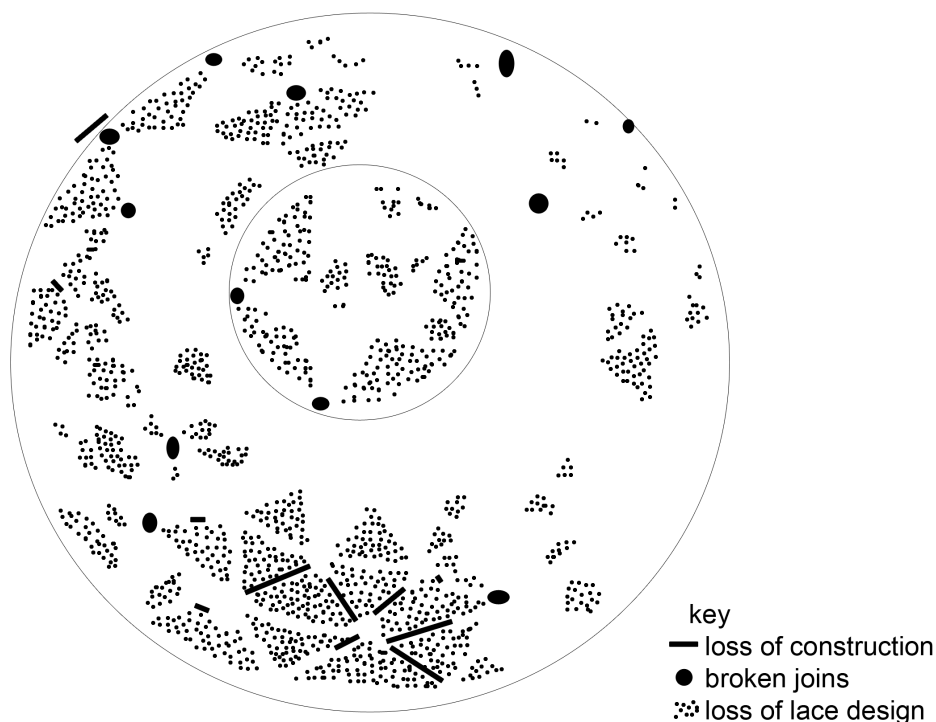


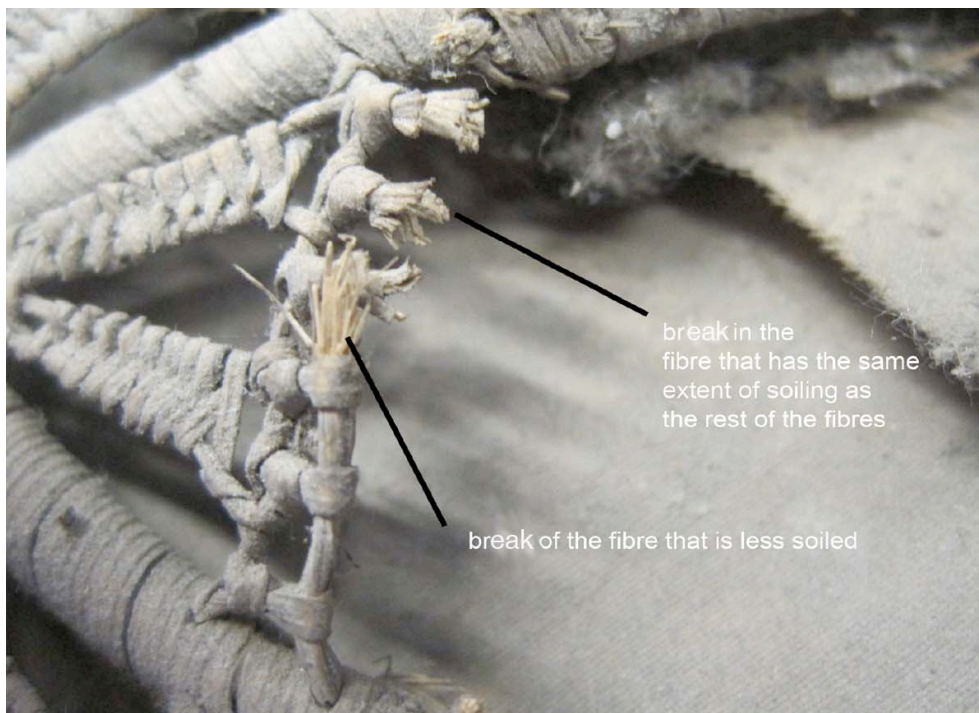
Figure 64: diagram of loss from edge of crown



Many of the breaks have less soiling and so may have broken after or during excavation (figure 64). The images taken after excavation appear to show less loss to the lace areas than now. The loss in the construction seems to be the same.

Many of the joins of the construction have broken and snapped (figure 65), possibly because of storage in an uncontrolled environment, making the fibres brittle and, along with the manufacturing tension, causing the fibres to break. These joins are very fragile and could break further.

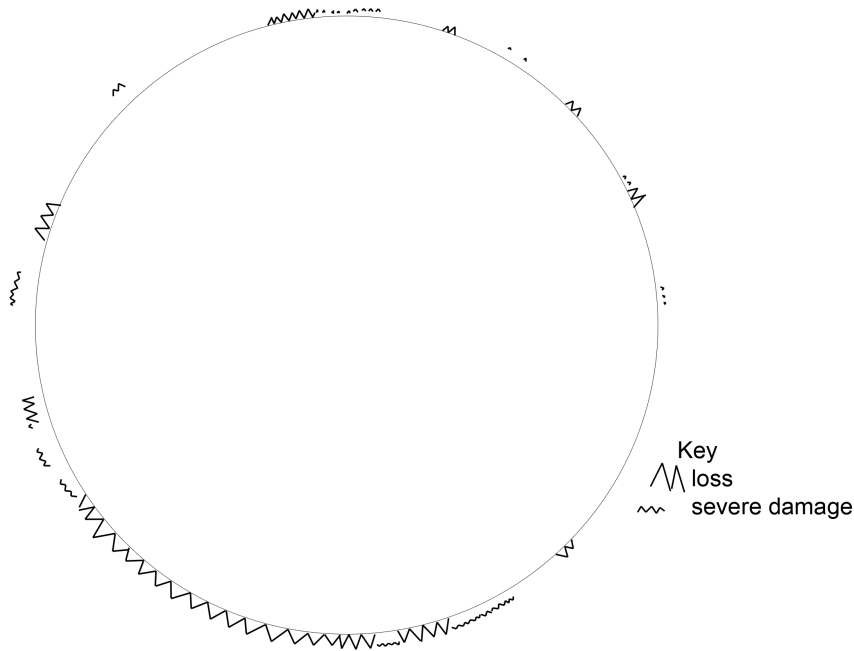
Figure 65: breaks in the fibres, colour changes indicate when it occurred



The decoration around the edge of the brim has some damage (figure 66). Some of this damage could be from wear because the breaks in the fibres have the same general level of soiling and these areas are vulnerable to being knocked when worn.

Some damage has little soiling in comparison, so may have occurred post excavation.

Figure 66: damage and loss to edge. Most of edging decoration is damaged. The worst is identified.



Lining Documented From the Underside:

Overall the fabric is brittle and the fibres are friable because the fabric has become stiff with soiling.

There is a large area of loss along one side. This could get worse because the edges are liable being caught and ripping when handled. The edges of loss do not have as much soiling on exposed fibres (figure 67), which suggests they could have happened during excavation.

Figure 67: large area of loss. The revealed fibres are less soiled.



In the images taken by the finder the area of loss still have fabric attached (figure 68), therefore this piece of fabric has been lost after excavation and before arrival at the museum.

Figure 68: photograph taken by finder after excavation showing fabric attached in large area of loss © LWPM

Loss in the seam stitching has caused the fabric to catch and rip. There are more small tears throughout the lining (diagram 69). The ripping could have happened during excavation. Duffield's¹¹² dissertation on the identification of damage on such objects states that deliberate damage before concealment are impact bulbous tears, scissor cuts which are pinched and knife cuts which have flat tops. The tears resemble the last two categories but the excavation, with a fishing line, could produce similar tears. The soiling on the tears is considerably less than the rest of the fabric making it more likely post concealment.

