

Astrology, Anglo-Saxons, and Dissonance: The Idea of Renaissance in Europe

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Conflicting Tuning Systems and the Path to a Second Practice:

An Exploration of Vicentino, Gesualdo and the Ferrara Avant Garde

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The mid-Renaissance composer and chapel master of Venice's basilica de San Marco, Adrian Willaert had two students who would give considerable insight into the musical thinking of their teacher. Though he left behind no major treatises, his two students did. The one, *Le istitutioni harmoniche* by Gioseffo Zarlino has long served as a guidebook to modal or 16th century style counterpoint, particularly book III in the study.¹ The other, by Nicola Vicentino has not been nearly as influential, except for those who excitedly embrace the world of micro-intervals, those intervals smaller than a semitone in 12-tone equal temperament. (For instance, Harry Partch, the American microtonal maverick made mention of Vicentino in his own treatise, *The Genesis of a Music*.²) Vicentino's *L'Antica musica ridotta alla moderna prattica* (*Ancient Music Adapted to Modern Practice*) is not as exhaustive as Zarlino's work, but does exist in complete English translation, thanks to the work of Maria Maniates.³ If we were to compare the two students, whose compositions were not of the stature of Willaert's, we could perhaps dub Vicentino the experimental liberal, and Zarlino as the practical

1 Gioseffo Zarlino, *Le istitutioni harmoniche*; trans. Guy Marco and Claude Palisca as *The Art of Counterpoint* (New Haven: Yale University Press, 1968).

2 Harry Partch, *Genesis of a Music*, 2nd edition (New York: Da Capo Press, 1974), p. 377-8.

3 Nicola Vicentino, *Ancient Music Adapted to Modern Practice*; trans. Maria Rika Maniates and ed. Claude V. Palisca (New Haven: Yale University Press, 1996).

conservative.

Willaert had demonstrated an experimental tendency himself in a much discussed work, *Quid non ebrietas dissignat?* ("What can't be accomplished through drinking?"). It is an early work of his that demonstrates that if one were to attempt to sing pure 5ths (with the ratio of 3:2) in a continuing descending cycle, or by adding flats, what would be notated at the end of the piece as E would actually sound E-double-flat or D. So, at the end of the work there is a notated seventh between E and D (a forbidden dissonant interval to end on certainly). But what you see is not what you get, because the tenor is actually singing a D, having compensated for the conflict between pure Pythagorean tuning and what we dare call increasing chromaticism.⁴ Now, the extent to which this puzzle piece influenced Zarlino and Vicentino may be difficult to gauge, but it is a fact that both composers were very much engaged in the study of tuning systems. Zarlino designed a keyboard with 19 keys to the octave. And Vicentino designed and had built his archicembalo (with 36 keys in the octave). This was only a precursor to more finely divided octaves both proposed and demonstrated later. Hermann Helmholtz's 53-note division of the octave⁵ and Partch's 43-note octave (or "2:1" as he preferred calling it)⁶ assured justly tuned intervals besides the octave itself, something lacking in 12-note equal temperament.

Another aspect of Willaert's legacy that should be mentioned is the disciplined approach he took to interval and affect, which is not just concerned with rules of counterpoint and ideas of consonance and dissonance. In his work there is a great deal of concern with the proper musical expression of emotion. Contrary to the way we have

4 Roger Wibberly, "*Quid non ebrietas dissignat?* Willaert's Didactic Demonstration of Syntonic Tuning," *Music Theory Online* 10/1 (2004), par. 15: <<http://mto.societymusictheory.org/issues/mto.04.10.1>>.

5 Hermann Helmholtz, *On the Sensations of Tone* (New York: Dover, 1954), p. 328.

6 Partch, *Genesis of a Music*, p. 134.

been conditioned to think, in this system major and minor harmonies do not always mean "happy" and "sad," respectively. In Timothy McKinney's recent study of Willaert's *Musica nova* madrigals in which the theories of Zarlino and Vicentino are compared with the works of their teacher, a point is made that major harmonies are more connected with "hardness" and minor harmonies with "softness," which is a little different.⁷ Also, harmonic stability (with triads in root position) is often connected with strength or hardness, and harmonic instability (with triads in first inversion, often moving in parallel motion) is associated with softness, weakness, frailty.⁸ This hardness/softness dichotomy harkens back to the hexachords of the Guidonian hand, with the "hard" hexachord having the B-natural, but the "soft" hexachord having the B-flat (in Italian this is *b molle*, which literally means "soft" b).⁹

