

Good recreative practice:

An interdisciplinary approach to reconstructing the early modern apron



Lucas de Heere (1573-1575)
Three citizens and a farmer [detail],
British Library, inventory number
28330



Dr Jane Malcolm-Davies – Associate professor

University of Copenhagen

Theoretical framework

Is the scientific reconstruction of garments the mechanism by which dress and textile methodologies can generate new knowledge by cross-referencing a variety of different data?

A way to integrate interdisciplinary work



Dress and textile research

Theoretical frameworks –

Object, culture, practice, production & consumption (Skov & Melchior 2010)

Range of sources -

Historical representations, artefacts, documents
(Riello 2008)

Written sources, iconography, archaeological evidence, including molecular analyses
(Gleba 2011)

Lack of agreed formal methodologies



New methodology

What is good practice for:

Restoration?

Replication?

Reconstruction?

Experimental history?

Experiential history?

Data and variables

Routledge
Taylor & Francis Group

Fashion Theory
DOI: 10.1080/1562046.2016.1000069
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Check for updates

'Researchers, curators and conservators who have engaged in hands-on, experimental remaking of historical dress for decades have largely done so on an ad hoc basis' (Davidson 2019, 337)

The Embodied Turn: Making and Remaking Dress as an Academic Practice
Hilary Davidson

Hilary Davidson is a dress historian and curator. She completed her PhD on embodied knowledge at La Trobe University, and an Honorary Research Associateship at the University of Sydney. She is an Australian Fashion Institute member (2009) and was curator of fashion and decorative arts at the Museum of London (2007–2012). Her most recent publication is *Dress in the Age of Jane Austen* (Yale University Press, 2019). hilary.davidson@trinity.edu.au

Abstract
Fashion is a field fundamentally entwined with bodies and materiality. After the global and material turns for history, I contend that we are now witnessing the embodied turn: a developing area that recognizes the process of dress-making and remaking, and reconstructing as a fruitful methodology with quantifiable, academically valid results. The pioneers of material clothing reconstruction changed dress history and fashion studies. From their lead, new generations of scholars are extending the original approaches, while historical re-actors using their findings are now an established global community.

Guidelines for good practice

Guidelines for Utilising Textiles in Experimental Archaeology

- Raw materials should be selected according to our knowledge of fibres.
- Tools should be reconstructed on the model of precise copies of archaeological artefacts.
- The primary parameter to be investigated is the function.
- All processes must be performed by skilled craftspeople.
- Each test should be performed by at least two skilled craftspeople, in order to secure a more objective assessment of the results.
- All processes must be documented, and some filmed.
- All products must be submitted to textile analysis by external persons.
- On the basis of the established typology, the tools will be reconstructed by experienced craftspeople. Experimental testing will be conducted with the aim of analysing the functioning of the tools, time consumption, and the quality and quantity of thread and textile.

Centre for Textile Research, Copenhagen - Andersson Strand (2014)

Learning from textile archaeology



Learning to be SMART ...

- **S**pecific: defining the purpose of the reconstruction
- **M**easureable: measuring its success
- **A**ttainable/**A**ssignable: deciding who does what & how to reconstruct it
- **R**elevant/**R**ealistic: identifying variables to be tested & the resources required
- **T**imely: Setting a timetable for action

(Doran 1981)

... and being SMART to learn



Categories of 'remaking'

Historically accurate ... to ... totally stylistic

(Radcliffe 1987)

Replication: duplication of an extant item exactly

Reconstruction: uses some justifiable speculation

Recreation: uses guesswork and imagination

(Wayland Barber 2005)

A, B & C models(Demant & Batzer 2015)

To investigate: a garment's function, effectiveness, sensory experience, tools or tacit knowledge required to make it (Harris 2019)

Smart: Defining a specific purpose



Undertaking systematic evaluation

A linear model - a neutral spectrum?

∨

A hierarchical model - implied rankings?

