WEST DEAN
CONSERVATION

Progress Report

2010/2011

Graduate Diploma – Conservation of Ceramics and Related Materials

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Sussex Area Young Arts Award

Introduction

It was throughout my Art History degree at the University of Sydney in Australia that my interest in the conservation and restoration of art and artefacts was really ignited. It was my passion for conservation, and ceramics in particular, that brought me home to England, where these objects hold such an important place in the history and culture of the country. Whilst I did not come from a background in conservation the skills I gained from my art history degree were invaluable to my studies at West Dean. The following report will take you through some of the objects I have had the pleasure to work on while also introducing you to some of the techniques and exercises I have done over the year.

Autumn Term

Test Piece

Flower Pot Bonding Exercise

As an introduction to conservation and ceramics in general one of the first projects students had to approach was to break, bond, fill and retouch a terracotta flower pot. Terracotta is a notoriously porous material and as such not all adhesives or conservation processes are suitable for the body type. Therefore to see how different adhesives respond to porous substrates a variety of adhesives, both suitable and unsuitable, were used to bond the flower pot. This exercise not only helped me to learn and practice bonding but it also greatly aided my knowledge of the adhesives available in conservation and why certain ones were better suited to different ceramic bodies.

As part of this exercise we were also required to fill two separate areas of loss using both a one and two-sided mould and then retouch the fills. This was not only invaluable as it enabled us to learn the process of filling in a risk-free way but also demanding as it introduced us to retouching through one of the hardest materials to colour match – terracotta.

Treated Objects

Spanish Tile

During the first term all students are required to conserve a 16th Century Spanish Tile, which originally came from one the fireplaces in West Dean. The tiles were decorated using a technique known as *Arista* and had a symmetrical floral design highlighted with polychromatic lead glazes typical to Seville, where they originate.

Figure 1 *Before treatment*

The tiles had been instated with cement and so as a result mortar residue was evident along the sides of the tile – this was removed with a chisel and small hammer. There was a reasonable amount of surface dirt across the glazed surface of the tile and this was removed using a cotton swab and an 80/20 solution of deionised water and I.M.S (Industrial Methylated Spirit) and 2 drops of Synperonic A7 (non-ionic detergent). There are also several areas of loss on the tile, on both the base and decorated side. These losses were filled with plaster and then retouched using both Golden Heavy-Bodied Acrylics for the base fills and dry powder pigments mixed with a gloss medium for the fill to the decorated surface.

Figure 2 *After treatment*

Meissen Teapot

This small turquoise, hand-painted Meissen teapot was another of my earlier objects however it was also one of the most complex I've worked on during my time at West Dean. Dating from the late 18th Century, in its original state the teapot had an extensive amount of damage including breaks to the handle and the lid, several areas of loss and also signs of old restoration such as yellowing adhesive.

Figure 3 *Before treatment*

Before any new conservation treatment could be attempted the old restoration had to be dismantled, which was a lengthy process involving treatments both mechanical and solvent based. Once dismantled and thoroughly cleaned the handle and lid were bonded again using a method known as *capillary action*. This process involved assembling the handle and lid prior to bonding using small drops of melted wax to secure the breaks and then introducing a specialised E-Poxy resin called Fynebond into the break lines. This method allowed for a particularly tight join and was extremely effectively considering it was such a complex bond.

The areas of loss to the handle cavity were colour filled with Fynebond bulked with fumed silica and mixed with dry powder pigments. There was extensive loss to the flower finial of the teapot, which was missing several petals and a stem. These were created by modelling the area in-situ using a putty made with Fynebond, fumed silica, French chalk and dry powder pigments. Once the modelled areas had fully cured they were retouched and then where needed were gilded using gold powder. Due to its complexity the Meissen teapot has taken most of the academic year to complete, however I am extremely pleased with the finished result and it is one of the object I am most proud of.

Figure 4 *After treatment*

Spring Term
External Visits

Throughout the year the tutors have organised numerous field trips to museums, conservation departments and archaeological stores. This year our course has been to the British Museum where we went behind the scenes at the Greek and Roman department and the conservation department; the Alton Museum where we had a private tour and were allowed to handle objects that interested us; Plowden and Smith, a private conservation company in London, and the Wedgewood factory. I have enjoyed every one of these trips as they have enabled us to have very privileged experiences handling objects thousands of years old. They have allowed us to see the variety of work carried out by other studios while also ensuring we are able to build vital contacts with other professionals within the industry.

Treated Objects

Worcester Lid
In order to gain as much experience of a real working environment as possible throughout the year each student is given a 'snap-shot' project to be completed within a short period of time. I was given an apple green Worcester lid with a plain guilt border originally from a tea service produced during the Barr, Flight and Barr period between 1804 and 1813. There was minimal damage to the lid apart from a small area of loss along the rim, which was ingrained with dirt.

Figure 5 *Before treatment*

The first step was to give the object a surface clean with a cotton swab and an 80/20 solution of deionised water, IMS and 2 drops of Synperonic however this preliminary clean did not have much of an effect on the ingrained dirt to the area of loss. The second stage was to steam clean the lid with particular attention being paid to the area of ingrained dirt – this process was extremely effective and the majority of the dirt was removed.

The area of loss was initially given a core fill of Flügger, a material similar to polyfilla, and then the remaining declivity was colour filled to match the whitish body of the lid

using Fynebond, fumed silica and dry powder pigments. To reproduce the washy apple green glaze on the surface of the lid the whitish colour fill was retouched by building up thin layers of Fynebond mixed with dry powder pigments. This technique was very effective producing an appearance similar to the original glazed body. The final stage was to gild the filled area using gold powder, which was then burnished using an agate tool to compact the powder and give a good finish.

