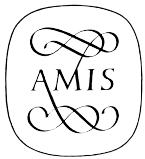
Journal of the American Musical Instrument Society

VOLUME XLIV • 2018



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"A Guittar to Be Played with a Bow, as Well as with the Fingers": Reconsidering a Puzzling Hybrid by Frederick Hintz

Panagiotis Poulopoulos

The latest research on the life and work of John Frederick Hintz (1711–1772) has substantially explored his dual career, initially as a furniture maker and member of the Moravian church and later as an important musical instrument manufacturer in Georgian London, providing extensive details of his extant guittars (English guitars)[1] and viols.[2] However, the discovery of three previously unnoticed advertisements with references to a kind of bowed guittar proves that in the early 1760s Hintz had also attempted to introduce a hybrid combining features of both plucked and bowed instruments. More significantly, the recent examination of an unusual instrument bearing Hintz's stamp, which in the past had been listed as "cither viol" or "sultana" and which until now had remained largely ignored by scholars, has shown that it is the only known surviving example of Hintz's bowed guittar mentioned in these advertisements.

References to the Invention and Development of a Bowed Guittar by Hintz

The earliest known references to a bowed guittar by Hintz are contained in two advertisements from 1760. That year the Edinburgh musi-

1. Throughout the text, the terms guittar or English guitar refer to a wire-strung plucked instrument commonly used in the British Isles during the second half of the eighteenth century, whereas the term guitar usually refers to the gut-strung Spanish guitar. For more details on the origins and development of the guittar see Panagiotis Poulopoulos, *The Guittar in the British Isles, 1750–1810* (PhD diss., University of Edinburgh, 2011). http://www.era.lib.ed.ac.uk/handle/1842/5776, accessed 21 October 2016.

2. For a comprehensive account of Hintz's biography and business activities, see Lanie Graf, "John Frederick Hintz, Eighteenth-Century Moravian Instrument Maker, and the Use of the Cittern in Moravian Worship," *Journal of Moravian History* 5 (2008), 7–39. For details on Hintz's instruments, see James Tyler, "English Guittar Makers in 18th-century Britain: A Directory," *FoMRHI Quarterly*, Issue 113 (2009), Comment 1876, 11–18, at 13; Peter Holman, *Life after Death: the Viola da Gamba in Britain from Purcell to Dolmetsch* (Woodbridge: Boydell & Brewer, 2010), 135–61; and Poulopoulos, *The Guittar in the British Isles*, 585–90.

cal instrument maker and dealer Neil Stewart offered for sale "guittars . . . particularly a parcel made by the famous Frederick Hintz, at five, six and seven guineas, bows of all sorts, bows made to any gentleman's taste," adding that:

> There is a commission coming by the first convoy, of the following instruments. Spinnets new and old, by different makers, which can be sold or lent out, a great assortment of guittars, guittars to play with a bow, whoever plays the violin may play them, mandolins, a new assortment of common and German flutes, by the best makers, musick and songs, a new book of Scots tunes for the guittar and common flute will be published next week.[3]

It seems that the convoy carrying the instruments arrived safely, for a couple of months later Stewart advertised:

> A LARGE ASSORTMENT OF GUITARS, From two guineas and a half to seven guineas. GUITARS to play with the Bow. SMALL GUITARS of the two sizes; the smallest may be managed by young ladies from seven to ten years old, and the other by ladies from ten and upwards. MANDOLINS, AND MANDOLINES, to be played in the same manner with the GUITAR, All made by the famous FREDERICK HINTZ.[4]

The above advertisements contain two details worth discussing. First, the phrase "guittars to play with a bow, whoever plays the violin may play them" suggests that the bowed guittars by Hintz may have been designed to appeal primarily to violin players. Second, the fact that such instruments were advertised in the Scottish capital as early as January 1760 suggests that they must already have been available in London at least some weeks or months before, thus placing their development by Hintz around the end of the 1750s.

Three years later, in 1763, Hintz himself likewise advertised "a Guittar to be played with a Bow, as well as with the Fingers," as well as "a new-invented Guitar with eight Strings more in the Bass,"[5] "a Guitar called

3. *Caledonian Mercury* (Edinburgh), 23 January 1760. In this and all following quotations throughout the text, original spelling and punctuation have been retained. For the reader's convenience, any quotations in languages other than English are translated freely in the main text, while original texts are included as footnotes.

4. *Caledonian Mercury* (Edinburgh), 26 March 1760.

5. This description may refer to a sort of arch-guittar with eight additional open bass stings, similar to arch-lutes. Interestingly, in an advertisement in the *Newcastle Courant* (Newcastle) of 7 January 1764 John Hawthorn, a watch-maker in Newcastle, announced the sale of guittars "all made by Mr FREDERICK HINTZ" stating that Hintz has "invented a new Guittar, having an Addition of eight Strings in the Bass, called the Arch-guittar, which Instrument was shewn to, and much admired by the Committee of Polite Arts in London."

the Tremulant,"[6] and "a De L'Amour Guittar, with a Lute Stop,"[7] all of which "were invented by him," adding that "Several uncommon Instruments are made and sold at his House, viz. the Trumpet-Marine, Dulcimer, Salitero, Viol de Gamba, Viol de l' Amour, Mandoline, German Harp, Lutes, Æolian harps, &c." (fig. 1).[8]

The Only Surviving Example of a Bowed Guitar by Hintz?

Until recently no instrument corresponding to the descriptions of a bowed guittar in the above advertisements had been identified. However, an unusual instrument bearing Hintz's stamp (fig. 2), in the Musikinstrumenten-Museum, Berlin (Inventory No. 5394), hereafter referred to as MIMB5394, has features which indicate that it is the only known surviving example of Hintz's bowed guittar.

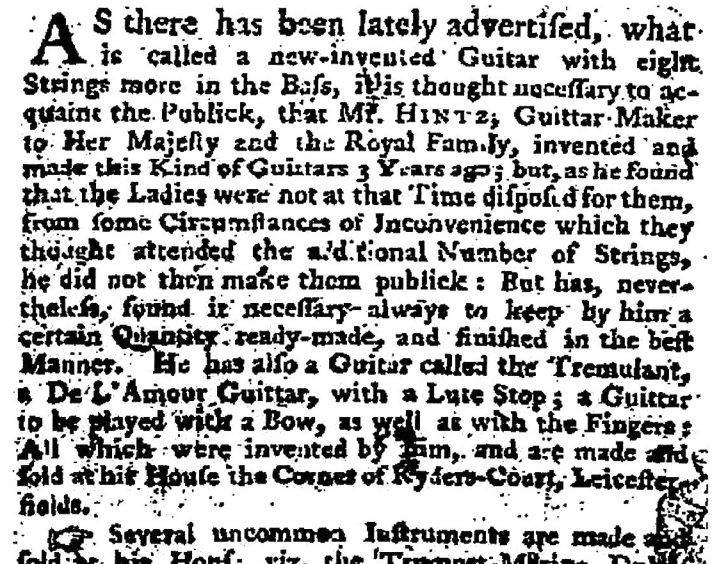
Unfortunately, there is little information regarding the provenance, previous ownership, use, and acquisition history of MIMB5394. The instrument, which is currently stored in non-playing condition, was purchased by the museum along with other instruments from Christie's by auction in 1983, being described in the auction catalog as "English cither viol by Frederick Hintz, London."[9] In a museum catalog that was

6. The description of the instrument as "Tremulant" may refer to a guittar equipped with a bridge, of which one side was not fixed but could freely vibrate on the soundboard, producing a snarling, buzzing tone similar to that of the trumpet marine. As will be shown later, Hintz was familiar with the trumpet marine, since he made and sold it at his shop.

7. The description of the instrument as "De L'Amour" may refer to a guittar equipped with additional sympathetic strings, like those on the viola d'amore or baryton, while the "Lute Stop" suggests some sort of muting device, such as a piece of felt or soft leather, attached near the bridge in order to dampen the unwanted resonance of the wire strings. Similar "lute" stops were commonly used on keyboard instruments, such as harpsichords or pianos, to imitate the mellow and less sustained sound of the gut-strung lute.

8. *St James's Chronicle or the British Evening Post* (London), 27–29 October 1763.

9. "302. AN INTERESTING ENGLISH CITHER VIOL *by Frederick Hintz, London,* stamped at the top of the back *F. Hintz,* of narrow festoon outline, the two-piece back of maple of medium horizontal curl, the ribs of similar curl, the table with inked purfling with circular soundhole with raised rim, the pegbox terminating in a square finial overlaid with tortoiseshell within an ivory frame, four double courses and three single courses of strings, *total length 37¾ in (95.9 cm), circa 1760* £400-600." This text, along with a photograph of the instrument, is included in Christie's auction catalog *Fine Musical instruments and Printed Music* (London), 6 April 1983, 13, lot 302.



AS there has been lately advertiſed, what is called a new-invented Guitar with eight Strings more in the Baſs, it is thought neceſſary to acquaint the Publick, that Mr. HINTZ, Guittar-Maker to Her Majeſty and the Royal Family, invented and made this Kind of Guittars 3 Years ago; but, as he found that the Ladies were not at that Time diſpoſed for them, from ſome Circumſtances of Inconvenience which they thought attended the additional Number of Strings, he did not then make them publick: But has, nevertheleſs, found it neceſſary always to keep by him a certain Quantity ready-made, and finiſhed in the beſt Manner. He has alſo a Guitar called the Tremulant, a De L'Amour Guittar, with a Lute Stop; a Guittar to be played with a Bow, as well as with the Fingers; All which were invented by him, and are made and ſold at his Houſe the Corner of Ryders-Court, Leiceſter-fields.

