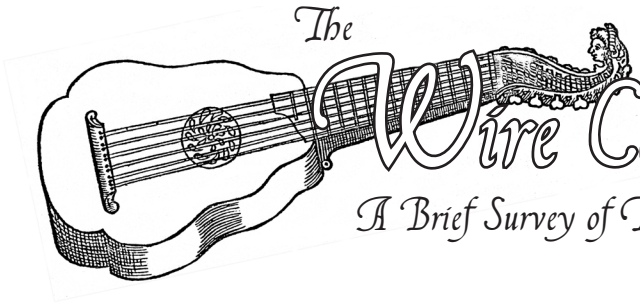


The Wire Connection

By Andrew Hartig

A Brief Survey of Plucked Wire-Strung Instruments, 15th-18th Centuries - Part Two

Wire-Strung Instruments in the 16th Century

Most of the wire-strung instruments from the 15th century discussed in *part one* — such as the *harpsichord, psaltery,* and *Irish harp* — continued to be used on a regular basis throughout the 16th century (and they would continue to be used into the 18th). The major exception to this was the Italian *cetra*, which disappeared at the end of the 15th century only to evolve into many different forms of citterns.

Historically, the 16th century heralds the beginning of major shifts in thinking that led to experimentation and innovation in many aspects of life. Times were changing: from the discovery of the "New World" that had begun at the end of the 15th century, to the shifts in politics, power, religion, and gender roles that occurred by the end of the 16th century. These shifts created new ways of thinking about the world, which led to greater experimentation and innovation in instrumental forms in the 16th and subsequent centuries. While instrumental evolution certainly occurred prior to the 16th century, what is remarkable about the 16th century is the rate of change within the space of eighty years that gives birth to the *scheitholt*, nearly a half-dozen types of *citterns*, the *bandora*, and the *orpharion.*

Scheitholt

While the birth of the *scheitholt* may have been as early as the 15th century, all evidence of its existence comes from the 16th century. The scheitholt (known variously in other times and other places as the *epinette du Nord, epinette du Vosges, langeleik,* and *langspil*) is a simple, zither-like instrument not too dissimilar from the modern day "mountain" or Appalachian dulcimer. It is essentially a long box with three or more single strings running over the top of the soundboard, one being a melody string and the others being bourdons or drones. The frets are put directly into the soundboard in a diatonic formation, sometimes being placed under only the top one or two courses.

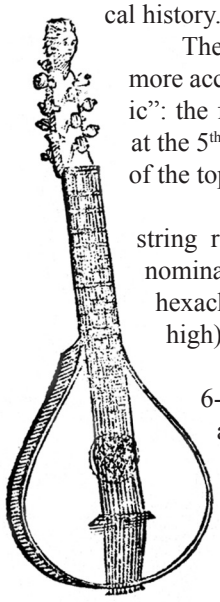
The scheitholt was more of a common than courtly instrument and was sometimes played by the curious method of using a small stick to fret the melody string. It was plucked either with the fingers or with a quill. Its repertoire was likely simple song accompaniment and dances. No music from the 16th century specified for the scheitholt survives.

The Cittern: An Overview

Over the course of the 16th century and well into the next, the cittern was the most widely-used fretted wire-strung instrument and was used in a multitude of countries and regions. Although most players today think of the cittern as a single type of instrument, there were in fact many different types, each significantly different enough from the others so as to constitute separate instruments. However, almost all citterns have in common a tuning characterized by the intervals of a 5th between the third and second courses and a major 2nd between the second and first courses, and one or more re-entrantly tuned strings.

Diatonic 6- and 7-Course Cittern

This was the earliest form of cittern used, possibly developed from the cetra late in the 15th or early in the 16th century, and it was definitely still in use into the 17th century. They were usually carved of one piece like the *cetra* (except for the fingerboard and soundboard). They seem to have been almost exclusively used in Italy and are regularly depicted in Italian art as symbols of concepts ranging from love to scientific knowledge to Biblical history.[1]



The diatonic cittern uses partial frets and should more accurately be referred to as being "semi-diatonic": the full frets follow a diatonic pattern repeating at the 5th while partial frets fill in the chromatic notes of the top one or two courses.[2]

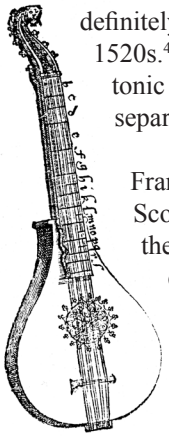
The 6-course instrument had an open-string range of only a major 6th and was tuned nominally using each of the notes of the *b-durum* hexachord arranged in a re-entrant pattern (low to high), *a-c'-b-g-d'-e'*.

