# Nineteenth-century buttons from the North Brisbane Burial Ground

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*From 2000–2002, a salvage excavation was conducted to record and remove 397 burials exposed by a stadium redevelopment in the centre of the city of Brisbane, Queensland. These burials formed part of the North Brisbane Burial Ground which received interments between 1843 and 1875. During the course of the excavation, 71 buttons were collected, consisting of 40 ceramic buttons, 17 metal buttons, 8 bone buttons, 1 shell button, 2 textile-covered buttons, 2 thread buttons, and 1 ivory button. The buttons were typed and analysed microscopically and compared to those of other sites. The threads used to attach these buttons were preserved in 16 samples, and fragments of a twill woven garment with button holes were preserved on two brass buttons. Given the very poor preservation of burial remains at the site, the complex taphonomic processes are also investigated and of the thirty four burials that contained buttons, six were assigned date ranges of interment based upon button morphology.*

## INTRODUCTION

The North Brisbane Burial Ground is situated 1.4km from the centre of the city of Brisbane, the capital of the state of Queensland, Australia. The burial ground opened in 1843, following the gazettal of Moreton Bay for free settlement, and was divided into separate cemeteries on the basis of religious denomination (McClurg 1975:105,106). Due to the topography, these denominational cemeteries occupied areas of higher ground and were separated from one another by steep gullies leading down to swampy ground at the base of the slopes. The burial ground was closed in 1875 in response to hygiene concerns from the local residents (McGowan 2008:19-22). It is estimated that 5000 of Brisbane's earliest free settlers were buried there (Rains and Prangnell 2002:3), although any documents showing the location of individual burials, including the burial registers, have not survived.

After the burial ground's closure, it lay neglected and overgrown for 33 years before being resumed by the Queensland government in 1911 (Queensland Parliamentary Debates 1911-1912:1242). The remaining headstones were removed, and part of the land was redeveloped as a recreational reserve for residents and named Lang Park (Queensland Parliamentary Papers 1914:97). Up until the 1960s, the very low-lying and swampy parts of the grounds became official landfill sites for the disposal of domestic and light industrial waste (Prangnell and Rains 2001). Queensland Rugby League took over the site in 1955, and built a succession of larger, more modern grandstands for spectators (McGowan 2008:7). The construction of a new sports stadium on the site in 2000–2002 disturbed interments from the original burial ground level and a salvage excavation was conducted to record and remove 397 burials from the affected areas of the Anglican, Roman Catholic, Presbyterian and Aboriginal cemeteries (McGowan and Prangnell 2009).

During the course of the salvage excavation, skeletal material was found to be in an extremely poor state of preservation. Bones were de-mineralised and compressed to the extent that often only a shadow of the skeleton remained, making osteometric determinations of age and sex impossible (McGowan and Prangnell 2009). Coffin wood, textiles, coffin furniture and fastenings had also badly deteriorated, and most of the coffins had failed under soil pressure (McGowan 2008:357-361). Metal coffin furniture consisted of iron nails, some screws, cast iron coffin handles, and decorative plates or strips made from thin sheets of pressed iron (McGowan 2008:289). All textile remains were fragmentary, and no complete sets of clothing or coffin linings were found. The

soil at the burial level was wet or waterlogged with an average pH of 5.5 (McGowan and Prangnell 2006). In areas of the burial ground which were originally low-lying and which had received dumped rubbish and nightsoil, graves were covered with up to 7m of refuse (Prangnell and McGowan 2009). Parts of the site had also received contaminated soil fill, with levels of heavy metals and petrochemicals up to 2470 per cent *above* the Queensland Environmental Threshold (McGowan 2008:219). The iron phosphate mineral, vivianite, was found associated with human bones and the edges of grave pits in 25 burials (McGowan and Prangnell 2006). Extensive research into the taphonomic conditions at the North Brisbane Burial Ground determined that soil temperature, soil pH, fluctuating groundwater levels, high soil salt content, chemical attack from landfill leachate, ongoing microbial attack, continual disturbance of the site and excessive weight of soil overburden were the primary factors involved in the degradation of human remains and artefacts at the site (McGowan 2008:357-360). To date the aspects of the North Brisbane Burial Ground that have been published include DNA analysis (Haslam *et al*. 2003), wood identification (McGowan and Prangnell 2009), the occurrence of vivianite (McGowan and Prangnell 2006) and soil temperature calculations (Prangnell and McGowan 2009).

Thirty-four of the excavated burials yielded a total of 71 buttons representing 23 different types and sizes. The buttons are made from a range of materials including metal, ceramic, bone and shell. These buttons were analysed using high and low magnification microscopy, typed and their morphology compared to those from other published sources. The effects of taphonomic processes are also discussed in order to explain the apparent absence of some button types.

## BUTTONS IN BURIALS

Because of the loss of records from Brisbane undertaking firms covering the period 1843–1875, little is known regarding burial practices in the first few decades of free settlement in Brisbane, and the role (if any) that buttons played in these practices. However, it is likely that choices relating to burials in Brisbane mirrored the dominant practices in England. To date, there have been no reported instances of buttons being used to decorate the interior or exterior of nineteenth century English coffins, nor those of the same period excavated from the United States or Canada. Therefore, buttons excavated from burials are more likely to indicate the use of clothing to dress the deceased: either a mass-produced shroud garment (Janaway 1993:96, 104-108), or an item from the person's wardrobe.

Ready-to-wear clothing (and presumably also mass-produced shroud garments) was imported from England (eg *Moreton Bay Courier* 4 July 1846:1, 3) into Brisbane Town, so it is possible many types of buttons entered the colony attached to these items in the period 1843–1875. From 1846 onwards, loose buttons were also advertised for sale in the local Brisbane newspaper at haberdasheries and general stores, and at auction (*Moreton Bay Courier* 20 June 1846:3; *Brisbane Courier* 4 September 1865:6). Little is known regarding the final retail or auction price of buttons in Brisbane, except for an advertisement in the *Brisbane Courier* in 1867 in which Buxton's haberdashery offered a sale price of one penny per dozen for buttons, and this was reportedly a large reduction on former prices (*Brisbane Courier* 22 August 1867:1). For comparison, the *Brisbane Courier* newspaper cost four pence per issue in 1866.

Mother-of-pearl buttons seem to have had an enduring appeal in Brisbane, with "pearl" buttons available at least from 1850 until 1873, and possibly until the end of the century (eg *Brisbane Courier* 14 February 1873:1). Textile covered buttons were also widely available as loose purchases from 1856, and could be covered in a variety of cloths from satin and terry (*Moreton Bay Courier* 26 April 1856:3), to coloured silk (*The Courier* 23 April 1863:1), and linen and velvet (*Brisbane Courier* 8 June 1866:6). Similarly, buttons made from metal came in a variety of materials including brass, iron and steel, and metal plated (*Moreton Bay Courier* 26 April 1856:3; *Brisbane Courier* 13 July 1867:8). It is likely that the plated buttons were silver-plated brass buttons, produced primarily for liveries and uniforms (Cole 1892:45). Pure 18 carat gold sleeve buttons and shirt studs were imported directly from Sydney in 1858 (*Moreton Bay Courier* 27 November 1858:3) and gilt brass buttons were among haberdashery items auctioned in 1866 (*Brisbane Courier* 19 September 1866:6).

Three advertisements listing bone buttons appeared in the *Brisbane Courier* newspaper between 1864 and 1867. These were all auction sales in which the buttons were sold among lots of haberdashery and general goods (*Brisbane Courier* 23 July 1864:7; 8 March 1866:6; 12 January 1867:8). By contrast, ivory buttons were advertised only once between 1843 and 1875, by Samuel Davis & Co, importers of British and foreign general merchandise and wholesale jewelers (*Brisbane Courier* 14 February 1873:1). Other button types advertised for sale in single advertisements between 1843 and 1875 include ladies and gents "fancy stone buttons" and "fancy glass buttons" (*Moreton Bay Courier* 3/11/1860:1), jet buttons (*Brisbane Courier* 12 January 1867:8), crystal and "Japan" buttons (*Brisbane Courier* 28 June 1867:4), and sets of pebble buttons (*Brisbane Courier* 5 September 1873:4). The "Japan" buttons referred to were ceramic Satsuma buttons made from earthenware or faience and decorated with scenic subjects, flora and fauna (Peacock 2008:54).

