The

Viola da Gamba Society

Journal

Volume Ten (2016)

Temperaments

STEWART MCCOY

David Dolata, Meantone Temperaments on Lutes and Viols (Bloomington: Indiana University Press, 2016) ISBN: 978-0-253-02146-5; Price: \$48; also available as an E-Book

In this important book on the use of unequal fretting on fretted instruments, Dolata acknowledges the work of Ross Duffin, How Equal Temperament Ruined Harmony (and Why You Should Care) (New York: Norton, 2007) and Mark Lindley, Lutes, Viols & Temperaments (Cambridge: Cambridge University Press, 1984). Lindley describes how historical temperaments were used, and has a leaning towards equal temperament; for example, he concludes on page 22 that Valderrábano's duets for vihuelas tuned a third apart must involve equal temperament. On page 19 he writes: "Most theorists between 1550 and 1650 regarded lutes and viols as equal-temperament instruments." Dolata is passionate about unequal temperaments. He acknowledges what theorists had to say, and accepts that equal temperament was used by some players, notably Vincenzo Galilei (c.1520-1591), but he argues that for the most part they were only amateurs or 'less refined players' (p. 54), and that good players would move frets to fine-tune their instruments. Dolata's aim is to encourage today's players to think about temperament and to use unequal fretting systems themselves. He asks, 'What is the point of having moveable frets if you don't move them?' (p. 1).

Dolata begins by looking at the historical evidence for unequal temperaments, and there is plenty of it. He describes situations where fretted instruments were played with keyboard instruments. In Italy the viol and theorbo were played with keyboard instruments, for example in Cavalieri's Rappresentazione di anima, e di corpo, and in Monteverdi's Orfeo. In England viols were often played with the organ. In France, Marin Marais specified in his *Pièces de viole* (1689) that the harpsichord or theorbo were the ideal instruments to accompany his viol pieces. In all these cases, the keyboard instruments would have been tuned in some kind of unequal temperament, so what was the viol player meant to do – perversely stick to equal temperament and be hopelessly out of tune, or move his frets to be as closely in tune with the keyboard as he could? In Spain Luis Milán and Enriquez de Valderrábano both advised vihuela players to move the fourth fret depending on the key of the next piece. Dolata agrees with Antonio Corona-Alcalde that Milán's fretting would have been close to sixth comma meantone. In his Compendium of Practical Music (1667) Christopher Simpson writes that some viol players had an extra first fret, meaning that some of them used unequal fretting systems. The problem with this kind of evidence is deciding to what extent equal and unequal temperaments were used. Dolata suggests that many players kept quiet about fretting, for fear of letting slip a trade secret.

In Chapter 2 Dolata describes the fretting of instruments which had fixed frets: the cittern, orpharion and bandora. None of the surviving instruments is fretted equally. The English cittern now in the National Music Museum of the University of South Dakota, is clearly fretted in a meantone tuning, with a wide space behind the first and third frets, and a narrow space behind the second and fourth frets. Interestingly the frets of some instruments are closer to equal temperament high up the neck, but in the lower positions meantone prevails. As before, what would the viol and lute players do when playing music from Morley's *Consort Lessons* (1599 and 1611) in a group with a cittern and bandora? Would they adjust their frets to be in tune with the wire-strung instruments, or would they scrape on regardless in equal temperament and out of tune?

In Chapter 3 Dolata examines evidence from paintings, looking for unequal fretting and slanted frets. He describes 'sharpening', how a player's left-hand fingers sharpen notes slightly when they press strings down onto the frets. The fatter the string, the more notes are sharpened. To counter this, frets were sometimes slanted across the fingerboard, closer to the nut on the bass side. There is a photo supplied by Richard Carter of one of his treble viols with what at first looks like crazy fret spacing: all the frets are spaced unequally; each of the two strands of the second and fourth frets are separated so that notes like F# and G flat on the third string are both available in tune; and the third and fifth frets are slanted towards the nut on the bass side to counter the effect of sharpening. It may look weird, but having played viols with Richard and Johanna Carter in Austria, I can confirm that their tuning is unbelievably good. Their close attention to details of fret-spacing creates a special sweetness of tone, which would be impossible to achieve otherwise. Unfortunately artists in the 16th and 17th centuries tended not to reproduce these subtleties in their paintings, and most pictures of the viol show equal fretting. Undeterred, however, Dolata tries to explain how this came about, discusses what evidence we can glean from paintings of fretted instruments, and argues that players in the past would have moved their frets much as the Carters do today.

In Chapter 4 Dolata turns to musical theory, the circle of fifths, and how the pure fifths of the middle ages were replaced by the pure thirds of the renaissance. He explains how pitch is measured in Hertz, and describes the harmonic series. This can be daunting stuff for the uninitiated, but Dolata explains things in simple terms without dumbing down the content. He comes over as a good teacher. My only quibble with his use of language is when his style becomes too chatty: '... all bets are off' (p. 58); having claimed to have won the argument against Galilei, 'Game, set, and match!' (p. 31); in the introduction to the third part of the book, 'Now the fun begins.' (p. 131). The description of different intervals would be difficult to follow without the actual sound, so Dolata has created audio files which may be accessed via the Indiana University web page, www.iupress.indiana.edu. I tried accessing this material on that web page, but unfortunately I could not find it.

