

Author: Beccatelli, Giovanfrancesco

Title: Documents and Rules to learn to play the Basso continuo summarized from the Speculative Musical observations of Giovan Francesco Beccatelli from Florence

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[-1-] [Numero 4. [2. ante corr.] in marg.]

Documents and Rules to learn to play the Basso continuo summarized from the Speculative Musical observations of Giovan Francesco Beccatelli from Florence

On the Musical Notes

The musical notes (or Strings) suitable to music are no more than seven, differing according to the different Sounds, as, if one adds to these the Octave, it is of similar Sound to the first one in the same way as the Ninth is of similar sound to the second, the tenth to the third, the eleventh to the fourth and so on. However, with regard to the difference between high and low they can be an infinite number, although only one series of these was considered throughout all time and this precise series was called Largest System by the Ancients and Constitution of notes by modern theorists. Their sole aim with it was to illustrate the span of the human voice from the highest note that, generally speaking, a Child can sing to the lowest that can be sung by a full grown an, as we shall see further on.

The above mentioned seven Notes are divided into two Classes, the first of which is called musical because it is the one through which one sings and play, while the second will be called Qualitative, because their intrinsic quality is illustrated on its basis.

With regard to the first one, which I called Musical, although it is known to all beginners, I shall say that it is the one where the Seven letters, Notes, marked by our ancient music theorists who wrote in Latin with the first seven letters of the Alphabet, are ordered one after the other to indicate with them the stepwise rise and fall of the voice when it goes from the low register to the high and vice versa. If one passes said seven Notes both ascending and descending, there follow nothing but a repetition [-2-] of the letters themselves. In order to distinguish these repetitions of the same set of letters, their appearance is altered, as they are written in Capitals in one set, in lower case in another one, and doubled in another one still. In the ancient System said Notes were doubled up to the number of fifteen, of which the lowest was assigned the letter A, while the other letters were assigned to the other notes in ascending, as I show here: A. B. C. D. E. F. G., a, b, c, d, e, f, g, aa. This System was enlarged to twenty letters by Guido of Arezzo, who marked the added note with the Letter G in its Greek form thus [Gamma] and called it Gamma with its Greek name. He divided these Systems into three Orders calling low Order the notes marked with Capital letters, high order the notes marked with lower-case letters, and above-high the notes marked with the lower-case double letters.

[Beccatelli, Documents and Rules, 2; text: [Gamma], A, B, C, D, E, F, G, a, b, c, d, e, f, g, aa, bb, cc, dd, ee, Ordine grave, acuto, sopracuto]

Moreover, since in the positions or place of the lower-case letter be two different notes occur, one lower than the other, and since the lower is produced by a string that is less tense than the one that produces the higher one, for this reason he created the

letter b in two ways, one that was marked, and still is, with the body of the letter of square shape, thus [signum], and called it hard B, and is called nowadays B square, with which he wanted to show the most intense, and the other one with the main body round, thus, b, with was called B soft, which indicates the more relaxed note. Also, because the Notes of different sound are no mere than seven, since every eighth Note is of similar sound to its first one, for this reason modern theorists did not agree [-3-] that the low order should have eight notes as one can see in the example shown below, which contains two G letters one in Latin and the other one in Greek form. Hence, the Greek letter was left in place while the second G was written in lower case, since they wanted to signify with very good reason that, just as the lower order begins from the letter G, which is said Gamma [Gamma], thus the other orders should start from similar letters, as one will be able to see in the following example.

[Beccatelli, Documents and Rules, 3; text: {Gamma, A, [sqb], C, D, B, F, g, a, b, [sqb], c, d, e, f, gg, aa, bb, [sqb][sqb], cc, dd, ee, ordine grave, acuto, sopracuto}]

The largest distance, which, to speak with greater propriety, we shall call the largest interval of sound that spans between a note and another one adjacent to it, is called Tone, while the smallest distance, or the smallest interval is called major Semitone. The interval of a Tone is divided from an intellectual point of view into five parts, of which three parts form the major Semitone, and two the minor Semitone. I said that it is divided from an intellectual point of view because this is not the place to deal with the geometric progression or of the arithmetic ones.

I call the major Semitone the natural Semitone, because the stepwise motion of this interval is sung naturally without any effort or instruction, while the stepwise motion of the minor Semitone cannot be achieved without some Practice.

