THE STRINGING OF THE 5-COURSE GUITAR

Monica Hall

This is a compilation of information about the stringing of the 5-course guitar in the 17th and early 18th centuries, taken from original documents of the period. It is not exhaustive, but it includes the most important sources.

The guitar was double strung - that is each "course" comprised two strings, although the first course was usually a single string. It was tuned in 4ths with a major 3rd between the second and third courses. *Scordatura* or irregular tunings were often used, but do not affect the way in which the instrument is strung. When pitch is indicated, the first course was usually tuned to the nominal pitch E as on the classical guitar, although a few sources give D as an alternative.

The strings of the second and third courses were tuned in unison. The main part of this survey deals with the different methods of stringing the fourth and fifth courses, with or without low octave strings (usually referred to as bourdons.) It is arranged under three headings - 1. Spain; 2. Italy; 3. France, England and the Netherlands (including Belgium). This arrangement is intended to bring together information from clearly defined geographical areas, written in the same language, Spanish, Italian and French. There are some exceptions. Briceño's book is in Spanish but was printed in France and GB:Och Ms.1187 is in English, but reflects French practice; both are included in the section dealing with France etc. Corbetta was Italian by birth but spent much of his career in England and in France. Although his two earliest surviving books were printed in Italy, his 1648 book was printed in the Spanish Netherlands and his 1671 and 1674 books in Paris. "La Guitarre royale", printed in 1671 is the only book to include specific comments on the stringing he considered appropriate for his music and this is discussed in detail in the section dealing with France. He is also mentioned briefly in the section dealing with Italy.

A further section sets out the documentary evidence for octave stringing on the third course.

There were three ways of stringing the fourth and fifth courses:

1. Without low octave strings (*bourdons*) on the fourth or fifth courses - "the re-entrant tuning". The third course is the lowest sounding course.

- 2. With a low octave string (*bourdon*) on the fourth course, but not the fifth often referred to as the "French" tuning. I prefer to call it "the semi re-entrant tuning". The fourth course is the lowest sounding course.
- 3. With low octave strings (*bourdons*) on both fourth and fifth courses which I refer to as "the conventional tuning". The fifth course is the lowest sounding course.

Information about stringing is found in two types of source

1. <u>Tutors and collections of guitar music</u>. Information in most guitar books is in the form of advice to beginners on how to tune the instrument, or to check that it is in tune. This does not necessarily indicate that the writer of the book thought that one particular method of stringing rather than another was to be preferred. Players could have ignored the instructions if they did not suite their purpose.

2. <u>Theoretical works including dictionaries</u>. Theoretical works reflect the sources which their writers were able to consult, not necessarily the status quo at the time and place where they were written.

Only a very small number of writers - Doizi de Velasco, Sanz, Corbetta, Carré and De Visée - express any opinion about the suitability of one method of stringing or another for different types of music. Most collections of guitar music give no indication at all as to the method of stringing which the composer preferred, perhaps because guitarists in the 17th century attached less importance to this matter than we do today.

What's the problem?

Which ever method of stringing is used, if the music is played in the way that the notation indicates there are some aspects of it which seem unacceptable to us today. The most controversial of these are the six-four chords. The earliest music for the 5-course guitar was entirely strummed and the basic sequence of 5-part chords includes several which will have the 5th of the chord as the lowest note; which ones depends on the method of stringing selected. Later the strummed chords were combined with "lute style" counterpoint to create a "mixed" style.

Most players today seem to think that there is a "correct" way of stringing the guitar for each part of the repertoire and that by identifying this it is possible to eliminate at least some six-four chords and also the skips of a 7th or a 9th which often occur in the melodic line. 17th century guitarists may to some extent have taken into account the method of stringing they were used to when intabulating their music in order to achieve accurate musical results. However, (with very fewexceptions) the music will never conform to what we today consider to be the "rules of musical theory" unless it is edited extensively.

One might be tempted to think that the best musical results would be obtained with octave stringing on both the fourth and fifth courses. The sixfour chords can be eliminated by leaving out the fifth course from strummed chords (although they are clearly notated) and some of the other problems can be solved by selectively plucking either the treble or bass string of a course. There is however no evidence to suggest that 17th century guitarists thought that this was necessary and it may well be that we are imposing our own prejudices on the music. If they had shared out concern about such matters they could have notated the music differently.

Many players today have a problem with the idea of re-entrant tunings. However these were used in the 16th and 17th centuries, not only on the guitar, but also on the cittern and theorbo. They are a solution to the problems which result from the kind of strings available at the time. The cittern was wire strung, and therefore need not concern us. Both the guitar and theorbo were usually strung with gut and the kind of gut strings available for the bass courses were not very satisfactory. These had to be very thick and produced a dull sound. The solution on the lute was to pair the thick strings on the lowest courses with thin strings tuned an octave higher. These provided the missing upper harmonics and improved the sound quality. However octave stringing can cause problems with tuning and fretting, especially at the higher frets, and the difference in thickness between the thin and thick strings makes the playing of left-hand ornaments such as trills and slurs more difficult. Dropping one or both bourdons may therefore have been the most satisfactory solution for guitar music composed in a certain style. The six-four chords are also less intrusive with a re-entrant tuning, because the notes of the chord are in close position. The introduction of overwound strings in the late 17th century went some way to solving the problem of unsatisfactory bass strings, although these were not unproblematic.

Re-entrant tunings also make it possible to place the music on the fingerboard of the instrument in a way that is not practical with a straightforward treble to bass unison tuning. This makes the best use of the small compass afforded by having only five courses and enhances the sound quality by maximising the use of open strings and by raising the tessitura of the instrument. What may seem to us today to be the best option may not have been the best option for players in the 17th century, given that the conditions under which they lived their lives were very different from ours. Players would have done whatever they found worked best in practice.

The question of whether we can, or should, try to play the music in the same way that players did in the past is beyond the scope of this survey.

The sources

For each source the text in the original language is given together with an English translation. The foreign language text is as in the original, generally without accents which were not much used in the 17th century. Comments on the possible significance of the information are included where this seemed appropriate.

CONTENTS (click on title)

<u>SPAIN</u>

Alonso Mudarra (1546) Juan Bermudo (1555) Joan Carles Amat (1596) Nicolao Doizi de Velasco (c1640) Gaspar Sanz (1674) Lucas Ruiz de Ribayaz (1677) Francesco Guerau (1694) Pablo Nassarre (1724) Pablo Minguet y Irol (1752) University of Granada Ms.16972 (ca.1763)

ITALY

Girolamo Montesardo (1606) Benedetto Sanseverino (1622) Ferdinando Valdambrini (1646/47) Pietro Millioni (1627) Fabritio Constanzo (1627) Girolamo Foscarini (ca.1640) Stefano Pesori (1648) Ludovico Monte (1625) Giulio Banfi (1653) Giovanni Abadessa (1627) Giovanni Abadessa (1653) Antonio Michele (1680) Athansius Kircher (1650) Antonio Stradivarius (ca.1700) F:Pn.Rés.Vmc ms. 59, fol. 108v

FRANCE

Luis de Briçeño (1626) Marin Mersenne (1636/37) Pierre Trichet (1640) Francesco Corbetta (1671) Antoine Carré (1671) F:Pn.Ms.Res. 1402 (Undated) Robert de Visée (1682) Nicolas Derosier (1690) Sebastien Brossard (1703) B.Bc.Ms.S5615 (1730) GB:Och Ms.1187 (ca. 1690) Denis Diderot (1757) Joseph Bernard Merchi (1761) Michel Corrette (ca.1763)

OCTAVE STRINGING ON THE THIRD COURSE

I.Bc Ms. AA 360. (c.1660) I.MOe Ms. Campori 612. (Undated).

THE STRINGING OF THE FIVE-COURSE GUITAR

SPAIN

Alonso Mudarra (1546) Juan Bermudo (1555) Joan Carles Amat (1596) Nicolao Doizi de Velasco (c1640) Gaspar Sanz (1674) Lucas Ruiz de Ribayaz (1677) Francesco Guerau (1694) Pablo Nassarre (1724) Pablo Minguet y Irol (1752) University of Granada Ms.16972 (ca.1763)

The earliest references to the way in which the guitar was strung relate to the 4-course guitar.

Alonso Mudarra : Tres libros de musica (Seville, 1546)

The earlier of the two vihuela books which include music for the 4-course guitar. Preceding the first piece for guitar "Fantasia del primer tono" on f.xxi there is a note:

A de estar entrastado como vihuela con diez trastes a de tener bordon en la quarta.

It (the 4-course guitar) has to be fretted like the vihuela with ten frets; it has to have a bourdon on the fourth course.

<u>Comment:</u> This implies that the instrument sometimes had fewer than ten frets and did not always have a low octave string on the fourth course, i.e. it had a re-entrant tuning. These are necessary to ensure an adequate compass for Mudarra's music. As a popular instrument which was played with a plectrum and possibly strummed, the guitar may originally have had a re-entrant tuning, a characteristic which it retained until the end of the 17th century. Unlike the lute, which had a high octave string added to improve the sound quality of the bass strings, the low octave string may have been added to the guitar to extend the compass downwards.

Juan Bermudo : Declaracion de instrumentos musicales (Osuna, 1555)

Treatise which includes sections on musical instruments and how to arrange vocal music for them. Book 4, Chapter 65 describes the 4-course guitar.

f.96 Suelen poner a la quarta de la guitarra otra cuerda, que le llaman requinta. No se, si quando este nombre pusieron a la tal cuerda: formava con la dicha quarta un diapente, que es quinta perfecta: y por esto tomo nombre de requinta. Ahora no tienen este temple: mas forman ambas cuerdas una octava: segun tiene el laud, o vihuela de Flandes Este instrumento teniendo las tres, o quatro ordenes de cuerdas dobladas, que forman entre si octavas: dizen tener las cuerdas requintadas.

They are accustomed to put on the fourth course of the guitar another string which they call "requinta". I do not know whether when they gave this name to the said string it made the interval of a 5th with the said fourth course, and for this reason it has this name. Today it is not tuned in this way; instead the two strings form an octave in the same way as on the lute, or "vihuela de Flandes" [i.e. another name for the lute]. Because this instrument has three or four strings doubled in octaves they say that it has its strings "requintadas".

<u>Comment:</u> Bermudo has previously pointed out that the 4-course guitar has the same intervals between its strings as the vihuela without its first and sixth course i.e. on the guitar there is a perfect 4th between the first and second courses, a major 3rd between the second and third courses and a perfect 4th between the third and fourth courses. However the guitar is different from the vihuela because the two strings of its lowest course are tuned an octave apart rather than in unison like the vihuela. He is not saying that there are two ways of stringing the guitar – with or without a high octave string, but that is the custom to string the course in octaves rather than in unison.

