

Cambridge University Press
978-0-521-62928-7 - The Cambridge Companion to the Cello
Edited by Robin Stowell
Frontmatter
[More information](#)

The Cambridge Companion to the Cello

Cambridge University Press
978-0-521-62928-7 - The Cambridge Companion to the Cello
Edited by Robin Stowell
Frontmatter
[More information](#)

The Cambridge Companions to Music

The Cambridge Companion to Brass Instruments

Edited by Trevor Herbert and John Wallace

The Cambridge Companion to the Cello

Edited by Robin Stowell

The Cambridge Companion to the Clarinet

Edited by Colin Lawson

The Cambridge Companion to the Organ

Edited by Nicholas Thistlethwaite and Geoffrey Webber

The Cambridge Companion to the Piano

Edited by David Rowland

The Cambridge Companion to the Recorder

Edited by John Mansfield Thomson

The Cambridge Companion to the Saxophone

Edited by Richard Ingham

The Cambridge Companion to the Violin

Edited by Robin Stowell

The Cambridge Companion to Bach

Edited by John Butt

The Cambridge Companion to Berg

Edited by Anthony Pople

The Cambridge Companion to Brahms

Edited by Michael Musgrave

The Cambridge Companion to Benjamin Britten

Edited by Mervyn Cooke

The Cambridge Companion to Chopin

Edited by Jim Samson

The Cambridge Companion to Handel

Edited by Donald Burrows

The Cambridge Companion to Schubert

Edited by Christopher Gibbs

Cambridge University Press
978-0-521-62928-7 - The Cambridge Companion to the Cello
Edited by Robin Stowell
Frontmatter
[More information](#)

The Cambridge Companion to the CELLO

.....

EDITED BY

Robin Stowell

Professor of Music, Cardiff University



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press
978-0-521-62928-7 - The Cambridge Companion to the Cello
Edited by Robin Stowell
Frontmatter
[More information](#)

CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9780521621014

© Cambridge University Press 1999

This publication is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without the written
permission of Cambridge University Press.

First published 1999
Sixth printing 2006

A catalogue record for this publication is available from the British Library

ISBN 978-0-521-62101-4 hardback
ISBN 978-0-521-62928-7 paperback

Transferred to digital printing 2007

Cambridge University Press
978-0-521-62928-7 - The Cambridge Companion to the Cello
Edited by Robin Stowell
Frontmatter
[More information](#)

TO THE MEMORY OF
Timothy G. S. Mason
(1948–1997)

Cambridge University Press
978-0-521-62928-7 - The Cambridge Companion to the Cello
Edited by Robin Stowell
Frontmatter
[More information](#)

Contents

List of illustrations [page viii]
Notes on the contributors [x]
Preface [xiii]
Acknowledgements [xv]
List of abbreviations, fingering and notation [xvi]

- 1 The cello: origins and evolution *John Dilworth* [1]
- 2 The bow: its history and development *John Dilworth* [28]
- 3 Cello acoustics *Bernard Richardson* [37]
- 4 Masters of the Baroque and Classical eras *Margaret Campbell* [52]
- 5 Nineteenth-century virtuosos *Margaret Campbell* [61]
- 6 Masters of the twentieth century *Margaret Campbell* [73]
- 7 The concerto *Robin Stowell and David Wyn Jones* [92]
- 8 The sonata *Robin Stowell* [116]
- 9 Other solo repertory *Robin Stowell* [137]
- 10 Ensemble music: in the chamber and the orchestra *Peter Allsop* [160]
- 11 Technique, style and performing practice to c. 1900 *Valerie Walden* [178]
- 12 The development of cello teaching in the twentieth century
R. Caroline Bosanquet [195]
- 13 The frontiers of technique *Frances-Marie Uitti* [211]

Appendix: principal pedagogical literature [224]
Glossary of technical terms [229]
Notes [236]
Select bibliography [246]
Index [253]