Unfortunately, many Brisbane newspaper advertisements of the period do not specify the materials from which buttons were made, listing only "coat", "vest", "waistcoat", "dress", "shirt" and "trouser" buttons for sale (eg *Moreton Bay Courier* 25 August 1849:3; *Brisbane Courier* 5 October 1867:8). Similarly, the term "fancy buttons" appeared repeatedly in advertisements from 1850 until after 1875, with no further indication as to their design or composition (eg *Moreton Bay Courier* 17 August 1850:1). It is therefore possible for a wide variety of buttons to have made their way into the archaeological record in interments made at the North Brisbane Burial Ground between 1843 and 1875.

In England, ready-made shroud garments sometimes had a row of two, three or four small buttons down the centre-front of the garment, as well as lines of pleating and ruffles (see Litten 1991, Figs 39 and 41). To date, no studies of these buttons excavated from archaeological contexts have been published, so their composition and morphology remain unclear. However, buttons interred as part of personal clothing worn by the deceased have been documented from excavations in the United Kingdom (Cox and Stock 1995; Janaway 1993), the United States (Bromberg *et al.* 2000; Deegan 1987; Favret 2006; Ford 2006; Strzewski, 2003), and from Canada (Beattie and Savelle 1983; McKillop 1995). By contrast, there have been no published studies of buttons excavated from funerary contexts within Australia. Among the unpublished literature is a report on the excavation of 109 burials from the Cadia Cemetery, Cadia, New South Wales which received interments between 1864 and 1927. Higginbotham (2002:91-95) described 17 children's burials containing 13 porcelain and mother-of-pearl buttons, one bone button, two copper alloy buttons covered with textiles and one copper ring presumed to be the foundation for a thread or cloth-covered button. A further 31 adult burials at Cadia contained buttons, including small ceramic and mother-of-pearl buttons, textile covered copper alloy buttons, trouser buttons inscribed with the maker's name or political slogan, and a fancy vest button with a porcelain insert decorated with a foliate pattern. Unfortunately, these buttons were not extensively described or illustrated as part of the report.

## METHODS

Seventy-one historic buttons from the Anglican, Roman Catholic and Presbyterian cemeteries at the North Brisbane Burial Ground were examined in their excavated condition without washing in order to preserve trace evidence for future study. Low magnification light microscopy was conducted on Olympus SZ61 and Olympus XZS16 microscopes with incident light. High magnification light microscopy was undertaken using an Olympus BX60 microscope with light directed from above the samples. The buttons were viewed in dark field, bright field, crossed polarized light and plane polarized light. Digital images were taken using the QCapture Pro 6.0 program. Information recorded included the material from which the button was made, the colour of the button, the type of fixing (eg shank, sew-through), the number and diameter of sewing holes, the dimensions of the shank, the overall diameter of the button, the diameter of a central depression (if present), the maximum thickness of the button, the thickness of the button edge, particular decorations on the front and back faces of the button, and documentation of any textile remains associated with the button or holes. The presence of mineral growths of vivianite was also recorded. Because human bone material was so poorly preserved at North Brisbane, the presumed age of the deceased was assumed on the basis of coffin length, with coffins under 1250mm in length taken to be those of children, and those longer than this dimension adult. Unfortunately in some instances, burials were extensively damaged by construction equipment prior to the archaeological team being called in, and an accurate measurement of coffin length could not be made. In these cases, the presumed age of the deceased is given as "unknown".
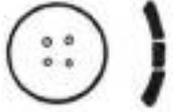
## RESULTS

A total of 397 graves were recorded and removed as part of the salvage excavation at the North Brisbane Burial Ground site. Of these, 15 (3 per cent) were Aboriginal, 191 (48 per cent) were Anglican, 162 (42 per cent) were Roman Catholic, and 29 (7 per cent) were Presbyterian. In accordance with the wishes of the Traditional Owners, no samples were taken from

Aboriginal burials. Thirty-four of the 397 excavated burials yielded buttons: 12 in the Anglican cemetery, 18 in the Roman Catholic cemetery and 4 in the Presbyterian cemetery. Of the 71 buttons studied, 35 (49 per cent) were recovered from the Anglican cemetery, 32 (45 per cent) from the Roman Catholic, and 4 (6 per cent) from the Presbyterian cemetery.

For ease of comparison with other Australian and overseas buttons excavated from nineteenth-century contexts, the North Brisbane Burial Ground buttons were classed into 23 types based upon composition and morphology, described in detail in Table 1. The typology consists of seven types of ceramic buttons, seven types of metal buttons, four types of bone

**Table 1: Button typology from the North Brisbane Burial Ground.**

| Type | Description (including Munsell Colour) | Illustration ▬ 10 mm |
|---|---|---|
| 1 | Ceramic; glazed; white; four hole sew-through; plain (no decoration); bi-convex profile. Mean overall diameter 10.8mm, mean diameter of central depression 5.2mm, mean maximum thickness 2.7mm, mean thickness at edge 0.8mm, mean diameter of holes 1.1mm. | |
| 2 | Ceramic; glazed; white; four hole sew-through; plain (no decoration); bi-convex profile. Overall diameter 8.5mm, diameter of central depression 4.2mm, maximum thickness 1.9mm, thickness at edge 0.5mm, diameter of holes1.2mm. | |
| 3 | Ceramic; glazed; white; four hole sew-through; plain (no decoration); bi-convex profile. Overall diameter 12.6mm, diameter of central depression 6.8mm, maximum thickness 3.0mm, thickness at edge 1.0mm, diameter of holes1.0mm. | |
| 4 | Ceramic; glazed; white; four hole sew-through; plain (no decoration); bi-convex profile, steep angle up to central depression. Overall diameter 10.7mm, diameter of central depression 5.5mm, maximum thickness 3.5mm, thickness at edge 1.0mm, diameter of holes1.2mm. | |
| 5 | Ceramic; glazed; white; four hole sew-through; pie crust decoration composed of impressed lines radiating from central depression, creating a wavy effect at the button's edge. Overall diameter 11.8mm, diameter of central depression 5.8mm, maximum thickness 2.5mm, thickness at edge 1.2mm, diameter of holes 1.2mm. | |
| 6 | Ceramic; glazed; white; four hole sew-through; ringed pie crust decoration, consisting of incised decoration of Type 5 with a plain ring around the outer margin of the button. Level of preservation: Excellent. Mean overall diameter 10.9mm, mean diameter of central depression 5.5mm, mean maximum thickness 2.9mm, mean thickness at edge 1.7mm, mean diameter of holes 1.0mm. | |
| 7 | Ceramic; glazed; white; four hole sew-through; spiral pie crust decoration, consisting of pie crust style incisions spiraling out from central depression. Overall diameter 11.0mm, diameter of central depression 4.5mm, maximum thickness 2.9mm, thickness at edge 1.0mm, diameter of holes 1.0mm. | |
| 8 | Metal; copper alloy; dark gray (7.5YR 4/1) with microscopic patches of copper corrosion minerals in dark blue (Plant colour 2.5B 3/4) and mid teal green (Plant colour 7.5G 6/6); four hole sew-through; ring around outer margin of button. Dimensions including corrosion layer: overall diameter 12.0mm, diameter of central depression 5.9mm, maximum thickness 2.4mm, thickness at edge 1.3mm, diameter of holes 1.0mm; diameter of decorative ring 10.5mm. | |
| 9 | Metal; iron alloy; very dark gray (10YR 3/1); four hole sew-through; plain (no decoration), back of button is flat. Hollow, made of front and back parts pressed together. Dimensions including corrosion layer: overall diameter 15.5, diameter of central depression 5.7mm, maximum thickness 3.3mm, thickness at edge 1.7mm, diameter of holes 1.2mm. | |
| 10 | Metal; copper alloy; very dark gray (2.5Y 3/1) with microscopic patches of light red copper (2.5YR 6/8) and green copper corrosion minerals (Plant colours 2.5G 8/2 and 5G 8/2); two hole sew-through; decorative ring around edge of button (on face only) and interlinked rings around the central two holes (present on face and back of button); no central depression. Hollow, made of front and back parts pressed together. Dimensions including corrosion layer: overall diameter 16.7mm, diameter of central area with holes 9.3mm, maximum thickness 3.0mm, thickness at edge 1.0mm, diameter of holes 2.1mm; diameter of decorative ring 14.3mm. | |
| 11 | Metal; copper alloy; dark grayish brown (10YR 4/2) with microscopic patches of green corrosion minerals (Plant colour 5G 8/2; 7.5G 7/6); four hole sew-through; pronounced bulb on back of button where central depression protrudes. Dimensions including corrosion layer: mean overall diameter 18.0mm, mean diameter of central depression 8.6mm, mean maximum thickness 4.4mm, mean thickness at edge 1.5mm, mean diameter of holes 1.3mm. | |
| 12 | Metal; copper alloy; very dark grayish brown (10YR 3/2), with microscopic patches of green corrosion minerals (Plant colour 7.5G 8/4); four hole sew-through; pronounced bulb on back of button where central depression protrudes. Dimensions including corrosion layer: overall diameter 13.9mm, diameter of central depression 7.7mm, maximum thickness 4.1mm, thickness at edge 1.4mm, diameter of holes 1.0mm. | |
| 13 | Metal; copper alloy, dark grayish brown (10YR 4/2) with microscopic patches of green corrosion minerals (Plant colour 7.5G 7/4); four hole sew-through; plain (no decoration), no central depression. Dimensions including corrosion layer: overall diameter 16.2mm, maximum thickness 2.1mm, thickness at edge 0.9mm, diameter of holes 1.1mm. | |

