Discourse by Padre Francescantonio Calegari aiming to support his system of the minor musical harmonial Tone in the note and Octave of D la sol re against Padre Vallotti, who maintains that it is founded on the note and octave of A la mi re for the reasons which shall be seen as a reply to the objections of the above mentioned Padre; without considering at present the other very valid foundations which, being perfectly coherent both in theory and in practice, set the mind free from any confusion, however small, with great and most considerable advantage of anybody who approaches the practice of Music. Padua, 24 November 1731

Padre Calegari. If the minor natural Tone extracted from the octave and string of D la sol re, the principle which underpins is destroyed. This causes the reading, modulation, transpositions and correct interpretation of it to fall into disarray, which in turn creates horrendous confusion to the practice of Music, et cetera. Therefore, et cetera.

Padre Vallotti. When I changed the location to the natural minor Tone, certainly I did not expect to preserve its reading, nor its progress, nor the order of its transpositions. On the contrary, I wanted to change all this in order to reduce everything to a correct principle which may set the mind free to understand correctly and to act in the right way by casting away any confusion.

Padre Calegari. The minor Tone must read mi in the sixth note, so, when one transposes it to A la mi re, one must put the sharp in the key signature to the note F fa ut. In this case the first transposition of the minor tone will be with the sign of a sharp, and it will never be the natural minor tone, because everybody knows that the natural tones do not admit an accidental in the key signature.

Padre Vallotti. Exactly because everyone knows that the natural Tones do not admit an accidental of any key in the key signature, for this reason, wanting to establish the minor natural tone on A la mi re, I do not apply to it a sharp or a B flat. Consequently, since when it was placed on D la sol re it read Re, mi, fa, sol, re, mi, fa, sol, now that it is placed on A la mi re it reads Re, mi, fa, re, mi, fa, sol, la, and where, against the nature of the minor tone one read mi in the sixth note, now, following the nature of the tone itself, one reads fa. However, I will explain this even more clearly further on. I add for now only that the above mentioned objection is unsubstantiated because of a regress argument, as the experts on Logic say, because, et cetera, and the premise can also be negated, since it presumes what is in dispute.

Padre Calegari. The note and octave of A la mi re is assigned and belongs to the third Choral tone. Hence, it can never be a minor harmonial tone, because of the difference which occurs between the choral tones and the harmonial ones, albeit those are based on an octave adorned with pure sonority and devoid of harmony, while these are placed in an octave which is full of harmony in itself. That one is composed only
of consonant and dissonant intervals, while this one is composed of seven consonant accompaniments.

Padre Vallotti. The note and octave of D la sol re with its natural reading is assigned and belongs to the first Choral tone, hence it can never be a minor harmonial tone, because of the difference et cetera, as above.

Padre Calegari. Given that one establishes that the minor natural Tone on the note and octave of A la mi re, what should one do with the note and octave of D la sol re with its natural reading?

Padre Vallotti. It remains untouched and it is left to be used to the Ecclesiastical musicians, which preserve their first choral tone in it, just as we leave aside the note and octave of G sol re ut with its natural reading for the octave, and the one of e la mi for the fourth Tone, which can be distinguished from the others in this way.

Padre Calegari. See how true it is that a mistake attira another one. The choral tones, as we said above, are founded in an octave composed of mere units of sound, where the harmonial tones are founded on an octave composed of consonant accompaniments. So, how can the note and octave of D la sol re, which was assigned to the minor harmonial tone can be seen now and allowed to be assigned to the first Choral tone? Certainly, I never intended that the same Octave of D la sol re, for the same reason and under the same consideration, should be at the same time the location of the minor harmonial tone as well as of the first Choral tone, although, in short, one and the other are based on that note and octave. Instead I distinguish one thing from the other, and, considering that octave as adorned of pure sonority, I say that it is the basis of the first Choral tone, but, considered as composed of seven consonant accompaniments, it is the basis of the minor harmonial tone, but never in any way of the first choral tone.

