

"Wherein Taylors may finde out new fashions"¹

Constructing the Costume Research Image Library (CRIL)

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1) Introduction

The precise construction of 16th century dress in the British Isles remains something of a conundrum although there are clues to be found in contemporary evidence. Primary sources for the period fall into three main categories: pictorial (art works of the appropriate period), documentary (written works of the period such as wardrobe warrants, personal inventories, personal letters and financial accounts), and archaeological (extant garments in museum collections). Each has their limitations. These three sources provide a fragmentary picture of the garments worn by men and women in the 16th century. There is a need for further sources of evidence to add to the partial record of dress currently available to scholars and, increasingly, those who wish to reconstruct dress for display or wear, particularly for educational purposes. The need for accessible and accurate information on Tudor dress is therefore urgent. Sources which shed new light on the construction of historic dress and provide a comparison or contrast with extant research are invaluable.

This paper reports a pilot project which attempted to link the dead, their dress and their documents to create a visual research resource for 16th century costume.

2) The research problem

There is a fourth primary source of information that has considerable potential but as yet has been largely overlooked by costume historians. Church effigies are frequently life-size, detailed and dressed in contemporary clothes. They offer a further advantage in the portrayal of many middle class who do not appear in

pictorial sources in as great a number as aristocrats. Effigies have been used as sources for the illumination of armour (Capwell, 2004) and academic dress (Beaumont, 1928). Nevertheless, they have limitations in line with the other primary sources discussed above. Funeral monuments can be misleading, some being commissioned by the deceased well before his or her death, and others by a sorrowing but impoverished spouse, many years afterwards. Effigies are sometimes portrayed in a stylised form of dress (for example, children and weepers are dressed as exact miniatures of the main figures). Funerary and memorial sculpture tends to show an idealised representation of the person who has died and there is no guarantee that the sculptor was representing dress exactly as he saw it in life.

The greatest barrier to the use of effigies for costume research is the lack of a detailed inventory of examples with accurate descriptions and their locations. The project reported here was an investigation into the practicality and usefulness of a database of images of effigies as source material for costume historians, costumiers and educators. It focused on Hampshire, partly because it was convenient for travel from Winchester School of Art, and because the density of monuments (at 17 monuments per square mile) is typical of the most challenging counties in terms of travelling time (see table 1). Kent, which is in the least challenging third, has five monuments per square mile. Surrey is in the middle third with 13 monuments per square mile.

3) Definitions and literature review

This project had two clear lines of enquiry: a) the feasibility of locating, photographing and describing 16th century effigies in Hampshire; and b) a method of creating a storage and retrieval system (a visual database) which would make those images readily available to researchers via the internet.

Table 1: Monuments in 38 English counties in rank order of density (number of monuments over square miles (based on Llewellyn, 2000, 8)

County	Number	Sq miles	Density	Corrections
Kent	308	1524	4.95	
Oxfordshire	150	755	5.03	
Middlesex/London	105	693	6.60	2.86 not 6.6
Buckinghamshire	112	749	6.69	
Northamptonshire	131	914	6.98	
Bedfordshire	67	473	7.06	
Berkshire	94	726	7.72	
Worcestershire	90	700	7.78	
Gloucestershire	159	1257	7.91	
Leicestershire/Rutland	105	832	7.92	
Cambridgeshire	61	492	8.07	
Warwickshire	111	982	8.85	7.13
Hertfordshire	68	632	9.29	
Essex	154	1528	9.92	
Somersetshire	144	1622	11.26	
Huntingdonshire	32	366	11.44	
Derbyshire	81	1021	12.60	
Surrey	56	722	12.89	
Norfolk	153	2055	13.43	
Suffolk	110	1499	13.63	
Staffordshire	83	1154	13.90	
Wiltshire	93	1345	14.46	
Devon	179	2600	14.53	
Herefordshire	55	842	15.31	
Dorsetshire	63	973	15.44	12.93
Sussex	88	1457	16.56	
Hampshire	99	1649	16.66	
Nottinghamshire	50	844	16.88	
Cornwall	77	1355	17.60	
Shropshire	71	1347	18.97	
Cheshire	47	1015	21.60	
Lincolnshire	103	2662	25.84	
Yorkshire	145	6089	41.99	
Westmorland	7	739	105.57	
Lancashire	17	1869	109.94	
Cumberland	10	1520	152.00	1000 not 10
Northumberland	10	2019	201.90	
Durham	5	1014	202.80	72.95
Average			31.63	