| Type | Description (including Munsell Colour) | Illustration 10 mm |
|---|---|---|
| 14 | Metal; copper alloy; pale brown (10YR 6/3) to light brownish gray (10YR 6/2) with microscopic patches of green corrosion minerals (Plant colours 7.5BG 7/4 and 7.5G 5/4); shanked button; plain (no decoration); made in three parts with face bent around the edge of the back of the button, leaving a rim on the back edge of the button, shank soldered on; front face is flat. Dimensions including corrosion layer: mean overall diameter 19.6mm, mean thickness at edge 2.2mm, mean height of shank 6.0mm, mean width of shank 3.6mm, mean length of shank 6.6mm. Back of button illustrated. | |
| 15 | Metal; copper alloy covered with textile; brown (7.5YR 5/2); un-known attachment method (no shank, loops, or sew-through holes); no central depression. Overall diameter 10.2mm, maximum thickness 2.9mm, thickness at edge 1.2mm. Textile cover obscures detail of the inner metal frame. | |
| 16 | Abalone shell; iridescent green (Plant colour 7.5G 7/6) and purple (Plant colour 5RP 6/4); four hole sew-through; raised outer rim, large flat central depression, back of button is flat. Overall diameter 22.2mm, diameter of central depression 16.1mm, maximum thickness 2.8mm, thickness at edge 2.8mm, thickness of central depression 1.7mm, diameter of holes 2.2mm. | |
| 17 | Bone; very pale brown (10YR 7/4); four hole sew-through; incised ring around central depression. Overall diameter 13.6mm, diameter of central depression 7.6mm, maximum thickness 2.5mm, thickness at edge 0.8mm, thickness of central depression 1.5mm, diameter of holes 1.7-2.6mm (irregular). | |
| 18 | Bone; brown (7.5YR 5/2); four hole sew-through; incised ring around central depression. Lathe turned-back of button has raised area around holes where turning tool was unable to reach. Overall diameter 17mm, diameter of central depression 10.7mm, maximum thickness 3.6mm, thickness at edge 1.5mm, diameter of holes 1.4mm. | |
| 19 | Bone; brown (7.5YR 5/2); four hole sew-through; incised ring around central depression. Lathe turned-face has vertical slit where button secured for turning, back has raised area around holes where turning tool was unable to reach. Mean overall diameter 18.3mm, mean diameter of central depression 11.4mm, mean maximum thickness 4.0mm, mean thickness at edge 2.0mm, diameter of holes 2.0mm. | |
| 20 | Bone; light yellowish brown (10YR 6/4); four hole sew-through; back of button is flat. Overall diameter 18.4mm, diameter of central depression 8.5mm, maximum thickness 2.8mm, thickness at edge 1.1mm, thickness of central depression 2.0mm, diameter of holes 1.7mm. | |
| 21 | Ivory; dark grayish brown (10YR 4/2); four hole sew-through; plain (no decoration), no central depression. Overall diameter 13.6mm, maximum thickness 2.9mm, thickness at edge 1.2mm, diameter of holes 1.0mm. | |
| 22 | Metal; alloy not containing copper, flattened ring with central hole; black (7.5YR 2.5/1). Dimensions including corrosion layer: overall diameter of ring 11.2mm, diameter of central hole in ring 6.1mm, maximum thickness or ring 2.0mm, thickness at edge of ring 1.5mm. | |
| 23 | Metal; copper alloy, flattened ring with central hole; very dark gray (10YR 3/1) with microscopic patches of green corrosion minerals (Plant colour 5G 8/2). Dimensions including corrosion layer: overall diameter of ring 13.2mm, diameter of central hole in ring 6.0, maximum thickness or ring 2.4mm, thickness at edge of ring 1.4mm. | |

buttons, one type of cloth-covered button, two types of thread buttons, one type of ivory button and one type of shell button. By far the most common buttons excavated were small white ceramic Type 1 buttons, and these comprised 46 per cent of the total button assemblage. By contrast, other button varieties, such as Types 2, 3, 4, 5, 7, 8, 9, 12, 13, 16, 17, 18, 22 and 23 were only represented by one example (see Table 2), while reducing their interpretive value this demonstrates the range of buttons in this collection.

The majority of burials containing buttons were those of adults, with buttons composed of ceramic, metal, bone, ivory and thread (Table 2). By contrast the three child burials contained only ceramic and thread buttons. The majority of ceramic buttons were excavated from the Roman Catholic cemetery, while most of the metal buttons were found within the Anglican cemetery. Bone buttons and covered buttons were only found in burials made in the Anglican cemetery, while thread buttons only occurred in Presbyterian burials.

The seven types of identified ceramic button were all glazed white and featured four central holes for sewing onto the garment. The majority of these button types (Types 1, 2, 3, and 4) were plain, without any significant decoration other than a central depression housing the sewing holes. Button Types 5, 6, and 7, however, were decorated with variations of the "pie crust" design described by Lindbergh (1999:51-2). Button Types 2 and 3 were essentially similar to Type 1, varying only in diameter, while Type 4 varied from Type 1 only in overall thickness. Two adult burials in the Roman Catholic cemetery (F197 and F274) were notable in that they combined one plain Type 1 button with a decorative Type 5 or

**Table 2: Distribution of buttons at the North Brisbane Burial Ground according to religious denomination and presumed age of the deceased.**

*Note:* Where the Presumed Age is listed as "unknown", for burials which were too damaged by heavy construction equipment for accurate dimensions of the coffin to be taken.