‘All products must be submitted to textile analysis by external persons’ (Andersson Strand et al 2014)

- Third-party assessment
- Evaluation instrument (Marendy 1993)
- Reflective practice (Bendall 2019)

sMart: Measuring success

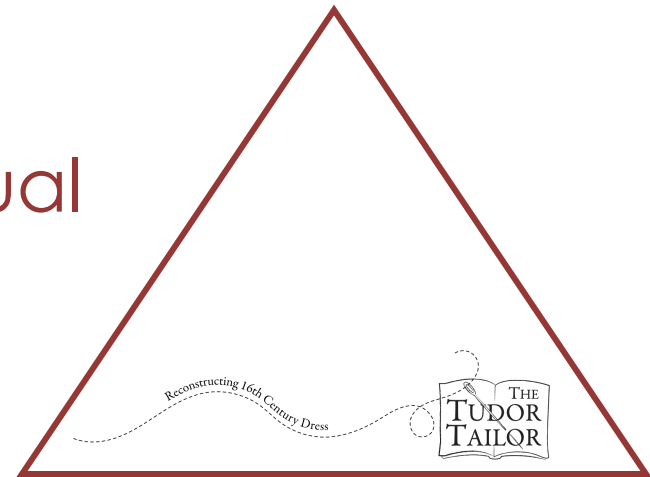


A draft operational model

Justifiable speculation is based on a triangulation of sources:

- Pictorial
- Archaeological/Artefactual
- Documentary

What's the **PAD**?



Base on which the reconstruction stands



An integrated methodology

- Pictorial
- Artefactual
- Documentary

Top: Schoolboys (1601)

Queen Elizabeth's Hospital charter, Bristol, UK

Far right (top): Small knitted coif
Museum of London, inventory number A6333

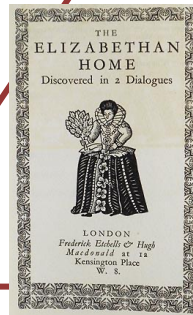
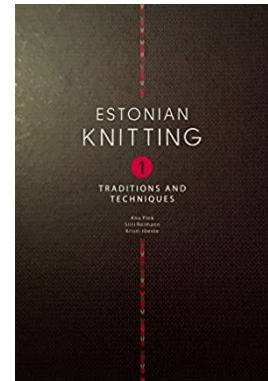
Far right (below): Small knitted coifs

Victoria & Albert Museum, London, inventory numbers
1570-1901 & 742-1904

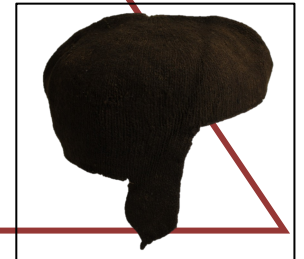
Bottom: Hollyband, C (1573)

The French School-Master

St Clare Byrne, M – ed (1949) London: Methuen



University of
Tartu, Estonia



- Craft

smArt: Deciding who does what & how



Reconstruction: Coif cap

Knitted coif cap to fit a child aged six years

	Lower	Middle	Elite
1485-1540	✓	✓	✓
1540-1580	✓	✓	✓
1580-1625	✓	✓	✓

Recommended materials

- 160yds/150m/60g pure wool 2-ply double knitting untreated (not superwash) yarn (such as New Lanark or Jamiesons) or a handspun equivalent (approximately 18/7 wraps per inch/cm)
- 5 x 3.25mm/size 3 double-pointed needles/pins (or size to obtain correct gauge/tension)

Size

Head circumference 21in/53.5cm (six-year-old)

The instructions below are for a coif cap for an six-year-old to go with the Bristol schoolboy's clothing. The instructions in parenthesis are for toddler and teenage sizes.

Instructions developed by Sally Potniser

Abbreviations

K – knit

M1 – make 1 stitch by knitting into the purl bar immediately behind the next stitch

K2tog – knit 2 stitches together

Stocking stitch – stockstette (all knit stitches when knitting in the round)



Knitted woollen coif cap after washing to shrink and full the surface. Repeated washing and blocking may be necessary to achieve the size and fit required

Sources

Small knitted coif cap, Museum of London, inventory number A6333

Small knitted coif cap, Victoria & Albert Museum, London, inventory numbers 742-1904 & 1570-1901

Small knitted coif cap, Gallery of Costume, Platt Hall, Manchester City Galleries, inventory number 1952.338

Detail from royal charter (1590), Queen Elizabeth's Hospital, Bristol, Avon

Collaboration with a professional knitter



Professionals v citizen scientists

- Resources (time, effort & energy)
- Specialist expertise & skills
- Range of experience
- Repeatable results
- Comparable evidence
- Unexpected bonuses

- **Results**

Knitting in Early Modern Europe (KEME)

swircling experiments:

20 knitted & fulled swircles

10 of handspun yarn



Wensleydale (top & centre) and Bluefaced Leicester yarns produced naps which most closely resembled the originals

Benefits for the researcher/volunteer?



