

Montefiascone, Italy: A beautiful, cosy, medieval town nestled on a hilltop, where I have just spent three weeks of a very studious and unforgettable summer holiday. Even now, back in the UK, I just need to close my eyes to feel myself walking up to the Seminario Barbarigo under a cloudless blue sky, passing by the lively "il Caffe" and the fountain on the Corso.

Splendid weather, delicious food and wine, friendly people, lake Bolsena for a refreshing swim in the summer heat (see Fig.1) – who could imagine this is also the setting for world-famous bookbinding and conservation workshops?

In this report I will tell you about my experience at the Montefiascone Project 2019 as a recipient of the Conservation By Design - Nicholas Hadgraft memorial scholarship.

The first week's workshop 'Re-creating the Medieval Palette' was taught by Cheryl Porter. Cheryl initiated the project for the care and maintenance of the Seminario Barbarigo Library collection in 1987 and has been organising the Montefiascone summer school since 1992.

The focus of the workshop was on the colourants used in Western and middle eastern medieval manuscripts. I love colours and was very excited by this programme. In the mornings we had lectures where we learnt about the properties of pigments/dyes and how they were historically used in manuscripts. In the afternoons we had practical workshops where we tried our hands at making dyes and pigments.

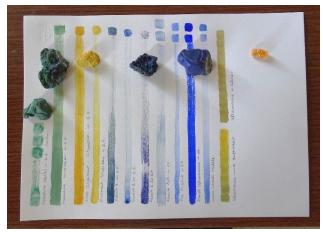




Fig. 2: A beautiful comparison of colours and minerals.

Fig.3: Christa Hofmann grinding lead white.

We started to learn about pigment sources starting from natural inorganic materials such as earth colours, lapis lazuli, malachite and orpiment (see Fig. 2). We then continued to synthetic pigments - including lead white, red lead, verdigris and cinnabar - and decorative metals such as gold/silver leaf and gold paints.

We used a glass muller to grind and mix pigments with a binder – a very fun practical exercise but that requires a lot of practice to master! That also gave us a first-hand understanding of how this process impacts the final texture and colour of the pigment (see Fig. 3). We also looked at the properties of various binders such as gum Arabic, egg white and yolk. We saw the effect of different binders on texture and hues, for example egg yolk led to thick mixtures leaving visible brush strokes and a particular shine.







Fig. 5: Weld juice (left) transforming into lake pigment.

On the third and fourth day we looked at dyes including weld, indigo, sap green, brazil wood and cochineal (see Fig. 4). What I enjoyed most was to compare colour variations between direct dyes and lake pigments (pigments made by precipitating a dye with a metallic salt called a mordant) (see Fig. 5).

An important lesson was that we have to keep in mind that colour depends on a large number of factors: materials, sources, particle sizes, binders and additives, pH of substrate, historical damage and discolouration etc ...(see Fig. 6). During the lectures Cheryl also introduced us to a corpus of research dedicated to the analysis of pigments/dyes applied on medieval manuscripts.

On the last day we experimented with inks and combinations of pigments and dyes we had made during the week.

Cheryl's teaching was amazing in that it was rooted in her passion for the subject compounded by years of study - travelling around the world to collect original materials and recreating recipes. I am very much looking forward to reading her upcoming book on the subject.



Fig. 6: Some of the colour variation charts collection I made during the course....I love these gradations!

The second week workshop was taught by Élodie Léveque and Cédric Lelièvre. This course had two key objectives:

- The first one was making a model of a 'Luxury French Romanesque Limp Binding' based on the tutors study from MS1740 from the Clairvaux collection (Troyes,France) and to explore the diversity of Romanesque limp bindings.
- The other was to investigate **Cistercian alum-tawed parchment making techniques**.



 $Fig.\ 7: Classroom\ of\ the\ second\ week-students\ are\ working\ hard!$

Romanesque limp bindings, as the name implies, do not have stiff boards but use flexible covering skins. I have never had the chance to work on these quite rare bindings and was very interested in studying their structure.

