Review of Wilder, The Conservation, Restorations, and Repair of Stringed Instruments and Their Bows



handbook of the stringed instruments, published in 2008, included some of the more recent research within the constraints of a pocket-book format; reviewing that volume in *GSJ* LXIII (2010), Darryl Martin commented 'in an ideal world a museum would wish to issue several different types of catalogue – a general book to serve as a souvenir for the majority of non-specialist visitors, and a detailed work which would be a reference for scholars and makers'. The present volume is that detailed work aimed at scholars and makers and hits the bull's-eye.

The Ashmolean has assembled an outstanding team of contributors to supply the content of this catalogue: Michael Fleming for the viols; John Dilworth and Carlo Chiesa for the violins; Derek Wilson and Tim Baker for the bows; Lynda Sayce, Stephen Barber and Sandi Harris for the guitars and citterns; Charles Mould for the keyboards; Tucker Densley as photographer.

References in the bibliography include articles and books up until 2009 and a couple of forthcoming publications which were due for 2010 and 2011, so the research comes right up to the publication date. The photography is all new: studio photographs benefit from Tucker Densley's triple career as a specialist photographer, luthier and dealer in fine violins; details are provided by members of the writing and editorial team. As a result there is a pleasing uniformity of style and approach while every important feature can be clearly seen.

The book itself is a pleasure to use. There is a reassuring impression that the design accommodates the content - too many catalogues have a procrustean design concept which adjusts the text to fit the allocated space. Each subdivision has an introductory essay as well as the detailed object entries and there is a separate section with biographies of the makers. Michael Fleming's eloquent plea for curators to be allowed enough space to avoid ambiguities and over-simplifications has obviously reached a sympathetic ear and the authors have been given the freedom to explain problems and anomalies. The book is copiously illustrated without toppling over into coffee-table-book values; every picture really does say a thousand words and the details of the violin archings, for example, are models of effective communication.

It is impossible to skim through this catalogue. The collection itself is highly focused and it is a pleasure to encounter knowledgeable and articulate experts writing about high quality objects and the evidence that they present for the history of instruments, of collecting and of workshop techniques. There is a sense of intellectual freedom that results from the flexible format and the fact that in a museum catalogue the truth can be addressed without worrying about the implications for the price tag or the feelings of the owner. The entry on Stadivari's 'Messie' violin of 1716, to take just one example, is twelve pages long with more than twenty relevant and beautifully produced illustrations. Its dissection of the physical evidence presented by the instrument itself is as gripping as a well-written detective novel and there is not a word of padding in it.

The book is stimulating as well as informative. The high quality of the illustrations has encouraged me to go chasing after a red herring that has intrigued me for some time. John, or possibly James, Preston was evidently one of the most prolific producers of English guittars and surviving instruments are marked with a device consisting of curly initials and a coronet. Logic suggests that the initials might include J and P but there is a curly tail on the right hand side which is clearly visible in Stephen Barber's detail – evidently the letter R is present. Many catalogues, the present one included, read the initials as JP; at least one on-line catalogue gives them as JRP while one American source has taken the whole thing to be the royal cipher of King George III. This is actually quite a reasonable misreading; the only differences between the two are the direction of one curl in the top left and the form of the coronet -aquick glance or a smudged version of the mark could easily give the impression that Preston's instruments had the royal seal of approval and, of course, this may have been what Preston himself intended.

The team is to be congratulated for producing a catalogue worthy of the Ashmolean's collection of instruments. All of this information so elegantly presented comes at a price; the standard edition of the catalogue retails for £290 but it represents real value for the money and will continue to be a valuable work of reference in years to come.

