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Reconstructing Jane Austen's Silk Pelisse, 1812–1814

By Hilary Davidson

This article explores the physical qualities and historical contexts of the silk pelisse coat dated c. 1812–1814 associated with Jane Austen (1775–1817) through family provenance and now held by Hampshire County Museum Services and Archives. The author took an exact pattern of the pelisse (included), then made replica garments. The association with Jane Austen is considered using evidence from Austen's letters about her tastes in colours, length of fabrics needed for clothing, and ownership of a silk pelisse. The silk's oak-leaf pattern is interpreted as a British patriotic motif, especially during the period of Napoleonic conflicts. Questions and insights arising from the process of reproduction are discussed, and the pelisse is compared to other surviving garments, and to contemporary fashionable images. As evidence suggests the pelisse probably did belong to Austen, her physical characteristics that can be gleaned from the garment are compared with information about Austen's appearance.

KEYWORDS: *Jane Austen, pelisse, replica, Regency fashion, silk, early nineteenth-century women's dress*

INTRODUCTION

Since 1993 Hampshire County Museum Services and Archives have held in their collection a brown silk pelisse dated *c.* 1812–1814 (Figure 1). It is an unexceptional garment with an exceptional provenance, according to which it once belonged to Jane Austen (1775–1817), one of the world's most significant and keenly loved authors. With such an attribution, the pelisse is the nexus for all sorts of interests and questions. Was it really Austen's? If it was, what can be discovered about her physique from examining the garment? How does it relate to ideal and actual fashions, textiles, clothing cultures and wider national contexts? How should the delicate object be studied, stored, interpreted and displayed? This article asks all and answers some of these questions based on a research project, begun in 2007, to make an accurate replica of the pelisse and understand the diverse aspects of the original's making and wear. The pattern diagram is included (Figure 2).

JANE AUSTEN

Jane Austen was born the daughter of a clergyman in Steventon, Hampshire, in 1775, with one older sister, Cassandra (1773–1845), and six brothers. George

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FIGURE 1. 'Jane Austen's' pelisse coat, 1812–1814. Winchester: Hampshire Museums Service, HMCMS:C1993.100

Austen gave up his Steventon living in 1800 and moved the family to Bath. After Mr Austen's sudden death in 1805, the family moved around until in 1809 Mrs Austen finally settled with her daughters in a house on the Chawton estate near Alton, Hampshire, left to her son Edward Knight (née Austen), who had been adopted by a wealthy childless cousin. Jane Austen completed three new novels in Chawton and revised three earlier works for publication.[1] Austen died after a long illness in 1817 in Winchester and is buried there.

There is little verifiable evidence for what Jane Austen looked like and a great deal of curiosity about her appearance. Textual references provide some contradictory information but add up to a tall, thin woman with curly brown hair and hazel eyes. Only two pictures known definitely to be of Austen exist. The watercolour by her sister Cassandra in the National Portrait Gallery (NPG 3630) was thought by their niece to be 'hideously unlike' Jane, and it was never shown during Cassandra's lifetime.[2] Cassandra also painted in 1804 a back view of Jane sitting on a grassy hill in a blue dress, face wholly hidden by the angle and her bonnet (private collection).[3]

Three more controversial portraits are further candidates for depictions of Austen.[4] The Rice portrait painted in oils by Ozias Humphry (1742–1810) shows a young brunette girl in a white muslin dress. If the subject was Austen, she could be no older than around age thirteen, which would make the painting's date *c.* 1789. A lively debate has existed for years between the portrait owners and art, dress and other historians as to whether it could be Austen herself, or another Austen

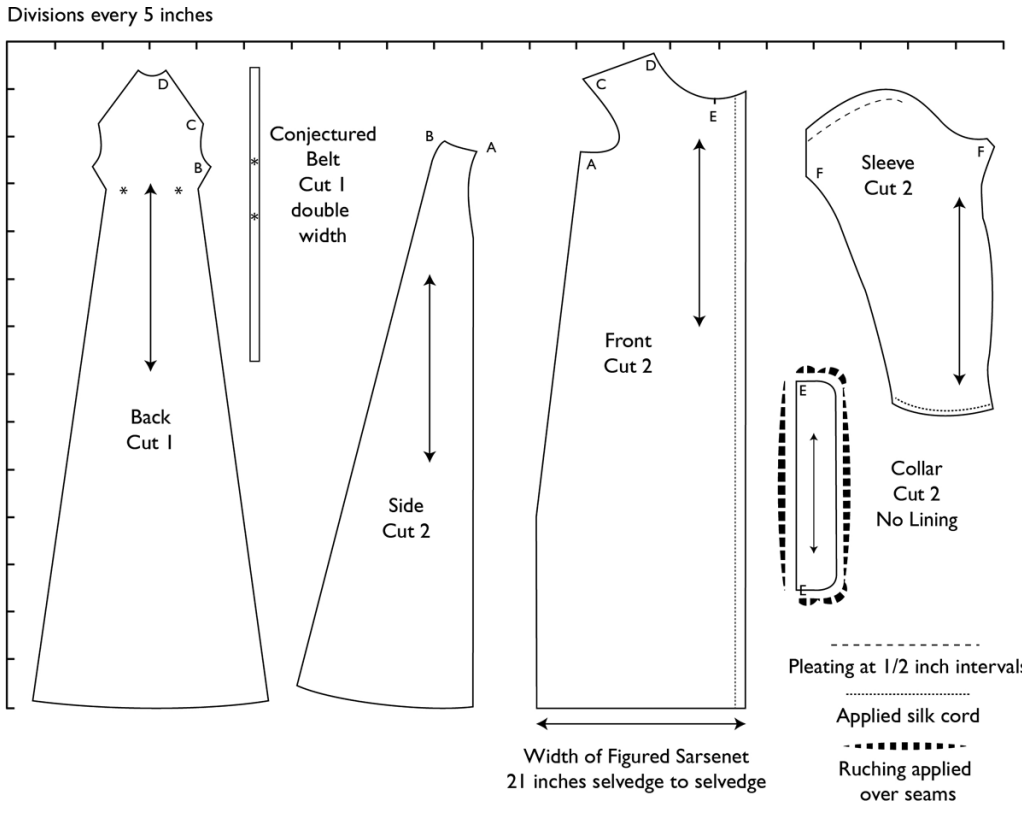

FIGURE 2. Pattern for the pelisse coat, made by Hilary Davidson, 2007
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cousin also called Jane.[5] Dress historians have tended to the 'nay' side, based on the portrait showing dress which is too stylistically advanced for the purported date.[6]

The antiquarian Richard Wheeler found and identified the Stanier Clarke Austen picture in an early nineteenth-century account book.[7] It is a watercolour of a tall, fashionably dressed woman with brown hair and dark eyes, with no inscription, painted by the Revd James Stanier-Clarke (1766–1834), who met Austen in his capacity as private secretary to the Prince Regent. Other named portraits in the book by the talented amateur artist have been noted for their correspondence with professional likenesses of well-known sitters.