| Button Type | Number Collected | Burial Number | Cemetery | Age | Number Per Burial | Preservation | Textile Remains |
|---|---|---|---|---|---|---|---|
| 1 | 33 | F51 | Anglican | Adult | 1 | Excellent | - |
| | | F57 | Anglican | Adult | 3 | Excellent | - |
| | | F96 | Roman Catholic | Adult | 2 | Excellent | - |
| | | F121 | Roman Catholic | Adult | 1 | Excellent | Cotton thread |
| | | F188 | Roman Catholic | Adult | 1 | Excellent | - |
| | | F197 | Roman Catholic | Adult | 1 | Excellent | Cotton thread |
| | | F221 | Roman Catholic | Adult | 5 | Excellent | Cotton thread |
| | | F232 | Roman Catholic | Adult | 3 | Good to Excellent | Blue cotton thread |
| | | F257 | Roman Catholic | Adult | 1 | Fair | - |
| | | F263 | Roman Catholic | Adult | 1 | Excellent | - |
| | | F264 | Roman Catholic | Adult | 4 | Excellent | - |
| | | F265 | Roman Catholic | Unknown | 1 | Excellent | - |
| | | F274 | Roman Catholic | Adult | 1 | Excellent | - |
| | | F311 | Anglican | Adult | 4 | Excellent | - |
| | | F342 | Anglican | Adult | 2 | Excellent | - |
| | | F345 | Anglican | Adult | 1 | Excellent | - |
| | | F356 | Roman Catholic | Adult | 1 | Excellent | - |
| 2 | 1 | F132 | Roman Catholic | Child | 1 | Excellent | - |
| 3 | 1 | F78 | Anglican | Adult | 1 | Excellent | - |
| 4 | 1 | F255 | Roman Catholic | Adult | 1 | Excellent | Cotton thread |
| 5 | 1 | F197 | Roman Catholic | Adult | 1 | Fair | - |
| 6 | 2 | F259 | Roman Catholic | Child | 1 | Excellent | - |
| | | F274 | Roman Catholic | Adult | 1 | Excellent | - |
| 7 | 1 | F172 | Presbyterian | Adult | 1 | Excellent | Silk thread |
| 8 | 1 | F136 | Roman Catholic | Adult | 1 | Fair | - |
| 9 | 1 | F136 | Roman Catholic | Adult | 1 | Poor | - |
| 10 | 2 | F268 | Roman Catholic | Adult | 2 | Fair to Good | - |
| 11 | 6 | F170 | Presbyterian | Unknown | 1 | Poor | - |
| | | F48 | Anglican | Adult | 5 | Fair | - |
| 12 | 1 | F48 | Anglican | Adult | 1 | Fair | - |
| 13 | 1 | F13 | Anglican | Adult | 1 | Good | - |
| 14 | 5 | F13 | Anglican | Adult | 5 | Good | Wool thread, twill weave textile, wool button hole |
| 15 | 2 | F295 | Anglican | Adult | 2 | Fair | Twill weave textile covering |
| 16 | 1 | F361 | Anglican | Unknown | 1 | Good | Wool thread |
| 17 | 1 | F17 | Anglican | Unknown | 1 | Good | Blue cotton thread |
| 18 | 1 | F13 | Anglican | Adult | 1 | Fair | - |
| 19 | 4 | F13 | Anglican | Adult | 4 | Good | Cotton thread |
| 20 | 2 | F15 | Anglican | Adult | 2 | Poor to Fair | - |
| 21 | 1 | F357 | Roman Catholic | Adult | 1 | Poor | - |
| 22 | 1 | F150 | Presbyterian | Child | 1 | Fair | - |
| 23 | 1 | F169 | Presbyterian | Adult | 1 | Poor | Wool fibres in centre of ring |

6 button. It is possible that in these cases the fancier button was placed in a more obvious position on the garment so that its decoration could be better appreciated, while the plain Type 1 was placed lower on the body or inside the garment.

Of the seven distinct types of metal buttons identified, all but one type (Type 9, an iron button) were composed of a copper-containing alloy, probably brass (Table 1). The method of attachment of these buttons varied from two hole sew-through (Type 10), to four hole sew-through (Types 8, 9, 11, 12, 13), and shanked (Type 14). The majority of metal buttons from North Brisbane were composed either of solid metal stamped into shape (Types 8, 11, 12 and 13), or two pieces pressed together with a hollow void in between (Types 9 and 10). However, Type 14 brass buttons were manufactured in three parts: the flat face, the smaller diameter back over which the face was folded, and a separate shank soldered onto the back. The most numerous metal buttons excavated were Type 11 buttons: large solid metal four hole sew-through buttons with a central depression and a pronounced bulb on the back face of the button where the central depression had been stamped through, described by Lindbergh (1999) as being "trouser" buttons. One example of this button was excavated from a burial in the Presbyterian cemetery (F170), while a set of five identical Type 11s were excavated from the burial of an adult in the Anglican cemetery (F48). Two of the shanked Type 14 buttons were of particular interest because the corrosion minerals on the back preserved fragments of the original garment to which the buttons were attached. This garment was made from a twill woven textile composed of a plant fibre warp (now totally degraded) and a wool weft. The weave pattern was identified as a 1/2 twill, where the warp threads pass over one, and under two weft threads. On one of these buttons, the woollen threads of the button-hole against which the button was resting during burial were also preserved on the rear face of the button (Figure 2). From the morphology of the buttons and the textile type, it is likely the original garment was a coat or jacket.

All of the bone buttons recovered from the North Brisbane Burial Ground were found in burials in the Anglican cemetery. Button Types 18 and 19 were excavated from the same adult burial (F13) and showed evidence of having been turned on a lathe. The front face of these buttons had a small vertical impression in the very centre where the turning spindle would have been pressed up against the bone material, while the back
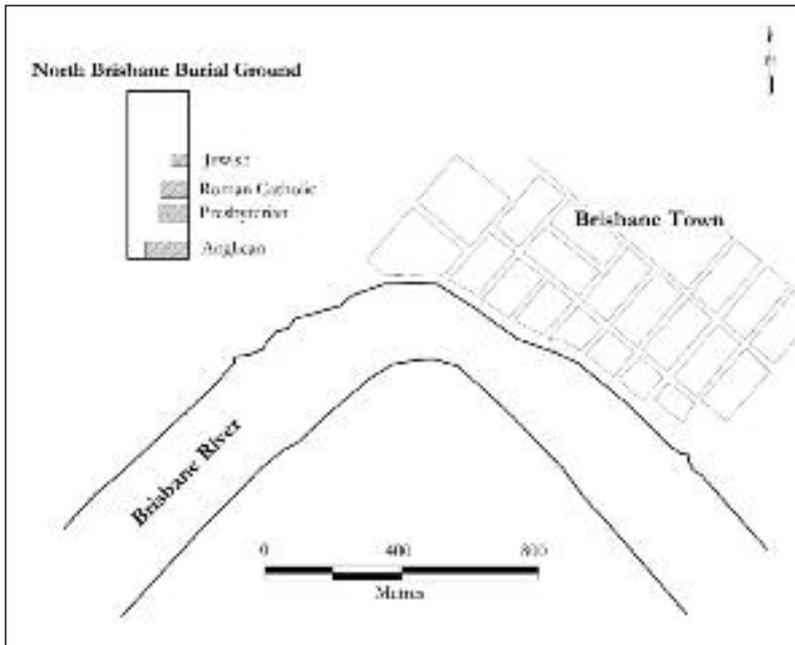
*Figure 1: Location of North Brisbane Burial Ground in relation to 1840 town plan.*

face of the buttons preserved a raised area right at the centre where the turning tool could not reach, again due to the presence of the turning spindle (Figure 3). A pair of bone buttons with a flat back (Type 20) were excavated from an adult burial in the Anglican cemetery (F15), with one showing a greater degree of decomposition than the other. It is possible that this is due to the varying placement of the buttons in relation to different parts of the body during the decomposition process.

A twill woven textile was used to cover the two Type 15 buttons excavated from an adult burial in the Anglican cemetery (F295). Both the warp and weft of the textile were composed of wool threads arranged in a 2/2 twill pattern. The warp and weft were spun in the Z direction and the thread diameter varied from 160–180μm for the warp, to 200–220μm for the weft. The copper alloy base frame was visible on the back of these buttons, with microscopic patches of green corrosion minerals (Munsell 5BG 4/6) evenly distributed over the metal surface. The Anglican cemetery also produced the



*Figure 2: Preserved button hole on back of one Type 14 metal button, 2x magnification.*

only shell button in the North Brisbane Burial Ground collection (Type 16). This large diameter button was coloured in shades of iridescent green and purple, a colour combination consistent with abalone or paua shell, rather than the pale iridescent cream, pink and green colours of mother-of-pearl.