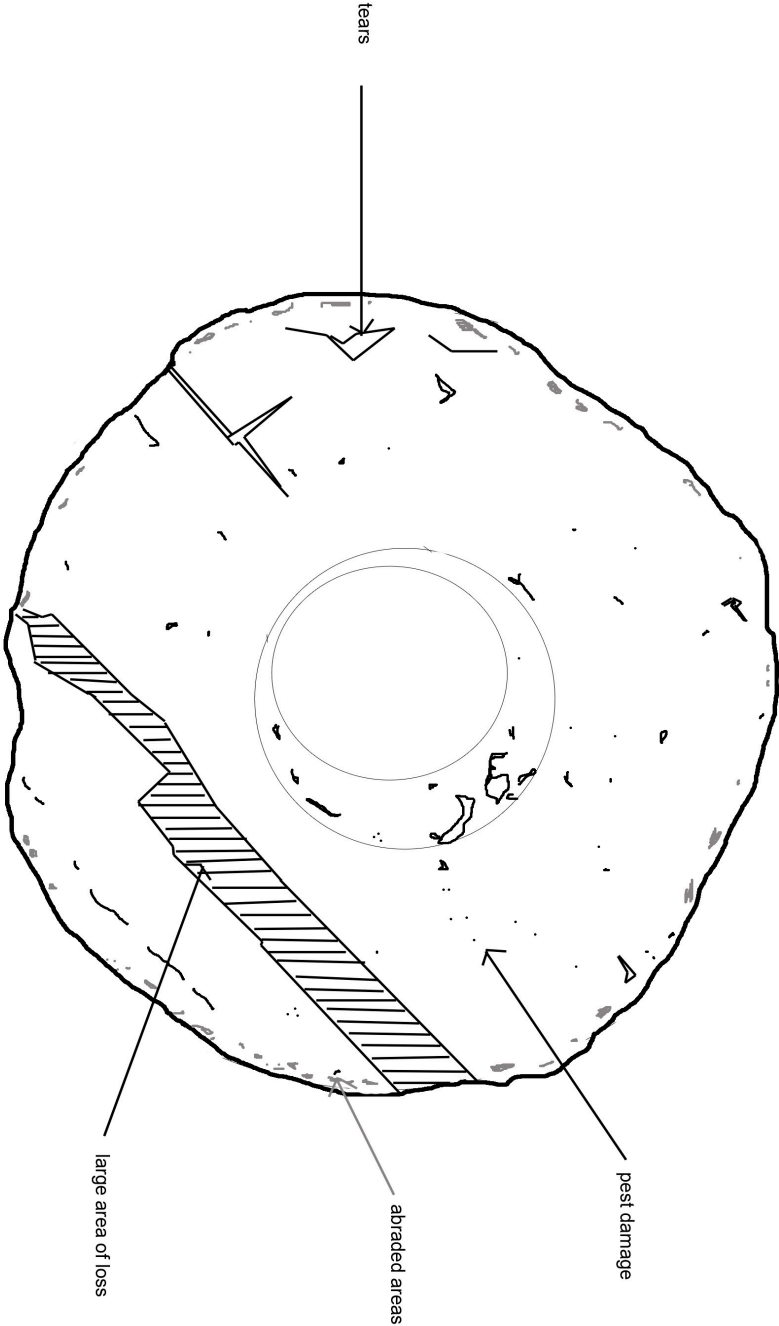
There are small holes throughout the lining. These could be caused by pest damage during and after concealment while on open display. See diagrams. However there is no other evidence of pests.

The abrasion around the edge of the brim, the edge of the crown, and on the rings of the construction look to have been caused by rubbing and could be from wear. The abrasion has caused areas of loss. Over the hems the lower layer of fabric is revealed. This fabric has the same level of soiling as the rest of the lining so this damage may have occurred before concealment.

¹¹² Duffield.

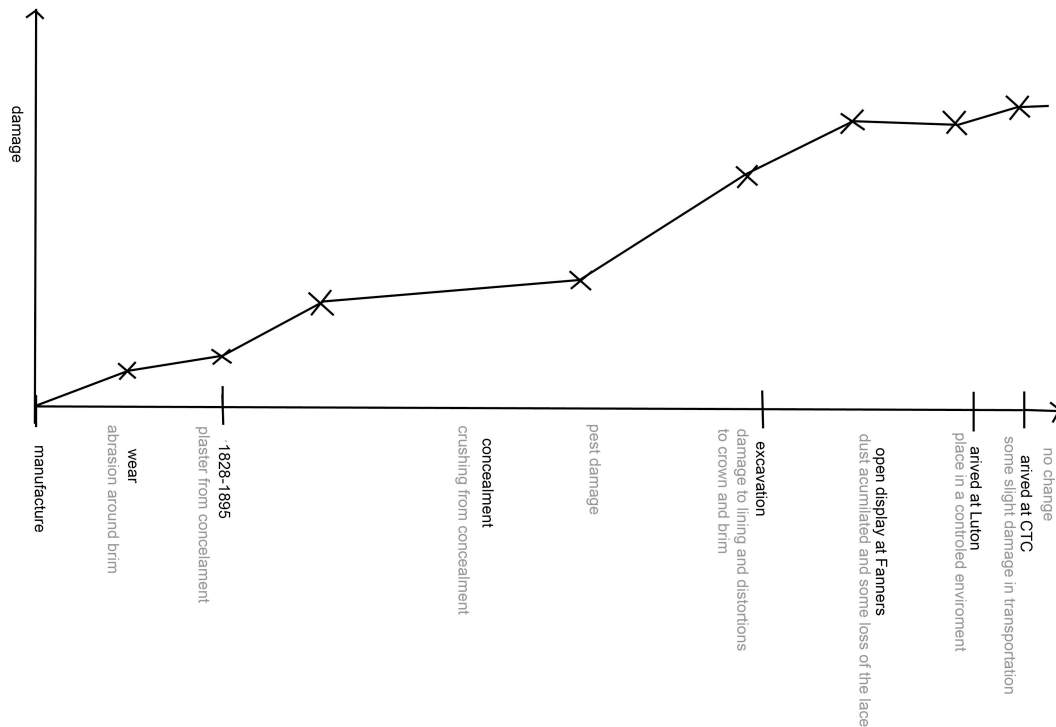
In the crown has some loss of lining (figure 69). This roughly follows the zigzag pattern of the plant fibre. The fabric in this area is fragile and fragments may fall off. This may also be from wear because it follows the zigzag pattern.

Figure 69: diagram of the loss on the lining



Conditions Relation to the Life Stages

Figure 70: material aging graph



The unlabelled point indicates settling during concealment.

Conclusion

The condition of the hat has been recorded in enough detail to inform the treatment. The hat is very fragile and the soiling occurred at three main life stages. The uses and wear, the concealment and while on open display. It is revealing how much soiling and damage had occurred after the concealment or during the excavation. These results plotted on the lifeline graph (figure 70) will be influential to the treatment proposal. The damage and soiling could cause misinterpretation of the hat.

Incomplete photographic and written records of the hat meant that identifying the causes of the condition and at what stage they occurred was imprecise. This identification was made through detailed microscope, visual and literature examination. There is an element of subjectivity in identifying at what stage each small fragment was lost.

Chapter Seven: Assessment of Significance

Introduction

Aim: to identify the object's ideal state, the point in the object's life that has the most significance and its value. This will be achieved by exploring the different forms of value and significance, following the framework in *A Guide to Significance*¹¹³ to document the object's true nature.

Identifying Different Sources of Value

Following Kopytoff's object biographies and Appelbaum's object's timeline and material aging graph has given a clear view of the object and its life stages (chapters four and six). Now it is important to identify the stage or stages that have the most value and significance. 'Significance means the historic, aesthetic, scientific and social values that an object or collection has for past, present and future generations'.¹¹⁴ This assessment of significance suggests that it is important to know the value of the object to all those with a vested interest, past and future. Significance is not just the materials of the object's appearance but also 'its context, history, uses and its social and spiritual value.'¹¹⁵ Clearly many factors influence the significance of the object. Thompson's *Rubbish Theory* says 'people of different cultures may value different things, and they may value the same thing differently.'¹¹⁶

Thompson studies how an object's value changes over time. Some objects have a consistent value and some have a decreasing value. That which has been thrown has lost its value for that person. In the hat's case, the concealed hat was considered significant by the hiders in hiding the object and then significant enough by the finders to bring to a museum: does this then mean that past, present and possibly future all value this stage of the object's life?

The *Guide to Assessing Significance*¹¹⁷ states that there are nine stages. These are:

¹¹³ Roslyn Russle and Kylie Winkworth, *Significance 2.0: a Guide to assessing the significance of collections*, (Australia: collections council of australia Ltd, 2009).

¹¹⁴ Russle and Winkworth, 10.

¹¹⁵ Russle and Winkworth, 10.