The repertoire of the Italian diatonic 6-course cittern is still a bit of a mystery, for as popular as it appears to have been (by the number of both iconographic images and extant instruments), there is very little in the way of surviving music, amounting to one printed book and a handful of brief manuscripts. What does survive indicates a repertoire of dances and song accompaniments.

The Italian diatonic 6-course was generally a larger instrument (approx. 61-62 cm mensur), though in the second half of the 16th century smaller sizes (around 54, 49, and 43 cm mensurs) began to be produced and were both carved and constructed (sometimes in imitation of the carved instruments).

Diatonic 4-Course Cittern

While the smaller 4-course diatonic cittern may have developed from the larger Italian diatonic,[3] it is not entirely known how they evolved. What we do know, however, is that they were



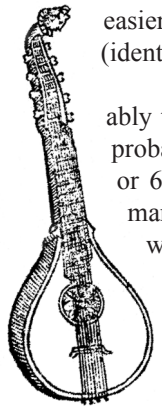
definitely in use by the 1550s and possibly as early as the 1520s.[4] A significant change from the early Italian diatonic is that these citterns began to be constructed from separate pieces of wood rather than being carved.

The 4-course diatonic was played in Germany, France, the Netherlands, Switzerland, Scandinavia, Scotland, and possibly England and Spain, and uses the same sort of partial frets as the Italian diatonic citterns, except with a slightly different tuning of (low to high) *a-g-d'-e'*. The tuning pattern and partial frets allow for a large number of easily playable chords. Another characteristic of this particular type of cittern is its predominant use of octave stringing: two higher octave strings were paired with each fundamental on both the third and fourth courses for a total of ten strings in four courses.

Of all the extant printed books and manuscripts for cittern, the greatest number survive for the 4-course diatonic. The solo repertoire includes only a few fantasies but many dances, intabulations, and songs with accompaniment. It was sometimes used with other instruments in small ensembles, and there is one extant book with accompaniment parts to Pacoloni's lute trios.[5] There are also other extant printed and manuscript duets, trios, and quartets for citterns of multiple sizes and pitches.

Chromatic 4-Course Cittern

The chromatic version of the smaller constructed diatonic instrument has all of the missing or partial frets filled in. The octave stringing which was characteristic of the 4-course diatonic was largely abandoned (though sometimes it was retained for the third course only), and the tuning of the fourth course was altered in order to make chords of the complete fretting easier to play, resulting in a nominal tuning of *b-g-d'-e'* (identical to the first 4 courses of the Italian diatonic).



This incarnation of the cittern is probably the most familiar to players today, though it was probably less common historically than either the 4- or 6-course diatonic citterns. It was played in Germany, Scotland and England, and possibly elsewhere (though documentation for other locations is scarce). It was established in England as early as the 1550s.[6]

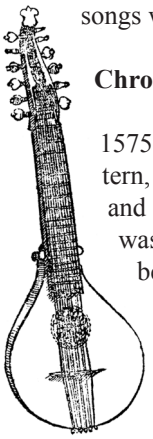
The few printed and manuscript sources include a repertoire of fantasies, dances, popular tunes, songs with accompaniment, and ensemble works including those for the English "broken consort."

As for the diatonic citterns, multiple sizes of instruments existed: In Germany evidence exists of four different sizes at different pitches,[7] and at least two sizes seem to have been used in England.

Chromatic 6- and 7-Course Cittern: Italy

Perhaps in response to the smaller constructed chromatic instruments being produced in England and possibly Germany, the Italians began to reinvent the cittern around the 1570s by making constructed 6- and 7-course chromatic versions, of which the most famous surviving example is the cittern made for the Archduke Ferdinand of Tyrol by Girolamo Virchi in Brescia, dated 1574, and now owned by the Kunsthistorisches Museum in Vienna.[8]

In the same year, Girolamo's son Paolo Virchi published one book of tablature of a very high quality using a new tuning that he promoted and possibly invented. This new tuning, *(G)-d-f-b-g-d'-e'*, which extended the tuning of the open strings to a major 9th (or an octave and a 6th for 7 courses), was unique for the cittern because it was the first time that the cittern's range was actually extended downward for true bass notes, possibly due to advancements in string-making technology. However, the chords created by this tuning are more difficult to play, which may be why it is not seen in other sources aside from Virchi's book (including three pieces from the same copied into one of Matthew Holmes's cittern manuscripts, Dd.4.23) and a suite from P.P.Melii's *Intavolatura di Liuto Attiorbato, Libro Quarto* of 1616. The caliber of the music is very high and includes fantasies, intabulations, dances, and songs with accompaniment.



