Journal of the Lute Society of America
Vol VII, 1975

ECCENTRIC FORMS OF THE GUITAR, 1770-1850[1]

By Joscelyn Godwin

If there are archetypes in the world of musical instruments, the guitar is certainly one of them. The familiar figure-eight shape has survived for over four hundred years, despite the opposition of those who thought that they could improve upon it. This article examines a few of the ingenious, if misguided efforts of guitar-makers between 1770 and 1850, the years that culminated in the work of Antonio Torres.

These eighty or so years have a strong claim to be the golden age of instrument making. They saw the final victory of the piano over the harpsichord and the development from the piano of Mozart to that of Liszt. The brass instruments were given valves, and the woodwinds most of their present keywork. The organ, for better or worse, became an orchestra in itself. Only the violin family and the harp remained unchanged. No wonder, then, that this era was rich in freaks and mutations, the results of an excess of creative energy.

Among the guitars, these freaks may be classified into four categories, according to the disposition of their strings: 1) guitars with added bass strings; 2) guitars with added treble strings; 3) guitars with added bass and treble strings; and 4) guitars with multiple necks. In treating these categories one by one, I omit the harp-lutes and lyre-guitars, which can be studied adequately in other sources.[2] My sketches, while not by any means comprehensive, include most of the examples found outside of Anthony Baines'

[1]Grateful acknowledgement is made to the Colgate University Ford Foundation Humanities Faculty Development Fund for assistance in the preparation of this article.

[2]For the lyre-guitar, see Stephen Bonner, *The Classic Image* (Harlow, Bois de Boulogne, 1972), and D. Fryklund, "Studier över lyragitarren" in *Svensk Tidskrift för Musikforskning*, Vol. IX (1927), p. 117. For Edward Light's harp lutes and other instruments, see R. B. Armstrong, *English and Irish Instruments* (Part II of *Musical Instruments*) (Edinburgh, 1908), and D. Fryklund, *Förteckn. över E. Lights mus. verk.* (Hälsingborg, 1921). For Ventura's variations on the harp-lute, see Bonner, *Angelo Benedetto Ventura* (Harlow, Bois de Boulogne, 1971).

European and American Musical Instruments,[3] which is easily accessible and fundamental to any student of organology. Baines gives over sixty photographs of guitars and their variants to which I shall refer by plate number.

Guitars with added bass strings

The earliest guitars with extra bass strings stretched beside the fingerboard date from pre-Revolutionary France. The names of the two basic models, "bissex" and "décacorde," indicate the numbers of their strings: twelve and ten, respectively. The bissex was apparently invented by van Heck(e),[4] and built by H. Nadermann, a Parisian harp-maker, in 1773. An example in the Paris Conservatory (Baines, 320, 321) bears the same date and looks like a lute with a rather unwieldy flat head bearing six levers that raise the pitch of the bass strings by a semitone—a refinement obviously borrowed from the pedal harp. The strings are tuned thus: six basses passing beside the fingerboard, tuned A' B' C D E F, and six strings over the fingerboard, tuned G A d g b e'.[5] The last five strings are, of course, those of the five-stringed guitar that was current at the time, while the first seven descend diatonically in the manner of the theorbo lute (which had up to eight courses off the fingerboard). The lower strings give a sonorous bass without necessitating extra fingering, and also make the playing of inversions simpler for amateurs who do not want to learn too many left-hand positions.

The name "décacorde" was given to two instruments from the extremes of the period in question. Examples of the older type by a Versailles maker named Caron survive at Yale University and in the Paris Conservatory, dated 1784 and 1895 respectively (see Baines, 322, 323, for the Yale décacorde). Mahillon mentions a model by Jean Baptiste Lejeune, bearing the date 1848, when it was apparently given to the maker's grandnephew. For the latter model he gives the tuning G A B^b C/d f a c' e' g', suggesting that the Caron models should be tuned likewise.[6] This is certainly a novel tuning, quite unlike the guitar's but resembling that of the French arch-cittern that was popular in the later eighteenth century: A B c#d d#e/d' e' a' c#" e". Both the bissex and the earlier décacorde seem to have been immediately inspired by the

[3]Anthony Baines, *European and American Musical Instruments* (New York, Viking Press, 1966). Hereafter referred to as Baines.

[4]Baines, pp. 53-54.

[5]F. V. Mahillon, *Catalogue descriptif et analytique* [of the Brussels Conservatory instrument collection], Vol. III (Ghent, 1893-1912), p. 297.