FRANCES PALMER

# TOM WILDER (ed). The Conservation, Restoration and Repair of Stringed Instruments and Their Bows. Montreal: IPCI-Canada and London: Archetype Publications, 2011. 1,600pp, 3 vols, illus, CD-ROM. ISBN 978-1-904982-41-8 (hardback). Price: \$1,395.00

It is a humbling task to review the three volumes of this extraordinary book. In my view (as a violin maker and restorer, and co-founder of the 'Oxford Violins' workshop), it is the first time that issues of conservation and restoration of musical instruments have been explored with such depth, insight and subtlety in one coherent work. The editor Tom Wilder summarizes the work and the process that led to it:

This book's 150 articles, 1,600 pages, and over 1,300 illustrations will be an invaluable resource for both craftspeople and scholars. The outcome of a rigorous selection process by an editorial board of prominent experts, it emphasizes conservation-minded techniques, presents alternative approaches for the same repair, and is ground-breaking in the extensive attention that it gives to the bow. The work's innovative combination of theory and practice, with extensive cross-referencing, is intended to foster a stimulating dialogue between scholars, conservators, and craftspeople.

In the general issues volume, conservators and scholars examine important issues concerning connoisseurship, collections, documentation, materials, surfaces, safety, and the environment. The more practical articles that follow in the other two volumes are meant to be considered in light of the ideas raised in these articles.

In the restoration and repair volumes, craftspeople and editors have collaborated to produce detailed technical articles that are generously illustrated with photographs and drawings. Complex processes are broken down into simple steps, and all of the tools and materials required are listed in order of appearance. Terminology and systems of measurement are standardized throughout the work to ensure clarity and precise meaning.

This book is guided by a conservationist approach that aims to safeguard our cultural heritage of instruments and bows for future generations, while its sale will help ensure the renewal of this heritage by raising funds for the protection of pernambuco trees. The heartwood of these trees, whose survival in the Brazilian Atlantic forest is under threat, has been used to make violin bows for over 250 years.

I quote this *in extenso*, because to my mind, the book does largely fulfil the aims it has set for itself, and this is no mean feat.

In his introduction, Tom Wilder mentions Hans Weisshaar and Margaret Shipman's book *Violin Restoration: A Manual for Violin Makers*, published over 20 years ago.<sup>1</sup> While Weisshaar's book still remains a very solid and thorough workshop manual, the book under review bears witness to a momentous change in attitude, moving from 'this is the way it is done', towards an acceptance of complexity as a given, of doubt as a necessary step towards eventually finding (or even, not finding) the most appropriate course of action and valuing knowledge as well as know-how. Its publication can only have happened because of a wide change in attitude with regard to a secrecy which used to plague the 'violin trade' much more so than it does now, and the generosity and enthusiasm of researchers, experts and luthiers who have contributed to so many books and articles published in the recent past. They are behind many of the chapters in this book and mostly contribute fresh material to it, rather than rehashes of previous work.

The multiplicity of vantage points when looking at one given area of interest is a significant feature of this work. The famous 'Chinese encyclopaedia list', a classification of animals in the Celestial Emporium of Benevolent Knowledge described by Jorge Luis Borges, does come to mind in this respect: the nature of the mapping of the territory has had to remain complex and open, because the editors have wisely not tried to unify or impose too much of a template on the authors to cover ground at all cost. Closely overlapping areas are given their own separate treatment by different authors. The tone and purpose of each chapter is quite distinct, clearly the fruit of personal practice, study and experience, therefore true to life and intrinsically partial, or even biased. The juxtaposition is fascinating as well as highly informative, and has the effect of an enlivened virtual conversation in the reader's mind between the different voices. The result could easily have been akin to a disparate collection of conference papers. Instead, I expect it owes its unlikely unity to the process that led to its coming to life: a consistent vision from its main proponent Tom Wilder, and a board of experts who assessed and assisted in the editing of all the material in consultation with the authors themselves. Above all else, this work constitutes a snapshot of what the most knowledgeable people in this world are able to say in the early twenty-first century, which is indeed plenty and fills three volumes as follows:

### Volume 1: General Issues Concerning Stringed Instruments and Their Bows

It is significant, and indicative of the confidence and lightness of touch of the editors, that one of the articles is titled 'The Danger of Learning Restoration Techniques from Books'! Issues of ethics are often near the surface of what is being said,

<sup>&</sup>lt;sup>1</sup> Hans Weisshaar and Margaret Shipman, Violin Restoration: A Manual for Violin Makers (Los Angeles, 1988).

and the particularity of this first volume is that it generally does not impose dogma. Rather it invites us, sometimes firmly, to examine throughout its 775 pages the relationships, conflicting needs and tensions between use, conservation, commerce, restoration and repair from many vantage points.

