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VIOLA DA GAMBA SOCIETY OF AMERICA

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The Viola da Gamba Society of America is a not-for-profit national organization dedicated to the support of activities relating to the viola da gamba in the United States and abroad. Founded in 1962, the VdGSA is a society of players, builders, publishers, distributors, restorers, and others sharing a serious interest in music for viols and other early bowed string instruments. VdGSA members receive a quarterly newsletter and this annual journal, and have access to the many activities and valuable resources of the Society. The website provides additional information on the annual Conclave, instrument rentals, the microfilm lending library for researchers, and other offerings.

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EDITORIAL NOTE

In the last few years this journal has suffered from a paucity of suitable articles. In part, this is a result of a variety of conferences and symposia entirely or partially devoted to research on the viol, its music, its history, and its makers. These conferences have published the research presented there in the form of proceedings, such as the one reviewed by Joëlle Morton in this issue; some of this research would otherwise have found its way into the pages of this journal. We might also consider the possibility that this type of research no longer occupies a niche on the periphery of academic inquiry and has become more mainstream, although organology in general is rarely included in the musicological curriculum and seldom presented in venues such as the national meetings of the American Musicological Society. In this sense the journal may have become a victim of its own success as a vehicle for the publication of research related to the viol. However, it will continue to provide an outlet for scholars, building on its forty-year history of publishing first-rate research and maintaining high standards.

This volume contains two articles. The first is a translation of an article that appeared in a publication associated with the Musée des Beaux Arts in Blois, dealing with a well-known portrait of a viol player long thought to represent Johann Schenck. The article demonstrates conclusively that in fact the player is Marin Marais and that the portrait was painted prior to the publication of his first book in 1686. Further, an adjacent painting may well represent his wife and one of his sons.

In the second article, Herb Myers deals with the complex issue of the way in which players thought about pitch in the sixteenth and seventeenth centuries. It may be helpful to read the abstract before tackling the article itself.

Although I have been involved with the journal for many years, contributing a piece to its second volume in 1965, this my first as editor. I am greatly indebted to Tom MacCracken and Jean Seiler for their advice and assistance. Thanks also to David Dreyfuss for his hard work in the final compilation of this journal.

Robert A. Green

A PORTRAIT OF THE MUSICIAN MARIN MARAIS BY JEAN DIEU DIT SAINT-JEAN IN THE MUSEUM IN THE CHATEAU OF BLOIS¹

Jonathan Dunford
With Pierre-Gilles Girault

Translated by Robert A. Green

Abstract

The Musée des Beaux Arts in Blois possesses a well-known painting long thought to represent the Dutch viol player Johann Schenck. Careful examination of the painting reveals a partially obscured signature belonging to the portrait painter Jean Dieu dit Saint-Jean (1654–1695). The viol held by the player, often described as having only six strings, in fact has seven; thus it is a French instrument, a type never used by Schenck. On the stool appears a prelude by Marin Marais found in his first book of 1686. The music on the stool, however, is a manuscript version that predates the printed one. It is highly unlikely that a professional musician would have himself painted with the music of another composer. The figure in the painting is undoubtedly Marin Marais painted prior to 1686. An adjacent painting may well represent his wife Catherine Damicourt and one of his nineteen children, probably Roland.

The year 2006 was marked by the 350th anniversary of the birth of the musician Marin Marais (1656–1728), made famous to the general public by Alain Corneau’s film *Tous les matins du monde* in 1992. The Musée des Beaux-Arts in the Chateau of Blois displays the portrait of a man (see Fig. 1) whose identity, confirmed by recent independently conducted research, is the famous viol player of Louis XIV.²

¹ This article originally appeared in *Cahiers du Château et des Musées de Blois* 37 (December 2006–June 2007). It is reproduced here with the kind permission of M. Pierre-Gilles Girault, Assistant Curator of the Chateau and Museums of Blois.

² Florence Gétreau, Corinne Vaast, Sylvia Abramowicz, Jonathan Dunford, and Pierre-Gilles Girault. The present article develops, completes, and brings to



Figure 1. The painting of Marin Marais by Jean Dieu dit Saint-Jean.

This painting, given to the museum in 1850 by M. Nuret, municipal councilor in Blois, represents a musician standing by his bass viol, which rests on a chair.³ The musician points his bow towards a score placed on the chair on which the notes and technical details such as fingerings are readily visible. On the score “Prélude de M. Marais” can be read distinctly, an inscription that without doubt refers to Marin Marais, famous composer, disciple of Lully, who as a gambist was a student of Sainte-Colombe. As early as 1967, Margaret Urquhart recognized that the score was the *Prélude in D Minor No. 3* found on page nine of the *Premier livre*

light the arguments published for the first time in 2006 on the internet site <http://www.a2violes.com/new/html/pages/recherches/1.html> [where the paintings discussed in this article are shown in color].

³ Oil on canvas, 68.8 x 52.7 cm, inv. 869.5.1.

de pièces pour deux violes published by Marais in 1686, suggesting an approximate date for the painting.⁴

At the time of its introduction into the collection, the work was attributed to the painter Jean Dieu dit Saint-Jean (1654–95).⁵ The portrait of the musician, at first considered Lully, was rapidly identified as that of the viol player Marin Marais. The local press published notifications of this exceptional gift. Some years later, the catalogue of paintings, engravings, lithographs, drawings, and sculptures of 1888 stated that it was a “Portrait of M. Marais, musician.”⁶ This identification is all the more remarkable, since, in the nineteenth century, there was hardly any interest in the viol or in Marin Marais.

In 1961 the painting was restored by the workshops of the Louvre. Certain researchers, including the famous Mme. De Chambure, declared that the viol player portrayed in the painting was Johann Schenck (1660–1712), violist originally from Amsterdam and active at the court of the Elector Palatine Johann Wilhelm of Düsseldorf, and not Marin Marais. Specialists in musical iconography then by erroneous methods attributed the painting to Constantin Netscher (1668–1723). It is true that certain features in a second painting of the same size, a portrait of a woman given to the Blois museum at the same time and by the same donor as the portrait of the musician, call to mind the vein of Netscher.⁷ This painting, currently hung above that of the viol player, is traditionally assumed to represent the Princess Palatine, mother of the Regent, dressed as Diana.

It is advisable to re-examine the question of models. In 1965 the iconographer Albert Pomme de Mirimonde saw only six strings on the viol of the musician. “The Blois museum possesses a portrait

⁴ Margaret Urquhart, *Style and technique in the Pièces de violes of Marin Marais*, Ph.D., University of Edinburgh, 1969–70.

⁵ One should not confuse this name with the following quasi-homonyms: his father Jean Dieu (1625–after 1683), Jean de Dieu (1658–1714), nor with Antoine Dieu (1662–1727). Corinne Vaast has disentangled this imbroglio in a forthcoming article.

⁶ Château de Blois, Bibliothèque numéro 5881.

⁷ Inv. 861.13.2. 69 x 52.7 cm. Gift reported in the *Journal du Loir-et-Cher* of 28 December 1850.

of a musician playing a bass viol... In the painting, the viol has only six strings and the model is more than nineteen years old.”⁸ In fact the viol in the painting indeed displays seven strings that are clearly visible. According to Jean Rousseau’s *Traité de la viole*, the seventh string was added around 1660 by Sainte-Colombe: “It is also to Sainte-Colombe that we are obliged for the seventh string which he added to the viol, and which by this means extended the range [of the instrument] by a fourth.”⁹

This seventh string was hardly ever adopted outside of France, neither across the channel, nor in Holland, and rarely in Germany; even the son of Sainte-Colombe, who lived the greater part of his life in England, composed his suites for a viol with six strings!¹⁰

A. P. de Mirimonde identified the portrait as being that of Johann Schenck, supporting [this assertion] with a print executed by the homonymous engraver Pieter Schenck (1645–1718), representing a viol player in a position analogous to the personage in the painting.¹¹ This hypothesis has been repeated numerous times since the 1960s; however, among all the scores of Schenck that have come down to us,¹² none of them makes use of the seventh string, as one might expect from a Dutch virtuoso viol player living in Germany.

More recently François Lesure and Florence Gétreau again attributed the painting to Jean Dieu dit Saint-Jean. In an article published in 1998,¹³ Florence Gétreau put forward the hypothesis that

⁸ Albert Pomme de Mirimonde, “Remarques sur l’iconographie musicale,” *Revue française de musicologie* (1965), 3–18, quote from p. 7.

⁹ Jean Rousseau, *Traité de la viole* (Paris, 1687).

¹⁰ Durham Cathedral Library, MS A 27, Philip Falle.

¹¹ Engraving of viol player by Pieter Schenck, The Hague, Haags Gemeentemuseum.

¹² See for example his works op. 6 *Scherzi musicali*, op. 8 *Nymphé di Rheno*, op. 9 *L’echo du Danube*, etc.

¹³ Florence Gétreau, “Les archets français aux XVIIe et XVIIIe siècles, quelques repères iconographiques,” *Musique, Images, Instruments* 4 (1999): 124–38. Gétreau finally adopted the identification of Marin Marais in “Portraits peints et gravés de Marin Marais,” in *Marin Marais violiste à l’Opéra (1656–1728), Livre-programme édité à l’occasion des Grandes Journées Marin Marais*, ed. Benoît Dratwicki (Versailles: Centre de musique baroque, 2006), 11–21.

“it could be the son of Marin Marais, represented by the painter Jean Dieu dit Saint-Jean, godfather of the model and creator of the well-known fashionable engraving *Gentleman of Quality playing the bass viol* dated from 1695, which returns to the composition of this *précieux* painting, with the viol leaning against a stool.”¹⁴ The same engraving is reproduced in a copy of the Manchester manuscript illustrating a noble playing the viol and described as “A Gentelman of quality playing the viola di gamba.” It is without doubt the same print as that of Jean Dieu that would serve as a model for Pieter Schenck in engraving the portrait of the Dutch musician.¹⁵

The attribution of the painting to Jean Dieu is supported by an article by André Tessier that appeared in 1924 before its restoration by the workshops of the Louvre.¹⁶ According to him, “... the portrait of Marais himself is signed at the base of a column in the lower right. The signature that escaped the author of the catalogue, and which is in fact barely readable and incomplete: I DE S IE ... The last two letters are missing, but there is no doubt that it must read: Jean de Saint-Jean...”

This inscription, really very worn, has been curiously neglected since; there is little doubt that it is the autograph signature of the painter, received into the Royal Academy in 1671 and the creator of many engraved portraits of the royal family.

It appears indeed that if the painting in the Blois museum is not by Netscher, there is hardly any reason that the musician depicted is Schenck, all the more as the score is indeed that of Marais, since it is the third prelude in his first book. Further, arrangement on the page of the manuscript in the painting is not the same as that in the printed work of 1686, and the painter has applied himself to depict in their totality the notes, the fingerings, and even the ornaments.¹⁷

¹⁴ Bibliothèque Nationale de France, Département des Estampes.

¹⁵ “The Manchester Gamba Book,” manuscript from the end of the seventeenth century, Watson Music Collection of the Manchester Public Library.

¹⁶ André Tessier, “Quelques portraits de musiciens français du XVIIe siècle,” *Bulletin de la Société d’histoire de l’art français* (1924), 244–49.

¹⁷ See Jonathan Dunford, “Marais,” *Goldberg Magazine* 25 (December 2003): 40–48. Digital photography makes it possible to verify all the details, the notes, the fingerings, and even the special ornaments that Marais uses in his viol scores.

The manuscript in the painting strongly resembles Manuscript 9466 in the National Library of Scotland, which is an autograph manuscript of Marin Marais, although the prelude is not found there.¹⁸ This point suggests that the manuscript must have been executed before the publication of the first book of Marais in 1686. If the viol player in the painting were Schenck, it would be even stranger that he would pose with the manuscript of the third prelude of the first book of Marin Marais, although the printed version was known throughout Europe.¹⁹

Let us turn our attention now to the face of the musician in the painting in Blois in order to compare it with the famous portrait of Marin Marais by Andre Bouys (1656–1740), currently displayed at the Cité de la musique in Paris, and to the bronze medal reproduced in *Le Parnasse François* of Evrard Titon du Tillet which appeared in 1732. It is striking to the viewer that in the two paintings, as in the medal, one finds the same nose, same brow, same mouth, and same eyebrows for a man depicted at different ages. The only feature that cannot be ascribed to age is the color of the eyes: the musician in Blois actually has blue eyes, the “Parisian” brown ones! But it should be mentioned that the painting of Andre Bouys was executed when Marin Marais was about fifty years old. The canvas was presented accompanied by a reproduction engraved for the Salon of 1704. The original painting has been lost. The painting exhibited in the Musée de la musique is only a replica, without doubt executed from the engraving. This fact could explain the difference of the color of the eyes between the two paintings.

It remains to establish the date of the execution of the painting. If we acknowledge that the portrait in Blois is indeed by Jean Dieu dit Saint-Jean, it must date from before 1695, the date of the painter’s death and that of the edition of the engraving of the *Gentleman of Quality*, manifestly derived from the painting. The stage

¹⁸ See the notes of the CD *Marin Marais, Pièces de Violes* (Accord Baroque, 2006), by Jonathan Dunford.

¹⁹ In 1692, his *Pièces en trio pour les flûtes, violons et dessus de viole* are a first of the genre: no doubt this collection would have been reproduced if the painting had been done after this date. Cf. John Hsu, *Marin Marais: The Instrumental Works* (New York: Broude, 1980).

of the manuscript of the composition placed on the stool suggests a date prior to the publication of the suites in 1686. Is a date around 1685, which would appear acceptable from the point of view of the clothing, possible for a portrait of Marin Marais? Certain critics have believed the face of the Blois musician too young to represent Marais around the age of thirty, but such an argument is without merit in a century when painters readily flattered their models by making them look younger.