Chapter 5 deals with different tuning systems – Pythagorean tuning, quarter comma meantone (with its 'Big Bad Wolf'), irregular temperaments (in particular Vallotti), and equal temperament. The third part of the book is about how the history in the first part, together with the theory in the second, can be used in practice to tune one's own lute or viol. The use of gut or nylon for strings and frets, the tailpiece, the bridge, the nut, the pegs, humidity, all can affect tuning (Chapter 6). There is much useful practical advice on the tuning

of open strings, setting the position of frets, using electronic tuners, tastini, split frets, slanted frets (Chapter 7), and playing continuo (Chapter 8).

Chapter 9 is of particular interest to viol players. Using a bow and playing single notes for much of the time, enables the player to fine-tune notes in a way which would be impossible with a lute. Dolata refers to Ortiz, Galilei, Marais and others for evidence of unequal fretting on the viol, and to Ganassi, Cerreto, Playford, Gerle and Mace for historical approaches to tuning. There is advice on tuning a consort of viols. At the end of the 16th century Ercole Bottrigari recommended that one person should tune the entire consort. I have seen Johanna Carter do this to good effect before concerts given by her students. Alison Crum suggests having one player tune first, and then the others tune to that instrument – open strings first, and then check the frets.

I think this is an excellent, well-written book. There is a wealth of information about how players of fretted instruments found different solutions to the problems of tuning; the section on the theory of temperaments is a good read in spite of the dryness of its subject matter; and there is much good practical advice to help us improve our playing by getting our instruments well in tune.

NOTES ON CONTRIBUTORS

MYRNA HERZOG is a well-known figure in the Early Music world, internationally praised as a viola da gamba performer, conductor, and researcher in the field of viols. Her articles have appeared in important journals and books; she is a contributor to the New Grove's Dictionary of Music. Brazilian-born, Myrna founded and conducted during 9 years Brazil's first Baroque Orchestra. In 1992 "the Lady of the viola da gamba" (Jornal do Brasil) immigrated to Israel, where she taught the first generation of Israeli gamba players. Since 1999 she is the musical director and conductor of Ensemble PHOENIX of early instruments, hailed by critics with raving reviews. As a viola da gamba soloist, Myrna has performed in 24 countries, throughout Europe, South America, the US and Israel. She has participated in the Israeli premiere of Bach's Passions with the Israel Philharmonic, performing the viola da gamba solos. As a conductor, she has staged operas and oratorios, among them the impacting premiere of Falvetti's Il Diluvio Universale and Nabucco at the Abu Gosh Festival. Myrna has recently taught workshops on baroque music for conductors, in Brazil and at the Royal Academy of Music and Dance, London. Herzog has a doctorate degree in music from Bar Ilan University and teaches at the Israel Conservatory of Music (Tel Aviv).

JAN W.J. BURGERS is a historian and works as a senior researcher at the Huygens Institute for the History of the Netherlands in Amsterdam and as a professor of the auxiliary sciences of history at the University of Amsterdam. He has published several books on and editions of lute music.

GÜNTER VON ZADOW is the owner of the music publishing house Edition Güntersberg, founded in 1999 together with his wife Leonore. His beautiful editions are scrupulously edited and prepared. The viol da gamba features strongly in his catalogue and especial attention has been paid to works written in the eighteenth century.

STEWART MCCOY was awarded a MMus with distinction in Historical Musicology from King's College, London, and an ARCM in Lute Teaching. He has taught the lute and viol in England, Germany, Austria, and Latvia, and he has contributed articles to *Early Music* and *The Lute*, and edited music for publication.

RICHARD CARTER grew up in a musical family, playing the 'cello, but was dissuaded from studying music and took a degree in Physics at New College, Oxford. Dissatisfied with the career which unfolded, he spent twenty years living and working on the English canals. Increasing interest in early music and historical performance led him to taking up the viol and baroque 'cello, with encouragement and guidance from Stewart McCoy, Alison Crum and Catherine Finnis. Since moving to Austria in 2002 he has devoted himself to early music, supporting and joining in the teaching and performance activities of his partner, Johanna Valencia, and running a small publishing venture, Oriana Music, with a special emphasis on lyra viol and viol music for beginners. He is a founder member of the Vienna-based viol consort Almayne, and a former editor of this Journal (2009).

SUSANNE HEINRICH is a leading viol player who studied in Germany and with Wieland Kuijken at the Royal Conservatory of the Hague. She has taught at the Guildhall School of Music and Drama and was a founder member of Charivari Agréable, producing her own edition Charivair Publications. She has performed with many of the