☞ Several uncommon Inſtruments are made and ſold at his Houſe, viz. the Trumpet-Marine, Dulcimer, Baliters, Viol de Gamba, Viol de l'Amour, Mandoline, German Harp, Lutes, Æolian Harps, &c.

FIGURE 1. The advertisement by Hintz referring to 'a Guittar to be played with a Bow, as well as with the Fingers' in *St James's Chronicle or the British Evening Post* of 27–29 October 1763 (image ©The British Library Board, reproduced with permission).

published a decade after its acquisition, MIMB5394 was similarly listed as "Sultana (Cither viol). Frederick Hintz. London, around 1760."[10] Apart from these two short catalog entries, only limited references to

10. "5394. Sultana (Cither viol). Frederick Hintz. London, um 1760." This description of the instrument, along with basic details and measurements, is included in Dagmar Droysen-Reber and Konstantin Restle, *Berliner Musikinstrumenten-Museum: Bestandskatalog der europäischen Musikinstrumente 1888–1993* (Berlin: Staatliches Institut für Musikforschung Preußischer Kulturbesitz, 1993), 294.

FIGURES 2a–c. (a) Front, (b) sides and (c) back views of the instrument by Hintz in the Musikinstrumenten-Museum, Berlin (Inventory No. 5394) (photograph by Heidi von Rüden © Musikinstrumenten-Museum Berlin, reproduced with permission).

MIMB5394 have appeared in the literature.[11] Furthermore, prior to its examination by the author, the instrument had not been sufficiently doc-

11. Brief references to the instrument are included in Panagiotis Poulopoulos, "The Influence of Germans in the Development of 'this favourite Instrument the Guittar' in England," *Soundboard: Quarterly Magazine of the Guitar Foundation of America* 38/4 (2012), 62–75, at 71, endnote 37; and in Panagiotis Poulopoulos and Rachael Durkin, " 'A very mistaken identification': The 'Sultana' or 'Cither viol' and its Links to the Bowed Psaltery, Viola d'Amore and Guittar," *Early Music* 44/2 (2016), 307–331, at 311, footnote 42.

umented and its original classification as "sultana" or "cither viol" had remained unchallenged.[12]

However, recent research on the history of the "sultana" or "cither viol" has shown that the features of MIMB5394 are quite different when compared to extant instruments commonly referred to as "sultanas" or "cither viols," such as those made by Thomas Perry of Dublin, John Kirk of Edinburgh, Joseph Ruddiman of Aberdeen, or other unknown makers.[13] This discovery brings forward several new questions relating to the origins and name of the instrument as well as its organological and musical characteristics.

Organological Overview of MIMB5394

MIMB5394 has several distinctive design and construction features which clearly set it apart from viols and guitars manufactured by Hintz (fig. 3), although it also shares similarities with both types of instruments.[14] The first striking features are the body size and outline. The body, at 474 mm on the front and 489 mm on the back, is considerably longer than Hintz's guittars (about 340 mm) and closer to that of his alto-size viols (about 440 mm). Additionally, the body has a festooned shape, with sloping shoulders at the top, a narrow waist in the middle, and a lobed, round extension at the bottom. A similar, though not identical, body outline is found on various surviving violas d'amore, viols, and barytons dating from the seventeenth and eighteenth centuries.

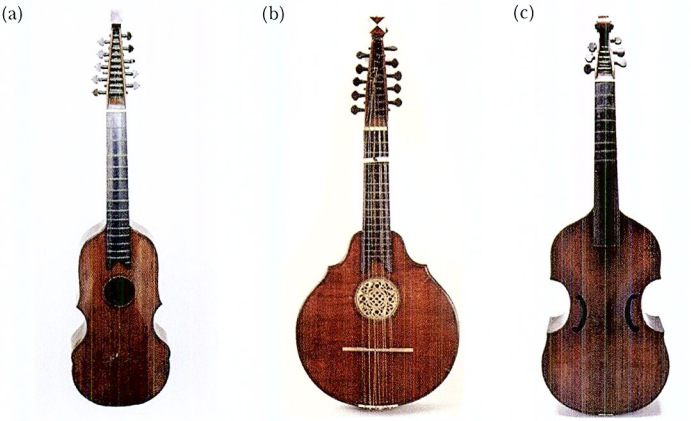
The second remarkable feature is the arched soundboard, made of two pieces of spruce (fig. 4). This feature is a direct link to bowed rather than plucked instruments, since, for example, guittars by Hintz or other makers typically have a flat soundboard.

The bridge is missing, though it can be safely assumed that its top was arched, following the curvature of the arched fingerboard and nut. The traces of the bridge position on the soundboard (fig. 5) comprise a

12. The instrument was examined by the author on 13 and 14 February 2014. The author is grateful to Annette Otterstedt, curator of stringed instruments, and Heidi von Rüden, conservator of stringed instruments at the Musikinstrumenten-Museum, Berlin, for help during the examination of the instrument and for useful remarks on its construction and possible use.

13. For further information on the history and development of the instrument until now known as "sultana" or "cither viol" see Poulopoulos and Durkin, " 'A very mistaken identification,' " 307–31.

14. The basic dimensions and construction materials of MIMB5394 are presented in the Appendix.



FIGURES 3a–c. (a) MIMB5394; (b) guittar, c. 1770, and (c) tenor viol dated 1764 (?) by Hintz in the Musical Instrument Museums Edinburgh (MIMEd), Edinburgh (Inventory Nos. 310 and 949 respectively) (left photograph by Heidi von Rüden © Musikinstrumenten-Museum Berlin, reproduced with permission; middle and right photographs © University of Edinburgh, reproduced with permission; note that the photographs are not in the same scale).

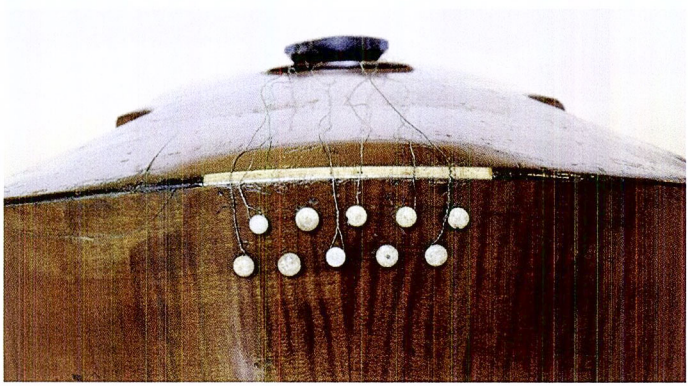


FIGURE 4. Detail of the arched soundboard of MIMB5394 (photograph by Heidi von Rüden © Musikinstrumenten-Museum Berlin, reproduced with permission).

(a)

(b)

FIGURES 5a–b. Detail showing the traces of the bridge position and playing marks on the soundboard of MIMB5394 (photographs by Heidi von Rüden © Musikinstrumenten-Museum Berlin, reproduced with permission).

round mark on the bass side and a square mark on the treble, pointing to two different bridge ends, one of which may have not been fixed on the soundboard.[15]

15. This may have been the same bridge design as on the "Tremulant" guittar mentioned in Hintz's 1763 announcement, presented earlier.

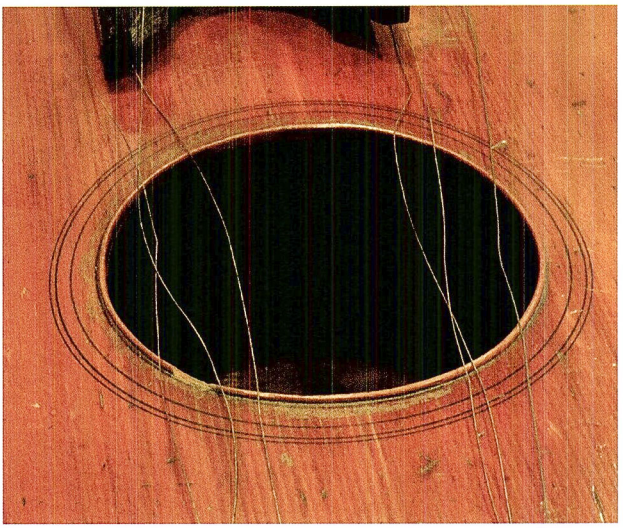
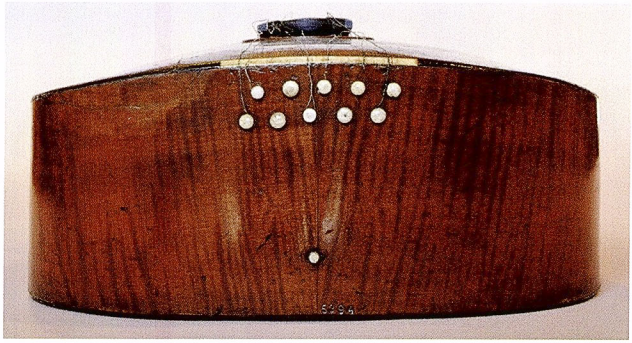


FIGURE 6. The soundhole and rose design of MIMB5394 (photograph by Heidi von Rüden © Musikinstrumenten-Museum Berlin, reproduced with permission).