a) Tudor effigies and dress

For the purposes of this project, Tudor was defined as 1485 to 1603 - from the date of Henry VII's accession to the death of Queen Elizabeth I - in order to cover as wide a range of dress as possible. A definition of "monument" was taken from previous work in the field: "A monument is ... a permanent memorial whose primary function was to record the death of one or more persons, and which was originally intended to be placed within a church" (Finch, 2000, 7). The *Oxford English Dictionary* definition of an effigy is "a likeness, portrait or image - now chiefly applied to a sculptured representation". Studies of monuments often include memorial brasses. However, this project concentrated on three-dimensional representations of people in stone (which also excluded wooden effigies - a decision which may be reviewed). It specifically excludes representations of armour and focuses on civilian dress for both men and women.

Much of the art history literature on church monuments makes depressing reading, for example: "The history of English sculpture in the 16th century is a sorry tale" (Whinney, 1988, 27). An emphasis on extraordinary examples and their treatment as a marginal branch of gallery sculpture has done the genre a disservice (Finch, 2000, 1). Though effigies may not demonstrate renaissance refinement to the cognoscenti of the art world, they do offer a rich resource to the dress historian. A few authors mention monumental costume where it is interesting to them (Whinney, 1988; Llewellyn, 2000) or praise detailed depictions (Esdaile, 1946, 55; Whinney, 1988, 49). However, these cursory remarks belie the wealth of information stored in church monuments.

There are a few examples of scholarly research which use effigies as evidence for dress (for example, Bagnell-Oakley, 1893-4). Others (for example, Scott, 1987) tend to describe monuments when the individual families represented are the focus of the research rather than as part of a broad survey of dress. The Cunningtons' series of volumes, including the one on the 16th century (1970), makes frequent references to church monuments, often through textual

description and re-drawings, to provide contrasting or supporting information about extant garments or documentary sources. An example is a brass memorial which provides a useful representation of a woman of 1511 at Worlingham Church in Suffolk (Cunnington, 1970, 54). Likewise, Arnold makes reference to monuments to compare and contrast these three-dimensional references with extant garments, such as the tombs of Richard Alington and his wife Joan circa 1561 at the Rolls Chapel in London (Arnold, 1988, 134) and Sir Rowland and Lady Cotton dated 1610-15 at the church of St Chad in Norton-in-Hales, Shropshire (Arnold, 1985, 29).

The first question which is answered to a limited extent by the literature is whether the representations of people in effigy are realistic and reliable. There is some evidence to suggest that this was the case even if monuments did not present perfect portraits. Trends in monument design have been interpreted against a backdrop of rising individualism - a theory expounded by two eminent historians (Aries, P, 1983 and Stone, 1977 & 1987). It has been argued that the gradual realisation of the individual is exemplified in the increasing naturalism of tomb sculpture, among other changes (Gittings, 1984; Finch, 2000, 3). However, this realisation occurs over five hundred years - from the 14th to the 18th century - and Tudor effigies lie toward the early end of this spectrum, when "individualism" is still in its infancy. Royalty and other notables were often modelled from death masks, which resulted in an exact portrait (Esdaile, 1946, 47) but this is not the case with the majority, according to one commentator who asserts that "none of the contracts [for monuments] specify a portrait, only a counterfeit of an esquire or lady" (Crossley, 1933, 7).

A closer examination of these contracts (between monument builders and their patrons) shows that some do specify a portrait, although the term may not mean an exact likeness (Llewellyn, 2000, 233), that London craftsmen such as Gerard Johnson were offering "exact portraitures" of the dead in the 1590s (Esdaile, 1946, 48), and the monuments themselves show evidence of characterisation, as

in, for example, a monument to Blanche Parry (died 1590) in St Margaret's Church, Westminster (Whinney, 1988, 65-66). However, "the early documentation is inconclusive on whether or not effigies were assumed to be portraits" and it is not until the 1620s and 1630s that effigies are clearly intended to be "to the life" (Llewellyn, 2000, 230 & 233).