¹¹⁶ Michael Thompson, *Rubbish Theory: the creation and Destruction of value*, (Oxford: Oxford University Press, 1979). 2

¹¹⁷ Russle and Winkworth, 23.

- Collate: collect information on the history of the object and the object itself
- Research: provenance, manufacture etc.
- Consult: donors, owners and experts
- Explore: wider context of the object
- Analysis: fabric and condition
- Compare: similar items
- Identity: places the item is related to, people etc.
- Assess: against criteria, cultural, historic, artistic, aesthetic etc.
- Write a statement summarising findings

The first seven stages have been documented in the object record, cache site report and condition report. Information documented on the timeline needs to be assessed against Appelbaum's¹¹⁸ criteria:

- Artistic
- Historic: information about the object, outside of the object.
- Aesthetic
- Educational
- Research: not just its appearance, but as a scientific specimen.
- Age
- Newness
- Sentimental: views of owners.
- Monetary: this is not static.
- Associative
- Commemoratives
- Rarity: based on human judgement. Objects with 'substantial cultural value'¹¹⁹. Intensifies other values.
- Use: 'change in physical state, even severe loss, does not always imply a major loss in value'¹²⁰

¹¹⁸ Appelbaum, 91.

¹¹⁹ Appelbaum, 114.

¹²⁰ Appelbaum, 116.

Identifying the Object's Significance

These criteria will make it possible to state the significance of the object. This involves the key point of the condition graph, life stages, views of people with a vested interest and the future of the object to identify its true nature.

Artistic

The hat is skilfully and beautifully created. The hat is not the usual 'straw' hat and is delicate in style and form. Therefore it has value for its artistic qualities and craftsmanship involved in its manufacture. The consumer may have valued the object for its artistic qualities, as the museum visitor and researcher may today.

Historic: information about the object, outside of the object.

Historically the object has significance. This is linked to associative value and rarity. The hat is one of the few hats of this rare construction, which have links to royalty. The concealment sheds light on an historic tradition and is an example of historic dress. The museum values it for its historic significance.

Aesthetic

Although the hat is beautifully created the aesthetic significance of the of the hat is hindered by the condition caused by the concealment and from being on open display. Researchers into historical dress may find the condition damaging to the significance of the object, whereas a researcher into concealed objects will identify the condition from concealment as essential to the significance of the object. These are contradictory.

Educational

The hat is educational about the history of costume and of people's spiritual beliefs.

Research

Research is linked to aesthetics, use and cultural significance. The aesthetic significance could be valued by different people, in different conditions and at different stages of the object's life. This is contradictory and will be influential when deciding the ideal state. The object will provide interest for research in the concealed

state, the original state and the state when it was used; each of these will be valued by different stakeholders. The hat has research significance for the curator of LWPM.

Scientific

The object is unlikely to be of scientific significance. It is conceivable that evidence may be gained about past environments. There may be interest in the past owners; scientific research may investigate the wearer's DNA, for example. It is therefore important that the ideal state does not eradicate possibilities for future scientific research.

Age

The hat is significant because of its age. The hat therefore is also important for research and historical significance. The hat, because of its age, is also linked to rarity. The condition is a good representation of the age of the object and therefore to bringing it back to a state in the object's life such as manufacture would destroy the significance of age. However the condition of the object is causing the object to deteriorate further. There is a balance to be found between stabilising the object and restoration.

Newness

The hat is not significant for its newness.

Sentimental: views of owners.

The original owners of the hat must have felt the object to have sentimental significance to conceal it in the building. The finders viewed the hat to have sentimental significance because they kept it for twenty years, developing an attachment to the object and its story.

Monetary

Monetary value could be attached to rarity. In the past it may have had less monetary significance than for the present day.

Associative

The hat is associated with hats that have a royal connection, therefore the style of hat is of significance, this association therefore creates significance. The association with past owners of the hat could create historical and research significance for the hat.

Commemorative

Not applicable

Rarity

As of yet only four other hats of this kind are known to exist, this is the only one with its original lining, which means that it is also of research significance. A hat of this type and age is very rare. This specific hat is the only one of this type that was concealed and is one of a handful of objects that have been concealed in buildings. The hat is valued for its rarity by many different people such as historical researchers and the general public. The present owner and the finders also valued the rarity of the object and it is likely to be valued for this in the future.

Use

The evidence of wear could be seen as significant to historians and researchers. This also adds to the story of the object and therefore its significance. This is likely to be valued in the future as well as the present. When the object was concealed in the building its use and function changed from an item of clothing to a ward against spirits (spiritual significance.)

Spiritual

The hidens of the cache valued the hat for spiritual and superstitious reasons. The finders saw this as significant because they kept the hat. The present owner feels the concealment has significance to the object's story and therefore the evidence of the concealment is significant.

Cultural

The hat could be seen of cultural significance to the origin of the manufacturing as part of heritage. The hat is of cultural significance for historians because it represents part of the history fashion in this country. The hat is also of cultural significance for its concealment because it provides an insight into past (possibly present) superstitious practices.

Statement of Significance

The concealment of the hat plays an important role in its historical, research, spiritual, cultural, aesthetic significance. The hat as a rare item of clothing and is of cultural, age, use, research, rarity and historical significance. All of these are of sentimental significance.

Conclusion

The hat does not have one ideal state. For the future it is important that none of the possible aspects of significance for research, historical, age and science are removed, although some of this information is contradictory. This will be explored in the treatment proposal. It is important to note that the condition caused by open display in the house or during excavation is not seen as significant and this will effect the treatment proposed.

Chapter Eight: Treatment Proposal

Introduction

The true nature of the object is from concealment and from manufacture and wear. The damage from the excavation and the soiling while on open display detracts from the significance of the object.

Aim: to present a conservation treatment proposal that is feasible, fulfils the wishes of the client, does not effect the possible future uses of the object, and has the protection of the object at the centre of the treatment.

Objectives:

- To identify the future role of the object
- To identify the complications of conserving an object with multiple ideal states
- To identify the treatment parameters
- To identify the most appropriate treatment option for this object

Client's Brief

The client would like to put the hat on display. The report will influence the length of time on display and the conservation work undertaken.

Role of the Object

The object role is as a rare object of historical dress and as an object that has been concealed in a building.

The hat has more than one true nature. The contradictory needs of maintaining the evidence, 'Soiling, damage, repairs and alterations may all be valuable evidence, concealing or revealing information about the history of a textile,'¹²¹ have to be taken into account to retain the significance but not damage the object further. The dusty soiling is thought to be from when the object was on open display, this soiling is not seen as evidential to the significance and true nature of the object. Cleaning cannot be reversed, 'If we agree that cleaning is an irreversible process and results in the permanent alteration of an artifact, the conservator's task is to determine whether a

¹²¹ Mary Brooks, "Textiles Revealed Object-based Research," in *Textile Revealed: Object Lessons in Historic Textiles and Costume Research*, Ed. Mary Brooks, (London: Archetype, 2000) 2.

cleaning treatment is advisable.¹²² The fibres are very fragile and surface cleaning could cause loss with excess mechanical action and abrasion of brushes along with the suction. This soiling is causing misinterpretation of the object because it hides the evidential soiling. The dusty soiling could become ingrained and damage the object. For this reason an option is to remove this soiling because it sits on the surface whereas the evidential soiling is more ingrained. With light suction and minimal brushing and regular reassessment it may be possible just to remove the top layer of dust. 'Although cleaning is an irreversible process, it is common practice because the benefits of the cleaning are usually considered to outweigh any drawback.'¹²³ The same decisions need to be made about the creases and distortions; 'creases fall into four categories, those which occurred during and result of the use of the object those caused by the disposition of the object during preservation, and those occurring in its storage since discovery.'¹²⁴ It was harder to identify exactly when each crease occurred so the decision to remove these creases is unclear. It is important to only remove creases where it is clear that they are not evidential to the true nature.

The future of the object is to go on display for, at this time, an unknown period and it is fragile; this will also effect the treatment proposed.

Treatment Parameters

The treatment will need to be carried out by a textile conservator.

¹²² Deborah Trupin, 'To Clean or Not To Clean? Decision Making For Textile Wet Cleaning,' in *AIC Textile Speciality Group Postprints*, 38-49, (Washington: The Institute, 1995) 39.

¹²³ Dinah Eastop and Mary Brooks, 'To Clean or Not to Clean: The Value of Soils and Creases,' in *ICOM Committee for Conservation* (London: James & James LTD. 1996) 687.

¹²⁴ Bill Cooke, 'Creasing in Ancient Textiles,' in *Conservation News No.35* 1988, 27.