Although the central rose is missing, the soundhole and rose design of MIMB5394 (fig. 6) are similar to those typically found on extant guittars by Hintz; judging from surviving specimens, the circular rose must have been made of gilt brass. In contrast, surviving viols by Hintz have C-shaped soundholes on the bass and trebles sides, but no central rose. Moreover, the purfling with a pair of inked lines on the edges of the soundboard and back, as well as around the soundhole, is a common feature of Hintz's guittars.

The flat back, a common feature on both viols and guittars, is made of two pieces of figured maple, which are off-matched rather than book-matched. The sides are made of six pieces of figured maple, with the top four joined together with two corner blocks. The presence, as well as the style and arrangement, of the thin soundboard protector, the ten endpins placed in two horizontal lines of five, and the tailbutton (presently missing its top) on the bottom of MIMB5394 (fig. 7), all made of ivory or bone, resemble closely those commonly found on guit-

(a)



(b)

FIGURES 7a–b: Details of the soundboard protector, endpins, and tailbutton made of ivory or bone on the bottom of MIMB5394. Note also the curvature of the arched soundboard (photographs by Heidi von Rüden © Musikinstrumenten-Museum Berlin, reproduced with permission).

tars by Hintz. In contrast, his viols always have a tailpiece for the attachment of the strings.[16]

The instrument's body, neck, and head are coated with an orange varnish, probably shellac. An examination of the coated surfaces under

16. This, of course, does not mean that a tailpiece found on or with a surviving Hintz viol is original. But there would certainly have been one, as opposed to some other kind of attachment for the strings. The author is thankful to the anonymous reviewers of this article for this remark.

ultraviolet light showed a uniform fluorescence, suggesting that the varnish is original. The instrument is stamped "F.HINTZ" on the top of the back below the neck heel (fig. 8), like many guittars by Hintz. Additionally, the museum number "5394" is stamped on the bottom below the tailbutton. The instrument bears no date of manufacture, which is typical for a large number of guittars by Hintz, especially those manufactured after the mid-1760s; surviving guittars and viols by Hintz made in the late 1750s or early 1760s are usually dated.

Regarding the internal construction, the barring consists of four supporting bars of triangular profile fixed on the soundboard and four bars on the back running over a central strip of wood. The end blocks at the neck-to-body join and the bottom of the body are similar to those found on Hintz guitars, while the soundboard and back have side lining with thin strips of wood. The details of the internal construction, as well as some repairs on the underside of the soundboard, were observed during the examination of the instrument with a dental mirror and with an endoscope through the soundhole (fig. 9).

The neck and head are carved out of a single piece of wood, probably beech. The neck has a D-shaped profile. The arched fingerboard is made of a single piece of palisander or rosewood with a compound radius of about 5″ (127 mm) and tapers towards the nut as, for example, on baroque violins (fig. 10). There are fifteen fixed frets made of thin brass bars, of which fourteen are full and one short; at present the third, seventh, and eight frets are lifted from the fingerboard, probably due to wood shrinkage. The fingerboard end has a pattern similar to that on guittars by Hintz. The scale length of MIMB5394, at 602 mm, is significantly longer than that of Hintz's guittars[17] and closer to his tenor viols.[18]

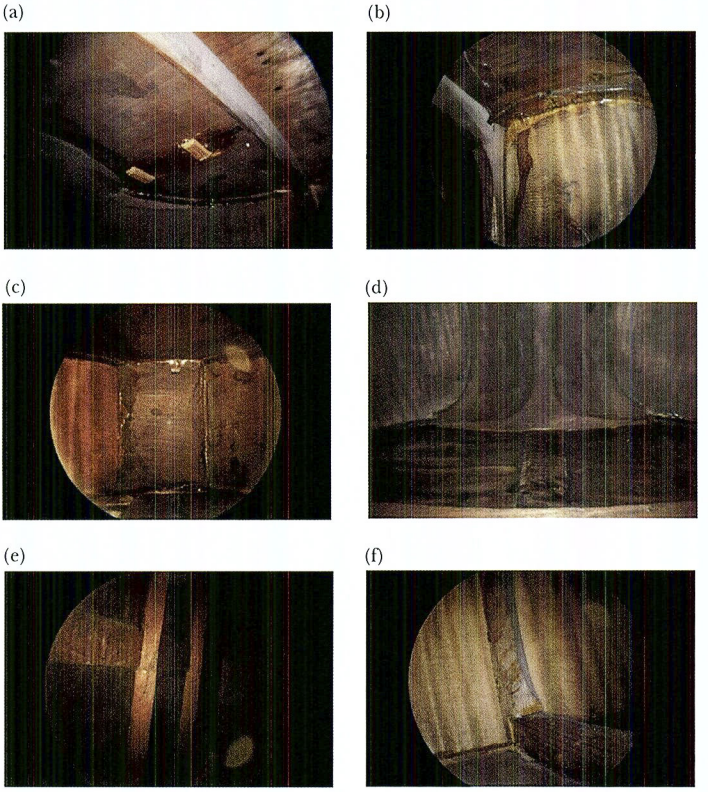
Apart from marks and scratches typical of wire strings on the endpins, soundboard, and tuning pegs, the presence of metal frets on the finger-

17. On fretted instruments, such as guittars, the scale length is the distance from nut to twelfth fret multiplied by two. On fretless instruments, like violins, one usually refers to the vibrating sting length, because the scale length is somewhat less definitive, since it can vary depending on where the bridge is exactly placed. The majority of surviving guittars by Hintz typically have a scale length of about 420–430 mm. There are, however, extant guittars by makers such as Gibson or Perry with a longer scale length of about 600 mm, normally tuned in G.

18. Thomas MacCracken, personal communication with the author, 1 May 2014. According to MacCracken, his tenor viol by Hintz has a vibrating string length of 604 mm, almost the same as MIMB5394. On the other hand, his treble viol by Hintz has a vibrating string length of 404 mm, which is more similar to Hintz's guittars.

FIGURE 8. The signature on the top of the back of MIMB5394 (photograph by Panagiotis Poulopoulos).

board alone indicates that MIMB5394 was originally strung in wire. Gut-strung instruments, such as viols, guitars, or lutes normally had tied frets of gut on the fingerboard, while wire-strung guittars required brass frets, simply because gut frets could be quickly worn out by the metal strings. Interestingly, some surviving viols by Hintz also seem to have been originally equipped with metal frets. For instance, an extant treble viol by Hintz had 12 brass frets inlaid in its fingerboard when it was bought by its previous owner, Howard Mayer Brown, at Sotheby's in 1976. Its present owner, Thomas MacCracken, reports that at that time the brass frets "were regarded as non-original and a new fingerboard was made for use with gut frets, but fortunately the original was kept," adding that when



FIGURES 9a–f. Details of the internal construction of MIMB5394 during its examination with an endoscope (photographs by Heidi von Rüden © Musikinstrumenten-Museum Berlin, reproduced with permission).

he acquired the instrument in 2004, he "took it to the same luthier who had restored it for Prof. Brown," together with a photograph of the viol by Hintz in MIMEd, Edinburgh (Inventory No. 949), shown above.[19] The luthier, William Monical of New York, a specialist in historical viols,

19. Thomas MacCracken, personal communication with the author, 14 May 2014; see also Holman, *Life after Death: the Viola da Gamba in Britain*, 148.

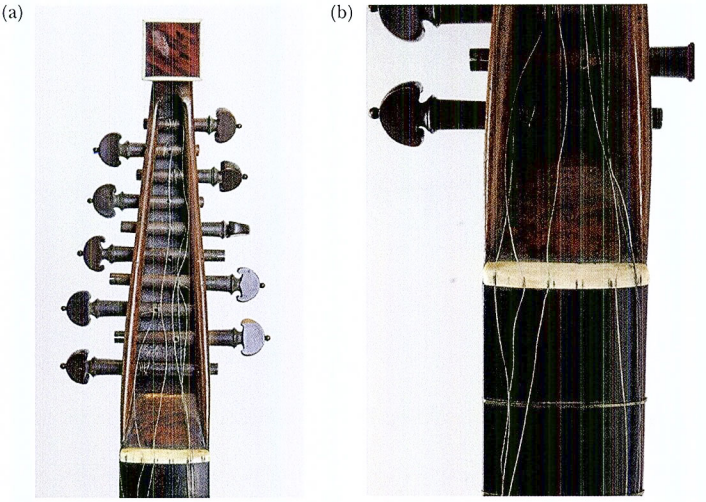
FIGURE 10. Detail of the fingerboard of MIMB5394 (photograph by Panagiotis Poulopoulos).

"felt that the characteristics of the lower edge and corners of both fingerboards were sufficiently similar that the metal-fretted one should be reclassified as probably original," thus it rendering uncertain "if this viol was originally intended to be strung with metal rather than gut strings and to what pitch."[20]

The head of MIMB5394 (fig. 11) has the form of a viol-style pegbox housing ten ebony (?) pegs, which may not be original, as they appear to have different designs. The pegbox terminates with a square finial decorated with tortoiseshell and ivory. This pegbox design is quite similar to extant guittars by Hintz and different from that of his viols, on which the pegbox ends with a scroll. The ivory or bone nut is original, bearing grooves that show the stringing arrangement with two single strings on the bass and four pairs on the treble, similar to that of most surviving guittars.