The third, most recent contender is the Byrne portrait (Figure 3), a graphite on vellum drawing owned by historian Paula Byrne, showing a woman in 1810s dress sitting at a window with St Margaret's Church, Westminster Abbey in the background.[8] Since this is the only putative portrait coming to light and contesting its position during the digital age, the active critical dialogues around the possibility of it being an Austen portrait have been more immediate. I was involved as the clothing expert in *Jane Austen: The Unseen Portrait* (BBC2, 2011), a documentary exploring the sitter's identity. From the clothing point of view, the portrait was unquestionably made in the 1810s, probably *c.* 1814–1816.

FIGURE 3. Portrait of a woman, possibly Jane Austen, 1810s. Graphite on vellum. Courtesy of Paula Byrne

If visual evidence for Jane Austen's appearance is scant or debatable, turning to her dress is an alternative method of using material culture to investigate what she may have looked like. At present her surviving personal adornments number one of a pair of topaz crosses set in gold given to Jane and Cassandra Austen by their brother Charles; a turquoise bead bracelet; a turquoise ring sold at auction in 2013 and kept in Britain through emergency fundraising during an export ban; and a muslin shawl embroidered in whitework, possibly by Austen herself. All five objects are in the collection of the Jane Austen House Museum (Chawton, Hampshire).[9]

The pelisse is a well-provenanced piece of sartorial Austenalia and the only body garment, therefore the only physical object that can offer sought-after information about the figure of this visually elusive author.[10] Given the provenance's lack of full certainty, the material information available is also concrete, rather than relying on second-hand description or interpretive portraiture. A descendant of the family donated the pelisse to Hampshire County Museums and Archives in 1993. She inherited it from her grandmother Mrs Winifred Jenkyns (1879–1973, née Austen-Leigh), who had received it from Eleanor Steele (née Glubbe, b. 1857).

Miss Glubbe had visited the Knight family as a young lady of eighteen, around 1875, and was given the garment by Miss Marianne Knight, sister of Captain John Knight (descendant of Jane's brother Edward Knight), along with other mementoes 'now mislaid'.[11] At the age of seventy-three Mrs Steele felt the pelisse should return to the Austen family, and sent it to Jenkyns, the great-granddaughter of Jane's elder brother James Austen (1765–1819). Mrs Steele's note accompanying the parcel reads: 'I missed the little coat for a long time but lately it turned up. I cannot remember if it was "Jane's" but it seems probable'.[12] If Mrs Steele had known what difference her 'probable' made to the certainty of attribution, she may have used different phrasing, or perhaps she had no certainty herself. Mrs Jenkyns wrote:

> Mrs Steele in 1930 could not positively state that this dress had been Jane's own, but knew it belonged to one of the Austens. The style is consistent with it having been Jane's own: it has been very little worn. Cassandra was never rich enough to abandon a dress in this condition & Marianne Knight, being all her life richer than her aunts would not have been given a dress except as a keepsake.[13]

The pelisse is now a star object in the Hampshire collection and one of its most important pieces, although not on display. Although its provenance is imperfect, this article works from the assumption that the pelisse did belong to Austen. While this can never be asserted with complete confidence, none of the internal evidence found during the meticulous examination of the garment contradicted this assumption. I summarize evidence for the attribution in the conclusion. The only way to corroborate the attribution would be to exhume Austen's body from Winchester Cathedral and check her skeletal measurements, which would accurately determine her height at least. This possibility is very unlikely.

PELISSES AND TEXTILES

Glosses on the word 'pelisse' in critical Austen editions condense information from dictionary definitions of a pelisse as 'a woman's garment partly of fur, a long mantle of silk, velvet or cloth, having armholes or sleeves'.[14] Such a description does little justice to the inventive varieties of this garment appearing in early nineteenth-century fashion. A pelisse as Austen would have understood it was a style of coat-dress or over-garment, made in every kind and weight of fabric, from sheer cotton muslins to fur-lined luxury, worn indoors and out, in all seasons, and reaching anywhere from the wearer's knees to her ankles. Pelisses were vehicles for fashion, situated between the essential gown and the hardier warmth of redingotes, mantles and cloaks, going 'some way towards compensating for the reduced number and thickness of petticoats, which was all that the new line of dress would accommodate'.[15] They could be cut with a separate skirt piece, like gowns, or flow uninterrupted from shoulder to hem. Some pelisses had cutaway fronts revealing the skirt below; some enveloped the neck in high ermined rolls. The garment was a staple for women in Austen's dressed world. In *Persuasion*, Captain Wentworth likens his aging ship to the ubiquity of pelisses:

> I had no more discoveries to make than you would have as to the fashion and strength of any old pelisse, which you had seen lent about among half your acquaintance ever since you could remember, and which at last, on some very wet day, is lent to yourself.[16]

Alison Carter, Senior Keeper of Art and Design at Hampshire Museums (1986–2011) dated the Austen pelisse stylistically to 1812–1814 during its accession to the Hampshire collection. Further research into fashion plates from these years, and into dated extant garments, confirmed this dating. The key stylistic points are the popular high collar, slightly flared cut of the skirts, and sleeve-heads getting a little fuller, with the fullness moving from the top shoulder to further down the back. Figure 4 shows a good comparative example of a waist-less pelisse in a fashion plate.