Illustrations

- 1.1 An 'exploded' view of a cello [page 2]
- 1.2(a) Cutting the back of the cello: three different methods [4]
 - (b) The back of a cello by G. B. Rogeri of Brescia, dated 1714, showing the characteristic transverse markings of quarter-sawn maple [4]
 - (c) The back of a cello by Francesco Rugeri of Cremona, c. 1690, showing the more diffuse and irregular pattern of slab-sawn maple [4]
 - (d) The back of a cello by Bartolomeo Cristofori in Florence, 1716, a single piece of poplar wood of typically plain appearance [4]
- 1.3 Cutting the table of the cello [5]
- 1.4 Modern and seventeenth-century bridges contrasted [6]
- 1.5 Detail from the cupola of Sarrono Cathedral painted by Gaudenzio Ferrari (1535), showing a cellist [8]
- 1.6 Cello by Antonio Stradivari in Cremona, 1712, known as the 'Davidoff' [11]
- 1.7 Early cello neck with wedge-shaped fingerboard, fixed to the ribs by nails, rather than the mortising method employed today [12]
- 1.8 Five-string piccolo cello by Antonio and Hieronymous Amati in Cremona, c. 1615 [13]
- 1.9 Cello by Francesco Rugeri in Cremona, c. 1690 [16]
- 1.10 Cello by Andrea Guarneri in Cremona, c. 1680 [17]
- 1.11 Cello by Gasparo da Salò in Brescia, c. 1580 [19]
- 1.12 Cello by Matteo Gofriller in Venice, c. 1690 [20]
- 1.13 Cello by Domenico Montagnana in Venice, c. 1740 [21]
- 1.14 Cello by David Tecchler in Rome, 1714 [23]
- 1.15 Cello by Jean-Baptiste Vuillaume in Paris, 1848, after Stradivarius [26]
- 2.1 Types of medieval and Renaissance bows [29]
- 2.2 'Clip-in' bow frog [29]
- 2.3 Cross-section of the frog of a modern bow [31]
- 2.4 Cello bow by François Tourte [33]
- 2.5 Cello bow by François Voirin [34]
- 2.6 Cello bow by John Dodd [35]
- 3.1(a) Schematic diagram of the motion of a bowed string shown arrested at two different times during its vibration cycle [38]
 - (b) The time-varying force signal which the open G string imparts at the bridge [38]
- 3.2(a) Sketches of the first four transverse modes of vibration of a stretched string [41]
 - (b) The second mode of vibration of a string illustrated using a 'slinky spring' [41]
- 3.3 A cello response curve showing the input admittance (velocity amplitude per unit driving force) as a function of excitation frequency [42]
- 3.4 The Violin Octet and its relationship with the violin, viola, cello and bass [47]
- 3.5 The Violin Octet [48]
- 3.6(a–c) Sound-pressure waveforms radiated by a cello when bowing the open C string [50]

ix Illustrations

- 5.1 David Popper (1843–1913) [70]
- 6.1 Herbert Walenn (1870–1953) [77]
- 6.2 Beatrice Harrison (1892–1965) [79]
- 6.3 Pablo Casals (1876–1973) [81]
- 6.4 Maurice Eisenberg (1902–72) [82]
- 6.5 Gregor Piatigorsky (1903–76) [85]
- 6.6 Mstislav Rostropovich (b. 1927) [86]
- 6.7 Paul Tortelier (1914–90) [89]
- 6.8 Jacqueline du Pré (1945–87) [91]
- 11.1 The manner of holding the cello and bow as illustrated in the tutor of Jules de Swert [182]
- 11.2 The manner of holding the cello and bow as illustrated in the tutor of Bernhard Romberg [183]
- 12.1 The manner of holding the cello and bow as illustrated in the tutor of Carl Fuchs [196]
- 12.2 One Hundred Cellos: concert given by the London Violoncello School in 1925 [200]
- 12.3 Csaba Szilvay with a group of young pupils [208]

The contributors

Peter Allsop is a Lecturer in Music at Exeter University and specialises in Italian seventeenth-century instrumental music. He is the author of *The Italian 'Trio' Sonata* (Oxford University Press, 1992) and General Editor of New Orpheus Editions (devoted to the publication of the trio sonata repertory), and he contributed a chapter to *The Cambridge Companion to the Violin*. He is currently completing a life and works study of the Italian violinist-composer Arcangelo Corelli.

R. Caroline Bosanquet studied at the Royal Academy of Music and later continued her cello studies with Christopher Bunting and in the USA. She also gained a B. Mus. degree externally from the University of Durham. A Senior Lecturer at Anglia Polytechnic University, Cambridge, from 1966, she has taught the cello, musicianship and numerous academic courses to students of all ages from beginners to degree and diploma level, and has given courses for cello teachers with Joan Dickson. Her book devoted to harmonics, *The Secret Life of Cello Strings* (1996), has received critical acclaim and her *Elégie* for cello and piano has received many performances world-wide. She has also written many articles on cello-related subjects in *The Strad* and in the journal of the European String Teachers' Association.

Margaret Campbell is the author of *The Great Cellists*, *The Great Violinists*, *Dolmetsch: the Man and his Work*, and has been editor of the *British Journal of Music Therapy*. She began her career as a Fleet Street journalist and has been a regular contributor to *The Strad*, *Musical Opinion*, *Music in Education*, and other journals.