This identification raises the question of the identity of the portrait, hanging right beside him, of the woman with a child. This work was also donated in 1850 by M. Nuret as a portrait of Madame de Maintenon and for a long time was regarded as that of the Princess Palatine Charlotte-Elizabeth of Bavaria, Duchess of Orléans, wife of Monsieur and mother of the regent.²⁰ However, neither the woman nor the child shows well-known characteristics associated with their models. The style and costume further confirm a dating of 1685–90, which makes the identification with them all the less probable.

Since the man is indeed Marin Marais, could the woman be Catherine Damicourt, whom he married September 21, 1676, represented here in a costume associated with the ballet or theater? The little boy who scampers beside her must be one of the nineteen children that Titon du Tillet attributes to her and of whom thirteen survived. A number of them in their turn became musicians; his oldest daughter, Marie-Catherine, married the composer Nicolas Bernier, music master of the Sainte-Chapelle; three of his sons and one daughter pursued the viol with success.²¹ If it was in preference to his son Vincent that Marin obtained the inheritance rights to his position [at court], the most famous was Roland, born in 1680, who was a member of the orchestra of the Academy, and published a music method and two collections of viol pieces. If we

²⁰ Inv. 861.13.2. 69 x 52.7 cm. Gift announced by the *Journal du Loir-et-Cher* of December 28, 1850. The king's brother was given the title "Monsieur." His wife, known as Liselotte, was the mother of Philippe, Duc d'Orleans. The latter became the regent after the death of Louis XIV.

²¹ Jérôme de La Gorce and Sylvette Milliot, *Marin Marais* (Paris: Fayard, 1991). Recent summary by Jérôme de La Gorce, "Biographie de Marin Marais," in *Grandes Journées Marin Marais*, op. cit., 23–42.

consider his oldest children, in 1685–86, Vincent, born around 1677, would have been nine, Anne-Marc, born in November 1679, seven, and Roland would have been six. Without doubt, would it not be the latter, wearing the traditional dress of little boys under the age of seven, who plays next to his mother, astride a stick with the head of a horse, a whip in his hand and wearing a grenadier's cap?

RENAISSANCE VIOL TUNINGS: A RECONSIDERATION¹

Herbert W. Myers

Abstract

Our modern sense of absolute pitch often colors our understanding of the pitch notation of earlier eras, even when we are intellectually aware that early pitch standards were considerably more variable than our own. This modern mindset is at least partly responsible for the difficulties researchers have encountered in interpreting sixteenth-century tuning schemes for the viola da gamba, and in particular those set out by Silvestro Ganassi. Modern scholars have tended (with some exceptions) to take his pitch notation literally, long resisting the idea that it represented a system of transposition. However, a fresh look at Ganassi's information reveals that in his "high" and "low" systems he was clearly presenting alternative ways to fit the notes onto the instruments, whose actual tuning (in the absolute sense) remained constant regardless of the nominal pitches applied to them. When we put this understanding together with our knowledge of the large sizes of sixteenth-century viols, we see too that the absolute pitches of Ganassi's (and his contemporaries') viols were better reflected—in terms of our modern concept of pitch—by the lower of his alternative nominal tuning schemes.

One of the undeniable virtues of living in the modern era is the standardization of musical pitch. Even those of us who perform regularly at so-called historical pitches are the beneficiaries of this achievement, since these different pitch standards—never so immutable or certain in their own day—are now conveniently defined in relation to our accepted modern value of $a' = 440$ Hz. However, we have become so dependent upon our absolute standard and so conditioned by its universality that we often find it difficult to put aside our sense of it when it is inappropri-

¹ This paper was read at the conference *Stimmton und Transposition im 16.–18. Jahrhundert/Pitch and Transposition in the 16th–18th Centuries*, Internationale Musikprojekte, Hochschule für Künste, Bremen, October 1999. Portions of it were summarized in Herbert W. Myers, "The Sizes and Tunings of Early Viols: Some Questions (and a Few Answers), *JVdGSA* 38 (2001): 5–26. I wish to thank Thomas MacCracken for a number of helpful suggestions during the preparation of the present published version.

ate for music of earlier eras. Although we may be intellectually aware that musical notation originally represented a scheme of pitch relationships, not absolute values, we may still find it hard not to think in terms of our own, more firmly established system when confronting early notation.

This standardization was, as we know, long in coming; the international acceptance of $a' = 440$ Hz is, after all, not even seven decades old, having taken place in 1939. Already by the seventeenth century, however, most of the known European pitch standards were within one or two semitones above or below ours. Perhaps the greatest impetus towards the establishment of these standards was the practice of combining all sorts of instruments and voices, a practice that began in the sixteenth century and came to fruition in the seventeenth. Michael Praetorius, writing in 1619, tells us,

You should first know that the pitch of organs as well as other musical instruments often varies greatly; since it was not usual for people in former times to make concerted music and to mix together all types of instruments, wind instruments are tuned to quite different pitches by their makers, one high, another low.²

Thus keenly aware of the problem, Praetorius took the unprecedented step of attempting to report in terms of a single pitch standard the tunings of all instruments he discusses in the second volume of his comprehensive treatise *Syntagma musicum*.³ This

²“Vnd ist anfangs zu wissen, daß der Thon so wol in Orgeln, als andern *Instrumentis Musicis* oft sehr *varijre*; dann weil bey den Alten das *concertiren* vnd mit allerhand *Instrumenten* zugleich in einander zu *musiciren* nicht gebreuchlich gewesen; sind die blasende *Instrumenta* von den *Instrumentmachern* sehr vnterschiedlich, eins hoch, das ander niedrig *intonirt* vnd gemacht werden.” Michael Praetorius, *Syntagma musicum* II (Wolfenbüttel, 1619), 14; facsimile ed. Wilibald Gurlitt (Kassel: Bärenreiter, 1958). For an English translation of the portions on winds and strings see Michael Praetorius, *Syntagma Musicum II: De Organographia*. Parts I and II, trans. and ed. David Z. Crookes (Oxford: Clarendon, 1986). All translations in the present article are, however, my own.

³“Nebenst dem ist allhier *in genere* vor allen Dingen zu wissen: Daß in diesem gantzen Werck durch vnd durch nicht nach dem ChorThon, sondern nach dem Cammerthon (wie es, als vor erwehnet, von etlichen gar wol vnd recht unterschieden) die *Instrumenta* vnd Stimmen gerechnet, vnd außgetheilet werden. Dieweil der Cammerthon am gebreuchlichsten, vnd fast alle, so wol

pitch is the comparatively high (and, according to him, reasonably fixed) one known to his contemporaries in North Germany as *Chorthon*. Praetorius himself, however, preferred instead to call this pitch *Cammerthon* after the model of Catholic choirs in Prague and elsewhere; in these places the term *Chorthon* was reserved for a standard a tone lower.⁴

The level of this reference pitch has been the subject of considerable scholarly debate, since the two methods Praetorius used to impart it—dimensions of a tiny set of organ pipes and his directive to take the pitch of a typical Nuremberg tenor trombone—have appeared to be at odds; most reconstructions of the organ pipes have produced a pitch a little below $a' = 440$ Hz, while surviving trombones (of the type he illustrates) suggest a pitch about a semitone higher than that, or about $a' = 460$ Hz.⁵ Recent reinvestigation of the pipe data, however, has shown that the discrepancy can be resolved in favor of the higher value.⁶ After settling the issue of Praetorius's declared reference pitch, however, we still find a few

besättete als blasende *Instrumenta*, wie auch itziger zeit die Orgeln, auff diesen Camerthon gerichtet vnd gestimmt werden." *Syntagma* II, 19.

⁴“Darumb laß ich mir den Vnterscheidt, da man zu Praag vnd etlichen andern Catholischen Capellen, den Thon in ChorThon vnd CammerThon abtheilet, auß dermassen sehr wol gefallen. Denn daselbsten wird der jtzige gewöhnlicher Thon, nach welchem numehr fast alle vnser Orgeln gestimmt werden, CammerThon genennet . . . Der ChorThon aber, welcher vmb einen gantzen Thon tieffer ist, wird allein in der Kirchen gebraucht . . .” *Syntagma* II, 15.

⁵For a review of the evidence and the controversy over its interpretation see Bruce Haynes, *A History of Performing Pitch: The Story of “A”* (Lanham, MD: Scarecrow Press, 2002), 76–82. Continuing the discussion of Praetorius's pitch standard are the following letters to the editor of the *Galpin Society Journal* (published after the appearance of Haynes's book): from Herbert W. Myers (55 [2002]: 392–403); from Denzil Wraight (55 [2002]: 403–5); from Haynes (55 [2002]: 405–7); from Ephraim Segerman (56 [2003]: 241–46); and from John Koster (57 [2004]: 252).

⁶See John Koster, “Michael Praetorius's *Pfeifflin zur Chormaß*,” *Journal of the American Musical Instrument Society* 30 (2004): 5–23. It should be mentioned, however, that Ephraim Segerman (a strong proponent of the earlier estimate of the level of Praetorius's reference pitch— $a' = 430 \pm 5$ Hz) appears to have remained unconvinced by Koster's findings. Segerman has long maintained that the discrepancy between the pipe data and the pitch of surviving trombones is to be resolved by assuming that Praetorius's trombonists employed a different technique from the modern one, and that his players constantly lipped down a

areas of potential uncertainty; despite his best intentions he was not absolutely consistent in giving his instrumental pitches in relation to *Cammerthon*,⁷ and he seems in the latter part of the *Syntagma* II to have slipped back into the habit of calling it *Chorthon*. However, in spite of these lapses, we can be fairly certain of his point of reference for pitch names within the range of a tone, from a semitone above modern pitch to a semitone below.⁸ (It will be convenient henceforth to refer collectively to pitch standards within one or two semitones of modern as “8-foot pitch,” since such time-honored organ terminology commonly implies just this kind of approximate, rather than absolute, pitch reference.)

Moving back a century, however, we see a very different picture; known pitch standards for instruments varied much more widely in the early sixteenth century. While the main focus of this paper is on the tunings specified for viols, we need first to take a short look at pitch standards for other instruments in order to view the viol tunings in a wider context. For instance, the pitch of shawms seems to have been a fifth higher in the early sixteenth century than it was for Praetorius. Throughout the shawm’s history as a polyphonic instrument two principal sizes were most in

semitone from the resonances of the instrument. Segerman seems, however, to be alone among researchers of pitch history in maintaining this position.

⁷ For instance, the transverse flutes shown in Pl. IX appear from their lengths to have played at about a minor third below $a' = 440$ Hz, or about a major third below the pitch of, say, the tenor recorder in the same plate. They are clearly too long to have the stated pitches of g , d' , and a' reckoned according to his *Cammerthon* reference pitch, but he was either unaware of the discrepancy or unwilling to report such ridiculous-sounding pitches as e_b , b_b , and f'' instead of the traditional ones. See Herbert W. Myers, “Praetorius’s Pitch: Some Revelations of the *Theatrum Instrumentorum*,” *Perspectives in Brass Scholarship: Proceedings of the 1995 International Historic Brass Symposium, Amherst, MA* (New York: Pendragon Press, 1997), 29–45 for a detailed analysis of the dimensions of the wind instruments illustrated in the *Syntagma* II, with particular reference to their probable pitches. It is worth noting that the pitches of the majority of surviving Renaissance flutes are incompatible with those of most other surviving winds, lending credence to Praetorius’s remarks about the common lack of standardization of instrumental pitches.

⁸ The pitch of the flutes (mentioned in the previous note) would seem to be the major exception.

use; these were the instruments Praetorius calls the *discant Schalmey* and *Altpommer* (known respectively as treble and *tenor* shawms according to traditional English terminology⁹). He gives *d'* and *g* as their bottom notes, but for Martin Agricola (*Musica instrumentalis deudsch*, 1529 and 1545) their nominal pitches were *g* and *c*—the normal pitches for Renaissance treble and tenor woodwinds—instead.¹⁰ This means that from Praetorius's standpoint the shawm band had in effect transposed its music up a fifth, just as recorders transpose up an octave. (It is useful to bear in mind that conceiving a *lower* pitch for an instrument results in an *upwards* transposition, and vice versa.)

Flutes, rebecs, and organs also seem to have exhibited similarly wide deviations from our standard. The flute consort, for example, was assigned three different sets of pitch schemes by Agricola: the bottom notes of the bass, alto-tenor, and discant flutes were given as *D*, *A*, and *e* in 1529¹¹ and both *C*, *G*, and *d* and *G'*, *D*, and *A* in 1545.¹² While these different schemes might be viewed as simply a

⁹ The modern English term “alto shawm” for the larger of these two sizes has come about through the partial adoption of Praetorius's terminology, which conveniently takes into account the enlarged shawm family of his day.

¹⁰ Martin Agricola, *Musica instrumentalis deudsch* (Wittenberg, 1529, rev. ed. 1545). In his composite charts for woodwinds Agricola includes the fingerings for *Schalmey* in the charts for *discant* (with 7-finger *g*) and those for *Bomhart* in the charts for *tenor-altus* (with 7-finger *c*). *Discant* charts are on fol. 9v (1529) and fol. 20r (1545); *tenor-altus* charts are on fol. 10r (1529) and fol. 21r (1545). See William E. Hettrick, “Martin Agricola's Poetic Discussion of the Recorder and Other Woodwind Instruments,” *The American Recorder* 21 (1980): 103–13; 23 (1982): 139–46; and 24 (1983): 51–60 for facsimiles of Agricola's charts and illustrations.