The major Semitone is the one that spans two different Notes, while the minor one is the one that occurs on the same Note, because it consists of a variation of sound caused on the same Note by the accidental of the Flat or Sharp sign. It is taught in music Schools that the Flat sign lowers the note by half a step, while the Sharp sign makes it higher by half a step. Now, that lowering produced by the Flat sign and that rising produced by the Sharp sign is the interval of minor Semitone, which corresponds to two fifths of a Tone. Let us now return to the aforesaid System.

[-4-] From the Gamma to the A there is the interval of a Tone, from a to the [sqb] there is also a tone, from the [sqb] to the C there is the interval of a major Semitone, from the c to the D there is a tone, from the D to the E there is a tone, from the E to the F there is a major Semitone, from the F to the g there is a tone, from the g to the a there is a Tone, from the a to the b there is a major Semitone, from the b to the [sqb] there is a minor Semitone, and from the [sqb] to the c there is a major semitone. This has to be understood with regard to all of the other similar letters. This will suffice according to the musical disposition of the Notes with regard to the ancient System. With regard to our System, if we consider the highest Note that can be played with clear and sweet sound by the highest of our Instruments, which is the Violin, and if we consider the lowest, which is ascribed, I will not say to our largest Organs, since they have an enormous extension, but to a simple perfect Organ, not only said letters are repeated up to the number of thirty, as one can see from the following example

[Beccatelli, Documents and Rules, 4; text: CC, DD, EE, FF, G, A, b [sqb], C, D, E, F, g, a, b [sqb], c, d, e, f, gg, aa, bb, [sqb][sqb], cc, dd, ee, ff, gg, aa, bbb [sqb][sqb][sqb], ccc, ddd. Soggrave. Grave, Acuto, Sopracuto. Sossopracuto.],

but, among those Notes which are at the distance of a Tone, the accidental Notes of the Flat and Sharp signs are interposed according to the quality of said Notes, as it can be seen in this following example, where, because of the lack of space on the page, only a section of said System with the Flat and Sharp signs interposed is illustrated, according to the disposition of the Keyboards of our simple Harpsichords and Organs.

[-5-] [Beccatelli, Documents and Rules, 5; text: FF, G, [sqb], C, E, F, g, a, [sqb], c, d, e, f, gg, aa, [sqb] [sqb] cc, #, b, Tuono, Semituono maggiore, minore]

These Notes of Guido's System illustrated above have each a particular name composed of the letter of the Alphabet and of the Syllable of the Names of the Notes that contain them naturally. However, since we have to deal with the Rules to accompany musical compositions with the Harpsichord and with the Organ, we shall omit their precise Names and we shall call all the As Alamire, all the bs Bfa, all the [sqb]s B mi, all the Cs Cosolfaut, all the Ds Dlasolre, all the Es Elami, all the Fs Ffaut and all the Gs Gsolreut. If these notes have the accidental of the Flat or Sharp sign, we shall call them with their own name adding it to the term Flat or Sharp, namely Elami Sharp, Alamire Flat, Ffaut Sharp, Csolfaut Sharp et cetera, except for the Flat sign of the Note [sqb], which has its specific name of Bfa. What has been said above will apply to the first order of Notes that I have called Musical. Let us move on now to the second Order, which I called Qualitative, because their nature and intrinsic quality is explained through it.

The difference that is found from a Note to another one in this Qualitative Order is to be more or less able to carry the musical accidentals, which are Flat and Sharps. Since the Flat signs render the notes before which they are placed more relaxed, namely, lower by a minor Semitone, which [-6-] is called, with some approximation, flattening of the voice, thus, the notes that are not capable to carry the Flat sign, namely, that cannot be flattened, are called minor. Conversely, the Sharp signs sharpen the Notes before which they are placed with a similar minor Semitone and renders them higher in sound, and, for this reason, the Notes that are not capable to carry the Diesis, which means that they cannot be sharpened, are called major. So that this Doctrine may be well understood I shall propose a similitude, adapted in some respects. Think of Seven Sisters. The age of each of them differs from the age of another one by a year, so that the second is older than the third one by the same span of time as the first is older than the second, and equally the third than the fourth one, and similarly up to the last one. Imagine them to be divided into three Classes, namely, the older ones, the middle ones and the younger ones. The major ones will be the first two, the middle ones the ones in the middle and the minor ones the last two. Although the first two are called older, they are not equally older, because the second one is younger than the first one, but they are called older in relation to the others who are younger than they are. The same is understood of the middle ones and of the younger ones because none of them is of the same age as another one.