John Dilworth graduated from the Newark School of Violin Making in 1979. He has since worked for Charles Beare in the London workshops of J. & A. Beare Ltd. as a restorer of violins, violas and cellos, but now runs his own workshop in Twickenham. He has made several instruments, including reproductions of Classical examples. A contributor to *The Cambridge Companion to the Violin*, he also writes for *The Strad* and *Das Musikinstrument*, contributing articles based on practical experience and research into the history of the violin and its makers. He is currently working on a volume on *The Masterpieces of Giuseppe Guarneri del Gesù*.

David Wyn Jones is a Senior Lecturer in the Department of Music, Cardiff University. His publications include *Haydn, his Life and Music* (co-authored with H. C. Robbins Landon; London, 1988), a study of Beethoven's Pastoral Symphony (Cambridge, 1995), an edited volume entitled *Music in Eighteenth-Century Austria* (Cambridge, 1996) and *The Life of Beethoven* (Cambridge, 1998). He is currently completing a project on manuscript sources of eighteenth-century Austrian music in the Royal Palace, Madrid, and compiling the *Oxford Companion to Haydn*.

Cambridge University Press
 978-0-521-62928-7 - The Cambridge Companion to the Cello
 Edited by Robin Stowell
 Frontmatter
[More information](#)

xi Contributors

Bernard Richardson is a Lecturer in the Department of Physics and Astronomy at Cardiff University. His research activities in musical acoustics stem from a long-standing passion for making and playing musical instruments. He has written numerous articles and lectured world-wide on the subject.

Robin Stowell Educated at the University of Cambridge and the Royal Academy of Music, Robin Stowell is a Professor of Music at Cardiff University. He is a professional violinist and Baroque violinist as well as a music editor and author. He has written extensively about the violin and stringed instruments in general, as well as about the conventions of performing early music. The author of *Violin Technique and Performance Practice in the Late Eighteenth and Early Nineteenth Centuries* (Cambridge, 1985), he has also written articles for a wide variety of music journals, including *Early Music*, *Music & Letters* and *The Strad*, and contributed chapters to several collaborative volumes. He is editor of and principal contributor to *The Cambridge Companion to the Violin* (Cambridge, 1992), editor of *Performing Beethoven* (Cambridge, 1994) and has recently completed a study of Beethoven's Violin Concerto (Cambridge, 1998).

Frances-Marie Uitti, solo cellist and composer, is a concert artist active in performing throughout Europe, the United States and Asia. She is the inventor of the two-bow technique of playing the cello, wherein four- three- or two-part chordal and polyphonic playing is now possible. Luigi Nono, Giacinto Scelsi, György Kurtág, Jonathan Harvey and many others have written for her using this innovation.

Ms Uitti has worked with a vast array of composers and has premièred concertos, solo pieces, theatrical works, and other music dedicated to her by such composers as Louis Andriessen, Iannis Xenakis, John Cage, James Tenney, Jonathan Harvey, Brian Ferneyhough, Richard Barrett and Per Nørgård.

Ms Uitti is ongoing guest Professor at the Rotterdam Conservatory. She is currently working on a book for the University of California Press detailing the major technical and musical innovations from 1915 until the present.

Valerie Walden A resident of California, Valerie Walden studied the cello with William van den Burg, Gabor Rejto, Laszlo Varga and Coral Bognuda. She holds an M.A. and Ph.D from the University of Auckland, New Zealand, and is an adjunct instructor for the South San Joaquin Valley branch of Chapman University. Her performance credits include being principal cellist with the Tulare County Symphony and cellist of the Kings Classical Trio. She is also active as a cello teacher and adjudicator. Dr Walden is the author of *One Hundred Years of Violoncello: Technique and Performance Practice, 1740–1840*, published by Cambridge University Press (1998), and is a contributor to the *Revised New Grove Dictionary of Music and Musicians*.

Preface

The chapters which make up this volume were commissioned from various friends and colleagues, all experts in their fields. Their principal aim has been to demonstrate that the cello deserves similar treatment to the other instruments in this series and to provide the reader with a compact, composite survey of the history of the cello from its origins to the present day, drawing on the resources of contemporary scholarship. They offer as comprehensive a coverage as possible, focusing in particular on four main areas: the instrument's structure, development and its fundamental acoustical principles; its chief exponents; its repertory; and its technique, pedagogical literature and aspects of historical and contemporary performance practice. Inevitable limitations of space have resulted in the need for authors to be selective in their essays, illustrations, musical examples and bibliographical references, but if we have been successful in stimulating constructive, penetrating thought about the past, present and future of the art of cello playing and its numerous related aspects, our joint purpose will have been realised. As editor, I must take full responsibility for this volume's overall content and proportions and I very much regret my negligence if there are significant areas which have been inadvertently overlooked.