The exhortation 'Restoration is, after all, criticism' aptly sits at the head of Tom Wilder's excellent introduction to the whole work; two articles by Robert L. Barclay, 'Museum or Concert Hall: Pragmatic and Aesthetic Views' and 'Reversibility, a Fragile Concept' stand out as carrying a strong sense of overview, as does Marco Tiella's forceful and persuasive 'Observations on the Most Common Criteria for the Restoration of Stringed Instruments'. These help to remove tinges of rosiness that may linger on one's spectacles, and they are useful primers to reading the rest of this compendium with a critical eye in the best sense of the word.

Different tendencies and approaches as well as what could be described as different focal lengths are covered: Charles Beare's article on restoration and John Dilworth's 'Restoration: a Historical and Commercial Survey' show a tenderness towards the objects themselves and a breadth which is born from their unique life-long first-hand experience. We cannot leave ethics without mentioning commerce, expertise and fakes! This does raise heat on the part of some of the authors, and understandably neither Roger Hargrave nor Laurence Libin is immune from speaking from a moral high ground in their respective articles.

Regarding history, the span of the chapters is somewhat arbitrary. Recent research is represented in Ian Watchorn's article 'Reconstructing the French Viol Bow', Philip Kass's 'English Bow Makers of the Dodd and Tubbs Families' and Florence Gétreau's 'Linking Collection History and Conservation History'. There is also an entertaining foray into post-modern relativism in Ben Hebbert's 'The Invention of Tradition', and Matthew Wehling offers an invitation to zoom in on the tips of the heads of French bows throughout their history.

'Nothing has really happened until it has been described' (attributed to Virginia Woolf by Nigel Nicolson) heads up the documentation section. Perhaps it is a sign of the times that this section is huge, exhaustive, and up to date as far as methods and techniques. Introductions to laser scanning and computed tomography (CT) give a taste of what possibilities lie ahead if and when they become widely available. The cross-section images they can provide are used for the purpose of documentation, but as a maker, I also find their power to evoke functional shape very exciting and incredibly poetic. 'Lighting Configurations for Standard Shots' by Tucker Densley is a concise and useful guide to the photography of stringed instruments.

Documentation in the form of immaculately designed charts, diagrams, forms and condition reports is given a lion's share of over 100 pages. The need for accurate and exhaustive documentation, including that of repairs past and happening, is stressed by Robert Barclay. Mark Soubeyran, H.R. Hösli, Paul Siefried and Tom Wilder take us through the process with great thoroughness. Templates (in two formats: 'detailed' and 'concise') are available in the body of the book, but also in electronic format on a CD-ROM as PDF files, which can be downloaded and filled in directly by the user.

Whilst lauding this effort and the need for good record keeping, a bit of mischief on my part would like to turn Woolf's quote around: 'It has been described and we have made sure nothing has really happened'. As in many areas in our early twentyfirstcentury western culture, experienced subjective and professional judgement is deemed risky, and a normalization through a particular lattice readable by anyone does constitute good practice. Because objects and the scars they bear are complex, the lattice has to be fine, and the data needing recording becomes very large. The objectifying absence of hierarchy and saliency in the recording of numerical data belies the fact that despite the huge number of suggested points of measurement, normative choices still have to be made on where they are taken, which reflect a particular view of the world. Something similar also applies to the types of questions on the proposed forms and condition reports, complete with tick-boxes. If widely used, these documents will be significant in representing our culture just as much as in representing the instruments themselves. As means of reflecting on what good practice might be, these pages are invaluable.

The extensive section on materials comprises articles on workshop safety, wood, glue, hair, metals, mother of pearl, bone, and infestations. It is a useful resource, and as everywhere in this book, the bibliographies and cross-references are first rate.