The Knight family identified the pelisse as a garment Austen describes in an 1813 letter to Cassandra:

> Thursday (Oct. 14). 1813
>
> I produced my Brown Bombasin yesterday, & it was very much admired indeed — & I like it better than ever [...][17]

However, bombasin or bombazine generally has a silk warp and a worsted or cotton weft, and the pelisse fabric is entirely silk. The garment mentioned in an 1814 letter from London is a better candidate, and fits the stylistic dating:

FIGURE 4. Detail from a fashion plate, showing a waistless pelisse, 1812. London: Harry Matthews Collection, Museum of London, 2002.139/2139

23–24 August, 1814

I must provide for the possibility by troubling you [to] send up my Silk Pelisse by Collier on Saturday. — I feel it would be necessary on such an occasion [...][18]

The 'possibility' referred to is calling on family friends on her way home from London.[19] Austen's identification of the pelisse by no other descriptor than 'silk' suggests the author had only one such garment in the expensive material at the time of writing, though she had one or more other pelisses (a trimmed pelisse, for example, is mentioned on 30 April 1811).[20] Had she more silk ones, other qualifying adjectives would have been needed. Costly silk was not a stranger to Austen's wardrobe, as by 1813 she owned a ball gown of 'China Crape' (as did Cassandra), and another gown of lilac sarsenet.[21] The Austen pelisse is made of warm brown silk twill woven with a pale gold or straw-coloured oak leaf motif in opposing diagonals containing four leaves per 4-inch repeat (Figure 5). The woven fabric width was no less than 21 inches, based on the widest pattern piece, which is consistent with half-ell wide English silks of the period.[22] It is of English manufacture as French silk imports were banned, verified by a tiny visible section of selvedge.[23] The full lining is a plain or tabby weave white silk.

Calculating from measurements taken from the pelisse, at 21 inches wide, it would take exactly 7 yards and 4 inches of silk to make the coat. Every dressmaker knows it is wise to get a little extra material just in case, so I estimated a purchase length of 7½ yards. Subsequently, some supporting internal evidence emerged from a letter where Austen asked her sister to purchase two gowns, as the bought lengths of fabric were called:[24]

Sunday, January 25 1801

Buy two brown [gowns of cambric muslin], if you please, and both of a length, but one longer than the other — it is for a tall woman. Seven yards for my mother, seven yards and a half for me; a dark brown, but the kind of brown is left to your own choice.[25]

FIGURE 5. Detail of the original pelisse's collar and front
© *Hilary Davidson*

This tells us Austen liked brown and at this time bought exactly the same length of fabric as the pelisse contains to accommodate her height. Thirteen years later Austen was still buying a gown of the same length of 7 yards of black sarsenet for Mrs Austen in London.[26] Could she also be buying 7½ yards for herself? Gown could mean either a dress or a pelisse-like article, and there are of course differences in fashion and thus pattern cutting to be taken into account. This pelisse does not make the most economical use of fabric, containing curves and angles that leave a lot of scrap. The later garment also has long sleeves, where dress fashions *c.* 1800 favoured short ones, allowing more yardage for the rest of the gown.

Austen was not alone in her love of the fashionable colour brown. Barbara Johnson's (1738–1825) ever-useful album of fashion plates and 121 fabrics bought between 1746 (age eight) and 1823 (age eighty-seven) supplied examples of fabrics and colours similar to the pelisse.[27] Johnson used five brown and two black twilled and plain 'sarsenet', 'sarsinet' or 'sarsnets' between 1797 and 1820. Brown appears repeatedly in fashion plates from around 1800 onwards, suggesting, as do the plates stuck into the album, that Johnson actively took note of and incorporated fashion into her wardrobe even as an elderly woman, 'having no intention of being numbered among those who chose to be invisible merely because they were old'.[28] Two entries evoke the Hampshire pelisse. The first is a 'Brown French Sarsanet Peliſse, nine yards, six shillings a yard, half ell wide made at Bath March 1811'[29] (the attached silk sample is tabby weave with a black warp and brown weft). A March 1809 entry for a 'figur'd Sarsnet Gown, ten yards half-yard wide made at Bath' has a sample of silk attached which is very like the pelisse fabric (Figure 6).[30] The twill

FIGURE 6. Figured silk twill sarsenet, 1809 in Barbara Johnson's album, London: Victoria and Albert Museum, T.219–1973

textile has an identical warm brown ground, with a stylized leaf-like pattern woven in grey silk (appearing silvery) in opposing twill. Sarsenet is a light silk that could be either plain or twilled. Based on the weave patterns in Johnson's album, the Hampshire pelisse outer textile is a twilled figured sarsenet, and the inner is a tabby sarsenet or Persian, a soft cheap lining silk. The textile historian Natalie Rothstein noted that the looser weave of sarsenets used less silk and thus made them cheaper, though the figured element would have increased the cost with the weaving time.[31]

Austen had made some money from her writing at this point; the pelisse could have been a sartorial indulgence. At any rate, it is dated to the period when for the first time she has some independent means. In July 1813 she could record, 'I have [...] written myself into £250'.[32] None of Austen's surviving letters refer to buying silk specifically, and unfortunately only two survive from 1812, the date of the silk. An expensive figured sarsenet was, if Austen bought it herself and it was not a present, almost certainly a purchase from London's bulging warehouses. Her first trip to the metropolis since coming into her *Pride and Prejudice* money appears to have been May 1813, but no textile purchases are recorded. Austen bought worsteds during a second trip to London, at Grafton House on 16 September 1813; and poplins at Layton & Shear's on 15–16 September 1813.[33] Upon giving half of her poplin to Cassandra, Austen grandly writes on 23 September 1813, 'Remember that it is a present. Do not refuse me. I am very rich'.[34] Like many of Austen's observations, the comment is simultaneously ironic and, for her situation, truthful, as her brother Edward had recently given her £5.

The museum's catalogue entry for the pelisse describes the pattern as an 'oak-leaf' motif. Although it is highly stylized, the pattern resembles other unambiguously oaken designs such as an oak/acorn motif on a *c.* 1815 printed cotton dress in the Museum of London.[35] It was certainly a popular era for oak emblems. The trees symbolized English- or British-ness and the Royal Navy's strength during the extended Napoleonic warfare, from the naval march 'Heart of Oak' to objects commemorating Nelson's funeral in January 1806. Textile prints of his funeral procession are embellished with profusions of oak trees, leaves and acorns. If the pelisse was Austen's, it is conceivable that wearing oak-leaf patterns could have been a display of quiet domestic support for her two naval brothers Francis and Charles who were both on active duty in 1812–1814. Austen's appreciation of the navy in *Persuasion* and the upright character of midshipman William Price in *Mansfield Park* demonstrate her depth of feeling towards the service.[36]

