

THE STRINGING OF THE 5-COURSE GUITAR

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Introduction

This is a survey 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 is 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 main 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. Briçeño's book is in Spanish but was printed in France and GB:Och Ms.1187 is in English; 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. His earlier books are discussed 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".

RE-ENTRANT TUNING



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 refer to it as "the semi re-entrant tuning".

SEMI RE-ENTRANT TUNING



3. With low octave strings (*bourdons*) on both fourth and fifth courses - which I refer to as "the conventional tuning".

CONVENTIONAL TUNING



Information about stringing is found in two types of source

1. Tutors and collections of guitar music.

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 usually indicate that the writer of the book thought that one particular method of stringing rather than another was to be preferred. Users of the book could have ignored the instructions if they did not suite their purpose.

2. Theoretical works including dictionaries.

Theoretical works do not necessarily reflect the *status quo* at the time and place where they were written. Much depends on the sources of information which the writers were able to consult and these are not always easy to identify.

Only a very small number of writers - Doizi de Velasco, Valdambrini, 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, if any, which the composer preferred, perhaps because composers in the 17th century attached less importance to this matter than we do today. Players would have done what worked best in practice.

It is important to bear in mind that what has survived to the present day is a matter of chance and it is not easy to determine how representative it is of what players really did in the past.

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 to be unacceptable to many players today.

1. 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.
2. Octave stringing causes random octave doubling of the melodic line. This is pervasive but is especially noticeable when playing *campanelas* – scale passages where successive notes are played on different courses.
3. Both re-entrant tunings and octave stringing sometimes result in skips of a 7th or a 9th in the melodic line.

These characteristics are nowhere condemned in contemporary sources but they seem to offend the sensibilities of present-day performers.

Most players today seem to think that composers intended their music to be played with one method of stringing rather than another, that there is a "correct" way of stringing the guitar for each part of the repertoire and by identifying this it is possible to eliminate at least some of these idiosyncracies. 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 few exceptions) the music will not conform to what we today consider to be the "rules of musical theory" whichever method of stringing is used 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 six-four 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 our concern about such matters they would have intabulated the music differently.

Some players today have a problem with the idea of re-entrant tunings and find it difficult to come to terms with the fact that the instrument had no true bass register. However re-entrant tunings were used in the 16th and 17th centuries, not only on the guitar, but also on the cittern and theorbo. They are one 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 also 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 without problems. "Loaded" strings, which were sometimes used for the

bass strings on the lute from the sixth course downwards, would probably not have been suitable for the guitar.

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.

Today discussion focuses on whether one or other method of stringing results in a more "correct" realization of the music. Very little attention is paid to the problems which 17th century players may have experienced in finding suitable strings for their instruments. The idiosyncracies which some people today dislike are really an integral feature of the music; they do not indicate that it is intended for one method of stringing rather than another. In trying to eliminate them we may actually be eliminating the characteristics which give the music its individuality. This does not mean that we should not try to play the music in a way which we feel makes sense. But we should be cautious about claiming that we are playing it in the way the composers intended.

As the distinguished musicologist Howard Mayer Brown pointed out many years ago what we may think sounds "best" or "right" or "most musical" is not a safe guide to what was done in the past.

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.

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THE STRINGING OF THE FIVE-COURSE GUITAR

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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 mention of the way in which the guitar was strung refers to the 4-course guitar.

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

This is the earlier of the two vihuela books which include music for the 4-course guitar. In *Libro I* preceding the first piece for guitar - "Fantasia del primer tono" there is a note:

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

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

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 may have been played with a plectrum and sometimes 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).

This is a lengthy treatise which includes sections on musical instruments and how to arrange vocal music for them. Book 4, Chapter 65 describes how the 4-course guitar was strung.

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 this string it made the interval of a 5th with the 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 [i.e. the lute] has three or four strings doubled in octaves they say that it has its strings "requintadas".

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. This is referred to as "*temple nuevo*". He also explains that the fourth course was sometimes tuned a perfect 5th rather than a perfect 4th below the third course; this is referred to as "*temple viejo*", (Mudarra also includes one Fantasia for this tuning).

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 octave 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 -

f.96 - Suelen llamar a la cuerda mas baxa "quinta".

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

However 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*".

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The fifth course was added or at least became standard towards the end of the 16th century. In theory all three of the possible stringing arrangements mentioned in the introduction are feasible and in spite of the sporadic nature of the evidence, all three may have been in use from an early date.

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).

Amat's work is the earliest known source to describe how the 5-course guitar was strung and played. Although copies of the earliest edition have not survived, it is to be assumed that the contents were the same as later editions. Amat clearly describes the guitar as having 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 five-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 strings 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 all Spanish sources.

f6v - Primeramente tomaras las terceras, que es el orden tercero, puestas en una misma voz, en el segunodo 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 string 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 string 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.

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. His book seems to have been so popular that no-one in Spain thought it necessary or worth while to publish an alternative.

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

This is a rather recondite treatise which sets out to prove that 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, rather than just strumming simple dances. In this context Doizi recommends the use of *bourdons* on the fourth and fifth courses. As a musician, who played the guitar himself – the preliminary poems refer to him as “*Apolo portugues*” and “*Amphion lusitano*” - he was evidently aware that there was more than one way of stringing. His comment implies that use of the re-entrant tuning was not uncommon in Spain, in spite of what Sanz says below. He also makes the point that when the standard chords are played *rasgado* or strummed, the inversions will be acceptable.

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 contrapuntally, 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 fourths between the lowest voices [i.e. will be six-four chords]. These will not matter when playing rasgado.

Doizi de Velasco was Portuguese, but spent his career within the orbit of the Spanish court. He was living in Madrid by 1624, where he was first attached to the household of the Cardinal Infante, Fernando of Austria, brother of Felipe IV. He then entered the service of the Duke of Medina de las Torres, Ramiro Nuñez de Guzmán, Viceroy of Naples from 1636-1644. In 1641 Doizi de Velasco returned to Madrid and from then until his death in c.1659 he was one of Felipe IV's *Músicos de camara*. Although “*Nuevo modo*” was printed during his time in Naples, there is no obvious reason why his comments should refer to Neapolitan rather than Spanish practices. Naples and Sicily had formed part of the Spanish hegemony since the beginning of the 16th century.

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

Throughout the period the primary role of the guitar in Spain was that of an accompanying instrument. Very little solo music for it appeared in print and only a small amount survives in manuscript. Sanz's “*Instruccion de musica*” is one of the most detailed source of information about the guitar we have. It describes the instrument and its technique, explains how to accompany a bass line and includes a substantial selection of solo music. His passage on stringing has been quoted many times and is one of the most illuminating.

f8r - [Primer tratado, p.1 Regla primer] - 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 igualdad, 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, 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. 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 fourth 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.

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.¹ The correct translation is highlighted above. The two versions imply something different. The mistranslation implies 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. Several people have derived unlikely stringing arrangements from the mistranslation.

¹ Sylvia Murphy - "The tuning of the five-course guitar" *in Galpin Society Journal*, XXIII, August, 1970, p.49-63.

SANZ' STRINGING FOR THE FOURTH & FIFTH COURSES



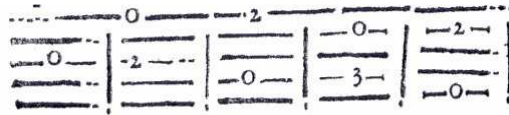
Sanz's tuning instructions are as follows -

f8v - [Primer tratado, p.2 Regla segunda] - Començeràs por las terceras, y estas las igualaràs de modo, que hagan una misma voz, no subiendolas mucho, para que las demàs cuerdas puedan llegar a tono. Despues las quintas en vacio, se igualan con las terceras, pissadas en segundo traste. Despues las segundas en vacio con las quintas, pissadas tambien en segundo traste. Despues las quartas en vacio con segundas, pissadas en tercero traste. Y ultimamente, la prima en vacio, con las quartas pissadas en segundo traste..

You will begin with the thirds, and these will be tuned in such a way that they make the same note, and not too high so that the other strings can reach their pitch. Then the open fifths are tuned equal with the thirds stopped at the second fret. Then the open seconds with the fifths also stopped at the second fret. Then the open fourths with the seconds, stopped at the third fret. Finally the open first with the fourths stopped at the second fret.

He has also illustrated this in a tablature chart.

SANZ' TABLATURE CHART



If these are taken at face value and interpreted as unisons throughout they imply a re-entrant tuning. However his instructions are really no different from those of Amat apart from the fact that they do not mention the low octave strings and they are suitable for any method of stringing.

Sanz visited Naples and Rome probably between 1667 and 1672. He claims to have studied harmony and counterpoint with Cristofaro Caresana, who was appointed organist of the Real Cappella and director of the Conservatoire of Sant'Onofrio in Naples in 1667. Caresana was Venetian by birth, and had studied with Pietro Ziani in Venice before settling in Naples around 1660. Sanz mentions both Ziani and Oratio Benevoli, Maestro de Capilla de San Pedro in Rome, who died in 1672. He may have known Benevoli personally, but his familiarity with Ziani is more likely to have been through Caresana; there is no evidence that he visited Venice or other parts of northern Italy. Sanz also studied with the lutenist and guitarist Lelio Colista in Rome.

Sanz's comments are based on his own observation of practices in Rome and he is comparing these with his own experience of practices in Spain. He is not comparing practices in Rome with those elsewhere in Italy and his comments do not therefore imply that use of the re-entrant tuning was

confined to Rome. Moreover Spain is a very large country and Sanz cannot possibly have known what method of stringing was used by every Spanish guitarist. We should be careful not to read too much into what he says.

His reference to noisy music "*musica ruidosa*" is usually taken to mean strummed music in general, but he may have had more specific circumstances in mind. In Spain the guitar was regularly used in the theatre and other forms of popular entertainment which took place out of doors where sheer volume of sound would be essential. Strummed music need not necessarily be loud, nor are *bourdons* essential from a musical point of view. Many other sources emphasise the importance of strumming softly and sweetly.

Sanz gives two reasons for recommending the re-entrant tuning.

1. 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 *bourdons* do not sound as well as do only thin strings on both the fourths and fifths when playing this style of music. It is primarily **left-hand technique** that he is concerned with, not voice leading or eliminating octave doubling. It is often stated today that when playing *campanelas* on an instrument with *bourdons* the player had the option of striking only the upper octave string of the pair. Sanz's solution is to remove the *bourdons*, not to try and leave them out.

2. His second reason seems to contradict what he has already said about *bourdons* being suitable for accompanying a bass line. He implies that this may result in inappropriate six-four chords. The example he gives is the chord of D minor which has an A on the fifth course, a 4th below the root which confounds the principal bass. The chord will also be a six-four line chord with the re-entrant tuning. The point here may be that the principal bass line will be supplied by another instrument and if the guitar has a *bourdon* on the fifth course, the fifth of the chord will sound below it. With the re-entrant tuning this will not happen. Although the chord will still be a six-four chord all the notes will sound above the principal bass.

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

We have no way of telling whether Sanz's readers took his advice, or whether they simply played his music using the conventional method of stringing, but "*Instruccion de musica*" proved very popular and was reprinted several times. During the same period two other guitar books found their way into print in Spain. Ruiz de Ribayaz's "*Luz y norte musical*" is a treatise which includes chapters on the guitar, the harp and musical theory with music in tablature for guitar and harp in separate sections.

Like Sanz and Amat, Ruiz begins his tuning instructions with the third course. They indicate *bourdons* of the fourth and fifth courses and are notable because they are one of the very few sources to mention that the *bourdons* were usually placed on the treble or thumb side of the course; the wording does imply that this may not always have been the case. No reason is given for this arrangement; perhaps it is mentioned because it was a recent innovation in Spain:

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 igualdad, 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 conpañera, 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 conpañera, 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.

"Luz y norte" includes twelve pieces borrowed from Sanz. Most of these vary only slightly from Sanz's originals, but four pieces have been abbreviated, several variations being omitted in each case. Some, but not all, of these variations include *campanelas* and it has been suggested that they have been omitted because these would not work well with octave stringing.² There are however other factors which should be taken into account. On the whole the variations omitted are more difficult to play and more difficult to print. Ruiz de Ribayaz has included only the first six variations of the "Xacaras" from "Instruccion de musica" (Ribayaz, p.70/Sanz, Libro 1, p. 7). Subsequent variations use higher frets, up to and including the 13th on the first course in one place and the eighth on the fourth and fifth courses in two; there is an extended passage in quavers at the end. Ribayaz has also omitted the final variation of the "Folias" (p.75/Sanz, Libro 2, p.3) described as a "running variation" by Sanz. Although this is all in quavers, it would work perfectly well with the conventional tuning. "Luz y Norte" was printed with a makeshift arrangement of letterpress because the facilities for printing from an engraving or from music type were not available in Madrid at the time. The note values are indicated irregularly using the letters S, L. and D. Shortage of space may also have dictated that only abbreviated versions be included. One thing is clear – there is nothing in "Luz y norte" to support the idea that the treble strings were played without the *bourdons*.

Francesco Guerou: Poema harmonico. (Madrid, 1694).

The music in Guerou's "Poema harmonico" is in a style more akin to that of contemporary Spanish keyboard music than to the music of other composers for the guitar. The two lower courses do however occasionally fulfil a dual treble and bass rôle in his music. There are no tuning instructions but the presence of *bourdons* on both courses is implied in the discussion of right-hand techniques.

² Robert Strizich – "A Spanish guitar tutor : Ruiz de Ribayaz's Luz y norte musical" [in](#) Journal of the Lute Society of America, Vol. 7, 1974, p. 51-81.

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 *bordones* 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 that course on downwards only with the thumb; and if you play from the *bourdons* upwards, you must play with the thumb up to the second course, and from that course upwards with the middle and index fingers.

This is just a passing reference; it does not necessarily indicate that Guerau thought this method of stringing was the only one suitable for his music.

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Pablo Nassarre: Escuela musica. (Zaragoza, 1724).