¹¹ Agricola, *Musica*, Fols. 13v, 14r and 14v; see *American Recorder* 21: 111 for facsimiles.

¹² Agricola, *Musica*, Fols. 28r, 27v, 26v, 31v, 31r, and 30v; see *American Recorder* 24: 53–55 for facsimiles. For a discussion of Agricola's information on flutes see Howard Mayer Brown, “Notes (and Transposing Notes) on the Transverse Flute in the Early Sixteenth Century,” *Journal of the American Musical Instrument Society* 12 (1986): 5–39; for a somewhat different interpretation of this information see Herbert W. Myers, “The Idea of ‘Consort’ in the Sixteenth Century,” *Musicque de Joye: Proceedings of the International Symposium on the Renaissance Flute and Recorder Consort, Utrecht 2003*, ed. David Lasocki (Utrecht: STIMU, 2005), 31–60 (here 40–42).

method of transposition—a question different from that of their absolute pitch—it is important to realize that no one scheme seems to have represented the “real” pitch of flutes from Agricola’s point of view; each had its advantages and disadvantages in a particular musical context.

Agricola’s tunings for rebecs would appear from physical considerations to have represented a standard much higher than 8-foot pitch. He gives *g-d'-a'* for the discant, *c-g-d'* for the alto and tenor and *F-G-d-a* for the bass;¹³ however, it is unlikely, given the string-making technology of the day and the short string lengths of plausible rebecs, that they could have supported such low tunings at any standard near $a' = 440$ Hz.¹⁴ While Agricola gives no absolute dimensions, it would seem from iconographic and other evidence that a pitch anywhere from a fifth to an octave (or a little more) above modern would be reasonable.¹⁵

Concerning the pitch of organs, Praetorius mentions surviving older instruments at a tone below his *Cammerthon*,¹⁶ as well as ones from almost a semitone to a fourth higher (or a fifth lower) than that pitch;¹⁷ these last—the ones a fourth higher or fifth lower than his—he regards as particularly suitable for the earlier practice of accompanying plainsong. In discussing the proper pitch for such an instrument, Arnolt Schlick (*Spiegel der Orgelmacher und Organisten*, Mainz, 1511) attempted to specify an absolute measurement for an appropriate pipe-length; he provides a line (to be multiplied by sixteen) to indicate the length of the bottom pipe,

¹³ Agricola, *Musica*, Fols. 46r, 47r, and 47v, 1545 edition (pp. 211, 213, and 214 of the Robert Eitner diplomatic edition—*Publikation älterer praktischer und theoretischer Musik-Werke*, vol. 20 [Leipzig, 1896]).

¹⁴ Modern “reconstructions” of bass rebecs intended to be tuned *F-G-d-a* at $a' = 440$ Hz are not only ridiculously large but also depend upon anachronistic, metal-wrapped strings to function effectively.

¹⁵ Praetorius’s rebec (*Syntagma* II, Pl. XXI, no. 1), for instance, was capable of being tuned to *g'-d''-a''* (or even a tone higher—see p. 26 of the *Syntagma* II) at his *Cammerthon* reference pitch. This would then mean that the bottom string of Agricola’s bass rebec, at a ninth below that *g'*, was but a tone below the bottom string of Praetorius’s ordinary violin—a far cry from our usual notion of the pitch of a bass stringed instrument!

¹⁶ Praetorius, *Syntagma* II, 14.

¹⁷ Praetorius, *Syntagma* II, 102–3.

which is to sound *F*. Calculations of the pitch of this pipe suggest a tuning standard a little more than a tone below $a' = 440$ Hz. Although the suitability of such a low pitch for voices (and thus the accuracy of his pipe dimension) has been called into question, the exact level makes little difference for purposes of the present discussion. More significant at the moment is the fact that Schlick also mentions the possibility of building organs a fifth lower, using his suggested measurement for a *c*-pipe instead of an *F*-pipe (although the resultant pitch would be less convenient for singers, in his opinion); he also recommends that organs be provided with some device to shift the pitch of the keyboard up or down a tone.¹⁸

It is against this background that we may now view the multiplicity of tunings given for viols in sixteenth- and early seventeenth-century sources. Despite their diversity, they can be broken down into two basic groups, dubbed the “high” and “low” consort tunings by Ian Woodfield in his monumental study *The Early History of the Viol*.¹⁹ The high tunings are those whose nominal pitches are similar in general level to the standard modern tunings: bass with top string *d'*, tenor with top string *g'*, and treble with top string *d''*, a system we may conveniently abbreviate as *d'-g'-d''*. (Since we will be comparing five- and six-string tunings, it will be most expedient to report them in terms of the pitch given for the top string rather than the bottom, as is perhaps more usual; it will be assumed—unless otherwise indicated—that the bottom string is the one “missing” in the case of the five-string tunings.) The level of the low tunings is a fourth or fifth lower. The *d'-g'-d''* system has pride of place among the tunings given by Silvestro Ganassi in 1542; in addition, he describes two other high tunings:

¹⁸ See Arthur Mendel, “Pitch in the Sixteenth and Early Seventeenth Centuries—Part I,” *Musical Quarterly* 34 (1948): 28–45, for a facsimile, translation, and discussion of the relevant passages from Schlick. A rebuttal to Mendel’s conclusions regarding Schlick’s organ pitch is to be found in W. R. Thomas and J. J. K. Rhodes, “Schlick, Praetorius and the History of Organ Pitch,” *Organ Yearbook* 2 (1971): 58–76. Mendel’s defense of his original objections appeared in his study “Pitch in Western Music since 1500—a Re-Examination,” *Acta Musicologica* 50 (1978): 1–93; see in particular pp. 37–39 and 48–53.

¹⁹ Ian Woodfield, *The Early History of the Viol* (Cambridge: Cambridge University Press, 1984).

d'-a'-d'' and *d'-g'-c''* (or, if one prefers, *e'-a'-d''*, a tone higher).²⁰ The first of these—*d'-a'-d''*—is given also by Giovanni Maria Lanfranco (1533),²¹ Diego Ortiz (1553),²² Aurelio Marinati (1587),²³ and Scipione Cerreto (1601),²⁴ while the second—*d'-g'-c''* and its alternative, *e'-a'-d''*—is specified in a manuscript (probably from the third quarter of the sixteenth century, now at Yale) which purports to give the tunings employed by the composer and gamba virtuoso Alfonso della Viola.²⁵ (The alternative system—*e'-a'-d''*—is also mentioned as a possibility by Lanfranco.)

Besides his three high tunings Ganassi gives the low tuning *a-d'-a'*, a tuning also given by Aurelio Virgiliano (c. 1600).²⁶ A different low tuning—*g-d'-g'*—is given by two other Italian

²⁰ Silvestro Ganassi, *Regola rubertina* (Venice, 1542); see Woodfield, *Early History*, 142–45. Facsimile ed. Silvestro Ganassi, *Regula [sic] rubertina* (Bologna: Forni Editore, 1970) and *Lettonne seconda* (Bologna: Forni Editore, 1978). English translation: “Ganassi’s *Regola Rubertina*,” trans. Richard D. Bodig, *JVdGSA* 18 (1981), 13–66 and “Ganassi’s *Regola Rubertina* (Conclusion),” trans. Richard D. Bodig, *JVdGSA* 19 (1982), 99–163. Reissued as Sylvestro Ganassi, *Regola Rubertina and Lettonne Seconda, Venice 1542–1543*, trans. Richard Bodig, introduction by Patrice Connelly (Artarmon, Australia: Saraband Music, 2002); reviewed by Herbert W. Myers, *JVdGSA* 39 (2002), 85–92.

²¹ Giovanni Maria Lanfranco, *Scintille di musica* (Brescia, 1533); see Woodfield, *Early History*, 140.

²² Diego Ortiz, *Trattado de glosas* (Rome, 1553), fol. 4r; published also in Italian as *El primo libro de Diego Ortiz tolletano* (Rome, 1553). See the German translation by Max Schneider: Diego Ortiz, *Tratado de glosas* (Kassel: Bärenreiter, 1936), v, xxxi, and [7].

²³ Aurelio Marinati, *Somma di tutte le scienze* (Rome, 1587); see Woodfield, *Early History*, 144.

²⁴ Scipione Cerreto, *Della prattica musica* (Naples, 1601); see Woodfield, *Early History*, 144.

²⁵ Yale University Library, Misc. MS 243; see Woodfield, *Early History*, 140–41 and 239–40, note 2, and Kathleen Moretto Spencer and Howard Mayer Brown, “How Alfonso della Viola Tuned His Viols, and How He Transposed,” *Early Music* 14/4 (1986): 520–33.

²⁶ Aurelio Virgiliano, *Il Dolcimelo*, manuscript treatise, n.d., now in the Civico Museo Bibliografico Musicale di Bologna; facsimile Florence: Studio Per Edizioni Scelte, 1979.

sources, Adriano Banchieri (1609)²⁷ and Pedro Cerone (1613),²⁸ a third tuning—*g-d'-a'*—is given by Lodovico Zacconi (1592).²⁹ Cerone actually gives all three: he shows *g-d'-g'* in his first chart³⁰ but notes that some tune the bass a fourth below the tenor and the treble a fifth above, implying *a-d'-a'*; he later gives *g-d'-a'* in a description and chart based loosely on Zacconi.³¹ Thus, of the Italian sources specifying consort tunings, Ganassi is unique in giving both high and low systems. By contrast, the majority of German sources—the so-called Weltzell manuscript (1523–24),³² Hans Gerle (1532 and 1546),³³ and Martin Agricola (1545)³⁴—give what Woodfield has called a dual system, specifying *a-d'-a'* (low) and *d'-g'-d''* (high) tunings as alternatives. (The 1529 version of Agricola's *Musica instrumentalis deudsch* is the only sixteenth-century German source not to have specified this dual system, as pointed out by Woodfield.) Scholars have easily accepted the idea that such a dual system represented—for German viol players—a method of transposition rather than two sets of tunings a fourth apart in sounding pitch. German viol players of the sixteenth century commonly read from tablature, for which the necessary transposition could be worked out at one's leisure before the time of performance. However, in reading from mensural staff notation—apparently the norm for Italian gambists—one would have to execute such a transposition in “real time,” making greater

²⁷ Adriano Banchieri, *Conclusioni nel suono dell'organo* (Bologna, 1609), 54; see Woodfield, *Early History*, 145. Banchieri's viol tunings are repeated in his *L'organo suonarino*, 2nd ed. (Venice, 1611).

²⁸ Pedro Cerone, *El Mellopeo y Maestro* (Naples, 1613). Though he wrote his treatise in Spanish, Cerone was, in fact, Italian.

²⁹ Lodovico Zacconi, *Prattica di musica* (Venice, 1592); Woodfield (*Early History*, 145) incorrectly includes Zacconi among the sources giving *g-d'-g'*.

³⁰ Cerone, *El Mellopeo*, 1059.

³¹ Cerone, *El Mellopeo*, 1063–64.

³² Munich University Library 4^o Cod. ms. 718; see Woodfield, *Early History*, 108 and 111–12.

³³ Hans Gerle, *Musica teusch* (Nuremberg, 1532) and *Musica und Tabulatur* (rev. ed. of *Musica teusch*, Nuremberg, 1546); see Woodfield, *Early History*, 109–10.

³⁴ See Woodfield, *Early History*, 110.

demands upon one's flexibility as a performer. For this reason scholars have been slow to accept the idea that the alternative tunings given by Ganassi could represent a similar dual system for purposes of transposition, long assuming that his various nominal pitches represented changes in the sounding pitches of the strings.

Howard Mayer Brown stated the problem clearly in 1981: did Ganassi intend for the instruments to remain the same, merely re-aligning the notation (as with Agricola's flutes), or did he assume an actual change in pitch?³⁵ Brown came down strongly in favor of the second explanation at the time; in this he was followed by Woodfield, who hailed Ganassi (along with Lanfranco) as a "progressive" in advocating the use of a high *d''*-tuned treble—a size rare in that period, as Woodfield was quick to point out.³⁶ Brown reconsidered this conclusion, however, as indicated in the article whose authorship he shared with Kathleen Moretto Spencer in 1986.³⁷ Based on an examination of the Yale manuscript mentioned above and the charts contained in a Florentine partbook of about 1520,³⁸ Spencer and Brown concluded that Ganassi (along with Alfonso della Viola and other Italians) did indeed conceive of his viols in terms of different nominal tunings in order to effect transpositions, and that the pitch names appearing on the page had little or nothing to do with absolute sounding pitch. Still, one is left with the vague impression from their commentary that the high tunings represent something closer to the "real" pitch³⁹—an idea at odds with what we know of the instruments themselves. In addi-

³⁵ "Notes (and Transposing Notes) on the Viol in the Early Sixteenth Century," *Music in Medieval and Early Modern Europe: Patronage, Sources and Texts*, ed. Iain Fenlon (Cambridge: Cambridge University Press, 1981), 61–78; see in particular pp. 75–76.

³⁶ Woodfield, *Early History*, 151.

³⁷ Spencer and Brown, "How Alfonso della Viola Tuned," 532, notes 22 and 24.

³⁸ Florence, Biblioteca Nazionale Centrale, MS Magl.XIX, 165, fols. 116v–117r.; see Spencer and Brown, "How Alfonso della Viola Tuned," 525–26.