Serious leisure



Knitting in Early Modern Europe & The Tudor Tailor's
experimental history project
Team Sleeve – 12 members (10 active)
Europe: Denmark, Finland, Sweden
ROW: Australia, Canada, United States
Yarn kits: skeins of worsted spun pure wool singles

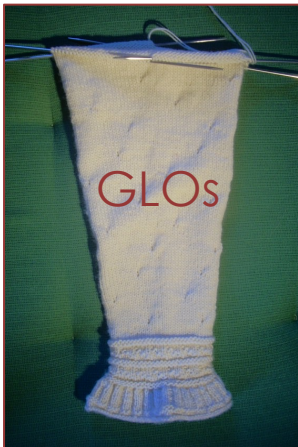
Knitted wool sleeve
(late c16th to early c17th)
Norfolk Museums,
inventory number
NWHCM: 1961.74.7



A serious commitment of time and work



Managing volunteers



Unintended consequences – all good!



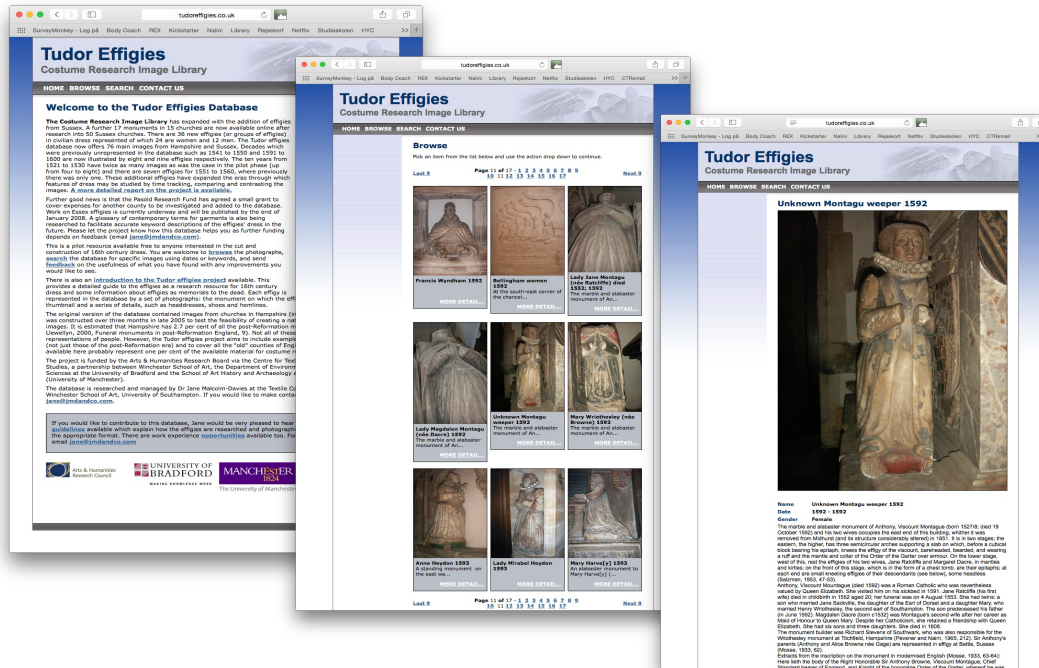
Different methodologies: specialist skills

- **Pictorial evidence** – art historical method; connoisseurship, cultural context research; quantitative study
- **Artefactual evidence** – object-based study, art historical method; connoisseurship; cultural context research
- **Documentary evidence** – qualitative & quantitative study; literary analysis; anecdotal data