It comes as a surprise to find Nassarre claiming in his "Escuela musica" that the semi re-entrant tuning is the one which is most commonly used. "Escuela musica" is a monumental work in two volumes dealing with musical theory. The last seven chapters of Volume 1 deal with instruments; Chapter 15 describes the 6- and 7-course vihuelas and the 5-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 five-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 second above the third course, the fourth course a fifth above or a fourth below [the third course], the second course a third [above the third course], and the first a fourth above the second course, or a sixth above the third course.

Nassarre does however 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.

Vol. 1, Book 4, Chapter 6, 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 fifth from the third course to the fourth which is in the proporción [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 proporción, and with the third course in proporción 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 second higher than the third course, which interval is in the proporción sexquioctava, which is found from 9 to 8. And the same proporción must be observed for the thicker one.

It is possible that Nassarre is documenting a change of fashion in Spain at the end of the 17th and beginning of the 18th centuries, the period from which most of the surviving solo repertoire dates. The last Hapsburg king, Charles II, died in 1700, and was succeeded by Philip V, a grandson of Louis XIV. In 1701 Philip married the French princess Maria Luisa Gabriela of Savoy. She is known to have learnt the guitar; Santiago de Murcia describes himself as her "Maestro de guitarra" on the title page of his printed book "Resumen de acompañar" (1714). If she was familiar with the guitar before arriving in Spain she would have been used to the semi re-entrant tuning, which was standard in areas of French influence at the time. Although "Resumen de acompañar", the three manuscript collections of Murcia's music³ and two other substantial manuscripts from this period - E:Mn.Ms.M2209 : Santa Cruz, "Livro donde se veran pasacalles" (n.d), and the anonymous anthology, E:Mn.Ms.M811 : "Libro de diferentes cifras" (1705) - include no tuning instructions, French influences may have led to the adoption of the semi re-entrant tuning by some Spanish players for a time.

In Part 2, Book 1, Chapter 9 Nassarre discusses the property of different intervals. Chapter 9 deals with the interval of a perfect 4th which, contrary to some theorists, Nassarre considers to be neither consonant or dissonant even when occurring between the bass part and an upper voice. His reason for this is that it is commonly used in this way on the guitar and other similar instruments.

Part 2, Book 1. Chapter 9 p. 57 - Verdad es, que formada con el Baxo, por si sola, no tiene aquellos grados de sonoridad que otras, y por esso la cuentan entre las disonantes; aunque no es bastante motivo este, quando la experiencia nos enseña, que algunos Instrumentos Musicos se usa con el Baxo en lugar de quinta (esto es en la Guitarra y en algunos otros).

It is true that when formed with the bass by itself it (the interval of a perfect 4th) does not have the same degree of sonority as the others (intervals) and for this reason it is included among the dissonances. Nevertheless this is not sufficient reason (for excluding it) when experience shows us that on some musical instruments it is used in the bass in place of the perfect 5th . This is true of the guitar and some others.

It seems that the six-four chords were regarded as less of a problem in the 17th and early 18th centuries than they are today.

³ The three manuscript collections are Cifras selectas (1722), Saldívar Codex no. 4 (c.1730) & GB:Lbl Add.Ms.31640, "Passacalles y obras de guitarra" (1732). Much of the music in the two later manuscripts dates from rather earlier than the 1730s.

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Two mid-18th century sources indicate that octave stringing on both courses was fairly standard in Spain prior to the addition of a sixth course.

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

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 Murcia. Sanz's comments on stringing are reproduced almost word for word although his comment about "guitarists in Rome" has been changed to "guitarists in Italy". The tuning instructions are taken from Amat's "Guitarra española," which continued to be reprinted until the end of the 18th century.

University of Granada Ms.16972 "Suma primoroso de la guitarra" (ca.1763).

University of Granada Ms.16972 "Suma primoroso de la guitarra" (c.1763)⁴ 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 are tuning instructions which indicate *bourdons* on fourth and fifth courses.

p. 40 - Primeramente poner las terceras mui yguales ni mui altas ni mui bajas. Despues pisar las terceras en el segundo traste, y por aquel tono que dan las terceras se ajustan las quintas y su bordon en punto baxo, octava. Despues pisar las quintas en el segundo traste, y por aquel tono que dan las quintas se tiemplan las segundas. Despues pisar las segundas en el tercera traste y por aquel tono se arreglan las cuartas, y su bordon lo mismo que el otro. Despues pisar las cuartas en el segundo traste y por alli se arreglan.

First tune the thirds in unison, neither too high nor too low Then stop the thirds at the second fret, and tune the fifths to the note which the thirds produce and the bourdon an octave lower. Then stop the fifths at the second fret and and tune the seconds to the note which the fifth produces. Then stop the seconds at the third fret and tune the fourths to that note and the bourdon in the same way as the other. Then stop the fourths at the second fret [and tune the first course to it]. And in this way it will be tuned.

As can be seen, a phrase is missing from the last check. A tablature tuning chart which is identical with Sanz is given followed by a series of intervals, some of which are octaves and some unisons.

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⁴ E:M.Bn M.1233, "Metodo de guitarra" (procede de Granada) dated 1763 was copied by the same person. It is the same compilation of extracts from Sanz and Murcia but does not include the tuning instructions.

THE STRINGING OF THE 5-COURSE GUITAR

ITALY

Girolamo Montesardo (1606)
Benedetto Sanseverino (1622)
Ferdinando Valdambrini (1646/47)
Pietro Millions (1627)
Giovanni Battista Abadessa (1627)
Ludovico Monte (ca. 1630)
Fabritio Constanzo (1627)
Giulio Banfi (1653)
Giovanni Paolo Foscarini (1629/ca.1640)
Stefano Pesori (1648)
Francesco Corbetta(1639)
Carlo Calvi (1646)
Antonio Carbonchi (1640/1643)
Giovanni Battista Granata (1646)
Athanasius Kircher (1650)
Giovanni Battista Abadessa (1653)
Antonino Michele (1680)
Antonio Stradivarius (ca.1700)
F:Pn.Ms.Rés.Vmc.59 (early 17th century)

The 4-course guitar does not seem to have been much used in Italy; there are no sources which are unequivocally for it and none that indicate how it was strung. The five course instrument seems to have taken the country by storm towards the end of the 16th century resulting in the publication of a large number of simple "teach yourself" books. Many Italian sources include advice on how to tune the guitar, but only three clearly mention the way in which it was strung - Montesardo, Sanseverino and Valdambrini.

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

Montesardo's book was the first book of its kind to appear in print. It is a "teach yourself" book and includes music notated in *alfabeto* which is to be strummed. In his introduction he explains that by profession he is a composer of madrigals and serious music (rather than a guitarist). However, as he has been asked to do so, he has invented a simple way indicating **the correct time and measure** with which the pieces are to be played. It should be noted that he did not invent *alfabeto* himself. This was already in use in 1606.

His tuning instructions mention *bourdons* on the fourth and fifth courses. He refers to the intervals between the courses but does not describe any other other procedure for checking whether that the guitar is in tune.

f.5v - [*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.

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 fourth 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 fourth higher and its companion in the unison with it.

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

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

Montesardo refers to the two lowest courses both as first and second and as fifth and fourth. The courses are sometimes referred to in reverse order in Italian sources. He also seems to imply that the *bourdon* is uppermost; the term *cordone* suggests a thicker string than *corda* but it may also refer to a course rather than a single string.

What is unusual about his instructions is that they suggest that the player should start by tuning the lowest course first. Instructions for tuning the lute usually start with the advice to tune the highest course as high as it will go without breaking and work downwards. Rather than providing a practical way of tuning the guitar he is really describing the way it is strung. The fact that he has done so in this way may explain why tuning instructions in later Italian books follow a similar pattern in spite of the fact that this is not the best way to ensure that the instrument is in tune.

He makes some interesting, if not entirely clear, comments about the quality of strings to be used, emphasising the need to use strings which are thin but not of a uniform gauge.

f.6r - [Della qualità delle corde] - E necessario, per le molte ottave, che vi sono in questo istrumento, haver corde fine, che non siano false, & di cinque qualità, cioè il primo cordone di sopra hà da essere più grosso del secondo, tanto quanto il giuditio ordinarà; & il secondo cordone alquanto meno di grossezza del primo. Poi il canto, overo l'ottava del cordone grosso hà da esser di quella grossezza, che saranno le seconde & il canto del secondo cordone, chiamato quarto, ha da essere della

grossezza della prima, ò canto come lo vogliate chiamare. Le terze hanno da essere di più grossezze delle seconde alquanto simili alle terze di leuto grosso, & sappiate, che pochi l'hanno havuta questa regola, perche molte chitarre si vedono, che li canti sono tutti sottili, e di una grossezza istessa, che non ponno rendere mai giusta consonanza. Avertirete ancora, che li vostri canti, ò prime siano pastosi alquanto, e fugire la sottigliezza loro, la quale non potra mai render buon suono.

It is necessary because of the many octave strings, which you find on this instrument, to have slender strings which are not false and of fifth [cinque] quality; thus the first course from above [i.e. the fifth course] has to be thicker than the second [i.e. fourth], as much as common sense ordains; and the second [fourth] course somewhat less thick than the first [fifth]. Then the canto, or octave of the thickest string has to be of the same thickness as the second [course], and the canto of the second course, called fourth, has to be of the [same] thickness as the first [course] or canto, whatever you wish to call it. The third course has to be thicker than the second in a similar amount to that of the third of the large lute. And it seems that few have had this rule, because many guitars are seen on which the cantos are all slender, and of the same thickness, which does not render a very just note. Note also that your cantos or firsts should be as pliable as possible, and avoid their being too thin, which will not make them sound good.

Benedetto Sanseverino: Intavolatura facile...per la chitarra alla spagnola....Opera terza (Milan, 1620; reprinted 1622).

This is also a collection of music in *alfabeto* and like Montesardo, Sanseverino specifically mentions the thicker strings on the two lowest courses in his tuning instructions.

f.4r - [Modo d'accordare le Chitarra alla spagnuola] La chitarra vuol'havere cinque ordine accompagnati à due corde per ordine eccetto il cantino.....

de quali 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.

The guitar has five courses of strings comprising two strings for each course except the cantino [which is single].

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

The fourth course also has a cantino accompanied by its bass; the two together make an octave as above. Tuning it with the fifth course, it will be made a fourth higher than the fifth course. Then if the fourth course is stopped at the second fret it will make a fifth with the bass, or stopping the fifth course at the fifth fret, the two together will make a unison.

The third course has two strings which together sound a single note in unison, tuned a fourth 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 sound a single note in unison as above, tuned a third 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 fourth 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.

Sanseverino describes the intervals between the courses but he has also incorporated additional random checks highlighted in red. He also gives the tuning in staff notation using the bass clef with d' for the first course omitting the upper octave strings.

SANSEVERINO'S TUNING



Sanseverino seems to have been rather a reactionary; he did not think it was appropriate to do anything other than strum the guitar at a time when other players were already experimenting with ways of making the music more varied. He concludes his introduction by saying -

f.3v - Finalmente mi pare, che la Chitarra alla Spagnuola, si debba suonare con le botte piene, e non altrimenti, perchè suonandola con diminutioni, legature, ò dissonanze, sarebbe più tosto suono di liuto, che di Chitarra alla Spagnuola, & diminuendo tal' instromento non solo si li viene à leuare il proprio, naturale & antico stile, mà anco se li toglie affetto l'armonia;

Finally, it seems to me that the Spanish guitar ought to be played with full strokes and not otherwise, since if one plays it with diminutions, ligatures

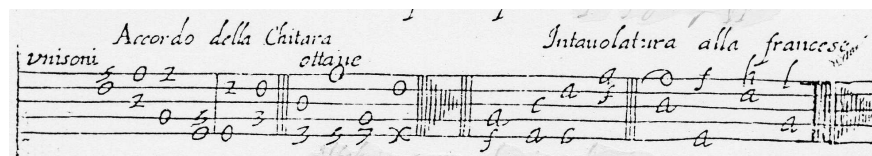
or dissonances, it would be more like playing the lute than the Spanish guitar and making diminutions with such an instrument not only causes it to lose its proper, natural and old style, but also removes the harmony entirely.

Unlike Spanish sources, which always begin with the third course, followed by the fifth, second, fourth and first, both Montesardo and Sanseverino begin with the fifth course, and work upwards according to the intervals between the strings. There is no obvious reason for this difference in approach but it is characteristic of the instructions found in most Italian books.

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

Both of Valdambrini's books are large collections of solo music in mixed tablature. "Libro secondo" also includes instructions for accompanying a bass line. In "Libro primo" Valdambrini includes two tuning charts in both Italian and French tablature. In the first the intervals are identified as unisons, and in the second as octaves. These indicate a re-entrant tuning.

VALDAMBRINI'S TUNING CHARTS



In the introduction to the 1647 book Valdambrini clearly states that the instrument has no basses.

p.3 - 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 hauendo il detto poche corde differenti un solo stile, ò riesco mancheuole, ò tedioso. Il sonarlo bene consiste più in destrezza che in rigore, perche volendoui 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.

As far as Valdambrini was concerned the re-entrant tuning was an integral feature of the instrument and he thought it was necessary to take this into account when arranging music for it. Because Valdambrini's books are the only Italian source clearly to indicate the re-entrant tuning, and both were printed in Rome, it has been suggested that they represent a practice which was more typical of southern Italy than the rest of the country. There is no reason why this should be so. The re-

entrant tuning may have been the more usual way of stringing the guitar especially once more sophisticated music began to be composed for it. Valdambri's books were printed forty years later than that of Montesardo and twenty-five years later than those of Sanseverino. They may represent a change in stringing preference which occurred when guitarists began to experiment with the "mixed" style. This method of stringing was associated with the kind of music which Sanz refers to as "the modern way of composing".

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Pietro Millioni: Quarta impressione del primo, secondo, et terzo libro d'intavolatura... (Rome, 1627).

Many of the earliest Italian "teach-yourself" *alfabeto* guitar books include some advice on how to check that the guitar is in tune in the form of verbal instructions and/or tablature charts. The earliest surviving source which includes them is Millioni's "Quarta impressione del primo, secondo, et terzo libro d'intavolatura... Sopra il quale ciascuno da se medesimo puo' imparare a sonare di Chitarra spagnola..." This is a collection of popular pieces in *alfabeto*. The title indicates that this is the fourth reprint of his first, second and third books. Presumably there had been three earlier printings of this compilation and the three books were probably printed earlier as separate items.