Figure 6 *After treatment*

African Candlestick

To provide some variety during the second term I was given a brightly coloured and imaginatively designed African candlestick. Compared with my other objects, which were mainly early examples of European porcelain, this was a relatively late earthenware object made in the last 20 years by Armore Ceramics who are based in South Africa. The main candlestick was built into a rectangular base and had an interesting design. There were several modelled elements including 3 green leaves that protrude and surround the top and a sculpted green crocodile, which appeared as if impaled by the candlestick. The candlestick was decorated in a bright polychrome of primary colours.

Figure 7 *Before treatment*

When I first received the candlestick there was a large amount of damage to the base and one of the leaves had become detached and had an area of loss to the tip. The candlestick was thoroughly cleaned using predominantly I.M.S, which was used to remove a waxy

residue that suffused the surface of the object. I chose to bond the object using Cellulose Nitrate as it had a relatively fast curing time which was desirable for such a complex bond – the base had to be bonded separately in two sections and then the main candlestick column was assembled on top before it had all cured.

The next stage was to fill the areas of loss along the break lines – the underside of the base was partially colour filled to provide strength and then all the remaining areas were filled using Flügger. The missing tip on one of the leaves was modelling in-situ using modelling wax. Once I was satisfied with the appearance of the wax model I created a mould for it using a silicone rubber which I then used to produce a cast in plaster. This plaster cast was refined, bonded to the original leaf and then retouched using Golden Heavy-Bodied Acrylics. Acrylics were also used to retouch the Flügger fills to the decorated surface of the candlestick.

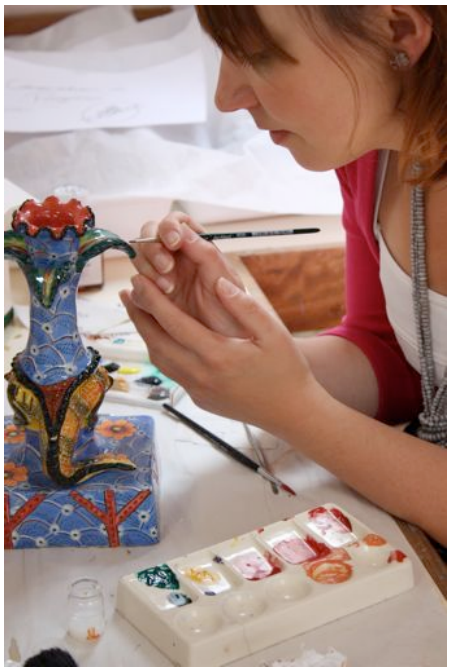

Figure 8 *Retouching*

Figure 9 *After treatment*

Summer Term

Making Techniques

In order to aid our understanding of the objects we are conserving throughout the year students take part in a weekly pottery class. As part of this class I have learnt the history and theory behind the production of ceramics in this country and worldwide, through practising different making techniques such as coil and slab building, press moulding and throwing and turning. Students are also given the opportunity to learn and partake in ancient making processes such as pit firing, the oldest known method of firing pottery, and Raku, a Japanese firing technique, which produces unique colours and patterns in the glaze as the pots are fired at low temperatures and rapidly cooled. My appreciation of a work of art comes from learning of its historical context and the artistic processes through

which it came to be and so for me being able to be involved in such ancient traditions was a great experience that enhanced my education in conservation.

Treated Objects

Roman Flagon

During the final term students were asked to work on several archaeological objects from Fishbourne Roman Palace that are to be exhibited in the Chichester District Museum. I was given a small terracotta Roman Flagon from approximately 4th Century AD, which was severely damaged and in numerous shards. The flagon also had signs of previous restoration including brittle adhesive residing on the break lines.

Figure 10 *Before treatment*

My first course of treatment was to clean all the shards and remove any old adhesive – due to the porous body wet cleaning was avoided and instead the dirt and adhesive was removed mechanically with brushes and tweezers.

Figure 11 *Cleaning and consolidation*

The surface of the flagon was quite friable in places and there were several running cracks and so these areas were consolidated by introducing a 5-10% solution of paraloid B72 in acetone via a micropipette. Following consolidation the top and base sections of the flagon were bonded separately using Paraloid B72. There were two areas of loss to the main body of the flagon and these areas were filled with a composite of Paraloid B72 and Glass Bubbles (extremely fine glass particles). Once both fills had been prepared they were refined and retouched using acrylics and then the base and top sections of the flagon were bonded together using Paraloid B72. Any areas of loss along the break lines and around the fills were filled with the same composite material and were then retouched with acrylics.

Figure 10 *After treatment*

Conclusion

In just a year I have learnt so much from West Dean and my time at the college has allowed me to develop an initial interest in conservation into a future career. I feel I have been able to learn and develop valuable skills and practical knowledge that will be invaluable. Furthermore the college's predominantly practical aspect as well as the variety of external visits and lecturers has prepared me well for professional work and enabled me to build important contacts within the conservation industry. I hope to broaden and strengthen the skills I have acquired thus far in the postgraduate year and look forward to researching my masters, which will be related to the conservation of tiles and mosaics in-situ. West Dean will allow me to research this area in depth through working with the in-situ conservation and reinstallation of several 16th century Spanish tiles in several fireplaces at the college. Ultimately I wish to become a freelance conservator within the specialised area of in-situ ceramic conservation and I hope my studies at West Dean will be the first stepping-stone on my path to achieving this.