... **Craft** lacks an academic discipline



tudoreffigies.co.uk



Mary Wriothesley (1615)
St Peter's Church, Titchfield, Hampshire

Data collection from pictorial sources

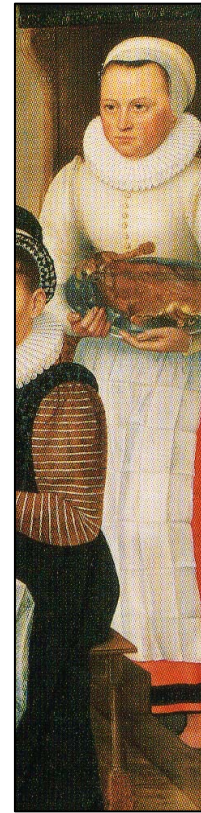


Aprons: how they were worn

Right: Jan Claesz (1602)
Albert Sonck and his Son Frans [detail] (1602) Westfries Museum, Hoorn, Netherlands (inventory number 01415)

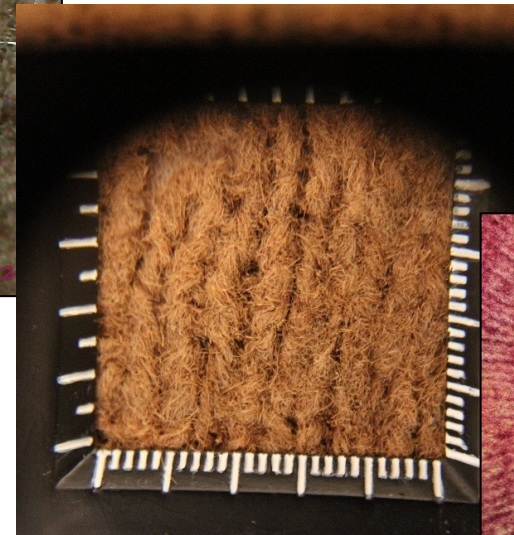
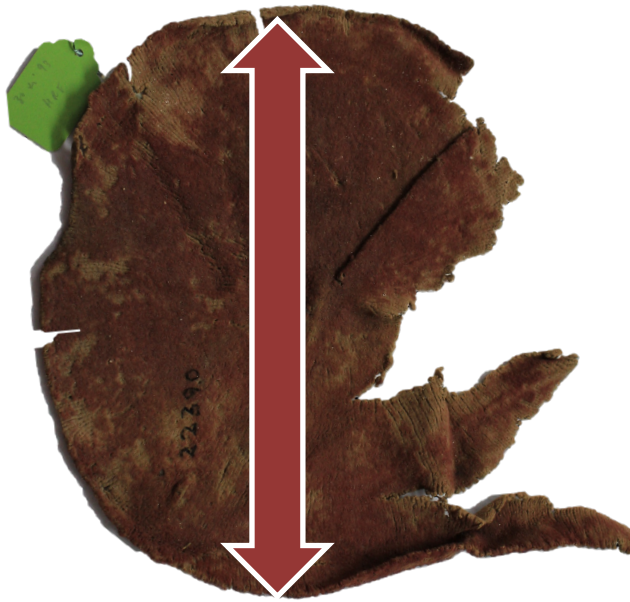
Centre: Anthonius Claessins (1585) as before

Far right:
Friesland School (1622)
Portrait of a girl aged one with a Basket of Strawberries,
Burrell Collection, Glasgow, Scotland
(inventory number 35.252)



Data collection: pictorial sources (macro)





Dimensions:

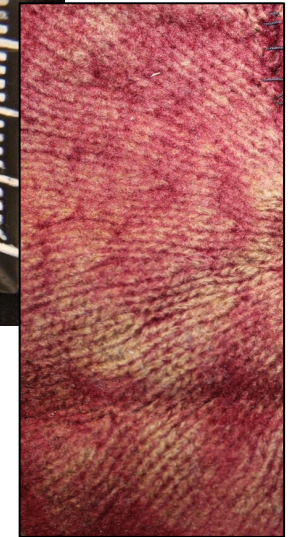
10 inch/25 cm diameter

Fibre: Wool

Fabric structure: Simple knit

Colour:

Red



Gauge (31):

5 to 12 **wales** per inch/2.5cm
(average 8; mode 7)