The instrument is in a relatively good state of preservation, though it has clearly been restored in the past. At some point the back must have been removed and reglued, since there are residues from adhesive material on its edges. Moreover, the back is sunk near the top under the heel, suggesting a strong tension on the wood at this point. In addition, several thin rectangular patches made of light wood on the underside of

20. Thomas MacCracken, personal communication with the author, 14 May 2014.



FIGURES 11a–b: Details of the pegbox and square finial on the head of MIMB5394. Note also the ivory or bone nut with grooves for two single strings on the bass and four pairs on the treble (photograph by Heidi von Rüden © Musikinstrumenten-Museum Berlin, reproduced with permission).

soundboard and back indicate the repair of cracks during restoration, while for the same purpose a thin wedge-shaped piece of wood has been attached on the bass side near the neck-to-body join. Furthermore, as mentioned above, the original bridge, soundhole rose, and tailbutton top are presently missing, and the pegs may not be original.

Hintz and the Market of Uncommon Instruments in Georgian London

In order to understand the motives and reasons behind the development of the bowed guittar, it would be useful first to investigate Hintz's multifaceted background. A former cabinet maker who would later make a thriving career as a manufacturer of musical instruments, Hintz constitutes a prime example of efficient professional adaptation in a competitive market. Belonging to a large group of skilled woodworking artisans who immigrated to England from the German-speaking regions

of central Europe around the middle of the eighteenth century, Hintz managed to become a successful entrepreneur in London, largely catering to an upper-class public of musical amateurs.[21]

Hintz's oeuvre, documented in many written and iconographical sources, is also confirmed by the numerous extant specimens bearing his name. Surprisingly, despite the variety of instruments Hintz offered at his shop, presented below, these consist mainly of guitars and viols.[22] Hintz was not only a prolific manufacturer and dealer of instruments, however, but also one who experimented with new instrument types. In the evolving consumerist society of Georgian England, the polite society was eager to embrace—and accordingly pay for—every kind of novelty and eccentricity, and musical instruments were no exception.[23] Especially during the 1760s and 1770s, the music sector witnessed a great expansion, associated with an increase in public concerts and benefitting from a craze for new, unconventional instruments.[24] Perhaps sensing this rising demand in the musical instrument trade, Hintz soon made a name as a producer of uncommon stringed instruments.

Hintz was the first maker to advertise the manufacture and sale of "all sorts of Guittars" in 1754, having established his workshop "At

21. Two other London-based instrument makers of German origin who had been originally trained as cabinet makers were John Christopher Zumpe (1726–1790) and Arnold Frederick Beck (active 1763–1798). Like Hintz, they both started their early instrument-making careers in London as guittar makers, abandoning however, the guittar during the late 1760s and focusing instead on the manufacture of square pianos. For more details, see Panagiotis Poulopoulos, "A Comparison of Two Surviving Guittars by Zumpe and New Details Concerning the Involvement of Square Piano Makers in the Guittar Trade," *The Galpin Society Journal* 64 (2011), 49–59, 180–83, at 49 and 54–57; see also Lance Whitehead and Jenny Nex, "The Insurance of Musical London and the Sun Fire Office, 1710–1779," *The Galpin Society Journal* 67 (2014), 181–216, at 207 and 211.

22. So far thirty-eight extant guittars by Hintz have been identified by the author, of which twenty-two are housed in public collections. The other sixteen guittars reported are in private ownership and therefore their number cannot be easily confirmed. The information for some of these guittars comes from old auction or exhibition catalogs; these instruments possibly changed hands several times, and consequently may have been duplicated in the author's list. In addition, seven viols by Hintz bearing dates from 1760 to 1764, including a bass, four tenors, and two trebles, are known to have survived, according to information presented on the website of the Viola da Gamba Society of America (http://vdgsa.org/pgs/viols/Biographies_of_English_Makers_2013.pdf, accessed 20 October 2016). The author is grateful to Lanie Graf, Graham Wells, Peter Holman, Thomas MacCracken, and John Pringle for exchanging valuable information on surviving instruments by Hintz.

23. See Holman, *Life after Death: the Viola da Gamba in Britain*, 162–63.

24. See Whitehead and Nex, "The Insurance of Musical London," 185.

the Golden Guittar, in Little Newport-Street, facing Newport-Market, Leicester-Fields,"[25] not far from the fashionable West End. In a 1764 advertisement John Hawthorn, who sold guittars by Hintz, maintained that Hintz "has been the original Guittar-maker for this 12 years in England,"[26] suggesting that Hintz had started making guittars as early as 1752. Like other instrument makers, Hintz, who claimed to be "the Original Maker of that Instrument call'd The Guittar or Zittern,"[27] also became active in teaching, composing, and publishing music for the guittar, which apparently helped him expand his business opportunities.[28]

In the late 1750s and early 1760s Hintz was allegedly the best guittar maker in London, his major competitors being his compatriots Reinerus Liessem and Michael Rauche.[29] Hintz's reputation as guittar maker reached a peak in 1763, when he was listed in Mortimer's *Universal Director* as "Hintz, Frederick. Guittar-maker to Her Majesty and the Royal Family: makes Guittars, Mandolins, Viols de l'Amour, Viols de Gamba, Dulcimers, Solitaires, Lutes, Harps, Cymbals, the Trumpet-marine and the Aeolian Harp."[30] Nevertheless, Hintz's profitable connections to the English royalty and aristocracy must have been established much earlier, since in 1759 Neil Stewart, mentioned above, announced that he "has lately arrived from London, and brought down from the best makers . . . guitars of all sorts, particularly a parcel made by the famous Frederick Hintz, who was the first maker of that instrument in London, and is at present guitar maker for the Royal Family, and most of the nobility in England."[31]

25. *Whitehall Evening Post or London Intelligencer* (London), 1–3 August 1754. For more details see Panagiotis Poulopoulos, " 'A complete Accompanyment to the Female Voice': The Guittar and its Role in the Culture of Georgian England," *Phoibos: Zeitschrift für Zupfmusik* 5/1, Issue "Gender" (2012), 97–120, at 104–05. A brief summary on Hintz's role in the development of the guittar is also included in Jürgen Kloss, "The 'Guittar' in Britain, 1753–1800" (first published 2012). http://www.justanothertune.com/html/guittarinbritain.html, accessed 20 October 2016), 9–11.

26. *Newcastle Courant* (Newcastle), 7 January 1764.

27. *Public Advertiser* (London), 17 November 1755.

28. For more details see Panagiotis Poulopoulos, " 'Wha sweetly tune the Scottish lyre': A Guittar by Rauche & Hoffmann and its Connection to Robert Burns," *The Galpin Society Journal* 67 (2014), 40–44 and 143–70, at 152–56.

29. See Poulopoulos, "The Influence of Germans in the Development of 'this favourite Instrument the Guittar' in England," 62–64.

30. Quoted in Lyndesay Graham Langwill, "Two Rare Eighteenth-Century London Directories," *Music & Letters* 30/1 (1949), 37–43, at 42.

31. *Caledonian Mercury* (Edinburgh), 14 November 1759.

Further evidence that Hintz's business was flourishing in the mid-to-late 1760s is his purchase of three insurance policies from the Sun Fire Office between 1764 and 1769.[32] Around 1764–65 Hintz was also listed in Leopold Mozart's travel memoirs from London as "Mr: Hinz Cytarren-macher. Instruments Shop Co[r]ner of the Court near little Newport Str."[33] Moreover, a guittar identical to those made by Hintz is depicted in the hands of young Princess Louisa in a painting dated 1767, confirming Hintz's fruitful relationship with the royal court.[34]

In an announcement written shortly after his death in 1772 Hintz was proclaimed as "one of the best Guittar-makers in Europe,"[35] another hint that the main focus of his production was guittars. However, the impressive number and range of instruments listed in his stock, which included "Guittars, Lutes, Violins, Bass-Viols, Dulcimers, Tenors, Harps, Spinnets, Clarichords, Mandolins, Harpsichords, Trumpet Marcens, Forte Pianos, Eolian Harps, German Harps, German Flutes, Viol de Gambo's, Psalteries, &c.,"[36] suggest that Hintz owned a workshop and showroom large enough to provide adequate working space for his personnel and for the storage of materials, tools, equipment, and

32. Hintz, who was registered as a "musical instrument maker," bought policies in 1764 (£500), 1765 (£1,500) and 1769 (£600). See Whitehead and Nex, "The Insurance of Musical London," 184 and 209.

33. Leopold Mozart's travel notebook for 23 April 1764 to 4 September 1765, as quoted in Lanie Graf, "John Frederick Hintz, Eighteenth-Century Moravian Instrument Maker," unpublished paper given at the 36th Annual Meeting of the American Musical Instrument Society, Yale University Collection of Musical Instruments, New Haven, Connecticut, 30 June 2007, 1–15, at 13. The author is thankful to Lanie Graf for providing him with a copy of her paper.

34. Francis Cotes, *Princess Louisa and Princess Caroline*, 1767, owned by H. M. the Queen, Buckingham Palace, London. This painting has been reproduced in Jane Roberts (ed.), *George III and Queen Charlotte: Patronage, Collecting and Court Taste* (London: Royal Collection Enterprises, 2004), 29, plate 6.