Although he seems to imply that high octave string is added (rather than the low one) and therefore seems to contradict what Mudarra is saying above, all he is really doing is comparing the guitar to the vihuela and highlighting the difference between the two. He may not have been aware of how the guitar came to be strung in the way that it is. He says he doesn't know why the string is called "requinta" – but a possible explanation is that this is because it was tuned a 5th above the 3rd course rather than a 4th below. At the beginning of the chapter he says

Suelen llamar a la cuerda mas baxa "quinta".

They are accustomed to call the lowest string "Quinta".

The term "requinta" probably just means a thin string. This is the case in other sources. "Quintsaite" in German (fifth-string) means a very thin string. The name was taken from early violin playing, when the first string was tuned a 5th above the second, but it soon came to mean "very thin string" only. German lutenists including Newsidler called their chanterelles "quintsaite". Bermudo also says that lutenists refer to octave strung courses as "requintadas".

Joan Carles Amat: Guitarra española de cinco ordenes. (1st edition, Barcelona, 1596, no longer extant. Earliest surviving edition, Lérida, 1626. Reprinted several times throughout the 17th and 18th centuries)

The earliest source to describe how the 5-course guitar was strung and played. It mentions octave stringing on both fourth and fifth courses:

f6 - Esta guitarra española de cinco ordenes... esta compuesta de nueve cuerdas: una en el orden primero, llamada prima, y en los demas ordenes dos, las quales llamamos segundas, terceras, quartas, quintas. Las segundas y terceras, entre si son en un misma voz: pero las quartas, y quintas, por hallarse en cada orden una cuerda gruessa no son iguales de la manera que lo son las segundas, y terceras; porque las gruessas estan una octava mas baxo de las otras cuerdas sus compañeras.

This 5-course Spanish guitar ... has nine strings in all, one on the first course, called first, and two on the other courses, which are called seconds, thirds, fourths and fifths. The seconds and thirds have their strings tuned in unison; but the fourths and fifths, having one thicker string on each course, are not tuned in unison like the seconds and thirds are, because the thicker ones are tuned an octave lower than the strings which accompany them.

Instructions for tuning are also given, starting with the third course. This method of tuning is typical of Spanish sources.

f6v Primeramente tomaras las terceras, que es el orden tercero, puestas en una misma voz, en el segundo traste, y con ellas templaras las quintas, la una dellas que es la mas prima igual, de suerte que sean en un mismo tono y en una voz, y la gruessa una octava mas baxa de su compañera; y tomando despues las quintas, en el segundo traste, templaras las segundas poniendolas en una mesma boz; despues tomaras las dichas segundas en el tercero traste, y con ellas templaras las quartas, desta suerte, la mas prima igual, y la gruessa una octava mas baxa que su compañera; y tomando las quartas en el segundo traste, templaras la primera, que es el orden primero, tambien en una misma boz, y quedara templada esta guitarra del todo.

First of all, take the thirds, that is, the third course, tuned in unison and stopped at the second fret, and tune the fifths with them, the thinner one in unison, and the thicker one an octave lower than its companion. And then stopping the fifths at the second fret, tune the seconds, tuning them in unison. Then take the seconds stopped at the third fret and tune the fourths with them so that the thinner one is in unison, and the thicker one an octave lower than its companion. And stopping the fourths at the second fret, tune the first, which is the first course, in unison also. In this way the guitar will be tuned throughout.

<u>Comment:</u> Amat deals only with playing strummed music and is primarily concerned with accompanying vocal music, although he also mentions the various popular dances which formed a staple part of the guitar repertoire the 17th century.

Nicolao Doizi de Velasco: Nuevo modo de cifra para tañer la guitarra (Naples, c1640)

Treatise which explains how the 5-course guitar can play music in three, four and five parts and realize a bass line according to the rules of harmony in the same way as the theorbo, harpsichord and organ. In this context Doizi recommends the use of *bourdons* on the fourth and fifth courses. He says nothing about what would be suitable for solo music.

p16.... y quando se quiera tañer con fugas no son tanpocos sus puntos que no passen de diez y siete, termino bastante a dilatarse en qualquier fuga, y por esta razon me parece mejor el encordarla con bordones en la quarta y quinta cuerda, y no sin ellos, porque asi es mas sonora, y mas semejante a los puntos de las bozes naturales. Que aun que de una, o de otra manera no se libran algunas consonancias de las quartas en las bozes bajas, esto se puedo suplir, quando se tañen de rasgado.

And when one wishes to play counterpoint, the notes [of the guitar] are not so few that they do not exceed seventeen, a range sufficient enough to encompass any counterpoint. For this reason it seems to me better to string it with bourdons on the fourth and fifth courses, rather than without them, because then it is more sonorous and similar in range to that of natural voices. Whichever way it is strung, some chords will have 4ths between the lowest voices [i.e. will be sixfour chords]. This will not matter when they are strummed. <u>Comment:</u> Doizi was of Portuguese origin. Although his book was printed in Spanish-ruled Naples, he spent most of his career attached to the court in Madrid. He makes the point that when the standard chords are played *rasgado* or strummed, the inversions will be acceptable.

Gaspar Sanz: Instruccion de musica sobre la guitarra española (Zaragoza, 1674)

Deals with the instrument, its technique and accompanying a bass line and includes a substantial selection of solo music. It is the first book of its kind to have been printed in Spain. His passage on stringing is the most famous of all!

[f8], Primer tratado p. 1 - En el encordar ay variedad, porque en Roma aquellos Maestros solo encuerdan la guitarra con cuerdas delgadas, sin poner ningun bordon, ni en quarta, ni en quinta. En España es al contrario, pues algunos usan de dos bordones en la quarta y otros dos en la quinta, y a lo menos, como de ordinario, uno en cada orden. Estos dos modos de encordar son buenos, pero para diversos efectos, porque el que quiere tañer guitarra para hazer musica ruidosa, ò acompañarse el baxo con algun tono, ò sonada, es mejor con bordones la guitarra, que sin ellos; pero si alguno quiera puntear con primor, y dulçura, y usar de las campanelas, que es el modo moderno con que aora se compone, no salen bien los bordones, sino solo cuerdas delgadas, assi en las quartas, como en las quintas, como tengo grande experiencia; y es la razon, porque para hazer los trinos y estrasinos y demas galanterias de mano izquierda, si ay bordon impide, por ser la una cuerda gruessa, y la otra delgada, y no poder la mano pissar con igualidad, y sujetar tambien una cuerda recia, como dos delgadas; y a mas desto, que con bordones, si hazes la letra, o punto E, que es Delasolre, en la musica sale la quinta vacante en quarta baxo, y confunde el principal baxo, y le dà algo de imperfeccion, conforme el contrapunto enseña; y assi puedes escoger el modo que te gustare de los dos, segun para el fin que tañeres.

In stringing there is variety, because in Rome musicians string the guitar only with thin strings, without a bourdon on either the fourth or fifth course. In Spain the opposite is the case, <u>since some use two bourdons on the fourth course and another two on the fifth, and at least, as is usual, one on each course.</u> These two methods of stringing are good, but for different effects. For those who wish to use the guitar to play noisy music, or to accompany the bass line of any dance tune or sonata, the guitar is better strung with bourdons than without them. If anyone wishes to play with skill and sweetness, and to use campanelas, which is now the modern way of composing, bourdons do not sound as well as do only thin strings on both the fourths and fifths, of which method I have had much experience. This is the reason - when making trills, slurs and other ornaments with the left hand, the bourdon interferes with them because it is a thick string and the other is thin, and therefore the hand cannot stop them evenly, and hold down the thick string as easily as two thin strings. Furthermore, with a bourdon, if you play the letter or chord of E, which is D lasolre [i.e. the chord of D minor], the open fifth course sounds a 4th below the root of the chord and confuses the proper bass, giving the music some imperfection, as the rules of counterpoint demonstrate. Thus, you may choose whichever of the two pleases you, according to the purpose for which you are playing.

<u>Comment</u>: The crucial phrase "Algunos usan de dos bordones en la quarta, y otros dos en la quinta" was wrongly translated as "Some use two *bourdons* on the fourth course and others two on the fifth" by Sylvia Murphy in her article "The tuning of the five-course guitar" in Galpin Society Journal, XXIII, August, 1970, p.49-63. The correct translation is as underlined above. The two versions imply something different. The mistranslation implies at least two separate tunings, one with two *bourdons* on the fourth course - but not on the fifth, and the other with two *bourdons* on the fifth course - but not on the fourth. The correct translation indicates either double *bourdons* on both the fourth and fifth courses, or one on each course accompanied by an upper octave string (either AA dd or aA d'd). Several people have derived unlikely stringing arrangements from it.

Sanz visited Naples and Rome probably between 1667 and 1672. His comments are based on his observation of what players whom he met in Rome did, and he is comparing this with his experiences in Spain. He is not comparing practices in Rome with those elsewhere in Italy and his comments do not imply that use of the re-entrant tuning was confined to Rome. His reference to noisy music (*musica ruidosa*) is usually taken to mean strummed music, but it could more generally refer to music played out of doors.

Sanz says that the re-entrant tuning is best for the "modern way of composing". The reason which he give for this is that it is difficult to stop a thick and thin string evenly when playing *campanelas* and making trills, slurs and other ornaments with the left hand, and that *bourdons* do not sound as well as do only thin strings on both the fourths and fifths when playing this style of music. He does not say that it is necessary because it eliminates the skips of a 7th or a 9th in the melodic line or octave doubling from *campanelas*. *Campanelas* are scale passages in which each successive note is played on a different string creating an effect like a peal of bells.

In spite of what Sanz says, (and he cannot after all have met every guitarist in Spain!), re-entrant stringing probably was used there before 1674. It is mentioned by Doisi de Velasco, and Briçeño was Spanish although his book was printed in France. We have no way of telling whether players who bought Sanz' book followed his advice when playing the music, but there is no reason why they should not have done so, whatever method of stringing they may

have favoured before. Presumably Sanz himself used the re-entrant tuning for his solo music, and it all works perfectly well in this way! Amat's "Guitarra española" is the only guitar book printed in Spain before Sanz and unless they had travelled abroad, or were able to obtain printed music from abroad, guitarists in Spain may have been unfamiliar with the whole idea of playing "mixed" or "lute" style music on the guitar. However, they may well have been excited by the novelty of it all.