We have written for all who have an interest in the cello – 'amateurs' as well as students and professional musicians. Although some technical knowledge has been assumed of our readers, those unversed in 'musical mechanics' will find help to hand in the explanatory glossary of technical terms included at the end of the volume. There is also a useful appendix and a selective bibliography, and numerous illustrative plates and musical examples have been included to enhance the text and contribute to a balanced publication. Dates of birth and death of significant figures in the cello's history are sometimes included in the text to clarify historical perspective, but such details are consistently provided in the index as points of reference in respect of most personalities cited.

My good friend Timothy Mason was to have contributed to this book. It is deeply regrettable that this volume has been deprived of a chapter from such a fine cellist whose enquiring mind and whose energies and enthusiasms for so many different aspects of his profession made him an especially influential force in the fields of contemporary music (for example, with Capricorn) and period performance (with the London Pianoforte Trio, the English Baroque Soloists, the Orchestra of the Age of Enlightenment and numerous other orchestras/ensembles). I dedicate this volume to his memory.

It is a pleasure to acknowledge the help given so willingly and by so many in the preparation of this Companion. I am indebted to my contributors one and all for their co-operative attitude, promptness of response to various problems and queries and for giving readily of their expertise in their various fields. I am also grateful for the assistance of Joanna Pieters and Naomi Sadler (*The Strad*), and

Cambridge University Press
978-0-521-62928-7 - The Cambridge Companion to the Cello
Edited by Robin Stowell
Frontmatter
[More information](#)

xiv Preface

Howard Cheetham (Cardiff University). Cardiff University of Wales has also been generous in its help, granting me a period of study leave in order to bring this volume to completion, and I am indebted to my wife and family and many friends and colleagues who have assisted and encouraged me during the course of this project. Last, but not least, I must extend my sincere thanks to Penny Souster and her team at Cambridge University Press, and especially Ann Lewis, for their helpful advice and firm but unobtrusive encouragement in bringing the book to press.

Robin Stowell

Acknowledgements

Acknowledgement for kind permission to reproduce illustrations and music examples is due to the following:

Illustrations

J. & A. Beare Ltd.: Fig. 1.2d
Colourstrings International Ltd.: Fig. 12.3
Dr Carleen Hutchins: Fig. 3.4
Mr Arthur Montzka: Fig. 3.5
Mr Peter Oxley: Figs. 2.4, 2.5, 2.6
Mr William Pleeth: Fig. 12.2
Schott and Co. Ltd. London: Fig. 12.1
Courtesy of *The Strad*: Figs. 6.5, 6.6, 6.7, 6.8

Music examples

Ex. 10.3 Universal Edition Ltd., London. Reproduced by permission.
Ex. 12.2 Schott and Co. Ltd., London.
Ex. 13.1 Morton Feldman: *Intersection 4*, Edition Peters No. 6960. © 1964 by C. F. Peters Corporation, New York. Reproduced on behalf of the Publishers by kind permission of Peters Edition Ltd., London.
Ex. 13.2 Brian Ferneyhough: *Time and Motion Study II*, Edition Peters No. 7223. © 1966 by Hinrichsen Edition, Peters Edition Ltd., London. Reproduced by kind permission of the Publishers.
Ex. 13.3 John Cage: *Etudes Boreales*. Edition Peters No. 66328. © 1960 by Henmar Press Inc., New York. Reproduced on behalf of the Publishers by kind permission of Peters Edition Ltd., London.

Abbreviations, fingering and notation

amp vc	amplified violoncello
bc	basso continuo
br	brass
ch ens	chamber ensemble
ch orch	chamber orchestra
cl	clarinet
db	double bass
elec org	electric organ
fl	flute
hn	horn
hpd	harpsichord
Hz	Hertz
ob	oboe
orch	orchestra
orchd	orchestrated
org	organ
perc	percussion
pf	pianoforte
sax	saxophone
str	strings
str qt	string quartet
timp	timpani
va	viola
vc	violoncello
vle	violone
vn	violin
ww	woodwind

Cello fingerings are indicated in the usual manner:

- ♭ thumb
- 0 open string
- 1 the index finger (not the thumb as in keyboard fingering) and so on

Pitch registers are indicated by the following letter-scheme:



Under this scheme the notes to which the cello is normally tuned are represented as C–G–d–a.