Focusing our attention now on Vicentino, it is noteworthy that it is only assumed that he studied with Willaert at Venice in the 1530's. He claims to have studied with him, and we know he was still in Vicenza (his birthplace) around that time, which is just a little ways from Venice. Most that we know about him is after he became a singer for Cardinal Ippolito II, of the d'Este family in Ferrara. He had been ordained a priest and was with the Cardinal for awhile in Rome, then went back to Vicenza to take a chapel master position, and then finally to Milan, where he was evidently a rector at Saint Thomas' and where he died during an outbreak of plague in the 1570's.

To show how seriously people took music theory in the mid-1500's (keeping in mind that the Council of Trent was meeting between 1545 and 1563), one must go no further than consider the important debate that took place between Vicentino and a Portuguese musician named Vincente Lusitano. After a performance in Rome,

7 McKinney, Timothy R., *Adrian Willaert and the Theory of Interval Affect: The "Musica nova" Madrigals and the Novel Theories of Zarlino and Vicentino* (Farnham, Surrey: Ashgate, 2010), pp. 23-28.

8 *Ibid.*, pp. 20, 21.

9 *Ibid.*, pp. 23, 24.

Vicentino had said something about 'no composer knowing the gender of the compositions he wrote,' and Lusitano took exception with that. There were wagers made and a debate was scheduled to take place. At the debate the Papal singers would perform and musicians and churchmen would decide who won the debate. A decision was not reached then and there. Other debates took place and finally a decision was rendered in favor of Lusitano. Vicentino basically took the position that there were three genders (or *genera*), the diatonic, the chromatic and the enharmonic. And he felt that the music written at that time mixed the three. Lusitano, on the other hand, said that "whatever progresses, as it were, from tone to tone is called diatonic." Tones were divided by sharps, flats and naturals ("colored" as it were).¹⁰ Both men invoked Boethius' writings to support their position. Even though he lost the debate, Vicentino continued to maintain his position. And his treatise, *Ancient Music Adapted to Modern Practice* is in large part an effort to ground his position in the theory of the three genera.

According to Boethius' *Fundamentals of Music* (book I) there are 3 genera of tetrachords: Diatonic (proceeding from semi-tone to tone to tone), Chromatic (semi-tone, semi-tone, tri-hemi-tone) and Enharmonic (diesis, diesis, di-tone). In his system the tone is a frequency ratio of 8:9 and cannot be divided into equal parts. It is a "noncomposite" interval, made up of only itself. That is why there is a minor semi-tone and a major semi-tone. The same goes for the the di-tone (and why there is a minor and major diesis). The tri-hemi-tone, however, is an example of a composite interval, made up of a semi-tone plus a tone.¹¹ One can easily see why the ones attending the first debate between Vicentino and Lusitano could not easily reach a decision. As Henry Kaufmann says in his study of Vicentino, the discussion of such things

10 Kaufmann, Henry W., *The Life and Works of Nicola Vicentino*, Musicological Studies and Documents 11 (n.p.: American Institute of Musicology, 1966), pp. 23-29.

11 Boethius, Anicius Manlius Severinus., *Fundamentals of Music*; trans. Calvin M. Bower and ed. Claude V. Palisca (New Haven: Yale University Press, 1989), pp. 22-41 .

"apparently either bored or confused everyone present."¹² In the 16th century the writings of an early 6th century theorist may have seemed not so relevant to most; but they did, nevertheless give a window through which Greek music theory could be consulted. And that was definitely still held in high esteem. In fact, the *Fundamentals* was translated into Italian twice towards the end of the 16th century, though not published.¹³

Let's turn now to Vicentino's treatise and take note of how it's laid out. What strikes one right away is the fact that it has only one book on music theory, but 5 books devoted to music practice, with the 5th of those specifically dealing with the new instrument called the *archicembalo*. There are copious examples of intervals and how they are arrived at and how they're to be treated in composition, examples of their use in melody and counterpoint, cadences, examples of scales, excerpts from Vicentino's own madrigals, even excerpts from Lusitano's work. There are also copious errors, which have been footnoted well by the translator. Vicentino gives in chapter 2 of the last book the "documentation as to the length, width, height of all measurements necessary to make the archicembalo." Part of Chapter 1 of the last book is worthy of quotation, since it gives insight into Vicentino's confidence in his enterprise and its value to mankind:

"I have labored for the benefit of rare and exceptional talents in order to give greater encouragement to students of music practice to study not only how to play but also how to learn composing for and singing with the archicembalo--the foremost and perfect instrument, in that none of the keys lacks any consonances. And I have adapted the new practice of chromatic and enharmonic music, facilitated with many examples,...Moreover, the examples are written so as to be easy for everyone, with explanations chapter by chapter and with intelligible notational signs as well..."¹⁴

12 Kaufmann, p. 24.

13 Claude V. Palisca, Series Editor Preface to *Fundamentals of Music*; trans. Calvin M. Bower and ed. Claude V. Palisca (New Haven: Yale University Press, 1989), p. xiv.

14 Nicola Vicentino, *Ancient Music Adapted to Modern Practice*; trans. Maria Rika Maniates, p. 315.

Clearly, Vicentino envisioned his work as revolutionizing performance and compositional practice. It was not to be something existing only in theory. By his statement "that none of the keys lacks any consonances" it is given that typical keyboards with only 12 keys per octave could not provide this.

Let's now look at our 2-dimensional archicembalo and hear some of the examples from *Ancient Music Adapted to Modern Practice*. There are six ranks of keys. **[play example 1--ascending the ranks in one octave]** The bottom keyboard's white keys are the first rank, called the natural or diatonic order. The second rank is the first row of black keys, called the chromatic order. The third rank is not labeled as any kind of order, since it has no imperfect consonances. The fourth rank is the white keys of the upper keyboard, called the natural enharmonic order. The fifth is the first row of black keys on the upper keyboard and is called the chromatic enharmonic order. The sixth rank is called the order of the just fifths. Chapters 8-38 show explicitly the truthfulness of his above statement about there being consonances with all keys. To understand the next example, it is necessary to explain a notational detail. Pitches with dots over them are played on the 4th and 5th ranks. Pitches with commas over them are played on the 6th rank. The smallest interval that can be played on the instrument is the minor diesis. If we went from F to \acute{F} it would be a minor diesis. **[play examples 2 and 3--consonances below and above C, from Chapter 31]** Here we have, as an example, all of the consonances above and below what we call middle C (or C4). Note that a just or untempered 5th is formed with the G on the 6th rank.¹⁵

If he had hopes for the wide acceptance of the enharmonic genus, they clearly were not realized. This 'sweetest and smoothest' of the genera was used in comparatively few compositions, and most of them were by Vicentino himself. In his

15 Vicentino, p. 369.

treatise he boasts:

"I have induced many lords and gentlemen to appreciate the sweetness of this harmony. And they in turn, enchanted exceedingly by it, have striven to learn it with the most exceptional diligence."¹⁶

He then makes a very interesting point about chromatic and enharmonic music:

"For in effect they understand that (as ancient writers show) chromatic and enharmonic music was reserved appropriately for another purpose than was diatonic music: the latter was sung at public festivals in communal places for the benefit of coarse ears, whereas the former was used to praise great personages and heroes for the benefit of refined ears amid the private diversions of lords and princes."¹⁷

So this is a very private, intimate, secrete kind of music, a *musica reservata*, should we say that he is proposing, not a music for common consumption. Exactly when Vicentino started and completed his treatise may not be possible to determine. But, at the time of writing he says he is living in Ferrara, and that Alfonso d'Este, the Lord Prince, "has learned this music with such consummate alacrity and grace that the world recognizes in him the image of the perfect prince."¹⁸ Vicentino also mentions Leonora D'Este (Alfonso's aunt) as one practiced in the three genera on instruments. We also know that he traveled with a group of singers who performed this new music in different venues across Northern Italy. Vincenzo Galilei mentions a concert in Ravenna in the 1560's at which an enharmonic madrigal by Vicentino was performed, evidently an unsuccessful performance, with the singers losing their place and not being able to get back on track.¹⁹ In Vicentino's treatise he has an excerpt from a 4-part Madrigal "which is mixed with the unruly species of the three genera in keeping with the words, and which can be sung in five ways." The English translation of the words is as follows:

My lady, the meager sweetness and the great bitterness,
The brief laughter and the long lament
Have reduced me to such a state,

16 Vicentino, p. 33.

17 Ibid.

18 Ibid., p. 34.

19 Kaufman, p. 36.

That forever to weep and sigh is my delight.²⁰

Let's listen to this realized on our virtual archicembalo. As is generally done when examining madrigals, we'll take note of correspondences between text and musical changes (particularly harmonic ones in this particular instance). **[play example 4--*Madonna from Book III, chapter 53*]** One rather effective use of text painting is witnessed with the words "Il breve riso, il troppo lungo pianto" (The brief laughter and the long lament.) These words extend over 14 breves and are set initially in the diatonic genus, then proceed to the chromatic, then, starting with the tenor raised a minor diesis and the soprano lowered a major diesis on the words "pianto" and "lungo" respectively, move momentarily into the enharmonic genus. In Vicentino's caption to the example he mentions that it can be sung in one of 5 ways. That evidently means that the singers could (1) sing without acknowledging any accidentals or enharmonic dots, (2) sing acknowledging only the accidentals (sharps and flats), (3) sing acknowledging accidentals and dots, (4) sing acknowledging only some of the accidentals, or (5) sing acknowledging all the dots but omitting some of the other accidentals.²¹ And this does seem to complicate further something that is already quite complicated, maybe even undercutting some of the subtle control over intonation that Vicentino was so intent upon cultivating.

Have any of these archicembali been preserved? Maniates mentions in the introduction to the English translation of the treatise that a one-manual instrument with 31 notes in the octave, built by Guido Trasuntino in 1606, has indeed survived. That is the closest we come.²²

To clarify the nature of Vicentino's association with the court at Ferrara, it must

20 Vicentino, pp. 213-217.

21 Maria Rika Maniates, Introduction to *Ancient Music Adapted to Modern Practice*, pp. iv-lvii.

22 *Ibid.*, pp. i, li.

be mentioned that his name does not appear in the account books there, so was probably not ever employed there. But he was employed by Cardinal Ippolito as a singer, and undoubtedly spent considerable time at the court in Ferrara. That his radical musical ideas outlived him and continued to exert some influence on the rich cultural life at Ferrara into the 1580's and '90's is the subject of tantalizing speculation. In fact, Alfred Einstein went so far as to assert that Gesualdo's hyper-chromatic style (especially seen in his 5th and 6th books of madrigals) is best explained by his encounter with the archicembalo.²³ Such a sweeping statement seems insupportable, given that Gesualdo never employed the enharmonic genus. However, spending time at the court of Ferrara is certainly something both Vicentino and Gesualdo had in common. Carlo Gesualdo, Prince of Venosa, married the daughter of Alfonso II, Eleonora d'Este in 1594. She was Gesualdo's second wife; he had murdered his first one. It was hoped that this union would produce an heir. If not, the Este court would become the property of the papacy. Indeed, upon the death of Alfonso II the estate did become the papacy's. The little son of Gesualdo and Eleonora died around the same time.

Truly, the court at Ferrara had been a veritable laboratory of musical experiments and advances at the end of the 16th century. As Vicentino had revealed in his comments about Alfonso (as sycophantic as they may be), the atmosphere promoted by the Duke was very congenial towards the "new." He was, after all, the "perfect prince." Certainly music expertly done was a priority for him. In the 1570's the Duke's court was known for solo singing. In particular, did diminution (or the practice of ornamenting a melodic line) and virtuosity become a hallmark of the music making there. But the singers were still amateurs. In 1580 they were replaced by virtuoso professionals, most notably the singing ladies known as the *concerto delle donne*.