Treatment Proposal Options

Option One: a minimal approach

“Wherever possible, deterioration should be inhibited or arrested through preventive measures rather than through treatment that alters the artifact”.¹²⁵ The aim of this treatment is to retain all evidence of all the life stages of the object but the object will still be in a fragile condition and therefore short term display is advised. The soiling and damage retained as evidence on the object will continue to cause the object to degrade.

- To make a mount that will support the object while on display and in storage and will aid handling the object safely.
- No remedial work will be done.
- Will have to be stored in a controlled environment as a preventive measure to slow down the rate of deterioration.

Option Two: a low interventive treatment to retain significant soiling and damage.

This option will retain evidential evidence and remove that which is distracting from the evidential condition and the construction of the hat. The object will still be fragile but will be more stable because it will retain some of the damaging soiling. This option allows the object to be displayed for longer periods.

- Surface clean¹²⁶ very lightly to remove the dusty soiling from when the object was on open display with light vacuum suction and minimal brushing¹²⁷. This will be kept for future analysis and stored with the object.
- To support the areas of loss identified as being caused by the excavation or open display.¹²⁸ Not all of the breaks will be supported because some are from the concealment and therefore evidential and will be left. Japanese tissue paper in small strips could support the areas of weakness.¹²⁹ (Such a method would require testing and consultation with a paper or objects conservator.

¹²⁵ Florian et al. 196.

¹²⁶ Sheila Landi, *The Textile Conservator's Manual* (Oxford, Butterworth-Heinemann, 1992) 80.

¹²⁷ Chapter six condition report: causes of soiling.

¹²⁸ Chapter six condition report: weakness and loss.

¹²⁹ Florian et al. 287-292.

- Support the textile so that the damage from wear on the crown is still visible using a semi transparent fabric to stop further loss and support the fragile areas.
- Make a padded mount for display, storage and easier handling¹³⁰.

Option Three: an interventive treatment. This treatment will aim to retain evidential soiling and damage and support the very damaged areas in an interventive way to stabilize the whole object. This means the object could be displayed for longer in a controlled environment but the treatment would be invasive and might cause more damage to the object.

- Surface clean with a very light suction to remove the dust from open display in the house. This will be stored with the object.
- Support the structure of the hat by inserting a splint¹³¹ into the broken sections to take the weight of these areas from these broken parts but retaining the shape of the damaged area. Only undertake after significant testing.
- Support the areas of weakness in the fibre as with option two
- Support the fabric lining as with option two.
- Make a mount to support the object during display, storage and to help handling.

Estimates

Option one: 22-31 hours

Option two: 90-110 hours

Option three: 122-144 hours

For the breakdown of the estimates please see the appendix.

Recommendation for Future Care

The mount will play an important role in protecting the object while on display, storage and handling. The object is very fragile and the fibres are very brittle and it is recommended that handling is kept to a minimum because the slightest movement causes loss. While on display the object needs constant monitoring and needs to be

¹³⁰ Florian et al. 203.

¹³¹ Florian et al. 248.

stored in a controlled environment. It is recommended that a box is made for the object for storage with room for the brim to lie to its full extent and with enough room for the crown. This box can also be used, if made with extra support and padding, for example ether foam shape support, for the transportation of the hat back to Luton. The length of time on display depends on the treatment option. The most interventive treatment would afford more time (3 years monitored¹³²) on display but does not follow the very minimal interventive (6 months) archaeological approach to the conservation.

With all the options a certain amount of soiling is to be retained on the object. This soiling, such as the feathers from the concealment, is food for pests. It will be important to have an active pest-monitoring plan and to follow it to prevent damage to this or any other nearby objects.

Conclusion

Eastop states 'Textile conservators are active in prioritizing one history over another. Choices are an inevitable part of textile conservation,'¹³³ these choices made were based on the research but identifying the causes of condition are to some extent subjective. The documentation of these decisions is therefore important to help people in the future understand the justifications.

Treatment option two is recommended because it takes the object back to the true nature without removing evidential damage and soiling which are significant. Option three is recommended for long-term display but it depends on the skills of the conservator and they both depend on testing the conservation methods.

¹³² An estimate based on the amount of damage from 20 years of open display. In a controlled environment with the support and minimal handling the hat could be displayed for three years monitored and reviewed before further display.

¹³³ Dinah Eastop, 'Textile as Multiple and Completing Histories,' in *Textile Revealed: Object Lessons in Historic textiles and Costume Research*, ed. Mary Brooks (London:Archetype, 2000) 26.

Chapter Nine: Conclusion

This study researched the most suitable method for documenting and conserving a hat found concealed in a wall of an 18th Century cottage. Studying documentation methodologies and past treatment methods lead to the creation of a clear format to follow with the aim of identifying the true nature of the object taking into account all the influencing factors such as those with vested interests, the future of the object and the causes of the condition. From the research it can be seen that a basic format can be used as a starting point when documenting an object but this needs to be adapted to the object's specific needs, such as, with this object, a cache site report.

The object record was a large body of information collected from the object and information that was not specific to the object but contributed to the understanding of the object. It revealed that the dimensions have changed since they were recorded at the museum. Through a variety of examination techniques it was possible to say the hat was made from a hemp fibre and that all the different parts of the plant fibre construction were made from the same fibre into a complex construction of lacing, weaving and knotting. It was found that there were no other materials aiding the construction and that the lining was original. The buttonhole style stitches on the hat were similar to a variety of lace that is made throughout Europe, but it was not possible on this evidence alone to say it was European because hemp was produced and used in many places.

Other hats of similar construction were all based on the same ring construction but differed in style and level of craftsmanship.

The cache site report added to the understanding of the hat. Researching into the concealment of garments suggested that the practice of concealment has happened over a long time and possibly carried on from building sacrifices to protect the home, and is possibly still happening today, although little is known why. Studying the location and history of the site, access to the sea and international trade was evident. The house was built in 1750. The past owners of the house were well travelled and were in the house when building works created an extension in 1828. The boundary

of the extension and original house was the site of the cache and it was likely created at this time. The report documented the finders' view of the cache site and how the objects were excavated. It also showed that it was a large cache of a variety of objects and which the owner valued as significant; for this reason they kept the hat in the house on open display for twenty years.

From all the information gathered on the object it was possible to date the manufacturing of the hat to before 1828.

The condition report showed that the object is very fragile; microscope examination showed how delicate the hat was. The condition seems to have been created in three key stages: from use and wear, from concealment and from open display. The last cause of condition was dusty soiling and this damage had cleaner, less soiled, breaks. This damage and soiling was distracting from the evidential soiling from concealment and use. Some of the soiling from the concealment was ingrained into the fibres and the construction and the object could be damaged by its removal. All the information gathered in the condition report, especially the causes of condition, was plotted onto a graph, which was very influential to the treatment proposal.

The assessment of significance also influenced the treatment proposal. All the information from the object record, cache site and condition report was taken into account along with the views of the owner of the object. It was felt that the significance lies at two key stages: the manufacture and use of a rare type of hat for research, historical importance, its age and rarity and the secondly the concealment for the research and importance of a cultural tradition which little is known. The object therefor does not have just one true nature. However the assessment showed that the soiling and damage caused after concealment, from excavation and from open display, were not seen as significant and distracting from the object's true natures.

For this reason the treatment proposed was to try and bring the object back to the condition of the concealment and stabilise it at this stage in order to retain the evidence that was seen as significant. The treatment options vary from a minimal treatment, which followed the idea that it is an archaeological object so all information be preserved, to the option to bring it back to the true nature, but this would be more

interventive and testing would be needed. The future of the object suggests that the latter is more suitable for the purposes of the public's interpretation of the object and stability while on display.

Overall this research has fulfilled its aims and a thorough investigation of the object has led to an informed treatment proposal.

Bibliography

Barbieri, Gabriella. "Memoirs of an 18th Century Stomacher: a Strategy for Documenting the Multiple Object Biographies of a Once Concealed Garment." MA Dissertation, University of Southampton, 2003.

Duffield, Miriam. "Interpreting Evidence of Wear and Deliberate Damage in Four DCG." MA Dissertation, University of Southampton, 2004.

Gibson, Lynn. "The Conservation of Garment Fragments Excavated from a Leicestershire Coal Mine." MA Dissertation, University of London, 1993.

Harrison, A. "The Preparation for Display of an Eighteenth-Century Baby's Cap and Pocket, Found Concealed in a Wall Cavity." MA Dissertation, University of London, 1998.

Hood, Fiona. "The Characterisation and Conservation of a Concealed Hat From Cupar in Fife, Scotland." MA Dissertation, Textile Conservation Centre, University of Southampton, 2002.