The section on surfaces includes a bizarrely evocative illustrated nomenclature of all the sorts of craquelures one may encounter at the surface of an old violin varnish; a sort of geographical study as though one was a flea on a trekking expedition, a labour of love by Vera de Bruyn-Ouboter. The other sections on varnish address 'The Nature of Coatings and the Care of Historic Varnishes' (Mel J. Wachowiak), 'Patina and Authentication' (Tom Wilder), 'Cleaning and Retouching Violin Varnish, with a Discussion of Colour Theory' (Stewart Pollens) and 'Cleaning and Its Hazards' (Padraig ó Dubhlaoidh). These add up to a comprehensive knowledge base, extensively illustrated, and not without contradictions and differences of view.

### Volume 2: Stringed Instruments and Techniques for their Conservative Restoration and Repair

The second and third volumes are devoted to techniques, and are a treasure trove. The shift from the formulaic towards the appropriate when it comes to repairing is exemplified throughout, and has motivated the inclusion of specially commissioned articles and descriptions of repair procedures, some of which are refinements on older techniques whilst others are very new.

With few exceptions, these procedures are very much genuine and workable and are in all cases described step-by-step in a consistent format and broken down into simple units. The materials and tools needed are comprehensively listed. Editorial notes on the suitability and the risks of a repair in terms of conservation are given, as well as health warnings where necessary. A few of the techniques described verge on virtuosity and cleverness for their own sake. On the whole, editors and authors are aware of this and attach due words of caution. Due to the constraints on review length, I can only mention a few of the pools of interest. I am also varying the attention I give to each in order to attempt to give a flavour of the work while not shying away from my own personal response to it.

Volume 2 opens with a set of line drawings, a descriptive schema of a violin, and is followed by a concordance of terms in English, French, Italian and German. With regard to 'setting up' and general violin workshop practices, the chapter by Pierre Caradot and Francois Varcin 'On Adjusting the Sonority of Stringed Instruments' covers much more than the title implies: it is a bit didactic in its tone, (the word 'should' comes up rather a lot), but the attitude it conveys well is one of adaptation to the specific needs of each instrument. It deserves to be read by anyone before embarking on potentially tricky tonal adjustments! From the London-based Beare workshop, the chapter on varnish retouching sums up effectively their philosophy and experience, with an emphasis on taste and sensitivity. These two short texts ought to be at the top of a reading list for aspiring and experienced maker-restorers.

Apropos of varnish, the subject of cleaning has elicited an explosion of fascinating research, both in this volume and in the later part of the first one: from Padraig ó Dubhlaoidh comes an extensive survey of materials and techniques for cleaning, followed by a frighteningly revealing review of the existing literature; and from Claudio Canevari, a thorough scientific 'no stones left unturned' approach informed by art restoration research, incidentally casting doubt on the modern use of Vulpex Soap advocated elsewhere in the book! Thorough analysis and observation do indeed translate into practical working methods, and these pages are opening a broad field to practitioners, who can draw from them lessons in the why and how of restraint.

The need to make counter-forms, moulds and casts arises for several reasons. The main ones include providing a support to repair a fragile piece, gluing reinforcements, countering distortions that have taken place and creating of replicas of shapes for reproduction. Modern and traditional techniques are explored in depth in a series of chapters. The materials used include plaster, acrylic sheet, rubber, and vinyl. Although all the articles have much to offer, Grubaugh and Seifert's 'A New Look at Arching Correction before Making a Mould' is exemplary in its aptness, inventiveness and simplicity.

For the first time that I know, the essential need for the broadest palette of approaches to cleaning and repairing cracks and fissures, and reinforcing them, is highlighted and the means of how to do it explored and actually taught step by step in several chapters. The materials used for reinforcement are on the whole traditional ones: wood, thinned out parchment, and a very good case is made for the use of paper.

The pegboxes of stringed instruments (bowed or plucked) are at the best of times the Achilles' heel of these fragile structures and appear to have vexed repairers for centuries. This small domain epitomizes the tensions the book does not shy from. The quasi-impossibility of satisfactorily meeting the needs of structural strength, minimum intervention, usability, sensitivity to visual appearance, and maintenance of the integrity of the object has stimulated a range of experimental techniques as well as welcome improvements and clarifications of extant ones. As well as wood, materials such as kevlar and carbon fibre appear. Readers must, and can, make up their own mind about the aptness and wisdom of the procedures they encounter and devise their own solutions from what they read.