[6]Mahillon, p. 298.

arch cittern, and share its lute-like shape. In that instrument the bass strings of the theorbo lute were adapted to the eighteenth-century cittern (or "English guitar"); it must have seemed logical to adapt them also to the true guitar. During the same decades Caspar Ferrari, a Roman maker, was doing the same to the mandolin. All of these adaptations may be seen as attempts to fill the void left by the decline and obsolescence of the theorbo lute.[7]

A nineteenth-century harp-guitar by Pasquale Vinaccia of Naples shows a different approach (see Figure 1). Here the bass strings are given further support and resonance through an elongation of the body (as sometimes occurred in the arch-citterns of Renault towards the end of the previous century), while the other side is decorated, for the sake of symmetry, with a turned bar similar to that found on certain mid-European zithers. But here the disposition of the strings departs from custom, and from logic: The bass strings go the wrong way, the lowest of them being the closest to the fingerboard. It is clear that fantasy, rather than practicality, inspired Vinaccia and many others of these instrument makers. They must have been building for people who wanted something new, elegant (to their taste), and easy to play; for people whose techniques would seldom be advanced enough for them to be worried by the essential clumsiness of these curious objects.

The same cannot be said of the instrument in Figure 2, which is certainly ugly but not impractical. It is a twentieth-century instrument known in Portugal as "violao-harpa" or "bandolin semilirado," and apparently is still in use as a folk instrument both there and in the Azores.[8] Although it falls outside the 1770-1850 period, it is shown here to demonstrate that the theorboed guitar is not altogether extinct. The similarity of all its essential features with those of the instrument in Figure 1 is quite striking, the differences stemming only from the visual tastes of the respective periods.

Guitars with added treble strings

Whereas the addition of bass strings to the guitar turns it essentially into a theorbo, the addition of trebles, tuned diatonically and sounding above the e' string, makes it more like a psaltery—the diatonically-strung instrument much favored in the Middle Ages and later developed into zithers and dulcimers of all kinds. The practice

[7]See my article on "The Survival of the Theorbo Principle" in *The Journal of the Lute Society of America*, Vol. VI (1973), pp. 4-16.

[8]E. V. de Oliveira, *Instrumentos Musicais Populares Portugueses* (Lisbon, Fundaçao Calouste Gulbenkian, 1966), p. 158.

of adding such strings has a long history, dating from the later sixteenth century, as evidenced by the Tieffenbrucker "polyphant" (see the next section). It recurs in the Russian bandura (Baines, 196), with an unfretted neck and up to thirty-six trebles arranged over the asymmetrical body, and in the torban or Russian theorbo, a sophisticated version of the bandura popular around 1800. In all of these instruments it seems that the trebles were used melodically in order to avoid high positions on the fingerboard, while the left hand fingered accompanying chords that were strummed with the right thumb.

Very few guitars diverse from the norm by the addition of trebles alone. Baines, illustration 325 shows a guitar by Rafael Vallejo of Baza (Granada) made in 1788-92 that was apparently once the property of King Charles IV of Spain (1788-1808). It is a large instrument (102 centimeters in overall length) with six double courses of strings and ten extra wire courses that run across the belly. Its fanciful decoration suggests that it may have been a unique specimen made expressly to amuse the King.

The Milan Conservatory collection has a "chitarra-salterio," an instrument of very different shape, in which the twenty-nine double courses are on the bass side (see Figure 3). It is hard to imagine this being played in any position other than horizontal, and almost impossible to imagine the playing technique, unless one is supposed to treat it *either* as a psaltery *or* as a double-strung guitar, but not as a combination of the two for practical purposes. The French "zithergitarre" in the Berlin Hochschule collection (Number 402) seems to be a close relative, with twenty strings on the expanded treble side. Sachs, in his catalogue of this collection, places it in the eighteenth century.[9]

A third variety, Number 2488 in the Brussels Conservatory collection, has no fewer than forty-one strings, tuned in two groups: strings 1-20, grouped in fours, give the chords of A, D, F, G, and C major; strings 21-41 give a scale from c' to c'' ', diatonic except for the addition of sharps for C, F, and G. This extraordinary creation of Messrs. Menzenhauer and Schmidt rejoices in the names "guitare-zither," "guitare américaine," or simply "La Merveilleuse." But its only marvelous quality is that, as Mahillon says in his catalogue, "one could play it without preparatory study and without musical knowledge"; for it is even supplied with a method-book giving the music in a series of novel symbols, analogous to those used today for the electronic chord-organ. One plucks the melody strings

[9]Curt Sachs, *Sammlung alter Musikinstrumente bei der Staatlichen Hochschule für Musik zu Berlin; beschreibender Katalog* (Berlin, 1922) col. 175.