A musician and composer at Ferrara who would both influence and be influenced by the younger Gesualdo was Luzzasco Luzzaschi. In the 1580's a new kind of concerted madrigal was cultivated at Ferrara. Rather than there always being a 5 part texture in these madrigals, a smaller group of voices was contrasted with the full ensemble, creating a "concertato" effect. This created more discreet sections in the work. A madrigal of Luzzaschi's that appeared in a 1582 collection entitled *Il lauro secco* is considered anticipatory of later concerted madrigals of Monteverdi. (The name of that madrigal is *E' lauro è sempre verde*.) All that is lacking is the independent basso continuo part. Even more important is the fact that it is a music to be enjoyed by listeners just as much as by the performers, which may not seem so revolutionary to us today, after centuries of the great divide between skilled performer and unskilled audience. Before this, madrigals had been the joy of anyone who could sing; just as the playing of viols and lutes was something enjoyed by amateurs of good upbringing, not virtuoso specialists. Also, this new kind of madrigal was to be appreciated by a discriminating and selective audience, a *musica secreta* like the one at the court of Ferrara.²⁴ As the 1580's progressed, other composers there developed an extremely ornate and luxurious style of madrigal, one with the virtuosic diminutions written out. This was clearly in response to the prodigious gifts of singers like Laura Peverara, Livia d'Arco, Anna Guarini and Tarquinia Molza. Luzzaschi did not embrace this luxurious style wholeheartedly. Even in the 3 madrigals that he wrote for accompanied solo soprano for a collection published in 1601, his use of diminution is not as advanced as what one can see in Caccini's *Le Nuove musiche*. As Anthony Newcomb brings out in his study of the Ferrarese madrigals of the '80's and '90's, this may have been in part due to the fact that he "was already a well-established composer with a serious and

24 Anthony Newcomb, *The Madrigal at Ferrara 1579-1597* (Princeton, New Jersey: Princeton University Press, 1980), pp. 61-67.

expressive polyphonic style."²⁵ If one wants to sample this full-fledged luxurious style, he need go no further than the madrigals of Luca Marenzio in his Third Book for 5 voices, such as *Rose bianche e vermiglie*.

The 1590's at Ferrara witnessed the increasing use of extreme contrasts and unprepared dissonance in the madrigal, hallmarks of the "second practice." Three composers there who led the revolution were Luzzaschi (the senior member of the group), Carlo Gesualdo and Alfonso Fontanelli. As we look at Luzzaschi's madrigals from this period we find sections of short-term repetition with the vertical order of the parts changed--an interesting textural variation. Also weak, deceptive and/or interrupted cadences are used to maintain forward momentum in textures where blockiness could threaten to bog things down. Another rather unusual phenomenon is where textures thin out or evaporate right before cadential goals are reached. In sections of imitation between parts Luzzaschi's madrigals from this period are not sharply defined or metrically clear. These things contribute to an over-all discontinuous behavior, appropriate to the fervid emotional states conveyed by the texts being set. That he influenced and was influenced by Gesualdo can be seen from Fontanelli's statement in one of his letters that Gesualdo had "abandoned his first style and had begun to imitate Luzzaschi, whom, he admires greatly and praises constantly."²⁶ In fact much can be learned about this cross-fertilization from the correspondence of Fontanelli that has been preserved. Comparisons of Luzzaschi's and Gesualdo's settings of the same poem (*Da le odorate spoglie*, written for the singer Peverara) bears this out as well. Both composers divide the text into two parts, with the division being in the same place. They both have imitative sections where two or even three parts double the melody in thirds. Also, they present the imitation subject in its normal and inverted form simultaneously. This surely was not by accident. Other examples support the

25 Newcomb, p. 78.
26 Ibid., p. 126.

conclusion that Gesualdo and Luzzaschi had a quite close relationship musically. When the 5th and 6th books of madrigals by Luzzaschi are compared with his earlier ones, it becomes clear that greater chromaticism and audacious harmonic explorations have become a part of his vocabulary. This surely is traceable to the influence of the younger Gesualdo, whose earlier madrigals had already incorporated such things.

As for the third member of the group of composers from the '90's, Fontanelli is perhaps the most daring in ways. Though his works were not as plentiful as the others and show the marks of a less mature creativity, in them can be seen a synthesis of all the aspects discussed thus far. In his *Com'esser puo* the use of unprepared major sevenths could be the signal gesture for the beginning of the *seconda pratica*.²⁷ As his language matured and became more individualized, the qualities of compactness and density took on greater significance. Close imitation and metrical overlap or dislocation can be noted in *Tra i gigli e le viole*, the first madrigal in his Book One. This makes for a very dense flow of information, with much happening in a short time.