One button, probably composed of ivory, was excavated from the burial of an adult in the Roman Catholic cemetery (F357). This button was heavily encrusted on the front and back faces with extensive growths of vivianite, making it difficult to conclusively identify the material from which it was made. However, while the button visually appeared to be composed of bone, the microstructure of the button and its fracture pattern were consistent with elephant ivory. Both of the thread buttons excavated from the Presbyterian section of the North Brisbane Burial Ground were also highly degraded, with just the metal ring framework evident, and none of the original embroidery thread visible to the naked eye. These were recovered from the burials of a child and an adult, and only the larger button from an adult burial (Type 23) retained microscopic traces of wool embroidery threads in the central void of the ring. Unfortunately, the threads were so fragmentary that the pattern of the embroidery could not be identified.

In the North Brisbane Burial Ground button collection, threads used to attach buttons to items of apparel were still extant on 16 buttons collected from 11 burials (Table 2). The threads were composed of wool, cotton and silk fibres. Cotton threads were preserved in the central sewing holes of five Type 1 buttons. In one of these cases (F232), the cotton thread was dyed blue. Cotton sewing thread was also identified in association with the Type 4 ceramic button and one Type 19 bone button, while one Type 17 button contained the remnants of a blue dyed cotton thread. Wool sewing threads were identified in association with the abalone shell button (Type 16) and the back of the textile covered buttons (Type 15). Corrosion products on the back faces of the shanked Type 14 buttons preserved a more heavy-duty wool sewing thread composed of two S-spun wool bundles twisted together to make a Z-spun two-ply thread. The only example of a silk sewing thread was found within the sewing holes of the single Type 7 ceramic button.

A parallel study of textile remains found in association with coffins and human remains at North Brisbane has also highlighted the occurrence of non-woven and woven clothing materials in association with buttons in some burials. The two textile covered buttons (Type 15) were found within an adult burial which also contained the remains of machine-knitted woolen stockings, while the shell button (Type 16) was found in a burial with the fragmentary remains of a garment made from Glace silk. Similarly, a set of three white ceramic Type 1 buttons were found associated with the remains of a garment made from a textile known as Mull in the burial of an adult in the Roman Catholic cemetery (F232). These textiles will be described in greater detail in a forthcoming publication (McGowan and Prangnell, in prep.).

Vivianite mineral growths were detected on six buttons in the North Brisbane Burial Ground collection. Vivianite crystals were found within the central sewing holes of one Type 1 button (F121), the Type 4 and 7 buttons, and one of the Type 6 buttons (F259). More extensive patches of vivianite growth occurred among the textile fibres covering the Type 15 buttons, and heavy encrustations of vivianite were noted on both faces of the ivory button. No vivianite deposits occurred

*Figure 3: Lathe turning marks on a Type 19 button. Face (a) shows central incision, back (b) shows raised area where turning tool could not reach, 6x magnification.*

in association with the copper alloy metal buttons. At the North Brisbane Burial Ground, 25 burials were found with vivianite deposits visible to the naked eye, associated with human bone material and the edges of grave pits (McGowan and Prangnell 2006). Two of these burials (F96 and F221) also contained buttons, but no microscopic vivianite crystals were found associated with these buttons. Instead, seven burials contained buttons with microscopic vivianite growth, and no other visual indications of the mineral's presence, indicating that the distribution of groundwater high in iron and phosphate (the constituents of vivianite) was much more widespread at the site than had previously been supposed.

In summary, buttons excavated from the North Brisbane Burial Ground showed great variety in design, and were made of essentially six types of material: ceramic, metal, bone, shell, ivory and textiles. A small proportion of these buttons retained some evidence of the threads used to attach them to garments, and in one unique burial, the remains of the garment itself and one of its button holes were preserved in corrosion products on the back face of the buttons.

## DISCUSSION

Buttons were excavated from 34 burials in the North Brisbane Burial Ground, and while the majority of burials containing buttons were located in the Roman Catholic cemetery, the actual number of buttons recovered was greatest from the Anglican cemetery. This was primarily due to the presence of

sets of metal and bone buttons found in some Anglican burials. These sets suggest that the deceased was buried in personal apparel. In the Roman Catholic cemetery, sets of four or five Type 1 ceramic buttons are also likely to have been attached to a garment, perhaps a shirt or blouse with buttons down the centre-front. Similarly, buttons found in burials containing the remains of machine-knitted stockings, and woven dress fabrics are most likely to have been associated with personal attire. From early twentieth-century records, it is known that at least one person was interred at the North Brisbane Burial Ground in their own clothes rather than a ready-made shroud garment. The official government report of exhumations conducted during the 1913–1914 landscaping of the burial ground prior to its conversion into a park and sports facility reported finding the skeletonised remains of a man dressed in a well-preserved brown riding suit with waistcoat. This particular body had been interred for sixty years, dating the burial to the early 1850s (Queensland Parliamentary Papers 1914:96).

The greatest variety of ceramic button designs came from the Roman Catholic cemetery, but overall, the greatest diversity in button materials was found in Anglican burials, with buttons composed of ceramic, metal, bone, shell and textile-covered buttons identified. Having noted this diversity, however, it is important that a number of fancier button types mentioned in contemporary newspaper reports did not apparently find their way into the archaeological record in the North Brisbane burials. For example, gold, silver-plated, steel, stone, pebble, jet, glass, crystal and painted Satsuma ceramic buttons were sold in Brisbane in the period 1843–1874, but were not present at excavation. This phenomenon could be taken as an expression of the Victorian value of "thrift", where the recycling of domestic materials was seen as a virtue (Lucas 2002), and valuable buttons could have been re-used and attached to other garments. Alternatively, it is possible that grieving relatives made a conscious choice to clothe the deceased in less expensive attire in an effort to decrease the overall cost of holding a respectable funeral that was consistent with social expectations. In the 1860s and 1870s, newspaper advertisements for undertaking services catered for this need by advertising that their company could provide "economy and respectability" in funerals (eg *The Courier* 14 November 1863:4; *Brisbane Courier* 30 November 1871:1).

It is notable that only a small proportion of burials containing buttons were those of children. This may perhaps reflect a preference for burying children in shrouds fastened with pins, or smock-type garments without buttons, rather than regular dress clothing. The disproportionate presence of buttons in adult versus children's burials was also noted by McKillop (1995) at St Thomas Anglican Churchyard, Ontario, Canada. This burial ground received interments between 1821 and 1874, a time period for the most part contemporaneous with the North Brisbane Burial Ground, and from a similar British colonial setting. With very few specific undertaker's records preserved from Brisbane covering the period of the North Brisbane Burial Ground's operation, any age-based differences in burial practices remain largely unknown. An alternative explanation for this deficit may, however, lie in the particular taphonomic conditions of the North Brisbane Burial Ground site which would have made smaller sized buttons composed of vulnerable materials such as mother-of-pearl more prone to degradation.

All of the white glazed ceramic buttons (Types 1–7) excavated from the North Brisbane Burial Ground were "Prosser buttons", also known as "small china" buttons (Sprague 2002). These were made by pressing a powdered clay and quartz in a cast-iron mould and giving an initial firing, followed by glazing or the application of transfer-printed designs and another firing (Sprague 2002). The

manufacturing process was devised by Richard Prosser of Birmingham in 1840, and later improved in 1855 (Peacock 2008:54). Because they could be produced in large quantities and were relatively inexpensive, Prosser buttons had a wide distribution during the nineteenth and early twentieth century, until finally replaced by plastic alternatives in the interwar years (Peacock 2008:54). Ceramic buttons produced by the Prosser process are useful archaeologically since they provide a *terminus post quem* of 1840, although in some instances their value has gone unrecognized because they can be easily misidentified as glass buttons (Sprague 2002). Lindbergh (1999) states that the primary uses of ceramic buttons with a diameter of 10–12mm (like those from North Brisbane) were as closures for shirts and underwear. Although "Prosser" or "small china" buttons are not mentioned specifically in Brisbane newspaper advertisements, it is likely that these were so generic in design and so readily available that they fell simply into the class of "assorted buttons" or "shirt buttons".