35. See Hill Family, Archival Material and Biographical Notes on English Violin Makers [in 2 volumes: WA 1992.643.1 and WA 1992.643.2], Ashmolean Museum, Oxford. The 1772 announcement, included in WA 1992.643.1, p.163, regards the sale of Hintz's stock after his death and contains a list of plucked and bowed instruments made and sold by Hintz. The author is obliged to Jon Whiteley, Honorary Curator at the Ashmolean Museum, for allowing the examination of this document.

36. See Hill Family, Archival Material and Biographical Notes on English Violin Makers, WA 1992.643.1, 163. A similar advertisement announcing the sale by auction of Hintz's stock on 13 August had appeared in *Morning Chronicle* (London) of 31 July 1772 and later in the same and other newspapers. See Holman, *Life after Death: the Viola da Gamba in Britain*, 139, and Kloss, 'The "Guittar" in Britain, 1753–1800', 11.

finished instruments,[37] although the making of some instrument parts or even whole instruments was possibly farmed out.[38]

From this perspective, Hintz can be considered as the equivalent of Joachim Tielke of Hamburg (1641–1719) who, like Hintz, produced various elaborately decorated plucked and bowed stringed instruments, such as guitars, lutes, citterns, violins, violas d'amore, viols, and barytons, presumably for affluent customers, during the late seventeenth and early eighteenth centuries.[39] From the early 1760s onwards Hintz must have employed several specialised craftsmen for the construction of stringed instruments,[40] while he probably had an administrative role, organizing and supervising the various stages of production.[41] Considering the op-

37. An idea of how Hintz's workshop may have been set up and operated can be obtained by comparing it to the guittar-producing workshops of Charles Pinto and Christian Claus(s), details of which are presented in Jennifer Susan Nex, *The Business of Musical-Instrument Making in Early Industrial London* (PhD diss., London: Goldsmiths College, 2013), 187–88 and 345–92. For Pinto, see also Whitehead and Nex, "The Insurance of Musical London," 197.

38. This applies, for instance, to the bowed instruments, especially since the treble and tenor viols by Hintz are of a completely different design and appearance from one another, indicating that they were made by different people. The author is thankful to the anonymous reviewers of this article for this observation.

39. The most complete inventory of instruments produced by Tielke has been presented in Friedemann and Barbara Hellwig, *Joachim Tielke: Kunstvolle Musikisntrumente des Barock* (Berlin and Munich: Deutscher Kuntsverlag, 2011), 107–391. That a large number of instruments by Tielke have survived (169 are listed in the book by Hellwig) can be credited to their spectacular and expensive decoration with ivory, tortoiseshell, mother-of-pearl, and fine woods. In comparison, most instruments by Hintz are relatively plain and may have thus been easily discarded once their fashion was over.

40. Around 1740 four journeymen joiners and one apprentice were living with Hintz and his family in his house in Herrnhaag, as mentioned in Graf, "John Frederick Hintz, Eighteenth-Century Moravian Instrument Maker, and the Use of the Cittern in Moravian Worship," 12. It can be assumed that in his London workshop Hintz employed an equal, if not larger, number of workers, especially in the 1760s, when his business had expanded considerably.

41. Tielke, active several generations before Hintz and in a different country, was a CEO rather than a craftsman, whereas Hintz was a highly skilled craftsman who gradually became a CEO, due to the expansion of his business. This was a typical career path for viol makers in London several generations earlier, and perhaps a more relevant comparison would be to the Meares family. Richard Meares Sr. just made viols (from ca. 1660 to 1700), but Richard Jr. branched out into other kinds of instruments (from ca. 1700 to 1725; according to a trade card of ca. 1718, "all Sorts of Harps, Lutes, Gittars, Violins, Base Viollins, Base Viols, Tenor Violins, Viols d'amour, Trumpet-marines, and all other sorts of Musical Instruments") and retailing, not to mention quite extensive music publishing. Other viol makers of his father's time similarly moved from the status of subcontractor to master craftsman to merchant without waiting for a second generation to take over, for example Thomas Cole, whose late labels

erational schemes of other contemporary instrument manufacturers, Hintz must have been at the head of a pyramidal business arrangement, designing new models, purchasing wood and other raw materials, undertaking the financial control, making contacts with customers, and overseeing his staff to ensure that his instruments achieved and maintained a fine, uniform manufacturing standard.[42] It is notable, for example, that the sale by auction of Hintz's stock, which had been planned for 13 August 1772, had been "unavoidably postponed till Thursday the 20th instant, on account of some of the said instruments being not quite finished."[43] This indicates that Hintz's associates wanted to finish the instruments before the auction in an attempt to facilitate their easier sale, while simultaneously raising their value.

That Hintz found enough time to teach, compose, and publish music for the guittar[44] is another proof that he must have relied on several assistants, while he kept himself mostly occupied with promoting his instruments and securing orders from new clients through teaching and advertising. Furthermore, although Hintz is known to have built keyboard instruments occasionally while living in Moravian communities,[45] the presence of not just one but four kinds of keyboard instruments ("Spinnets," "Clarichords," "Harpsichords," and "Forte Pianos") as well as wind instruments ("German Flutes") in his stock, mentioned above, implies that he was most likely buying these instruments from subcontractors and then selling them from his shop as a retailer.

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describe him as someone "who selleth all sorts of Musical Instruments." The author is grateful to the anonymous reviewers of this article for this information.

42. For a thorough analysis of entrepreneurship models in stringed instrument-making in pre-industrial Europe, see Herbert Heyde, "Entrepreneurship in Pre-Industrial Instrument Making," 25–63, at 31–34 and 41–54, in Boje E. Hans Schmuhl and Monika Lustig (eds.), *Musikalische Aufführungspraxis in nationalen Dialogen des 16. Jahrhunderts: Teil 2: Musikinstrumentenbau-Zentren. 26. Musikinstrumentenbau-Symposium Michaelstein, 6. bis 8. Mai 2005* (Augsburg: Wissner, 2007). The role of entrepreneurship based on division of labor in manufacture of luxury products, which include musical instruments, has been also discussed in Michael Snodin and John Styles, *Design and the Decorative Arts: Georgian Britain 1714–1837* (London: V&A Publications, 2004), 142–44.

43. See Hill Family, Archival Material and Biographical Notes on English Violin Makers, WA 1992.643.1, 163.

44. See Holman, *Life after Death: the Viola da Gamba in Britain*, 139–40.

45. See Lindsay Boynton, "The Moravian Brotherhood and the Migration of Furniture Makers in the Eighteenth Century," *Journal of the Furniture History Society* 29 (1993), 45–58, at 52; see also Graf, "John Frederick Hintz, Eighteenth-Century Moravian Instrument Maker, and the Use of the Cittern in Moravian Worship," 11, and Holman, *Life after Death: the Viola da Gamba in Britain*, 142.

In the early 1760s Hintz proposed to "send to any Lady or Gentleman in Scotland or Ireland, that will favour him with their commands, EXTRAORDINARY FINE GUITTARS, both in workmanship and sound" instructing potential clients to "direct at his musical warehouse, the corner of Ryder's court, Leicester-Fields"[46]; the term "musical warehouse" used in this and other advertisements by Hintz clearly suggests that he was as much a large-scale seller as manufacturer of various instruments. In addition, surviving trade cards by Hintz[47] (fig. 12) depict many brass and woodwind instruments, such as horns, trumpets, recorders, oboes, and bassoons, along the various plucked and bowed instruments which Hintz must have sold at his shop, even though he never claimed to have made them.[48]

Hintz even offered "that new instrument called the Forte Piano"[49] in 1766, the year the first square pianos were produced by Zumpe, showing that he was certainly aware of the latest developments and fashions in musical instruments. Besides, Hintz was also familiar with gut-strung guitars, since he advertised "Spanish Guittars,"[50] although he may have not produced them himself. However, it seems that he chose to apply his idea of bowing on the wire-strung guittar rather than on the gut-strung guitar, possibly in order to exploit the marketing potential of the first instrument, whose popularity in Britain had grown considerably during the 1760s.[51]

Possible Origins of Hintz's Bowed Guittar

Having examined Hintz's role in the design and promotion of uncommon instruments, it is interesting to indicate and analyze the possible influences of his bowed guittar. As mentioned above, by the late 1750s the guittar was already established in London's musical circles and its fame was rapidly expanding in the provinces, albeit sporadically fac-

46. *Caledonian Mercury* (Edinburgh), 23 and 30 August 1762.

47. Reproductions of two similar trade cards by Hintz, held by the Ashmolean Museum, Oxford, are included in Poulopoulos, "The Influence of Germans in the Development of 'this favourite Instrument the Guittar' in England," 64, and in Poulopoulos, " 'Wha sweetly tune the Scottish lyre'," 151.

48. The only surviving wind instrument by Hintz is a recorder mentioned in Graf, "John Frederick Hintz, Eighteenth-Century Moravian Instrument Maker," 9.

49. *St James's Chronicle or the British Evening Post* (London), 5–8 July 1766.

50. *Public Advertiser* (London), 17 March 1766 and *St James's Chronicle or the British Evening Post* (London), 5–8 July 1766.

51. See Poulopoulos, " 'A complete Accompanyment to the Female Voice'," 105–12.

FIGURE 12. Trade card of Frederick Hintz, showing the various instruments he offered for sale, in the British Museum, London (Inventory No. D,2.2607) (Image © The Trustees of the British Museum, reproduced with permission).

ing criticism due to its musical limitations. What led Hintz to experiment with a bowed guittar at a time when the normal guittar was already selling quite well?

