

Marquetry Demonstration with Jack Metcalfe

Saturday afternoon, 17 July

A fascinating and detailed lecture began with an image of the library table made by Thomas Chippendale for Harewood House c1771. This has recently returned home from the collections at Temple Newsam, a move that enabled a close inspection of some of the unfaded details beneath the brass mounts when Ian Fraser carried out conservation work. Jack outlined his 15-year journey of investigation into the techniques and methods employed in the workshops of Thomas Chippendale. A facsimile of this table is now being made: Jack is carrying out the marquetry and Ron Dickens the cabinet work.

Referencing A.J. Roubo's 18th century treatise, *L'Art du Menuisier*, Jack gave an explanation of how the necessary thin veneers were cut with a knife and saw, some craftsmen cutting 10 to the inch. Such thinness was needed in order to allow the dye to penetrate into the timber, and the pieces had to be flexible enough to bend while permitting the production of multiples in a packet. He described how

fretsaws were invented in the 16th century and continually improved, with springs and finer teeth on the saw blades, to enable fretwork to be cut for the clock makers. A da Vinci drawing showed a treadle-operated framed device, surprisingly unchanged until the 19th century and similar to one which Jack himself now uses. The packet or pad technique overcame the problem of the loss of material resulting from the saw's thickness or kerf. Here a sandwich of materials is built up and held together. When cut, this produces a negative and positive frame with similarly matching cut-outs, as in Boulle work *première partie* and *contre partie* designs. The number of veneers in the packet is only limited by the veneer thickness and the saw's length. Once laid down, the wood was smoothed with scrapers, scouring rushes, dogfish skin and so on.

Jack outlined how further details can be achieved by the choice of veneer and the use of hot sand shading. In this the wood is gently charred in a controlled manner to create shaded effects. He showed how, with a penwork technique, ink is drawn onto the sealed (varnished) surface to create ultra-fine lines and enhance existing design details. Cross-hatching can also be added in this way, for three-dimensional effects.

We were shown details of a games table from Nostell Priory, c.1769, where fustic wood was used: this has faded and become brown, and the original design obscured. A secretaire from Harewood House, c.1772, demonstrated the use of West Indian satinwood and purpleheart which, although now faded, still reveal the work of a master craftsman.

The library table from Harewood House, c.1771 (sold in 1965 for £43,050) was then shown in more detail to reveal swags, acanthus leaves (fret-cut on the short grain), red berries and green leaves set into dark Indian rosewood. Jack pointed out that this was evidence of a panel being made and then fitted. Detailed non-destructive scientific analysis showed the use of Brazilwood dye, cochineal, indigo, barberry, dragon's blood, and natural tulipwood and holly. He contrasted the drawer fronts with the panels and revealed these to be packet cut, with a revealed blade signature later filled in. This proved it to be of lesser quality and possibly by a different hand. He compared this work with the Renishaw commode (with penwork to simulate fret-saw work), the Diana and Minerva commode (with fine swag work) and the Panshanger cabinet (with more detailed penwork), postulating that the marquetry work was subcontracted out and may have been supplied to more than one firm. This could account for the difference in quality between the drawers and the panels.

A pair of matching tables from the music room at Harewood House illustrated the technique of joining sections of marquetry to create the total design. These have

rosewood and marquetry tops depicting green acanthus leaves, and the individual sections were united or joined at the edges, creating a now invisible line; the only evidence is a very small cut line between the cross-banding and the acanthus leaf tips. Had the crossbanding met the leaf tip, it is likely that no evidence of the technique would have been visible, all other cuts being with the grain lines and fine enough to be lost to the eye. This proved the use of two-part fret cutting in the overall creation of the design and was a sign of high quality and great skill.

Jack discussed the analysis of several pieces by Heinrich Piening (head of conservation at Schloss Nymphenberg, Germany), using UV/visible light spectroscopy. This allowed the identification of some of the original substances used in the construction of these marquetry panels. They included the mordants, tin and alum, along with dyes: campeachy (purple), cochineal (red), madder (red), Brazilwood (red), indigo (blue), indigo with weld (green), kamala (orange-yellow), weld (yellow), barberry (yellow) and wigtree or young fustic (golden yellow).

We looked at the Diana and Minerva commode, c.1773, covered in marquetry on a satinwood ground, made for the state dressing room in Harewood House. Originally costing £86, it is said that Chippendale considered it his finest work. The construction of the curved fan section was achieved by cooping techniques, using over 200 separate pieces as well as sand shading and marquetry swags for the decoration.

The final piece to undergo analysis was the pier table made for the Yellow Drawing Room at Harewood House, c.1775. The marquetry top is of satinwood, inset with various woods and engraved ivory, and supported on a carved frame 'highly finished in Burnished Silver and varnished' (it is now gilt). The emblems of the muses preside over the dance, the attributes of heroic and pastoral poetry, and representations of love and learning. Jack regards this table as the 'finest marquetry piece in the world', and he theorises that it may have been made as a tribute to the Lunar Society (see *The Lunar Men* by Jenny Uglow). Although now in a private collection, the table will be visiting Harewood in 2012.¹

Questions followed the lecture, and the use of 'best white varnish' was recommended as a clear varnish to enhance marquetry. The mention of fish glue and animal glue in varying sources was raised: Roubo used the term 'English glue'. The best was said to come from a sturgeon's swim bladder; pollock glue was mentioned as a lesser product.

Simon Feingold

¹ For photographs of some the pieces mentioned see Christopher Gilbert, *The life and Work of Thomas Chippendale* Tabard Press, 1978, and David Linley, *Classic Furniture*, H.N. Abrams, 1993.