Apply now this comparison to the seven Notes, since none of them is the same as another one, and the difference between the first and the second is the same as the one between the second and the third, from the third to the fourth, and so on similarly upto the last one. This difference between them consists in their being more or less suited to receive the accidentals.

We can demonstrate their order, namely, either starting from the major to the minor, or from the minor to the major. We can do this with two movements, namely, either moving from the high to the low register or vice versa.

If we want to consider the order from the major [-7-] to the minor, moving from the low to the high register, the progress from a Note to the following one will be by the leap of a Fourth, while, if we move from the high to the low register, it will be by the leap of a Fifth. Conversely, if we consider the Order from the minor to the major going from the low to the high register, we shall proceed by the leap of a Fifth, while from the high to the low register we shall move by the Leap of a Fourth. Let us come to the practical explanation and let us demonstrate the order from the major to the minor.

The Note that is more major than the others, because it is more incapable than the others to rise, or to acquire a Diesis, but is more capable than the others to lower itself, namely, to carry a Flat sign, is [sqb] mi. Elami follows after this one, which, in our interpretation, we shall say to be a degree minor than [sqb] mi, because it is a little less incapable to rise and, at the same time, a little less capable to rise than [sqb] mi. After Elami there follows Alamire, which we shall regard as a degree minor than Elami, because it differs from Elami as much as Elami differs from [sqb] mi. Dlasolre then follows after Alamire with the same difference, and Gsolreut after Dlasolre, Csolfaut after Gsolreut, and, finally, Ffaut is left in last place after Csolfaut. Ffaut is considered minor than all the others because it is the most incapable to lower itself, or to acquire the Flat sign, while it is the Note that is most capable to rise, or to acquire the Sharp sign. This implies that a Note is capable to acquire an accidental in the same degree as it is capable to acquire the other one. In fact, if a Note is capable to lower itself by the first degree, it will be also incapable to rise by the first degree; a Note that is capable to rise by the second or third degree will be also incapable to lower itself by second or third degree. Hence, if one wants to ascribe the Flat sign to a Note, only the one that is the most major than all the others can have it, because, since the Flat sign [-8-] lowers the note, it befalls the Note that is most capable to lower itself than all the others. When one says 'to ascribe the Flat or Sharp sign' to a Note, it is understood as their having to be placed in the Key signature. Hence, if a Flat sign is placed in the Key signature the only Key that can have it is the [sqb] mi. In which case, the [sqb] mi, which is the most major of all the Notes, when it has the Flat sign, becomes the most minor. Equally, and conversely, when one places a Sharp sign in the Key signature, no other Note can have it but the Ffaut. In that case Ffaut, which is the most minor of all the Notes, becomes the most major Note of all when it acquires the Sharp sign. Also, if one wants to ascribe the Flat sign to a Note that is not the most major, it is necessary that one should ascribe it first to the Notes that are major than said Note, and, conversely, if one wants to ascribe a Sharp sign to a Note that is not the most minor, it is necessary to ascribe it first to the Notes that are minor than said Note.

This distribution of Notes, which in actuality is finite because no more than seven are put into practice in any Composition, nevertheless, in potency, so to speak, can be said to be infinite, because there is no major or minor Note in the case of which one may not find a hundred or a thousand more major or minor Notes than it is by applying said accidentals, as I shall explain. Place in sequence the seven Notes in the following way. [[sqb] mi E la mi Alamire Dlasolre Gsolreut Csolfaut Ffaut in marg.] Two of said seven Notes are the major ones, two the minor ones and three the Middle ones or median, or mixed, as others call them. If one wants to continue this series ad infinitum towards the minor ones, one proceeds in this way. When one gives the Flat sign to