Millioni's original instructions are as follows -

[p.7] - *La quinta va accordata con la terza tastandola al secondo tasto.*
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.

The fifth is tuned to the third stopping it at the second fret.
The fourth is tuned to the fifth stopping it at the fifth fret
The third is tuned to the fourth stopping it at the fifth fret
The second is tuned with the third stopping it at the fourth fret
The first is stopped with the second stopping it at the fifth fret.
To the same notes (A voce eguali)

There is no mention of the fact that there are two strings to each course and no advice is offered as to how to tune them if there are. Millioni has not made it clear whether the fourth and fifth courses are octave strung or said which (if any) method of stringing the instructions are meant to refer to.

He starts by saying that the **fifth is tuned to the third stopped at the 2nd fret.** This implies that the third course, which should be in unison (although he hasn't said so), is to be tuned first. If using octave stringing, the player would presumably tune the **treble string** on the fifth course in **unison** with the third course stopped at the 2nd fret and then tune the **bourdon** an **octave lower**. Alternatively if using the re-entrant tuning, on reaching the third course (which he has already tuned) he would need to check that this is an **octave lower** than the fourth course stopped at the 5th fret. In any event the player will have to either tune the two strings of a course an octave apart or two separate courses an octave apart.

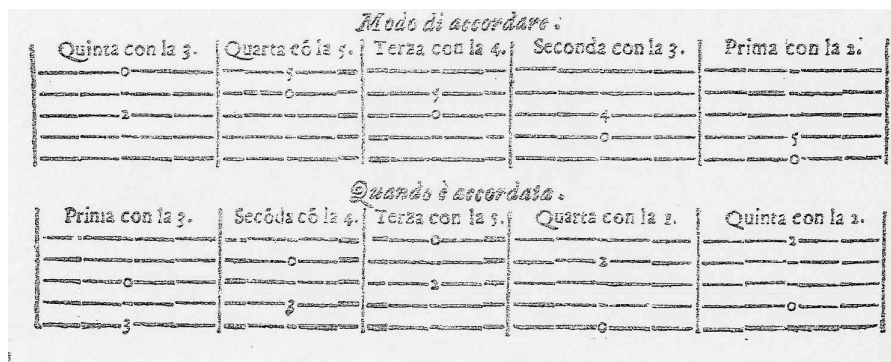
The first check is followed by a second. Here presumably the first course stopped at the 3rd fret is an octave above the open third (although if the third course was octave strung, as is fashionable today, it could be in unison); otherwise the intervals may be either octaves or unisons depending on the method of stringing preferred.

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

The instructions are illustrated in tablature.

MILLIONI'S TUNING CHARTS



Millioni's instructions make no distinction between octaves and unisons. It is possible that they were originally devised with octave stringing in mind although it is just as likely that they are vague because he didn't think it necessary to be specific. When playing music entirely in *alfabeto* it makes no difference which method of stringing is used.

Millioni's books were re-printed and plagiarised repeatedly throughout the 17th and early 18th century. It is therefore not surprising that his tuning instructions seem to have been adopted as the standard procedure for tuning the guitar. In later versions the first sentence of the "*Modo di accordare*" has been altered to read

*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 etc.*

**The fifth course may be tuned as you wish
 The fourth is tuned to the fifth stopping it at the fifth fret etc....**

This is often illustrated in tablature –

STANDARD ITALIAN TUNING CHART [FROM FOSCARINI]



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 at face value, i.e. assuming that all the intervals in the chart are to be read as unisons, they imply that 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 it would be unsatisfactory for later music in mixed style where the fourth and fifth courses have a dual rôle. It has been suggested that because with the re-entrant tuning the fourth course stopped at the 5th fret will sound an octave above the third course rather than in unison with it, these and other similar tuning instructions are only suitable for an instrument with octave stringing on both the fourth and fifth courses. This is not self evident. Players who did use octave strings on the fourth and fifth courses would have understood how these were to be tuned. Those who did not would have been aware that there was an octave rather than a unison between the fourth and third courses when tuning in this way. The fact that this is a "reversed octave" – i.e. the third course is to be tuned an octave below rather than an octave above the fourth course is neither here nor there. It is no more difficult than any other octave check in spite of what one or two writers have tried to argue.

However as a tuning method it is not very satisfactory for two reasons.

1. It is more difficult work with two strings of a course an octave apart as a starting point, rather than from a unison course (as in the Spanish instructions).
2. If the fifth course is tuned too high, the first course will break.

Because this method was established in the "teach yourself" books in *alfabeto* printed in the early 17th century, it continued to be used, or at least re-printed, when it was really unsuitable for the purpose.

The written instructions vary from one source to another, although all of them seem to have been adapted from Millioni. None of them gives any indication at all that the fourth and fifth courses are octave strung. On the contrary, where they attempt to shed more light on the matter, most of them imply that all the courses are in unison.

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

This is collection of strummed music in *alfabeto*. Like Millioni's books, Abadessa's books seem to have been reprinted in various guises. They are carelessly produced

and none of the material in them is original. The tuning instructions are more or less the same as Millioni's. They have however been the subject of some speculation.

p.6 – [Il modo per accordare la chitarra] - S'accorderà la prima del quinto in aria, nè troppo alto, nè troppo bassa

La quinta v'è accordata con la terza tastandola al secondo tasto

La quarta v'è accordata con la quinta tastandola al quinto tasto etc.

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

The first [string?] of the fifth [course?] unstopped is tuned neither too high, nor too low

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

The fourth course is tuned with the fifth stopped at the fifth fret etc.

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 fifth stopped at the second fret with the second open

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 2nd fret - and also that there might be octave stringing on the third course because the first course stopped at the 3rd fret is equated with the open third course.

However, as with Millioni, 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. The fact that the fourth course stopped at 5th 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 they are ambiguous and could apply to any method of stringing. Similar instructions are included in Abatessa's "Cespuglio di varii fiori" (Orvieto: 1635), "Ghirlanda di varii fiori" (Milan: ca.1650) and "Intessivra di varii fiori" see below (Rome;Lvcca: 1652).

Ludovico Monte: Vago fior di virtu dove si contiene il vero modo per sonare la chitarriglia spagnuola. (Venice, undated, ca.1630).

This is another collection of strummed music in *alfabeto*. It is the only book published under Monte's name alone and was presumably printed some time before 1637 when the earliest edition of what was to become the most frequently reprinted *alfabeto* book appeared jointly under the names of Millioni and Monte. The *chitarriglia* is literally a small guitar although the term seems to be used somewhat indiscriminately. It includes the standard tablature tuning chart and an additional one apparently in octaves although this is not entirely clear in the accompanying note which reads:

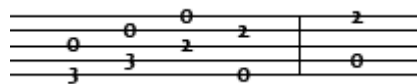
p.2 - E quelli altri numeri che sono da se é il modo d'accordare, cioè le prime due corde di sopra si fanno farsi voce uguale & mettendo un dito al quinto tasto, ò toccar la quarta che segue vota & farli far l'istessa voce uguale e così di mano in mano sino à basso,

e poi cominciare a salire con la seconda prova cioè la prima a tre tasti con la terza vota farà l'ottava, e così 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 will match the open fourth course 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.

MONTE'S ADDITIONAL CHART



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, these imply a re-entrant tuning. Taken literally they imply unison tuning throughout. All the intervals in the additional chart will be octaves even if there are no **high** octave strings on the fourth and fifth courses. But apart from the first interval they could all be unisons.

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

This is also a collection of strummed music in *alfabeto*. It is interesting because although it was printed in the same year as *Millioni* and *Abadessa*, the tuning instructions are different and the contents of the book are more original. The pieces are set out to be played by four guitars of different sizes and the music is more clearly printed with bar lines marking the ends of phrases. It appears to be the work of an individual player rather than a printer's compilation.

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

Prima si tirerà 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.

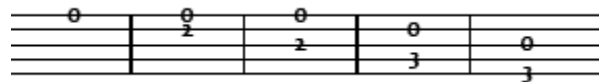
The second stopped at the third fret has a *corrispondenza* [unison?] with the fourth and the first stopped at the third fret makes an *ottava* [octave] with the third course.

As the octave between the third and first courses is specifically mentioned, the "*corrispondenza*" between the third and fifth courses and second and fourth courses may be a unison. This would indicate the re-entrant tuning. However, Costanzo may not have thought it necessary to mention the option of using *bourdons*, leaving it to the player to chose. He has not commented on the *Pruoua* but all the intervals in it could be unisons or octaves.

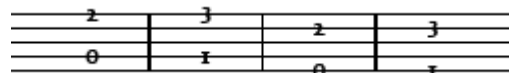
COSTANZO'S TUNING CHARTS



Modo d'accordare la chitarra a il 1.tuono



Pruoua



Although it might be argued that Costanzo's instructions are unique, they are only unique because they have not been copied from Millioni. There is no reason to suppose that they less typical. Costanza describes himself as "Napolitano" on the title page, but his book was printed in Bologna and was presumably intended primarily for the Bolognese market; the dedication to a Bolognese dignitary is signed by Costanzo from Bologna. It is unlikely that it represents a tradition from southern Italy significantly different from that elsewhere in Italy. All of the earliest editions of Millioni's work were printed in Rome.

Giulio Banfi: Il maestro della chitarra. (Milan : 1653).

All the sources considered so far are entirely in *alfabeto*. Banfi's book is in two sections; the first part comprises music in *alfabeto* and the second part short and simple pieces in mixed tablature with some instructions on accompanying a bass line. The first part of the book may have appeared in print earlier (as is the case with Foscarini). The introduction includes verbal tuning instructions similar to the first part of Millioni's. He then adds a convoluted explanation –

p.11 Column 1 - Avertendo nell' accordare qualsuoglia corda doueranno ricercar la voce, cioè l'unisoni per essemplio 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.

There is no mention of **octaves or 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 taken literally it indicates unison tuning throughout. Two tablature tuning charts are included in a separate engraved illustration at the beginning of the book. See the section "Octave stringing on the third course below".

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Girolamo Foscarini: Il primo, seco[n]do, e terzo libro della chitarra spagnola. (No imprint. After 1629).

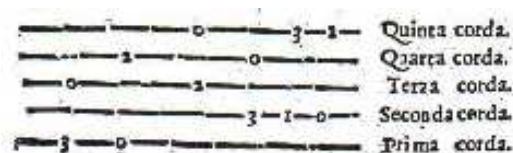
One source which has attracted a lot of attention because it does specifically mention octaves for the second check is Foscarini's "Il primo, seco[n]do, e terzo libro della chitarra spagnola" printed some time after 1629. Foscarini issued at least two further editions of his work, "Libro primo, secondo, terzo, e quarto" which is undated and "Li cinque libri della chitarra alla spagnola" dated Rome, 1640. The first section (Books 1 & 2) of the work includes pieces in *alfabeto* only, some of which were originally included in his earlier surviving book "Intavolatura de chitarra spagnuola. Libro secondo" printed in Macerata in 1629. Books 3, 4 and 5 include pieces in mixed tablature and pieces entirely in "lute" style. The tuning instructions form part of the lengthy introduction included in all three editions. The standard tuning instructions beginning with the fifth course and tuning upwards are given first together with the usual tablature chart (see above). This is followed by a check which he says is in octaves.

f.5v - [Regole, e modi d'accordar la chitara] - Si troua ancora un'altra Regola per prouare se la Chitarra sia accordata, cioè con due corde in ottaua, toccando, come vedrete qui sotto, che saranno tutte ottaua, e questo sarà quanto posso dire in materia d'accordare.

Another rule will also be found for checking 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 as much as I am able to say on the matter of tuning.

Foscarini's comment "this is as much as I am able to say on the matter of tuning" is intriguing; were there things he didn't know about?

FOSCARINI'S TUNING CHART IN OCTAVES



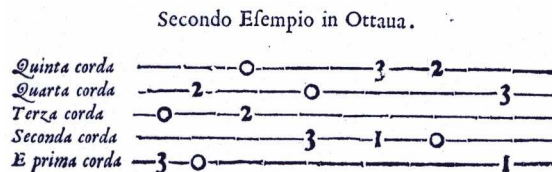
Contrary to what some people seem to have assumed, this does not indicate that the fourth and fifth courses were octave strung. All the intervals in the chart will be octaves even if the guitar is strung throughout in unisons.

Many readers may not be aware that these instructions appeared earlier in Foscarini's "Intavolatvra di chitarra spagnola. Libro secondo" (1629) which is a collection of music entirely in *alfabeto*. Furthermore this is in part a plagiarised edition of at least one, possibly more earlier books in *alfabeto* printed by Gio. Ambrosio Colonna in about 1620. It includes an expanded version of Colonna's instructions to the player and many of the same pieces. Colonna has not included tuning instructions in any of his surviving books but Foscarini may have copied those in his own book from another earlier source rather than devising them himself. They may have been appropriate for the music in "Libro secondo" but there is no reason to suppose that they indicate that Foscarini specifically intended all of his music to be played with octave stringing. The "lute" style pieces certainly require low octave strings (but not high octave strings) on the fourth and fifth courses but the rest of the music could be played with other methods. His musical style develops quite considerably and the pieces in Book 5 in particular exhibit some of the characteristics of later Italian and French guitar music. His instructions are no more typical of Italian practice than the instructions of Valdambrini.

Stefano Pesori: Galeria musicale...Compartita in diuersi scherzi di Chittariglia. (Verona: 1648).

Pesori produced at least five guitar books, possibly more. Each has a lengthy typeset preface which includes no useful musical information. The music is a mixture of pieces, some entirely in *alfabeto* and some in Italian tablature, some of it notated in an unintelligible way. None of it is of any intrinsic merit. It includes verbal tuning instructions similar to those in other *alfabeto* guitar books, the standard tuning chart in unisons and a second tuning chart which he says is in octaves. This is similar to Foscarini's octave chart and Pesori may well have copied it from one of Foscarini's books. There is no obvious reason why he should have added the last check comparing the first course stopped at the 1st fret with the fourth stopped at the 3rd fret.