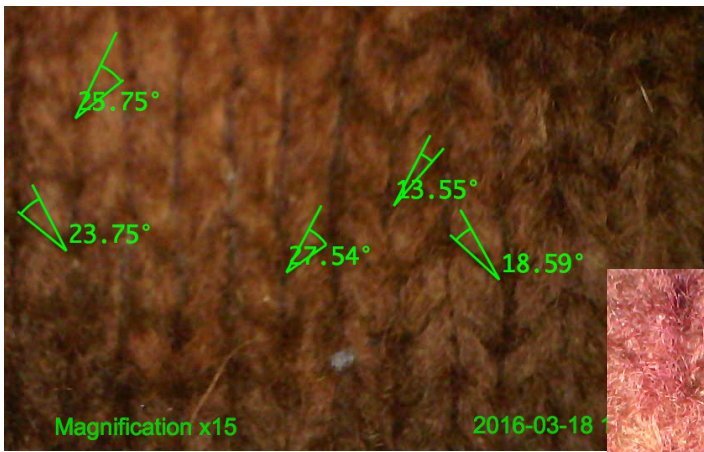
20 to 48 per 10cms (av 32; m 28)

6 to 16 **courses** per inch/2.5cm
(average 11; mode 10)

24 to 64 per 10cms (av 44; m 40)

Data collection from artefacts (macro)





Yarn diameter (x29):

Range 1 to 2.15mm (average 1.49mm)

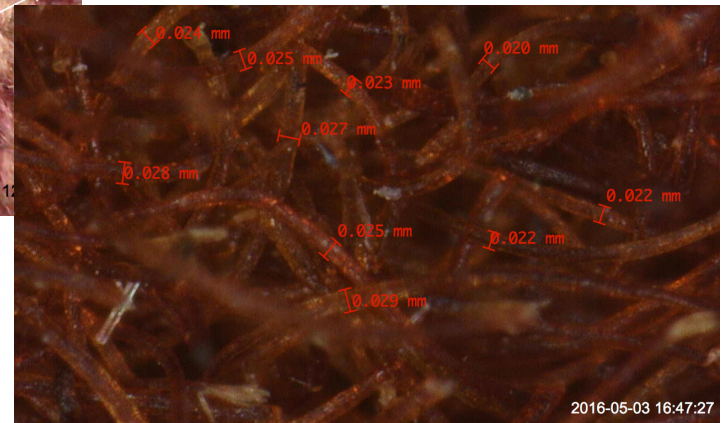
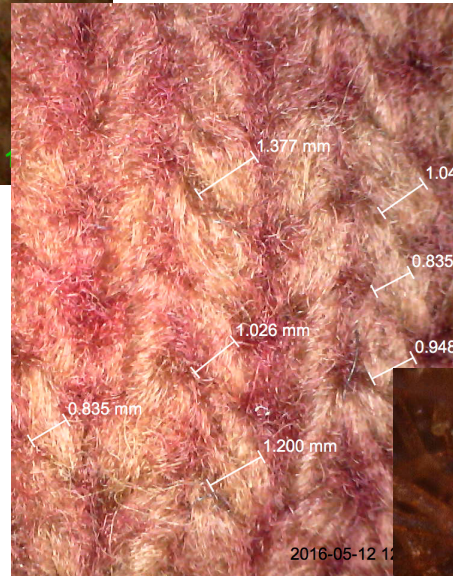
Spin angle (x9): range 22 to 44 degrees

(average 28; mode 26)

Medium

Ply (x31): x28 2-ply;