Extant contracts do describe the details of dress required. An agreement between George Shirley and the Roileys for a tomb at Somerton (Oxfordshire) to Thomas Fermor and his wife of 27 October 1582 which specifies "a decent and p'fect picture of a faire gentlewoman wth a Frenchhood, edge and abilliment, with all other apparel furniture jewels, ornaments and things in all respects usuall, decent and seemly, for a gentlewoman" (Crossley, 1933, 32). There was quite a flurry of correspondence between John Gage of Firlle Place and his Southwark-based builder in 1591. This features an initial design drawing and Gage's subsequent revisions which stripped his two wives of their fashionable wired hair and farthingales and resulted in a model of part of the required headwear - a French hood with "cornetts" - being sent to London in a box (Llewellyn, 2000, 176 & 233).

A second question partly answered by the literature is whether the monuments of today accurately reflect what their contemporaries intended. Again, recourse to the original documents suggests that the monuments were coloured with oil paint, certain parts being also gilded (Whinney, 1988, 46). An example is the monument to Sir Richard Kingsmill (1600) at Highclere, Hampshire (TNA PRO, SP Supp, 46/23, f137 quoted in Whinney, 1988, 430). Most have lost their Tudor colours and some have suffered damage and neglect: "Whitewashed in Puritan times, they have suffered even a worse indignity at the hands of the 'restorers', who when not actually destroying or turning out the tombs, have scrubbed and reworked the surfaces of many of the effigies, and removed not only the whitewash but the coloured decoration as well, giving them a dull, mechanical appearance, to the detriment of their value and the loss of their beauty"

(Crossley, 1933, 38). Damage has been caused by "Cromwellian brutality ... [and] ... partial disfigurement often due to choir-boys, careless visitors and ... careless clergy and churchwardens" (Esdaile, 1946, 61).

Despite the approximation in personal appearance and the vagaries of time and neglect, what remains of effigies and their dress today is well worth observing.

b) Visual databases

A review of relevant texts revealed that the critical issue in image archives is not the demands of storage but the need to relieve the bottle-neck presented by largely inadequate access and retrieval systems (Bamidele, Stentiford and Morphett, 2004, 151). Most systems rely on manual description of images to produce text which is searched using keywords. However, there is a general recognition that this method of retrieval is inadequate because it is costly, slow and prone to error (Bamidele, Stentiford and Morphett, 2004, 151). In addition, textual labels cannot fully capture the visual nature of data (Del Bimbo, 1996, 353). Images are no longer considered as pure communication objects or appendices of a textual document. They have become self-describing entities, so that related information can be extracted directly from them (De Marsicoi, Cinque and Levialdi, 1997, 119). The future for visual databases is the development of content-based image retrieval (CBIR) which does not rely on descriptive text attached to images (Idris and Panchanathan, 1997).

The Technical Advisory Service for Images (TASI) provides advice on standards, guidance and good practice in creating an archive of images. It is advisable to use a file format that retains all information that was created by the capture device. Further, a master archive should be set up to retain a copy of each image in a form as close as possible to the original captured data. This enables the project to go back to the archive knowing that they have an exact copy of everything that was originally created by the capture device for the project. Another consideration was the appropriate file format for delivery. Since it was

intended that the images be accessed via the Internet, a file format which works well with a web browser is required. The JPEG format is recommended by TASI for this purpose.

4) Tudor effigy research methodology

Stage 1 – Identifying churches with relevant effigies

An electronic search of descriptions of church architecture and furnishings taken from Pevsner's survey of England was undertaken using key words, such as "monument" and "effigy" (Good, 2004). The reliability of these keywords was tested by reference to two thesauri - one national and one international: English Heritage's National Monuments Record Thesauri (NMRT) within which there is a broad term "commemorative monument" and a class listing "commemorative" which includes "effigy" with the definition: "A sculptured likeness, portrait or image, often found on a tomb or other memorial"; and the Art & Architecture Thesaurus (AAT) created by the J Paul Getty Trust, which defines effigies as a subset of funerary sculpture: "sculptured representations of the deceased on a tomb."

The only difficulty in consulting this database is that the Tudor era is not easily isolated. The results for Hampshire span two eras: c15th and c1550 to 1630. The search produced a list of about 90 monuments worthy of further investigation. This figure is close to the 99 monuments identified in a survey of post-reformation (1530 to 1660) monuments in Hampshire, representing 2.7 per cent of the national total (Llewellyn, 2000, 9).