[sqb] mi, [sqb] mi, being the most major, becomes minor than Ffaut as much as Ffaut is minor of Csolfaut. [-9-] In fact, if, to be clearer, we said that from one note to the next one adjacent there is one degree, between Ffaut to [sqb] mi with the Flat sign there will be also a degree. Therefore, [sqb] mi with the Flat sign follows Ffaut, and after this one Elami with the Flat sign follows with the same difference towards Ffaut. After the Flat sign has been assigned to Ffaut, and, if one wants to proceed even further towards the minor Notes, one returns again to the first one which is [sqb] mi with a Flat sign, and adds to it another Flat sign, because, just as [sqb] mi with a Flat sign is a degree lower than Ffaut natural, thus [sqb] mi with two Flats is minor by a degree than Ffaut with B flat, and, just as one progressed with one Flat sign, one shall progress with two Flat signs ascribing two Flat signs to each Note until the point when, having reached Ffaut with two Flat signs, there will follow [sqb] mi with three Flat signs. After the third Flat sign has been ascribed to all the Notes, the fourth follows, and the fifth after the fourth. Thus one proceeds ad infinitum, as one can see here in the noted example.

[Beccatelli, Documents and Rules, 9; text: Ordine e proseguimento verso le minori [sqb] mi. Elami. Alamire. D La Sol re. G Sol re ut. C sol fa ut. F fa ut. b]

Conversely, if one wants to continue the sequence towards the ever more major Notes, after [sqb] mi there follows the minor with the Sharp sign, namely Ffaut with the Sharp sign, which, with said accidental, results major than [sqb] mi as much as [sqb] mi is major than Elami. After Ffaut with the Sharp sign, there follows Csolfaut with the Sharp sign, and, having ascribed the Sharp sign to all the Notes in the same way that was described in the case of the Flat signs, one can add the third, the fourth and as many as one wants. Thus, one would carry on indefinitely, as one will be able to see in the following example, where I show the Notes with the simple letters of the Alphabet.

[-10-] [Beccatelli, Documents and Rules, 10; text: Ordine, e proseguimento verso Le maggiori F. C. G. D. A. E. [sqb]. #]

From the illustration of these progressions, it will appear clearer what I said above, namely that, if one wants to place the Flat sign in the Key signature ascribing it to a Note that is not the most major, it is necessary first to ascribe it first to the Notes that are major than said Note. For instance, if one wants to ascribe the Flat sign to Elami in the key signature, since Elami has a major Note above itself, which is [sqb] mi, it is necessary to apply the Flat sign to this one as well, because, if one does not do so, Elami cannot have the Flat sign. Equally, if one wants to ascribe the Flat sign to Alamire in the key signature, this cannot have it, unless it is also ascribed to [sqb] mi and Elami, since these Notes are major than Alamire. Thus, equally, if one wants to ascribe the Sharp sign to a Note that is not the most minor, it is necessary to ascribe it to the other Notes that are minor than said Note. In fact, if one wants to ascribe the Sharp sign to Gsolreut, since this Note has two Notes minor than itself, namely Csolfaut and Ffaut, it is necessary to ascribe the Sharp sign to these, otherwise Gsolreut would not be able to have the Sharp sign. One should reason of the others in the same way.

It was said above that the Notes that are specifically major are two, two are the minor ones and three the median ones. The two major ones are [sqb] mi and Elami. It has been said that, if one ascribes the Sharp sign to Ffaut, this one becomes major than

[sqb] mi as much as [sqb] mi is major than Elami. Hence, one could believe, in that case, that the major notes are three.

Similarly, the two minor Notes are Ffaut and Csolfaut. If one ascribes the Flat sign to the most major, namely [sqb] mi, this one becomes minor than Ffaut, as much as Ffaut is minor than Csolfaut. Hence one could believe also that the minor Notes are three. Therefore, one must know that the major Notes are always two and the minor ones are also always two. These are always the [-11-] two most minor ones, while those are always the two most major ones, since the Notes are always seven. In fact, when one ascribes the Sharp sign to Ffaut, it is true that one acquires the Note called F Sharp, but one loses the Note of Ffaut natural. Hence, once this one is lost, Csolfaut and Gsolreut are left as the two minor ones, the median ones are Dsolre, Alamire and Elami, while the major ones are [sqb] mi and the Sharpened one of Ffaut.

Equally, if one assigns the Flat sign to [sqb] mi, one acquires said Note with the Flat sign, but the [sqb] mi natural is lost, hence, when this one is lost, Elami and Alamire are left as the two major ones, Dsolre, Gsolreut and Csolfaut as the three median ones and Ffaut and the flattened [sqb] mi as the two minor ones. One must follow this line of reasoning when one employs several Sharp and Flat signs. One must understand of this that if the Flat sign of the major Note, namely, the major Flat sign, is minor than the minor of the natural Notes, namely Ffaut, it follows that any Flat sign is minor than any natural note. Thus, if the Sharp of the minor note, namely, the minor Sharp sign, is major than the natural Notes, namely than [sqb] mi, it follows that any Sharp sign is major than any natural Note.