Fig. 1. Harp-guitar by Pasquale Vinaccia, Naples, nineteenth century (Copenhagen, Carl Claudius Collection, No. 204), strung 9/6 (see Footnote 10 for explanation of stringing symbols)

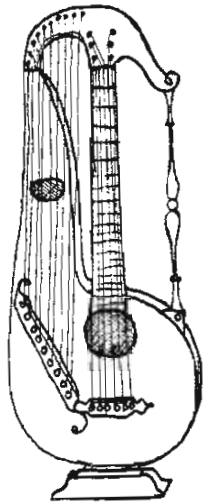


Fig. 2. Theorboed guitar ("violao-harpa") by Antonio Victor Vieira, Lisbon, twentieth century (from *Instrumentos Musicais Populares Portugueses*, p. 158), strung 5/6

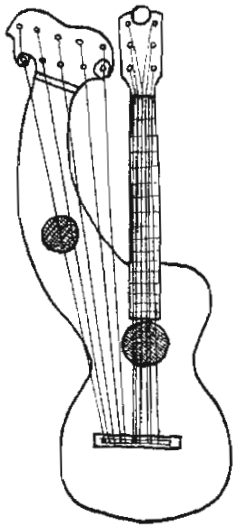


Fig. 3. Psaltery-guitar ("chitarra-salterio"), late eighteenth century (Milan Conservatory collection, No. 267), strung $29^2/6^2$

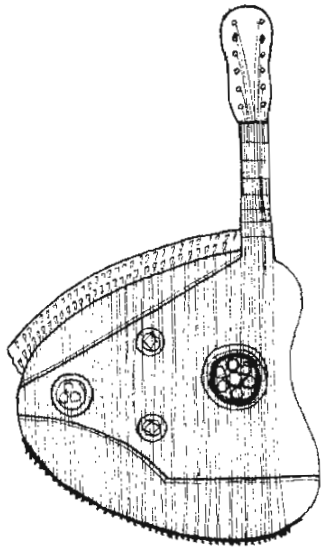
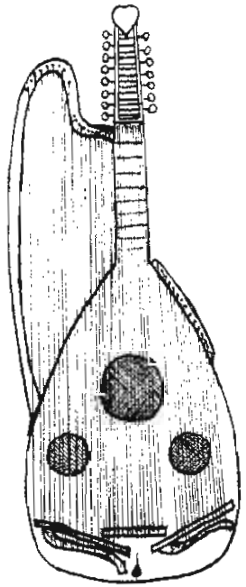


Fig. 4. Polyphant (?) by Wendelin Tieffenbrucker, Padua, circa 1590 (Vienna, Kunsthistorisches Museum, No.C.67), strung $20/1+6^2+2/15$



with the right thumb, and the chords with the left hand—and hopes that a minor chord will not be required. I hesitate to class this invention as a guitar, but it demonstrates something of the amazing variety of hybrids, in this case between the guitar and the zither or autoharp.

Guitars with added bass and treble strings

The most ancient and mysterious example of a guitar with strings added on both sides of the fingerboard is the instrument by Wendelin Tieffenbrucker in the Vienna collection that was made in Paris circa 1590; it may well be a specimen, or at least a relative, of the "polyphant" which Queen Elizabeth I is said to have played (see Figure 4). Uniting the advantages of harp, lute, and psaltery, it must have been a fiendish instrument to master (and to tune); but no music survives to show what was played on it. It is not until the second quarter of the nineteenth century that one meets another such instrument. Figures 5 and 6 show two unsigned instruments from the Brussels Conservatory collection that each illustrate a different approach. The "guitare multicorde" was patented in 1832 by Charpentier and Munchs of Paris. Another specimen in the Berlin Hochschule collection (Number 2357) bears their label, but has the disposition 8/6/11,[10] as opposed to the 6/6/9 pictured here in Figure 5. The curled horns of the fingerboard and right-hand side allude perhaps to those of the lyre-guitar, which was just reaching the end of its career. Most of these guitars have to be played in a vertical position, which precludes any real virtuosity. The other instrument (Figure 6) is supposedly of English origin and, like Figure 3, is more a combination than an integration of the two types. Part of it is tuned like an ordinary guitar, while the harp runs diatonically from A' to c'' ' with hooks provided for chromatic alterations. The small circles shown in my sketch are holes in the harp body about half an inch in diameter, some of which can be closed by ivory plaques; but this procedure would do virtually nothing to the sound. This instrument is reminiscent of the bizarre hybrids of harps and guitars made by Edward Light and A. B. Ventura in the second and third decades of the century.