An important caveat to this first stage is that Pevsner's county guides were intended as a *vade-mecum* for visitors, and, as a secondary source, "cannot be construed as sound evidence" (Finch, 2000, 5). It was intended that a series of spot-checks would be conducted at churches not listed in Pevsner but time and resources precluded this. By way of alternative, the National Monuments Record's (NMR) photographic database was consulted. There are 402 churches

listed in this *Images of England* database for Hampshire. A careful keyword search showed that Pevsner was not infallible but generally reliable. There were 22 churches which featured figures, 16 with effigies, and 10 included the word "recumbent", which is usually associated with the representation of a person lying on a monument. Those not listed in Pevsner but identified on the NMR's database were not of the Tudor period as defined for this project.

A selection of guides and gazetteers to churches and monuments were also consulted (for example, Cox and Ford, 1935) to see if there were effigies outwith Pevsner's survey. However, these did not produce any further examples. The sources mentioned above permitted some checks to be made on the dates when monuments were built. However, there were many for which the specific date and the presence of effigies was unclear. This necessitated a comprehensive survey of the monuments in situ.

Stage 2a - Locating the effigies and photography

Churches were located with the aid of the Ordnance Survey Touring map of Hampshire and the Isle of Wight, which is a convenient scale for visiting several churches in one day by road. However, despite having places of interest and tourist attractions marked, it does not feature churches. The precise location of each church was pinpointed with the aid of the AZ Street Atlas of Hampshire. This has the disadvantage of not including the Isle of Wight. A satellite navigation system might have proved useful. However, it is very difficult to discover postcodes for churches, which is what most electronic systems rely on to identify destinations. The Royal Mail's database of postcodes does not include churches.

Most churches in Hampshire were open and the monuments freely accessible. The Open Churches Trust has contributed to this by helping with security measures and funding for them. In those cases, where the church is locked, the telephone numbers of the clergy and churchwardens are usually available. One

of these people is usually able to assist or make an appointment for a return visit. Some churches have notices showing the opening hours.

On examination, many of the churches with monuments of the appropriate date do not have effigies. Of the 82 monuments identified, 17 had effigies of the appropriate era. In total, there were 43 individual figures and 10 groups of people (where each figure was incompletely shown or it was difficult to photograph them individually) in 16 churches. A total of 13 of these figures were men in armour and not relevant to this study. Nevertheless, the representation of men's civilian dress is not much less than that of women: 19 to 23 figures (or groups of figures) reflecting the changing fashion away from depiction as knights. A study of monuments in Norfolk has shown that armour was appropriated by esquires at the beginning of the century and that this may signal a renegotiation of social roles and status among the rural elite (Finch, 2000, 51). There were 44 figures or groups of figures photographed during fieldwork for this project.

An Olympus Camedia c-50 Zoom digital camera was used to take most of the photographs. However, a drawback to this camera is that it does not capture raw data files which are of a sufficiently high resolution for publication. It delivers the photographs as JPEGs which can be archived and manipulated with relative ease. In order to offer some comparison for similar work in the future, all the photographs of effigies in the Isle of Wight were taken using a Canon 20D with a two additional lenses (28-135mm, and 10-22mm). In most cases, the Canon 20D produced better results than the Olympus mainly because of the higher resolution images it produced. It was possible to zoom in on a photograph of a whole monument and focus on details without losing any quality in the image. This was not possible with the images taken on the Olympus. In addition, the Canon's wide angle lens was invaluable for achieving a complete photograph of monuments with recumbent effigies - another task which was impossible with the Olympus.

A standard portfolio of images for each effigy was constructed. This consisted of the following 16 views (plus accessories or other items of interest, as necessary):

Table 2: Standard photographic shots of monumental effigies

Monument	Full					
Front	Full	Head	Torso	Neck	Sleeve	Hem
Back	Full	Head				
Side	Full	Head			Sleeve	Feet
Top		Head				Feet
Bottom						Feet
(Other)			(Girdle)	(Chain)	Ring)	

It soon became apparent that photographing effigies presents a number of logistical challenges. Lighting is often poor or garish; monuments are high on a wall or very tall; furniture may be piled against a monument obscuring it from view. A stepladder is an essential piece of equipment in this context. It was necessary on occasions to stand in precarious positions to achieve specific shots, which suggested that a lone researcher might do well to inform others of their movements in advance in case of accidents. This was particularly important when visiting remote churches. Many of the effigies were dusty and dirty, which produced rather depressing images.