Padre Vallotti. It is all true, but it was never my intention to assign to the first Choral tone that same note and octave of D la sol re composed of seven consonant accompaniments, but only the one which is composed of consonant and dissonant intervals of sound and that it contained really in that one itself which is composed of seven consonant accompaniments. Moreover, it is known that, besides the simple Choral tones, which are used only in the Gregorian chant, there are the choral tones made harmonial by means of the seven consonant accompaniments contained in the seven octaves of different reading and species, which have been practised with supreme praise and felicity by Pier Luigi Palestina and others who lived in his time and belonged to his school. Now, I intend to talk about the first choral Tone, which, however, is very different from the minor harmonial tone because of the different way one and the other develop. It also differs from the first simple Choral tone, since this one contains only sonorities within itself, and that one harmony and sonority at the same time.

Padre Calegari. The beautiful order of the transposition disposed with such effort and hard work is muddled with this novelty, so that the major tone transposed with he sign of the Sharp # has ten and six with the sign of the B flat b. The minor tone then has eight when it is transposed with the sign of the Sharp #, and another eight when it is transposed with the sign of the B flat b. Hence, the major tone has sixteen
transpositions, and the minor tone has another sixteen, which make thirty-two in all. All of these added to the two natural tones form thirty-four notes, by the whole of which the extension of a keyboard instrument is divided entirely with a marvellous order. What courage does one need to modify matters disposed so well?

Padre Vallotti. These new adjustments, since they partake of pure truth, vary the order mentioned before but they do not destroy it entirely. To prove that this is true, observe that, just as there is no disruption in the major tone, its principal natural note is left untouched as well as its transpositions both with the sign of the Sharp #, as with the sign of the B flat b. However, in the minor tone, in order to remedy the grave disruption, the principal natural note is changed, and instead of it being placed on D la sol re, it is placed on A la mi re. Therefore, it follows that where its transpositions were eight in the signs of Sharp # and eight in the sign of B flat b, now they become nine in the sign of B flat, while seven are left in the sign of Sharp because of mutation, so that the transpositions of the major tone are sixteen, and sixteen the ones of the minor tone, as it is clear from the following example and correct disposition.

[<Vallotti, Raggionamenti, f.5r; text: Tuono maggiore, minore, e suoi trasporti in figura di Diesis #. A. B. C. D. E. F. G. molle b.>]

One can observe in the above placed example that the major Tone exceeds the minor Tone in its transpositions by three transpositions, since that one has ten, and this one only seven. Conversely, when one deals with the transposition in sign of B flat b, the minor tone exceeds the major tone by three transpositions, because that one has nine, and this one only six. There are true, right and well founded reasons, which we will discuss further on, since it is enough for now to observe the good order which is found between one and the other harmonial tone.

Padre Calegari. All of this is destroyed by itself, when one considers that (given the total subordination of the minor tone to the major one, which means that, if the latter did not exist, the former would never have occurred either) the letters and notes of the one must be the same as the ones of the other. This occurs when the natural minor tone is based in D la sol re, while it never happens if it is sounded in A la mi re.

One must have as irrefragable rule the minor tone depends so closely dependent on the major that, if this one did not exist, the other one also would not exist at all, and, because of such relationship of subordination the letters and the notes of the one must be the same as the ones of the other. However, I add that they must be the same not only in the first practice, but also in the second. It is true that in the first practice the minor tone has the same letters and notes of the major tone, with this only difference, that, whereas the major tone starts on the letter and note of C sol fa ut, the minor starts on the one of D la sol re; tha one reads do re mi fa sol re mi fa; this one reads Re mi fa sol re mi fa sol. But in the second practice I observe that the reading given above is modified always through the B flat b placed on the sixth note. And this is the natural reading of the letter and note of A la mi re.
Padre Calegari. One answers in a worse way when one does not understand the matter. The natural reading of the minor tone is always contained in its natural positions, but, if one sees that it changes in the second practice, this happens in order to avoid the tritone which is contained between F fa ut and B fa [sqb] mi, which is remedied through the application of the B flat to the note of B fa [sqb] mi. One must know that the minor tone, besides the two natural fa contained in the letters and notes of F fa ut and C sol fa ut, admits also a third accidental fa in the above mentioned letter of B fa [sqb] mi by means of the B flat b, not placed in the key signature, but used only as an accidental when the need arises.