³⁹ This is implicit in such statements as "Playing *Sapeti amanti* using Alfonso's fingerings 'per b mol' on viols 'in *D*, *G* and *c*' makes the music sound at written pitch" (p. 526), and that "modern consort players . . . ought . . . to be playing on viols 'in *E*, *A* and *d'* . . ." (p. 530).

tion, there are some unresolved points of confusion regarding Ganassi's information; we may find, in fact, that on closer examination he is not nearly as ambiguous in his explanations as has hitherto been claimed.

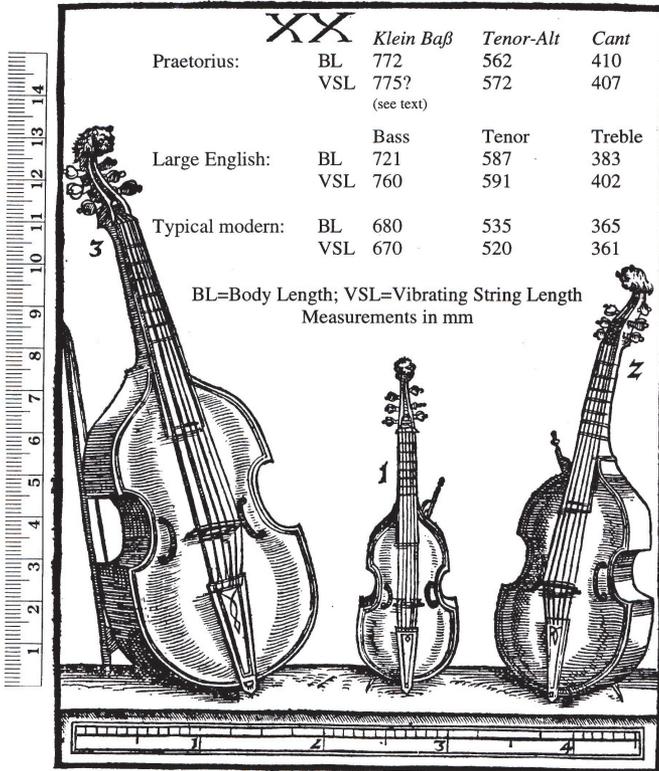
It is well established (if not yet widely understood by players) that the vast majority of Renaissance viols were large by later standards.⁴⁰ This fact is evidenced by both iconography and surviving examples. Of the hundred-odd extant Renaissance viols from the Continent, only one (by Gioan Maria da Bressa, late sixteenth century, now in the Ashmolean Museum, Oxford) is what we would now call a treble.⁴¹ Considering its rarity and its late date, it was probably considered a *sopranino* or *kleiner Discant*—a size mentioned in a few late-sixteenth-century sources.⁴² It is evident that Praetorius did not yet know such an instrument, as the measured illustrations in the *Syntagma II* attest. His *Cant* viola da gamba (Plate XX, no. 1) is intermediate in size between a modern treble and tenor, and his *Tenor-Alt* (no. 2), between a modern tenor and bass; his *Klein Baß* (no. 3) is considerably larger than most modern basses.⁴³ Fig. 1 shows Praetorius's viols from Plate XX along with some significant measurements. With vibrating string lengths of

⁴⁰ See Woodfield, *Early History*, chaps. 7 and 8.

⁴¹ This estimate is based upon the *Viollist: A Comprehensive Catalogue of Historical Viole da Gamba in Public and Private Collections*, which was begun by Peter Tourin (Duxbury, Vermont, 1979) and is now maintained and updated by Thomas G. MacCracken. See his "Italian Instruments in a List of Extant Viols Made Before 1900," *The Italian Viola da Gamba: Proceedings of the International Symposium on the Italian Viola da Gamba, Magnano, Italy, 29 April–1 May 2000*, Susan Orlando, ed. (Solignac/Turin: Edition Ensemble Baroque de Limoges/Edizioni Angolo Manzoni, 2002), 127–44.

⁴² See Woodfield, *Early History*, 186 and 193.

⁴³ The sizes are not named in the plate; one has to look to the tuning chart on p. 25 for the labels, which are then confirmed in the passage from p. 44 quoted later in this article. Further confirmation that these are the correct labels comes from Praetorius's description (p. 47) of the *Viol Bastarda*, which he says is somewhat larger than the tenor; as depicted in Plate XX the *Bastarda* (no. 4) is indeed intermediate in size between nos. 3 and 2. It should be noted that his term *Klein Baß* ("small bass") for no. 3 is used to distinguish it from the *Groß Baß* (Plate VI, no. 4—basically our modern "D-violone") rather than to suggest it is at all small for its type.



1. 2. 3. Viola da Gamba.

Figure 1. Praetorius's consort viols (*Syntagma II*, Pl. XX). The scale at the bottom represents Brunswick feet and inches; that along the left side represents decimeters and centimeters.

about 775,⁴⁴ 572, and 407 mm, listed from bass to treble, they are remarkably similar in size to the “set of large [English] viols at low pitch” illustrated by Ian Harwood in 1981;⁴⁵ these have vibrating string lengths of about 760, 591, and 402 mm. Harwood (follow-

⁴⁴ As illustrated, the vibrating string length of no. 3 is about 740 mm. However, its bridge is shown at an impossible slant; “straightening up the bridge” yields a figure some 35 mm greater, or about 775 mm.

⁴⁵ Ian Harwood, “A Case of Double Standards? Instrumental Pitch in England c1600,” *Early Music* 9/4 (1981): 470–81; ills. 3a, b and c, p. 472. This “set” is made up of a bass by Henry Jaye (1619), a tenor by John Rose (1598), and a treble by John Hoskin (1609).

ing Abbot and Segerman⁴⁶) suggests a pitch standard of at least a tone below modern for these large English viols, but it is evident that Praetorius had an even lower absolute pitch in mind for his instruments: he specifies *g*, *d'* and *a'* (or *a*, *d'* and *a'*⁴⁷), reckoned according to *Cammerthon*, as the top-string pitches of his first (and presumably preferred) tunings. (See Fig. 2.) This puts his viols with *a-d'-a'* tuning about a tone below Harwood's suggested absolute pitch for the low English set. For instance, Harwood's treble *d''* at a tone below modern is *c''*; this is about a tone above an *a'* at 460 Hz—the estimate of Praetorius's *Cammerthon* mentioned above. With *g* (rather than *a*) tuning his *Klein Baß* would, of course, be yet another tone lower, or about a major third below Harwood's suggested absolute pitch for the large English bass.

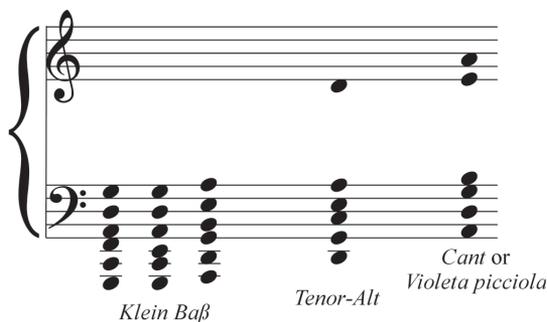


Figure 2. Nominal pitches of Praetorius's viols (first tunings), sounding about a semitone higher.

Praetorius, as we have just seen, specifies low tunings for his large viols. However, from one comment he makes he may be included among the German writers who mention a dual system of tuning. In his section on viols he says,

⁴⁶ Djilda Abbott and Ephraim Segerman, "Strings in the Sixteenth and Seventeenth Centuries," *Galpin Society Journal* 27 (1974): 48–73; "Gut Strings," *Early Music* 4/4 (1976): 430–37; and E. Segerman, "On the Sizes of Surviving English Viols," *Fellowship of Makers and Researchers of Historical Instruments Quarterly* 13 (1978): 42, 43, 60, and 61.

⁴⁷ Both tunings are given in the tuning chart, p. 25, under numbers "1," while only the first is mentioned in the text (p. 44).

Viols *de* [sic] *gamba* have six strings [and] are tuned in fourths, with a third in the middle, just like six-course lutes. The English, when they play something on them alone, put it all lower, sometimes by a fourth and sometimes even by a fifth, so that they reckon and consider the bottom string of the small bass as a *D*, the tenor and alto as an *A*, and the descant as an *e*; whereas, as [is] to [be] observe[d] above in the table [p. 25], each is [actually] tuned a fifth lower (according to chamber pitch): namely, the bass on *G'*, the tenor and alto on *D*, and the descant on *A*. And that gives in this whole “rank” of instruments a much more pleasant, magnificent, and majestic resonance than when one adheres to the true pitch.⁴⁸

Thus, according to Praetorius, the English effected a downward transposition by imagining higher nominal pitches for their instruments.⁴⁹ While Praetorius’s information here does not square with what we know of the *exact* nominal pitches or intervallic relation-

⁴⁸“Die Violen *de Gamba* haben 6. Saiten, werden durch *Quarten*, vnd in der Mitten eine Terz gestimmt, gleich wie die sechs Chörliche Lautten. Die Engelländer, wenn sie alleine darmit etwas *musiciren*, so machen sie alles bißweilen vmb ein *Quart*, bißweilen auch ein *Quint* tieffer, also, daß sie die vntersten Säitten im kleinen Baß vors *D*; im Tenor und Alt vors *A*; Im *Cant* vors *e* rechnen vnd halten: Do sonsten, wie oben in der Tabell zu ersehen ein jedere (nach dem Cammerthon zu rechnen) eine *Quint* tieffer, Als nemlich der Baß ins *GG*; der Tenor vnd Alt ins *D*; der *Cant* ins *A* gestimmt ist. Vnd daß gibt in diesem Stimmwerk viel eine anmutigere, prächtigere vnd herrlichere *Harmonij*, als wenn man im rechten Thon bleibet.” *Syntagma* II, 44.

⁴⁹This interpretation differs from that of Nicholas Bessaraboff (*Ancient European Musical Instruments* [New York: October House, 1941], 368–73), who believed that Praetorius was talking about an English use of physically smaller viols. Bessaraboff castigates other writers who have “interpreted” or “corrected” Praetorius’s language, but is guilty himself of mistranslation (as well as some very convoluted reasoning to explain the resulting contradictions). Crucial here is the expression *halten vor*, which is an earlier form of modern German *halten für*: “consider as, take to be”; Bessaraboff renders this instead as “hold . . . from . . .,” allowing him to conclude that the higher nominal pitches are the real ones—the opposite of what Praetorius is telling us. (The “daß” in the last sentence of this quotation [“Vnd daß gibt . . .”] can refer only to the English practice of transposition, since pitches reckoned according to *Cammerthon* are by definition the “true” ones for Praetorius.) Sibyl Marcuse (*A Survey of Musical Instruments* [New York: Harper & Row, 1975], 505) has reached a conclusion similar to that of Bessaraboff, forcing her to reason that Praetorius really meant “higher” when he said “lower.”

ship of English viols,⁵⁰ it is still valuable for giving his impression of English practice.⁵¹ That is to say, he was almost certainly wrong about the English using a *d'-a'-e''* system—or indeed any system other than *d'-g'-d''*—but he was clearly taken with the timbral effect of what he heard as a downwards transposition.

Not all surviving Renaissance viols fit neatly into the size categories shown by Praetorius, so that we cannot establish any kind of constant pitch standard for viols throughout the whole era. However, it does seem probable from the generally large size of extant instruments (as well as those shown in pictures) that the low tunings are closer to representing the “true” pitches from the point of view of 8-foot pitch. It seems highly unlikely that practical musicians such as Ganassi and Alfonso della Viola would have advocated the use of rare or unavailable instruments. Thus, rather than being a “progressive” in recommending the use of smaller viols, Ganassi was merely one of those who recognized the advantage of visualizing the high tunings: the written notes are then placed lower on the instruments and are less likely to demand playing above the frets, especially with pieces in high clefs. A secondary advantage is sonority, as noticed by Praetorius. The advantage of using the low tunings, on the other hand, is that the notes then sound at 8-foot pitch (as opposed to, say, 10- or 12-foot pitch), useful when viols are combined with voices and most other instruments. This explains Ganassi’s remark (in introducing his fourth rule of tuning—his low system) that “most players play the viol a fourth higher than in our first rule of tuning”—i.e., that most players find it advantageous to play at 8-foot pitch.⁵²

⁵⁰ While there are no early-seventeenth-century treatises specifying English consort tunings, there are several indications from musical sources that the now-standard *d'-g'-d''* tunings given by later seventeenth-century English authors (such as Playford and Mace) were already the norm at the beginning of the century. These indications and their implications are discussed in Myers, “The Sizes and Tunings,” 15–17.

⁵¹ The question of the sizes and pitch of English viols is still a matter of some argument among experts. The evidence and competing theories regarding its interpretation are reviewed in Myers, “The Sizes and Tunings,” 12–15.

⁵² “E perche il piu di sonatori si sona le viole una quarta piu alta de la prima regola nostra . . .” *Regola rubertina*, xxxvii.

We have seen that for Praetorius the low tunings represented the “real” pitch of the viols, much as they do for us; for Ganassi, however, neither a high nor a low tuning was in any sense more “real” than the other. For him the concept of a single reference pitch did not yet exist, and thus we cannot expect from him (or his contemporaries) the kind of explanation that speaks to such a concept. His concerns are nevertheless quite practical and understandable on their own terms. However, in reading him we must pay particular attention to his choice of words, for his distinctions in terminology often provide subtle but definite clues to his meaning.