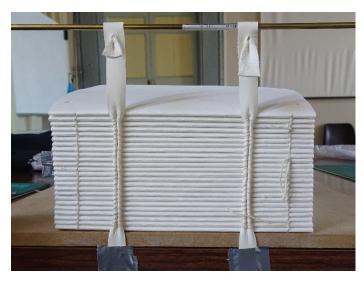


Fig. 8: Second week – students are working hard!

The first step in making the model was to sew a textblock in herringbone style over the slit thongs made of alum tawed skin (see Fig. 8).

Then a 'lining' layer, of alum tawed skin was cut to size with holes punched for the sewing supports coming through to attach the textblock with a small amount of paste applied on the centre panel on the spine.

The next day was spent making primary endbands over linen cores, stitching through the lining layer. Some of us tried connecting the lines at top and bottom of the over-casting long stiches by linking each station (see Fig. 9).

Following this, the secondary end bands, using a chevron pattern, were made over the primary end bands. Based on existing historical references, four colour threads were used for this. This is very absorbing work and I really enjoyed making this pattern! (see Fig. 10)



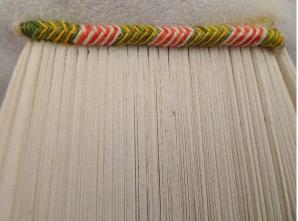


Fig. 9: Primary endband, sewing through the lining layer. Fig. 10: Secondary endband with a chevron pattern.

Another fun process was making fasteners out of alum tawed skin strips. We tried making different decorative styles such as rolled toggle, loops, 'Turks head' and 'Coptic style' toggles. After much hesitation between a large Turks head with a little chickpea core and a 'Coptic style' like floral pattern one, I decided to use the latter with a rolled toggle. The fasteners were attached with invisible stiches from the lining verso (see Fig. 12).

On the fourth day, the tanned brown leather outer cover was pasted over the lining. Long strips of alum tawed skin (dyed in advance with brazilwood in a bright pinkish red) were stitched



around the covering materials for edging (see Fig. 11). Using a leather needle, the double layers of lining and cover, and both edges of folded strips were sewn together with invisible stiches (see Figs. 12 & 13).

We continued this process on the final day..... and at last, c'est fini!!!

Fig. 11: Stitching, stitching, stitching...phew!





Figs. 12 & 13: Completed model, closed (left) & opened.

In parallel to this, we were given sheets of parchments to experiment with traditional alumtawed parchment making techniques. Throughout the week the sheets were soaked into an alum solution, mixed with flour, egg and oil, and pH was controlled, and finally dried. The final product is meant to combine the properties of parchment (thin and durable) and alum-tawed skin (soft and long-lasting). Cédric demonstrated applications of this material in conservation work. I had not come across with this material before but am keen to experiment with it! Note that the process is long however – the sheets I started to make in Montefiascone will need to 'rest' for a few weeks then damped and crumpled before they are usable (see Fig. 14).



Fig. 14: Alum tawed parchments, drying after preparation.

My final week in Montefiascone – 'A study of small format bindings from fifteenth century Germany and the Low Countries'. The course was taught by Jim Bloxam and Shaun Thompson from the Cambridge University Library, UK.

The week began by providing us with a historical and contextual background followed by an indepth analysis of these bindings as compared with similar styles. From the beginning, I was fascinated by the detailed descriptions of each binding structure by the lecturers – even one small hole can be a hint as to the structure and production process.

For model making we started sewing a pocket-size book block (Height: 111 mm x Width: 83 mm) in single straight sewing style on alum tawed skin slit-thongs (see Fig. 15).

Then we moved on to making end bands over linen cores. Shaun gave us many practical tips during the course - not only showing us step by step how to use tools correctly - but also



demonstrating how each small detail could affect the final result. For example, in our models end bands are made without any beads, so they will end leaning slightly towards the back of the spine and protrude a little at the end when laced into the boards. Shaun's deep understanding of book making taught me that we always have to look carefully at the objects, without taking anything for granted.

The completed textblock was slightly rounded and the spine was fixed with starch paste.