PESORI'S OCTAVE CHECK



As with Foscarini, these instruction do not indicate that the fourth and fifth courses were octave strung. All the intervals in the check will be octaves even if the guitar is strung throughout in unisons.

With the exception of Foscarini, all of the books referred to so far can hardly be regarded as reliable sources of information about what competent players did. Most of them are the work of printers taking advantage of the fact that there was a demand for cheaply produced "teach yourself" books. Most are so badly printed that the music is difficult to interpret and even the best of them do not claim to provide

the beginner with all the help and advice which they need. Indeed many of them advise the beginner to find a good teacher.

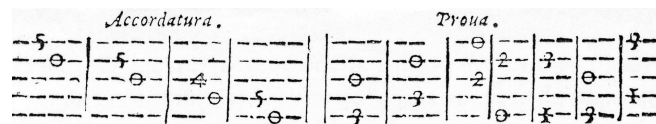
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A small number of the later books are the work of individual players of some distinction. Amongst these Corbetta is the most significant.

Francesco Corbetta - De gli scherzi armonici. (Bologna : 1639).

Corbetta published his first guitar book "De gli scherzi armonici" in 1639. All the music in it is in *alfabeto* apart from eight short experimental pieces in mixed style. There is a brief but informative introduction. At the end he has included two tablature charts for checking whether the guitar is in tune without any written explanation. These comprise the standard *Accordatura* found in many Italian guitar books and a *Prova*. There is no indication that the fourth and fifth courses are to be doubled in octaves; as ever, if taken at face value they indicate unison tuning throughout.

CORBETTA'S TABLATURE TUNING CHARTS (1639)



These are followed by instructions for tuning four guitars of different sizes to play in concert:

p.7 - *Per accordar quattro Chitarre di concerto, prima s'accorderà la terza corda della picciola Chitarra con la quinta della mezzana, e con la quarta della più grande si farà unissono,*

toccando poi la terza dell'altra Chitarra mezzana con la seconda corda della grande si farà l'istesso,

sì che la picciola con la grande farà accordata in quinta, e una mezzana in quarta, e l'altra in terza

Toccando poi la picciola sopra l'A, la grande sopra il C, una mezzana sopra l'I, e l'altra sopra l'H, faranno ottimo concerto..

To tune four guitars in concert, first tune the third course of the small guitar with the fifth course of the medium size one, and with the fourth course of the largest so that they make a unison.

Then playing the third course of the other medium sized guitar with the second course of the largest will make the same.

Thus the smallest and the largest will be tuned a fifth apart, one medium size a fourth and the other a [major] third above the largest.

Then playing the chord A on the smallest, C on the largest, I on one medium size one and H on the other medium sized one will sound in concert.

Assuming that the first medium sized guitar is tuned in e' the four instruments would be tuned as follows:

CORBETTA'S FOUR GUITARS

The image shows four staves of musical notation for different guitar sizes: Small, Medium 1, Medium 2, and Large. Each staff is in 4/4 time and contains a sequence of notes. The Small staff starts with a whole note G4, followed by a half note A4, a quarter note B4, and a quarter note C5. The Medium 1 staff starts with a whole note G4, followed by a half note A4, and a quarter note B4. The Medium 2 staff starts with a whole note G4, followed by a half note A4, a quarter note B4, and a quarter note C5. The Large staff starts with a whole note G4, followed by a half note A4, a quarter note B4, and a quarter note C5. Below the notation is a tuning chart showing four guitar tunings labeled S, M1, M2, and L. The chart shows the notes for each string (1-6) for each tuning. S is standard tuning (E2, A2, D3, G3, B3, E4). M1 is A1, I1, H1, C1. M2 is A2, I2, H2, C2. L is A3, I3, H3, C3.

Corbetta's instructions are calculated consistently from the treble strings on the fourth and fifth courses of the guitars. **The third course of the small guitar can only be in unison with the high octave string on the fifth course of the medium sized guitar and the high octave string on the fourth course of the large guitar.**

Arguably the instructions could imply the re-entrant tuning, but in the context it is not really necessary to mention whether or not there are *bourdons* on the fourth and fifth courses.

At the beginning of his career Corbetta may have used octave stringing on the fourth and fifth courses, but if he did there is no reason why he should have continued to do so throughout the whole of his career or that he should never have experimented with any alternative.

The music in his second book "Varii capricci per la ghittara spagnvola" printed in 1643 is in mixed style throughout and more sophisticated. The brief introduction does not offer any advice on tuning. The book does however include three pieces calling for the guitar to be tuned to a different interval pattern i.e. *scordatura* and Corbetta has indicated this with the standard tuning chart. Clearly he had to have some means of indicating the altered intervals and not surprisingly he has chosen the chart traditionally used in Italy for this purpose, but this does not indicate that he considered one method of stringing rather than another appropriate for the music in this book. In his next surviving book "Varii scherzi di sonate" printed in 1648 in Brussels he has used a different chart for his *scordatura* pieces.

CORBETTA'S SCORDATURA TABLATURE CHART (1648)



This avoids making a comparison between the fourth and third courses. If all the intervals are regarded as unisons it implies a re-entrant tuning. This is perhaps reading more into it than Corbetta intended but he must have had some reason for using a different method in this particular book. It is significant because both Granata and Bottazzari include pieces in the same *scordatura* and have used the standard chart to indicate it. There is no obvious practical reason why Corbetta should not have done the same.

A few other guitar books which include at least some music in mixed style as well as music in *alfabeto* include some advice on how to check that the guitar is in tune.

Carlo Calvi : Intavolatura di chitarra. (Bologna, 1646).

This is a collection of pieces taken from two separate sources compiled by Calvi, rather than an original book. The first part comprises music in *alfabeto* adapted from Corbetta's 1639 guitar book preceded by Corbetta's introduction including the same two tablature tuning charts and instruction for tuning four guitars to play in concert. The second part comprises pieces in Italian tablature without *alfabeto* which were probably not originally intended for guitar at all. These are preceded by a note -

Le seguenti suonate possono seruire anche per la chitarriglia ma sono veramente per la chitarra.

The following sonatas can also be played on the chitarriglia although they are really for the chitarra.

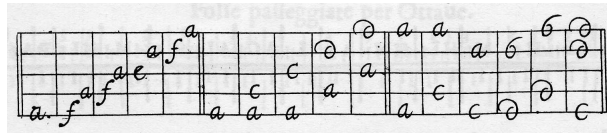
In the past it has been assumed that the **chitarriglia** was a small guitar and the **chitarra** a standard sized one. However it is more likely that the **chitarra** referred to here is a small 5-course lute known as the **chitarra italiana**. The music is completely different from other music for 5-course guitar and sheds no light on how the 5-course guitar was strung.

Antonio Carbonchi : Sonate di chitarra spagnola. (Florence, 1640); Le dodici chitarre spostate. (Florence, 1643).

The earlier of Carbonchi's two books is in French tablature, because as he says, he wished to make the music more accessible to non-Italian players. Most of it is however to be strummed although it does include some pieces in mixed style and some in lute style without any strummed chords which suggests that players of other nations were more adventurous than the average Italian. The second book is entirely in *alfabeto* and as the title suggests the pieces are written out in twelve

different keys. The same tablature tuning charts are found in both books. The first is the standard Italian chart; the second is the same as that in Costanzo. The 1643 book includes an additional chart. There are no written instructions so it is not clear whether the intervals are octaves. It is however interesting that the second starts with the interval of a perfect 5th between the fifth and fourth courses and the third check with a perfect 5th between the open fifth and first course.

CARBONCHI'S TUNING CHARTS (1643)



Giovanni Battista Granata : Capricci armonici (Bologna, 1646).

Most of the music in Granata's first book is in mixed tablature although there are five pieces at the end in *alfabeto* only. His introduction is an abridged version of Foscarini's introduction and he has included the first part of Foscarini's tuning instructions with the same tablature chart but has omitted the second part with the reference to octaves. He has also copied Foscarini's table of *alfabeto* chords including his "*Alfabeto dissonante*" omitting N+ and P+ although none of these are used in the music.

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Between 1640 when the latest surviving edition of Foscarini's work was printed, and 1692, collections of solo music, the work of individual composers, appeared in print. These are

- 1640 Bartolotti - Libro Primo di chitarra spagnola. (Florence, no imprint).
- 1650? Granata - Nouve suonate di chitarriglia spagnuola. (No imprint).
- 1650 Pellegrini - Armoniosi concerti sopra la chitarra spagnuola. (Bologna, Monti).
- 1651 Granata - Nuova scielta di capricci armonici e suonate musicali. (No imprint).
- 1656? Bartolotti - Secondo libro di chitarra spagnola. (Rome, no imprint).
- 1657 Granata - Soavi concerti di sonate musicali (Bologna, Monti).
- 1663 Botazzari - Sonate nuove per la chitarra spagnola. (Venice, no imprint).
- 1670 Coriandoli - Diverse sonate recercate sopra la chitarra spagnuola. (Bologna Monti)
- 1674 Asioli - Primi scherzi di chitarra. (Bologna, Monti).
- 1674 Granata - Novi capricci armonici musicali (Bologna, Monti).
- 1676 Asioli - Concerti armonici per la chitarra spagnuola (Bologna, Monti).
- 1680 Granata - Nuovi soavi concerti di sonate (Bologna, Monti).
- 1684 Granata - Armoniosi toni di varie suonate musicali (Bologna, Monti).
- 1692 Roncalli - Capricci armonici sopra la chitara spagnola. (Bergamo, Casetti).

Eight of these were printed by the Bolognese printer Giacomo Monti who fortuitously possessed a font of tablature type. Not surprisingly four are the work of Granata who spent most of his life in Bologna. The other four are diverse in style. Pellegrini apparently worked in Bologna but Coriandoli was a native of Ferrara and Asioli worked as a guitar teacher in Parma. They cannot be regarded as a "school" of

guitarists working together and composing in a style which was distinct from that of their contemporaries.

The music in these sources is variable in quality but none of it was intended for beginners who needed any advice on how to tune their instruments and none of them includes any information about how the guitar was strung. It is therefore impossible to say whether the composers had any preferences, and if they did, what these were.

This has not prevented present-day writers from speculating on what their preferences might have been and putting forward simplistic arguments in support of whatever method they favour themselves. These fall into two categories -

1. **Documentary evidence**

Most people seem to accept that there is a difference between sources which actually describe the way the guitar was strung and those which merely offer advice on how check that it is in tune. Few people would argue that the charts used to indicate *scordatura* in some of these later books indicate the method of stringing the composer preferred.

Unfortunately not everyone is impartial when interpreting the evidence. It has been suggested that the tuning instructions which originate with Millioni are only suitable for a guitar with octave stringing on both the fourth and fifth courses and **all** the music in **all** the books which include them **in any form** must have been specifically intended to be played with this method of stringing. As there are rather a lot of these, this must have been the way in which the guitar was usually strung in Italy and books which suggest something different are atypical.

However if we discount the reprinted and plagiarized versions of Millioni's books, most of which are not worth the paper they are printed on, there are no more sources that imply octave stringing than there are ones which imply re-entrant stringing and most of these are not particularly impressive either. The only ones which are of any real interest are those of Foscarini, Corbetta (1639) and Granata (1646) and they may have included the standard charts simply because they were the traditional way of indicating the interval pattern between the courses of the guitar.

It is also often argued that because there is no specific mention of the semi-re-entrant or "French" tuning, this was unknown in Italy. In fact the detailed tuning instructions in one source - F:Pn.Ms.Rés.Vmc.59 - an early 17th century manuscript of music in *alfabeto*, do imply that there is octave stringing on the fourth course only (see below). For further discussion see the section on **France**.

2. **Stylistic evidence**

The alternative approach is analyse the music to try and establish which method achieves the best musical results according to the rules of musical theory. The problem with this approach is that it is entirely subjective.

Campanellas are the most obvious bone of contention. Some writers claim that these indicate a re-entrant tuning because it eliminates unwanted octave doubling. Others claim that with the "right technique" (whatever that might be) the *bourdons*

can be left out. Some people might even feel that the occasional octave doubling is unobjectionable and actually enhances the bell-like effect.

Most people overlook the fact that Sanz does not say that re-entrant tunings are preferred because they eliminate octave doubling. He is concerned with the practical inconvenience of having two strings of different thickness and the effect this has on left-hand technique, particularly when playing left-hand ornaments – including slurs.

Two unusual features of Bartolotti's notation – the *lettere tagliate* in his first book and his system of indicating how many courses should be included in strummed chords in his second book – have also attracted attention. At first glance the purpose of these seems to be to eliminate six-four chords by omitting the fifth course if this is the fifth of the chord. On closer examination this is far from obvious. The main reason for omitting the fifth course is to facilitate the introduction of passing notes into or between the chords, especially a 4-3 suspension. In some chords it is necessary to omit the fifth course and re-finger the chord to free a left-hand finger to play the passing notes. Bartolotti is actually very inconsistent in the way he treats six-four chords and often writes six-four chords out in tablature. (See my essay on Bartolotti).

A few of the books – Foscarini, Corbetta (1643/1648), Banfi (1653) and Granata (1659) include exercises in accompanying a bass line and it has been argued that this is an indication that **all** their music is intended to be played with octave stringing on the fourth and fifth courses. In fact these examples do not always reproduce the bass line and the chords in the correct inversions which ever method of stringing is used. Valdambrini has included similar examples in his 1647 book which are presumably intended to be played with the re-entrant tuning. Accompanying a bass line on the guitar is about the "art of the possible." Sanz and Carré suggest that different methods of stringing may be used for accompanying a bass line and professional players may sometimes have done so.

As far as the Italian repertoire is concerned we do not have sufficient evidence to prove that any particular method of stringing was the norm.

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A few other sources include information of some interest.

Athanasius Kircher: Musurgia universalis. (Rome, 1650).

The 17th century German Jesuit scholar, Athanasius Kircher was the author of number of scholarly works on a wide range of topics including "Musurgia universalis" dealing with music. Book 6, Chapter 2 covers plucked stringed instruments including the guitar, which he refers to as the "*cythara hispanica*". Much of Kircher's information is taken from Mersenne (see under France) including apparently the illustration of the guitar with the re-entrant tuning shown in staff notation with d' for the highest course. However, it seems that Mersenne originally obtained his information about how the guitar was strung indirectly from Kapsberger in Rome so this may be a case of information going full circle.