x3 2-yarns

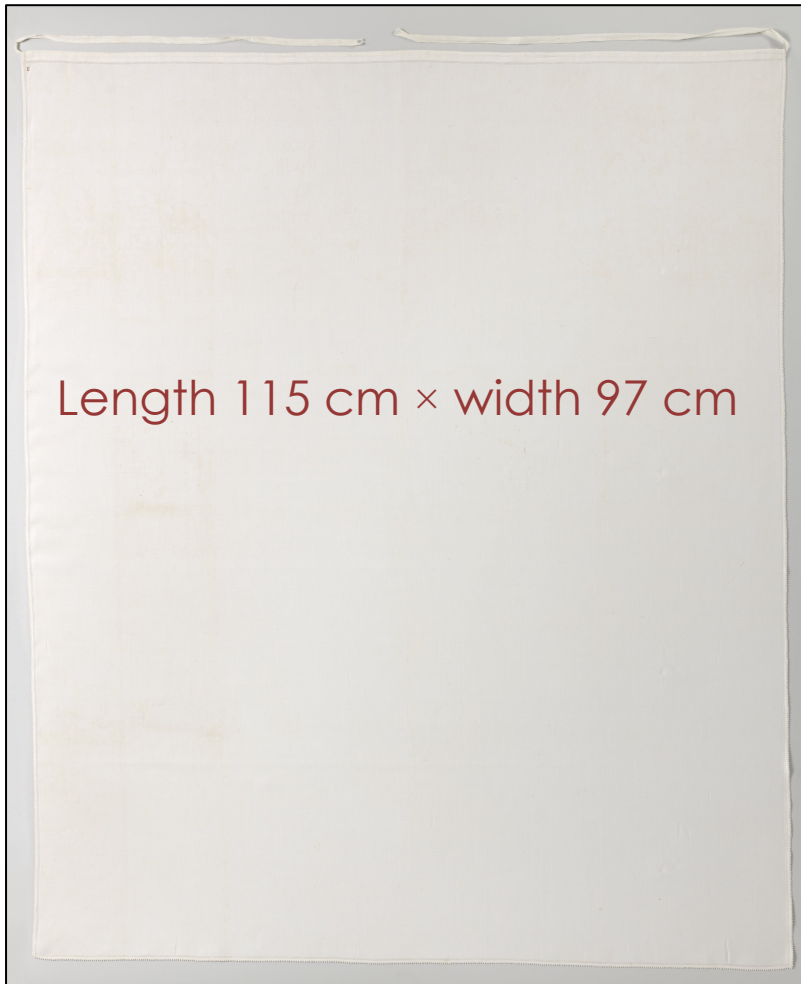


Fibre diameter (25): Range 23 to 35.5 μ
(average 28 μ); medium to coarse

Data collection from artefacts (micro)



Evidence from extant aprons



Apron (1590-1610) Rijksmuseum, Amsterdam, Netherlands (inventory number: BK-1999-91)

Data collection from artefacts (macro)



Thread counts

Apron locations	Warp per cm (vertical)	Weft per cm (horizontal)
I	34	29
II	33	31
III	34	31
IV	33	31
V	34	31
Average	34	31

Apron (1590-1610) Rijksmuseum, Amsterdam, Netherlands, inventory number: BK-1999-91

Data collection from artefacts (micro)



Aprons



Master of Frankfurt (1493) *Festival of the Archers* [detail], Royal Museum of Fine Arts, Antwerp, Belgium (inventory number 529)

'A worsted aperse' Warwickshire fishmonger's widow (1552)

Hulton, M & Shuttleworth, J - eds (1987) *Ten Tudor families: Coventrian wills and inventories*, Coventry: Coventry Historical Association, 23-26



Pieter Bruegel the Elder (1568) *The peasant dance* [detail], Kunsthistorisches Museum, Wien (inventory number 159)

Braun, F & Hogenberg, G (1573) *Civitates Orbis Terrarum*, Köln: Heinrich von Ach, xii

Functional and fashionable or both



Aprons for specific occasions

‘2 workday aprons’
left to an Essex maidservant (1560)

Emmison, F (1994) *Essex wills: the Bishop of London's commissary court 1569-1578*,
Chelmsford: Essex Record Office, publication 127, 9, item 258

‘my wife's best worsted apron’
Essex yeoman (1572)

Emmison, F (1994) *Essex wills: the Bishop of London's commissary court 1569-1578*,
Chelmsford: Essex Record Office, publication 127, 9, item 362

‘one appron for the hallyday’
Lincolnshire woman (1533)

Hickman, D - ed (2001) *Lincoln wills 1532-1534*, Lincoln: Lincoln Record Society, 89, item 205, 141

Documentary evidence



Aprons

'A holyday apron'

Essex widow (1580)

Emmison, F (1987) *Essex wills: the archdeaconry courts 1577-1584*,
Chelmsford: Essex Record Office, publication 96, 4, item 630

'My best linen apron save one'

Essex widow (1590)

Emmison, F (1998) *Essex wills: the Bishop of London's commissary court 1587-1599*,
Chelmsford: Essex Record Office, publication 137, 11, item 182, 33

Anon (early 1600s) *The Bartholemews of Burford* [detail], private collection



Anon (1595-1600)
Elizabeth Vernon,
Countess of
Southampton,
Boughton House,
Northamptonshire