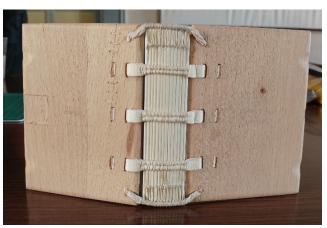
Fig. 15: Mito (left) sewing textblock. (Photo by Shaun Thompson)

On the next day, there was a lot of work with drills, chisels and sandpaper to make holes and channels on the beech wood boards for lacing. We chamfered the edges too. The shallow dents on the boards, what the teachers called 'dimples', to help positioning fingers for opening the book were also made (see Fig. 17).

Now the boards were ready to have the book block laced in. As I hammered the small wooden pegs 'gently' in the board, the lower board got a split along the holes (I did not know I was that strong.)! This accident was transformed into a lesson in wooden repair techniques. I drilled very tiny holes on both sides of the split and made thread 'sutures' to hold both pieces together. I could then finish the lace-in process (see Figs. 16 & 17).



Figs. 16 & 17 : After lace-in process, closed (left) and open. Do you see the cute sutures?



We were then given pieces of rough alum tawed pig skin and had to break them in - to make them supple by rolling them repeatedly in different directions. Paste was then evenly applied on the flesh side following the "no bubbles, no puddles!" rule (see Fig. 18). The techniques of corner making was then demonstrated. Here I learned the critical importance of both accurate handskills and of quality tools, such as a very sharp blade, to achieve good results. The book was finally covered and left to dry overnight under tension and weight—using a simple but effective tie-down kit (Fig. 19).



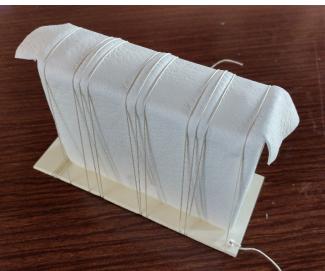
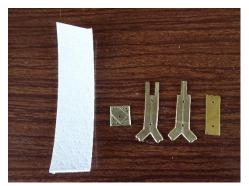


Fig. 18 (left): Shaun demonstrating the covering step.

Fig. 19 (right): Book after covering.



This was my first attempt at making brass clasps out of brass plate and it was really challenging, but it was also very fun to do the metal work – especially shaping little feet-like details (see Fig. 20). I enjoyed blind tooling with decorative hand tools on pig skin too (see Fig. 21). It is so pretty!

Fig. 20: Metal clasps and a strap.

On the final day, the clasps and the strap were finished, tweaked and balanced before being nailed down in position without damaging the book.... This I think was the most challenging part for me. The last step was to introduce saddle stiches over the headcaps, and to fix the paste-down onto the inner board (see Figs. 22 & 23).





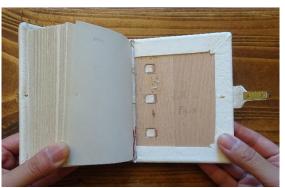


Fig. 21: Completed book, upper board.

Fig. 23: The inner board before paste-down is fixed.



I am so pleased at the end result after a week of effort (and with a lot of help from the tutors) – when I put my fingers on the "dimples" on board edges and press gently, the strap is smoothly released, and the book opens beautifully.

Fig. 24: In front of the Seminario with our books! (Photo by Shaun Thompson)

There was such a lot to take in and to learn during these three weeks that this small report can only be a brief sketch of the wealth of this experience.

Seeing many professionals/students from across Europe and America – tutors and attendees - getting together, sharing dedication to conservation/bookbinding and exchanging ideas, techniques and best practices was such an inspirational and heart-warming experience for me.

Far beyond the acquisition of academic knowledge and practical techniques, if there was one thing to take home from this experience for me is how it boosted my professional motivation to move forward in my career, improve my skills and – maybe one day – be able to share them with others. I have already used some of the tips I leant from the course for my projects back in the UK, and of course I will keep expanding my horizons!

This precious experience was only possible thanks to the generous Conservation by Design - Nicholas Hadgraft memorial scholarship, and I would like to thank both CXD and the selection board members for this.

I would also like to extend my thanks to the fantastic tutors Élodie, Cédric, Jim and Shaun for their incredible work and to all other attendees for their great spirit.

Last but not least very special thanks to Cheryl for her energy, kindness and dedication. You're showing us the way!