Stanton, Susan. "A Seventeenth Century Linen Doublet: The Development of a Strategy for Documentation, Preservation and Display of a Rare Item of Working Dress." MA Dissertation, University of London, 1995.

Appelbaum, Barbara. *Conservation Treatment Methodology*. Oxford: Butterworth-Heinemann, 2007.

Broudy, Eric. *The Book of Looms*. New England, University Press of New England, 1979. 146-147.

Mary Brooks. "Textiles Revealed Object-based Research." In *Textile Revealed: Object Lessons in Historic Textiles and Costume Research*. Ed. Mary Brooks. London: Archetype, 2000.

Brooks, Mary. Lister, Alison. Eastop, Dinah. Bennett, Tarja. "Artefact or Information? Articulation the Conflicts in Conserving Archaeological Textiles." In *Archaeological Conservation and Its Consequences*, IIC Conference. ed. Roy and Smith, 16-21 Copenhagen, 1996.

Cook, Gordon. *Handbook of Textile Fibres*. Watford: Mellow publishing co. ltd, 1959.

Cooke, Bill. 'Creasing in Ancient Textiles.' in *Conservation News No.35*, 1988.

Corfield, Michael. "Conservation records in the Wiltshire Library and Museum Service." In the *Conservator*, 7:1(1983): 5-8.

Corfield, Michael. "Conservation Documentation." In *Manual of Curatorship: A guide to Museum Practice, second edition*. ed. J. Thompson, 229-233. Oxford: Butterworth-Heinemann, 1992.

Cunnington, Willell. and Cunningham, Phillis. *Handbook of English Costume in the 18th Century*. London: Faber and Faber, 1964.

De. Courtais, Georgine. *Woman's Headdress and Styles in England From AD600 to Present Day*. London: BT Batsford Ltd. 1986.

Derrick, Michele. Stulik, Dusan. Landry, James. *Infrared Spectroscopy in Conservation Science*. Los Angeles: Getty Conservation Institute, c1999.

Earnshaw, Pat. *A Dictionary of Lace* (Aylesbury: Shire Publications, 1982).

Earnshaw, Pat. *Needle-Made Laces: Material, Design and Techniques*. London: Ward Lock Limited, 1988.

Eastop, Dinah. "Decision Making in Conservation: Determining the Role of the Artefacts." In *International Perspective on Textile Conservation*. ed. A. Timár-Balázy & D. Eastop. London: Archetype Publications, 1998.

Eastop, Dinah. "Garments Deliberately Concealed in Buildings." In *A Permeability of Boundaries? New Approaches to the Archaeology of Art, Religion and Folklore*. ed. Robert wallis and Kenneth Lumer. 79-84. Oxford, BAR international press, 2001.

Eastop, Dinah. "Outside In: Making Sense of the Deliberately Concealment of Garments Within Buildings." In *textile volume 4 issue 3*, 239. UK: Burg, 2006.

Eastop, Dinah. "Sound recording and text creation: oral history and DCG project." In *Textile and Text: Establishing the Links Between Archival and Objects Based Research*. ed. M. Hayward and E. Kramer, 66-69. London: Archetype Publications Ltd., 2007.

Eastop, Dinah. 'Textile as Multiple and Completing Histories.' In *Textile Revealed: Object Lessons in Historic textiles and Costume Research*. Ed. Mary Brooks. London: Archetype, 2000.

Eastop, Dinah and Brooks, Mary. 'To Clean or Not to Clean: The Value of Soils and Creases.' In *ICOM Committee for Conservation* London: James & James LTD. 1996.

Eastop, Dinah and Drew, Charlotte. "Context and Meaning Generation: The Conservation of Garments Deliberately Concealed within Buildings." In *The Object in Context: Crossing Conservation Boundaries. The 21st IIC International Congress* London. Eds. Saunders, David, Townsend, Joyce H. and Woodcock, Sally, 17-22. London: IIC, 2006.

Eastop, Dinah and Drew, Charlotte. "Secret Agents: DCG as Symbolic Textiles." in *Tales in the Textile: the Conservation of Flags and Other Symbolic Textiles*, North America, 2003, preprints. Ed. Jan Vuroi. 10-11. New Your: New York State Museum, 2003.

Evens, Gorge Ewart. *The Days That We Have Seen*. London: Faber and Farer Ltd, 1975.

Esau, Katharine. *Anatomy of Seed Plants*. Canada, John Wiley & sons inc., 1960. 61-82.

Florian, Mary-Lou. Kronkright, Dale Paul and Norton, Ruth. *The Conservation of Artifacts Made From Plant Materials*, ed. Mary-Lou Florian, Dale Paul Kronkright and Ruth Norton. USA: The J. Paul Getty Trust, 1990.

Gale, Elizabeth. *From Fibres to Fabrics*. London: Allman and Son, 1968.

Harrison, A. and Gill, K. "An Eighteenth-Century Detachable Pocket and Bab's Cap, Found Concealed in a Wall Cavity: Conservation and Research." *Textile History* 33 (2002): 177-194.

Heizer, Robert F. *A Manual of Archaeological field methods*. USA: National Press, 1950.

Kopytoff, Igor. "The Cultural Biography of Things: Commoditization as Process." In *The Social Life of Things: Commodities in Cultural Perspectives*. A. Appadurai ed. 64-92. Cambridge: Cambridge University Press, 1986.

Landi, Sheila. *The Textile Conservator's Manual*. Oxford, Butterworth-Heinemann, 1992.

Lennard, Frances. *Textile Conservation Advances in Practice*. Oxford: Butterworth-Heinemann, 2010

Mc Dowell, Colin. *Hats status, Style and Glamour*. London: Thames and Hudson, 1992.

Merrifield, Ralf. *The Archeology of ritual and magic*. London, BT. Batsford LTD, 1987.

Stewart, Jennifer. "Discipline Developments in Archaeology, Anthropology and Ethnography." In *Terminology for Museums Proceedings of an International Conference*, ed. Andrew Robbers, 198 (Cambridge: the Museums Documentation Association, 1990).

Trupin, Deborah. 'To Clean or Not To Clean? Decision Making For Textile Wet Cleaning.' In *AIC Textile Speciallality Group Postprints*, 38-49. Washington: The Insitiute, 1995.

Alvaro Mora-Othomano. "Archaeological Building Recording at the forma Killamarsh Central Station Derbyshire." www.archaeological-researchservice.com. Accessed May 15, 2013.

AIC. "Code of Ethics."

http://www.nps.gov/training/tel/Guides/HPS1022_AIC_Code_of_Ethics.pdf. Accessed June 14, 2013.

Ancestry.com. "Census." Assessed May 28, 2013.

BBC My Paintings, Tate. "Girl in Straw Hat."

<http://www.bbc.co.uk/arts/yourpaintings/mypaintings>. Accessed June 25, 2013.

Britannica. "Retting." <http://www.britannica.com/EBchecked/topic/500159/retting>. June 25, 2013.

Collections Australia. "Significance- A Guide to Assessing the Significance of Cultural Heritage Objects and Collection 2001." http://www.collectionsaustralia.net/sector_info_item/5. Accessed July 5, 2013.

Encyclopaedia of needlework. "Laces of Different Kinds." http://www.gutenberg.org/files/20776/20776-h/chapter_14.html. Accessed July 5, 2013.

English Heritage. "Listing status." <http://list.english-heritage.org.uk/resultsingle.aspx?uid=1122120>. Assessed May 24, 2013.

Gazetter. "Smuggling in Britain." http://www.smuggling.co.uk/gazetteer_e_11.html. Accessed May 27, 2013.

Google maps. "Wickham Bishops." <http://maps.google.co.uk>. accessed May 27, 2013.

Gov.UK. "Discover your district." http://www.maldon.gov.uk/info/200139/explore_the_district/365/the_blackwater_estuary/2. Accessed May 27, 2013.

Gov.UK. "National Archives." <http://www.nationalarchives.gov.uk/imagelibrary/>. Assessed May 28, 2013.

Gov.uk. "Records office." https://secureweb1.essexcc.gov.uk/SeaxPAM2012/result_details.aspx?ThisRecordsOffset=3&id=75666. Assessed, May 27, 2013.

Hats UK. "Glossary of hat terminology." <http://www.hatsuk.com/hatsuk/hatsukhtml/bible/glossary.htm>. Accessed June 24, 2013.

ICON. "Professional Guidelines." http://www.icon.org.uk/index.php?option=com_content&task=view&id=121. Accessed June 14, 2013.