KIRCHER'S TUNING FOR THE GUITAR



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Two *alfabeto* books include verbal instructions matching successive strings of the "arpetta" with notes on the guitar fingerboard. It is not clear whether the "arpetta" was a separate instrument or some sort of an attachment of unstopped strings. As a matter of interest no distinction is made between octaves and unisons in either case.

Giovanni Battista Abatessa : Intessivra di varii fiori. (Rome/Lucca, 1652).

This is the latest of Abatessa's books and as poorly produced as the rest of them. It includes the same tuning instructions as his other books. The instructions matching successive strings of the "arpetta" with the guitar are as follows

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

La 8. corda dell'Arpetta v'è accordata con la 5.corda della Chitarra voce para.

La 7. corda v'è accordata con la 2. corda à voce para.

La 6. corda v'è accordata con la 5.corda tastandola al 3. tasto.

La 5. corda v'è accordata con la 4. corda à voce para.

La 4. corda v'è accordata con la 1.corda à voce para.

La 3. corda v'è accordata con la 4. tastandola al 3. tasto.

La 2. corda v'è accordata con la 3. corda à voce para.

La 1. corda v'è accordata con la 5. corda à voce para.

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

The 8th string of the arpetta is tuned to the same note as the open fifth course of the guitar.

The 7th string is tuned to the same note as the second course

The 6th string is tuned to the fifth course stopped at the 3rd fret

The 5th string is tuned to the same note as the fourth course

The 4th string is tuned to the same note as the first course

The 3rd string is tuned to the fourth course stopped at the 3rd fret

The 2nd string is tuned to the same note as the third course

The 1st string is tuned to the same note as the fifth course.

The heading suggests that the *arpetta* is a separate instrument but Abadessa is not the most reliable source of information. The pitch is not indicated.

NOTES ON THE ARPETTA



GUITAR TUNING



It has been suggested that this indicates a re-entrant tuning. However, assuming that the *arpetta* is tuned to a straightforward diatonic scale, **its second string will be an octave above the third course of the guitar whatever method of stringing is used.** The first and eighth strings of the *arpetta* are also presumably an octave apart. It does not therefore clearly indicate how the guitar was strung.

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

This is a rather late *alfabeto* book. It includes a lot of interesting and forward looking theoretical material which suggests that this style of music was still alive and well at the end of the 17th century and not merely the prerogative of beginners. Micheli includes similar instructions matching the strings of the *arpetta* to the guitar under the heading -

Regola per accordare l'arpetta della chitarra

Rule for tuning the "arpetta" of the guitar

This suggests that the *arpetta* is actually part of the guitar – probably a rank of treble rather than bass strings.

Micheli also includes an illustration matching the strings of the guitar to successive notes on the keyboard. It has also been suggested that these indicate a re-entrant tuning. However, two of the notes fall in the wrong octave so that it does not clearly indicate how the guitar is strung.

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.

MICHELI'S KEYBOARD

L	Z	E	S	*	P	V	O	T	D	K	X
B	&	C	M	F	G	Q	A	N	I	H	R
C	D	E	F	G	A	B					
	Con la 4 ^a della Chitarra		Con la 3 ^a della Chitarra		Con la 2 ^a della Chitarra		Con la 1 ^a della Chitarra				

NOTES ON THE KEYBOARD



GUITAR TUNING



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Antonio Stradivarius (ca.1700)

A rather unusual source of information about how the guitar was strung is found on a paper pattern, or template in the Stradivari Museum in Cremona. On one side there is a drawing of the neck and fingerboard of a "chitarra tiorbata" or theorboed guitar. On the reverse there 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.¹

*Questi deve essere compagni due cantini di chitarra -
queste deve essere compagne due sotanelle di chitarra -
questi deve essere compagne doi cantini da violino grossi -
queste altra corda deve essere un canto da violino -
questa altra corda deve essere una sonanella di chitarra -
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 i.e. the same as the second course.

Ninth string: This must be the thickest possible violin second string (bourdon)

Tenth string: This must be a violin first string.²

¹ Quotation from Simone F. Sacconi: *The secrets of Stradivari* (Cremona : Libreria del Convegno, 1979), Item 375, p.228.

² 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 it has sometimes been interpreted as indicating a *bourdon* on the fourth course only.

The pattern dates from the end of the 17th century or later and the exact identity of the instrument is uncertain; **in particular it is not clear whether it had a lute-shaped or guitar-shaped body.**

There are a very few references to guitars with additional bass strings, the best known being Granata's "Soavi concerti di sonate musicali" (1659) which includes five pieces for a *chitarra atiorbata* with seven open diapasons. Granata's earlier book "Nuova scielta di capricci armonici e suonate musicali" (1651) includes an illustration of the instrument. However it is by no means certain that Granata's instrument was the same as the Stradivarius instrument or that it had *bourdons* on the fourth and fifth courses rather than re-entrant courses on the fingerboard.

It has been argued that because Granata was interested in an instrument which may have had an extended bass range this somehow proves that he also used octave stringing on the fourth and fifth courses on the 5-course guitar. There is no real logic in this suggestion. There are several advantages to having open basses, the most obvious being that it simplifies left-hand fingering. Granata may have had a number of reasons for wanting such an instrument, not least the fact that it may have been something of a curiosity. He may also have wanted an instrument with a bass register precisely because this was lacking on the guitar with a re-entrant tuning.

It should be noted that the *guittare theorbée* for which twelve short pieces were included in the manuscript "Pieces de guittarre de differendes autheures recueillis par Henry François de Gallot" (GB:Ob Ms.Mus.Sch.C94), copied between 1660-70, is a completely different instrument, possibly a type of mandora, with different tunings and diapasons which definitely overlap with the courses on the fingerboard. These pieces shed no light at all on the stringing of the 5-course guitar.

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F:Pn.Ms.Rés.Vmc.59 (early 17th century)

This manuscript is a collection of pieces in *alfabeto* dating from the first quarter of the 17th century and of Italian provenance. It is therefore surprising that the instructions seem to have been adapted to refer to the so called "French" method with octave stringing only on the fourth course.

James Tyler reproduced the text on p.77 of his book "The guitar and its music" and suggested 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 omitted part of the final sentence which sheds further light on how the text should be interpreted.

primo
seconda
terzo
quarto
quinto
sesto
settimo

Nota che le prime dua corde sempre s'accordano a voce pari tastandole al sec.^o o terzo tasto o a voto come si vede qui

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 seconde con voce uguale

Le terze s'accordano una quarta sotto tastate al secondo tasto col le prime a voce pari

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

La quinta s'accorda una quarta sopra le prime tastate al terzo tasto un'ottava sopra le terze o al quinto tasto otto voce sopra le prime

Text & translation

Nota che le prime dua corde sempre s'accordano a voce pari 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 sopra 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 sopra le terse o al quinto tasto otto voce sopra le prime - omitted by Tyler.]

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 or at the fifth fret eight notes above the firsts [i.e. fifth course].

The courses are referred to in the Italian manner - the lowest sounding course is the first; the highest 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 sounding 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 7th fret, its *bourdon* will be in unison with the fifth course. When the fifth course is stopped at the 5th 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 2nd 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 3rd fret it sounds the same voice as the high octave string 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 3rd fret it is an octave above the third course; stopped at the 5th 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 Valdambri's octave check). Those elsewhere in the instructions are most likely unisons. The fact that the first course stopped at the 5th 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.

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 2nd 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 5th fret is eight notes above it.

The instructions seem typical of the attempts to clarify Italian tuning instructions found, for example in Abadessa 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.

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THE STRINGING OF THE 5-COURSE GUITAR

FRANCE, ENGLAND & THE NETHERLANDS

Adrian Le Roy (1551)
Luis de Briçeño (1626)
Marin Mersenne (1636/37)
Pierre Trichet (1640)
F:Psg Ms.Rés.2344 (1649)
Francesco Corbetta (1671)
Antoine Carré (1671)
Robert de Visée (1682)
F:Pn.Ms.Res. 1402 (Undated)
Nicolas Derosier (1690)
US:CAh.Ms.Mus.139. (ca. 1685)
GB:Och Ms.1187 (ca. 1690)
Sebastien Brossard (1703)
B.Bc.Ms.S5615 (1730)
Denis Diderot (1757)
Joseph Bernard Merchi (1761)
Michel Corrette (ca.1763)

A substantial repertoire for the 4-course guitar appeared in print in France in the middle of the 16th century. Adrian Le Roy's "Premier livre de tablature de gvyterre" (1551) includes a tablature chart for checking whether the guitar is in tune but this does not give any indication as to whether the fourth course was octave strung. It is interesting in that each check starts with the first course and works downwards; this seems to have been the French way of doing things.

LEROY'S TUNING CHART

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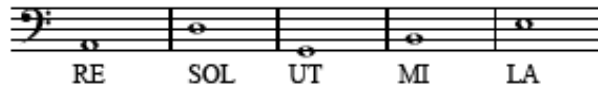
Although there are few surviving French sources which can be dated to the early 17th century, the 5-course instrument seems to have become popular in France at much the same time as it did in Italy. In 1615 the young king Louis XV married the Spanish infanta Anna of Austria, an event which led to an influx of Spanish musicians bringing their guitars with them.

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

Briçeño's "Metodo mui facilissimo" is a collection of popular Spanish dance songs with Spanish texts, notated in **Castilian cifras** – a system similar to *alfabeto* but using Arabic numerals and a few other symbols for the chords instead of the letters of the alphabet. (It should be noted that this system is different from Amat's system

The solmisation syllables represent the notes as follows –

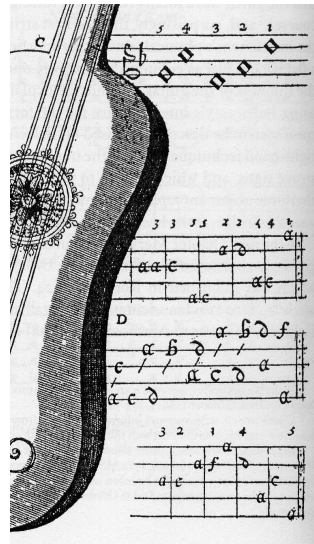
MERSENNE'S TUNING



Taken literally if Ut = Gamut, 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 in which the staff notation seems to indicate a nominal pitch of e' for the first course.

Because Mersenne mentions Briceño in his text, it has often been assumed that he obtained his information about the way the guitar was strung from Briceño's book but this probably not the case. Mersenne's first tuning chart compares courses in unisons in a different order from Briceño's; he in fact follows the standard interval pattern found in other Spanish sources. He includes a table of Castilian *cifras* but this varies from Briceño's table and includes a number of additional chords.

MERSENNE'S TUNING AND TABLATURE CHARTS



It is more likely that Mersenne 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 at the time, contains several references to Kapsberger. Bouchard apparently included with his letter a separate sheet (no longer extant) with the tunings for various instruments. In his letter he explains "Here are the tunings which are found in Italy for lutes, citterns, guitars etc... which Giovan Girolamo (i.e. Kapsberger) gave me." Mersenne also mentions Millioni and Colonna. He was apparently familiar with some of their books as he reproduces two pieces by Millioni. He also

reproduces two pieces in French tablature by a composer he refers to as Monsieur Martin.

Mersenne evidently drew on a wide variety of sources and his description of the guitar is very detailed but it does not necessarily represent practices which were specifically French.

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

This is an **unpublished** manuscript treatise on musical instruments. Trichet's description of the guitar is less detailed than that of Mersenne and his information about stringing may have been derived from an Italian or a Spanish source rather than a French source. He describes the intervals between the courses in a way which is similar to Montesardo but he has also included two tablature charts in French tablature, which he says are in unisons and octaves.

f98. - Ils montent ordinairement la guiterre de cinq rangs de cordes 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 corde, qui est une des cinquiemes, laquelle doit 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 doit 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 doit 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.

TRICHET'S TUNING CHART



Because Trichet does not specifically 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 although he does not seem to have possessed any guitars. He corresponded with Mersenne and may have obtained some of his information from him as he mentions both Colonna and Briceño. Trichet is the only 17th century French source to mention *bourdons* on the fourth and fifth courses. His comments do not necessarily represent French practices.

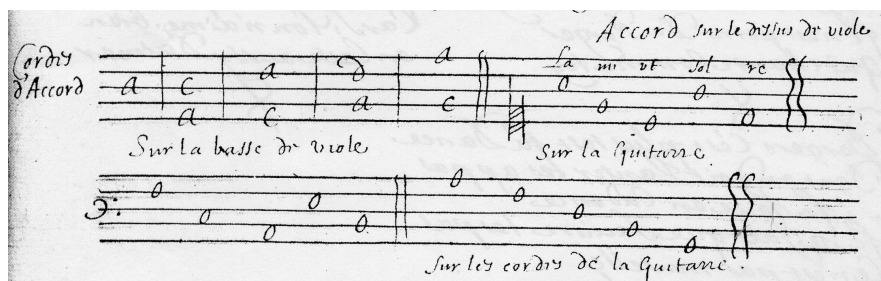
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F:Psg Ms.Rés. 2344 "Tablatvre de gvitarre" (1649).

F:Psg Ms.Rés. 2344 is clearly dated 1649 and a note on the foreleaf indicates that it was copied by Monsieur DuPille "*commiss[ai]e des guerres demeurent rue de l'esprones chez monsieur mascron auocat en parle[men]t*". The music is in mixed style notated in fully developed French tablature with note values placed on the staff with the tails down or up to indicate the direction of the strummed chords. Presumably this kind of notation was already well established by 1649. It includes arrangements of French chansons of the period.

On the f.84v there is a tablature tuning chart for the guitar and three staff notation examples illustrating the pitch of the courses of the guitar on the treble and bass viols. Although the intervals in the tablature chart are not specified, they are presumably unisons. There are two other manuscripts from the same period, F:Psg Ms.Rés. 2349 and F:Psg Ms.Rés. 2351 and the former includes a tablature tuning chart with the heading "*accord de gitarre par unison*". At first sight the staff notation seems to indicate that the first course of the guitar was tuned nominally to a' – a perfect 4th higher than usual. However it is possible that the clefs are incorrect or vary in form from the usual. The solmisation symbols in the first example indicate that the third course is g if Ut = Gamut as in Mersenne. The clef may be intended as a G clef. In the second example the clef is probably a variant of the C clef which would also give G for the third course.