Before we move on, it is necessary to consider also this sequence with the names of the Notes, which, since they are six, and since two are the major Notes and two the minor ones, hence there are only two of them for the middle Notes, also called mixed. Their Order, therefore, from the major to the minor is the following one: Mi, La, Sol, Do, Fa. The opposite sequence is the one from the minor to the major Note, namely, Fa, Do, So, Re, La, Mi. Hence, the two Major ones are Mi La; the Mixed one are Re, Sol, and the two minor ones are Do, Fa. However, since in certain positions the Note that says La says also Re, and, equally, the note that says Do, in certain positions, says Sol, so that they participate evidently [-12-] of a mixed Note, for this reason, the one that says only Mi, such as [sqb] mi does in the natural System, is called solely major, while, equally, the one that says only Fa, such as Ffaut in the natural System, is called purely minor. It is very necessary to muster the knowledge of that Order in the Names of the Notes, because without it one can understand nothing or very little of the Rules on accompanying. This shall suffice with regard to the second Order of the Notes that I called Qualitative.

On the Intervals

Since the Notes are seven, seven are also the sounds or voices produced by them. These sounds, according to the distance between them and a given first sound which is called unison are called thus: Second, Third, Fourth, Fifth, Sixth and Seventh. And, just as after the Seven Notes in their Musical order, there follows the replication of the same Notes, thus the replication of the Sounds after the Seventh, because the octave is similar in sound to the Unison, and for this reason it is called a replication of the Unison. The Ninth is a replication of the Second, the Tenth of the Third, the Eleventh of the Fourth and so on up to the Fifteenth, which is the replication of the Octave and triplication of the Unison. Similarly, the Sixteenth is the replication of the ninth and triplication of the Second. The others are considered according to this order. The first

ones are called simple, the second ones compounded or replicated, and the third ones de-compounded or tripled, as I show with the following numbers.

[Beccatelli, Documents and Rules, 12; text: Semplici, Composti e replicati, Decomposti, e triplicati, 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. .17. 18. 19. 20. 21.]

[-13-] However, since we have discussed the Sounds as much as we need them, since the words voice, Sound and Note have the same meaning in this context, and because we have to discuss the Intervals, and because the meaning of the term interval is simply the distance between a sound and another one, there follows that the Unison is not considered among the intervals, since it is purely the origin of the interval, since the first interval is the second, to which follows the third, then the Fourth, then the Fifth, the Sixth, the Seventh and the Octave, although the Octave, since it is the replication of the Unison, has to be considered as a compound interval, despite the fact that, since it is the main and most perfect interval, from the extremities of which depends the ratio of all the simple Intervals of which it is completion and conclusion, it has to be placed for this reason among the simple intervals, as I demonstrate with the following numbers.

[Beccatelli, Documents and Rules, 13; text: Semplici, Composti e replicati, Decomposti, e triplicati, 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. .17. 18. 19. 20. 21. 22.]

Each of these intervals is distinguished in two ways, namely, major or minor. To start from the first one, I shall say that the minor second is the interval of major Semitone, as from [sqb] to C, E to F, a to b, and similar ones. If they are caused by an accidental sign, they occur, for instance, from D to E with the Flat sign and from F with the Sharp sign to G. Hence, one can say in general that the interval of major Semitone occurs between a lower note and a higher note with the Flat sign and between a higher note and a lower note with the Sharp sign, and, using the names of the Notes, from Mi to Fa. The major second is the interval of a Tone, and for this reason it is also called Tone, as between C and D, D and E, and similar. Using the names of the Notes, it occurs from Do to Re, from Re to Mi, from Fa to Sol and from Sol to La. [-14-] The minor third is the interval of a tone and a semitone. It is called Semiditone, which means imperfect Ditone because it is smaller than the Ditone, which is the interval of two Tones, which is called by the Ancients Trihemitone, which means interval of three Semitones. This interval lays between A and C, D and F, [sqb] and D, E and g and similar. Using the names of the Notes, it lays between Re and Fa and between Mi and Sol. Bear in mind that when one mentions the semitone, one must always understand it as major Semitone. Moreover, consider that many who have not known and understood the true division of the System believed and still believe Semitone that I called natural to be the minor semitone and that its opposite to be the larger Semitone, which is a grave mistake.