Institution for Archaeologists. "Standards for guidance." www.arcaeologists.net/sites/default/files/node-files/ifa_standards_buildings.pdf. Accessed May 9, 2013.

International Dental. "Minimal Intervention Dentistry." [journalhttp://onlinelibrary.wiley.com/doi/10.1111/j.1875-595X.2000.tb00540.x/abstract](http://onlinelibrary.wiley.com/doi/10.1111/j.1875-595X.2000.tb00540.x/abstract). Accessed July 5, 2013.

Lace. "Reticella lace." www.lace.lacefairy.com/lace/ID/ReticellaID.html. Accessed May 20, 2013).

Oxford dictionary. "Dictionary definition."

<http://oxforddictionaries.com/definition/english/cache>. Assessed 16.07.13.

Spectroscopy Now. "Microscopy."

<http://www.spectroscopynow.com/view/index.html?tzcheck=1&tzcheck=1>. Accessed June 20, 2013.

Straw art Museum. "Straw Art." <http://www.strawartmuseum.org/amsahistory.htm>. Accessed June 12, 2013.

Textile Dreamer. "Needlepoint lace." www.textiledreamer.wordpress.com/2007/01/02/star-in-needlepoint-lace/. Accessed July 2, 2013.

Thermo Nicolet corporation. "Introduction to Fourier Transform Infrared Spectroscopy, 2001." <http://mmrc.caltech.edu/FTIR/FTIRintro.pdf>. Accessed June, 2013.

Wikipedia. "Microscopy." <https://en.wikipedia.org/wiki/Microscopy>. Accessed June 15, 2013.

Wikipedia. "Salvage." <http://en.wikipedia.org/wiki/Selvage>. Accessed July 3, 2013.

Wikipedia. "Straw." <https://en.wikipedia.org/wiki/Straw>. Accessed June 29, 2013.

Further Reading

Ancient Textiles: Production, craft and Society, eds. Caroline Gills, Marie-Lousie Nosch. Oxford: Oxbow Books, 2007

Cronyn, J. *The elements of Archaeological Conservation*. London: Routledge, 1990.

Harrison, M. *The history of the Hat*. London: Hurbert Jenkins, 1960.

Prown, J. *Mind in Matter: An Introduction to Material Culture*. USA: University of Chicago Press, 1980.

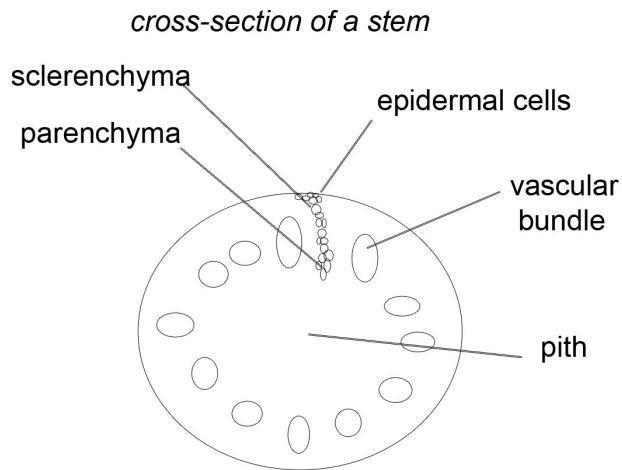
Thomas, K. *Religion and the Decline of Magic*. London: Weidenfield and Nicolson, 1971.

Thompson, M. *Rubbish Theory: The Creation and Distribution of Value*. Oxford: Oxford University Press. 1979.

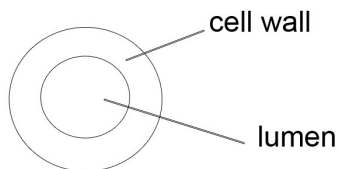
Museum Document association www.mda.org.uk

Appendix One: Diagram of Identifying Features of a Plants Cross Section

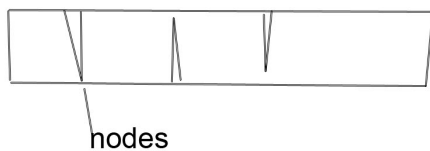
The stem is made up from a variety of structures most have sclerenchyma (strengthening ring of cells) or collenchyma (if the stem if green) and a core of the cells. An example of this has a central pith (parenchyma cells) surrounded by a ring of xylem then a ring of phloem.¹³⁴



A single cell

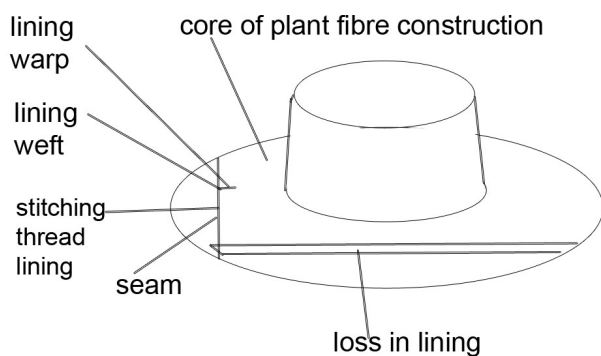


longitudinal



Appendix Two: Small Samples of 1-3mm Taken From the Hat.

Where samples were taken for fibre I.D.



The lace and wrapping fibres were loose in the box.

¹³⁴ Florian et al.12.

Appendix Three

RISK ASSESSMENT FORM

Please view the 'GUIDANCE NOTES ON COMPLETING RISK ASSESSMENT FORM' below.

RISK ASSESSMENT NO: R23/13

Brief outline of work/activity :	Examination of a straw hat found concealed in a wall of a building.
---	---

Location :	The Centre for Textile Conservation
-------------------	-------------------------------------

Significant hazards :	Stains for identifying parts of the fibres: could stain skin if spilt. Trip hazards and spil hazards.
------------------------------	--

Who might be exposed to the hazards :	students at the CTC and tutors.
--	---------------------------------

Existing control measures :	gloves, lab coats, eye wash stations, COSHH forms and emergency procedures planned. Keeping the work space clean and tidy.
------------------------------------	---

Are risks adequately controlled : YES / NO

If NO, list additional controls and actions required :	Additional controls :	Action by :
	Stains-COSHH assesment C110/13 06.07.13	Anita Quye

Completed by :	Jennifer Beasley		03.06.13
	Name	Signature	Date

Supervisor :	ANITA QUYE		22/7/13
	Name	Signature	Date

Dates of Reviews:				

COSHH Assessment Form

School: Culture and Creative Arts
Section: Centre for Textile Conservation and Technical Art History
Project Title: Stain test, Saffanin O

File ref: C110/13
Related Assessment Form: R23/13.
Date: 16.07.13

Room Number(s): 310, 315

Building: Robertson Building, Level 3

Persons involved: Jennifer Beasley
 Second year students, tutors and visitors.

Description of procedure:

Mix 0.1% Saffranin into water.
 Drop onto material (on microscope slide).
 Leave to stand for 1min.
 Remove excess stain by drawing through water .

Substance used	Quantities used	Frequency of use	Hazards identified	Exposure route
Saffanin	Less than 10ml	One day only	Flammable Inhalation Ingestion Irritant	Use in a well ventilated area Breathing Swallowing Skin contact Eye contact

Could a less hazardous substance (or form of the substance) be used instead? **no**

Justify not using it: is the stain used to identify the cell structure.

What measures have you taken to control risk?

Engineering controls: uses in ventilated area, eye wash facilities, fire extinguishers either alcohol resistant foam, carbon dioxide or dry powder.

Personal Protective Equipment: gloves, lab coat.

Management measures: stored in the chemical cabinet, tutor supervision.

Checks on control measures: tutor supervision.

Is health surveillance required? /no

Training requirements:

Emergency procedures: inhalation: move to fresh air.
 Ingestion: DO NOT vomit or drink fluids. Immediate medical attention. Skin contact: wash with soap and water. Remove contaminated clothing. Eye Contact: wash 15min. symptoms of any of the above continue seek medical attention.

Waste disposal: hazardous waste.

Name and position of assessor:

J. BEASLEY

Name of supervisor (student work only):

ANITA QUNE

Name of Head of School or nominee:

Signature:

J. Beasley

Signature:

Anita Qune

Signature:

Appendix Five: 21st May 2013 Interview with Mr Philips list of questions.
(Blue notes taken from meeting).