Functional and **fashionable** or **both**



Reconstruction: late c16th apron for display

Textile choices

Textile dimensions

Constructional details

Finishing techniques

Embellishments

Adriaen Van Cronenburg
(circa 1567)
Lady with a yellow flower
Museo Nacional del Prado, Spain
(inventory number P002073)



smARt: identifying variables & resources



Textile choices

‘2 course aprons’

London widow (1543)

Darlington, I - ed (1967) *London consistory court wills 1492-1547*,
London: London Record Society, 178, 101-107

‘2 fine flaxen aprons’

Essex woman (1573)

Emmison, F (1986) *Essex wills (England) 1571-1577*,
Boston, MA: The New England Historic Genealogical Society,
3, item 238, 92

‘my best holland apron’

Essex woman (1600)

Emmison, F (1990) *Essex wills: the archdeaconry courts 1597-1603*,
Chelmsford: Essex Record Office, publication 107, 7, item 645

16 holland aprons listed in wills from 1566 to 1601

‘Proviso for wearing Foreign Linen’

Act of apparel in force from 2 February 1534

‘An acte for reformacyon of excesse in apparayle’ (1532-1533)
Raithby, J - ed (1963) *Statutes of the realm*, London: Dawsons, 4, 1, 430-432, 431

Documentary evidence



Textile dimensions

‘There resteth yet **7 yards** more of **hempen cloth**, of which 6 of the poor folk have each an apron’

Essex woman (1601)

Emmison, F (1990) *Essex wills: the archdeaconry courts 1597-1603*, Chelmsford: Essex Record Office, publication 107, 7, item 590

‘for **xij yardes of inkell** for the aperne’ (1596)

Webb, J - ed (1966) *Poor relief in Elizabethan Ipswich*, Woodbridge: Suffolk Records Society, 9

‘**towe yeardes of grine [green] fustyon** to be the lityll wenches [3] evrie one an apron and ynckele to be strynges to the said apron’

Lancashire gentleman’s daughters (1598)

Harland, J - ed (1856) *The house and farm accounts of the Shuttleworths of Gawthorpe Hall, in the county of Lancaster, at Smithills and Gawthorpe from September 1582 to October 1621 part 1*, Manchester: Chetham Society, 35, 114

Documentary evidence



Constructional details

‘my gadrid apron’

Bedfordshire widow (1520)

Bell, P - ed (1997) *Bedfordshire wills 1484-1533*,
Bedford: Bedfordshire Historical Record Society, 76, item 203, 126

‘an holland apron gathered’

Essex widow (1572)

Emmison, F (1995) *Essex wills: the Bishop of London's commissary court 1578-1588*, Chelmsford: Essex Record Office, publication 129, 10, item 52

‘a lockram apron with a flat hem ...
to my wife's nurse’
Essex major (1571)

Emmison, F (1987) *Essex wills: the archdeaconry courts 1577-1584*,
Chelmsford: Essex Record Office, publication 96, 4, item 501

‘a newe apren of durance [worsted] laid with laice’
Northumberland miller's daughter (1585)

Greenwell, W (1860) *Wills and inventories from the registry at Durham: part 2*,
The Surtees Society, Durham: George Andrews & Co, 38, item 55, 113

Documentary evidence



Top right:

Antonius Claessins (1585)
A family saying
grace [detail] Shakespeare
Birthplace Trust, Stratford-upon-Avon

Far right:

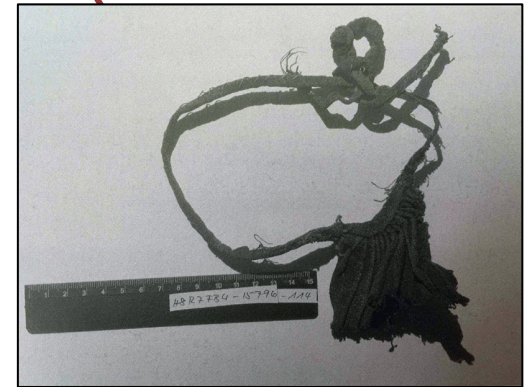
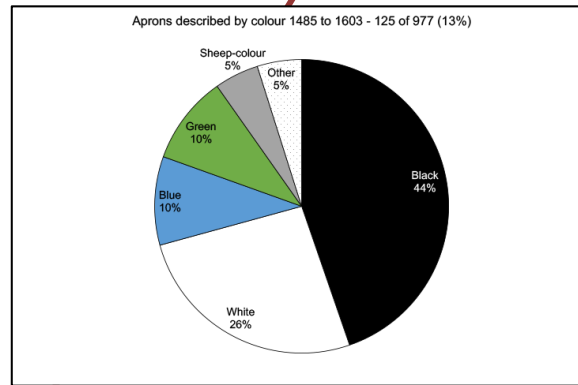
c15th-c16th apron
fragment, Mühlberg-Ensemble
Kempten (Germany)