In Australia, Prosser buttons were among the 963 buttons excavated from Casselden Place, Melbourne, a site encompassing working-class dwellings and industrial buildings covering the period 1850–1950 (Porter and Ferrier 2006; Murray 2006), and were also excavated from late nineteenth century domestic dwellings at the CSR Pyrmont site, Sydney (Lindbergh 1999). At Cadia Cemetery "small china" buttons were excavated from the burials of both adults and children (Higginbotham 2002:91-2). Archaeological excavations at the Omata Stockade, Taranaki, New Zealand (occupied 1860–1866) found that Prosser buttons were the most abundant among the 111 buttons collected (Prickett 1994:69-73). The majority of these buttons were plain, resembling the Type 1, 2, 3 and 4 buttons described from North Brisbane. However, Prickett's Type 1E button is almost identical to the spiral pie crust Prosser button described from burial F172 at North Brisbane, giving a possible interment date in the 1860s (see Pricket 1994:71 Fig 2.48).

Small numbers of ceramic Prosser buttons have been excavated from the Foster burial site, Charlottesville, Virginia (interments between 1833 and 1906) (Ford 2006); from the burial of a soldier belonging to the Louisiana Tiger Rifles (d. 1861) (Deegan 1987); from the Quaker Burying Ground, Alexandria, Virginia (interments from 1784 to the 1890s) (Bromberg *et al.* 2000:472-481); and from four burials of patients in the grounds of the Eastern Kentucky Lunatic Asylum, Lexington (interred between 1839 and 1861) (Favret 2006). Favret's Lexington excavation is of particular interest since the deceased were interred with either single Prosser buttons (burials 3 and 4), or with sets of two or three buttons (burials 6 and 11), a similar distribution to that seen at North Brisbane. Favret took this to indicate that individuals buried with Prosser buttons were not buried in shrouds, but wore regular street clothes, for example a button-up shirt. However, the same conclusion cannot be drawn regarding the North Brisbane Burials. From contemporary illustrations, it is known that some mass-produced shroud garments available in England (and presumably imported into Brisbane) were decorated in the centre-front with small buttons, possibly Prossers, so their presence at North Brisbane could equally represent a shroud garment as a button-up shirt or underwear.

During the nineteenth century, bone buttons were also among the most common types of utilitarian button (Favret 2006), with smaller sized buttons used as fastenings on underclothes, and larger diameter buttons used as closures for shirts and trousers (Lindbergh 1999). The method of manufacture was to turn the bone piece on a lathe (Strezewski 2003:12), and evidence of this turning process can be seen on some of the buttons excavated from the North Brisbane Burial Ground. In Australia, bone trouser and shirt buttons were used on convict uniforms in Tasmania (Casella 2000), New South

Wales (Lindbergh 1999) and on Norfolk Island (Starr 2001). Bone buttons were also excavated from nineteenth-century domestic buildings at Casselden Place, Melbourne (Porter and Ferrier 2006) and the CSR Pyrmont site, Sydney (Lindbergh 1999). In the United States, bone buttons have been reported from excavated burials at the Foster burial site, Charlottesville (Ford 2006), the Quaker Burying Ground, Alexandria (Bromberg *et al.* 2000), the Eastern Kentucky Lunatic Asylum, Lexington (Favret 2006), and the Michigan City Old Graveyard, Indiana (interments between 1835 and 1864) (Strezewski 2003). While the morphology of the Type 18 and 20 bone buttons excavated from North Brisbane have not been reported elsewhere in the literature, one example virtually identical in dimensions to Type 17 from North Brisbane was excavated at the Warea Redoubt, Taranaki, New Zealand, occupied from 1865 to 1868 (Prickett 1994:118-119, Fig 3.31). Bone button Type 19 from North Brisbane also matches the description of a large number of turned bone buttons excavated from Fort Fisher, a Civil War fortification in North Carolina dating from 1837–1865 (South 1964, button type 20). Considering these similarities, and the published dates at which this style of decoration appears in New Zealand and the United States, it is possible that these buttons indicate burials made in Brisbane between 1843 and the late 1860s.

Mass-production, particularly in places such as Birmingham, also allowed metal buttons to be readily available at little expense to the general population (White 1977). Buttons could either be cast by pouring hot metal into a mould, or stamped out in one or two pieces from sheet metal (Peacock 2008:12). All of the metal buttons from North Brisbane appear to have been made by the stamping method. At North Brisbane, metal buttons often occurred singly or in pairs, suggesting they functioned as closures on shirts or underwear. However, burial F48 is notable in that it contained six trouser buttons, indicating that the apparel used to dress the deceased included street trousers. A similar burial was reported by Cox and Stock (1995) from St Nicholas's Church, Bathampton; that of a young man who died in 1829 and was buried wearing trousers with plain metal buttons down the outside seams. Trouser buttons appear to have been extremely common at nineteenth-century military and domestic sites, with large numbers excavated from the Omata Stockade, Taranaki, New Zealand (Prickett 1994:69-71), and from the CSR Pyrmont site in Sydney (Lindbergh 1999). Unfortunately, the lack of any text or decoration on the North Brisbane trouser buttons precludes the possibility of narrowing the date range for these buttons. However the unusual Type 10 buttons excavated from burial F268 at North Brisbane were very similar in decoration to a brass button excavated from the Omata Stockade, Taranaki, suggesting a possible interment date in the 1860s.

Birmingham was also the home of shell or "pearl" button manufacturing, with factories sourcing white mother-of-pearl shell from producers in the Persian Gulf, Asia and the Pacific, and dark abalone shell from New Zealand and the Pacific (Cole 1892:46; White 1977). By 1866, the Birmingham shell button industry was consuming 22 tons of shells per week (White 1977). Pearl buttons were primarily used in the nineteenth century for fastening shirts and underwear (Strezewski 2003:15), and Lindbergh (1999) notes that they could often be used with other types of buttons on the same garment. Such an arrangement was noted in one burial excavated from Christ Church with All Saints, Spitalfields, London (1729–1852), where the body was found dressed in a linen shirt with the front fastened using alternating mother-of-pearl and cartwheel (thread) buttons (Janaway 1993:112). While north Queensland had an active mother-of-pearl shell industry from the 1860s, all the collected shell was exported overseas rather than processed locally (Ganter 1994:22, 195).

Therefore, any shell buttons purchased in Brisbane and interred in the North Brisbane Burial Ground are likely to have been imported. It is interesting to note that despite the enduring popularity of mother-of-pearl buttons in Brisbane, and their ready availability, no mother-of-pearl buttons were interred in the North Brisbane Burial Ground. Because small mother-of-pearl buttons were among those found in the burials of adults and children at Cadia Cemetery, New South Wales and overseas at Christ Church with All Saints, Spitalfields (Janaway 1993:112), and at Michigan City Old Graveyard, Indiana (Strezewski 2003:15), it is likely that some of these buttons were also interred with the dead at North Brisbane, but have not survived.

The abalone shell button excavated from the North Brisbane Burial Ground is similar in design to shell buttons excavated from Fort Fisher, North Carolina (South 1964) and from the burial of a sailor from the Franklin Arctic Expedition of 1845–1848 (Beattie and Savelle 1983), although the North Brisbane button has a larger diameter. Therefore, this relatively simple design was available in Britain (and presumably Brisbane) at least in the 1840s and may well have persisted into the late 1860s, since the Fort Fisher site pre-dates the production of American-made shell buttons in the 1870s (White 1977). It may then be possible to date burial F361 in the North Brisbane Burial Ground to a time period between 1843 and 1865. The possibility exists, however, that such a large and attractive button could have been recycled a number of times in the years following its purchase, and been interred with its final owner sometime after 1865.