Lucas Ruiz de Ribayaz: Luz y norte musical. (Madrid, 1677)

Treatise which includes chapters on the guitar, the harp and musical theory. The book also includes music in tablature for guitar and harp (separately). Tuning instructions mention *bourdons*.

p11 - Tiene su principio el templar la guitarra en las terceras, las quales se ajustan de suerte que heridas ambas a dos juntas parezca que son en el sonido uno. En estando acordes, y con dicha igualidad, se pisan dichas terceras en segundo trastes, y conforme al sonido que tienen, despues de pisadas en segundo traste, se pone la mas delgada de las quintas (que ordinariamente suele ser la mas alta) y en estando ajustada dicha quinta, se pone la compañera, octava abaxo con ella, porque es un bordon... ... En estando ajustadas las segundas, se han de pisar en tercer traste, y conforme tuvieren el sonido pisandas en dicho traste, se ha de poner la mas delgada de las quartas (que tambien suele ser la mas alta) y despues se ajusta con ella la compañera, que es un bordon, octava abaxo.

The tuning of the guitar begins with the third course, which is adjusted in such a way that... the two [strings] together sound the same note. And these being tuned in unison, the third course is stopped at the second fret, and the thinner string of the fifth course (which is usually the highest [i.e. on the instrument as held in playing position]) sounds the same as the strings of the third course stopped at the second fret; and the said string of the fifth course being tuned, its companion is tuned an octave lower than it, because it is a bourdon......... The second course being tuned, it must be stopped at the third fret, and the thinner of the fourths (which is also usually the highest) is tuned in unison with [the note on the second course]; and then its partner, which is a bourdon, is tuned an octave lower.

<u>Comments:</u> This is the only 17th century source to mention explicitly that the **treble or high octave strings** were usually placed on the thumb side of the course. **It includes a** number of pieces from Sanz, which have been simplified, **and possibly** adapted to make them more suitable for octave stringing.

Francesco Guerau: Poema harmonico. (Madrid, 1694)

Music for guitar. Tuning instructions are not given but the use of *bourdons* on both courses is implied in the discussion of right-hand techniques.

p.5 - Que la glossa que hizieres con el dedo indice, y largo, ha de ser alternandolos; ... observando, que si glossas de la prima abaxo, ha de ser con estos dedos, hasta la quarta; y della abaxo con el pulgar, dando con èl todos los golpes; y si glossas de los <u>bordones</u> àzia arriba, ha de ser con el pulgar, hasta la segunda; y della arriba con el indice, y largo.

When you play runs with the index and middle fingers, you must use them alternately.....If you play from the first course downwards, it must be with these two fingers as far as the fourth course, and from there on downwards only with the thumb; and if you play from the <u>bourdons</u> upwards, you must play with the thumb up to the second course, and from there upwards with the middle and index fingers.

<u>Comment:</u> Guerau's book is one of the few sources in which the music is clearly intended for the "conventional" method of stringing.

Pablo Nassarre: Escuela musica. (Zaragoza, 1724)

A monumental work in two volumes dealing with musical theory. The last seven chapters of Volume 1 deal with instruments, and Chapter 15 describes the six- and seven-course vihuelas and the five-course guitar.

Vol. 1, Book 4, Chapter 15, p.463 - La guitarra española, que es de cinco ordenes, aunque tambien han variado algunos el temple, no obstante ha sido mas permanente el que comunmente se usa, y es este. La quinta, èsta segunda arriba de las terceras, la quarta, quinta arriba, ò quarto abaxo; la segunda tercera arriba, y la prima, quarta arriba de la segunda, que es sexta de las terceras.

Although the 5-course Spanish guitar has various tunings, the one which is most commonly used and has been the most permanent is as follows: the fifth course is a 2nd above the third course, the fourth course a 5th above or a 4th below [the third course], the second a 3rd [above the third course], and the first a 4th above the second course, or a 6th above the third course.

<u>Comment</u>: Although the wording is ambiguous, Nassarre seems to be saying that only the fourth course is tuned to an octave. This may seem rather surprising, but a taste for French fashions in Spain in the early 18th century may have resulted in this method of stringing becoming popular for a time.

Nassarre does also refer to the guitar as having *bourdons* on both the fourth and fifth courses in a passage where he discusses the mathematical ratios between the thickness of the strings.

p.401 De la tercera à la quarta se halla la consonancia de quinta, que es de la proporcion sexquialtera...Hablo de la cuerda delgada, porque como se pone doble la que està octava abaxo, ha de estar en proporcion dupla, y con la tercera en proporcion sexquitercia, que es 4 à 3. La quinta cuerda, en dicho Instrumento tambien se pone doble, octava abaxo; pero proporcionando la delgada, se halla una segunda de tono mas alta, que la tercera, el qual intervalo es de la proporcion sexquioctava, que se halla de 9 à 8.Y la misma proporcion se ha de guardar en la gruessez...

There is the interval of a 5th from the third course to the fourth which is in the proporcion [ratio] sexquialtera.....I am speaking of the thin string, because as this is doubled, the string which is an octave lower has to be in duple proporcion, and with the third course in proporcion sexquitercia, which is 4 to 3. The fifth course of this instrument is also doubled an octave below. But measuring the thin string, it is a 2nd higher than the third course, which interval is in the proporcion sexquioctava, which is found from 9 to 8. And the same proporcion must be observed for the thicker one.

Pablo Minguet y Irol: Reglas y advertencias generales. (Madrid, 1752)

<u>Comment:</u> The sections dealing with the guitar in Minguet y Irol's "Reglas y advertencias" (1752) are made up of extracts from Amat, Sanz, Ruiz de Ribayaz and Santiago de Murcia (who does not include any comments on stringing in any of the collections of his music). Although Sanz's comments on stringing are reproduced verbatim, the tuning instructions are taken from Amat's "Guitarra española". However, Sanz's comment about "guitarists in Rome" has been changed to "guitarists in Italy"

University of Granada Ms.16972 "Suma primoroso de la guitara" (c.1763)

Manuscript which combines excerpts from Sanz's "Instruccion de musica" with the whole of the section on accompanying a bass line from Santiago de Murcia's "Resumen de acompañar". At the end of the manuscript there is a note on the tuning of the guitar which implies *bourdons* on fourth and fifth courses.

Next page: <u>ITALY</u>

Return to: INTRODUCTION

THE STRINGING OF THE 5-COURSE GUITAR

ITALY

Giordano Montesardo (1606) Benedetti Sanseverino (1622) Ferdinando Valdambrini (1646/47) Pietro Millioni (1627) Fabritio Constanzo (1627) Girolamo Foscarini (ca.1640) Stefano Pesori (1648) Ludovico Monte (1625) Giulio Banfi (1653) Giovanni Abadessa (1653) Giovanni Abadessa (1653) Antonio Michele (1680) Athansius Kircher (1650) E:Pn.Rés.Vmc ms. 59, fol. 108v

Many Italian guitar books include tuning instructions, but only three clearly mention the way in which the instrument was strung - Montesardo, Sanseverino and Valdambrini.

Girolamo Montesardo: Nuova inventione d'intavolatura. (Florence, 1606)

The first book of its kind to be printed in Italy, Montesardo's book includes music to be strummed in *alfabeto*. Tuning instructions mention *bourdons*.

Regola per accordare la chitarra

Prima, e principalmente volendo ben'accordare la chitarra spagnuola, bisogna metter il cordone di sopra in un tono basso conveniente, come fondamento della consonanza dell'altre corde, i poi accordar il suo canto vicino à lui un'ottava alto: le quali ambe due corde insieme si chiameranno quinte.

Appresso poi tirarete, il secondo cordone, un quarta più alto del primo essendo vuoto, (come si dice) & accordar il suo canto all'ottava alto del cordone, le quali corde ambidue si chiameranno quarte,

dopò accordate bene queste, tirate l'altra corda, chiamata terza anco una quarta più alta, & la compagna unitela, nell'unisono:

dopò volendo accordare la seconda, tiratela una terza maggiore più alta, & unite insieme la sua compagna:

Ultimamente accordarete la prima, ò canto, come lo volete chiamare, tirandola una quarta più alta, e sarà bene accordato il vostro istrumento.

Rule for tuning the guitar

First of all if you wish to tune the Spanish guitar well it is necessary to tune the uppermost string to a convenient bass note, as the foundation of the notes of the other strings, and afterwards tune its accompanying canto an octave higher: these two strings together are called fifth.

Then tune the second string unstopped a 4th higher than the first and tune its canto to the higher octave of that string: these two strings together are called fourth.

Then these being well tuned, tune the next string, called the third, also a 4th higher and its companion in the unison with it.

Then if you want to tune the second, tune it a major 3rd higher, and its companion in unison.

Finally tune the first, or canto, as it is called, tuning it a 4th higher, and your instrument will be well tuned.

<u>Comments</u>: Montesardo refers to the two lowest courses both as first and second and as fifth and fourth. Most sources refer to the highest sounding course as the first course. However some Italian sources refer to the courses in reverse order so that the lowest sounding is the first.

Benedetto Sanseverino: Il primo libro d'intavolatura. (Milan, 1622)

Collection of strummed music in *alfabeto*. Tuning instructions mention *bourdons*.

Modo d'accordare le Chitarra alla spagnuola

(p.vii) La chitarra vuol'havere cinque ordine accompagnati à due corde per ordine eccetto il cantino.....

Il quinto ordine detto il Basso haverà un cantino di sopra accompagnato con una corda più grossa, che venghino à far ottava tutte due insieme, tirandole à voce corista, come si usa nelli altri strumenti, overo à voce proportionata secondo la grandezza della chitarra.

Il quarto ordine parimente vuol havere un cantino accompagnato con il suo basso, che facciano ottava tutte due insieme come di sopra, l'incordarete con il quinto ordine, tirandole quattro voci più alte del quinto ordine, che mettendo il deto sopra il secondo tasto farà quinta con il basso, overo toccando il quinto tasto del quinto ordine faranno unison tutti duoi li ordini. Il terzo ordine faranno due corde accompagnate insieme d'una sola voce al unisono, tirandole quartri voce più alte del quarto ordine, che mettendo il deto sopra il secondo tasta, farà ottava con il quinto ordine voto.

Il secondo ordine, faranno due corde parimente d'una sola voce al unisono come sopra, tirandole tre voci più alte del sodetto terzo ordine, che mettendo il deto sopra il terza tasto farò ottava con la corda grossa del quarto ordine, e unisono con suo cantino.

Il cantino primo ordine solo, l'accordarete quattro voci più alte del sodetto secondo ordine, che mettendo il deto sopra il terzo tasto faccia ottava conil terzo ordine voto.

Method of tuning the Spanish guitar

The guitar has five courses of strings comprising two strings for each course except the cantino

The fifth course known as the bass has an upper cantino accompanied by a thicker string, which two together make an octave, striking them together, as is usual in other instruments, tuned to a note which is appropriate for the size of the guitar.