One reason may lie in the contemporary efforts for improvements in sound, which reflected a parallel obsession with timbre and sonority. The main issue with plucked instruments such as the lute, guitar, or cittern, as well as with keyboard instruments such as the harpsichord or spinet, was that they may not have produced a "singing" tone. In comparison, wind and bowed instruments could produce long, sustained notes with a broad dynamic range, capable of imitating the human voice, considered the most expressive instrument. It is no coincidence that instruments such as the glass harmonica or the Aeolian harp, which produced ethereal sonorities reminiscent of the voice, became extremely popular in the mid-to-late eighteenth century. It has been stated that with such experimental instruments, many eighteenth-century inventors tried to solve "an age-old musical problem," which

was "the creation of an instrument that combined the dynamic nuance and sustaining power available to bowed-string instruments with the convenience of a keyboard instrument."[52]

This sound ideal was discussed in several contemporary treatises. For instance, Hubert Le Blanc, writing twenty years before the earliest reference to Hintz's bowed guittars, stated that "the Lute and the Theorbo, with their plucking, also have the inherent defect of not being expressive because they lack a bow. Their incomparable Harmony gives out everything in resonance and leaves nothing at all to the voice."[53] Therefore, by being able to use a bow on a primarily plucked instrument one could theoretically have a versatile tool that could provide both the melodic, "vocal" tone of bowed instruments and the harmonic, percussive tone of plucked instruments, depending on the current musical requirements.

An instrument that fulfilled these desires, and which may have inspired Hintz's bowed guittar, is the lyra viol. Being essentially a small-sized bass viol that enjoyed a great popularity in England during the seventeenth century, the lyra viol developed a distinctive repertoire notated in tablature, like the lute.[54] In musical terms, the lyra viol was "the connecting link between two aesthetic ideals of instrumental sound and function," since it could offer "the polyphonic textures and

52. Emily I. Dolan, "E. T. A. Hoffmann and the Ethereal Technologies of 'Nature Music'," *Eighteenth-Century Music* 5/1 (2008), 7–25, at 11–15. The unique acoustical and musical properties of the glass harmonica, the epitome of such experiments, are also discussed in Rebecca Wolf, "The Sound of Glass: Transparency and Danger," in Mary Helen Dupree and Sean B. Franzel (eds.), *Performing Knowledge, 1750–1850* (Berlin and Boston: De Gruyter, 2015), 113–36.

53. See Barbara Garvey Jackson, "Hubert Le Blanc's Défense de la basse de viole," (translation, commentary and index in three parts) *Journal of the Viola da Gamba Society of America* 10 (1973), 11–28, 69–80; 11 (1974), 17–58; and 12 (1975), 14–36. The above comments about the lute and theorbo are included in Volume 11 (1974), at 34. For the texts in the primary source, see also the 1975 facsimile edition of Le Blanc's *Defense de la basse de viole* (Geneva: Minkoff, 1975).

54. An instrument often described in the literature as lyra viol survives in the Ashmolean Museum, Oxford (Hill Collection No. 5). This instrument, built by John Rose and dated 1598, is presented in John Pringle, "John Rose, the founder of English Viol Making," *Early Music* 6/4 (1978), 501–11, at 507–08, as well as in John Milnes (ed.), *Musical Instruments in the Ashmolean Museum: The Complete Collection* (Berkhamstead: Oxford Musical Instrument Publishing, 2011), 62–69, 78–79. However, it is a misconception to think there was a specific instrument called the lyra viol, much less that any extant instrument can be unambiguously identified as such. Rather, one could play "lyra way" on any size viol. Moreover, only some lyra viols had sympathetic strings, and unlike the baryton, they were never plucked by the player. The author is thankful to the anonymous reviewers of this article for this information.

self-accompaniment capabilities" of the harpsichord and lute, while, at the same time, being able to provide "a rich singing line" typically associated with the violin and the solo voice.[55]

Therefore, the lyra viol could be effectively used as an instrument for solo pieces or vocal accompaniment as well as for ensemble works, undertaking harmonic and melodic roles interchangeably. Because of its relatively flat bridge and low action, with the strings being fitted close to the fingerboard, the lyra viol was able to play chordal music, taking particular advantage of the great number of tunings that were devised for it.[56]

It has been suggested that the earliest variant tunings of the lyra viol "were probably the result of composers' attempts to overcome the technical difficulties inherent in playing a polyphonic style of music on a bowed stringed instrument."[57] In contrast to plucking with fingers, where one can "choose various combinations of strings at will," bowing restricts a player "to produce harmonic combinations on adjacent strings only."[58] For this reason "composers tried to devise tunings which would offer the crucial pitches in close proximity on adjacent strings," while "the availability of certain notes as open-string pitches was also an important consideration."[59]

More importantly, the lyra viol could be played with a bow in the traditional manner but could also be plucked being held across the lap like a lute. Although dated a century and a half before Hintz's bowed guittar, the painting *Garden Party* (*Fête Champêtre*) by David Vinckboons, ca. 1610, in the Rijksmuseum, Amsterdam (Inventory No. SK-A-2109) (fig. 13), depicts two musicians: a man playing the lute and a woman next to him playing a small fretted viol-shaped instrument being held on her lap and plucked like a lute.[60]

55. See Frank Traficante, "Lyra viol," in *Grove Music Online. Oxford Music Online. Oxford University Press.* http://www.oxfordmusiconline.com/subscriber/article/grove/music/17260, accessed 17 October 2016.

56. See Eric Crouch, *The English Solo Lyra Viol: A 21st Century Perspective on a 17th Century Musical Instrument* (MA Dissertation, Open University, 2012), 16–30. See also Rachael Durkin, " 'A Barretone, an Instrumentt of Musicke': its History, Influences and Development pre-1750," *The Galpin Society Journal* 67 (2014), 85–105, at 95–97.

57. See Frank Traficante, "Lyra Viol Tunings: 'All Ways have been Tryed to do It'," *Acta Musicologica* 42 (1970), 183–205 and 256, at 192.

58. Ibid.

59. Ibid.

60. The author is thankful to Rachael Durkin for drawing his attention to this painting.

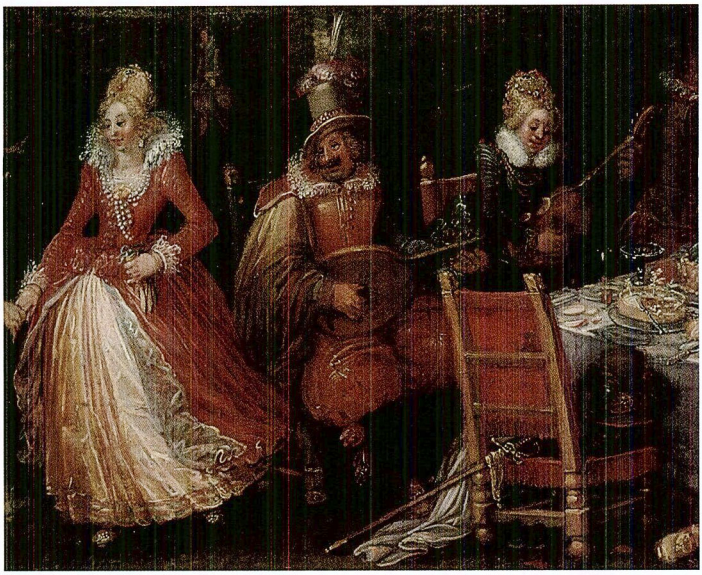

FIGURE 13. Detail of the painting *Garden Party (Fête Champêtre)* by David Vinckboons, c. 1610, in the Rijksmuseum, Amsterdam (Inventory No. SK-A-2109) (Image © Rijksmuseum, reproduced with permission).

Although the details of the instruments are not clear, the fact that combinations of gut- and wire-strung instruments, such as lute with cittern, were quite common in seventeenth-century "consorts" may indicate that the viol-shaped instrument had wire strings. This in turn suggests that the instrument most likely had metal frets, thus being a viol-cittern hybrid which may have had a melodic role in this duet. The viol-like features of the instrument indicate that it could have been plucked or bowed at pleasure, being in this respect quite similar to Hintz's bowed guittar.[61]

61. Although the body shape of the depicted instrument resembles a viol, the instrument seems to have no tailpiece. Additionally, it has frets all along its neck and a large, centrally located, circular soundhole (rather than Fs or Cs), as well as four pegs on the bass side of the pegbox, implying a total of at least seven strings, which no viol ever had ca. 1610. I am thankful to the anonymous reviewers of this article for these observations.