TUNING CHARTS IN F:PSG MS.RES. 2344



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

There is a gap of more than twenty years between Corbetta's "Varii scherzi di sonate" printed in 1648 and "La Guitarre royalle," which appeared in 1671. From what he says in his prefaces it seems that he published at least one, possibly two books in the intervening period which have not survived to the present day. "La Guitarre royalle" is one of the most interesting collections of music for the 5-course guitar; Corbetta regarded it as his masterpiece and it includes his most mature

music. As well as solo works there are several vocal pieces with guitar accompaniment and 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'Octobre 1671*" ("Finally printed the last day of October 1671"). The book has two separate introductions, one in Italian and one in French. Italian would have been Corbetta's mother tongue and he presumably wrote the Italian preface himself. The French version is an abridged and slightly different version of the Italian. It is not known whether Corbetta made this himself or whether it was done by someone else.

The Italian reads -

p3 - Averti di mettere una picciol ottava alla seconda corda que e D sol re perche li dui unissoni non fanno armonia, come anche le mie sonate lo ricercano; e batti sempre le consonanti con la mano et il polzo insieme che ti riuscirà piu armoniosa la batuta.

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 also call for; and always strike the chords with the hand [fingers] and thumb together, which will make the stroke more harmonious.

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 - Je vous avertis de mettre une octave à la 4.me corde de. la. re. sol. parceque les deux unissons 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.

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

Corbetta's instructions have given rise to endless speculation.

Theory 1: 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* from the fifth course for this particular book.

Comments: The fact that there is no clear reference to this method of stringing with a *bourdon* on the fourth course but not the fifth 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 in which it is used. 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 do not 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 Italian chart and one which could be in octaves or a combination of octaves and unisons (reproduced in the section on Italy). 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 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 so, adding a *bourdon* to the fourth course as soon as he began to write more sophisticated music in mixed style would make good sense.

Conclusion: Although we do not know what method of stringing Corbetta used before 1660, there is no reason why he should not have used the semi-re-entrant or "French" tuning throughout most of his career.

Theory 2: Because in the Italian preface Corbetta describes the octave string as "*picciol*" (literally "little") he is advising Italian players to put a high octave string on the 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.

Comments: This is based at least in part on a 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 re-entrant tuning referred to by Mersenne was specifically "French", whilst Italian guitarists always used octave stringing. Neither assumption is supported by the available evidence. We cannot be certain what methods of stringing French guitarists used before 1670. The only

collection of guitar music published before that date is François Martin's "Pièces 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.

Conclusion: The term "picciol" is slightly 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.

Comments: It is clear that the re-entrant tuning was known and used in Italy. Italian guitarists, especially Granata, would certainly have been familiar with Corbetta's music, and some of them may have used the method of stringing he seems to have preferred.

Conclusion: 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. The absence of any specific reference to this method of stringing does not prove that it was unknown in Italy.

Theory 4: Corbetta's comment in both prefaces is directed to players, mostly in France, but possibly in Rome as well, who had previously used the 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.

Comments: This theory is too speculative to take seriously. If Corbetta 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.

Theory 5: Corbetta had seen Carré's book (see below) and copied his instructions on stringing because he thought this was the most viable option for inexperienced French players who were used to the re-entrant tuning. It was intended as a concession or compromise for their benefit although he himself (and other Italian players in Paris at the time) always used octave stringing on both the fourth and fifth courses.

Comments: This theory is also too speculative to take seriously. Adding a *bourdon* to the fifth course is no more difficult than adding one to the fourth provided suitable strings are available and it does not make the music any more difficult to play. There were certainly a number of Italian players in Paris in the 1650s and 1660s including Bartolotti and of course Lully. We do not know what method of stringing they preferred but it is quite possible that the "French" method of stringing originated with them. Bartolotti in particular seems to have been influenced by French practices. It is unlikely that French players would have opted for something "inferior" to that favoured by their Italian counterparts.

Theory 6: "La Guitarre royale" includes exercises in accompanying a bass line and several vocal pieces with guitar accompaniment. This indicates that all the music is intended to be played with octave stringing on the fourth and fifth courses.

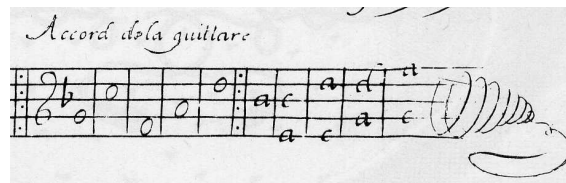
Comments: These examples do not always reproduce the bass line and the chords in the correct inversions which ever method of stringing is used. The accompaniments to the vocal pieces work just as well with the "French" tuning and the bass part will in case be provided by one of the other parts.

Conclusion: There is no reason why we should not take what Corbetta has said at face value. 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 most of his career.

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

This is a collection of music in French tablature which also includes instructions for accompanying a bass line. At the end of the section of pieces for solo guitar solo on p.27 Carré gives an "Accord de la guittare" - the re-entrant tuning in staff notation with d' for the first course which he may have copied from Mersenne. A tuning chart in French tablature starting with third course is also given. This is presumably in unisons, although this is not explicitly stated. It is the same as the chart in F:Psg Ms.Rés. 2344 (1649). See above.

CARRÉ'S "ACCORD DE LA GUITTARE" AND TUNING CHART



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 necessary to put an octave string on the fourth course of the guitar

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 have appeared in print a few months before Corbetta's "La Guitarre royale", although this is not certain. However there is no reason to suppose that this method of stringing originated with Carré. Carré was clearly familiar with Corbetta's music (and that of Bartolotti). He has included pieces by Corbetta unattributed in this book and the one which he had printed in about 1677.

He and Corbetta certainly knew one another. There is a reference to legal proceedings involving Corbetta, the printer Bonneuil and Carré dated 20th December 1670 which

may have been over plagiarism.¹ In the prefaces to "La Guitarre royale" Corbetta refers to several occasions on which his music was plagiarized. Carré is simply following Corbetta's example. There is no reason why he should have opted for something inferior because he was French.

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

De Visée published two fine collections of music for 5-course guitar in French tablature in 1682 and 1686. Like Corbetta, in the introduction to his 1682 book he says that there must be an octave string on the fourth course.

p.6 - J'ay esté obligé de transposer les pieces de musique a cause 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.

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.

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 personal 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 no reason why he should not have done so himself if he thought this was a practical option. Rousseau in the entry for "Guitarre" in Diderot's "Encyclopédie" (see below) specifically mentions that de Visée never used an octave on the fifth course and as result lost half an octave in compass. As the most talented guitarist of his generation he is not likely to have compromised over such a matter without good reason. It is also very unlikely that he would have done so if Corbetta always used octave stringing on both fourth and fifth courses. The two men probably knew one another personally and De Visée must have been familiar with Corbetta's music. He has included in his 1682 book a *Tombeau* in memory of Corbetta who had died the previous year.

Two other guitar books were printed in France between during the same period –

¹ Michel Brenet, 'La librairie musicale en France de 1653 à 1790...', p. 414 (quoting from F-Pn Ms. Fr. 21945, an equivalent of the Stationers' registers) in *Sammelbände der Internationalen Musik-Gesellschaft*, viii (1906–7), 401–66.

- 1676 Remy Médard - Pièces de guitarre (Paris, Ganiere).
1680 Henri Grenerin - Livre de guitarre (Paris, Bonneüil).

Neither of these includes any information about stringing but there is no reason to suppose that they did anything different from Corbetta, Carré and de Visée. Médard was a student of Corbetta. In his introduction he says "I have tried entirely to follow the method of the famous Francisque Corbet which he showed me during a period of several months but with the difference that I found for my pieces the simplicity which he did not take the trouble to seek". Médard's music is less complex and less demanding to play but this has no bearing on the method of stringing he may have used.

Slightly later – in 1705 - François Champion also published a collection of pieces for guitar "Nouvelles découvertes sur la guitarre". This does not include any information about stringing. However a passage in his "Traité d'accompagnement" (1716) has attracted some attention. Discussing the suitability of the guitar as an instrument for realizing a bass line he says -

p. 19 - Cependant je la croy suffisante pour accompagner une voix :au moins est-ce la justice qu'on luy a rendu, quand on me l'a entendu toucher ; pour ce qui est des accords, je ne luy en connois point d'impossibles, elle a par-dessus les autres la facilité du transport & du toucher, & par-dessus le theorbo, les Parties d'accompagnement non renversées, par consequent plus chantantes.

However I believe it [the guitar] is adequate for accompanying a single voice. At least that is the opinion of those who have heard me play it. As for the chords, I know of nothing which is impossible. Unlike other instruments it is easy to transport and to play and unlike the theorbo, the accompanying parts are not reversed so that they are more like the parts which are sung.

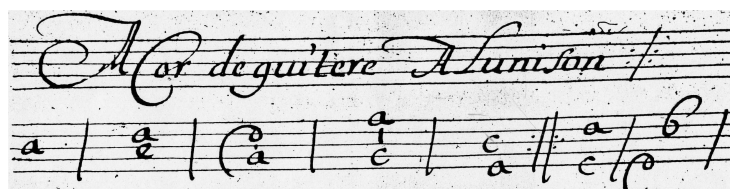
It has been suggested that this indicates that the guitar did not have a re-entrant tuning. However the point which Champion is making is that because the guitar does not have the **first and second course tuned down an octave like the theorbo**, the accompanying voices above the bass line will be at the right pitch or will be arranged on the instrument in the right order. The passage does not shed any light on the way the fourth and fifth courses are strung. Champion is not very consistent about the way he refers to the theorbo and his examples do not always take into account the instrument's re-entrant tuning.

F:Pn.Ms.Rés. 1402. (Undated).

This is a manuscript collection of mainly strummed music in French tablature. It includes several Spanish pieces, amongst them a version of Briceño's "Tu la tienes Pedro". The Sarabande on p.27 is found in Corbetta's 1648 book (p.74) and there are also five pieces by De Visée. The manuscript is usually dated around 1700 because it includes pieces by De Visée but the repertoire seems earlier.

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

TUNING CHART FROM F:PN.MS.RÉS.1402



Nicolas Derosier: Les principes de la gitarre. (Amsterdam, ca. 1690/Paris, 1699).

This is simple instruction book. It includes a table of *alfabeto* chords set out in French tablature and a series of brief *chacónnes* in different keys, also in French tablature.

Examples in tablature and staff notation on p.iv illustrate the tuning with octave stringing on the fourth course only.

DEROSIER'S TUNING AND TUNING CHARTS CA. 1690

The actual notes on the guitar are shown first. These are followed by two charts for checking that the guitar is in tune. **It should be noted that these are tuning checks, not alternative tunings as has been suggested elsewhere.**² The first – “*autre maniere*” – mixes unisons and octaves ; the second – “*troisième maniere*” – is in unisons. The octave doubling is indicated in all three examples.

Derosier was of French extraction but spent much of his life in the Netherlands possibly because he was a protestant. Although “*Les principes de la gitarre*” is a simple “teach yourself” book, he also published a collection of solo music for 5-course guitar in 1691. No copies of this have survived to the present day. However, the manuscript B:Bc Ms.S5615, copied by Jean-Baptiste Castillion in 1730 (see below) includes 40 pieces attributed to Derosier. Castillion refers to Derosier as “*Ordinaire de la Musique de son Alteze Electorale Palatin*” and says that he

² In Dart, Thurston, Derosier’s guitar tutor in Galpin Society Journal VI, 1953, p.107 the tuning checks have been mistaken for alternative methods of stringing the instrument, an error which has been repeated elsewhere.

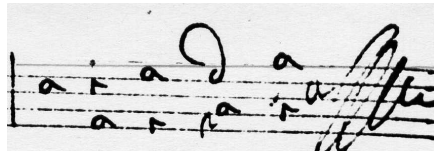
invented the "*guitarre angelique*" which had eight extra strings – presumably open diapasons. Derosier apparently published a book of pieces for this instrument in 1691 but no copies of it have survived. It is not known therefore whether it had re-entrant courses on the fingerboard.

There are two English sources which include information about the stringing of the guitar.

US:CAh.Ms.Mus.139. (ca. 1685).

This belonged to Lady Elizabeth Cromwell, a distant relative of Oliver Cromwell. On f.3 there is a tablature tuning chart which is identical with that in F:Psg Ms.Rés. 2344 and Carré. Although the intervals are not specified they are presumably unisons.

ELIZABETH CROMWELL'S TUNING CHART



Elizabeth began to copy the manuscript when she was about twelve years old and starting to learn the guitar. In the earlier part the pieces are graded according to difficulty taking advantage of the guitar's re-entrant tuning to arrange the melodies so that they are played almost entirely on open courses. She has also copied into her book two pieces by Corbetta, the Sarabande in G minor on p.56 of "*La Guitarre royale*" and a version of a Chaconne which incorporates at least some of the variations from the chaconne attributed to him in the two manuscripts copied by Castillion, presumably at a later date than the pieces at the beginning of the manuscript as both are very demanding to play.

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

This is a manuscript copied by the English scholar, James Talbot, between 1690 and 1700. It consists of unnumbered loose sheets grouped by topic. Two sections deal with the guitar. In one of these the tuning with octave stringing on the fourth course only is shown in **staff notation** with e' for the first course. This is referred to by Talbot as "Mr. Shore's tuning". John Shore (ca.1662-1752), the trumpeter and lutenist employed at the courts of James II and William III, supplied Talbot with much of his information. On the same page two names associated with the guitar are mentioned - **Francesco**, which is probably Corbetta, and **Latour**, probably the De la Tour mentioned as a teacher of the lute and guitar in 1694. Corbetta of course spent much of the last twenty years of his life in England and the method of stringing which Shore was familiar with is most likely to have been that favoured by Corbetta.

The other section gives a fairly detailed description of the instrument, most of it copied from Mersenne. This includes Mersenne's tuning in staff notation.