The fourth course likewise has a cantino accompanied by its bass, which two together make an octave like the above, tuning it with the fifth course, striking it a 4th higher than the fifth course, which putting the said above at the second fret makes a 5th with the bass, or stopping the fifth fret of the fifth course all together makes a unison.

The third course has two strings which together sound a single note in unison, tuned a 4th above the fourth course, so that when it is stopped at the second fret it will make an octave with the open fifth course.

The second course also has two strings which likewise sound a single note in unison as above, tuned a 3rd above the said third course, so that when it is stopped at the third fret it will make an octave with the thicker string of the fourth course, and a unison with its cantino.

The cantino, the single first course, is tuned a 4th above the said second course, so that when it is stopped at the third fret, it will make an octave with the open third course.

<u>Comments:</u> Sanseverino also gives the tuning in staff notation using the bass clef with d' for the first course. The upper octave strings are not shown.

Ferdinando Valdambrini: Libro primo d'intavolatura di chitarra (Rome, 1646); Libro secondo (Rome, 1647)

Two large collections of music in mixed tablature. In "Libro primo" Valdambrini includes two tuning checks, given in both Italian and French

tablature. In the first the intervals are identified as unisons, and in the second as octaves. These imply a re-entrant tuning.

ILLUSTRATION 1 - VALDAMBRINI'S TUNING CHECKS



In the introduction to his 1647 book he says the instrument has no basses

Benche questo istromento non habbia i bassi come gl'altri con tutto cio si vede ch'è atto ad imitare tutto quello ch'è conduceule alli affetti. La vaghezza e perfetione consisteno nelle variationi de stili perche havendo il detto poche corde differenti un solo stile, ò riesco mancheuole, ò tedioso. Il sonarlo bene consiste più in destrezza che in rigore, perche volendovi andare con rigore di musica ò si darà in asprezze, overo in seccaggini per la ragioni su detta.

Although this instrument does not have basses like the others, nevertheless one can see that it is capable of imitating everything which is conducive to the affections. Its charm and perfection consist in variations of style, because having so few different strings, a single style would run the risk of defectiveness or tediousness. Sounding well consists more in dexterity than in rules, because trying to observe the rules of music results either in harshness or in tedium for the aforesaid reason.

<u>Comments:</u> Because Valdambrini's books are the only ones to clearly indicate the re-entrant tuning, and both were printed in Rome, it has been suggested that they represent a practice which was confined to Rome. However, Valdambrini specifically mentions that the instrument has no basses and that it is therefore necessary to write for it in a specific way. It seems more likely that this method of stringing was associated with the kind of music which Sanz refers to as "the modern way of composing". Valdambrini's books were printed forty years later than that of Montesardo and twenty-five years later than that of Sanseverino. They may represent a change in stringing preferences which occurred when guitarists began to experiment with the "mixed" style.

Other sources

Unlike Spanish sources, which always begin with the third course, Montesardo and Sanseverino begin their tuning instructions with the fifth course, and work upwards according to the intervals between the strings.

Many other Italian books, most of them collections of pieces in *alfabet*o, include what is really a method for checking whether the intervals between the strings are true (a "tuning check"). None of these clearly mention the octave stringing. The earliest surviving version is that of Millioni:

Pietro Millioni: Quarto libro d'intavolatura...(Rome, 1627)

This is a collection of pieces in entirely *alfabeto*. Earlier books by Millioni have not survived. Millioni's instructions start off by comparing the fifth course to the third

p.7 La quinta và accordata con la terza tastandola al secondo tasto.

The fifth course is tuned with the third course stopped at the second fret.

This implies that the third course is to be tuned first (as in Spanish sources); the fifth course is then tuned in unison with it. No mention is made of a low octave string on the fifth course. It continues

La quarta và accordata con la quinta tastandole al quinto tasta. La terza và accordata con la quarta tastandole al quinto tasta. La seconda và accordata con la terza tastandole al quarto tasta. La prima và accordata con la seconda tastandole al quinto tasta. A voce eguali

The fourth is tuned with the fifth stopped at the fifth fret The third is tuned with the fourth stopped at the fifth fret The second is tuned with the third stopped at the fourth fret The first is tuned with the second stopped at the fifth fret To the same voice

This is followed by a second check

p.8 Quando è accordata in questa maniera si potrà poi toccare La prima, tastandola al terzo tasto con la terza vota. La seconda tastandola al terzo tasto con la quarta vota La terza tastandola al secondo tasto con la quinta vota La quarta tastandola al secondo tasto con la prima vota La quinta tastandola al secondo tasto con la seconda vota

When it is tuned in this manner it is possible to play The first, stopped at the third fret with the open first course The second, stopped at the third fret with the open third course The third, stopped at the second fret with the open fifth course The fourth, stopped at the second fret with the open first course The fifth, stopped at the second fret with the second course

Both are represented in tablature.

In later editions of Millioni's book, which was reprinted and plagiarized throughout the 17th and 18th centuries, the first sentence is altered so that the instructions start with the fifth course and read as as follows;

p.7 - La quinta si puole accordare a suo piacere.

La quarta si deve accordare con la quinta tastata al quinto tasto a voce eguale. La terza si deve accordare con la quarta tastata al quinto tasto a voce eguale. La seconda si deve accordare con la terza tastata al quarto tasto a voce eguale. La prima si deve accordare con la seconda tastata al quinto tasto a voce eguale. Quando si è accordata in questa maniera, si deve poi toccare la prima tastandola al terzo tasto con la terza vota.

The fifth may be tuned as you wish.

The fourth must be tuned to the same note as the fifth stopped at the fifth fret. The third must be tuned to the same note as the fourth stopped at the fifth fret. The second must be tuned to the same note as the third stopped at the fourth fret. The first must be tuned to the same note as the second stopped at the fifth fret. When it is tuned in this manner it should be possible to play the first course stopped at the third fret with the open third course.

This version of the instructions is reproduced in many other later books and is often illustrated in tablature as follows –

ILLUSTRATION 2 - STANDARD ITALIAN TUNING CHECK



Comment:

Most of the books which include these instructions are primarily collections of pieces in *alfabeto* to be strummed for which any method of stringing would be suitable.

Although these instructions illustrate the intervals between the strings, neither of the verbal instructions nor the chart indicates how the fourth and fifth courses are strung. Taken literally, i.e. assuming that all the intervals are to be read as unisons, the later version suggests that the two strings of the fourth and fifth courses are to be tuned in unison in the lower octave. This may sometimes have been the case for entirely strummed music (as Sanz implies) but would be unsatisfactory for later music in mixed style where the fourth and fifth courses are used as treble strings.

It has been suggested that because with the re-entrant tuning the fourth course stopped at the fifth fret will sound an octave above the third course rather than in unison with it, these and other similar tuning instructions can only refer to an instrument with octave stringing on both the fourth and fifth courses. This is not self evident. No clear distinction is made between unisons and octaves in these or many other tuning checks found in Italian sources. Players who did use octave strings on the fourth and fifth courses would have understood how these were to be tuned. Those who didn't would have been aware that there was an octave rather than a unison between the fourth and third courses when tuning in this way. However as a tuning method it is not very satisfactory for two reasons. It is more difficult work with two strings of a course an octave apart as a starting point, rather than from a unison (as in the Spanish instructions) and if the fifth course is tuned too high, the first course will break. Because this was the method was established in the "teach yourself" books printed in Italy in the first quarter of the 17th century, it continued to be used, or at least re-printed, when it was really unsuitable for the purpose.

The standard tablature tuning check is used by Corbetta, Granata and others to indicate the altered pattern of intervals between the courses required for their *scordatura* pieces. It is not surprising that they chose the method traditionally used in Italy for this purpose, but this doesn't indicate that they considered one method of stringing rather than another appropriate for their music. Although Corbetta uses this standard tuning check for the *scordatura* pieces in "Varii capricci" (1643) he uses a different one in "Varii scherzi di sonate" (1648).

ILLUSTRATION 3: TUNING CHECK FOR SCORDATURA PIECES IN CORBETTA'S VARII SCHERZI (1648)



This avoids making a comparison between the fourth and third courses. If all the intervals are regarded as unisons this would imply a re-entrant tuning in the absence of any mention of octave strings. This would be reading more into it than Corbetta probably intended but it does beg the question - why did he use a different method in this particular book?

Several other sources give incomplete or ambiguous tuning instructions which don't clearly indicate octave stringing or the absence of it.

Fabritio Costanzo: Fior novello, Libro primo (Bologna, 1627)

A collection of strummed music in *alfabeto*.

p.5 - [Modo d'accordare la chittara a il 1.tuono]

Prima si tirarà la 5, à suo modo, alta, ò bassa, secondo la grandezza della chitarra, la 4 toccandola à duoi tasti farà una consonanza, che l'orecchia conoscerà facilmente;

la 3 toccandola à duoi tasti, farà una corrispondenza simile alla 5;

la 2 toccandola à 3 tasti haverà corrispondenza con la 4 & la 1 toccandola à 3 tasti andarà un'ottava alta su la terza.

First, the fifth course, being tuned to a convenient pitch according to the size of the guitar, will make a "consonanza" [i.e. a perfect 5th] with the fourth stopped at the second fret, which the ear will easily recognise.

The third course stopped at the second fret will make a "corrispondenza" [i.e unison?] with the fifth in the same way.

The second stopped at the third fret has a "corrispondenza" [unison?] with the fourth and the first stopped at the third fret makes an "ottava" [octave] with the third course.

<u>Comments</u>: As the octave between the third and first courses is specifically mentioned, it is possible that the "corrispondenza" between the others is a unison. This would result in the re-entrant tuning. The fourth course is not compared with the fifth in unison. However, Costanza may simply not have thought it necessary to mention the option of using octave stringing and left it to the player to decide what to do.

Girolamo Foscarini: Intavolatura de chitarra spagnuola. Libro secondo. (Macerata, 1629).

Collection of music in *alfabeto*. Although it is not generally realized, this book is substantially a plagiarized edition of one or possibly two earlier books in *alfabeto* printed by Gio. Ambrosio Colonna in about 1620. Colonna has not included any tuning instructions but Foscarini may have copied those which he has included in his own book from another earlier source rather than working them out for himself. He gives the standard tuning instructions and chart beginning with the fifth course and tuning upwards in unison followed by a tuning check which he says is in octaves. This could be taken to imply octave stringing on the fourth and fifth courses, although these are not specifically mentioned. Taken literally, i.e. assuming that all the intervals are to be read as unisons in the first check and octaves in the second, they suggest that the fourth and fifth courses are to be tuned in unison in the lower octave.