The 1809 Johnson album silk reflects the popularity of small, stylized oak-leaf or acorn-like motifs as seen in the pelisse silk, and recurring throughout early nineteenth-century textile patterns.[37] A pelisse of a waist-less cut dated *c.* 1807 in the Fashion Museum, Bath, is made of figured sarsenet woven with a similarly scaled falling-leaf pattern.[38] A printed cotton cambric dated May 1812, included as a swatch in *Ackermann's Repository of Arts*, is an exact match for the pelisse textile (Figure 7).[39] There must be a manufacturing or copying relationship between the silk and cotton designs because they are identical, the golden leaves being precisely the same size, scale and colourway as the silk. The cotton strongly suggests an 1812 manufacture date for the silk, supporting the pelisse's stylistic dating, because the cotton has a background of diagonal printed brown lines imitating the silk's woven

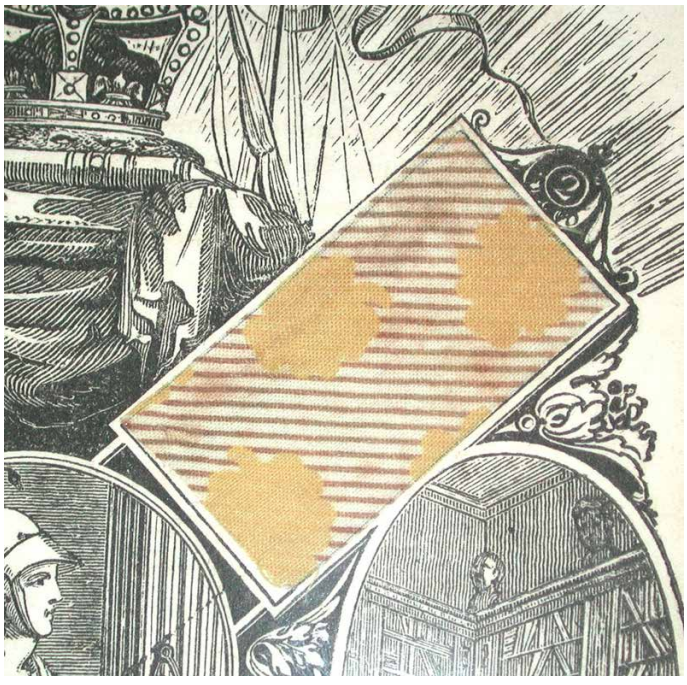

FIGURE 7. Printed cambric swatch matching the design on the pelisse's figured sarsenet, May 1812, from *Ackermann's Repository of Arts*, London: Museum of London, 2002.139/2173

twill lines and implying it was designed after the silk. Perhaps it formed a cheaper version of an existing popular textile.

THE REPLICA PELISSE

Catherine Leonard, then a volunteer at Chilcomb House, Hampshire, where the pelisse is stored, explored the possibilities of its reproduction in a poster presentation on *Access vs. Preservation* during her MA History of Textile and Dress studies at Winchester School of Art.[40] Leonard weighed the balance between the public's right to view an important item and the responsibility of the museum to care for it. There are sound reasons for looking seriously at both points in relation to this object. The original pelisse is very fragile and loses integral strength with each passing year and exhibition event. It has been frequently on display and shows signs of strain from this usage. It is also extremely popular. When Alison Carter had responsibility for the pelisse she received frequent loan and exhibition requests which she could usually not fulfil, in order to preserve this unique and important object for the future.

Having a replica object allows the modern one to stand in for the historical and to disseminate the information it contains much further afield. A replica copes with the stresses of mounting, display and light exposure more robustly. If it breaks, it can be repaired with no ethical conservation concerns, and can be replaced, unlike the historical garment. A replica object can also, depending on the researcher's aims, become a research surrogate. In some cases only the original object will suffice. In

others, the questions to be asked of the garment, such as pattern shapes, construction method, final dimensions and others, can be better answered after the replication process. One cannot take an original piece of clothing apart and put it back together, which is what happens through the process of making a replica and fashioning a material substitute for the original garment's construction sequence. A replica can also be freely handled without specialist knowledge and cleaned when necessary. It can be lent with far less restrictive conditions, and display and security requirements. If there is more than one replica, simultaneous loans are possible, transmitting the agency of the original as messengers used to be the embodiment of the king. Other metaphors suggest themselves: a replica is the avatar of the original, living a sprightlier and more active virtual life where the original cannot go anymore due to age and infirmity.

Replication also overcomes the great human desire implicit in historic clothing now generally forbidden in curatorial practice: wanting to try it on.[41] The everyday experience of dressing ourselves makes clothing seem more intimate and familiar to our haptic and sensual understanding of 'I' than, say, a vase, or a painting. As a curator I saw in visitors countless times the urge to touch historic textiles with their bare skin, registering the information in their nerve endings and tactile comprehension — an urge I share. It is no coincidence that the feel of a textile is called the 'hand'. Replicas can not only be touched, crushed, stroked, folded, lifted; but they can also be tried on. This mode of encounter gives a different level of intimate interpretation for audiences and encourages children in particular to engage with the past in a non-rational, intuitive way. For the Austen pelisse, the right of the public to view this important object must also be considered. The pelisse is in a public collection, and were it kept perpetually in storage with no alternative or substitute object, the people who 'own' it might never get to see it.

Finally, there is commercial potential; an accurate pattern and imitation fabric would attract many customers wishing to make a replica pelisse, especially as there is a growing interest in authentic costuming amongst re-enactment groups and Regency enthusiasts globally. Jane Austen is never out of fashion.

With all these reasons supporting making a replica, Alison Carter contacted me to undertake the process for the pelisse in 2007. It took one and a half days studying the pelisse to take an exact pattern by recording measurements and shapes (in inches, being contemporary to the garment), using a combination of measuring tape, the thread grid method, and checking against the regular pattern running vertically down the garment.[42] I drafted the shapes onto grid paper, checked and double-checked, and photographed every detail of the pelisse to record construction methods for reference when away from the object. Then I machine-stitched a calico toile or sample garment to test the pattern, the seam matching, and the conjectured construction order. The first copy was in soft unprinted silk, followed by the full replica in Figure 8 hand-stitched in reproduction printed silk. Analysing and remaking a garment raises and answers many questions that cannot be quantified through normal research methods, or as textile historian Beverly Gordon puts it, 'Understanding the complexity of a given task helps researchers think knowledgeably about diverse aspects of production'.[43] Some of the external context has been considered above; the following section explores the information found when deconstructing and reconstructing the pelisse.