[10]The disposition of the strings is shown throughout this article as follows: The digits represent the numbers of courses—the basses, the strings on the fingerboard, and the trebles being divided from each other by virgules. Courses are single unless indicated otherwise by a superscript. Thus, $5/1+5^2/6$ means "five single bass courses, a single fingered course (the lowest) and five double fingered courses, and six treble courses." In the case of guitars with multiple necks, the virgules separate the strings on each neck.

Fig. 5. "Guitare multicorde," Paris, circa 1832? (Brussels Conservatoire collection, No. 2490), strung 6/6/9

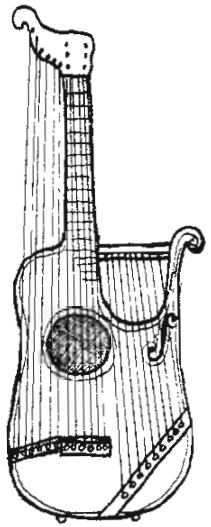
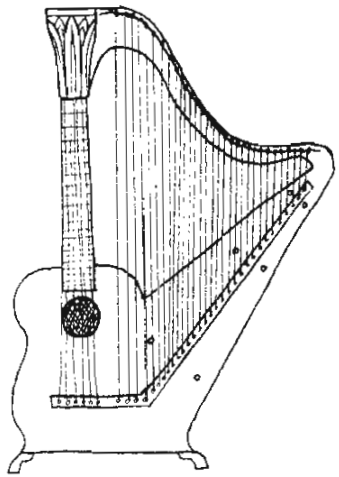


Fig. 6. Harp-guitar, English, nineteenth century (Brussels Conservatory collection, No. 1550), strung 6/31

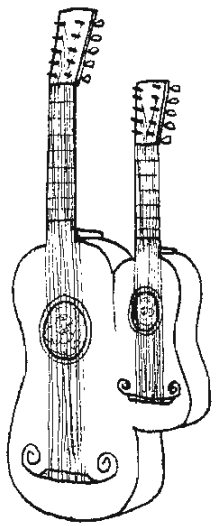


Guitars with multiple necks

A guitar with two or more necks presents an entirely new problem to the player, who must now move the left hand not only up and down but also across the necks. Obviously this is not easy to do in the middle of a piece, since a mobile left hand will impair the stability of the instrument. One really wonders how some of the guitars in this category were meant to be held at all; a vertical position is almost inevitable for most of them (as was the case with the lyre-guitar, for physical as well as aesthetic reasons). The complexity of their construction is probably in inverse proportion to the difficulty of the music generally played on them.

To judge from the beauty of its decoration, the early double guitar shown in Figure 7 is a unique object made for a wealthy owner, as was the much later Vallejo instrument mentioned previously. It precedes the main period of these inventions, and differs from them in being a true "double guitar" rather than a single guitar with multiple necks.

Fig. 7. Double guitar by Alexandre Voboam, Paris, 1690 (Vienna, Kunsthistorisches Museum, No.57 in Catalogue by J. Schlosser), strung 52/52



The variants that represent a single maker's *jeu d'ésprit* can generally be distinguished from those that enjoyed some measure of popularity. At least three instruments similar to Figure 8 survive, each by a different maker, whereas Figure 9 is a unique specimen. Figure 10 again shows what may have been a more widespread model. It is a "harpolyre" of a type patented in 1829 by Jean François Salomon of Besançon. In 1806 one Le Dhui de Coucy-le-Château patented a "lyre organisée" with three sets of strings, 4/5/6, from which Salomon's may have derived but of which I have found no example. The harpolyre's three sets of strings are tuned: A B^b B c d^b d e^b/E A d g b e'/c' d' e' f' g' a' b' c".[11] They provide the combined advantages of extra basses and extra trebles. The chromatic basses obviate fingering on the A string (which for most people of the time, accustomed to the five-string guitar, would be the basses of any chord), and the trebles allow melodies to be played in psaltery fashion. The frets on the two flanking arms, therefore, are merely decorative, unless, as Baines suggests, they are for affixing capotastos. The technique of the harpolyre must have been similar to that of the instruments in Figures 4 and 5.