Padre Vallotti. When the second practice does not conform to the first one, any musical scholastic subject falls into the most horrid disarray, and I see that the same happens to the minor harmonial tone if the use of the fa with the accidental is allowed to it, because we always run the risk to make a mistake in the subjects, and more often in the answers of the fugues, and in their methodical subjects (besides the disarray which derives from the reading of its melodies) mainly when one writes with white notes and it the style suited to the Chapel, in which it is undisputed that more rigour is required. This is also an essential error which tainted also some very illustrious Professor in this respect. Instead, if one places the natural minor tone in the letter and note of A la mi re through the due observance and use of the two natural fa and mi, the subjects turn out right and the answers extremely right, the reading of any melody is made easier and the minor tone is rendered uniform with he major tone not only in the letters and notes, but also in the quality and number of the secondary cadential notes.

Padre Calegari. The cadential notes of the major tone are six and those of the minor tone are five, and they must be exactly five because it is a minor tone. The reason consists in the fact that the major tone must have one more than the minor tone.

Padre Vallotti. Every time that the mere free will unsupported by any reason must be the infallible rule to establish any musical matter, and especially in the very important subject of the modal tones, our harmonic Profession will be always enveloped in thick and most horrid darkness, since the free opinion of a man is as free as the one of another man. Therefore, it is appropriate to assign some reason, if not to determine the number of the cadences, at least so that one might understand that they are these rather than those.

Padre Calegari. Of the six cadences assigned to the major tone, three, which are the principal ones are based on the principal note, the fourth and the fifth, namely, on C sol fa ut, F fa ut and G sol re ut. These are the three notes which constitute the tone. There are another three besides these ones, which are auxiliary and are based on the sixth, second and third note, namely on A la mi re, D la sol re and E la mi. The one based on A la mi re corresponds to C sol fa ut, the one based on D sol re to F fa ut and the one based on E la mi corresponds to G sol re ut.

Padre Vallotti. This disposition is most beautiful, most right and most clear, and, since it does not contain within itself but pure truth and clarity, it is left untouched and it is looked upon with respect and admiration. However, the difficulty originates in the minor mode, therefore greater clarity in this is required than one finds.
Padre Calegari. The minor tone, as it was said above, has only five cadential notes. The first three, which are the main ones, are based on the principal, fourth and fifth note, namely, on D la sol re, G sol re ut and A la mi re, which are the notes which constitute the tone. It has to be noted that the note of G sol re ut must be practised with the minor third, since the three main cadential notes in the harmonial tones must be uniform. Therefore, since they are major in the major tone, thus, they are minor in the minor tone, and so the third of G sol re ut, which is naturally major, will be made minor through the B flat b. The other two cadences are based in the third and seventh note, namely on F fa ut and C sol fa ut, which are added to the other three because the two natural fa belong to the principal octave, while it is completely forbidden to make a cadence on B fa b, although the accidental fa is contained within that letter and note. In this way everything is placed in its clear light and every difficulty, whichever it may arise on this matter, is reduced to nothing.

Padre Vallotti. If only the two above mentioned cadences are allotted to the minor tone, because two fa are natural, hence the cadences on E la mi and B fa [sqb] mi, which are its two natural mi, will also have to be allowed, or rather, if not the one of B fa [sqb] mi, since it has naturally the minor fifth which is incapable to work as a cadence, certainly at least the one on E la mi, which is not subject to that objection. This is completely improper and totally far removed from what is right, as everyone can understand. However, to answer directly, I appeal to the excellent and irrefragable rule mentioned above, namely, that the harmonial tones must be uniform in the three principal cadential notes (the principal, the fourth and the firth note) and I add that, since it is a natural tone, they must be uniform in a natural way, and never through any accidental sign. Were this not true, one could establish the natural major tone in the note and octave of G sol re ut with its natural reading, although, in that case, in order to render its fifth note uniform to the principal, one has to use the occasional Sharp to the place of F fa ut. This could be called its accidental mi, as the accidental fa is admitted in the minor tone besides the two natural ones. Anybody can learn that these things are wrong in every part of them. Therefore, it is necessary to establish an infallible law and rule, so that everyone may know how many the specific cadences of any tone are and must be, and which ones they are.