FIGURE 8. The handstitched second replica pelisse, without the conjectured belt, on display, June 2012

CONSTRUCTION

The pelisse comprises two symmetrical wide front sections, narrow flared side sections, and a single back panel with typical early nineteenth-century 'kite' shaping that flares into a longer skirt. There is no waist seam; all the sections are continuous. The sleeves are pleated with the fullness quite far back into a deep armhole and have dipped curved cuffs falling over the hand. The straight upright collar opens in the centre, has curved fronts, and the neck seam and edges are covered with ruched puffs about an inch long. The upward curved peaks of the main front section extend past the collar about four inches, curved to fit snugly against the neckline (see pattern in Figure 2). Note the unusual shape of the narrow side piece with its kick-back or angled area at the top, under the arm. Another surprise was the complexity of the difficult sleeve pattern shape, which took a few attempts to map accurately. The whole sleeve is nearly on the bias, with curvatures over the arm and elbow, and weighting towards the sleeve-head to achieve fullness through pleating. The finished result is a sleeve seam running from the midpoint of the back armhole, along the outside of the upper arm, then swinging around to end at the centre of the inside wrist, with room to bend the elbow fully. It is a beautiful fit and a subtle piece of drafting. The sophisticated shape suggests the pattern originated with a professional mantua- or dress-maker either in construction or copied from an existing garment used as a pattern gown.[44] It raises the question of whether the pelisse was home or professionally made.

The Lady's Economical Assistant, published in London in 1808, provides examples of the kinds of garments that were regularly produced domestically.[45] The book emphasizes linen ancillary garments for adults and children such as stays, drawers, petticoats, caps, shirts and shifts, outer clothing for children such as coats and spencers, and clothing for the poor. By contrast, early nineteenth-century tailors' manuals focus on structured male garb, with women's dress only appearing in the form of riding habits and sturdier pelisses.[46] At each end of this spectrum, the sleeve patterns given follow an average shape without the stylish extremity of the pelisse sleeve. Instructions in these books for altering the basic patterns provided to accommodate fashionable variations suggest a similar professional skill applied to drafting the pelisse pattern.[47]

The stitching quality is not exceptional, which first suggested a home-made origin, although subsequent comparison with a range of early nineteenth-century women's garments determined the stitching to be average in quality for the period.[48] It was easy to reproduce the stitching to the same scale, unlike many Regency gowns displaying stitches of an even fineness it takes hundreds of hours of practice for the modern sewer to achieve, especially in muslin. A systematic investigation of comparisons and differences between professional and domestic historical sewing would be complicated, given the difficulties of retaining the production information with a garment, and telling the difference against a background of a normative feminine skill applied with individual ability in many different contexts.[49] Labour was the cheapest component of a garment and professional construction does not guarantee superior results. Some of the clumsiest stitching I have seen is the visible seams on the front of a pearl-embroidered silk bodice once worn by Princess Charlotte (1796–1817), only child of George IV (1762–1830).[50] A reputable professional sewer presumably executed it, possibly in haste to fulfil the royal commission, yet ordinary garments show much neater and smaller stitching. In the Hampshire pelisse, the pleating on the sleeve-head is by no means regular and varies in width by up to a quarter of an inch. I discovered on making the toile this is because the easiest way to create the folds is to set them in by eye, not measurement, to approximately half an inch. My casual irregularities matched the historical ones in a discovery that exemplifies the value of research through remaking.

The next question concerns what is known of how Austen obtained clothing. Her letters make occasional reference to (exclusively) female mantua- or dress-makers and the vagaries of their skills: 'I will engage Mrs Mussell as you desire. She made my dark gown very well & may therefore be trusted I hope with Yours — but she does not always succeed with lighter Colours'.[51] In 1811: 'I mean, if I can, to wait for your return, before I have my new Gown made up — from a notion of their making up to more advantage together'[52] which seems to have been cheaper: 'I shall not go to Miss Hare till you can come and help choose yourself, unless you particularly wish the contrary. It may be hardly worth while perhaps to have the gowns so expensively made up'.[53] In 1811 both sisters had pelisses made by an unnamed London dressmaker at a cost of 17*s*. The labour was the very cheap 8*s*. seen in account-books as the average cost of having a gown made up — one pair of 'bargain' silk stockings cost 12*s*. — and the extra cost was incurred by buttons, ruling out this button-less pelisse.[54] The commission seems to have suffered

a mishap, for two letters later Austen wrote to Cassandra that she did 'not mean to provide another trimming for my Pelisse [...] so I shall wear it as it is, longer than I ought'.[55] Perhaps this is one of the non-silk pelisses the 1813 letter needs to distinguish from. But the Austen sisters did also make and alter their own clothing and that of their acquaintance. Cassandra made Martha Lloyd a bonnet and cloak in 1801; both women trimmed bonnets, added flounces, and altered waistlines and bodices on their own clothes.[56] Their nephew recalled his aunt talking 'over clothes which she and her companions were making, sometimes for themselves, and sometimes for the poor', probably the kinds of garments for which the *Lady's Economical Assistant* gives instructions, and certainly including shirts for their brothers.[57] Within the extended family their niece Fanny Knight in 1814 recorded an entire 'working week with Frocks and Spencers' — constructing or perhaps mending the garments.[58] Therefore, the possibility exists that the pelisse wearer could have made it domestically. However, I believe she did not. If Austen embroidered the muslin shawl and Cassandra's handkerchief in the Jane Austen House Museum, she was indeed the excellent needlewoman of her own and her nephew's repute.[59] James Austen-Leigh described his aunt's needlework 'both plain and ornamental' as of a standard 'as might have put a sewing machine to shame'.[60] The pelisse stitcher was a competent yet average worker. Given the indefinite provenance, this alone is not a sound reason to dismiss a domestic origin. The pelisse's expensive silk textile and its semi-tailored cut with complicated pattern shapes are better evidence. Both point to a professional maker experienced in using this material and method, as domestic production appears to lean towards linen, cotton, or simply cut garments, and Austen only mentions altering rather than making gowns and pelisses.