Moreover, the fact that the musicians are playing outdoors may be another hint to the instrument's wire strings. Despite its small size, the wire-strung cittern could produce a resonant and projecting sound due to its metal strings, thus making it ideal for open-air performances. The sound of wire strings was extremely popular in the seventeenth and eighteenth centuries; for instance, the sound of the viola d'amore, which in its early days was strung entirely in wire, was often described in contemporary sources as sweet or agreeable, particularly when heard outdoors from a distance.[62] This preference for the sound of wire strings is further evidenced by the invention of various wire-strung plucked or bowed instruments, such as the stump, polifant, orpharion, bandora, viola d'amore, and baryton, which appeared in the late seventeenth and early eighteenth centuries.[63]

Performance Aspects and Musical Role of the Bowed Guittar by Hintz

Taking into account the information and arguments presented so far, it is clear that MIMB5394 is a hybrid combining features of the viol and the guittar, two instruments with which Hintz was quite familiar. Although the neck angle and the curvature of the soundboard and fingerboard are not as great as on bowed instruments, they are sufficient to permit playing with a bow, as well as plucking or strumming the strings. Besides, another obvious feature to enable easier bowing is the deeply curved waist, although the neck and fretted fingerboard of the instrument resemble that of a guittar, which was typically plucked.

Additionally, the existence of a tailbutton (whose top is presently missing) strongly suggests that MIMB5394 could be played in a horizontal or slightly diagonal position like a guittar. Commonly found on plucked instruments, a tailbutton allows a performer to attach a band or strap in order to wear the instrument around the shoulders, thus achieving a firm and balanced grip and better support especially when standing, but also in a seated position. This practice is advocated in Robert Bremner's *Instructions for the Guitar*, one of the earliest guittar tutors, which includes detailed guidelines on holding and playing the instrument:

62. See, for example, Rachael Durkin, "The Viola d'Amore—its Heritage Reconsidered," *The Galpin Society Journal* 66 (2013), 139–147, at 144–45. For a comprehensive account of the development of the viola d'amore, see Rachael Durkin, *The History and Development of the Viola d'Amore* (PhD diss., University of Edinburgh, 2014).

63. For more details on these instruments see Durkin, " 'A Barretone, an Instrumentt of Musicke,' " 88–95.

> The manner of holding the Guitar . . . The best Way to hold it with Ease in this Position, is to sling it over the left Shoulder, with a Ribband fixed to both Ends of the Instrument, so that the Hands, particularly the Left-hand, may be free to move up and down without Interruption; the Necessity of which will be found in the Course of Practice.[64]

The soundboard of MIMB5394 has several scratches between the bridge and the rose, although it shows neither wear on the treble side from the little finger nor sharp dents from fingernails, typical playing marks found on many surviving guittars. On the other hand, there are presently no traces or residues of resin from a bow, which would indicate that MIMB5394 was bowed rather than plucked, although it is possible that these may have been removed during the restoration and cleaning of the instrument.

The bowed guittar may have been designed as a counterpart of the guittar in the same manner that the lyra viol was for the lute.[65] Thus, the wire-strung MIMB5394 was presumably tuned to an open major chord, like the guittar, and may have been played in two ways: either plucked, being held horizontally like a guittar, or bowed, being held vertically like a viol. The body length and the deep ribs of MIMB5394 imply an instrument suitable to be played in the manner of a treble viol, either held between the knees or balanced upon the lap, rather than on the chest or under the chin in the fashion of a violin. Heavy wear to the varnish on the lower part of the bass and treble sides of MIMB5394 suggests contact with the player's body rather than with the face.

The instrument may have been conceived by Hintz initially as an accompaniment for singing, perhaps in a religious context, given Hintz's association with the Moravian Church. Nevertheless, the curvature of the bridge and fingerboard of MIMB5394 allowed not only the playing of chords but also of double stops and single notes. Given that most surviving music for guittar is primarily melodic, the bowed guittar could potentially play from available guittar scores with the capability of adding occasional chordal embellishments when required, thus performing a dual role as a solo or accompaniment instrument. Still, it remains unclear how it was strung and tuned, how it was actually held and played, and what sort of music it was designed for.

64. Robert Bremner, *Instructions for the Guitar* (Edinburgh: R. Bremner, 1758), 1.

65. However, early references to lyra viols describe them as resulting from the addition of metal sympathetic strings to a viol (having bowed strings of gut), with no evidence that plucking was in any way involved. The author is thankful to the anonymous reviewers of this article for this comment.

Plucked-Bowed Hybrids after Hintz: The "Viole d'Orphee" and the Arpeggione

That no other references to the bowed guittar by Hintz after 1763 are presently known suggests that the instrument may have not been commercially successful, and quickly disappeared, even though guittars remained in use until the end of the eighteenth century. However, Hintz was not the only person experimenting with instruments that combined features of guittars and viols. For instance, an instrument called "viole d'Orphée," being essentially a five-course wire-strung fretless viola da gamba, was developed in France in the early 1770s.[66] Interestingly, its inventor, Michel Corrette, thought that the "viole d'Orphée" was linked to other "Harmonious instruments such as clavecins, organs, harps, guitars, mandolins, violas, citterns," pointing out that the instrument is "most melodious, most appealing, most analogous to the human voice,"[67] possibly due to the resonant sound of the bowed wire strings.

In his method, Corette devoted a detailed section on the stringing of the "viole d'Orphée," remarking that the wire stings, which were attached to steel nails under the tailpiece, "can last without breaking for two or three years," while refuting that they "can cut the hairs of the bow" as was commonly believed.[68] The instrument, of which no example is known to have survived, seems to have been an attempt to "recycle" redundant violas da gamba by stringing them in wire (thus complying to the late-eighteenth-century fascination with metal strings) and tuning them in fifths, like a violoncello, but with an extended top range (C to e′).[69]

66. The "viole d'Orphée" was first described in Michel Corrette, *Méthodes pour apprendre à jouer de la contre-basse à 3, à 4, et à 5 cordes, de la quinte ou alto et de la viole d'Orphée* (Paris, 1773). For more details see Carol Reglin Farrar, *Seven String Instrument Treatises of Michel Corrette: Translation with Commentary* (PhD diss., North Texas State University, 1978), 282–83 and 314–18. For the texts in the primary source, see also the 1977 facsimile edition of Michel Corrette's *Méthodes* (Geneva: Minkoff, 1977).

67. Quoted in Farrar, *Seven String Instrument Treatises of Michel Corrette*, 282–83.

68. Quoted in Farrar, *Seven String Instrument Treatises of Michel Corrette*, 316–17. The author is thankful to Rachael Durkin and Paul Sparks for their useful comments on the characteristics of the "viole d'Orphée."

69. For more details on the "recycling" of bowed instruments of the viol family see Panagiotis Poulopoulos, *New Voices in Old Bodies: A Study of "Recycled" Musical Instruments with a Focus on the Hahn Collection in the Deutsches Museum* (Munich: Deutsches Museum, 2016), 84–85.

The idea of combining plucked and bowed instruments continued to attract instrument makers and musicians alike well into the nineteenth century. Perhaps the best-known of these experiments is the instrument commonly known as the arpeggione, introduced in the early 1820s, more than half a century after the last known reference to Hintz's bowed guittar. The instrument is mostly remembered today because of the sonata for arpeggione and piano (D.821) written in 1824 by Franz Schubert (1797–1828) for the guitarist and cellist Vincenz Schuster (active 1810–25) who, along with Heinrich August Birnbach (1782–1848), was the most renowned arpeggione virtuoso.[70]

The arpeggione originated in two bowed gut-strung guitars that appeared simultaneously in the spring of 1823. The first was the "Guitarre d'Amour" (also "Bogenguitarre" or "Violoncellguitarre"), devised by the prominent guitar and violin maker Johann Georg Stauffer (1778–1853) in Vienna and first advertised in March 1823.[71] The second was the "Sentiment" or "Bogenguitarre," developed the same year by Peter Teufelsdorfer (1784–1845) in Budapest.[72] It has been proposed that Johann Anton Ertl (1776–1828), a violin maker in Vienna, "might also have contributed to the arpeggione's invention," and alternatively that the instrument was conceived by Johann Georg Leeb (active 1728–1788) of Pressburg, "who may have experimented with the construction of a bowed guitar 20 years earlier."[73]

70. For more details on the sonata see Karl Geiringer, "Schubert's Arpeggione Sonata and the 'Super Arpeggio,' " *The Musical Quarterly* 65/4 (1979), 513–23.

71. An announcement titled "Guitarre d'Amour. Neue Erfindung" appeared in Vienna in the *Allgemeine Musikalische Zeitung*, xxv/17 (March 1823), columns 140–44. Similar announcements regarding Stauffer's invention appeared in Leipzig in the *Allgemeine musikalische Zeitung* xxv/18 (April 1823), column 280; in Weimar in the *Journal für Literatur, Kunst, Luxus und Mode*, 39 (September 1824), 774; and in Mainz in *Cäcilia, eine Zeitschrift fur die musikalische Welt*, 1 (1824), 168–69.

72. For more details on the history of the arpeggione see Georg Kinsky, *Musikhistorisches Museum von Wilhelm Heyer in Cöln, Katalog Zweiter Band: Zupf-und Streichinstrumente* (Leipzig: Breitkopf & Härtel, 1912), 174–75; Gerald Hayes, "Arpeggione," in Stanley Sadie (ed.), *The New Grove Dictionary of Musical Instruments* (London: Macmillan, 1984), 1:75; Eszter Gát, "Teufelsdorfer contra Stauffer," *Gitarre & Laute* 8/2 (1991), 15–19; and Erik Pierre Hofmann, Pascal Mougin, and Stefan Hackl, *Stauffer & Co.: The Viennese Guitar of the 19th Century* (Germolles sur Grosne: Les Éditions des Robins, 2011), 58–61.