Subsequently Foscarini issued at least three further editions of his work, Il primo, seco[n]do, e terzo libro della chitarra spagnola (c.1630), Libro primo, secondo, terzo, e quarto (c.1632)and Li cinque libri della chitarra alla spagnola (Rome, 1640). Each of these includes some of the pieces in alfabeto from his Libro secondo, pieces in mixed tablature and pieces entirely in "lute" style. A lengthy introduction on playing the guitar, first included in the 1630 book, is reproduced in the later editions together with the tuning instructions from 1629. These don't necessarily apply to all the music in the later editions of the book. The octave check is as follows:

Regole, e modi d'accordar la chitara - Si troua ancora vn'altra regola per prouare se la Chitarra sia' accordata, cioè con due corde in ottaua, toccando, come vedrete quì sotto, che saranno tutte ottaue, e questo è quanto posso dirli in materia di accordare.

Rule and method for tuning the guitar - Another rule will also be found for testing if the guitar is in tune, that is two courses sounding in octaves, as may be seen [in the example] below, which are all octaves, and this is all that it is necessary to say about tuning.

ILLUSTRATION 4: FOSCARINI'S TUNING CHECK IN OCTAVES [FROM HIS 1640 BOOK]



Stefano Pesori: Galeria musicale (Verona: 1648)

A collection of music, some in *alfabeto* and some in mixed tablature for *chitarriglia*. Includes the standard verbal tuning instructions, the standard tuning chart in unisons and a second tuning check which he says is in octaves. This is the same as that of Foscarini, although it includes one additional octave check between the first and fourth courses. The *chitarriglia* is literally a small guitar. All Pesori's books are badly printed and the notation is difficult to interpret, which makes him a rether unreliable source of information.

Ludovico Monte: Vago fior di virtu dove si contiene il vero modo per sonare la chitarriglia spagnuola. (Venice ca.1625)

A collection of strummed music in *alfabeto*. It includes the standard tuning check and an additional one apparently in octaves although this is not entirely clear in the accompanying note which reads:

E quelli altri numeri che sono da se é il modo d'accordare, cioe le prime due corde di sopra si fanno fars voce uguale & mettendo un dito al quinto tasto, ò toccar la quarta che segue vota & farli far l'istessa voce uguale e cosi di mano in mano sino à basso, e poi comenciare a salire con la seconda prova cioè la prima a tre tasti con la terza vota farà l'ottava, e cosi accordarete, se bene à l'accorder ci vuol la voce viva, che mostri.

And those other numbers which are given are the method of tuning; that is, the first two strings from above [i.e. the fifth course] are made to make the same note, and placing a finger on the fifth fret, it matches the open fourth which follows and it will make the same note; and so from one to the next as far as the lowest course [i.e. the first course]; and then beginning to work with the second check, here the first course at the third fret will make an octave with the open third course.

<u>Comment:</u> It has been suggested that because the strings of the fifth course are to be tuned to the same note, and the interval of an octave between the first and third courses is specifically mentioned, this implies a re-entrant tuning. Taken literally it implies unison tuning throughout. In a more general sense it could refer to any method of stringing.

Giulio Banfi: Il maestro della chitara (Milan : 1653)

Collection of music in *alfabeto* and mixed tablature. Includes verbal tuning instructions similar to Millioni's. He then adds convoluted explanation similar to Monte's –

p.11 Column 1

Avertendo nell' accordare qualsiuoglia corda douuranno ricercar la voce, ciòe l'unisoni per essempio nell'accordar le quarte se la voce sarà accordata al quarto tasto della quinta bisognerà alzar le dette corde quarte. Se la voce sarà al sesto ò più ò meno, anderanno abbàssate, e questa regola servirà per tutte l'altre.

Note that in tuning any string you must seek the [right] note, that is to say the unisons. For example when tuning the fourths, if the note sounds the same as that of the fifth course [stopped] at the fourth fret, it will be necessary to raise the said fourths. If the note [is the same as that] at the sixth [fret] we have to lower [the fourth course] more or less, and this rule will serve for all the others.

<u>Comments</u>: There is no mention of any octave strings. He seems to imply that the fifth and fourth courses strings will be tuned in unisons. If the remark "this rule will serve for all the others" is to be taken literally it indicates unison tuning throughout. In a more general sense it could refer to any method of stringing.

Giovanni Battista Abadessa: Corona di vaghi fiori (Venice: Magni, 1627)

A collection of strummed music in *alfabeto*.

Il modo per accordare la chitarra

S'accorderà la prima del quinto in aria, nè troppo alto, nè troppo bassa La quinta và accordata con la terza tastandola al secondo tasto La quarta và accordata con la quinta tastandola al quinto tasto La terza và accordata con la quarta tastandola al quinto tasto La seconda và accordata con la terra [sic, terza] tastandola al quarto tasto La prima và accordata con la seconda tastandola al quinto tasto Quand'e accordata in questa maniera si potrà poi toccare la 1 tastandola al 3 tasto con la 3 vota La seconda tastandola al terzo tasto con la quarta vota La terza tastandola al secondo tasto con la quinta vota La quarta tastandola al secondo tasto con la prima vota La 5 tastandola al 2 tasto con la 2 vota

Method for tuning the guitar

The first [string?] of the fifth [course?] unstopped is tuned the same, neither too high, nor too low <u>The fifth course is tuned with the third course stopped at the second fret</u> The fourth course is tuned with the fifth stopped at the fifth fret The third course is tuned with the fourth stopped at the fifth fret The second course is tuned with the third stopped at the fourth fret The first course is tuned with the second stopped at the fifth fret When it is tuned in this manner it is possible to play the first course stopped at the third fret with the open third course The second stopped at the third with the open fourth The third stopped at the second with the open fifth The third stopped at the second fret with the open fifth

<u>Comment:</u> It has been suggested that these instructions imply a re-entrant tuning - because the fifth course is equated with the third course stopped at the second fret - and also octave stringing on the third course because the first course is equated with the open third course.

However no distinction is made throughout between octaves and unisons. The first line could imply that the point of departure is the treble string of a course tuned in octaves, although this is unclear. The fact that the fourth course stopped at fifth fret is equated with the third seems to imply a low octave string on the fourth course. In the last part of the instructions it is not clear whether the intervals are octaves or unisons. The best one can say is that these are ambiguous and could apply to any method of stringing. Similar instructions are included in Abatessa's "Cespuglio di varii fiori" (Orvieta: Robletti, 1635) and "Ghirlanda di varii fiori" (Milan: Monza, c.1650).

<u>General Comment:</u> With the exception of Banfi, whose instructions are ambiguous, and Pesori, whose books are too badly produced to be regarded as reliable, all of the above date originally from the 1620s.

Abadessa, Giovanni Battista, Intessitura di varii fiori. (Rome/Lucca, 1652)

p.4 - Modo d'accordare l'arpetta per sonare in concerto con la chitarra

Method of tuning the "arpetta" in concert with the guitar

Antonino Micheli: La nuova chitarra di regole (Palermo, 1680)

Regola per accordare l'arpetta della chitarra

Rule for tuning the "arpetta" with the guitar

Corrispondenza di tutte le lettere della chitarra con tutti li tasti del cembalo.

Correlation of all the [alfabeto] letters of the guitar with all keys of the keyboard.

<u>Comment:</u> Both are collections of strummed music in *alfabeto*. Both include verbal instructions matching successive strings of the "arpetta" with notes on the guitar fingerboard. Micheli also includes an illustration matching the strings of the guitar to successive notes on the keyboard. It has been suggested that these indicate a re-entrant tuning. However, in each case some of the notes fall in the wrong octave so that none clearly indicates how the guitar is strung.

Athanasius Kircher: Musurgia universalis. (Rome, 1650)

A scholarly treatise. Book 6, Chapter 2 deals with the guitar. Much of Kircher's information is taken from Mersenne (see under France) including the illustration of the guitar and re-entrant tuning shown in staff notation.

Antonio Stradivarius (ca.1700)

A paper pattern in the Stradivari Museum in Cremona. On one side is an illustration of the neck and fingerboard of a theorboed guitar. On the reverse are notes describing the strings on the fingerboard which also refer to the theorboed guitar. These indicate *bourdons* on both fourth and fifth courses placed on the treble side of the course. [Quotation from Simone F. Sacconi: The secrets of Stradivari (Cremona : Libreria del Convegno, 1979), Item 375, p.228.]

Questi deve essere compani due cantini di chitara queste deve essere compane due sotanelle di chitara questi deve essere compane doi cantini da violino grossi queste altra corda deve essere un canto da violino - questa altra corda deve essere una sotanella di chitara questa altra corda deve essere un canto da violino ma di più grossi questa corda deve essere un cantino da violino.

First & second strings: These must be like two guitar first strings Third & fourth strings: These must be like two guitar second strings Fifth & sixth strings: These must be like two thick violin first strings Seventh string: This must be a violin second string (bourdon) Eighth string: This must be a guitar second string Ninth string: This must be the thickest possible violin second string (bourdon) Tenth string: This must be a violin first string

<u>Comments</u>: These date from the end of the 17th century and apply to the theorboed guitar. The Italian is mistranslated in Frisoli, Patrizia - The Museo Stradivariano in Cremona in Galpin Society Journal, XXIV, July 1971, p. 40. and on the basis of this mistranslation has sometimes been interpreted as indicating a bourdon on the fourth course only.

F:Pn.Rés.Vmc ms. 59, fol. 108v

This manuscript is a collection of pieces in *alfabeto* probably dating from the first quarter of the 17th century and of Italian provenance so it is surprising that the instructions may have been adapted to refer to the so called "French" method with octave stringing only on the fourth course. James Tyler has reproduced the text on p.77 of his book "The guitar and its music" and suggests that it refers to the "re-entrant tuning". He has not reproduced the chart. Rather than using a tablature stave like other Italian sources, it shows the courses on the fingerboard, all double except the first, which is single. The line representing the bourdon on the fourth course is slightly thicker than the one which accompanies it, but this may be accidental. This is more noticeable in the manuscript itself than in the photocopy. As well as the standard intervals the chart includes a *Reprova* confirming some of the intervals in the written instructions. Tyler has also omitted part of the final sentence which sheds further light on how the text should be interpreted.

unterfette & fetti Nota che le prime dua corde semps accordano à une pari tasta note al e seconce s accordano una guarta nor astate al settimo tasto, con le prime a pari o ucro alquinto quelle prime co secondo con nove uguak to statate al recondo tasto colle prime a te le quarte saccordano una terta sor t te al terlo tasto con le seconde a tore ; quinta saccorda una quanta so tastata al trelle tasto un ottava o al quento tasto otro una sopra lega

Text & translation

Nota che le prime dua corde sempre s'accordano <u>a voce pari</u> tastandole al sec.º o terzo tasto o a vota come si vede qui

Note that the first two strings [i.e. fifth course] are always tuned to the same voice; stopping them at the second or third fret or open as you see here.