Further evidence is found in a comparable object held at the Victoria and Albert Museum (V&A), London, a pelisse dated *c.* 1810 which is a good match for the Austen pelisse in many respects (Figure 9). This second garment helped interpret the former's physical characteristics. The V&A pelisse is made from russet and blue shot twilled sarsenet silk with the same weight and slight stiffness, lined in teal-blue tabby weave sarsenet or Persian, cut without a waistline and with the same type of pattern pieces and off-centre front closure. It is made with stitches of roughly the same length and evenness, starting to suggest an accepted standard for this expensive fabric quality and type (hand-sewers know how the textile affects the needle's rhythm and stitch size and shape).[61] Both pelisses show the same golden-yellow twisted silk stitching thread, despite their brown, and red, ground fabrics (visible in Figure 5), although in the V&A pelisse it is only in the side seams. A thread colour choice that matches neither outer nor lining fabric is unusual and to date I have not seen another example. The 1807 pelisse in the Fashion Museum, Bath, sheds further interpretive light on the Hampshire pelisse to which it is similar in appearance.[62] The Bath pelisse is cut with no waist seam and similar front and back shaping, but has a cotton bodice lining with separate internal flaps, based on the fall- or apron-front styles of the 1800s, and the sleeve-heads are less full, showing how the later pelisses' fashion has developed. The later garments' sleeve cut is also more sophisticated. Yet, the Bath pelisse is also made from a twilled sarsenet figured with a small repeating leaf motif, like the Hampshire garment, and has a high rounded collar nearly identical to the two later pieces, suggesting that the Hampshire pelisse is a little more

conservative in style for the 1810s. Finally, the 1807 garment contains the same length and standard of construction stitches as the other two throughout. Finding congruent thread and stitch quality in three different pelisses emphasizes a parity of non-domestic production although the point needs more collections-based research.

The V&A pelisse indicates where the Hampshire pelisse is incomplete. At the narrowest point of its internal back section, the fashionable under-bust 'waist', a one-inch wide white silk ribbon is stitched between the seam lines. Alone, the ribbon could be seen as a strengthening element. However, the V&A pelisse has the same width silk ribbon in the same place but with longer tails intact to form an internal waist stay tying at the front. I added a long version of the internal ribbon to the replica as a photograph of this area shows slight fraying on the ribbon outsides where it had torn off. The V&A pelisse has retained a belt stitched on to the outside back seams, as the Hampshire pelisse once also had, otherwise there is no way to keep it closed. The front opening has no fastenings of any kind, and there are no discernible

FIGURE 9. Pelisse of red and blue shot-silk twill, *c.* 1809–1810, London: Victoria and Albert Museum, T.24–1946

pin marks at the curved top apex or near the waist. The back seams show a small amount of yellow thread tufting at exactly the right place to have been caused by stitching a belt through from the outside. To test the theory, a belt closing with a hook and eye based on the V&A pelisse was attached to the replica. Combined with the internal waist stay, it worked very effectively to close the pelisse, at the right height (see Figure 10), and solved a long-standing curatorial query about its closure.

The pelisse's two front pieces are identical and both edged with cord made from two-ply of a cotton core wrapped in golden silk floss, so either side can be on top. The cord is attached with yellow silk thread and ends abruptly at top and bottom with the cord cut off and no attempt to hide the raw edges (Figure 5). The pelisse may have been worn with the fronts open like a revers collar, as seen in contemporary fashion plates and as displayed on the Hampshire website in Figure 1, but the internal finishing with large facing, and visible lining and stitching does not suggest it was made to be seen. The cording on the section placed underneath also creates a visible ridge through the fabric on the upper torso. I first questioned this stylistic detail, but trying the replica pelisse on moving figures reveals that the lower fronts fall open when walking so the cord creates a pleasing decorative visual symmetry

FIGURE 10. Juniper Bedwell-Wilson wearing the replica pelisse, April 2014

while hiding the construction stitches. With the belt in place, a small pin, brooch or ribbon would be all that is needed to fasten the neckline. Evidence of this on the original pelisse is perhaps hidden underneath one of the one-inch long puffs applied with whip stitches decorating the collar-neck seam, and running around the upper edge which helps stiffen it. The V&A pelisse collar has fabric pleated decoratively over the same basic shape. A September 1813 morning dress plate published in *La Belle Assemblée* (Figure 12) shows similar ruched puffs adorning a pelisse on the

FIGURE 11. Juniper Bedwell-Wilson's figure, April 2014

collar and armholes, and demonstrates the relationship between ideal fashion and actual garments. The Hampshire pelisse has long sleeves with a cuff dipping in a curve over the back of the hand, very common in the period. Like the centre fronts, the cuffs are adorned with a cord with butted ends bound with thread.

After finishing the pattern draft I made a calico toile, to check the pattern and construction order. This went smoothly and no amendments were needed to the paper pattern. Having a toile which could be tried on revealed that the person for whom the pelisse was made had very narrow shoulders, slim hands, wrists and arms. Testing the toile on smaller and smaller females, a thirteen-year-old girl was the best fit through the torso. It worked without much excess on a ten-year-old girl also. On both young girls, however, the pelisse was far too long, the one aspect which worked for a taller adult. As pelisses could reach anywhere from below the knee to the ankle, this gave a good first idea of the original wearer's height based upon the distance of the pelisse hem from the ground and comparing it with the lengths seen in fashion plates. The overall proportions suggest this garment is a longer type. On a wearer 5 feet 8 inches tall (176 cm) the pelisse hem stops 3 inches (5 cm) above the ankle, and at 5 feet 3 inches the hem skims the ground. The implications of these dimensions as related to Austen are presented below.

Alison Carter discussed producing a reproduction of the pelisse fabric with Whitchurch Silk Mill in Hampshire which specializes in hand-woven, historically accurate silk textiles. Before this was made, I constructed a first test reproduction with the best substitute fabrics available. All the modern silk twills had none of the historical textiles' stiffness. A white 'Heavy Twill Silk PL80' from textile wholesaler Whaleys, in Bradford, was eventually chosen, and dyed until the figured sarsenet's warm brown ground colour was achieved.[63] The difference in hand proved to be a construction problem as it was too soft and slippery. The pelisse's cut depends on the fabric's stiffness to hold its shape and for the collar to stand up with no extra internal support. The Whaleys silk had none of the required structural integrity, especially when lined with an equally slippery tabby-weave medium-weight white silk habotai, and a stiff silk taffeta would have worked better.[64] The habotai was a good substitute for the white sarsenet or Persian lining and this fabric was used to line the full reproduction. Peach-coloured silk cord was dyed yellow to match the original. Seams were machine stitched, with hand finishing where necessary, as details like the collar ruching are not possible with machine construction.