73. See Gerald Hayes and Eszter Fontana, "Arpeggione," in *Grove Music Online. Oxford Music Online. Oxford University Press.* http://www.oxfordmusiconline.com/subscriber/article/grove/music/01328, accessed 17 October 2016.

It is unknown why Stauffer named his instrument "Guitarre d'Amour," although in the 1763 announcement quoted above, Hintz also mentioned that he had invented a new instrument called "De L'Amour Guittar."[74] Like Hintz's bowed guittar, introduced when the guittar was at the peak of its popularity in Britain, the arpeggione appeared at the height of the "guitar mania" ("guitaromanie") in central Europe, a phenomenon humorously documented in the caricatures of Charles de Marescot, published in France in 1829.[75]

The arpeggione can be seen as an attempt to revive the viol and its music, which had declined by the end of the eighteenth century. It has been suggested that the arpeggione may have failed as a result of its problematic "mechanics and aesthetics,"[76] although it coincided with new research in the field of acoustics at the beginning of the nineteenth century. But apart from the arpeggione, the lasting influence of the viol on the design of plucked instruments is echoed in several nineteenth-century guitars whose body outline is reminiscent of viols, although their flat soundboards, fingerboards, bridges, and nuts indicate that they were plucked. Such viol-shaped guitars were produced in Germany by Moritz Gläsel (1829–1917), while several unsigned examples of varying characteristics have also survived, suggesting that different makers experimented with the concept.[77] In 1823, the year Stauffer and Teufelsdorfer introduced their bowed guitars, in Paris the guitarist Francesco Molino (1775–1847) presented a new guitar design with distinctive features evoking instruments of the viol and violin families, such as an arched

74. *St James's Chronicle or the British Evening Post* (London), 27–29 October 1763.

75. For the popularity of the guitar, especially as a portable instrument for song accompaniment, see Panagiotis Poulopoulos, "Musik im Freien in der Zeit des Biedermeier: Die Beispiele der Orphica, der Gitarre und des Csakans," *Phoibos: Zeitschrift für Zupfmusik* 8/1, Issue "Historische Aufführungspraxis II" (2015), 43–68, and Panagiotis Poulopoulos, "The Guitar as an 'Open-air' Instrument in the Early Romantic Era," *Soundboard Scholar: Journal of the Guitar Foundation of America* 1 (2015), 4–15.

76. Michael Hovnanian and David Cardon, "Schubert's Arpeggione Sonata Revisited" (Discordia Music, 2003), 3. http://www.discordia-music.com/Arpeggione_Project/the_arpeggione.htm, accessed 13 October 2016.

77. The author is thankful to James Westbrook for information on viol-shaped guitars by Gläsel and other makers. The development of these instruments has been analysed by the author in his paper "The origins of the viol-shaped guitar DM69731 in the Deutsches Museum," presented at the 2nd Colloquium of the Consortium for Guitar Research at Sidney Sussex College, University of Cambridge, Cambridge, 8 to 10 April 2013. https://guitarconsortium.wordpress.com/, accessed 13 October 2016.

soundboard with C-shaped soundholes, a movable bridge, and an arched fingerboard.[78]

Conclusions

The bowed guittar discussed in this article is one of the numerous experiments in the design of new instruments that characterised the second half of the eighteenth century, but which until now have remained largely overlooked in musicological and organological literature. Developed by Frederick Hintz, an influential maker and seller of uncommon instruments in London, this exceptional instrument shared many similarities with the guittar and the viol, while being quite different from both. Like other novel instruments that appeared during this time, the bowed guittar was intended to appeal to an audience keen to discover and enjoy unusual sounds, which sustained a demand for experimental instruments in Georgian England. Despite the relatively minor commercial success of such instruments, as evidenced by the small number of extant specimens and printed music for them, one cannot ignore their importance as historical evidence of a constant search for an ideal sound during this ground-breaking era. Above all, the bowed guittar and the other similar hybrids presented in this article exemplify the creative discourse and intersection between plucked and bowed stringed instruments from the seventeenth to the nineteenth centuries, a topic that certainly deserves further research.

78. For more details on this guitar see Panagiotis Poulopoulos, "The Impact of François Chanot's Experimental Violins on the Development of the Earliest Guitar with an Arched Soundboard by Francesco Molino in the 1820s," *Early Music* 46/1 (2018), 67–86.

Appendix

Reference Details, Dimensions (mm), and Construction Materials

Instrument name/type	Bowed guittar
Ownership	Musikinstrumenten-Museum Berlin (MIMB)
Location	Berlin
Inventory number	5394
Manufacturer	John Frederick Hintz
Place of manufacture	London
Date of manufacture	Made between 1760 and 1772
Signature (position)	"F. HINTZ" (stamped on the top of the back below the neck heel)
Other inscriptions (position)	"5394" (stamped by the museum on the bottom below the tailbutton)
Scale length (distance from nut to 12th fret x 2)	301 x 2 = 602
Distance from nut to bridge (saddle top)	About 604 (as evidenced by bridge position marks)
String number and material (courses)	10 metal strings (arranged in 6 courses, treble to bass: 4 x 2, 2 x 1)
Overall length at front (F)/back (B) (including protruding parts)	958/942
Body shape	Festooned with a lobed bottom
Sounboard/back profile	Arched soundboard/flat back
Body length at front/back	474/489
Body width at lower bout/waist/ upper bout of front	210/156/248
Body width at lower bout/waist/ upper bout of back	208/154/24
Body depth at neck heel/waist top/waist bottom/bottom (including F and B)	74/81/84/101
Number of parts on soundboard/back/sides	2/2/6
Soundboard material	Spruce
Back and sides materials	Figured maple (back not book-matched but off-matched)
Internal bracing type, bars under soundboard/back	4 supporting bars under soundboard, 4 under back
Side lining	Thin strip of wood on soundboard and back
Soundhole diameter (D) and rose design	71 (the original rose, possibly made of cast brass/ormolou as on extant guittars by Hintz, is missing)
Distance from bottom of soundhole to bottom of body	269

Bridge shape, material and dimensions (width (W)/ thickness (T)/height (H))	Missing (the original would be arched, essentially following the curvature of the fingerboard and nut)
String attachment method	10 endpins, made of ivory or bone, arranged in two horizontal lines of 5, fixed on the bottom of the instrument above the tailbutton
Soundboard protector material and dimensions (W/T/H)	Thin curved strip of ivory or bone (98 x 4 x 3) (similar to those on extant guittars by Hintz)
Tailbutton material and dimensions (D/T)	Ivory, top part missing
Purfling on soundhole	Single inked line and pair of inked lines surrounding soundhole (similar to that on extant guittars by Hintz)
Purfling on soundboard and back	Pair of inked lines (similar to that on extant guittars by Hintz)
Coating on front	Orange varnish (possibly shellac, as shown by UV-light examination)
Coating on sides and back	Orange varnish (possibly shellac, as shown by UV-light examination)
Neck profile and material	D-shaped profile (beech?)
Fingerboard length	364
Fingerboard width at nut/body join/end	45.5/53.5/56
Fingerboard thickness at nut/body join	3/8/10 (fingerboard tapering towards nut)
Fingerboard material and profile	Single piece of palisander or rosewood (?), arched with a compound radius of about 5" (127 mm)
Neck length from nut to body join (bass side)	248
Neck thickness at nut/7th fret	24/28
Coating on neck and fingerboard	Orange varnish (shellac?), same as on body
Fret (F) number and material	15 frets made of thin brass sheet (14 full, 1 short)
F1 position (approximate measurements from center of nut)	34
F2	63.5
F3	95.5
F4	122.5
F5	149.5
F6	176
F7	200.5
F8	223.5

F9	244
F10	264
F11	282
F12	301
F13	318
F14	333.5
F15	346.5 (half-fret, covering only the treble side of fingerboard)
Head shape and material	Viol-shaped pegbox, same wood as neck (neck and head are one piece) terminating with a square finial (similar to extant guittars by Hintz)
Headstock length from nut to top	224
Headstock width at bottom/top	45/24
Headstock thickness at bottom	400
Nut material & dimensions (W/T/H)	Ivory (46 x 3 x 3)
Tuning mechanism	10 wooden pegs of ebony or rosewood
Finial materials and dimensions	Ivory frame (4 pieces) with single-piece tortoiseshell center (32 x 32)
Playing marks	Tailbutton on bottom indicates supporting the instrument with a strap and playing in a horizontal or slightly diagonal position like a plucked instrument. Varnish on lower part of treble side is heavily worn out. However, fingerboard has no wear on treble side from little finger nor sharp dents from fingernails, typical on many surviving guittars. Presently no traces of resin from a bow. Several scratches between bridge and rose.
Remarks on condition	Original bridge, soundhole rose, and tailbutton top are missing. Back must have been removed and reglued, as there are residues of adhesive near the edges. On the bass side, a thin wedge-shaped piece repair of wood. Back is sunken near the top under the heel. Several wooden patches and a strip of wood added to back during restoration.
Other observations	Round mark on bass side and square mark on treble side indicate an asymmetrical bridge. Fingerboard is tapered as on baroque violins.
Display, storage and use	In storage (non-playing condition)
Ownership history	Purchased by MIMB in 1983 along with other instruments from Christie's; listed as "cither viol."

Acknowledgments

Annette Otterstedt (curator) & Heidi von Rüden (conservator), Department of Stringed Instruments at MIMB

Date of examination

13 and 14 February 2014