Ivory buttons were only explicitly advertised for sale in Brisbane from 1873, although it is possible that these were available in earlier years from jewellers and haberdashers and, along with other varieties of button, fell into the catch-all category of "fancy buttons". Ivory button production dates at least from the fourteenth century (Cole 1892:43), but ivory buttons were always a more expensive choice (Peacock 2008:58). In the nineteenth century, ivory buttons could be ornamented by carving or scrimshaw work, or inlaid with semi-precious stones (Peacock 2008:58). The primary source for nineteenth-century button ivory was eastern Africa, with the raw tusks being shipped via ports in Tanzania and Egypt (Beachey 1967), although other ivory sources existed. The lack of decoration on the ivory button recovered from North Brisbane suggests that it may have been among the cheaper types of ivory button available for sale in Brisbane. Alternatively, it is possible that a thrifty individual could have carved the button from another ivory object. Solid ivory items offered for sale in Brisbane at this time and earlier include chess pieces and draughts counters (*Moreton Bay Courier* 23 June 1855:3) and cutlery handles (*Moreton Bay Courier* 1 February 1851:3), any of which could have furnished the raw material for this small button. It is therefore impossible to provide a firm date range for this type of button.

Hand made cloth-covered buttons were first introduced to Britain in 1801, when they were known as "Florentine" buttons after the silk material used to cover them (Peacock 2008:32). Once the process was mechanised by Birmingham button makers in the 1830s, buttons covered in a greater variety of textiles became cheaper and more readily available, and took part of the market-share previously occupied by metal and gilt buttons (Peacock 2008:32,49). Cloth-covered buttons, could either be mass-produced at a rate of 90 gross per day, or made individually by tailors and dress-makers using small portable presses (Cole 1892:45). The popularity of these kinds of buttons lay in the fact that they could be made in any size and covered with the same material as a dress, jacket or other clothing, thus eliminating the inconvenience of having to match the button colour and style to the garment (Cole 1892:45). The most popular type of mass-produced cloth button in the nineteenth century was the linen button introduced in 1841, and these were primarily used on shirts (Peacock 2008:49). From contemporary Brisbane newspaper advertisements, it is known that silk, satin, terry, linen and velvet were used to cover sets of mass-produced buttons. However, the two cloth-covered buttons excavated from the North Brisbane Burial Ground (burial F295) were covered in a wool twill textile with a weave that was different to commonly available buttons, and it is probable that these were a one-off set produced by a tailor or dress maker to match an item of clothing, such as a bodice or shirt, rather than as a decorative element on a mass-produced shroud garment. The associated machine-knitted stocking fragments within this grave are also suggestive of a set of personal clothing. Because textile-covered buttons were made throughout the period the North Brisbane Burial Ground was in operation, it is not possible to arrive at a date of interment for this burial.

By contrast, the two thread button frames discovered at North Brisbane represent an early type of button that was largely superseded by the introduction of linen covered buttons in 1841. Thread button manufacture dates back to the seventeenth and eighteenth centuries in England, where small cottage industries fed large national distribution firms (White 1977). The centres for this industry were the English counties of Dorset and Staffordshire, and Scotland (Peacock 2008:50). Thread buttons were made by stitching wool, silk or cotton embroidery threads over discs or circular frames made from horn or metal. They could have a domed, doughnut or cart-wheel appearance (Peacock 2008:50, Fig 7). Thread buttons became less fashionable in the early part of the nineteenth century, and the industrialisation of button manufacture (particularly metal button making and cloth covered buttons) further contributed to the decline of thread button sales (Peacock 2008:50; White 1977). The early date of these buttons is exemplified by their appearance in four burials at Christ Church with All Saints, Spitalfields (interments between 1729 and 1852) (Janaway 1993:111, 117), and at the Te Puna Mission Station in the Bay of Islands, New Zealand, established in 1832 (Middleton 2008:186-7). It is highly likely that the thread buttons excavated from two burials in the Presbyterian section of the North Brisbane Burial Ground represent some of the earliest interments made in the cemetery, and most probably date between 1843 and the early 1850s.

## CONCLUSION

The analysis of buttons excavated from the North Brisbane Burial Ground has allowed a greater understanding of Brisbane burial practices during the period 1843–1875 than was possible through the examination of contemporary documentary sources. For example, while fancy and expensive buttons were available in Brisbane from the 1840s, the deceased at North Brisbane were generally buried in garments decorated with relatively inexpensive mass-produced buttons. Exceptions to this are the abalone and ivory buttons excavated from adult burials in the Anglican and Roman Catholic cemeteries. The presence of buttons in burials has in the past been taken to indicate that the deceased was dressed in their own clothes rather than a shroud or shroud garment. However, the ready availability of small china buttons from the middle of the nineteenth century onward makes it possible that some were employed to decorate the front of shroud garments in the manner illustrated by Litten (1991), and thus a number of the Prosser buttons recovered at North Brisbane may have been associated with shroud garments. More indicative of personal apparel are the sets of metal and bone buttons, as well as the shell, ivory, cloth-covered and thread buttons. The great majority of

buttons were recovered from adult burials, suggesting a possible age-based difference in button use in Brisbane in the mid- to late-nineteenth century. However, this difference could equally be due to preservation bias brought about by the unique taphonomic conditions of the site.

Of the 34 excavated burials which yielded buttons, only six could be given relative date ranges of interment based upon button morphology. The thread buttons identified from Burials F150 and 169 in the Presbyterian cemetery give these burials a very early probable date of interment between 1843 and the 1850s. The Type 17 and 19 bone buttons excavated from the Anglican cemetery provide a date range of 1843 to the 1860s for burials F13 and F17, while the unique copper alloy Type 10 buttons from Roman Catholic burial F268 give a probable interment date in the 1860s. It is possible that the spiral pie crust Prosser button (Type 7) collected from the burial of an adult in the Presbyterian cemetery (F172) also dates to the period of the 1860s. The fancy shell and ivory buttons could have been recycled onto a number of garments over a period of years, or even decades, before burial at North Brisbane and so cannot provide any definitive interment date or time period other than the general span of the burial ground's operation.

The buttons from the North Brisbane Burial Ground form the largest collection of buttons excavated from an Australian nineteenth-century cemetery site. Their analysis has aided in the understanding of the funerary practices of Brisbane's earliest pioneers, as well as the taphonomic conditions operating at the North Brisbane site. Because this is also the first published study of its kind using Australian material, it provides a point of reference for future studies of buttons excavated from other Australian funerary contexts.

## REFERENCES

BEACHEY, R. 1967 'The East African Ivory Trade in the Nineteenth Century', *The Journal of African History* 8:269-290.

BEATTIE, O. and SAVELLE, J. 1983 'Discovery of Human Remains from Sir John Franklin's Last Expedition', *Historical Archaeology* 17(2):100-105.

BRISBANE COURIER 1864 'Auction Sales'. *The Brisbane Courier* 23 July 1864, p.7.

BRISBANE COURIER 1865 'Auction Sales'. *The Brisbane Courier* 4 September 1865, p.6.

BRISBANE COURIER 1866 'Auction Sales'. *The Brisbane Courier* 8 March 1866, p.6.

BRISBANE COURIER, 1866 'Auction Sales'. *The Brisbane Courier* 8 June 1866, p.6.

BRISBANE COURIER, 1866 'Auction Sales'. *The Brisbane Courier* 19 September 1866, p.6.

BRISBANE COURIER 1867 'Auction Sales'. *The Brisbane Courier* 12 January 1867, p.8.

BRISBANE COURIER 1867 'Auction Sales'. *The Brisbane Courier* 28 June 1867, p.4.

BRISBANE COURIER 1867 'Auction Sales'. *The Brisbane Courier* 13 July 1867, p.8.

BRISBANE COURIER 1867 'Bargains at Buxton's Sale'. *The Brisbane Courier* 22 August 1867, p.1.

BRISBANE COURIER 1867 'Auction Sales'. *The Brisbane Courier* 5 October 1867, p.8.

BRISBANE COURIER 1871 'Economy and Respectability in Funerals'. *Brisbane Courier* 30 November 1871, p.1.

BRISBANE COURIER 1873 'Samuel Davis & Co'. *Brisbane Courier* 14 February 1873, p.1.

BRISBANE COURIER 1873 'Auction Sales'. *Brisbane Courier* 5 September 1873, p.4.

BROMBERG, F., S. SHEPHARD, B. MAGID, P. CRESSEY, T. DENNEE and B. MEANS 2000 *"To Find Rest From All Trouble": The Archaeology of the Quaker Burying Ground Alexandria, Virginia*, Office of Historic Alexandria, Alexandria, Virginia.