Eventually, Whitchurch's reproduction fabric was ready. The firm had produced an imitation of the pelisse silk some years before this project on a tabby-weave ground with a loosely interpreted printed pattern. This time we worked more closely with owner Stephen Bryers to create a closer match. Weaving the leaf motifs into the fabric would have been prohibitively expensive so a golden overprint of the pattern at 1:1 scale onto a silk twill ground the same colour as the original was agreed upon. Colours were matched using embroidery silks to allow for the sheen of yarn instead of flat tone swatches. The final fabric was 47 inches wide with selvedge of half an inch, and resembles the original in effect beautifully. Unfortunately, the pattern direction was not double-checked. The printed version ran horizontally across the fabric instead of vertically down it, affecting the placement of the paper pattern pieces.

FIGURE 12. Morning dress for September 1813, fashion plate from *La Belle Assemblée*, number 18

When it came to cutting the full replica, it appeared that the roller printing process had subtly distorted the fabric's grain in places, running it off true and keeping it there with the heat, pressure and glue-like effect of the paint. This has an effect on the replica's final drape, albeit a small one. The twill's stiffness compensates greatly. We had already allowed for the fact that the modern fabric would be wider than the original which affects cutting along selvedges. As there are few straight edges, this did not make the difference it would if replicating a garment of unlined silk, or of linen, which must exploit strict geometry and hard-woven selvedges to be successful.[65] The selvedge is also wider in weave and has a bigger gap created by the end of the printed pattern. Overall, the Whitchurch fabric was an excellent substitute for the crisp finish of the original which made all the difference to making the second garment.

This one was entirely hand-stitched, for which I sought the nearest commercially available, repeatable thread. After testing Sylko cotton thread 20 Yellow, Seta Reale 0273 (silk), and old, discontinued Gutermann silk S303, I used a reproduction vintage silk twist embroidery thread, of which there was enough of the right colour in my supplies, as the best match for the original thread.[66] Using a number twelve Sharp needle allowed easy imitation of the original stitching. The work quality is not particularly fine and it was not difficult to match the nine stitches per inch of running stitch along the seams and hem. From unfolding the fabric to lay it out and cut, cutting, stitching and finishing the construction by hand took a total of twenty-seven hours of work. There is not too much sewing involved, in practice, and most of the seams are long and reasonably straightforward. The only fiddly parts are setting in the sleeve pleats, finishing the collar ruching, and setting the lining to sit exactly with the hem. An additional hour was needed after completion to fit the waist-stay ribbon, and to make and attach a belt. Table 1 shows a comparison of *c.* 1813 costs of fabric and construction compared with the 2008–2010 reproduction. The main difference is the bulk of the cost has moved from the textiles to the labour.

TABLE 1
COMPARISON OF MAKING COSTS FOR A PELISSE C. 1813 AND 2008

Item	*Quantity*	*Cost c. 1813*	*Total cost 1813*	*Equivalent cost, 2008*^	*Cost of replica item, 2008*
Figured twilled sarsenet	7.5 yards	9/6*s.**	£3 11*s.* 3*d.*	£180	£125.00
Plain sarsenet	7 yards	4/6*s.**	£1 11*s.* 6*d.*	£80	£16.83
Labour		8*s.*	8*s.*	£20	£300
Cord & thread	?	?	5*s.* (estimated)	£13.00	£8.83
TOTAL			£5 11*s.* 6*d.*	£293.00	£450.66

*Estimated from prices in *Barbara Johnson's Album*

^Conversion from *Historical UK Inflation and Price Conversion* <http://safalra.com/other/historical-uk-inflation-price-conversion/>, based on Jim O'Donoghue, Louise Goulding and Grahame Allen, 'Consumer Price Inflation Since 1750' *Economic Trends*, 604 (2004), 38–46

There is more work to be done on the issues around reproduction, replication, interpretation and the approaches of experimental archaeology in methodologies of historic dress remaking as a research practice; its terminology and approaches.[67] An increasing scholarly literature discusses what can be learned from, and different ways of interrogating, past dress construction and wear practices through reconstruction.[68] Some of the key questions for researchers using this approach are as follows: when working on making a faithful modern version of an historic garment, do you replicate it as it is, or as it was, or as it might have been? What is the purpose of the reconstruction and what information do you want to elicit from the process? The decision to add a belt in this case uses the replica to do what the original cannot, and to explore its historical possibilities beyond the capabilities and limitations of the original. Adding a belt to the original pelisse is restoration, a false modern addition; to add one to the replica is experiment and testing a hypothesis. Doing so can extend the knowledge of the original and help reinterpret it. Since the pelisse works with a belt and the restored internal stay tape, this information can be imparted in the mounting process by future curators and conservators, a way of reinterpreting the object.

The scaled pattern in Figure 2 has been tested three times and shown to produce an accurate copy of the original garment. Future plans for its use include retail sale with detailed instructions for constructing the pelisse, including crucial pattern adjustments for fitting modern figures. Commercial production of the pelisse fabric was again under discussion in 2014 as it is an excellent product to use in a variety of gift items for Austen-connected attractions and institutions. And, of course, more replicas can be produced for the same organizations.

JANE AUSTEN'S FIGURE

Taking all the above internal and external evidence together, what can the replica pelisse contribute to discussions about Austen's appearance, and how do records of her physicality tally with the pelisse? The woman for whom this pelisse was made, who, for the purposes of this discussion we assume was Jane Austen, had approximate measurements of a 31 to 33 inch bust, a 24 inch waist, and 33 to 34 inch hips, and was between 5 feet 6 inches and 5 feet 8 inches tall, adding up to a present UK size four to six. The pelisse was made to be worn over other garments — a gown, petticoat, stays and chemise at the very least — hence the leeway in measurements. There is also some fluidity as the pelisse does not fasten precisely, but relies on the cut of the fronts to show where to line it up with the collar. All the measurements were taken closed and from the final pattern. However, a replica can be tried on different bodies to give a very different effect from the static vital statistics of a mannequin that takes its dimensions from the object. From the project's start I sought the right adult figure to wear the pelisse. She must be tall, and very thin, with long arms and some bust. In 2014, while based in Australia, I took the pelisse replica to the Jane Austen Festival in Canberra in order to look for a body match amongst participants already in period dress. The pelisse eventually fitted sixteen-year-old Juniper Bedwell-Wilson perfectly. Figure 10 shows the fitted pelisse, and Figure 11 Bedwell-Wilson's naturally spare and slender figure.