The major third is the interval of two Tones. For this reason it is called Ditone and it occurs between C and E, F and A, and g and [sqb], while, if one uses the Names of the Notes, it occurs from Do to Mi and from Fa to La.

The minor third is the interval composed of two Tones and a Semitone. Since it was composed of four sounds, for this reason it was called Dia-tessaron by the ancients, which means 'across four'. It occurs from each Note to the fourth note upwards from

it, namely, from A to D, from [sqb] to E, from C to F, from D to g et cetera, except for the following, namely, from F to [sqb]. If one wants to describe it using the Names of the Notes, it lays between Do and Fa, between Re and Sol and from Mi to La.

The major fourth is the interval of three Tones, and for this reason it is called Tritone. It lays between the F and the [sqb], from the b to the e, and so on.

The minor fifth is the interval of two Tones and two Semitones. Since the Semitones are major Semitones they exceed a Tone by one Fifth. This interval is called false Fifth, or Semidiapente, which means imperfect Diapente, because it is smaller than the Diapente, which is the interval of three Tones and a Semitone. The minor Fifth is found between the [sqb] and the F, between the E and the b and similar spans. The major fifth is the interval of three Tones and a Semitone. Since it consists of five sounds, it was called by the Ancients [-15-] Dia-pente, which means 'across five'. This interval is found between a Note and the fifth Note above it, such as from A to E, from C to g, from D to a et cetera, except for these, namely, from [sqb] to F. Written with the names of the Notes they appear as follows: from Do to Sol and from Re to La.

However, in order to avoid describing all the intervals, since, if one bears well in mind the order of the Notes that illustrates their character, one can know immediately which ones the minor ones and which one the major ones are, I shall reduce to practice this theoretical knowledge.

Each interval is contained within two sounds, a low one and a high one. The low one will be called unison, while the high one takes its name from the number of the places or positions that it contains within itself. For instance, if the high one is in the second place compared to the unison, the interval is called a Second, if it is in the third place it will be called a Third, if in fourth place a Fourth, if in fifth place a Fifth, if in Sixth a Sixth, if in Eight an Octave, and thus in order. For instance, consider the interval from E to c. Since E is the lower sound, it will be called Unison, while c, since is in the sixth place from E, is called a Sixth. Since c is the minor of these two Notes, E and c, it follows that this Sixth is minor. Here is another example. Consider the interval between D and a. D will be unison and a, since it is located in the fifth place from D, is called a Fifth. Since the Note a is major than the Note D between these two Notes D and a, it follows that the Fifth is major. One can apply this reasoning to all the other intervals except for the octave and its compound intervals, since this interval is contained by Notes marked with similar letters, namely A and a, [sqb] and [sqb], C and c, D and d and so on, and there is no difference between similar letters because the Notes of similar name are all equal between each other. This interval of the Octave was called Dia-pason by the Ancients, which means 'across all', because this interval contains and comprehends all the other simple intervals within itself. [-16-] Moreover, thanks to the power of the accidentals, we can reduce any interval from minor to Major and from Major to minor, and we can render it even more than major and more than minor by altering with said accidentals either the high extreme or the low extreme. For instance, consider the interval from C to a, of which C is the unison and a is the Sixth, and, since the Note a is major than the Note C, for this reason the interval is a major Sixth. This major Sixth can be reduced in two ways. The first one consists in altering the high extreme, namely, in lowering a by assigning the Flat sign to it. So, since any Note with a Flat sign is minor than any natural Note, it follows that the a with the flat sign is minor than C. Therefore, since a is the Sixth, if the Flat sign is applied, it becomes a minor Sixth. The other way will consist in altering the lower extreme, namely, raising the C major by applying the Sharp sign to it. Since any Sharpened note is major than any natural one, it follows that C with the Sharp sign is