Chromatic 6-Course Cittern: Germany

Sixtus Kargel's printed book *Toppel Cythar* of 1575 contains music for another 6-course chromatic cittern, though possibly with a body shaped like a lute[9] and possessing an alternate tuning: *B-G-d-g-d'-e'*. It was likely called a "double cittern" ("toppel cythar") because the tuning paired the top three courses of one cittern with the bottom three of another cittern an octave below. This gave an overall open-string range of an octave and a 6th, much like for Virchi's 7-course tuning. It also represents one of the first of the "chordal tunings" that are seen in the beginning of the 17th century.

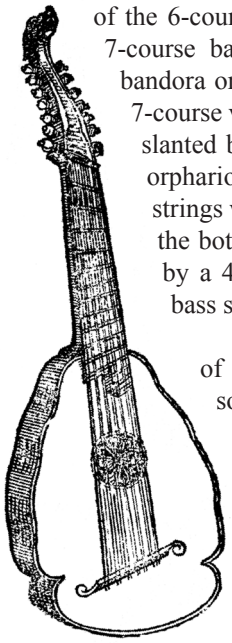
The tuning proved to be very popular. It was used in Germany, Silesia and surrounding areas, its main benefit being the creation of many easily playable, full-sounding chords. Kargel published a reprint in 1578, and works for this tuning are also found in several surviving manuscripts. There are also a couple of other tunings closely related to Kargel's for which little or no music survives.[10]

The repertoire of Kargel's books and the surviving manuscripts include fantasies, intabulations, German lieder and psalms, dances, and song accompaniment. One of the manuscripts also contains a series of duets for two "toppel cythars" tuned either a 4th or 5th apart.[11]

Bandora

The bandora (sometimes known as *pandora*) is one instrument that can be said with some certainty to have been developed in England. We are told that it was invented by John Rose in 1562. The instrument now in Helmingham Hall may originally have been designed as a 5-course bandora,[12] but 6 courses quickly became standard, and by the end of the century 7-course models were common.

While the bandora is known (at least conceptually) to many lute players, it is not well understood. Musicologists are quick to point to the "strange combination" of 2nds, 3rds and 4ths that comprise its tuning, *(G')-C-D-G-c-e-a*; however, the tuning



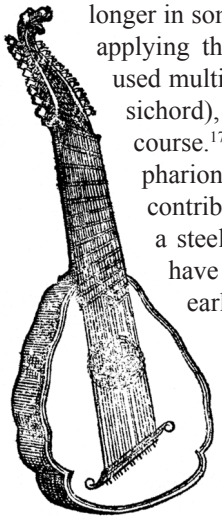
of the 6-course bandora is nothing more than that of a 7-course bass lute without a top course. While the bandora originally had parallel frets like the lute, the 7-course version was developed by implementing the slanted bridge, frets and nut that were used on the orpharion. By increasing the length of the bottom strings without changing the length of the top ones, the bottom range of the tuning could be extended by a 4th without compromising the sound of the bass strings.

While there is not a great deal of music that survives for the bandora (one solo print, several consort prints, and a variety of manuscript sources for solo and consort works),[13] the instrument was seen in its time as both a flexible and highly useful continuo instrument. In fact, unlike the currently better-known orpharion, its use can be documented from its invention in the middle of the 16th century into the first half of the 18th century.[14]

The bandora was used extensively in England, France, the Low Countries, and Germany. Later sources indicate that in addition to being plucked by the fingers, it could also be played loudly with a quill.[15]

Orpharion

The orpharion was developed in the 1580s. Compared to the bandora, it had a relatively short life-span, being popular for only about 50 years (though it was used longer in some areas).[16] The orpharion used slanted frets, applying the principle of other early instruments that used multiple scale lengths (e.g. the psaltery and harpsichord), accompanied with stronger steel for the top course.[17] The same strong steel that allowed the orpharion to be played at a higher pitch may also have contributed to its demise: the unavailability of such a steel in the first quarter of the 17th century may have made existing instruments obsolete by the early 1620s.



Orpharions had six or more courses, and by the early 17th century could have as many as ten just like the lute. The tuning was identical to and its repertoire overlapped with that of the lute, though the wire strings allowed the orpharion to be played much higher up the neck while in tune. Like lutes, the orpharion was also used in ensembles and for continuo. Evidence indicates that at least in England there were multiple sizes of the instrument at multiple pitches.[18]

The trends one sees in the latter part of the 16th century — the use of more chordal tunings (e.g. toppel cythar), the addition of courses to extend the bass range, and continued experimentation in instrument size — strongly influenced the development of the wire-strung instruments of the 17th century, all of which will be addressed in *part three*.