CASELLA, E.C. 2000 '"Doing Trade": A Sexual Economy on Nineteenth-Century Australian Female Convict Prisons', *World Archaeology* 32:209-221.

COLE, G. 1892. *A Complete Dictionary of Dry Goods*, W. B. Conkey Company, Chicago.

COX, M. and G. STOCK 1995 'Nineteenth Century Bathstone Walled Graves at St Nicholas's Church, Bathampton', *Somerset Archaeology and Natural History: The Proceedings of the Somersetshire Archaeological and Natural History Society* 138:131-150.

DEEGAN, A. 1987 'Archaeological Textile Evidence for Historic Costume Study: Louisiana Tiger Rifles 1861', *Clothing and Textiles Research Journal* 5:23-27.

FAVRET, A. 2006 *Archaeological Investigations of Unmarked Graves at Eastern State Hospital Lexington, Fayette County, Kentucky*, Kentucky Archaeological Survey, Lexington.

FORD, B. 2006 *"A settlement known as Canada": Archaeological Investigations at the Foster Site*. Rivanna Archaeological Services, Charlottesville, Virginia.

GANTER, R. 1994 *The Pearl-Shellers of Torres Strait: Resource use, development and decline, 1860s–1960s*, Melbourne University Press, Melbourne.

HASLAM, H., J. PRANGNELL, L. KIRKWOOD, A. McKEOUGH, A. MURPHY and T. LOY 2003 'A Lang Park Mystery: Analysis of Remains from a 19th Century Burial in Brisbane, Queensland', *Australian Archaeology* 56:1-7.

HIGGINBOTHAM, E. 2002 Report on the excavation of the Cadia Cemetery, Cadia Road, Cadia, N.S.W. 1997–1998. Volume 1 – Main Report, unpublished report for Cadia Holdings Pty Ltd, Edward Higginbotham & Associates Pty Ltd, Haberfield, NSW.

JANAWAY, R. 1993 'The Textiles' in J. Reeve and M. Adams (eds) *The Spitalfields Project Volume 1: The Archaeology, "Across the Styx"*, Council for British Archaeology Research Report 85, York, pp. 93-119.

LINDBERGH, J. 1999 'Buttoning Down Archaeology', *Australasian Historical Archaeology* 17:50-57.

LITTEN, J. 1991 *The English Way of Death: The common funeral since 1450*, Robert Hale Limited, London.

LUCAS, G. 2002 'Disposability and Dispossession in the Twentieth Century', *Journal of Material Culture* 7:5-22.

McCLURG, J. 1975 *Historical Sketches of Brisbane*, Library Board of Queensland and the Royal Historical Society of Queensland, Brisbane.

McGOWAN, G. 2008 The deterioration of human remains and

artefacts in the cemetery environment: A study of archaeological materials excavated from the nineteenth century North Brisbane Burial Ground, Lang Park, Queensland, unpublished PhD Thesis, The University of Queensland, St Lucia.

McGOWAN, G. and J. PRANGNELL 2006 'The significance of vivianite in archaeological settings', *Geoarchaeology* 21:93-111.

McGOWAN, G. and J. PRANGNELL 2009 'The Truth Will Out: Recycling of Packing Timber to Construct a Nineteenth Century Australian Coffin', *Australian Archaeology* 68:56-58.

McGOWAN, G. and J. PRANGNELL 2013 'Nineteenth Century Textiles from the North Brisbane Burial Ground', in press *International Journal of Historical Archaeology*.

McKILLOP, H. 1995 'Recognizing Children's Graves in Nineteenth-Century Cemeteries: Excavations in St Thomas Anglican Churchyard, Belleville, Ontario, Canada', *Historical Archaeology* 29:77-99.

MIDDLETON, A. 2008 *Te Puna – A New Zealand Mission Station: Historical Archeology in New Zealand*, Springer, London.

MORETON BAY COURIER 1846 'New Store'. *Moreton Bay Courier* 20 June 1846, p.3.

MORETON BAY COURIER 1846 'J. Richardson'. *Moreton Bay Courier* 4 July 1846, p.1.

MORETON BAY COURIER 1846 'New Goods'. *Moreton Bay Courier* 4 July 1846, p.3.

MORETON BAY COURIER 1849 'Come And Look'. *Moreton Bay Courier* 25 August 1849, p.3.

MORETON BAY COURIER 1850 'J. Richardson'. *Moreton Bay Courier* 17 August 1850, p. 1.

MORETON BAY COURIER 1851 'Iredale & Co's Iron Stores'. *Moreton Bay Courier* 1 February 1851, p.3.

MORETON BAY COURIER 1855 'Fancy Goods on Sale at the Stores of De Pass, Ellis & Co'. *Moreton Bay Courier* 23 June 1855, p.3.

MORETON BAY COURIER 1856 'Trimmings'. *Moreton Bay Courier* 26 April 1856, p.3.

MORETON BAY COURIER 1858 'Peremptory and Unreserved Sale'. *Moreton Bay Courier* 27 November 1858, p.3.

MORETON BAY COURIER 1860 'The Criterion Store'. *Moreton Bay Courier* 3 November 1860, p.1.

MUNSELL PLANT TISSUE COLOR CHART 1977 Gretag Macbeth, New Windsor, New York.

MUNSELL SOIL COLOR CHARTS 2000 Revised Edition, Gretag Macbeth, New Windsor, New York.

MURRAY, T. 2006 'Integrating Archaeology and History at the "Commonwealth Block": "Little Lon" and Casselden Place', *International Journal of Historical Archaeology* 10:395-413.

PEACOCK, P. 2008 *Discovering Old Buttons*, Shire Publications Ltd, Oxford.

PORTER, J. and A. FERRIER 2006 'Miscellaneous Artefacts from Casselden Place, Melbourne', *International Journal of Historical Archaeology* 10:375-393.

PRANGNELL, J. and G. McGOWAN 2009 'Soil Temperature Calculation for Burial Site Analysis', *Forensic Science International* 191:104-109.

PRANGNELL, J. and K. RAINS 2001 Cultural Heritage Report of Historical Landscapes and Materials at the Lang Park Redevelopment Site, unpublished University of Queensland Archaeological Services Unit Report No. 344, St Lucia.

PRICKETT, N. 1994 *Archaeological Excavations at the Omata Stockade and Warea Redoubt, Taranaki*, New Zealand Archaeological Association Monograph No.20, Auckland, New Zealand.

*QUEENSLAND PARLIAMENTARY DEBATES* 1911–1912, p. 1242.

*QUEENSLAND PARLIAMENTARY PAPERS* 1914, Vol. 2, Appendix VIII, pp.95-97.

RAINS, K. and J. PRANGNELL 2002 'Background to the University of Queensland Archaeological Services Unit's Lang Park Salvage Excavations: History, Significance, Assessment and Methods', *Queensland Archaeological Research* 13:21-30.

SOUTH, S. 1964 'Analysis of the Buttons from Brunswick Town and Fort Fisher', *The Florida Anthropologist* 17(2):113-133.

SPRAGUE, R. 2002 'China or Prosser Button Identification and Dating', *Historical Archaeology* 36:111-127.

STARR, F. 2001 'Convict Artefacts from the Civil Hospital Privy on Norfolk Island', *Australasian Historical Archaeology* 19:39-47.

STREZEWSKI, M. 2003 *"Ellen We Miss Thee At Home": Archaeological Investigations at the Michigan City Old Graveyard (12 Le 348), La Porte County, Indiana*, IPFW Archaeological Survey, Indiana University-Purdue University at Fort Wayne, Reports of Investigations No. 308. Fort Wayne, Indiana.

THE COURIER 1863 'Drapery Drapery Drapery'. *The Courier* 23 April 1863, p.1.

THE COURIER 1863 'Joshua Ebenston Undertaker' *The Courier* 14 November 1863, p.4.

WHITE, D. 1977 'The Birmingham Button Industry', *Post-Medieval Archaeology* 11:67-79.