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

Brossard was a composer and musician who held church appointments in Strasbourg and Meaux after spending several years in Paris. He was also a collector of books and music and a distinguished writer on music. During his lifetime he acquired fame as a theorist and his dictionary was the first of its kind to be published in France. His brief entry for the guitar is reliable and probably reflects the *status quo* at the time when it was written – that is – that the instrument had a re-entrant tuning unless a low octave string was added to the fourth course.

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 4^e

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.

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.

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, De Visée and their contemporaries were composing. It retains 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 been the method of stringing most widely used in the second half of the 17th century.

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

This manuscript of music by François Le Cocq and others was copied by the Flemish clergyman and amateur guitarist Jean-Baptiste de Castillion in 1730. It has a lengthy introduction written by Castillion who has taken his information from a variety of sources including de Visée, Derosier and Sanz.

When describing how the guitar is strung, Castillion 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.

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.

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 cinquieme 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 choisiss 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 music lovers, 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..

Overwound strings did not come into general use until the last quarter of the seventeenth century, and as Castillion suggests, they were not always very satisfactory.

At the end of the Introduction the tuning with octave stringing on the fourth course only is illustrated in staff notation and tablature (copied with some variations from Derosier).

CASTILLION'S TUNING CHARTS COPIED FROM DEROSIER

*Acords
De la Suitarre,
avec les Notes De Musique.*

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 may have sometimes have 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.

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

During the early years of the 18th century the guitar seems to have declined in popularity with little solo music being written for it. It went through a period of transition during which tablature was abandoned in favour of staff notation and the conventional tuning became standard. This changing scene is reflected in the entry for Guitar in Diderot's "Encyclopédie", written by Jean-Jacques Rousseau. Evidently in 1750 it was not yet universal practice to add a *bourdon* to the fifth course.

p.1011 - ...on l'a mis à cinq doubles, dont les trois premières sont à l'unisson. & les quatrième & cinquième à l'octave; souvent même on ne souffre point de bourdon à la cinquième, & 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.

Rousseau comments unfavourably on overwound strings –

p.1011 - Les bourdons filés ont deux inconvénients, l'un d'user de couper les touches; l'autre plus grand, est de dominer trop sur les autres 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 souvent, il vaut mieux s'en tenir aux bourdons simples, à 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.

The entry includes a fold out illustration of the fingerboard of the guitar which clearly shows that the *bourdons* were placed on the treble side of a course.

ROUSSEAU'S DIAGRAM OF THE GUITAR FINGERBOARD



Writing retrospectively Rousseau also refers to De Visée -

p. 1011. - *Visé, célèbre 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.

Rousseau was born in Geneva in 1712. It is unlikely that he knew De Visée personally, but he may well have obtained his information from someone who did.

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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).

The tuning instructions in the tutors of 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' work includes an introduction to playing the guitar. In Chapter 16 - "*Des cordes dont il faut se servir pour monter la guitarre*" he describes the quality and gauges of the strings to be used on the guitar together with the aid of a diagram of the fingerboard. These indicate that the *bourdons* were on the treble side of the course.

Corrette is the only writer in the whole of the period to mention the possibility of playing only the treble string of a course in some circumstances. At the end of Chapter 13 in which he explains French tablature and note values there is a note -

p.18 - *Les P que j'ai mis au dessus des LA et des RE aux pages 23, 25, 26, 28, enseignent que ses notes se pincent legerm.^t du pouce sur les petites cordes du 5e et 4e rang. Les bons Maitres se servent de cette maniere dans les pieces pour laisser plus de liberté aux 2^e et 3^e doigt de la main droite.*

The Ps which I have placed above the As and the Ds on pages 23, 25, 26, 28 show that these notes are to be played lightly with the thumb on the thinner strings of the fifth and fourth courses. The best players use this method in some pieces in order to leave the second and third fingers of the right hand freer.

The music is printed in pallel staff notation and French tablature. Where he has indicated that notes might be played on the fourth course omitting the *bourdon* there are no obvious advantages for doing so; the notes can just as easily be played on one of the upper courses.

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THE STRINGING OF THE 5-COURSE GUITAR

OCTAVE STRINGING ON THE THIRD COURSE

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

Two Italian manuscripts seem to imply the use of a high octave string on the third course. Neither source indicates that this method of stringing is to be combined with octave stringing on other courses and in both the information is ambiguous.

OCTAVE ON THE THIRD COURSE

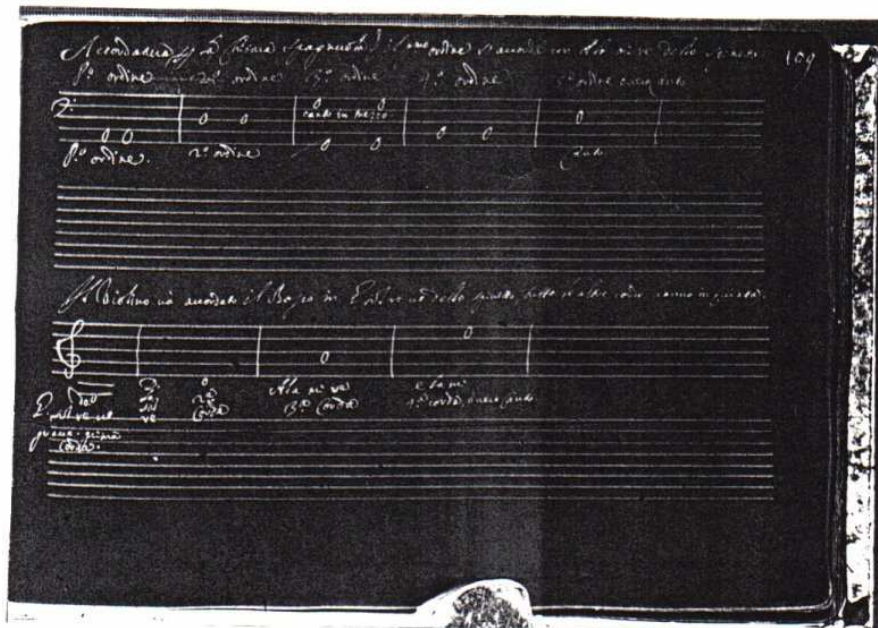


I.Bc Ms. AA 360. (c.1660)

This is a manuscript of music for various instruments including keyboard and violin, some in staff notation and some in tablature. It was copied over a period of time; the date 3rd November, 1661 appears on f.119, 10th November, 1671 on f. 169v and 16th August, 1681 on f. 176v.

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

I.Bc Ms. AA 360.TUNING OF THE GUITAR AND VIOLIN



The text reads -

Accordatura da Chitarra spagnuola il primo ordine s'accorda 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 accordato il Basso in G sol re ut dello spineto le altre corde vanno in giusta.

The lowest string of the violin is tuned to G sol re ut [G below middle C] of the spinet, the other strings accordingly.

A la mi re can be the A either below or above middle C. The notes on the guitar are written in the bass clef an octave lower than sounding pitch. 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" - "canto in the middle". This could refer to the position of the high octave string between the other eight strings indicating that it is on the bass rather than the treble side of the course.

However it seems 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. The term "canto" is ambiguous. It may refer to a high string but 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 Chitarra 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".

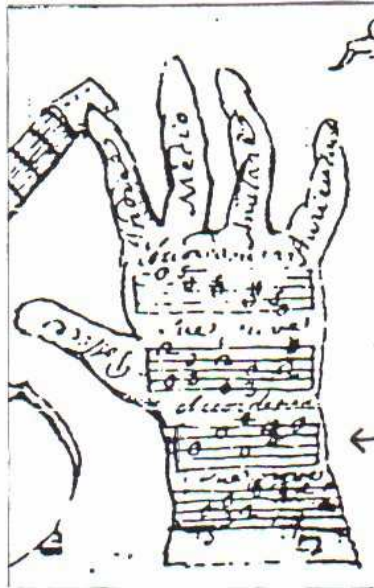
I:MOe Ms. Campori 612 "Regole per imparare a sonare la chitarra". (Undated).

This is a manuscript collection of music in *alfabeto*. The introduction, including an engraved illustration showing the tuning of the guitar, has been copied from Banfi's "Il Maestro della Chitarra" presumably after 1653. (see in Italy).

BANFI'S ILLUSTRATION



I:MOe Ms. CAMPORI 612



Banfi's original includes an "Accordatura" and a "Proua" - the standard Italian tablature tuning chart and a second chart presumably in octaves. In the manuscript the staff notation and an additional tuning chart, which is also apparently in octaves, have been added. The staff notation has no clef but assuming the C clef on the lowest line of the stave the first course would be e'.

Rather than indicating that the third course is octave strung, this may be intended to clarify Banfi's 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 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 charts, the other intervals being read as unisons.

Elsewhere in the manuscript the tuning charts and tables of *alfabeto* chords in both Italian and French tablature have been copied from Carbonchi's 1643 book. (See section on Italy).

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Whats the problem?

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 sometimes, but not always, be ameliorated with a high octave string on the third course. The classic example is a passage in Sanz's "Jacaras" on p. 7 of Book 1 of "Instrucción de musica". In the first bar the high octave string on the third course will fill in the gap (and with the "right technique" the note in the lower

octave can presumably be eliminated). However in the third bar no method of stringing or technique can remedy the skip of a 7th.

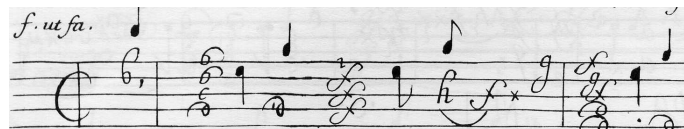
SANZ – JACARAS



Sanz is one of the few writers who has expressed his views about the suitability of different methods of stringing and he has not mentioned octave stringing on the third course as an option. Moreover he does not say that the standard re-entrant tuning is to be preferred because it eliminates skips of a 7th or a 9th in *campanelas*, (and nor does anyone else). There does not seem to be any justification for using this method of stringing for his music.

Corbetta is also rather fond of a melodic phrase which skips up and down a 7th as in the opening bars of the "Allemande Cherie de son Altesse le Duc d'Yorck" on p.6 of "La Guitarre royale". In the example below the passage is transcribed literally in A. The quaver passage could however be interpreted as being in two parts as in B.

CORBETTA'S ALLEMANDE



A.



B.

However, Corbetta has also included a vocal version of this particular piece and the voice part starts with the motif as in C. To reproduce this exactly it is necessary to have a high octave string on the third course as in D.



C.



D.

Corbetta could have put all the notes in the right octave on the first course as in E but this would involve going up to the 10th fret and shifting positions on the fingerboard twice and it would not be possible to sustain the chord.



E.

His reason for intabulating the music in this way is purely practical. Idiosyncracies like this do not indicate that the music is intended for one method of stringing rather than another. Corbetta of course says nothing at all about putting a high octave string on the third course.

It is also 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. Even today it this can be a problem on a standard size 5-course guitar. The fact that it works with nylgut or other synthetics is beside the point as these were not available in the 17th century.

The reason why this method of stringing has become popular today is because it makes the music sound much brighter. Notes on the third course will often sound above those on the first creating a different melodic line from what the tablature actually suggests.



TABLES

GUITAR BOOKS WHICH INCLUDE REFERENCES TO STRINGING

Date	Author	4 th course	5 th course	Pitch	Comments
SPAIN					
1546	Mudarra	Octave	-		
1555	Bermudo	Octave	-		
1596	Amat	Octave	Octave	E	Verbal instructions
1640	Doizi de Velasco	Unison Octave	Unison Octave	E	Says it is better to use <i>bourdons</i> when accompanying a bass part
1674	Sanz	Unison Octave	Unison Octave	E	Verbal instructions/Tablature chart. Says re-entrant tuning best for solo music in the modern style. Mentions double <i>bourdons</i> on 4 th and 5 th courses
1677	Ruiz de Ribayaz	Octave	Octave	E	Verbal instructions. Says treble strings on 4 th & 5 th courses are uppermost on the instrument
1694	Guerau	Octave	Octave		<i>Bourdons</i> mentioned when describing right-hand fingering
1752	Minguet y Irol	Octave Unison	Octave Unison	E	Verbal instructions from Amat but quotes Sanz
ca. 1760	E.Gru. Ms.Caja B-25	Octave	Octave	E	Verbal instructions/Tablature chart
ITALY					
1606	Montesardo	Octave	Octave		Verbal instructions
1620	Sanseverino	Octave	Octave	D	Verbal instructions/Staff notation
early 17 th C	F:Pn.Ms.Rés. Vmc.59	Octave	Unison		Verbal instructions seem to indicate octave stringing on 4th course only
1627	Costanzo	Unison ?	Unison ?		Verbal instructions/Tablature chart imply treble strings only.
1629	Foscarini	Octave ?	Octave ?	E	Verbal instructions/Tablature chart imply bass strings only
1639	Corbetta	Unison ?	Unison ?		Verbal instructions for tuning four guitars to play in concert imply treble strings
1646	Valdambrini	Unison	Unison	E	Tablature charts in Italian and French tablature. Says instrument has no basses
FRANCE/ENGLAND/LOW COUNTRIES					
1626	Briceño	Unison	Unison		Verbal instructions
1649	F:Psg Ms.Rés.2344	Unison	Unison	E	Tablature chart/Staff notation
1671	Corbetta	Octave	Unison	E	Says a low octave string should be added to the 4 th course in both Italian and French prefaces
1671	Carré	Unison Octave	Unison Unison	D/E	Tablature chart/Staff notation from Mersenne. Says a low octave string should be added to the 4 th course for continuo exercises
Ca. 1682	F:Pn.Ms.Res. 1402	Unison	Unison		Tablature chart

1682	Visée	Octave	Unison	E	Says a low octave string should be added to the 4 th course
1685	US:Cah.Ms. Mus.139	Unison	Unison		Tablature chart implies re-entrant tuning
1690	Derosier	Octave	Unison	E	Tablature chart/Staff notation
1730	B.Bc. Ms.S5615 – Castillion	Unison Octave Octave	Unison Unison Octave	E	Verbal instructions/Tablature chart/Staff notation
1761	Merchi	Octave	Octave	E	Staff notation
1763	Corrette	Octave	Octave	E	Staff notation