Her measurements are bust: 30 inch; waist: 24 inches; hips: 30 inches; and she is 5 feet 7 inches tall.[69]

Bedwell-Wilson's appearance tallies remarkably closely with Jane Austen's, who was, by her own description, 'a tall woman'.[70] To this we can add the recollection of a neighbour of Austen being a 'tall, thin *spare* person with very high cheek-bones', and other comments by those who knew her that she was 'tall and slight, but not drooping', 'slight and elegant', her figure 'rather tall and slender', and even 'a thin upright piece of wood or iron'.[71] Her brother Henry considered that her stature '"could not have been increased without exceeding the middle height", a very elegant, brotherly formulation', as Clare Tomalin notes.[72] What counts as tall in this period? Roberts and Cox tabulated female stature in the post-medieval period *c.* 1550–*c.* 1850 based on eleven separate English burial site excavations and a total of 540 skeletons.[73] The mean height for women is 160 cm or 5 feet 2 inches tall, with no socio-economic variation. The tallest women found in late eighteenth-century burials were 170 cm tall. Therefore the conjectured lowest possible height for Austen of 5 feet 3 inches, based upon where this pelisse reaches the ground, is the around average height of her female contemporaries. The more realistic upper estimate of 5 feet 6 inches to 5 feet 8 inches would have made the author, categorically, a tall woman in her day. Her slenderness would have made her look even taller by proportion.

Another notable feature of the pelisse is the round torso shape suggested by the proportions of the front. When the coat was worn by those whose shoulders and wrists fitted the narrow pelisse at these points, the front had significantly more room in it than the back. Some of this was filled by inserting a false bust at the right height to reflect the position of the bosom raised by a pair of period stays. The placement of the remaining volume of fabric suggested the underlying body shape itself was different to the modern body on which it was being tried. The original garment fitted around a more circular ribcage, rather than the ellipse with breadth at the sides of a natural torso. We conjectured that the pelisse's round shape had been created through the effects of wearing stays from childhood rather than showing a peculiarity of Austen's physique. The subsequent discovery of new osteoarchaeological research has confirmed this could be the case.

Excavations at St Marylebone Cemetery by the Museum of London Archaeological Service (MoLAS) uncovered seven female skeletons dated between 1780 and 1853 that show distinct distortion of the ribs, and flattened vertebrae.[74] The rib bones normally curve outwards from the spine like a pair of parentheses. The altered bones appear to have been flattened at the sides to project more at the front, and some to point slightly downwards, not evenly horizontal as normal. This corresponds exactly to the shape produced by restrictive garments in the same period. These deformations were not found in any of the male skeletons. This information tallies with Austen's lifespan, which would have seen her wearing constrictive stays during the rib formation of childhood and adolescence before adopting softer but still boned undergarments in her twenties.

There is not enough information available on the appearance of other female members of the Austen family around the time of the pelisse's making to consider or dismiss them as its possible owners. Could it have belonged to Cassandra

Austen, for example? As Winifred Jenkyns observed, the coat shows very little wear, although it lost its belt at some point. If it was another Austen's, did it fall out of fashion quickly; or did the family indeed keep it as a memento of their beloved dead relative? The pelisse's measurements show a definite correspondence with all contemporary descriptions of Jane Austen's figure and strongly suggest it was made for the tall, thin author.

CONCLUSION

The Hampshire pelisse is made from 7 yards and 4 inches of 21-inch wide, English-manufactured figured twilled sarsenet silk in warm brown, woven through with a repeating vertical pattern of stylized oak leaves in golden yellow. It is lined throughout in a white tabby weave sarsenet or Persian silk and entirely stitched with yellow silk thread. Gold silk cords on cuffs and both fronts, and a ruched self-fabric decoration around the collar are the only embellishments. There are no visible fastenings, but it once had a full internal ribbon waist stay and a belt made from the figured sarsenet stitched on at the back seams and fastening off centre.

A mantua-maker or other professional sewer made the pelisse, the construction quality is average, and it was drafted and cut from a professional pattern, either directly or copied from an existing garment. Its collar shape and decoration, sleeve-head shape and pleating position relative to the armhole, and waist-less cut, combined with dated fabric samples, give it a making date of 1812–1814.

The pelisse was made for a woman of between 5 feet 6 inches and 5 foot 9 inches in height, with a slight bust, waist and torso, and narrow shoulders and arms for someone of her height. She wore stays from early childhood which shaped her body into a more rounded shape, away from the ribcage's natural oval.

Through evidence from her own letters, Jane Austen was known to like brown gowns, to have a silk pelisse in 1814, to need 7½ yards of fabric to make a gown (albeit over a decade earlier and thus in different fashion), to be interested in maintaining a respectable, reasonably up-to-date appearance, and to be a tall woman. Recollections of her appearance by family, friends and acquaintance confirm her height and frequently note a thin figure. Finally, the pelisse came from Austen's family and has the provenance, although indefinite, of having been hers. Based on these factors, it is highly likely this pelisse was indeed once owned and worn by Jane Austen. The attribution can probably never be definitely ascertained though no piece of information found during this research contradicts the connection and the correspondences are many. Because of its 1812–1814 fashion, and the strength of the associations and internal evidence for it having formed part of Jane Austen's wardrobe, this garment will never be just any old pelisse. The process of replication has interrogated its material evidence to establish a new source of information about the author which cannot currently be gained any other way. This research gives unique, concrete information on her body's possible structure and appearance; demonstrates the value of informed object analysis, replication, and understanding of historical clothing construction; and provides results which can be used with existing visual and documentary sources for future research into Jane Austen's life. The project highlights the usefulness of this methodology for interpreting surviving clothing of

other major figures, and contributes in a material way to discussions on how to preserve and protect fragile garments while simultaneously making them accessible.

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[73] Charlotte Roberts and Margaret Cox, *Health and Disease in Britain: From Prehistory to the Present Day* (Gloucester: Sutton Publishing, 2003), table 6.7, p. 308.
[74] Adrian Miles, Natasha Powers, Robin Wroe-Brown and Don Walker, *St Marylebone Church and Burial Ground in the 18th to 19th Centuries: Excavations at St Marylebone School, 1992 and 2004–6* (London: Museum of London Archaeology Service, 2008).

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