Padre Calegari. One cannot assign any other rule nor a better one than to say that the three main cadences of the harmonical tone must be based in its three main notes, namely, principal, forth and fifth. The others then, which are called auxiliary, must be founded by correspondence, as it was said above, and particularly in the case of the major tone, from which the minor depends in such a way that if the major did not exist, this one would not exist either.

Padre Vallotti. Another very effective and better rule, or rather infallible, eternal and universal is found, and it is this one: only those notes which are natural with their third and fifth in the principal octave of the tone, I say, only those are able to create a cadence in that tone. By following this rule, which must be called an unalterable mass, I see, or rather, I touch with my hands that the notes of the major tone are six, namely, the above mentioned. Thus I understand that the eighth choral tone based on the note and octave of G sol re ut with its natural reading does not admit the cadence on B fa [sqb] mi, since that note does not have a major fifth in that octave. Equally, it does not admit the cadence on D la sol re but with the minor third for the same reason, since the first choral tone does not admit the cadence on B fa b in
any way, since that note is excluded from its principal octave of D la sol re, and thus it
does not admit the cadence on G sol re ut but with a major third for the same reason
mentioned above. This can be said about any choral tone. Now, on the strength of
such rule the cadence of G sol re ut with a minor third is excluded from the minor
harmonial tone based on D la sol re, but, because of the other rule, which
states that the principal, the fourth and the fifth note must be uniform, it should be
allowed. One can easily comprehend from this contradiction that the note and octave
of D la sol re with its natural reading can never be the basis of the minor natural tone,
but this can only be and is the note and octave of A la mi re, in which we observe the
natural uniformity of the three principal notes in which the three essential cadences of
the tone itself are based, while we have room to established the participated cadences,
which are the other three, namely, on C, sol fa ut, F fa ut and G sol re ut. The first
three, namely, the ones of A la mi re, D la sol re and E la mi are called essential,
because they are the only ones which constitute the minor tone in its essence. The last
three are called participated, because they partake of the major tone. In the same way,
in turn, in the major tone the three cadences on C sol fa ut, F fa ut and G sol re ut are
essential because constitute it in its total being, while the other three of A la mi re, D
la sol re and E la mi are called participated because they partake of the minor tone.
This is how one and the other harmonial tone are intertwined, because one
finds the two natural notes with the other four of the first transposition of both as
much with the sign of the sharp #, as with the sign of the B flat b in one and in the
other. However, in order to provide an answer and establish my system with the same
convictions of my Opponent, I go back and I say that if the cadence on A la mi re is
admitted in the major tone as a note corresponding to the note of C sol fa ut, since this
is a natural note of the major tone, it is necessary that that should be the natural note
of the minor tone, because the note that corresponds to a natural note can be only
another natural note, and never one that is transposed. Thus, for the same reason and
with appropriate disposition if the cadence on D la sol re, which corresponds to the
one of F fa ut, is admitted in the major tone, since this note of the first transposition is
of the same tone with the sign of B flat b, it is necessary that that is the note of the
first transposition of the minor tone with the same sign. Finally, if the cadence on E la
mi is admitted in the major tone, as a note corresponding to that of G. sol re ut,
since this first note of the first transposition of the same tone with the sign of a
Sharp #, it is necessary that that is the note of the first transposition of the minor tone
with the same sign, and thus, with the same convictions of my Opponent, we have
found not only the main note and octave of the natural minor tone, but also its three
essential cadences. In order to find the three participated ones even just with the light
of the correspondence, it is sufficient to take the three essential ones of the major tone
with one’s eyes shut. In fact, if A la mi re corresponds to C sol fa ut, D la sol re to F
fa ut, E la mi to G. sol re ut, it is occurs necessarily that C sol fa ut corresponds to A
la mi re, F fa ut to D la sol re and G sol re ut to E la mi. Hence, the minor harmonial
tone is established without any resulting confusion either in theory or in practice, but
with the most perfect clarity that one may wish.