- How was the hat found?
Updating the house, re-doing the plasterwork and found.
- Was there anything else with it?
There were lots of objects such as a jack-in-the-box and other toys, postcard, shoe, dead cat and figurine. Some still had to hand photographed by author. In another cache downstairs was a collection of newspapers behind the gun cupboard. These were replaced with a modern newspaper of Diana's funeral, because the original was of a royal funeral; along with a written message explain what they had done.
- How did you store it while on possession?
Open display in house, moved from room to room for about 20 years. Stored in a dolls house in the landing last.
- What made you want to donate it to the museum?
Didn't want to throw away and didn't know what to do with it as they are moving and thought a museum may be interested.
- How did you feel about finding the hat?
Curious what it was. They seemed to recall pulling out the objects from the top of the wall and from a cupboard in the next room, excitement of discovery. It seems like a story told before.
- For what reason, in your opinion was the hat hidden?
Hadn't seemed to cross their minds. They said it was probably the builders. Later went to mention the other cache newspaper site was a time capsule.
The toys they felt fell in the cache site from a small hole in the bedroom cupboard but the other object were placed in a way that they didn't look like an accident and had reminisce of the plasterwork on them from the building work.
- Were you worried about removing it from the house?
Not the hat but the small doll figurine, which they found creepy, they didn't want to remove.
- Do you know anything about the past tenants?
They said they thought the owners were part of the timber trade. The town was a seaport, which was a busy place for barge building and Donnellson shipping company.
At one time the house was a ale house because of fixtures and fittings and alterations to the house.
They said the house in Victorian times was 'gentrified'. Servant's access was made at the back of the house, along with a large extension (location of cache site).
- What did the hat look like when it first came out?
The hat was a lot paler when they excavated it.

Appendix six: Time estimates

ESTIMATE SHEET OPTION ONE

Object Number: CTC.181			
Object title:	ESTIMATE		COMMENTS
	Lower	Upper	
Plant fibre hat			
<i>Client liaison</i>	1	2	Discussing treatment options and testing
Project management	2	3	
Handling and room prep	1	2	Very fragile object
Before photo			Already done
Documentation	1	2	Stating which treatment used
I.P. photo	1	2	
Prep of cov. board/display forms	10	11	Altering plastic mount?
After photo	1	2	
Packing	2	3	Packing for transport
Final report	3	4	Future recommendations important
TOTAL	22	31	
Estimate date	22.06.13		
Estimate prep by	Jennifer Beasley		

ESTIMATE SHEET OPTION TWO

Object Number: CTC.181			
Object title:	ESTIMATE		COMMENTS
	Lower	Upper	
Plant fibre hat			
<i>Client liaison</i>	1	2	Discussing treatment options and testing
Project management	2	3	
Handling and room prep	1	2	Very fragile object
Before photo			Already done
Documentation	1	2	Stating which treatment used
Special research			
Testing	15	17	Test surface cleaning how to remove only dust. Test support of weakness with Japanese's tissue.
Surface cleaning	7	8	
Fibre & materials ID			Already done
Selecting materials	1	2	Support lining
Dyeing	6	8	Support lining/ dyeing Japanese tissue paper
Preparation of support fabric	3	4	Twisting tissue?
Stitched support	16	18	Support of edges ?
Adhesive support	20	22	Japanese tissue support of plant fibre
I.P. photo	1	2	
Prep of cov. board/display forms	10	11	Altering plastic mount?
After photo	1	2	

Packing	2	3	Packing for transport
Final report	3	4	Future recommendations important
TOTAL	90	110	
Estimate date	22.06.13		
Estimate prep by	Jennifer Beasley		

ESTIMATE SHEET OPTION THREE

Object Number: CTC.181			
Object title:	ESTIMATE		COMMENTS
	Lower	Upper	
Plant fibre hat			
<i>Client liaison</i>	1	2	Discussing treatment options and testing
Project management	2	3	
Handling and room prep	1	2	Very fragile object
Before photo			Already done
Documentation	1	2	Stating which treatment used
Special research			
Testing	25	27	Test surface cleaning how to remove only dust. Test support of weakness with Japanese's tissue. Testing splint support of breaks.
Surface cleaning	7	8	
Fibre & materials ID			Already done
Selecting materials	1	2	Support lining
Dyeing	6	8	Support lining/ dyeing Japanese tissue paper
Preparation of support fabric	5	6	Twisting tissue?
Stitched support	16	18	Support of linings edges ?
Adhesive support	40	44	Japanese tissue support of plant fibre and splint support
I.P. photo	1	2	
Prep of cov. board/display forms	10	11	Altering plastic mount?
Attach to cov board/display fms			
After photo	1	2	
Packing	2	3	Packing for transport
Final report	3	4	Future recommendations important
TOTAL	122	144	
Estimate date	22.06.13		
Estimate prep by	Jennifer Beasley		

Appendix Seven: Contact with Finder and Curator

Contact with finder

Sent: 21 May 2013 15:00
To: [Jennifer Beasley](mailto:Jennifer.Beasley)

Dear Jenny,

The map I was trying to find was Chapman and Andre's Atlas of Essex, 1777, the first large-scale (2-inch or 1:31,680) map of the county comprising 25 sheets. As 'Fanners' appears on the map, its inclusion gives proof of some kind of building being on the site by the time of publication. It remains unproven when it was actually built.

Good luck with your work over the coming months, and thanks for including us in your schedule. We were so pleased to have your visit.

Kind regards

Philip Kipping
philipkipping@btinternet.com

Transcript of contact with curator

Conversation with Veronica Main dated 13.03.13

Veronica (V): So I think, at this moment in, in time, its, its, what I am going to be saying this morning, my thoughts, set at this moment of time, which is not to say that as you start work on it that we will re-order.

Jenny (J): Yes, we need to re-evaluate.

V: Yes, because this is so little known, so I suppose at this moment in time, I'm really excited by this. In that, it is the first opportunity we've ever had to use this type of hat as a research tool. To actually investigate what's the material, um, what plant fibres are being used, what, what's the lining made of and see if there is a possibility of deducing where it may have been made.

Um, I am less worried, strangely, about the dating of it. The dating would be lovely but it's more to find out about the origin of it because that would fill, fill in a huge chunk of, of hat making history and importation of hats into this country.

The next thing that sort of worries me is the stabilisation of it, that this was discovered about twenty years ago...

J: Oh ok, so it's quite a while ago then.

V: So it's quite a while ago and the chap who discovered it in his house has just had it in his house in that time. So we have a slight problem with how much of the dust....

J: Is just from him storing it in his house.

V:is from him storing it and how much of the dust is, um....

J: From concealment,

V:yes from concealment. I think it looks as if there are some pieces that look as if it possibly is, um, but we've got to bear in mind that some of the damage and some of the dust on it may be more recent.

J: Okay then that's an extra level, that's interesting isn't it?

V: Yes, which is why, I have been keeping all the dust....

J: that will be really great.

V:as I thought we need, I need to keep everything that's um, that's come from the hat so I have been absolutely scrupulous on doing that.

Um, so stabilisation because we don't want it to get worse than it actually is, um, I should have said that this has been through an anoxic treatment.

so it has been treated so we know it is pest free.

J: So it that the only treatment it has had?

V: Yes, well I know the chap wouldn't have done anything at all with it when it was in the house, um, but obviously bring it into the museum I was desperately worried that there might be something being concealed in the fibres.

J: Yeah, yeah, that's some concern.

V: That something could be inside it.

V: I know, with all the dirt there as well. So stabilisation is really important, um, and then I suppose lower down the list is because I am rationalising constantly the big problems of how much dirt do you take off and what do you do. I put that as the third on my list at this moment at this time, because I almost feel in my mind that the process of cleaning it is going to be somewhat dependant on the story of the hat.

J: Yeah, you've got to also remember that this soiling is quite damaging to the object as well, so you have got to weigh up the fact that goes into the stabilisation.

V: Yes,

J: So yes I agree with the storage of the hat but you also have to take into account that it could cause it more damage.

V: Hmmmm, so that's what I'm thinking and I keep going round in little circles of prioritisation of what comes first and it's really, really difficult. So it is a question of just starting work on it.

J: So research **tool** and then bringing it so it's stable and if that means soil removal and things like that, then interpretation is very important as well.

V: Absolutely important, the interpretation, because as you said why was it concealed. Because, as you said, a lot of the objects are um, sort of quite poor things, so how much of this damage happened in store, is it possible to tell if it was put away in better condition than this and this is actually damage that's happened while it's been in store....

J: In store....there's um, research that has been done into this, about the damage, so I'll be having a look at that, um, it was a past dissertation by a student and it is really interesting the stuff that she went to, so I will look at hers and see if I can follow her thought process. To see and develop on that as well and to see where, if the damage is from storage or if it was from beforehand. So that will be really interesting as well.