Ganassi first introduces the subject of tuning in Chapter VII with a discussion of the problem of badly proportioned viols, accompanied by a long moralistic diatribe against those makers who are at fault and who lead others astray. (Nonetheless, he does claim to have learned from their products, if only by negative example.) It is admittedly unclear at this point just what he means by “badly proportioned,” but it becomes clear later that he is talking about the relationship in size among various members of the family, which was obviously not standardized. Chapter VIII, on tuning a single instrument, names the strings (*basso, bordon, tenor, mez[z]ana, sotana, canto*) and the intervals between them—the standard fourth-fourth-major third-fourth-fourth. Chapter IX gives their pitch names according to the first rule (*regola*)—that resulting in *d'*, *g'*, and *d''* top strings of bass,⁵³ alto-tenor, and soprano, respectively. Following a discussion in Chapter X of the relatively greater importance of the bass part, Chapter XI takes up the question of tuning viols all together (or, as we might say, in consort). Here Ganassi suggests following the example of the celebrated choirmaster Gombert, who was particularly adept at choosing the right pitch level for his voices. As it is important for voices that those on the top parts not sing too high, it is best for viols not to tune too high, both for longevity of the strings and for sound; it is better to err in being a tone too low than a semitone too high. This, Ganassi says, is particularly important for badly proportioned viols, which may in addition need some experimentation with bridge placement and string diameter in order to be made to

⁵³ Ganassi uses the terms *basso* and *contrabasso* indiscriminately for this member of the family.

work together; there is apparently a little more leeway in the case of well-proportioned viols, but still one should be careful not to tune too high.

Thus, it is important to stress, finding the proper pitch for a set of viols—for Ganassi, at least—had nothing to do with matching any absolute pitch standard, but with balancing the needs of the different sizes of instrument.⁵⁴ It was ultimately a compromise between the highest pitch comfortable for the smaller viols and the lowest pitch that still allowed the larger viols to be audible.⁵⁵

Having described how to tune viols together, Ganassi proceeds to explain—primarily by means of charts—how to fit onto them the various scales of music. It should be noted that up to this point the words Ganassi has employed to describe the process of tuning are all forms of the verb *accordare* (sometimes *incordare*) or the noun *incordatura*. He tells us that there are in all four manners (*modi*) or rules (*regole*) of tuning. (See Fig. 3.) Under each he mentions three orders (*ordini*) for the placement of scales; the first and second orders (for scales with B \sharp and B \flat) are what we should expect from the tunings, but the third order (for twice-transposed modes, or *musica finta* as he calls them—modes with two flats) treats each instrument as nominally a tone lower.⁵⁶ For instance,

⁵⁴ This is not to suggest that gambists of Ganassi's time would never have had occasion to tune to other instruments, but it is to recognize that such was not his primary concern in setting the pitch of a viol consort.

⁵⁵ Even among a set of viols considered to be “well-proportioned” there is a lack of exact mathematical proportionality; for ergonomic—and probably acoustical—reasons, the bass of such a family is never exactly twice the length of the treble (as would be demanded by strict observance of the ratio for an octave between them). Note, for instance, the dimensions of Praetorius's set as shown in Fig. 1, in which the vibrating string length of the bass (c. 775 mm) is less than twice that of the treble (c. 407 mm); using his *g-d'-a'* system, with its interval of a ninth between bass and treble, the deviation from strict proportionality would be even greater than in the case of his *a-d'-a'* system.

⁵⁶ Note that in the case of his *quarta regola* he gave up on specifying this stepwise transposition. However, this may be more an accident of his having simplified the nature of his charts than the result of a real change in attitude. In the first three *regole* each of the three *ordini* is afforded its own chart; in the fourth, the three *ordini* are presented instead on a single chart for each size, so that he is able to specify with only three charts what required nine in the case of the *prima regola*. However, one—perhaps unintentional—result of this process of

Nominal pitches of Ganassi's viols—high tunings:

Basso Alto-Tenor Soprano B A-T S B A-T S B A-T S

Prima regola Seconda regola Terza regola Terza regola, Alternative

Approximate sounding pitches, using large viols:

(= Quarta regola, nominal pitches)

Figure 3. Ganassi's viol tunings.

the *d'*-string of the bass is treated as a *c'*, the *a* as a *g*, and so forth. This has led many a scholar to believe that he intended a retuning of the instruments for the scales of *musica finta*.⁵⁷ However, it seems highly unlikely that Ganassi did indeed intend an actual retuning, given the trouble he wanted one to go to for finding just the right pitch for the viol consort—a pitch that in any case was independent of any fixed standard. Furthermore, in explaining the

reduction is that the fingerings for the scales of *musica finta* can no longer be shifted over by a tone.

⁵⁷ For instance, Wolfgang Eggers in his translation and commentary on Ganassi's *Regola rubertina* (Kassel: Bärenreiter, 1974) devotes considerable space to pondering why Ganassi would have suggested such retuning; see in particular pp. 234–48.

three *ordini* for the bass (Chapter XIII) he says merely that in the third he has placed the clef differently; there is no use of the verb *accordare* or any other mention of changing the tuning.

So just what is Ganassi's reason for transposing the scales of *musica finta* (in effect) up a tone? His explanation provides only a vague clue: "and so that all parts may have or make their sounds more easily, in the third order I have moved the clef . . ." ⁵⁸ In a detailed analysis of the practical implications of this adjustment Wolfgang Eggers has concluded that it results in a reduction in number of both unusable open strings and extended hand positions in music with two flats. ⁵⁹ A similar conclusion was reached by Spencer and Brown: in their examination of the transposition practices of Ganassi and Della Viola (which, though not identical, are comparable ⁶⁰) they show that shifting scales with flats up a tone results in a greater use of open strings, with advantages for both resonance and intonation as well as ease of fingering. ⁶¹ A further consideration might have been the intonation of fretted notes. Ganassi was a proponent of an unequal form of temperament, which, though it followed no absolute mathematically determined scheme, tended towards mean-tone. ⁶² Once one has achieved the best compromises for, say, the Dorian mode on D, it would make good sense to transpose Dorian on C up a tone in order to use the same fret placements (rather than working out new ones for Dorian on C). ⁶³

⁵⁸ ". . . & per far che tutte le parti habbiano over facciano il suo sonar piu facile: nel terzo ordine io muto la chiave . . ." *Regola rubertina*, xix.

⁵⁹ Eggers, *Regola rubertina* trans., 234–48. Although Eggers may have misunderstood about retuning the strings, his reasoning regarding the changes in fingering is still quite sound.

⁶⁰ Ganassi transposes up a step the scales with two flats, while a single flat suffices to cause Della Viola to make such a transposition.

⁶¹ Spencer and Brown, "How Alfonso della Viola Tuned," 526–30.

⁶² Ganassi makes it clear that one is to adjust the frets by ear once they are placed by proportions; see Mark Lindley, *Lutes, Viols and Temperaments* (Cambridge: Cambridge University Press, 1984), 60–66 for an analysis of Ganassi's fretting instructions and their musical implications.

⁶³ Brown ("Notes [and Transposing Notes] on the Viol," 73) makes this point, even while still convinced at the time that Ganassi expected a retuning of the

The investigation of Ganassi's transposition practice has been further complicated by the question of viols with fewer than the normal six strings. Ganassi devotes considerable space in the *Letzione seconda* (the second volume of the *Regola rubertina*) to such instruments. Since he mentions using his fourth rule of tuning for viols having five strings, scholars have often concluded that this rule was *exclusively* for such instruments and thus that his low tunings pertained to viols of a different physical nature from those using his high tunings.⁶⁴ This has tended to reinforce the modern idea that the low and high tunings were to be taken literally and thus did not represent a system of transposition. Woodfield, for instance, states that Ganassi's fourth rule is "for" five-string viols.⁶⁵ However, this is not quite what Ganassi has to say.

First of all, Ganassi tells us early on (in Chapter VIII of the *Regola rubertina*), "Note well that the viol has six strings..."⁶⁶

strings despite the impediments to stability of intonation such retuning would engender.

⁶⁴ Eggers (*Regola rubertina* trans., 249), for instance, assembles several quotations from Ganassi that seem to point to transposition, only to have to reinterpret and explain them away in the following pages as he tries to show that Ganassi did not have a transposition scheme in mind. Thus when Ganassi says that his fourth rule is for playing a fourth higher, Eggers has to explain that this is only *visually* a fourth higher, since Ganassi is concerned primarily with the visual aspect of the fingerboard! Eggers goes so far as to interpret his statement that "most players play the viol a fourth higher than in our first rule of tuning" as meaning that most players play five-string viols—an idea contradicted by most of the Italian evidence from that period.

⁶⁵ Woodfield, *Early History*, 144.

⁶⁶ "Nota bene come il violone e composto di sei corde . . ." *Regola rubertina*, viiii. This statement—repeated later in the same chapter—is important to remember when we consider the instruments depicted in the frontispiece of the *Regola rubertina* (see Myers, "The Sizes and Tunings," Figure 2, p. 11 for a reproduction). Prominent among them is a viol with five symmetrically placed strings; it is obviously not a six-string viol with one string broken. It has often been used as evidence of Ganassi's concern with viols built to carry only five strings. However, in the light of his clear statements that the viol normally carried six, it seems more probable that the reduced number of strings here is the result of artistic license rather than a conscious attempt to illustrate the object of his discussion. This is not to say that there were no five-string viols in sixteenth-century Italy, but only that they were not the instruments Ganassi had in mind.

When he first introduces his fourth rule (Chapter XVIII) he shows six strings, all with their usual labels (*basso, bordon, tenor, meza[na], sotana, canto*), just as he has for rules one, two, and three; the fact that here the bottom string of the bass viol and the bottom two strings of the tenor and soprano are unused is an accident of part ranges rather than an indication that they were, in fact, missing. For instance, no normal cantus part would venture below *g*, the pitch of the open *tenor* string of the soprano viol in this tuning. Likewise, no normal bass part would go below *F*, the lowest note Ganassi shows for the bass viol in this tuning. Thus his charts suggest he is still dealing here with normal, six-string viols. This is confirmed by a remark in the last chapter (XXI) of the *Regola rubertina*. Here he states that there are really only three tunings, and that the fourth is not really a different *tuning* at all but differs (from the first) merely in the placement of the clefs; he admits that he erred in saying earlier that there were four tunings.⁶⁷ Thus, not only is there nothing physically different about the viols under his first and fourth rules, but the strings are to be tuned identically under both as well!

It is much later (in Chapter XXII[I] of the *Letzione seconda*) that Ganassi tells us that his “method of playing up a fourth” (his fourth rule) “may serve” (*supplisse*—imperfect subjunctive) for viols with five strings. Thus, rather than “confirm[ing] that the fourth rule of tuning is specifically suited to five-string viols” as stated by Woodfield,⁶⁸ this chapter first introduces the idea. The whole point of this chapter (and the one following) is to discuss make-do situations—how to cope with viols without their full complement of six strings. Ganassi is quite specific in explaining which strings might be missing: it is the top ones, since they break so easily; the bottom ones seem not to have been a problem. In suggesting that his fourth rule of tuning (presented in the earlier vol-

⁶⁷ “. . . la quarta regola non è variata ne lo accordo suo: ma bene il loco delle chiave come hai veduto essere una quarta piu alta di quello che è nella prima regola, abenche io habbia ditto essere quattro incordature, ogniuno è atto a fallare, non importa niente quando della cosa glie il remedio.” *Regola rubertina*, xxxix. This statement reinforces the claim made above that Ganassi is overall quite careful to distinguish between tuning (*accordo; incordatura*) and the placement of notes on the fingerboard.

⁶⁸ Woodfield, *Early History*, 240, note 6.

ume) may serve for viols with five strings,⁶⁹ Ganassi absolves himself of repeating this information. Now, he says, he needs to treat only those with four and three strings.

What Ganassi does *not* mention is that in order to apply his *quarta regola* to viols missing their *canto* string it is necessary to move his tablature fingerings over one string towards the bass. This, of course, means *up* one string as they appear on the page, since they are shown in musically inverted order—from *basso* on top to *canto* on the bottom. Thus the fingerings given for the *canto* apply to the *sotana*, those for the *sotana* to the *mezzana*, and so forth. He obviously considered this adjustment so self-evident as not to require comment. But such an adjustment is unnecessary for the charts specifically intended for viols with four and with three strings: the strings are in each case correctly labeled to take into account the missing top strings. Thus the chart for viols with four strings carries the labels *ba[sso]*, *bo[rdon]*, *Te[nor]*, and *m[ezzana]* at the upper left, while the chart for viols with three strings carries the labels *ba[sso]*, *bo[rdon]*, and *Te[nor]*. Had Ganassi thought of his *quarta regola* as primarily for viols with five strings, he would similarly have shown only five and labeled them appropriately, from *basso* to *sotana*, leaving off the *canto*. Clearly the charts of the *quarta regola* were drawn up with normal six-string viols in mind; that they could serve a double function was quite obviously an afterthought.