Padre Calegari. I do not know how others understand it, but I certainly do not
understand it, since, because of the subordination of the minor tone to the major, the
notes of each of those must be the same, and this does not happen when, left aside
when, left aside the note of D la sol re, one wants to establish the natural minor tone
on A la mi re or in any other note except for D la sol re.
Padre Vallotti. If I did not answer fully enough to this, I add that one should not keep
to anything else except to the rule by which it is expected that the notes and the letters
of both harmonial tones must be the same. I say that the minor harmonial tone could
be established also in the note and octave of E la mi, and, nevertheless, the same
letters and notes would belong to both of the harmonial Tones, because the Gregorian
letters are only seven, and the notes of the major harmonial tone contained in the
above mentioned letters are eight, but with the repetition of C sol fa ut, which is the
first of them. Not only the seven octaves of different reading and species, but also the
seven consonant accompaniments are derived from that Octave. Now, since each
modal tone is based in one of the seven octaves, and each of them contains the above
mentioned seven letters and notes, it is occurs necessarily that the letters and notes of
the one are the same note and letters of the other. This [-<f.12r>-] happens not only in
the harmonial tones, but also in the Choral Tones compared with each other and also
with the harmonial ones.

Padre Calegari. This is not what I mean, so I explain myself better. In order for the
letters and the notes of one and of the other harmonial tone to be the same it is
necessary tat the principal letter and note of the minor tone is immediately adjacent to
the principal of the major tone, hence it appears that one is born of the other one, or,
better, in the other one.

Padre Vallotti. Certainly it seems to me that the minor tone is born from the major
one, and that the letters of one and the other are the same, since it is absolutely certain
that both have the same mi and fa and, in a word, in both of them the same major,
minor and simple intervals are found, as well as the same seven consonant
accompaniments. As to the fact that the two mi are expected to be placed in the
second and sixth note, and the two fa in the third and in the seventh, I reply that this is
named a mere regress argument. Moreover, I inform you that, placed the basis of the
natural minor tone on the letter and note of D la sol re, said tone turns out to be
founded in an octave of different reading [-<f.12v>-] and species which is equal to the
one of A la mi re of the octave of the major tone. Consequently, since the two octaves
of D la sol re and A la mi re proceed in the same way, the mind must refer to other
more essential features to know clearly, and to establish rightly, which of the two is
the true basis of the natural minor harmonial tone. However, this has been discussed
above sufficiently, therefore I omit saying anything else to demonstrate that it was
arbitrary to say that the two mi must be placed on the second and sixth note and the
two fa in the third and seventh of the principal octave of the minor tone, since I
observe that such difference between the two natural mi considered in the major tone
is comparable to the one between one and the other fa, and it consists in the fact that,
since one of the two mi is persistent and immutable, namely the one of C sol fa ut, and
the other one is subject to alteration by the Sharp #, namely the one of F fa ut, hence
they can be distinguished reasonably with the name of first and second, moreover, this
can be confirmed also [-<f.13r>-] by considering the order according to which the
transpositions are made with one and the other sign of Sharp # and B flat b. In fact, in
the first transposition with the sign of the Sharp the second fa is subject to the
alteration, while the first one, namely the one of C sol fa ut stays unchanged. Equally,
in the first transposition with the sign of B flat b the second mi is subject to being
made smaller, while the first one, namely the one of E la mi, stays unchanged. Now,
on the this basis, I add that, if the first of the two mi, namely the one of E la mi, forms
the major third with the note of the major tone, it follows reasonably that the first fa,
namicly the one of C sol fa ut, must form the third with the principal note of the minor tone, and, therefore, the note of D la sol re must be established as its principal note, but the one of A la mi re. Moreover, it becomes clear that, since the main note of the major tone inclines immediately towards its fifth note, according to reason it follows that the two mi which constitute that tone must be placed in the third and seventh note, in order to create, in this way, the major third with its principal and fifth note. Also, since the principal note of the minor tone inclines immediately towards its fourth note, according to reason the two fa which constitute said tone must also create the minor third with its principal and fourth note. As to the fact that the major tone inclines immediately towards the fifth note and the minor one towards the fourth, not only our sense hearing allow us to know it, but it becomes evident as well from the observation of the transposition with both the accidental signs, since the major tone exceeds the minor one in the transpositions with the sign of the Sharp #, which are made by ascending from one fifth to the next one, and conversely, the minor tone exceeds the major one in the transpositions with the sign of the B flat b, which are created ascending from fourth to fourth. Therefore, in the principal octave of the natural harmonial minor tone the two fa must not be placed in the third and seventh note, but in the third and sixth. Therefore the two mi must not be placed in the second and sixth note, but in the second and fifth. Therefore, A la mi re, instead of D la sol re, must be established as principal note of the natural harmonial minor tone.