Le seconde s'accordano una quarta voce sop.^a tastate al settimo tasto, con le prime a voce pari o vero al quinto quelle prime con le secondo con voce uguale

The seconds [i.e. fourth course] are tuned a fourth above; stopped at the seventh fret, to the same voice as the firsts [i.e. the fifth course], otherwise those firsts [fifth course] stopped at the fifth fret make the same voice as the seconds [fourth course].

Le terse s'accordano una quarta [una quinta?] sotto, tastate al secondo tasto, col le prime a voto

The thirds are tuned a fourth [fifth?] below; when stopped at the second fret with the open first [fifth] course

Le quarte s'accordano una terza sop^a tastate al terzo tasto con le seconde a voce pari

The fourths [i.e. second course] are tuned a third above; when stopped at the third fret to the same voice as the seconds [i.e. fourth course]

La quinta s'accorda una quarta sopra le [quarte] tastate al terso tasto un ottava sop^a le terse [<u>o al quinto tasto otto voce sopra le prime - omitted by Tyler.</u>]

The fifth [i.e. first course] is tuned a fourth above the fourths [i.e. second course]; stopped at the third fret it makes an octave with the third course <u>or at the fifth</u> <u>fret eight notes above the firsts [i.e. fifth course]</u>.

<u>Comments</u>: The courses are referred to in the Italian manner - the <u>lowest</u> sounding course is the first; the <u>highest</u> sounding is the fifth.

There is a clear distinction throughout between unisons (*voce pari/voce uguale*) and octaves (*un octave/otto voce*) - the last sentence - which Tyler has omitted - seems to confirm this.

In the *Riprova* the lines are reversed so that the lowest line represents the lowest <u>sounding</u> course. The word *Riprova* is written upside down under the grid to indicate this.

Fifth course

The initial sentence states that two strings of the fifth course are always tuned to the same voice. The second part of the sentence refers to the figures 0 2 3 in the first segment of the illustration under the heading "primo" and seems to be intended to emphasize the fact that this is so whether the course is stopped or open.

There is nothing to suggest that the fifth course is octave strung.

Fourth course

If the fourth course is octave strung, when stopped at the seventh fret, the *bourdon* will be in unison with the fifth course. When the fifth course is stopped at the fifth fret it will be in unison with the treble string on the fourth course.

The fourth course is probably octave strung. The additional check may have been added to the standard instructions to clarify the octave stringing.

Third course

The third course is tuned a fourth [a fifth?] below the fourth course; when stopped at the second fret it sounds the same as the open fifth course. The first interval in the *Riprova* in the segment headed "*sesto*" illustrates this.

The word quarta/quinta is not entirely clear in the manuscript. The copyist may have written quarta instead of quinta or possibly vice versa and tried to correct it - an easy mistake to make.

The third course will be a fourth above or a fifth below the fourth course if this is octave strung.

Second course

The second course is tuned a third above the third course; when stopped at the third fret it sounds the same voice as the <u>high octave string</u> on the fourth course if this is octave strung. The second interval in the *Riprova* in the segment headed "*sesto*" illustrates this.

First course

The first course is a fourth above the second; stopped at the third fret it is an octave above the third course; stopped at the fifth fret it is an octave above the fifth course. The third interval in the *Riprova* in the segment headed "*settimo*" illustrates this.

The copyist has made it clear that these intervals are octaves. (They are incidentally the first two intervals in Valdambrini's octave check). Those elsewhere in the instructions are most likely unisons. The fact that the first course stopped at the fifth fret is specifically mentioned as being an octave above the fifth reinforces the idea that the fifth course has no bourdon.

The second interval in the *Reprova* in the segment headed "*settimo*" indicates that the outer courses are a fifth apart although this is not mentioned in the text.

<u>Conclusion</u>: Although there is one apparent error, the unisons and octaves are consistent and suggest that there is a bourdon on the fourth course but not the fifth. The strings of the fifth course are referred to as being the same and also

the same as the third course stopped at the second fret. The strings of the fifth course cannot be in unison in the lower octave as the final phrase of the instructions specifically mentions that the first course stopped at the fifth fret is eight notes above it.

The instructions seem typical of the muddled attempts to clarify Italian tuning instructions found, for example in Abatessa and Banfi. They suggest that there were different ways of interpreting the original instructions and that players did not always find them helpful. There is no reason why individual players should not have adapted the standard instructions to suit themselves.

Next page: **<u>FRANCE</u>**

Return to: INTRODUCTION

THE STRINGING OF THE 5-COURSE GUITAR

FRANCE, ENGLAND & THE NETHERLANDS

Luis de Briçeño (1626) Marin Mersenne (1636/37) Pierre Trichet (1640) Francesco Corbetta (1671) Antoine Carré (1671) F:Pn.Ms.Res. 1402 (Undated) Robert de Visée (1682) Nicolas Derosier (1690) Sebastien Brossard (1703) B.Bc.Ms.S5615 (1730) GB:Och Ms.1187 (ca. 1690) Denis Diderot (1757) Joseph Bernard Merchi (1761) Michel Corrette (ca.1763)

Luis de Briçeño: Metodo mui facilissimo para aprender a tañer la guitarra. (Paris,1626)

Collection of music in Castilian *cifras* - to be strummed. Tuning instructions indicate the re-entrant tuning.

f.5- Primeramente poner las dos terçeras en unison, despues poner el dedo en una E. y ajustallas con las segundas en A en unison.

Por la prima, poner el dedo sobre una D y haçer que suene aun mesmo son en octava con las terçeras en A.

Por las Quartas, poner el dedo sobre una D de las segundas y haçer que suenen en unison con las quartas en A.

Por las quintas, poner el dedo sobre una C de las terçeras y haçer que suenen con las quintas en A aun mismo son.

First tune the thirds in unison. Then stop them at the fourth fret [E] *and tune the open seconds* [A] *in unison with them.*

For the first course stop it at the third fret [D] and tune it an octave higher than the open thirds.

For the fourths stop the seconds at the third fret [D] and tune the open fourths in unison with them. For the fifths stop the thirds at the second fret [C] and tune the open fifths to the same note.

<u>Comment:</u> Although Briçeño was Spanish, he lived and published his book in Paris. The table of chords at the beginning is set out in French tablature and Briçeño uses the tablature letters to refer to the frets to be stopped. He does not indicate the pitch.

Marin Mersenne: "Harmonie universelle" (1636/1637)

Mersenne's treatise on music includes the most influential seventeenth century study of musical instruments. He clearly describes the re-entrant tuning:

Book 2, Proposition XIV, f. 95 - ces notes se prononcent ainsi, RE, SOL, UT, MI. LA: par où l'on void que le son de la 5. chorde est plus haut d'un ton que celuy de la 3 : ce qui est particulier à l'accord de la guiterre.

These notes are called thus, re, sol, ut, mi, la: from which one can see that the pitch of the fifth string is one tone higher than that of the third. This is peculiar to the tuning of the guitar.

<u>Comment:</u> The solmisation syllables represent the notes A d G B e; (Ut = Gamut). Taken literally they are an octave below sounding pitch. However his drawing of the five-course guitar shows the tuning in staff notation using the treble clef with a B flat signature, an octave above sounding pitch, with d' for the first course. There is also a Latin version of the treatise.

Mersenne may have obtained his information indirectly from the Roman based lutenist and guitarist, Kapsberger. A letter dated 14th January 1634 to Mersenne from the French mathematician, Jean-Jacques Bouchard who was working in Rome, contains several references to Kapsberger. It includes tunings for various instruments with an explanation which reads "Here are the tunings which are found in Italy for lutes, citterns, guitars etc... which Giovan Girolamo (i.e. Kapsberger) gave me." Because Mersenne mentions Briçeño, it has often been assumed that he obtained his information about the way the guitar was strung from Briçeño's book but this may not be the case. Mersenne's tuning charts compare courses in unisons in a different order from Briçeño's and his table of Castilian *cifras* also varies. His description of the guitar does not necessarily represent practices which were specifically French.

Pierre Trichet: Traité des instruments, F:Psg Ms.1070. (1640)

An unpublished manuscript treatise on musical instruments.

f98. - Ils montent ordinairement la guiterre de cinq rangs de chordes doubles, sauf la chanterelle, qu'aucuns veulent estre simple.....Pour l'accorder telle qu'elle

est aujourd'hui, et la mettre en son vrai ton naturel, il faut commencer par la plus grosse chorde, qui est une des cinquiemes, laquelle doibt servir de guide pour accorder sa compagne, qu'il faut hausser d'une octave plus haut, comme estant plus desliée. Puis il faut venir aux quatriemes que l'on doibt hausser d'une quarte plus haute que les precedentes. Les deux autres qui viennent apres, que l'on nomme tierces, doivent estre tendues d'une autre quarte plus hautes que les quatriemes. Par après les secondes doivent estre plus hautes que les tierces d'un diton ou tierce majeure. Finalement la chanterelle se doibt hausser d'une quarte plus que les secondes; tellement que depuis la plus basse chorde jusques a la plus haute il y a une douzieme que l'on nomme autrement diapason diapente...

The guitar is usually strung with five pairs of strings, although the chanterelle is often single. To tune it in the modern way and to put it in its natural pitch, it is necessary to start with the thickest string, which is one of the fifths. This will serve as a guide for tuning its companion, which must be tuned an octave higher because it is thinner. Then one must tune the fourths, which one has to tune a fourth higher than the preceding. The next two, which are called thirds must be tuned another fourth higher. The next two which are called seconds must be tuned a major third higher. Finally the chanterelle must be tuned a fourth above the seconds. Thus from the lowest string to the highest there is a twelfth.

<u>Comment:</u> Because Trichet does not explicitly mention the octave stringing on the fourth course it has sometimes been suggested that he is saying that it should be tuned in unison. This is unlikely. Trichet lived in Bordeaux and was a keen collector of musical instruments.

Francesco Corbetta: La guitarre royalle. (Paris, 1671)

Collection of music in French tablature including instructions for accompanying a bass line. The title page and preliminaries are undated, but the privilege on p.102 is dated 21st September 1670 and ends with a note "Achevé d'imprimer le dernier iour d'Octubre 1671" ("Finally printed the last day of October 1671") The book has two separate introductions, one in Italian and one in French. These are apparently intended for separate readerships. Italian would have been Corbetta's mother tongue and he presumably wrote the Italian preface himself. The French version is an abbreviated translation of the Italian. It is not known whether he made this himself or whether it was done by someone else.

The Italian reads

p3 - Averti di mettere una piciol ottava alla seconda corda que e D sol re perche li dui unissoni non fanno armonia, come anche le mie sonate lo ricercano; Take care to put a thin octave on the second string which is D sol re, because the two in unison do not make the harmony which my sonatas reach for.