Right: Malcolm-Davies, J &

Mikhaila, N (2022)
*The Typical Tudor: reconstructing
everyday 16th century dress*

An apron

23 aprons described by
textile **and** colour:
Black worsted (x7)
Russet [sheep] (x6)
Green fustian (x3)
White linen (x3)
Other (x4)



Triangulated sources for reconstruction



A black worsted apron

Right: Anon (circa 1545)

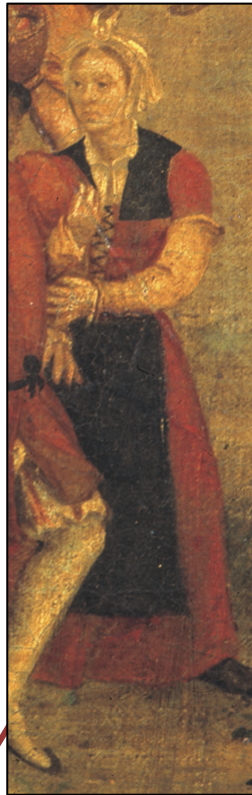
The field of the cloth of gold [detail]

Royal Collection Trust, Hampton Court Palace, Middlesex

'a black worsted apron worth five shillings' stolen, Shoreditch (1555)

Jeaffreson, J - ed (1886)
Middlesex county records, volume 1, 1550-1603 ..., London: Middlesex County Record Society, 21-26

Far right: Unknown artist (1596) *Hilleke de Roy and four of her orphans*, Stichting Huize Matthijs-Marijke, Gorinchem, Netherlands



No known extant example



A white linen apron

Top right:

Pieter Bruegel the Elder (1566)
The Wedding Dance [detail]
Detroit Institute of Arts, US
(inventory number 30.374)

'a white linen apron ... to
Margaret Smith my daughter'
Joan Livermer (1588)

Emmison, F (1994) *Essex wills: the Bishop of
London's commissary court 1569-1578*,
Chelmsford: Essex Record Office, publication
127, 9, item 1052

Bottom right:

Apron (1590-1610) Rijksmuseum,
Amsterdam, Netherlands
(inventory number BK-1999-91)

16 holland aprons in wills
from 1566 to 1601



Length
115 cm
Width
97 cm

Triangulated sources for a reconstruction



Still working on this one!



Triangulated sources for a reconstruction



Interdisciplinary collaboration

Specific purpose

Measure success

Allocate attainable tasks & assign roles

Relevant & realistic variables & resources

Timely

Let's find **SMART** new ways of working with integrated methodologies in pragmatic multidisciplinary teams, which include experts from the humanities, sciences and **craft**

smarT: Setting a timetable for action



See, feel, smell, hear, wear aprons ...



'The sensory archaeology of textiles' (Harris 2019)





The End

Andersson Strand, E (2014) "Experimental textile archaeology" in Andersson Strand, E, Gleba M, Mannering, U, Munkholt, C & Ringgaard, M - (eds), *NESAT X (North European Symposium for Archaeological Textiles)*, London: Oxbow Books

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Malcolm-Davies, J & Mikhaila, N (2022 - forthcoming) *The Typical Tudor: reconstructing everyday 16th century dress*, Lightwater: Fat Goose Press

Marendy, M (1993) Marendy, M (1993) 'The development and evaluation of costume reproduction pattern blocks for an 1880s woman's dress' in *Clothing and textile research journal* 11, 4, 41-52

Radcliffe, P (1987) Period dress projects: considerations for administrators. *Curator* 30,3,193-198

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Stiftelsen Agnes Geijers Fond för Nordisk Textilforskning, Stockholm, Sweden



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Reconstructing 16th Century Dress