Thus we can be quite certain that Ganassi's first and fourth rules of tuning are different sets of nominal pitches to be applied to a single set of six-string viols. These instruments had the same intervallic relationships (if not the same sounding pitches) as those standard today: a fourth between bass and alto-tenor, and a fifth between alto-tenor and soprano (or treble). Ganassi apparently preferred this fourth-fifth consort arrangement; not only did he give it first place, but he also devoted to it the most complete description. In addition, it was the only one for which he bothered to provide both high and low systems of pitches. However, it is easy to extrapolate matching low systems for his second and third rules as well; in fact, the necessary charts are already to be found among

⁶⁹ Even by calling these “five-string viols,” Woodfield gives rather the wrong implication.

those he has given. For instance, under his second rule (with its fifth-fourth relationship) the top strings are d' , a' , and d'' ; the matching low system would have a , e' , and a' . The bass and soprano are thus covered by the charts in the fourth rule, while the alto-tenor scales can be found in the chart for bass on E , third rule.⁷⁰ Likewise, a low version of the third rule (with its fourth-fourth relationship) would have a , d' , and g' as nominal top-string pitches, again demanding no new charts.

The various tunings given by other Italian writers similarly represent different nominal tuning schemes to be applied to the large, low-pitched sets of viols then in use. One authority preferred the advantages of a high system; another, those of a low one. It is significant that mention of the high tunings outside of England became less frequent over time; the majority of Italian sources from the late sixteenth and early seventeenth centuries (Zacconi, Virgiliano, Banchieri, and Cerone) give low tunings, reflecting the growing tendency to report instrumental pitches in terms of a common standard. The need to combine all sorts of instruments (as mentioned by Praetorius) had become a more important consider-

⁷⁰ The chart in the Florentine partbook mentioned above (see note 38) would seem to be appropriate for just such an alto-tenor under Ganassi's second rule, since it implies the alternative nominal tunings $A-d-g-b-e'-a'$ (high system) and $E-A-d-f\sharp-b-e'$ (low), at least for music with no flats in the signature. (For scales with one flat the high tuning remains the same but the implied low tuning is a tone lower, on D .) The scale over the first low tuning is labeled *All'alta*, since, like Ganassi's fourth rule, it produces higher sounding pitches; one over the high tuning is labeled *Alla Bassa*, since it produces lower sounding pitches. This chart was taken by Spencer and Brown ("How Alfonso della Viola Tuned," 525–26) to apply to a *bass* viol because of the identity of the low tunings (on E and D) with Della Viola's tunings for bass (and possibly also because the chart is found in the bass partbook). However, Della Viola's tuning is already a high one; if the Florentine chart were for bass, it would imply the existence of an even higher set of tunings (with bass on A —an octave higher than the normal bass on A') for which there is no other evidence. It seems more likely that the chart was intended for alto-tenor viol as recognized by Woodfield (*Early History*, 240, note 8), who saw that this chart represents the logical extension of Ganassi's fourth rule. Cleffing provides further support to this idea: the musical scales comprising the bulk of the chart are in alto and tenor clefs—those most often associated with alto and tenor parts. The scales in alto clef are fingered so as to sound low on the instrument (*Alla Bassa*) and those in tenor clef, to sound high (*All'alta*). While a tenor clef can also serve for a bass part, it is there a high clef in need of downwards transposition; it would not be marked *All'alta*.

ation than the convenience of the viol consort itself—the primary reason for the high tunings, it would seem. Transposition was still often necessary, of course, as indicated by Virgiliano,⁷¹ but 8-foot pitch had now become the main point of reference. If in spite of the evidence presented here one were still to take the high tunings as actual pitches in the modern sense, one would have to believe not only that the small treble viol held an important place in the music-making of the sixteenth century while leaving little “fossil record,” but also that it all but died out in Italy and Germany only to be reinvented in the seventeenth, possibly by the English⁷²—altogether an improbable scenario.

Much of the information reviewed in this paper is not at all new. For instance, the lack of standardization of pitch in the sixteenth century is well established in the scholarly literature on pitch history, and the fact that musical notation of that era carried with it no consistent implications of absolute pitch has become axiomatic. The various early viol tunings, including those of Ganassi, have been presented in detail by a number of authors, and even the idea that Ganassi’s high and low tunings represented a system of transposition, not actual pitches in the modern sense, has been acknowledged—albeit somewhat tentatively and incompletely, in my opinion. What I hope to have demonstrated here, however, is that Ganassi’s presentation of tunings as alternative possibilities for the placement of notes on the fingerboard of gambas is quite clear on its own terms, and that it in no way depends for its correct interpretation upon the information supplied by a putative student of Della Viola (as suggested by Spencer and Brown).⁷³ This is partic-

⁷¹ Virgiliano (*Il Dolcimelo*, [98–99]) provides a chart for his *a-d'-a'* set of viols that details transpositions over the range of an octave, from a second above written pitch to a seventh below. Playing up a tone, at pitch, down a tone, and down a third is associated with music in the low clefs, while playing down a fourth, fifth, sixth, and seventh is associated with the high clefs.

⁷² Jean Rousseau (*Traité de la viole* [Paris, 1687], 22) credits the English with reducing the size of their viols before the French did. Just when this reduction took place is still unclear; it is still a matter of research and debate.

⁷³ I thus do not agree with Spencer and Brown (“How Alfonso della Viola Tuned,” 524) that Ganassi “did not write as clearly and unambiguously as Della Viola’s student” regarding transposition by step for music with flats in the

ularly important to understand in the case of Ganassi's first and fourth rules—those resulting in transposition by a fourth when applied as alternatives to a single set of viols—since the information supplied by the follower of Della Viola does not even speak to the question of tunings differing by a fourth, but only those differing by a tone. Ganassi, as I have shown, states as unambiguously as he could that his first and fourth *regole* represented different nominal schemes of pitches to be applied to instruments having the same actual tuning in terms of absolute pitch. I hope, too, to have put to rest the idea that Ganassi's fourth *regola* was designed primarily with five-string viols in mind—an idea that has, again as we have seen, tended to obscure rather than elucidate Ganassi's meaning.

Other writers have also commented upon the comparatively large size of Renaissance viols, as well as the paucity of evidence for the existence of a treble viol in the modern sense. However, the implications of this information concerning the actual sounding pitches seem not yet to have made their full impact, and the idea that the low tunings, rather than the high ones, come closer to representing the “true” pitches from our own point of view has remained a difficult one to internalize. The look of the notes on the page—particularly in the case of the high tunings, which nominally resemble our own—often continues to be an impediment to a true understanding of the flexible concepts of pitch in the Renaissance.

* * * * *

signature; both treat of it simply in terms of different placements of the clefs in relation to fingerings, and neither mentions anything about retuning the strings.

Freed from the notion that the earlier high tunings indicate actual pitches, we can take a fresh look at the sixteenth-century nomenclature for viols. Modern writers about Renaissance viols have painted a rather chaotic picture, according to which the labels of bass, alto-tenor, soprano, and the like were independent of physical size and were determined entirely by musical function—i.e., by the part one was playing at the time. Sibyl Marcuse, for instance, has stated, “in the matter of gambas, one man’s bass was simply another man’s tenor.”⁷⁴ Woodfield echoes this assessment.⁷⁵ Such a slippery terminology is unlike any we have seen for other Renaissance instruments; it would, of course, have rendered any inventory or maker’s vocabulary meaningless. Renaissance writers use voice-part labels for viols just as they do for other instruments, suggesting that for them such labels carried consistent implications of general physical size; they evidently felt no need to qualify further their descriptions. Thus, while the labels may have varied somewhat over time and from place to place, it would appear that each writer felt confident that there was no room for misunderstanding on the part of his own readership. Once we understand that Renaissance terminology for viols was no more capricious than that for other instruments, we can begin to sort it out as we have for lutes, violins, flutes, recorders, shawms, crumhorns, and all the rest.

What does all this mean for modern performers of Renaissance music? First and foremost, it means we can no longer justify using our smaller modern viols for sixteenth-century music with the excuse that their pitches were endorsed by at least some contemporary sources; as we have seen, that endorsement is illusory. We must obtain the proper equipment. Work on the reproduction of Renaissance viols has only barely begun, and much still needs to be done before we can be confident that their special sonorities have been recaptured.⁷⁶ There is no dearth of material for this re-

⁷⁴ Marcuse, *A Survey*, 505.

⁷⁵ Woodfield, *Early History*, 145–47.

⁷⁶ Most of the published work on Renaissance viols concerns those of Venetian manufacture; see Woodfield (*Early History*, ch. 7) for a summary. (See also the following, which appeared after Woodfield’s book: Pierluigi Ferrari, “La liuteria veneziana del Cinquecento e la viola da gamba di Antonio Ciciliano del

search, given the rather remarkable survival rate of the instruments. Few, however, survive unaltered, making interpretation of what they have to divulge both complex and controversial.⁷⁷ The project must ultimately be a group effort, involving the contributions of curators, collectors, builders, and players.

Armed with plausible versions of the instruments, we can try applying to them the various nominal tunings given in the sources. Use of the high tunings on larger instruments will naturally result in a much lower absolute pitch than we are accustomed to, for obvious reasons. However, use of the low tunings may involve the use of pitch standards higher than modern (such as Praetorius's *Cammerthon*—the normal pitch of Renaissance winds) or conform to no particular known standard, depending upon the particular viols, the specific nominal tunings, and performance conditions. Not all the implications of using different historical tunings on such instruments can be anticipated; some will come clear only

Museo civico di Bologna,” *Il flauto dolce* 17/18 [1987–88]: 49–53; Simone Zopf, “A Study of Three Viols Attributed to Antonio Ciciliano,” *The Italian Viola da Gamba*, 195–204; and Marco Tiella, “The ‘Antonio Ciciliano à Venetia’ Viol in the Accademia Filarmonica of Bologna,” *The Italian Viola da Gamba*, 205–16.) An investigation of the viols of other schools (particularly those of Brescian provenance) has been undertaken by Ray Nurse, lute and viol builder of Vancouver, B.C., to whom thanks are due for helpful suggestions in the preparation of this article. The use of Brescian models somewhat sidesteps one of the major issues regarding Renaissance viols, that of the soundpost, since the Brescian instruments seem clearly designed for its use. (See Herbert W. Myers, review of *The Italian Viola da Gamba*, *JVdGSA* 41 [2004]: 69–74 [here 71] for a discussion of the soundpost issue as it relates to Renaissance viols.) It is of interest that the Renaissance viols produced by Henner Harders, based upon Venetian models and employed by Fretwork in its CD *Ottaviano dei Petrucci: Harmonice Musices Odhecaton* (Harmonia Mundi USA 907291, 2002), do not possess the extremely nasal timbre, quiet sound, and slow response usually associated with bowed strings without soundposts—this in spite of the fact that, as Harders avers, they have none. Their behavior remains, to me at least, a conundrum.

⁷⁷ For some idea of the complexities of this issue see the articles by Zopf and Tiella cited in the previous note, as well as Karel Moens, “Problems of Authenticity in Sixteenth-Century Italian Viols and the Brussels Collection,” *The Italian Viola da Gamba*, 97–114.

with trying. But one result is certain: our current sound-picture of Renaissance viol music will surely change.⁷⁸

⁷⁸ Though the main focus of this article has been consort tunings, its ramifications for Renaissance solo viol music are equally important. Perhaps the most often publicly performed viol compositions of the sixteenth century are the *ricercadas* of Diego Ortiz, which are popular not only because of their inherent attractiveness, but also because they are designed for bass viol and harpsichord and thus fit so well into the modern recital format. However, Ortiz's bass (*contrabaxo*) viol was, like Ganassi's, undoubtedly a good deal larger than the modern one, and his high (*D-G-c-e-a-d'*) nominal tuning would thus have sounded considerably below 8-foot pitch. This low viol pitch in turn implies a low pitch for the accompanying harpsichord. Ortiz tells us (p. [51]) that there are several ways to tune the viol to the harpsichord, but that the best is when the viol's fifth string (from the top) is in unison with the *G* of the harpsichord; this tuning gives both instruments equal share of low and high notes and will allow everything to be played that he writes for them. ("Muchas maneras ay de Templar el Violon con el Cymbalo . . . Empero la mas facil y meior manera de templar el Violon con el Cymbalo es que la quinta del Violon en vazio este vnisonus col el G[a]maut del Cimbalo, porque desta manera participan y gualmente delos baxos y altos y enesta manera de temple se ha de tanner todo lo que aqui escriuiere destos instrumentos.") Thus if the open (nominal) *G* string of the viol is to agree with the *G* of the harpsichord, the latter must also be at a similarly low pitch. Several harpsichord researchers have suggested that some sixteenth-century Italian harpsichords were built to a standard about a fourth low to modern pitch, and a few writers have gone so far as to claim that *all* were at this pitch or lower. (However, Denzil Wraight, who has made an exhaustive examination of surviving Italian string keyboards—the large majority of which are of Venetian manufacture—has concluded that, while there was considerable variation in pitch as indicated by their string lengths, the great majority were at some version of 8-foot pitch or higher; a few—but only a few—were "alla quarta bassa." See Denzil Wraight, "The Pitch Relationships of Venetian String Keyboard Instruments," *Fiori Musicologici: Studi in onore di Luigi Ferdinando Tagliavini nella ricorrenza del suo LXX compleanno* [Bologna: Pàtron Editore, 2001], 573–604.) The issue is far from being settled at this time. However, the fact that there was a definite need for such a low-pitch harpsichord to accompany low-pitch viols should perhaps be added as evidence in the debate.

RECENT RESEARCH ON THE VIOL

Ian Woodfield

This bibliography is intended as a concise guide to recent research related to the viol. It lists books, articles, dissertations, selected reviews, published papers, and major scholarly editions of music. Research on any aspect of the viol (and related instruments such as the baryton) will qualify for inclusion. A sign of the changing times, this list incorporates an increasing number of on-line citations. Suggestions for additional entries in any language would be most welcome. They should be sent to Ian Woodfield, School of Music, Queen's University Belfast, Belfast BT7 1NN, Northern Ireland, or e-mailed to <i.woodfield@qub.ac.uk>.