Sources and Additional Reading

- Forrester, Peter. "Wood and Wire — A Lecture by Peter Forrester." Published in *Lute News: The Lute Society Magazine*, 2005. [Available online: http://www.cittern.theaterofmusic.com/articles/wood.html]
- Gill, Donald. "Wire-strung Plucked Instruments Contemporary with the Lute." *Lute Society Booklet No.3* (1977)
- *Grove Dictionary of Music and Musicians* [Available online: http://www.oxfordmusiconline.com]
- Hartig, Andrew *The Renaissance Cittern Site*: http://www.cittern.theaterofmusic.com
- Michel, Andreas, *Studia Instrumentorum Musicae*: http://www.studia-instrumentorum.de [Site in German]
- Segerman, Ephraim. *The Development of Western European Stringed Instruments*. [Available for purchase online: http://www.lulu.com]

Notes

[1] For examples, see Giovanni Serodine's *Allegoria della Scienza*, http://cittern.theaterofmusic.com/art/serodine.html and Bernardo Cavallino's *David playing before Saul*, http://cittern.theaterofmusic.com/art/cavallino.html.

[2] For a fuller explanation of fret patterns, see Peter Forrester's lecture "Wood and Wire" and its accompanying handout "Fretting Patterns", http://www.cittern.theaterofmusic.com/articles/wood.html

[3] One recently auctioned 16th century drawing by F. Zuccaro (1540?-1609) of a street musician from Abruzzo, Italy actually depicts a 4-course Italian diatonic. Sotheby's New York, Sale N08403, 23 Jan. 2008. http://www.sothebys.com/app/live/lot/LotDetail.jsp?lot_id=159428087

[4] The earliest extant printed work for diatonic cittern is G. Morlaye's *Quatriesme Livre ... en Tabulature de Guyterne, & au jeu de la Cistre* of 1552. A work by J. Schlumberger, *Cythare Germanice Tabulatur,* published in Mainz in either 1525 or 1532, does not survive.

[5] F. Viaera, *Nova et Elegantissima in Cythara* (Louvain, 1564).

[6] The cittern (chromatic or diatonic was not specified) was reported by Thomas Whythorne in his *Autobiography* as being popular with gentlemen in London in 1548. The *Mulliner* manuscript, which contains several pieces for 4- and 5-course chromatic cittern, is dated post-1558.

[7] For more information, see Segerman, "Violins, citterns and viols in the Edinburgh 'A.S.' manuscript." *FoMRHI* Comm. 1576.

[8] The Virchi instrument is cited by them as "one of the most magnificent and most beautifully decorated instruments throughout the history of music." http://www.khm.at/de/neue-burg/sammlungen/sammlung-alter-musikinstrumente/zupfinstrumente/?aid=0&cHash=8de5fe7336

[9] For some examples of lute-shaped citterns, see Cornelis Bega, "The Cittern Player," dated 1662, Staatliche Museen, Berlin, and Jan van Kessel (1626-1679), "Allegory of Hearing," private collection.

[10] Michael Praetorius lists in his *Syntagma Musicum* tuning "VV," *G-d-b-g-d'-e'*, for which no known music survives. Also, according to Christian Meyer's *Sources Manuscrits en Tablature* (vol. III/2), MS G. 10,1400, located in the Czech Republic, Brno, Státní Oblastní Archiv, supposedly has at least one piece for a cittern tuned *G-B-d-g-d'-e'*.

[11] United States of America, Chicago, Newberry Library, Case M Vm1734.5/G37. It is unclear from the context of the pieces whether they are supposed to be played in unison or an octave apart.

[12] For more information on this argument, see Ian Harwood's "Wire Strings at Helmingham Hall." *Lute Society Booklet* (2005).

[13] For more information, see Lyle Nordstrom's *The Bandora: Its Music and Sources*. Harmonie Park Press (1992). ISBN 0-89990-060-7.

[14] Depictions of the bandora in German prints occur both on the title page of Johann Christoph Weigel's *Musicalisches Theatrum,* Nuremberg (around 1715/1725) and on the frontispiece of Johann Gottfried Walther's "Musical Lexicon," Leipzig, 1732. For images, see "Pandora: Quellen" on Andreas Michel's site *Studia Instrumentorum Musicae* listed above in the "Sources and Additional Reading" section.

[15] Ibid. note 13 above, p.20. Roger North in 1695 mentions that bandoras were "struck with a quill" and could be played with a "touch with a quill strong and guitar fashion."