OTHER SOURCES OF INFORMATION ABOUT STRINGING

Date	Author	4 th course	5 th course	Pitch	Comments
SPAIN					
1724	Nassarre	Octave Octave	Unison Octave		Treatise
ITALY					
1650	Kircher	Unison	Unison	D	Treatise. Staff notation. Information from Mersenne
Ca. 1700	Stradivarius	Octave	Octave		Drawing showing fingerboard of theorboed guitar with notes on stringing
FRANCE					
1636	Mersenne	Unison	Unison	E/D	Treatise. Staff notation. Information from Kapsberger.
1640	Trichet	Octave	Octave		Manuscript treatise. Information from Italian or Spanish source
1703	Brossard	Unison Octave	Unison Unison		Dictionary
1757	Diderot	Octave Octave	Octave Unison		Dictionary
ENGLAND					
Ca. 1700	GB:Och Ms.1187	Unison Octave	Unison Unison		Manuscript notes. Staff notation. Re-entrant tuning from Mersenne. "French tuning" from John Shore

LIST OF SOURCES

Printed works

- Abatessa, Giovanni Battista**, Corona di vaghi fiori (Venice: Magni, 1627). Copy in GB:Lbl.
- Cespuglio di varii fiori (Orvieta: 1635). Copy in GB:Lbl.
 - Ghirlanda di varii fiori (Milan: ca.1650). Copy in GB:Lbl.
 - Intessitura di varii fiori. (Rome/Lucca, Pieri/Paci, 1652). Copy in I:Bc.
- Amat, Joan Carles**, Guitarra española de cinco ordenes. (1st edition, Barcelona, 1596 no longer extant. Earliest surviving edition Lerida, Anglada/Llorens, 1626; reprinted 1639, 1640, 1674 and several times in the 18th century. Facsimile of ca.1760 edition - Editions Chanterelle, 1980.
- Asioli, Francesco**, Primi scherzi di chitarra. (Bologna, Monti, 1674). Facsimile - Studio per Edizioni Scelte, 1984.
- Concerti armonici per la chitarra spagnuola (Bologna, Monti, 1676). Copy in F:Pc.
- Banfi, Giulio**, Il maestro della chitara. (Milan, No imprint, 1653). Copy in I:Ma.
- Bartolotti, Angiol Michele**, Libro Primo di chitarra spagnola. (Florence, no imprint, 1640). Facsimile - Minkoff, 1984.
- Secondo libro di chitarra spagnola. (Rome, no imprint, c1655). Facsimile - Minkoff, 1984.
- Bermudo, Juan**, Declaracion de instrumentos musicales. (Osuna, 1555). Facsimile - Bärenreiter, 1957.
- Botazzari, Giovanni**, Sonate nuove per la chitarra spagnola. (Venice, no imprint, 1663). Facsimile - Studio per Edizioni Scelte, 1984.
- Briceño, Luis de**, Metodo mui facilissimo para aprender a tañer la guitarra. (Paris, Ballard, 1626). Facsimile - Minkoff, 1972.
- Brossard, Sebastien**, Dictionnaire de musique (Paris, no imprint, 1703). Facsimile - Amsterdam : Antiqua, 1964.
- Calvi, Carlo**, Intavolatvra di chitarra e chitarriglia. Facsimile - Studio per Edizioni Scelte, 1980.
- Campion, François**, "Nouvelles découvertes sur la guitarre". (Paris, Brunet, 1705). Facsimile - Minkoff, 1977.
- Traité d'accompagnement. (Paris, Adam, 1716). Facsimile - Minkoff, 1976.
- Carbonchi, Antonio**, Sonate di chitarra spagnola. (Florence, Massi/Landi, 1640). Facsimile - Studio per Edizioni Scelte, 1981.
- Le dodici chitarre spostate. (Florence, Sabatini, 1643). Facsimile - Studio per Edizioni Scelte, 1981.
- Carré, Antoine**, Livre de guitarre. (Paris, no imprint, 1671). Facsimile - LGO Publishing, 2009.
- Livre de pieces de guitarre (No imprint). Facsimile - Minkoff, 1977.
- Colonna, Giovanni Ambrosio**, Intavolatura di chitarra alla spagnuola. (Milan, Colonna, 1620). Facsimile of 1637 version - Forni, n.d.
- Corbetta, Francesco**, De gli scherzi armonici. (Bologna, Monti, 1639). Copy in I:Bc.
- Varii capricci per la ghittara [sic] spagnuola. (Milan, no imprint, 1643). Facsimile - Studio per Edizioni Scelte, 1980.
 - Varii scherzi di sonate per la chitara spagnola. (Brussels, no imprint, 1648). Facsimile - Studio per Edizioni Scelte, 1983.
 - Guitarre royale. (Paris, Bonneüil, 1671). Facsimile - Minkoff, 1975.
 - Guitarre royale, (Paris, Bonneüil, 1674). Facsimile - Forni, n.d.
- Coriandoli, Francesco**, Diverse sonate recercate sopra la chitarra spagnuola. (Bologna, Monti, 1670). Facsimile - Studio per Edizioni Scelte, 1981.
- Corrette, Michel**, Les dons d'Apollon : méthode pour apprendre facilement a jouer de la guitarre. (Paris, Bayard, c1763). Copy in GB:Lbl.

Costanzo, Fabritio, Fior novello, Libro primo (Bologna, Tebaldini, 1627). Copy in I:Bc.

Derosier, Nicolas, Les principes de la guitarre. (Amsterdam, no imprint, ca.1690). Facsimile – Forni, n.d..

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

Doizi de Velasco, Nicolao, Nuevo modo de cifra para tañer la guitarra. (Naples, Longo, c1640). Copy in E:Mn.

Foscarini, Girolamo, Intavolatura di chitarra spagnola. (Macerata, Bonomo (1629). Copy in F:Pn.

- Li cinque libri della chitarra alla spagnola. (Rome, no imprint, 1640). Facsimile
- Studio per Edizioni Scelte, 1979.

Granata, Giovanni Battista, Capricci armonici (Bologna, Monti, 1646). Facsimile - Studio per Edizioni Scelte, 1978.

- Nouve suonate di chitarriglia spagnuola. (No imprint, c.1650). Copy in I.Bc.
- Nuova scielta di capricci armonici e suonate musicali. (No imprint, c.1651). Copy in I.Bc.
- Soavi concenti di sonate musicali (Bologna, Monti, 1659). Facsimile – Chanterelle, 1979.
- Novi capricci armonici musicali (Bologna, Monti, 1674). Facsimile – Forni, n.d.
- Nuovi sovavi concenti di sonate (Bologna, Monti, 1680). Copy in I.Bc.
- Armoniosi toni di varie suonate musicali (Bologna, Monti, 1684). Copy in GB:Lbl.

Grenerin, Henri - Livre de guitarre (Paris, Bonneüil, 1680). Facsimile edition – Minkoff, 1977.

Guerau, Francesco, Poema harmonico. (Madrid, Ruiz de Murga, 1694). Facsimile – Tecla, 1977.

Kircher, Athanasius, Musurgia universalis. (Rome, Corbelletti, 1650). Facsimile – Georg Olms, 1970.

Le Roy, Adrian, Premier livre de tabvlature de gviterre. Paris, Leroy & Ballard, 1551). Facsimile – Eds. Chanterelle, 1979.

Martin, François, Pieces de guitarre. (Paris, no imprint, 1663). Copy in F:Psg.

Médard, Remy - Pièces de guitarre (Paris, Ganiere, 1676). Facsimile edition – Minkoff, 1988.

Merchi, Joseph Bernard, Le guide des Écoliers de la guitarre, op. 7. (Paris, The Author, 1761). Facsimile edition – Minkoff, 1981.

Mersenne, Marin, Harmonie universelle. (Paris, Cramoisy, 1636). Facsimile - Editions du Centre National de la Recherche Scientifique, 1963. An English translation of the books on instruments by Roger Chapman - Nijhoff, 1957.

Micheli, Antonino, La nuova chitarra di regole. (Palermo, Barbera, Rummolo, & Orlando, 1680). Relevant pages reproduced in Failla, Salvatore Enrico, La Nuova Chitarra composta da Don Antonino de Micheli della citta di Tusa in *Analecta Musicologica*, XIX, 1979, p.244-71.

Millioni, Pietro, Il primo, secondo, e terzo libro d'intavolature. (Rome, 1627).

- Quarto libro d'intavolatura...(Rome, Facciott, 1627). Copy in GB:Lram.

Minguet y Irol, Pablo, Reglas y advertencias generales. (Madrid, Ibarra, 1752). Facsimile – Minkoff, 1981)

Monte, Ludovico, Vago fior di virtu. (Venice, Salvadori, ca. 1630). Copy in I:Bc.

Montesardo, Girolamo, Nuova inventione d'intavolatura. (Florence, Marescotti, 1606). Copy in I:Bc.

Mudarra, Alonso, Tres libros de musica. (Seville, Leon, 1546). Facsimile – Chanterelle, 1980.

Murcia, Santiago de, Resumen de acompañar. (Antwerp, no imprint, 1714). Facsimile – Chanterelle, 1980.

Nassarre, Pablo, Escuela musica. (Zaragoza, Larumbe, 1724). Facsimile – Zaragoza : Institución "Fernando el Católico", 1980.

Pellegrini, Domenico, Armoniosi concerti sopra la chitarra spagnuola. (Bologna, Monti, 1650). Facsimile - Studio per Edizioni Scelte, 1978.

- Pesori, Stefano**, Galeria musicale. (Verona, Gio. Battista & Fratelli Merli, 1648). Copy in I:Bc.
- Roncalli, Ludovico**, Capricci armonici sopra la chitarra spagnola. (Bergamo, Casetti, 1692). Facsimile – Chanterelle, 1978.
- Ruiz de Ribayaz, Lucas**, Luz y norte musical. (Madrid, Alvarez, 1677). Facsimile – Minkoff, 1976.
- Sanseverino, Benedetto**, Il primo libro d'intavolatura. (Milan, Lomazza, 1620/1622). Copies in GB:Lbl.
- Sanz, Gaspar**, Instruccion de musica sobre la guitarra española. (Zaragoza, Dormer, 1674). Facsimile - Zaragoza : Institución "Fernando el Católico", 1966
- Valdambrini, Ferdinando**, Libro primo d'intavolatura di chitarra (Rome, no imprint, 1646). Copy in I:Rsc.
- Libro secondo (Rome, no imprint, 1647). Copy in I:Rsc.
- Visée, Robert de**, Livre de guitarre. (Paris, Bonneüil, 1682). – Facsimile – Minkoff, 1973.
- Livre de pieces pour la guitarre. (Paris, Bonneüil, 1682). – Facsimile – Minkoff, 1973.

Manuscripts

- 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 (Ghent, 1730). Copied by J.B. de Castillion. Facsimile – Brussels : Editions Culture et Civilisation, 1979.
- B:Br. Ms.II.5551**. Recueil des pieces de guitarre composées par Mr. François Le Cocq...et de differens authors excellens maitres (Ghent, after 1730). Copied by J.B. de Castillion.
- B:Lc. Ms. 245**. Untitled ms. copied by J.B. de Castillion (ca. 1706).
- Chile:Pontificia Universidad Catolica. Ms.** Murcia, Santiago de, Cifras selectas (1722). Facsimile edition – A-R Editions, 2010.
- E:GRu. Ms.16972**. Suma primoroso de la guitarra[sic] consagra el Lisenciado {sic} Don Manuel Valero. (Undated).
- E:Mn. Ms.M.2209**. Santa Cruz, Anttonio [sic], Livro donde se veran pazacalles. (Undated).
- E:Mn. Ms.M.811**. Libro de diferentes cifras. (1705).
- E:Mn. M.1233**. Metodo de guitarra (procede de Granada). (1763).
- F:Pn.Ms.Res. 1402**. Untitled ms. of music in French tablature. (Undated).
- F:Pn.Ms.Rés.Vmc.59**. Untitled ms. of music in *alfabeto*. (early 17th century)
- F:Psg Ms.1070**. Trichet, Pierre, Traité des instruments. (1640). Modern edition edited by François Lesure – Neuilly-sur-Seine : Societé de Musique d'Autrefois, 1957.
- GB:Lbl Add.Ms.31640**. Murcia, Santiago, Passacalles y obras de guitarra (1732). Facsimile edition – Chanterelle, 1979.
- GB:Och Ms.1187**. James Talbot's manuscript. (ca. 1690).
- I:Bc Ms.A.A.360**. Untitled manuscript of violin and keyboard music. (Undated).
- I:CRMuseo Stradivariano**. Paper pattern no. 375 of theorboed guitar. Details of stringing in Sacconi, Simone, The secrets of Stradivari. Cremona : Libreria del Convengo, 1979.
- I:MOe Ms.Campori 612. 8.L.10.21**. Regole per imparare a sonare la chitarra. (Undated).
- Mex:M.Saldivar**. Saldívar Codex no. 4 (ca.1730). Facsimile – Michael Lorimer, 1987.
- US:CAh.Ms.Mus.139**. Elizabeth Cromwell's manuscript. (ca. 1685).

RILM sigla

B.Bc

Brussels: Bibliothèque du Conservatoire royal de musique

B:Br	Brussels: Bibliothèque royale de Belgique
B:Lc	Liège: Bibliothèque du Conservatoire
E.Gru	Granada: Biblioteca de la Universidad
E.Mn	Madrid: Biblioteca nacional
F:Pc	Paris: Bibliothèque nationale (fonds du Conservatoire)
F:Pn	Paris: Bibliothèque nationale
F:Psg	Paris: Bibliothèque Sainte-Geneviève
GB:Lbl	London: British Library
GB:Ob	Oxford: Bodleian Library
GB:Och	Oxford: Christ Church
I:Bc	Bologna: Biblioteca del Conservatorio (Liceo Musicale)
I:CRMuseo Stradivariano	Museo Stradivariano
I:MOe	Modena: Biblioteca Estense
I:Rsc	Rome: Biblioteca S. Cecilia (Conservatorio)
Mex:M. Saldívar	Private collection of Dr. Gabriel Saldívar
US:CAh.	Cambridge, Mass. Harvard University, Houghton Library