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REVIEWS

Elizabeth Wells and Christopher Nobbs. *European Stringed Instruments* (Royal College of Music Museum of Instruments, Catalogue Part III). London: Royal College of Music, 2007. xii, 224 pp.; 48 color and 364 black-and-white illustrations. ISBN: 0 946119 08 2. £35.00.

In Britain and Europe, unlike in the United States, some of the most important public collections of old musical instruments are (or at least were originally) connected with music conservatories. Those in Berlin, Brussels, and Paris are especially well known in early music circles today, not least for their holdings of antique viols, with the latter two museums each having more than 75 specimens. Though smaller both overall and in its holdings of viols, the Museum of Instruments at the Royal College of Music (RCM) in London contains comparable riches: as noted in the introduction to this volume, “There are now nearly 900 musical instruments and accessories in the collection and the high proportion of exhibits of outstanding importance places it amongst the world’s major collections” (pp. viii–ix). Many of these items have remained in undeserved obscurity, due in part to the lack of a proper catalogue, but in recent years efforts to remedy this situation have resulted in several important publications, beginning in 1982 with E. A. K. Ridley’s *European Wind Instruments* and continuing in 2000 with the appearance of *Keyboard Instruments*, edited by the museum’s longtime curator, Elizabeth Wells.

European Stringed Instruments, by Wells and Christopher Nobbs, is the most recent addition to this series, offering illustrated descriptions of 73 plucked instruments (psalteries, harps, lutes, mandolins, citterns, and guitars) and 56 bowed ones, including members of the violin family, violas d’amore, hurdy-gurdies, trumpets marine, and—no doubt of greatest interest to readers of this journal—five viols and a baryton. One can get an initial impression of the collection’s most important stringed instruments by skimming through the section of color photographs at the front of the book, in which may be found images of harps by Cousineau and Erard, a chitarrone by Tieffenbrucker, and guitars by Voboam

and Tielke, alongside three of the viols, the baryton, and more than a dozen other instruments.

Perhaps the best known of the RCM's viols is a bass made in 1692 by Barak Norman (1651–1724), which is noteworthy for still having its original neck, pegbox and open scroll, and intricately inlaid fingerboard and tailpiece. A technical drawing of this instrument, available from the museum since the mid-1970s, has informed and inspired a number of modern makers, and the viol itself has been illustrated in several publications, including the *New Grove Dictionary of Music and Musicians*. Two other viols are also English: a bass attributed to Edward Lewis (1641/2–1717) (based on its close similarity to signed instruments in the Brussels and Paris collections) that has been converted to a cello, and a treble with sharply pointed body corners and a striped back that similarly has been transformed into a viola. The wood of the latter's belly dates to about 1600, suggesting that the internal signature of Nathaniel Cross (c. 1689–1751)—who was Barak Norman's apprentice and later his business partner in the early years of the eighteenth century—probably identifies not its original maker but rather the person responsible for its rebuilding.

The collection also contains a five-string pardessus dated 1759 by Louis Guersan (c. 1700–1770) (one of more than fifty such instruments by this maker known today), and a curious German bass with a festooned outline, whose neck detaches to store inside its body and whose label proudly proclaims it to be the first of its kind, invented and made in 1710 by Jeremias Würffel (1650–1726) of Greifswald. Finally, the museum contains the earliest surviving baryton, made in 1647 by Magnus Feldlen in Vienna, more than a century before Prince Esterházy began asking Haydn to compose trios featuring his favorite instrument.

The presentation of each instrument in the catalogue follows a standard format, with a text divided into seven sections and accompanied by one or more black-and-white photographs. Most instruments receive either one or two pages (in an A4, or metric letter-size, format), though a few are given more or less space. The entries are grouped initially by overall type, with five sections devoted to plucked instruments followed by a further six for the bowed ones. Within these divisions the arrangement is first ac-

ording to subtype—for example, with viols preceding violas d’amore, and violins before violas before cellos—and then by approximate date. In addition to a list of all 129 instruments in the table of contents, there are indexes by inventory number, maker’s name, previous owner, and place of manufacture, while the introduction includes a concise history of the collection as a whole and a short but very useful section explaining the conventions of measurement and terminology used throughout the book.

Both the organization of the catalogue entries and the level of detail found in them are thoughtfully chosen, imparting a satisfying amount of information in an efficient yet accessible manner. The essential facts are given first, including the text of any inscriptions by the maker, a very brief (often single-line) description of the instrument, and half-a-dozen basic measurements. These are followed by a more complete physical description and separate prose commentary, and finally by information on provenance (fully two-thirds of these instruments were donated by the art dealer and collector Sir George Donaldson in 1894 or soon thereafter) and a list of previously published references (about a third have either never been described in print, or have appeared only in a privately printed catalogue of Donaldson’s collection).

Like its predecessors, this volume provides well-researched and much-needed documentation of the instruments it covers, successfully steering a middle course between sometimes superficial museum guidebooks aimed at tourists on the one hand, and quasi-encyclopedic tomes compiled by and for professional organologists on the other hand, while remaining potentially interesting and useful to both groups of readers. In comparison to Bettina Wackernagel’s recent catalogue of European plucked and bowed instruments at the Deutsches Museum in Munich (Frankfurt: Bochinsky, 1997), the present publication by Wells and Nobbs is more engagingly written, more profusely illustrated, and much less expensive (approximately \$75 vs. \$200), while still being printed on glossy paper and provided with a sewn binding. In reading through it I noticed only a few small details that might have been improved upon: it’s not completely clear how the instruments’ body lengths were measured (most likely using calipers); the bibliography does not give inclusive page numbers for

articles in journals, though references under individual instruments do provide specific locations; and Michael Mullen's "An Introduction to the Viols in the RCM Collection" in a recent issue of the (British) Viola da Gamba Society's *The Viol* (no. 2 [spring 2006], pp. 24–25) might usefully have been added for all five viols (though not the baryton).

Looking beyond instruments with which one may be already familiar, either specifically or generically—for example, viols—there is much to enjoy here among the attractive images (and informative write-ups) of other types as well, such as the half-dozen ornately inlaid Baroque guitars, eight harps with anywhere from 20 to 45 strings, and a full dozen pochettes with a wide range of body shapes. As Wells points out (p. ix), Donaldson's "interest was primarily in . . . instruments . . . of beautiful form and decoration; he also collected the curious and unusual," while giving relatively little attention to the more traditional field of fine violins.

As noted in the introduction to this volume, Part IV of the RCM catalogue, *Bows for European Stringed Instruments*, by Alicja Knast, is already available on the museum's website (www.cph.rcm.ac.uk), the implication being that its publication in book form is not presently contemplated. Moreover, the earlier wind and keyboard volumes of the series have been updated and uploaded to the internet, complete with their full texts and illustrations. While stringed instruments are currently represented online only in the form of a list derived from the table of contents of Part III, perhaps when the initial press run of the printed catalogue sells out its full entries will become available electronically as well. In the meantime, this is a book very much worth acquiring, not only for gambists but also for their lute- and guitar-playing friends, those interested in historical harps or unusual violin-like instruments, and indeed anyone attracted to old musical instruments. The online introduction to Part IV contains a statement, surely applicable to all segments of this endeavor, explaining that "The main goal of the catalogue is to provide basic details of the items in the collection for musicians, organologists, and researchers of performance practice and other areas of historical musicology." It is a

pleasure to report that this aim has been very successfully achieved for the stringed instruments covered in Part III.

Thomas G. MacCracken

Susan Orlando, ed. *A Viola da Gamba Miscellanea*. Limoges: Presses Universitaires de Limoges, 2005. 244 pp.; 27 pp. with color images and 29 pp. with black-and-white plates. ISBN: 2 84287 353 X. €40.

This volume presents a collection of twelve essays by different authors that were read at international symposia held in La Borie near Limoges in 1995, 1996, and 1998. It is the second such collection produced by editor Susan Orlando and director Christophe Coin and follows their publication entitled *The Italian Viola da Gamba* (Limoges: 2002) (reviewed in this journal, volume 41 [2004]: 69–74). In contrast to the first volume, the present collection deals with articles concerning French, English, and German subjects; however, as in the first volume, subjects are of a wide variety that will appeal to a broad public. Topics range from details about specific viol composers and their works (Sainte-Colombe, Stoeffken, Hotman, Dubuisson, Handel) to issues about the historical use and development of the viol (Italian influence on seventeenth-century English music, the evolution and use of the treble viol, the building of a chest of viols) and finally, matters pertaining to lutherie and restoration of old instruments (with details about viols by Jaye, Meares, and Bertrand). Though published in a scholarly format, most of the articles read easily enough from a layperson's perspective, and will prove interesting and relevant to a wide spectrum of viol enthusiasts.

Nine of the articles contained in this volume appear in English, although three of those have been additionally translated into French. Two of the remaining articles appear only in French, and the third appears in its original French with a German translation. From a reader's perspective, scholarly or otherwise, this is way too confusing. Though it's true that at international symposia, papers are presented in different languages (on the premise that scholars are conversant in a variety of European languages), for hard-copy presentation an editor usually has a broader public in mind in order

to justify the substantial expense of publication and distribution. For the present volume, only four of the articles have been provided in two languages, representing three languages in total. This all seems too random—my feeling is that either all or none of the materials should have been offered in translation, and then, in the same languages. The current collection comes across as a hodgepodge and will likely not be accessible in its entirety to most people. Considering the value and scope of the contents, that is a shame.

The articles themselves are extremely interesting and thought-provoking. Jonathan Dunford's first essay provides newly discovered biographical information about M. de Sainte-Colombe, clarifying his status in Parisian society and disproving previous work that asserted Sainte-Colombe was called d'Autrecourt and connected with Lyons. Dunford's second contribution centers on Ditrich Stoeffken, a "gifted composer who was admired and revered by his contemporaries, but whose works and reputation have fallen into obscurity with the passage of time." Stoeffken was close friends with Jenkins, and the one hundred and fifty-four extant works that he penned are clearly worthy of more attention by modern players and audiences. Stuart Cheney's article fills out the biographies of Nicolas Hotman and Dubuisson (Jean Lacquemant), and describes in detail all of the known sources of their compositions, including the earliest known French instructions on how to play the viol, written by Dubuisson and found in a manuscript dated 1666. Richard G. King's article provides a treasure trove of information about the gamba repertoire of George Frideric Handel, discussing both the extraordinary virtuosic quality of the parts (reflecting a vocabulary with which gambists of the time must surely have been acquainted) and the players for whom they were likely composed. David Pinto's discussion of the English madrigal-fantasia concludes with an extensive appendix that lists all known examples of the genre (approximately one hundred pieces), and their original (purported) texts. Annette Otterstedt builds on research presented in some of her other publications, arguing that the treble viol did not come into use until later on in the family's history, though it received a rich and varied repertoire from German composers of the eighteenth century.

Articles not presented in English perhaps merit detailed examination here. Two are by Pierre Jacquier, a French luthier who has done substantial restoration work on the instrument collections in Paris and Nuremberg. The first of his articles presents selections from Hubert le Blanc's *Défense de la Basse de Viole* (1740), particularly with an eye to defining and clarifying some of the terms that Le Blanc used, and highlighting his enthusiasm for the violin and Italian music. The article concludes with little-known biographical facts about Le Blanc himself. Jacquier's second article describes his building a chest of viols for the Conservatoire de Lyon (France). His creative and whimsical imagination takes him from place to place, citing all manner of inspirations, from Baldassare Castiglione, John Taverner, Thomas Morley, Henri Maugars, Marin Mersenne, Thomas Mace, Jambe de Fer, to Robert Fludd, Thomas Elyot, and Henry Peacham. The third article not provided in English is by Ingo Muthesius, who is renowned for his copying and restoring of old instruments. He describes some of the many responsibilities a curator faces, primarily addressing the issue of whether or not restoration of instruments that are in a poor state of preservation is justified when valuable original details are obfuscated or destroyed in the process. A case-in-point analysis is provided in the form of discussion of work he has performed on viols by Jacob Heinrich Goldt, Joachim Tielke, and Gregory Karpp.

The remaining three articles in this volume focus on the restoration of viols by Henry Jaye, Richard Meares, and Nicolas Bertrand, and all are accompanied by numerous color and black-and-white plates, showing internal and external details of the instruments under discussion. Dietrich Kessler's article speaks of bass viols by Jaye and Meares and is unequivocal in his belief that "old viols can and should be used," arguing in favor of restoring instruments "so that they are returned to the original maker's intentions, as much as possible." French luthier Charles Riché details a seven-string bass by Nicolas Bertrand, providing line drawings with measurements and information about previous work that has been done. The final article in the volume is an interview with John Topham by Marc Soubeyran, discussing the various issues and problems of restoration of Christophe Coin's recently acquired Jaye bass.

When I was asked to review this volume I was very pleased—it is one with which I have been acquainted for several years, and I have already found many of the materials presented to be very useful material for my own programming ideas and program notes. To date, the volume has also already generated considerable discussion, with reviews in some of the most important scholarly publications (including the VdGS and Galpin Society journals, *JAMIS*, *Music and Letters*, and *Notes of the Music Library Association*). In several of the essays, other reviewers have been able to contribute additional details, and/or to point out considerations that might be taken into account for future research. This kind of stimulation and discussion is precisely the main goal for presenters/organizers of international symposia; so by all accounts, Susan Orlando and Christophe Coin are to be lauded for their time and effort organizing such events, and for the great expense that was incurred making the materials they inspired available to a broader public, in the form of a printed edition.