[16] Mersenne indicates that the orpharion (which he calls "pandora") was no longer being used by the time of his publication, 1635. See Segerman, *The Development of Western European Stringed Instruments*, p. 153.

[17] For more information on Meuler and the idea of "super-strong steel," see *FoMRHI* Comms. 439 "Heinrich Schütz's Strings" (Karp), 440 "Ferrous wire circa 1600" (Segerman), and 866 "Jobst Meuler or the secret of a Nuremburg wire drawer" (Gug). For a complete list of articles on wire and the on-going debate about "super-strong steel," see http://www.cittern.theaterofmusic.com/articles/.

[18] Matthew Holmes's partbooks (Cambridge University Library, Dd.3.18, Dd.5.20, and Dd.5.21) have several (incomplete) ensembles for 3 orpharions and 3 viols. The pitch of one of the orpharions is a 4th higher than the others.

Reviews

CDs

Clear or Cloudy

Valeria Mignaco, soprano, Alfonso Marin, lute

Musica Ficta 8009

John Dowland: Ayres

Gerard Lesne, alto; Jacob Heringman, lute; Ensemble Orlando Gibbons (Anne-Marie Lasla, Kaori Uemura, Sylvie Moquet, Emmanuel Balssa, viols);

Naïve E 8881

Both these recordings are devoted to the English lute song. One features the eminent French countertenor (he prefers to be called an "alto"), Gerard Lesne, a longtime early music star with a long major-label discography, and founder-director of the ensemble Il Seminario Musicale, in a CD devoted entirely to Dowland: songs and instrumental pieces with Jacob Heringman on lute and a viol quartet; forces that can bring all sorts of tonal variety to their program. The other features two less well-known artists, Argentine soprano Valeria Mignaco and Spanish lutenist Alfonso Marin, in a mostly-Dowland program: nine Dowland songs, and songs by Rosseter, Campion, Ford, Pilkington, Robert Johnson and Michael Cavendish, with a few lute solos by Dowland and Holborne.

If at first blush, this looks like a comparison between Name Brand and Brand X, perhaps it is. But Brand X wins.

There is no music in which words are more important than they are in English lute songs. The golden age of the English lute was the golden age of English poetry — the age of Dowland and Ferrabosco was also the age of Shakespeare, Ben Johnson and John Donne — and the songs reflect, and rely on, the depth and richness of the poetry. Indeed, they tend to be poetry recitations, the words coming as they would in speech. Contrast this with a century or so later, when Handel ruled the London stage with airs built (in characteristic baroque style) on verses of a few lines, with the words repeated over and over in virtuosic displays. (We know that the audiences at Handel's early London oratorios sometimes laughed at the way Italian singers mangled the words, but it didn't much matter.) Lute songs are discourses with multiple sentences that typically come at the listener only once. If the singer can't get the words out clearly and convincingly, the song turns into nonsense. Making everything intelligible is a daunting task. Even the most accomplished English singers can't make everything clear, especially lines like "No grave for woe, yet earth my wat'ry tears devours," or "With your hearts' desires long live still joy, and never moan," that are tough going for modern ears because the syntax is strange and the listener has trouble putting the words in context as they are heard. The task is all the harder for singers whose first language is not English.

Lesne and company bring much to the music: his own assured and sensitive vocalism, Heringman's acute playing, the rich sound of the viols (the four of them accompanying a verse of "Can She Excuse" in pizzicato is a wonderful touch). What Lesne cannot bring is intelligibility. He is at a loss singing in English, throwing out a mash of odd vowels that makes Sting sound like Kenneth Branagh. It even gets comical in spots, reminiscent of John Cleese's castle sentry in *Monty Python and the Holy Grail* exclaiming "I'm French! Why do you think I have this outrageous accent?" But on the whole, he (Lesne, not Cleese) could be singing the phone book in Armenian for all the sense he makes of the songs. So much blah-blah gets tedious, no matter how pretty it sounds.

Valeria Mignaco is obviously not a native English speaker either, but she and Marin take a more serious approach to the words (they credit her English language coach in the CD booklet), and she does as good a job bringing them off as many a singer born to the language. She is a major-league singer with a beautiful sound and an impressive range of nuance. She and Marin are attuned to the words, letting them dictate the flow of the music and pausing for rhetorical emphasis where needed. When she sings "to see, to hear, to touch, to kiss, to die with thee again," there's so little doubt about what she means that I wondered whether the CD should have a parental warning label. Marin's lute (a seven-course strung completely in gut) balances the voice nicely and makes the counterpoint clear. In pushing to bring impetuosity and impatience to the fore