The triple guitar of Figure 11 is similar in looks to the harpolyre but different in function, since it is tuned like three guitars, each a third apart. This is obviously a transposing device. A triple guitar in the Berlin Hochschule collection (Number 2356) may have been tuned the same way, although its shape is different: Sachs describes it as having "separate necks, but the bodies joined progressively, so that the whole body rather gives the impression of an egg placed diagonally."[12]

Finally, there is another triple guitar in the same collection (Number 2388) which Sachs describes as: "A narrow pyramid with three sprucewood sounding boards; the purfling and the edging of the ten triangular sound holes are inlaid with ebony and mother-of-pearl. It is crowned with a brass ball containing a complicated screw-arrangement, supposedly to achieve a very fine tuning. The three surfaces hold: (1) five high strings and seven bone frets, (2) six lower strings and seven bone frets, (3) five bass strings. They are all fastened to diagonal bridges placed at various heights."[13] This sounds like a guitar maker's answer to the problems of "what to give the Man Who Has Everything."

[11] This information is from Fryklund, "Studier över lyragitarren," cited in Footnote 2.

[12] Sachs, col. 176.

[13] Sachs, col. 176.

Fig. 8. Double arch-guitar by Savains, Paris, circa 1783 (Brussels Conservatory collection, No.1534), strung 5/5/3/5

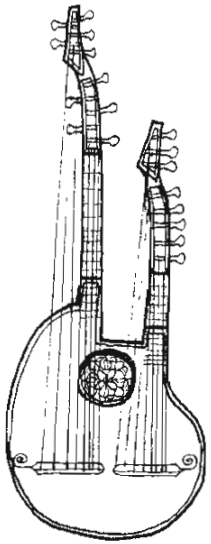


Fig. 9. Double harp-guitar by John Frederick Grosjean, London, circa 1840 (London, Victoria and Albert Museum, No.201-1872), strung 6/6

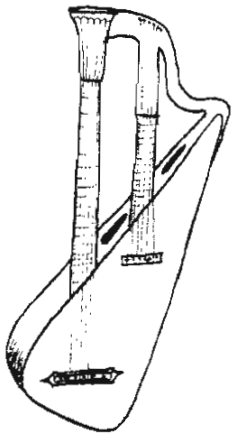


Fig. 10. Triple lyre-guitar by Salomon, Besanón, after 1829 (Berlin, Staatliche Hochschule für Musik collection, No.2370), strung 7/6/8

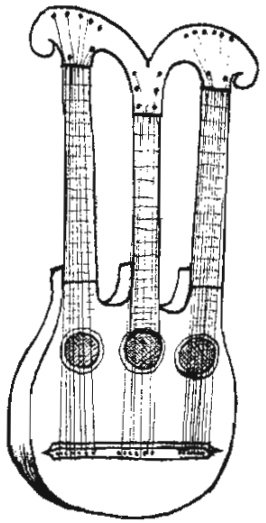
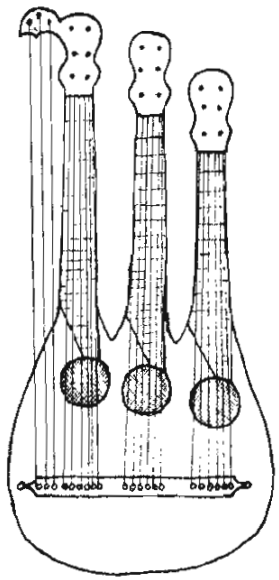


Fig. 11. Triple guitar by Georg Heidegger, Passau, 1850 (Copenhagen, Carl Claudius Collection, No.189), strung 3/6/6/6



A study of the music that was played on these variant instruments would be welcome, but the difficulty of compiling it would hardly be justified by the results. None of the eccentric guitars lasted long enough to attract the attention either of virtuosi or of first-rate composers. The repertoire of these instruments is found in rare and occasional publications and in tutors, often produced and even composed by the inventors of the instruments to promote sales. The phonograph record of songs and pieces by A. B. Ventura in Stephen Bonner's book on Ventura shows a lamentable lack of musical inspiration on the part of an otherwise ingenious man. But a study of the instruments themselves is really more illuminating, if what one desires is a better understanding of one's ancestors. A glance at these illustrations can tell one much more about the mentality of the "romantic bourgeois" than would a prolonged study of the trivial music that was probably all he could play on them.