Joëlle Morton

Christian Ahrens and Gregor Klinke, eds. *Viola da gamba und Viola da braccio: Symposium im Rahmen der 27. Tage Alter Musik in Herne 2002*. Munich/Salzburg: Musikverlag Katz-bichler, 2006. 243 pp. ISBN 3 87397 583 1.

Herne, a city with a population of some 160,000 inhabitants in the industrial Ruhr Valley, has been the unlikely host since 1976 to a significant early music festival, the *Tage Alter Musik in Herne*. The festival is held annually in mid-November and presents highly acclaimed concerts, expositions of instrument makers, and scholarly symposia. From its inception until 2003, the festival was under the artistic direction of Klaus Neumann and Dr. Barbara Schwendowius, whose leadership at the West German Radio (WDR) established Cologne as the center of the German early music movement in the last three decades of the twentieth century. Neumann and Schwendowius produced a large number of groundbreaking recordings, and Schwendowius had a particular interest in the viol; her doctoral dissertation in musicology was entitled “Die solistische Gambenmusik in *Frankreich* von 1650–1740.”

Often the festival chooses a particular instrument or family of instruments as its focal point. In 1980 it was the viol, and again in 2002, the viola da gamba and the viola da braccio. (In this case, “viola da braccio” refers specifically to the tenor-range instrument of the violin family, the viola.) The present volume is a collection of nineteen articles in German, English, and French taken from the 2002 symposium proceedings. Some of the articles are quite short, two or three pages, suggesting that they may have been part of a larger discussion on a specific topic.

Our understanding of the early viol and its predecessors is murky at best. In the absence of surviving instruments, we have only second-hand knowledge of the medieval viol or fiddle. Scholars and performers including Howard Mayer Brown, Mary Remnant, and Christopher Page have carried out iconographical research in order to throw light on various aspects of early string instruments, such as bridges, frets, stringing, tunings, and bowing. However, paintings and stone carvings, no matter how detailed, cannot show us the inner construction of these instruments. Other sources of information, such as literary references and theoretical treatises, are little more than hearsay. And the search for answers in the folk traditions of Europe and the Middle East, while intriguing, cannot promise more definitive answers and may lead us astray.

As Ian Woodfield has demonstrated, the earliest bowed instruments in medieval Europe fell into two categories, those held up or *a braccio*, and those held downwards, or *a gamba*. The downward fiddles were generally “waisted” or “eight-shaped.” Instrument maker Christian Rault’s presentation “Was the ‘medieval viol’ a giga?” argues that the “eight-shaped” fiddle, in contrast to the oval or pear-shaped fiddle, was played *da gamba*. Rault compares the medieval viol to the organistrum, and also suggests that this instrument may have been the Germanic *giga*.

The early medieval viol appears to have died out by the end of the fourteenth century in most of Europe. In parts of Spain, however, the tradition of *a gamba* fiddles continued, as evidenced by the popularity of the North African *rebāb*, particularly in the Kingdom of Aragon. In the fifteenth century, the bowed *vihuela* appeared in Aragon and then in the province of Valencia, and

eventually developed into the viol. Although there is ample iconographical evidence of these instruments, none survived into modern times, and again, we can only make educated guesses as to the true nature of their construction.

The oldest surviving instruments available for study are the mid-sixteenth-century Renaissance viols made by the Ciciliano and Linarol families, as well as by Hainrich Ebert. These viols, located in museum collections in Vienna, Brussels, and Bologna, were studied in some depth by Ian Harwood and Martin Edmunds in the 1970s. Their research demonstrated sharp distinctions in construction from later Baroque viols, and has been the basis for the subsequent reconstruction of Renaissance viols by many instrument builders.

In the late 1990s, Karel Moens employed advanced techniques such as special light, as well as the evidence of tree rings in the wood, to examine the Renaissance viols. He demonstrated that the instruments had been altered or forged to such an extent that, in the words of Annette Otterstedt, “there is not a single Renaissance viol preserved in a state sufficient to permit any conclusions about their original shape or manner of construction” (Otterstedt, *The Viol*, p. 154). The same doubts could probably be raised for many other original viols. Most of these instruments have probably not survived the nineteenth century without undergoing some modifications by violin makers.

Not everyone has accepted Moens’s conclusions in their entirety. Herbert W. Myers, writing in this journal (Volume 41 [2004], p. 72), notes that “at least some elements of some of the instruments are unquestionably old, even though there has been considerable reworking and substitution of parts over the centuries.” As evidenced by the symposium in Herne, the Ciciliano viols in particular continue to inspire instrument makers and curators. Christian Bosse examined two Cicilianos in Vienna and one in Bologna, measuring similarities. Rudolf Hopfner’s “Antonio Cicilianos Viole da gamba in der Sammlung alter Musikinstrumente, Wien” traces the provenance and history of the instruments before their arrival in the Viennese collection.

Other scholars and curators in Herne discussed elements of construction in the Linerol viol in the Nuremberg museum (Klaus

Martius), North German viols (Ingo Muthesius), English consort viols (Tilman Muthesius), Marin Mersenne's categorizations in his *Harmonie universelle* (Ingo Negwer), viols and barytons in Munich (Josef Focht), and the Gautier collection in Nice (Josiance Bran-Ricci). Gambist Hans-Georg Kramer of the Marais Consort offered a description of his project involving the reconstruction of a Renaissance viol consort, undertaken with the financial support of the WDR and Dr. Schwendowius. Rather than creating a consort of similar instruments, Kramer and Christian Brosse chose a variety of sixteenth-century models with the idea of matching the variety of the human voice. Kramer's comparison of the timbres of his viols with the voices of well-known early music singers from Emma Kirkby to Harry van der Kamp was, in my opinion, questionable. None of the singers mentioned are Italian, and few have been particularly associated with sixteenth-century music. Furthermore, we are on even shakier ground regarding the early voice than regarding the early viol.

One intriguing article was Stewart Pollens's "Salmon, Stefkins, Visconti, and Stradivari: An Unlikely Collaboration," in which Pollens traces a connection between the English music theorist Thomas Salmon and Antonio Stradivari. Salmon had derived a system for placing frets on the viol according to proportions in order to avoid the unpleasantness of equal temperament. In the early 1700s he demonstrated this in public with a couple of viol players, and called for the use of "moveable" fingerboards to accommodate all possible tonalities. Shortly thereafter, the granddaughter of one of his viol-playing colleagues married an Italian violinist and moved to Cremona. Stradivari measured the neck of her viol and noted the position of the frets, which in the end did not correspond to Salmon's system. Unfortunately, no description of Salmon's movable fingerboards was presented, but he vouched for their simplicity, asserting that "They are taken out and put in upon the Neck of the Viol, with as much ease, as you pull out and thrust in the Drawer of a Table."

A few articles treated the subject of music and musicians, in addition to their instruments. Johannes Boer's "Von Hausmusik und Virtuosen" examines the position of the viol as an amateur's instrument in the Netherlands, the popularity of the discant viol (par-

ticularly for ladies), and the activities of professional players such as the Hacquart Brothers, Jacob Richman or Riehman, Johan Snep, and of course Johan Schenck. Annette Otterstedt continues her study of the lyra viol in “Die Lyra Viol auf dem Kontinent und ihre Verwandten.” I found the title somewhat misleading; Otterstedt is speaking more of the use of scordatura and tablature rather than the instrument itself. She also seeks to define the relationship among the lyra viol, the lira da gamba (or lirone), and the baryton in terms of their construction. Given the limited amount of space available for such a discussion, Otterstedt’s presentation left me in some confusion as to the point of her argument.

The disappearance, for most practical purposes, of the viol in Italy in the mid-seventeenth century was remarked upon by numerous foreign visitors at the time. Bettina Hoffmann’s thoughtful discussion “‘Viola’—Gambe, Bratsche oder Cello?” revisits the problem from the standpoint of nomenclature. Her examination of the repertoire leads her to the following conclusions:

In Italy after 1640, the use of the viola da gamba was an unusual and extraordinary occurrence. It was considered a foreign instrument, and often referred to as the “English viola.” Virtuoso gambists who gave noteworthy concerts in Italy came from abroad. Neither a distinctive repertoire nor an idiomatic technique was developed in Baroque Italy. The gamba was known under several different names, but shared those with other instruments. When a composition calls for a solo *violone*, a *viola* in bass clef or a group of violas (*Concerto di viole*), caution must be taken before employing the viola da gamba. (p. 201)

For those who love instruments and have some knowledge of German, *Viola da gamba und Viola da braccio* is a most valuable contribution to the literature. It should be noted that two of the presentations are in English (Rault and Pollens), and one in French (Bran-Ricci). The book is printed on high-quality glossy paper and the articles are lavishly accompanied by black-and-white reproductions and photographs. I would have appreciated a short biographical notice for all of the contributors to this excellent collection.

Christine Kyprianides

CONTRIBUTOR PROFILES

Jonathan Dunford has become one of the principal forces in bringing solo seventeenth-century music for unaccompanied bass viol back to public attention. He has performed in concert halls worldwide, as well as in museums, theaters, castles, mills, and churches, including regular performances at the Musée de la musique in Paris. He is invited regularly to large festivals and musical associations. In addition to performing, he is an avid researcher of unedited music for the viol. He has published editions of this music for the Cahiers du Tourdion of Strasbourg and the Société Française de Musicologie, and has written articles for various newspapers and magazines as well as the *New Grove Dictionary of Music and Musicians*. He has also participated in countless conferences and radio broadcasts on the viol. In 2004 he was appointed curator of viol music at the Centre de Musique Baroque in Versailles. His recordings, devoted primarily to unedited music for the viol for Adès - Universal Music Classics, have earned him such prizes as the Diapason d'or and the Choc de la musique. He has lived in Paris since 1985.

Christine Kyprianides holds degrees from the Peabody and New England Conservatories and the Royal Conservatory of Brussels, and was awarded the Gregor Piatigorsky Cello Prize at Tanglewood. Her teaching activities have included faculty positions at the Lemmens Institute (University of Louvain), the Musikhochschule of Cologne, and the Dresden Academy of Early Music. For many years she was a leading Baroque cellist and gambist in Europe, performing internationally with Huelgas Ensemble, Musica Antiqua Köln, Das Kleine Konzert, Diapente Consort, Collegium Carthusianum, Les Arts Florissants, Ganassi-Consort, Les Adieux, and the Finchcocks String Quartet. Her recording credits include over 70 albums for numerous major labels, as well as radio and television productions in several countries. Currently she teaches Baroque cello at the Indiana University Jacobs School of Music, where she has just completed her

D.M. degree. She continues to perform in the United States and Europe, and is also active as a scholar.

Thomas G. MacCracken is an independent scholar and freelance performer of early music based in the Washington, D.C., area, where he formerly held a fellowship at the Smithsonian Institution in support of his ongoing research on the viola da gamba, building on the pioneering work of Peter Tourin's *Viollist* (1979). While earning a doctorate in musicology from the University of Chicago he also studied historical woodwind and keyboard instruments at the Oberlin Baroque Performance Institute, and currently plays with a number of local ensembles on recorder, Baroque flute, harpsichord, fortepiano, and continuo organ. As an occasional gambist he enjoys playing English consort music on tenor viol, mostly at home rather than in public.

Joëlle Morton is an active performer and teacher throughout the U.S., Canada, and Europe. In addition to numerous performing affiliations, she is artistic director for the Scaramella concert series in Toronto, where she also coordinates the Pastime With Good Company viola da gamba workshop series, teaches viola da gamba at the University of Toronto, and directs a viol consort as ensemble-in-residence at the Church of St. Mary Magdalene. She is also much in demand as a musicologist and clinician, presenting lecture/demonstrations on the history and development of string instruments. She is the author of a number of scholarly articles and has published several editions of music for lyra viol. Her website (<http://www.greatbassviol.com>) serves as an important international resource for those interested in researching large bowed bass instruments.

Herbert W. Myers is Lecturer in Early Winds at Stanford University, from which he holds a Doctor of Musical Arts degree in Performance Practices of Early Music; he is also curator of Stanford's collections of musical instruments. As a member of the New York Pro Musica from 1970 to 1973 he toured extensively throughout North and South America, performing on a variety of early winds and strings; currently he performs with The Whole Noyse and Jubilate. He has contributed articles and reviews to various journals, including *Early Music*, *The American Recorder*, *The Galpin Soci-*

ety Journal, the *Journal of the American Musical Instrument Society*, and *The Historic Brass Society Journal*, and chapters to *Early Music America's Performer's Guides to Early Music*. His designs for reproductions of Renaissance winds have been used by Günter Körber and Charles Collier.

Ian Woodfield received his bachelor's degree from Nottingham University and his master's and doctorate from King's College, University of London. He was Herschel Fellow at Bath University in 1976–77. In 1978 he was appointed to the music faculty of Queen's University Belfast, where he is now Director of the School of Music. His first book, *The Celebrated Quarrel Between Thomas Linley (Senior) and William Herschel: An Episode in the Musical Life of 18th-Century Bath*, was published by the University of Bath in 1977. He has also contributed articles and reviews to *Early Music* and the *Proceedings of the Royal Music Association*. His book *The Early History of the Viol* (published by Cambridge University Press in 1984) is now a classic on the subject. He delivered two lectures at the 1994 VdGSA Conclave. He has recently published two books: *Music of the Raj* (Oxford University Press, 2000) and *Opera and Drama in Eighteenth-Century London* (OUP, 2001).