major than a. Hence, in said case a remains minor sixth. Should the Sharp applied to the C at the same time as the Flat sign to a, in this case a would be sixth more than minor. If, while C stays natural, the Sharp sign is applied to a, which is naturally major than C, or, while a stays natural, the Flat sign is assigned to the note C that is naturally minor than a, in that case that Sixth would be more than major. Here is another example. Consider the interval from E to g, of which E is unison and g is the Third. Since g is minor than E, for this reason it is a minor Third. Now, it can be reduced to major Third with those two mentioned methods, namely assigning the Sharp sign to the g, namely, assigning the Sharp sign to the g, since this Note with the Sharp sign is major than E, so it renders it major Third in that case, or, by assigning the Flat sign to the E. Since this Note [-17-] with the Flat sign is minor than g, it follows that the g becomes a major Third. If, however, the Flat sign is assigned to E at the same time as the Sharp sign to g, this interval would be a more-than-major Third, while, if the E stays natural and the Flat sign is assigned to g, which is naturally minor than E, or, while g stays natural, the Sharp sign is assigned to E, which is naturally major than g, then this Third would be more than minor. Consider the other intervals with the same method.

These Intervals are divided into three Species according to the harmony that they produce, namely, perfect Consonances, imperfect Consonances, and Dissonances. The perfect Consonances are the ones that, when their extremes are struck together, produce the sweetest and most appreciated dissonance, the imperfect Consonances are the ones that produce less sweet a sound, while the dissonances are the ones that produce a bitter and unpleasant resonance. Albeit these intervals are divided into the said species, this does not make them resound with equally pleasantly or bitterly, but each one of them is more or less sweet or bitter than another one, since this depends on the proportions that contain them. In fact, the greater and more rational the proportion that represents them, the sweeter the sound produced by the interval, and the smaller and less rational the proportion that represents them, the more unpleasant and bitter is their sound. Hence one must not deal with those who are only Practical Musicians. So, it is enough to know that the most perfect interval is the Octave, since this is the first and principal Consonance. However, since its extremes are of similar sound and they cannot suffer any variety or alteration, and since it derives the proportion of all the other intervals, since it is, as one might almost say, their Mother and Bosom, because it contains them all within itself, thus, we shall leave it aside and we shall deal with the other intervals, the extremities of which are of different Sound, and which are contained within the Octave. Therefore, the perfect Consonances are two, namely, [-18-] the Fifth and the Fourth, or the major Fifth and the minor Fourth, because, if the Fifth is reduced to minor and the Fourth is rendered major, both of them become Dissonances. Note that the Fourth is classed among the Dissonances by most part of practical Musicians. This happened and happens because they lack the necessary knowledge through which they failed and fail to know the true and reliable explanations of the Intervals. Moreover, note that, when one says 'the Fifth', one always means the major Fifth, which is also called Dia-pente, and, when one says Fourth, one understands always the minor Fourth, which is also called Diatessaron. Four are the imperfect consonances, namely the major and minor Third and the major and minor Sixth.

The Dissonances are six, namely the minor and major Second, the major Fourth, the minor Fifth, and the major and minor Seventh. We have shed enough light up to this point on the knowledge of the Intervals.

On timing

Time is measured and equally divided in music by an orderly movement distinct into two terms, the first of which is called position, which is the beginning of said measurement, and the second one elevation, which is its conclusion. We call this measurement of time Bar, because it is realised by the placement and lifting of the hand. This placement is the beginning of the Bar, and it is the same as the position, while the lifting is the same as the elevation, or the end of the Bar. That position, with regard to the movement of the hand is called the earthly part of the Bar, while the elevation is called the airy part of it. However, every Beginner knows that is timing and the Bar in Music, and how it is subdivided, sometimes into two, sometimes [-19-] into four, sometimes into three, and sometimes into six times, and sometimes into six and twelve Notes. Therefore, I shall just say that those who divided the Bar of the time alla Breve into only two times are greatly mistaken, since I myself fell into this error in my youth. In fact, if the use of a bar of two times has been introduced because of its ease of use, so that the Notes may be considered in their ordinary value, this does not take away from the obligation to write it in four, as nature requires, as well as the name of that time signature where the Breve is worth a Bar, or four times, and the Semibreve half a Bar, or two times, and the minim one time. Moreover, if one wants to write the Bar divided into two times, one cannot use this sign [Crvd], but it is necessary to place the number 2 instead of it, which indicates that the Bar is divided into two times, just as the number three indicates that the bar is divided into three times. These are the different types of Bar.