Rarely, a chapter falls a bit short of its promise. I must mention an article on shaping steel scrapers which describes a ludicrously hazardous way of proceeding, a chapter on covering woodworm tracks where I know from experience that the description of the process is too simplistic when compared with the accompanying before-and-after illustrations; on the casting of a pegbox, it is the other way around: the images suggest a slightly chaotic process while the text is convincingly poised.

## Volume 3: *Bows and Techniques for their Conservative Restoration and Repair*

The repair of bows is a world where metalwork, lathes and precision engineering need to serve the less-than-square environment of historical bows and not impose on it. The volume highlights this in a series of chapters ranging from detailed and careful descriptions of time-honoured rehairing techniques to 'high-wire act' stick, frog and button repairs.

The inherent vulnerability of bows lends a different quality to these chapters. While reversibility is possible in most cases when repairing violins, it sometimes becomes unattainable with bows: breaks near the head will elicit desperate and inventive measures. Five techniques are described and the contributors are also generous on the reasoning behind their actions. These repairs are invariably sophisticated. Specific jigs, clamping blocks and engineering tools may have to be made especially to carry them out. Cyanoacrylate (CA) glue and epoxy resins are used to good advantage to preserve the playability of these very precious tools of music. Wood shavings layered and applied with CA glue permit repairs without the need to resort to ablation of original material. As in the rest of the work, the steps are described with precision and clarity.

Tongues of bow frogs are also a vulnerable area: three variations on the replacement of a broken tongue are presented, ranging from the highly engineered to the freehand (Pasewicz, Oxley, Panhaleux). Paul Siefried takes his readers on a journey through the making of a replica frog and button of a historical bow, in order that the original need not wear out though use. Going through the process becomes an occasion to learn how to observe and understand the specific style of the maker one is copying.

French bowmaker Benoit Rolland in 'Linking Musician and Instrument' gives a lyrical and also pragmatic view of the function of the bow: 'a great bow is a bond between a musician's emotion and the stringed instrument, a link that ceaselessly evolves with music and new styles of playing that music'. This chapter, and others especially on the cambering of sticks, also refers eloquently to the process of making.

The quality of the production of all three volumes is exceptional: the two-column layout is generous and easy on the eye, the simple and beautifully clear line drawings, fine photographic reproduction and the prize-winning overall design are exemplary. The quality of the binding is such that the volumes lay flat without any risk of injury to the spine and the archival-grade paper and inks all point to lasting quality. The specially commissioned artworks by Vida Simon interspersed between chapters add a lightness and tenderness, a sort of breath, much needed in a work of such intensity and magnitude.

The splendid presentation certainly lends an authoritative and definitive look to the books but as discussed earlier, readers sometimes need to exercise a degree of caution. However rigorous the editing underpinning the work, it cannot be perfect: the balancing act of allowing controversy to unfold where needed whilst not giving absolute free rein to contributors had to be managed somehow, and on the whole it is well judged. However the editors cannot be expected to be nit picking academic supervisors, so the venture is to a large degree at the mercy of the contributors and their own rigour. They may be eminent in their field, but it may not protect them entirely from prejudice, errors, and some wholesale perpetuation of received wisdoms. This ought not deter readers, but merely encourage them to stay alive in relationship to what they read! In reviewing a work of such encyclopaedic ambition, one also becomes tempted to ask questions about what it does not cover: these gaps could well be meaningful insights about the culture that has produced it. I do think this work needs to be read and used with this in mind.

Although aimed primarily at bowed instruments specialists, it is clear that the work's scope and usefulness extends to the repair and conservation of all musical instruments made of wood, including keyboards and woodwinds. This work is a must for every luthier's workbench and museum conservation workshop; it belongs in the libraries of teaching and academic institutions, and in the hands of all musical instrument researchers. It may be hailed as definitive and authoritative, but thankfully it is more interesting than that: it is a launch pad for further work, reflection and investigation.

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