<u>Comment:</u> Corbetta refers to the order of the courses in the Italian manner, the first course being the lowest, fifth course, the second course being what we would usually call the fourth course. (He also refers to the courses in this way in the Italian description of the *repicco*). The solmisation probably refers to the low octave string - D on the middle line of the bass stave.

The French version is less specific

p8 - Ie vous avertis de mettre une octave à la 4.me corde de. la. re. sol. parceque les deux unissones ne composent point d'harmonie...

I advise you to put an octave on the fourth course de. la. re. sol. because the two in unison never make harmony.

<u>Comment:</u> The solmisation syllables may refer to the pitch of the course, rather than the low octave string. In the hexachordal system D la sol re = D above middle C, a high D.

However the solmisation syllables in both versions are probably not intended to be taken literally. They can vary or may have been misprinted.

It is reasonably clear in both prefaces that Corbetta is instructing his readers to add a low octave string, or *bourdon*, to a fourth course which was usually tuned in unison at the upper octave, that is to the re-entrant tuning.

<u>Overall comment:</u> Corbetta's instructions have given rise to a number of conflicting theories summarized as follows:

<u>Theory 1:</u> Because this method of stringing is not mentioned in any surviving sources before 1670, it was "new" in 1670. Corbetta had previously always used octave stringing on the fourth and fifth courses, but dropped the bourdon on the fifth course for this particular book.

<u>Comment:</u> The fact that there is no clear reference to this method of stringing with a *bourdon* only on the fourth course before 1670 does not rule out the possibility that it was in use earlier. Things often turn out to have been around longer than one might think! For example it was previously thought that Montesardo "invented" *alfabeto* in 1606, but there are now known to be at least two manuscripts dating from the 1590s which use it. At least some of the music in "La Guitarre Royale" dates from the early 1660s - the Duke of Gloucester, for instance, died in 1660 and Corbetta is unlikely to have written

his *Tombeau* for him ten years later. Whatever method of stringing he considered suitable for the pieces must have therefore have been in use by 1660.

We don't know what method of stringing Corbetta used before about 1660. His three earlier surviving books have only short introductions and in none of them does he mention the method of stringing he preferred. His 1639 book, "De Gli Scherzi Armonici", is in *alfabeto* with just a few simple pieces in mixed style. It includes two tablature tuning charts, the standard one (reproduced in the section on Italy) and one which could be in octaves or a combination of octaves and unisons. There are no written instructions. These are sufficient for checking whether the guitar is in tune, but do not indicate any particular method of stringing. In his 1643 book, "Varii Capricii per la Ghittara spagnvola" he uses the standard chart to indicate the altered intervals for the *scordatura* pieces, but in his 1648 book. "Varii scherzi di Sonate per la Chitarra Spagnola" he uses a different chart for this purpose (reproduced in the section on Italy).

The idea of dropping the *bourdon* from the fifth course, reducing the compass of the instrument by a perfect 4th, may at first sight seem to be regressive. This is not as obvious as it may seem if we bear in mind the problems inherent in plain gut strings. The reduced compass can be compensated for by using the higher frets; this raises the tessitura of the instrument creating a brighter sound. On the other hand, it is clear that the "re-entrant" tuning was known and used in Italy and it is possible that this was the method of stringing Corbetta used early in his career. If this were the case, adding a *bourdon* to the fourth course as soon as he began to write music in mixed style would make good sense.

<u>Conclusion:</u> Although we don't know what method of stringing Corbetta used before 1660, there is no reason why he should not have used the semi-reentrant" or "French" tuning throughout most of his career.

<u>Theory 2:</u> Because in the Italian preface Corbetta describes the octave string as "picciol" (literally "little") he is telling Italian players that a high octave string should be put on a fourth course which was usually strung in unison at the lower octave. In the French preface he telling French players who always used the re-entrant tuning to put a low octave string on the fourth course.

<u>Comments</u>: This is based on the misunderstanding of comments in Sanz and Trichet which have wrongly been taken to indicate that only the fifth course was octave strung, and that the fourth course was strung in unison in the lower octave. There is no evidence to suggest that the guitar was ever strung in this way.

It is also based on the assumption that the tuning referred to by Mersenne was specifically "French", whilst Italian guitarists always used octave stringing. Neither assumption is supported by the available evidence. We can't be certain what methods of stringing French guitarists used before 1670. The only collection of guitar music published before 1670 is François Martin's "Pieces de Guitairre, à battre/ et à pinser" printed in 1661 which does not include any information about stringing. Valdambrini clearly describes the re-entrant tuning.

<u>Conclusion</u>: The term "picciol" is a tad ambiguous, but the most likely explanation is that in the Italian preface, Corbetta is advising the use of a thin string - the thinnest string practical for the *bourdon* - to minimize the inconvenience caused by having strings of different thicknesses which Sanz refers to.

Theory 3: This method of stringing was "French" and was never used in Italy.

<u>Comments</u>: Corbetta's comment in the Italian preface appears to be directed to an Italian readership whom he assumed used a re-entrant tuning. If they followed his advice, they would have used the method of stringing he recommends. There would be no point in his including this comment, if Italian players always used octave stringing on the fourth and fifth courses.

<u>Conclusion</u>: Italian guitarists, especially Granata, would have been familiar with Corbetta's music, and some of them may have used the method of stringing he seems to have preferred. In any event, none of the significant collections of music printed in Italy after 1647 gives any clear indication as to the method of stringing to be used.

<u>Theory 4</u>: Corbetta's comment in both prefaces is directed to players, mostly in France, but possibly in Rome as well, who had previously used a re-entrant tuning. It is intended as a compromise for their benefit. He himself always used octave stringing on both courses - and left out the fifth course of all the chords which will be six-fours with this method of stringing.

<u>Comments</u>: This theory seems too speculative to take seriously. If he thought that it was necessary to use octave stringing on both courses, and always did so himself there is no reason why he should not have said so. Most players, whatever method of stringing they had used previously, would have aspired to play the music in the best way possible. It is not easy to play and is not intended for beginners. The music in "La Guitarre royale" is in French tablature; there is no reason why Corbetta should have included notes on the fifth course if he did not intend them to be played. <u>Conclusion</u>: The method of stringing which he refers to, with octave stringing on the fourth course but not the fifth, is clearly the one intended for the music in "La Guitarre royale" and probably the one he used himself throughout his career.

Antoine Carré: Livre de guitarre. (Paris, 1671)

Collection of music in French tablature including instructions for accompanying a bass line.

At the end of the section of pieces for solo guitar solo on p.27 he gives an "Accord de la guittare" - the re-entrant tuning in staff notation with d' for the first course which may have been copied from Mersenne. A tablature tuning check in French tablature starting with third course is also given which could be in unisons, although this is not explicitly stated.

ILLUSTRATION 5 - CARRE'S "ACCORD DE LA GUITARE" AND TUNING CHECK



At the bottom of p.1 of the following section on accompanying a bass line there is a note

[Part 2] p.1 - Fault mettre a la guitare une octave on quattriesme

It is necesary to put an octave string on the fourth course of the guitar

<u>Comment</u>: Carré's instructions suggest that the re-entrant tuning is to be used for the solo pieces, and a low octave string added to the fourth course for the continuo exercises. From the context it is clear that "une octave" is a low octave string.

The privileges of Carré's "Livre de guitarre" are dated 18th February 1671, and the date 1671 appears on the title page. It may therefore have appeared in print a few months before Corbetta's "La Guitarre Royale". However there is no reason to suppose that this method of stringing originated with Carré. Carré was clearly familiar with Corbetta's music and influenced by it. He has even included some of it unattributed in the guitar book which he had printed in about 1677. He is simply following Corbetta's example.

F:Pn.Ms.Res. 1402. (Undated)

Manuscript collection of mainly strummed music in French tablature which includes several Spanish pieces and five pieces by De Visée which were probably copied at a later date than the rest of the manuscript.

On p.192 there is an "Acor de guitere a l'unison" in tablature which implies a re-entrant tuning.

Robert de Visée: Livre de guitarre. (Paris, 1682)

Collection of music in French tablature with some pieces in staff notation. Like Corbetta, de Visée also says that there must be an octave string on the fourth course.

p.6 - J'ay esté obligé de transposer les pieces de musique acause de l'estendüe de la Guitare qui va jusques en D la re en haut, il ne faut pas oublier une octave a la quatrieme corde, elle y est tres necessaire.

I have been obliged to transpose the pieces because the compass of the guitar only reaches high D la re. One should not forget to put an octave on the fourth course, it is very necessary.

De Visée also emphasises the need satisfy the ear rather than follow the rules. (Good for him!)

p.4 - Et ie prie ceux qui scaurons bien la composition, et qui ne connoistreront pas la guittare, de n'estre point scandalizez, s'ils trouvent que ie m'escarte quelque fois des regles, c'est l'instrument qui le veut, et il faut satisfaire l'oreille preferablement a tout.

I beg those who understand the art of composition well and are unfamiliar with the guitar not to be scandalized if they find that I sometimes break the rules. The instrument calls for it and it is necessary above all to satisfy the ear.

<u>Comment:</u> De Visée implies that breaking the rules is unavoidable. The music is the way that it is, because that is how the instrument is. This is not a matter of choice. As with Corbetta, there is no reason why De Visée should not have told his readers to use octave stringing on both the fourth and fifth

courses (and edited out all the six-four chords!) if he thought this was a viable option.

<u>General Comment</u>: The "French" tuning may seem like a compromise, but as with most compromises, it is probably what worked best in practice for the kind of music which Corbetta and De Visée were composing. It retains all the advantages of a re-entrant tuning, whilst providing a sufficient range of notes on the fingerboard, although as De Visée says, it is necessary to chose suitable keys. The difference in thickness between the strings of the fourth course is not so problematic as that between the strings of the fifth course. For this reason, it may have become the method of stringing most widely used in the second half of the 17th century.

Nicolas Derosier: Les principes de la guitarre. (Amsterdam, 1690)

Instruction book with some simple pieces in French tablature.

p.iv. The tuning with octave stringing on the fourth course only is set out in staff notation.

ILLUSTRATION 6 - DEROSIER'S TUNING and TUNING CHECKS



<u>Comment</u>: The second and third examples are tuning checks, not alternative tunings. It should be noted that in the "autre maniere" check Derosier has mixed octaves and unisons.

Sebastien Brossard: Dictionnaire de musique. (Paris,1703)

Entry for Guitar

[Guitarra] - Espece d'instrumente à cinq rangs doubles de cordes, dont la plus basse est au milieu à moins qu'il n'y ait un bourdon une 8e plus bas que la 4e.