Stage 2b - Commissioning the database

A number of alternative database systems were considered. Filemaker Pro is an off-the-shelf database which permits the storage and retrieval of images, although a weakness is that the images are stored outside the database, which uses specified locations to retrieve them. Although Filemaker can be configured for web browser access, this is not its primary purpose. Vernon is another off-the-shelf database for cataloguing museum collections. It is currently used for

recording two projects at the Textile Conservation Centre, both of which are drawing heavily on objects in museums. It is beyond the remit of the current project to catalogue the effigies in the way a collection of museum objects is recorded. End users are as likely to be enthusiastic amateurs as serious scholars of dress history. A more user-friendly interface, such as those used by internet shopping sites, was considered appropriate.

The database was built by a freelance IT consultant on an SQL platform, which is compatible with most servers. This was an important consideration as it was envisaged that the pilot database would be made available to users via the University of Southampton's website. Its format is similar to that used by photographic agencies to showcase and sell their images.

Stage 3 - Uploading the images and configuring the database

The front full-length view became the main image for the effigy's database entry with all the other views filed as details. Each of the main images was also made available as a thumbnail image. The photographs were converted to 500-pixel width (main images) and 160-pixel width (thumbnails) and saved in a "for web" format using Adobe Creative Suite software. However, TASI advises that all digital image archives make the original image available to end users. The original images are not yet in the database but are available to upload at a future stage.

Each figure (or group of small figures) on a monument was treated as a separate effigy. Each element of dress was captured in a separate image and uploaded to the database. A management area is accessed by password protected entry system. This allows new images to be added, text to be edited and entries to be deleted as necessary.

A home page welcomes visitors to the site and explains how its three features are used: browse, search, contact us. The search function checks all the text

associated with each effigy and presents the results in chronological order (earliest to latest). Feedback is invited on the home page and the menu bar of each page offers an automatic email message form to encourage users to respond.

The final stage of the project will be the transfer of the database to the University of Southampton's website.

5) Testing the database and feedback

A selection of potential users was invited to visit the database and provide feedback on an email message form. These were drawn from internet news groups for costume and theatre designer, re-enactors and from informal networks of academics and costume enthusiasts (for example, the Costume Society of America and The Costume Society of Great Britain). A future draft of this report will include an overview of this feedback.

6) Conclusions and recommendations for further work

The main conclusions drawn from this project were that:

- Identifying likely churches with relevant effigies is easily achieved with desk research.
- The resources taken to locate, photograph and upload images of effigies produced considerable useful data which would otherwise be relatively inaccessible. In Hampshire churches, a base of 90 monuments yielded 44 useful effigies or groups of effigies, most of which offered detailed, three-dimensional depictions of items or features of dress.
- Providing textual descriptions of the effigies' dress proved to be beyond the scope of this project. The time allocated for labelling the effigy details was taken up by the technical demands of uploading the images to the database. Future projects will need to allocate at least one day per

monument for annotating the photographs with a minimum number of keywords.

- The setup costs associated with designing and refining the database were covered by this pilot project. Adding to the image archive will not incur IT costs in the future. Although refinements to the user interface (see below) may need further funding, these will not be as costly as the setup fees.

A number of potential improvements to data quality were identified:

- Using a high-resolution camera with a range of lenses
- Giving users access to the high-resolution original images via a downloadable file
- Facilitating rich text description in the main effigy descriptions for bold, italic, underlining and the possibility of inserting hyperlinks to other web resources
- Investigating what appropriate, sensitive cleaning might be undertaken without causing undue wear and tear to the effigies before photographing them

Further development of the database could be achieved through:

- An investigation into the accuracy of the dress represented in effigies. Are the garments and accessories shown accurate renderings of real garments, as is the case with representations of armour (Capwell, 2004)?
- An analysis of what the dress represented in effigies demonstrates: do they support or contradict theories about Tudor dress reported elsewhere?
- Case studies based on specific effigies or a range of effigies offering detailed analysis of the dress represented. These would document findings which result through comparison or tracking a feature of dress through the century.

- The creation of a user group which exchanges observations, queries and a regular html newsletter linking disparate groups of dress historians and amateur enthusiasts.

The Costume Research Image Library (CRIL) for Hampshire was constructed within its time and budget constraints. It has provided some useful images for dress researchers to examine, although detailed feedback is currently being submitted by users and, when analysed, will offer useful insights into future improvements.

Work elsewhere has linked economic information from tax assessments of 1522 and 1524 to the geographical distribution of monuments in Norfolk (Finch, 2000, 54). Similarly, wills, corporation records have helped to identify trades among those commemorated in monuments (Finch, 2000, 59). There is clearly a great deal more to be learned from reuniting the dead, their dress and their documents.

Notes

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