Padre Calegari. Such a system cannot stand in any way, because the minor musical tone, since it is furnished with harmony by its nature, must be founded on an octave full of harmony, such as the one of D la sol re, while the one of A la mi re is made of pure sonority and it is devoid of harmony, and, for this reason, it was ascribed by the writers on music in Latin to the third choral tone.

Padre Vallotti. It seems to me that I have answered these difficulties sufficiently, nevertheless I add that should the octave of A la mi re be completely devoid of harmony, and furnished of pure sonority instead, in that case the major tone would not be founded on an octave composed of seven consonant accompaniments of different reading and species, which is something that anybody can see easily how it is far removed not only from what is true, but from what is probable. Therefore, there are the seven octaves of different reading and species, but replete of pure sonority, which have been destined to the formation of the simple choral Tones, and, apart from them, there are also the seven octaves of different species and reading composed of seven consonant accompaniments, which are used respectively as the same Choral tone, when they are made harmonial through the seven consonant accompaniments. Two of the said Octaves serve as the foundation of the two musical modal tones, namely the harmonial major and minor, and these are the one of C sol fa ut for the major tone, and the one of A la mi re for the minor one, since these are the only two Octaves among the seven mentioned above, which are really suited to the melodies of both of the harmonial tones respectively. Finally, I say that the writers on music in Latin never dreamed to ascribe the note and octave of A la mi re to the third Choral tone, but I reserve to deal with this matter on another occasion when there will be more ease of time, since it requires a long discourse.

Padre Calegari. Without talking any more in ditties, I say that if one wants to believe what one does and do what one does on a whim, one can, because each one is Master
of one’s own will, but who loves truth must not abandon my teachings. The reason is that, if there were any error in them, I would have noticed it and I would retracted my opinion myself changing my mind, as I have done in many other scholastic musical matters ventilate by me in the course of so many years with such diligence, study and effort, but I have never such a disorder and error as the one which is put in front of me. Finally, I conclude by saying that who wants to follow my school must agree with all of my views, since these are consistently true from beginning to end. Conversely, who wants to create for oneself or follow different systems of belief must abandon also the rest of my rules, especially since we are dealing with important matters of this kind, so that he may do better what he wants and wishes.

Padre Vallotti. I has been appropriate to start from your discourses on the aforesaid matter not because I wanted to act on a whim, but because I was won over by the strength of the pure truth. I am not surprised at the fact that a great Man might have made a mistake, because everyone can be wrong in one’s opinion. He has never retracted on this because he has never recognised the mistake that wants to be predicated as irrefragable truth, albeit it has been unveiled as such, since there are some who are amenable and pliable when they realise by themselves that they have made a mistake, but who are equally defensive of their errors if these are unveiled to them by someone else. Finally, I conclude by saying that in any scholastic musical matter I have never sworn on the word of my Teacher, but I declare that I want to profess and follow the pure truth always, because I hold as a principal rule and primary foundation of my studies that Socrates and Plato are friends, but even more so is Truth. The end, et cetera.