V: Because I think that's gonna tell us a lot about it because where it was found, the house it was found is relatively close to the coast in Essex and it's in the Thames estuary, so, I mean, this is, this is me with flights of fantasy, there is absolutely no grounding for me saying this but you do, it does put in the possibility, was it a stolen object that was concealed....

J: That's quite an interesting thought.

V:um, you know so there are different, there are, also **possibilities**, saving part of someone who has lived in the house and died in there. There's all these different elements that it could be....

J: Yeah, there are so many different things.

V:but being near the coast, but that links back to how damaged was it, is it possible to find out how damaged it was when it was concealed.

J: Yes, I think that is quite important actually, isn't it, for the understanding of the object. Yes.

V: Yes, but it is a real mystery as to why this was concealed, and also it is quite a large object to conceal as well.

J: It's huge, yeah.

V: Bbecause when he took it out it was quite, it was pretty much the shape that it is....

J: So it wasn't folded up or anything,

V:no, it wasn't folded so it came out pretty much as you see it.

J: So was there any, did he take any photographs of where....

V: When he took it out? Yes – (Veronica show the photographs).

J: (Gasp) Brilliant.

V: I've scanned them all, so that's how he got it out. So these were taken when he found it in the wall. So I can let you have digital copies of those.

V: So as we can see that was taken outside in natural light.

J: It looks like there was more soiling on it at the time.

V: Yeah, although there is a big patch there on that side.

J: Oh, is there, oh yeah,

V: So, but it would give us some form of reference.

J: Yep, brilliant, or this is really great isn't it?

V: I know, I know, I gasped when they said there were photographs, it's like, 'YES'!

J: So this is the evidence of what it looked like when it came out of the wall?

V: Yes.

J: Did it have any photographs of where it was in the wall or....?

V: No.

V: But the chap, I don't know how much you'd like to get involved with him.

J: Well I would, I would be very interested to talk to him because part of the delivery of the concealed garment project was all about an oral testimony, of what, from the person who found it, or where they found it, what they felt, um, things like this. So I think it is quite important on the documentation on the object is where it was found.

V: Yes.

J: 'Cos, I think, 'cos in comparison to say the one in Hatfield House, how different was it concealed, can that tell us anything? 'Cos if the one in Hatfield House was found.... -

V: No, that was just given to them.

J: Oh, was it. So they were....

V: No, so this is the only one that's been concealed.

J: one where they know, where they – okay so that wasn't.

V: Um, and then I think I'm going to try and get hold of Linda Belgarten in Colonial Williamsburg. I think I've still got her email, and if that's okay with you, um, contact the Met and Colonial Williamsburg....

J: That would be fantastic, yeah.

V: So if I do the introductions....

J: That would be really great because I could follow it on.

....

V:I haven't found them at home yet.

J: *(Laughter)*

V: I need to spend some time to searching, um so I have got photographs that I can let you have of the others, but the one on the Met is on their website.

J: Yeah, yeah, I'll have a look at them.

V: I think that has got natural colours, um, lining to it. The one at Hatfield has been re-lined, it looks as if there may be some original stitching but we don't know if it is original stitching or a previous lining that's been put in, so that's really difficult to tell....

V: Yes, so, I'm, there seems to be missing gap in the, from the research I've done there seems to be a missing gap in the history of the hat industry, particularly in the early period. And there's very little documentation of the part that the Iberian Peninsula played in the hat industry. But because from very early on you have hats being made in what now is Belgium and the southern Netherlands and that industry can be dated back to the 1300's. And knowing that, through history, the connection between that part of Europe and the Iberian Peninsula. Then I sort of wondered if there is a connection between the Azores, the Canaries and the hat industry in the Iberian Peninsula.

J: Um, yeah, sounds quite likely, doesn't it?

V: So, but that's speculation.

J: I'll have to look into it.

An Interruption by someone in the building asking Veronica a question.

V: So, as I said that I've got no, I've got no justification for it other than knowing that there's a missing link somewhere in the story.

V: So that's why I keep coming back to the Azores, and it would make sense of two ending up in America, because of course the shipping route went through the Azores and the Canaries Islands.

J: Yeah.

V: So, it's, it's, there is sort of a shipping link possibility.

J: Yeah,

V: The other thing is that the Azores still have a lot of, um, now I can't remember the **BO's ??name of an island Fiela??** is one and I can't remember the other Island. But on, at least one of the islands and if not two of the islands in the Azores, they still work with straw but when I say "work with straw" I'm not sure what the straw is. It's not necessarily a cereal crop straw, although it may be, I don't know. It could be a wild grass that they use, or it could be plant fiber that they are using. Now I kept drawing a blank in contacting someone in the Azores and I tried so many times. I haven't sort of had a dedicated onslaught at it. (*Laughter from Jenny*). But I kept trying to track down in the Azores someone to talk about and find out more about what they actually use.

J: Aha.

V: And has anyone done any research into the history of what goes on in the Azores? So there is, sort of again, a sort of element, of, well is this something that could have come out of the Azores? And being on the shipping route, then it is quite likely that it could have ending up coming back into Britain or it could have gone off to America. I tried, I went out to Madeira in October and I tried finding out there and I met a brick wall because of course the Canaries is Spanish and the Azores Portuguese (*Laughter from Jenny*). And I didn't get on very well asking questions about the Azores....

J: Yeah, (*Laughter*) - No.

V: ...other than to establish that as far as the people in the museum were aware there's no history of hat making in the, in Madeira or the Canaries that dates back to the 1700's it's a, it eh, it's very much a 19th century area.

J: **??? area, um (21:05)**

V: Um, that's what they say but then there was lace making. So, I don't, I don't know, but I keep coming back to the Azores. That's why if it did turn out to be a plant fiber that does grow on the Azores. It wouldn't tell us it WAS the Azores especially if it was a plant fiber that also grows in the Caribbean. (*Laughter*)

J: Yeah.

V: But it would say, well actually there is this possibility, so we could take it down that, sort of next step while actually it's a possibility.

J: Yeah. I was just thinking about, um, you know Kew Gardens in London? I was working over there for a bit and he's got such a good collection of fiber, plant fibers and stuff. So I'll get in touch with him and see if I could sort of have a look and eh....

V: That was going to be one of my moves as well.

J: I'll contact him; he's so lovely he'll be great.

V:oh, that would be brilliant. Yeah absolutely brilliant, but eh, that had, yes that had occurred to me as well.

J: I think that's 'cos, I was just thinking about a reference collection, 'cos it's doing an analysis of the fibres and things. It's like; well you need something to compare it to and I'm thinking where will I get **?????? something about Kew(22:20)**

V: So that's another reason why I didn't want to ******* (22:57)** because you can take as many samples from it and distribute the samples, because it is this, it's much more important to find out the information....

J: Definitely.

V:which we're never going to find from the others but having done work on this, it may mean that the Met and Colonial Williamsburg....

J: But then if they wanted to do research into theirs, they wouldn't have to do it to the same extent because they could just get to one sample and compare it to ours. We need it to do all the research but they can just do a small sample and use it as comparison so, if they need it to compare it to, it would be really good wouldn't it?

V:Yes.

V: So what I propose, doing is, eh, I'll contact eh, I'm sure he won't mind me telling you this, so his name is Philip Kipin and where he lives is at Wickham Bishops and he is terribly excited about it and he has got the ha, the house dated back so far but he's now off doing more work....

J: Oh so he loves it, that's great.

V:so I'll telephone him and say this is happening 'cos he'll be so excited about it.

J: Okay.

....

V: And how much of the, I mean when you look at soiling on the inside there.... (Paper or something crackling can't hear)

J: Yeah.

V: How much of the soiling is original?

J: I know.

V: So does that actually tell us about the, anything about the wearer?

J: The soiling is always very interesting to analyse to see what it actually is....

V: Yeah, so have we actually got some, some sweat or grease from hair?

J:was it ever worn?

V: And I think it was....

J: Hummm yeah.

V:from the soiling inside, but that is speculation.

J: Yeah, no I have to really look into it.

.....

V: Yes, hummm. But this will go out on display.

....

End of Transcript.

Appendix eight: Plan for Extension Records Office

Appendix Nine: Grade Two Listing Status

1.

Legacy Record - This information may be included in the List Entry Details

National Grid Reference: TL 68051 12221

Map

© Crown Copyright and database right 2012. All rights reserved. Ordnance Survey Licence number 100019088.

© British Crown and SeaZone Solutions Limited 2012. All rights reserved. Licence number 102006.006.

This copy shows the entry on 28-May-2013 at 06:52:06.