A kind of instrument with five courses of strings where the lowest is in the middle unless there is a bourdon an octave lower than the fourth course.

<u>Comment:</u> Brossard was a talented composer and musician who held church appointments in Strasbourg and Meaux after spending several years in Paris. He was also collector of books and music and a distinguished writer on music. His description of the guitar is certainly reliable.

Brossard's dictionary was translated into English by James Grassineau and published in London in 1640, by which time his observations may have been out of date.

GB:Och Ms.1187. (ca. 1690)

Manuscript notes made by the English scholar, James Talbot between 1690 and 1700. Consists of unnumbered loose sheets grouped by topic. Two sections include information about the stringing of the guitar.

In one section the tuning with octave stringing only on the fourth course is shown in staff notation with e' for the first course. (See Derosier above). This is referred to by Talbot as "Mr. Shore's tuning". John Shore (c1662-1752), the trumpeter and lutenist employed at the courts of James II and William III, supplied Talbot which much of his information. On the same page the names Francesco (a possible reference to Corbetta) and Latour are listed.

The other section gives a fairly detailed description of the instrument mostly taken from Mersenne. This includes Mersenne's tuning in staff notation.

B.Bc.Ms.S5615.Recueil des pieces de guitarre composées par Mr. François Le Cocq/Recueil des pieces de guitarre de meilleurs maitres du siecle dixseptieme (1730)

Manuscript of music by Francois Le Cocq and others copied by Jean-Baptiste de Castillion. It has a lengthy introduction written by Castillion who has taken his information from a variety of sources including de Visée.

He paraphrases De Visée's comment thus -

[Des Chordes] - Mais il faut observer de mettre un octave à la quatrieme corde, elle y est absolument necessaire.

But one must put an octave on the fourth course, it is absolutely necessary

The tuning with an octave stringing on the fourth course only is given in staff notation (copied from Derosier) at the end of the introduction.

He then says

[Des Chordes] - Même il se trouve des amateurs, que j'imite, qui mettent pareillement une octave à la cinquieme corde, ils la nomment bourdon....Et afin de donner à ce instrument plus de son, je charge les deux octaves que je mets au quatrieme et cincquieme rang d'un fin filet de laiton ou d'argent, ce dernier en vaut mieux. Et pour prevenir qu'elles ne sautent en les montant au ton d'octave necessaire, je ne les charge qu'à demi : C'est à dire qu'il reste un espace viude à la corde, de la grosseur\$du dit filet ou même un peu plus, et je choisis des cordes d'un moindre grosseur. Je les prepare moi-même, à cause que celles qu'on trouve aux boutiques sont entierement chargées ou trop grosses, ce qui rend le son sec et dure.

There are even amateurs, whom I copy, who also put an octave on the fifth course; they call it a bourdon... So as to give the instrument more volume, I cover the octave strings which I use for the fourth and fifth courses with wire of brass or silver; the last is the better of the two. To prevent them from slipping when being tuned to the pitch of the appropriate octave, I only half cover them; that is, the wire is wound in such a way that between each twist the length of uncovered string is of the same width as the wire, or slightly greater. I choose thinner strings and I prepare them myself because those which one finds in the shops are entirely covered, or too thick, which makes them sound dry and hard..

<u>Comment:</u> It is clear from the context that "un octave" is a low octave string, not a high octave one, added to what would otherwise be a re-entrant tuning. Overwound strings did not come into general use until the last quarter of the seventeenth century, and as Castillion suggests, were not always very satisfactory.

In his introduction Castillion says that he had recently taken up the guitar again after not having played for a number of years. He specifically says that he has copied the manuscript for his own use, and that he hopes that after his death it will fall into the hands of another guitarist who will benefit from his labour. He died in 1752 and it is unlikely that anyone other than close friends would have been able to consult it before that date. He is commenting on what he himself was doing in 1730. As well as music by Le Cocq, the

manuscript includes music by Corbetta and other 17th century guitarists. Castillion probably played this with octave stringing on both courses. However, Corbetta had been dead for 50 years by 1730 and Castillion's comments cannot be projected backwards in support of the notion that Corbetta used the same method of stringing.

Denis Diderot: Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers par une societé de gens de lettres. (Paris, 1757). Vol. 7

Entry for Guitar, written by Jean-Jacques Rousseau, includes the following comments:

p.1011 - ... on l'a mis à cinques doubles, dont les trois premieres sont à l'unisson. & les quatrieme & cinquieme à l'octave; souvent même on ne souffre point de bourdon à la cinquieme, & dans ce cas on les met à l'unisson. ...

...they put on it five pairs of strings, of which the first three are in unison and the fourth and fifth in octaves; often the bourdon on the fifth course is omitted and in that case these are tuned in unison.

p.1011 - Les bourdons filés ont deux inconvéniens, l'un d'user de couper les touches; l'autre plus grand, est de dominer trop sur les autre cordes, & d'en faire perdre le son final par la durée de leur, principalement dans les batteries. Il est des accords où ils peuvent bien faire, c'est lorsqu'ils produisent le son fondamental; mais comme cela n'arrive pas le plus souvant, il vaut mieux s'en tenir aux bourdons simples, a-moins qu'on ne veuille que pincer.

Overwound bourdons have two deficiencies. One is that they cut into the frets; the other, which is greater, is that they dominate the other strings and override the final note of the cadence with their resonance especially in strummed passages. There are some chords where they are useful because they supply the root of the chord, but as this does not happen very often, it is better to have plain bourdons at least when playing in lute style.

p. 1011. - Visé, célebre maître de guittare sous Louis XIV n'en mettoit point l'octave au cinquieme rang; mais il y perdoit l'octave du la, & par conséquent une demi-octave ...

Visée, the famous master of the guitar in the reign of Louis XIV never put an octave on the fifth course. Because of this he lost the low A on the fifth course and half an octave in compass.

<u>Comment</u>: Rousseau was born in Geneva in 1712. He cannot have known De *Visée* personally, but he may well have obtained his information from someone who did. His comments highlight the problems inherent in overwound *bourdons*.

Joseph Bernard Merchi: Le guide des Écoliers de la guitarre, op. 7. (Paris, 1761)

Michel Corrette: Les dons d'Apollon : méthode pour apprendre facilement a jouer de la guitarre. (Paris, ca.1763)

Both Merchi and Corrette indicate that the guitar had octave stringing on the fourth and fifth courses and this was probably the norm by the mid-18th century.

Corrette and Rousseau include illustrations of the guitar which show the high octaves strings placed on the thumb side of the course.

Next Page: THIRD COURSE

Return to: INTRODUCTION

THE STRINGING OF THE FIVE-COURSE GUITAR

OCTAVE STRINGING ON THE THIRD COURSE

I.Bc Ms. AA 360. (c.1660)

I.MOe Ms. Campori 612. (Undated).

It has been suggested that the illustrations in these two Italian manuscripts indicate the use of an upper octave string on the third course. Neither source indicates that such a method of stringing is to be combined with octave stringing on any other course and in both the information given is ambiguous.

I.Bc Ms. AA 360. (c.1660)

Manuscript of violin music, some in staff notation and some in tablature.

On f.109 the tuning of the five-course guitar and the violin are given in staff notation.

ILLUSTRATION 7 - TUNING OF THE GUITAR AND VIOLIN

: lo	0 cando in here		0	Ţ	
Portine. sinti	NO 0 0		and.	1	
Michan in more	il Boya in Ed.	to stredo maso he	to partie and	como in quised	
f=(j			
	O colla sec yes	Chimi Chimi			
	dla no var 13.0 (more)	O Company			
The set of	O offa pic ver Bio (more)	0 1 1 to 100 produce finds			
	O Alla pie ver Bio (Artho	C fa pro- g. S. (art) S. (s new finde			

The text reads

Accordatura da chitarra spagnuola il primo ordine s'accorder con A la mi re dello spineto.

Tuning of the Spanish guitar. The first course is tuned with A la mi re of the spinet

Il biolino va accorder il Basso in G sol re ut [G below middle C] dello spineto le altre corde vanno in giusta.

The lowest string of the violin is tuned to G sol re ut of the spinet, the other strings accordingly.

<u>Comments</u>: A la m ire can be the A either below or above middle C. The courses of both the guitar and violin are numbered in reverse order. The notes representing the third course of the guitar are shown twice with a note between them "canto in mezzo" i.e. "*canto*" in the middle. This could refer to the position of the high octave string between the other eight strings indicating that is it is on the bass rather than the treble side of the course.

However it is more likely that the purpose of the diagram is to match the lowest string of the violin (g) to the third course of the guitar (also g) and that it does not have anything to do with the way the guitar is strung. Although the term "Canto" was used to refer to the highest sounding string of the guitar and other instruments, it can also mean "angle", "corner", and in architecture "the point at which two walls meet". In the "A Lettori" of his "Libro Primero di Chitara spagnola" (1640), Bartolotti uses the term to mean "to the side of" - "trouando 2 numeri con li punti a canto" = finding 2 numbers with the dots to the side of them".

I:MOe Ms. Campori 612 "Regole per imparare a sonare la chitarra". (Undated).

A manuscript collection of strummed music in *alfabeto*. The introduction, including an engraved illustration showing the tuning of the guitar, has been copied from Banfi's "Il Maestro della Chitara". (see in Italy).

ILLUSTRATION 8 - BANFI'S ILLUSTRATION/I:MOe Ms. CAMPORI 612



<u>Comment</u>: In the manuscript the staff notation and an additional tuning check have been added to Banfi's original. This may be intended to clarify Banfi's rather ambiguous tuning instructions. If the standard Italian tuning check is used with a re-entrant tuning there will be a discrepancy between the fourth and third courses - the fourth course stopped at the fifth fret will sound an octave above the third course, rather than in unison with it. The staff notation may have been added to illustrate this discrepancy and to indicate that the third course must be tuned an octave lower.

Alternatively, since a number of Italian tuning instructions explicitly mention the fact that the first course stopped at the third fret sounds an octave above the third course, the staff notation may be intended to indicate that this is so in the tuning checks, the other intervals being read as unisons.

<u>Comment:</u> Why is there a need for a high octave string on the third course? There are occasionally skips of a 7th or a 9th in the *campanella* passages in the music of Sanz, Santiago de Murcia and some Italian guitarists. These can be amended with a high octave string. Corbetta is also rather fond of a melodic phrase which skips up a 7th and then resolves downwards to a 6th. Whether this justifies the use of a high octave string on the third course is largely a matter of personal taste. It is questionable whether it would have been practical, with the kind of gut strings available in the 17th century, to put a thin string on the third course which had to be tuned a minor 3rd above the first course. The reason why this method of stringing has become popular today is probably because it makes the music sound much brighter.

Return to: INTRODUCTION

_

_