Time divided in two, or the Bar of four times, since one of these bars is worth two bars of the time in two. This is marked by a semicircle, thus [C] and it was called imperfect Time by the Ancients, while we call it tempo ordinario, where the Breve is worth two Bars, the Semibreve one Bar, namely, four times, the Minim half a Bar, or two times, and so on. It is marked with the cut semicircle, thus , and it is called time alla Breve, because the value of a Breve is the measure of a Bar, since that division of the Semicircle indicates that the notes reduce their value by half. This means that the Breve, that in tempo Ordinario is worth two Bars, it is worth one Bar in this time, while the Semibreve, that was worth a Bar in that one, is worth half a Bar in this one, and the Minim, that was worth half a Bar in that one, is worth one time in this one. However, to avoid changing the value of the Notes of a Bar in this time, We [-20-] indicate two with the hand, rendering the bar of two Times.

The Bar of three times is given as composed of different Note values, but the Substance of the times is always the same. It is indicated by the number 3. This is called Proportion, and Tripla by modern theorists, but it should be described more appropriately as 'in three times'. Thus, the bar of six times is called Sestupla. It is indicated with the number 6 and one of these [Bars is equivalent to two bars of Tripla. in marg.]

The Bar of six Notes is also called Sestupla and it is indicated by the number 6. This one, however, is equivalent to the time in two. Therefore, instead of considering it, as others do, of six times, it seems right to me to consider it of six Notes and divided into two times, of which each is divided into three Notes. This Bar differs from the one mentioned above because of the style of composing, but, since this cannot fall within the expertise of a Beginner, I shall say that, if the Bar is in tempo Largo, or Lento, we shall say that it is composed of six times, while, if the Bar is in a fast tempo, we shall call it of two times divided into six Notes. Do not ascribe to me as an error my describing this Sestupla in these terms, since very often it is also directed and

regulated very slowly, but allow me to call it fast in order to distinguish it from the other one that is truly of six times. The same applies to the time that Modern theorists call 'in twelve', or Duodupla, because even this one is not divided into twelve times, but into twelve notes, while the times are four, each of which is divided into three notes. In a similar way to the fast Sestupla, it is equivalent to the time in four, or Tempo ordinario, but, with regard to the Notes of a bar of Duodupla, it is worth two Bars of the aforesaid Sestupla. Similarly, the Nonupla, which is indicated by the number 9, is nothing but the bar of three times, of which each one is divided into [-21-] three Notes. Let this be sufficient to the explanation of the times or Bars. Now we shall explain the times that are the parts of the Bar.

I call some times of the Bar good and others bad. The bad ones may also be called false.

The first time of the bar is always good, and after every good time there follows always and inevitably a bad one, which, if is not expressed, it is at least silent. After a bad one, another good one follows. This is true with regard to the bars divided into two and four times. Hence, if the bar is of two times, the first one is good and the second one is bad. If the bar is of four times, the first and third one are the good ones, and the second and fourth one are the bad ones.

The same applies to the division of the times through the Notes. In fact, when the bar of two times contains four or eight equal Notes, the Notes corresponding to the odd numbers are the good ones, while the ones corresponding to the even numbers are the false or bad ones, although the main ones are the ones where the good time begins. The same goes for the Bar of four times when it is divided into eight or sixteen equal Notes.

In the bar of three or six times, the good time is the first of the three, while the other two are bad. Therefore, in the bar of six times the first and the fourth are good, while the second, third, fifth and sixth are bad. However, if these bars are divided into six and twelve equal Notes, the same applies to these Notes as to the ones mentioned above, namely, the ones corresponding to odd numbers are good and the other ones are bad.

In bars of six and twelve Notes, since they correspond, in their times, to the bars of two and four times, for this reason the same applies to them. However, among the notes, the method of assigning good and bad notes is different, because, as they are grouped three for every time, the first one is a good one, while the other two are bad ones.

The good times are the ones that correspond to the long Syllables [-22-] of the Verses. In fact, if words are set to the music, the long Syllables must fall on these times. These long Syllables are uttered with a certain stress of pronunciation, which we call accent, hence said Syllables are said to be accented. The bad and false times correspond instead to the short syllables, which are pronounced without said stress and a little faster than the long ones. For this reason these syllables are paired with these times. Now, in the same way as long Syllables differ from the short ones, thus they differ one from the other, albeit they are the same, not only the times as principal parts of the bar, but also their divisions, namely, the Notes that produce the divisions of those times, as I said a little earlier. This difference of accent among the Notes is very considerable and very necessary to know, but it cannot be learned without the help of a Teacher.