We are left now to make a meaningful connection between Vicentino and Gesualdo. In the 1630's an inventory of items in Gesualdo's castle revealed that the Prince of Venosa owned a certain "cembalo grande con l'ottave stese cromatico, lungo da nove palmi, sua cassa pittata fuori e dentro, con suoi piedi" (a large keyboard with the octave chromatically extended, nine palms long, its case painted inside and out, with legs).²⁸ Also, we know that Luzzaschi played the archicembalo and composed music for it. Evidently Gesualdo heard him play it at the time of his marriage to Eleonora in 1594. By that time was it simply an intriguing novelty to Gesualdo, a curiosity from a few decades earlier? Or was it something new to embrace, or maybe a notion (especially the capability of the instrument to play "enharmonic" music) that

27 Newcomb, p. 146.

28 Watkins, p. 292.

would have to wait awhile before it could become fully integrated into the new *seconda pratica*? We'd have to speculate on what Gesualdo's feelings toward the instrument and its creator were. But that shouldn't keep us from venturing an attempt at hearing what some of Gesualdo's madrigals would sound like on an archicembalo. We once again take a look at and listen to our virtual archicembalo as we hear a 21st century intabulation of *lo parto*, a famous madrigal from his last book. Remember, though this appeared in print for the first time in 1611, it was composed in the 1590's when he was part of the triad of composers who cultivated the avant garde Ferrarese madrigal. **[play example 5--*lo parto*]**

Gesualdo's final works, which date from the first decade of the new century, the 17th, are his *Responsorio* for Holy Week. Did he know about Vicentino's *Hierusalem, Hierusalem*? We can't be definite. Glen Watkins in his book, *The Gesualdo Hex*, points out how the descending chromatic tetrachords in the earlier work (a setting of some words from Jeremiah's Lamentations) showed that non-diatonic harmony could be used in sacred music, even that for Holy Week.²⁹ In any event, the *Responsorio* of Gesualdo are unprecedented in their emotional intensity and *seconda pratica* characteristics. But, then again, the words of the Office of Tenebrae (to which the *Responsorio* belong and which was taken out of the Catholic liturgy last century) are of an extremely impassioned and emotive nature themselves.

Which brings me to the final part of our presentation: bridging the gap between the "second practice" and a "third practice." By using this latter term we posit that composers of art music today who make use of recent technologies in the creation and performance of new works which intend to break with tradition in some way are engaged in a "third practice." I am currently in the process of planning a piece of my

own which will serve as a tribute to Vicentino. I am definitely not the only one to be inspired by his ideas and the dedication with which he carried them out. For example, the Swiss composer Klaus Huber was very much taken with the archicembalo when composing his *Lamentationes sacrae et profanae ad Responsorium Gesualdi*.³⁰ In this work from the late 20th century, the Lamentations of Jeremiah, that precede the "responses" that Gesualdo set to music, are now set to music themselves by Huber. After mentioning the "spiral enharmonic" way of conceiving the Gesualdo model of the Responsorium, he goes on to make this very important point about his own milieu:

"..It is totally correct to pretend, as one is wont to do today, that the development of the stile cromatico, that brilliant discovery of musical Mannerism, came to an abrupt end with Gesualdo's late music. While adhering to Gesualdo's fundamental requirements, in these Lamentationes I tried to 'go back to the unpaid debt to the past' (Ernest Bloch), so as to also free my music from the ascendancy of panchromaticism, which became totalitarian in this century. I do not claim to have found a valid solution to one of the most burning historical questions. However, I have opened a way which I now intend to pursue."³¹

Looking to the past is a way of freeing oneself of the present; that is, the ongoing and still current dilemmas in new music. Where to now, after the neutralizing effect of panchromaticism, the complete "emancipation of the dissonance," as Arnold Schoenberg called it? It's beyond the scope of this paper to take up the issues that Glen Watkins, I think, deals with well in his book, *The Gesualdo Hex*. He makes the following summary statement:

"...In late-Renaissance Ferrara, musicians had turned to the Greeks as a vivifying source. Now in the late twentieth and early twenty-first centuries, a continuing line of performers, composers, artists, and writers repeatedly turned to the late Renaissance in search of a rejuvenating companion."³²

30 Klaus Huber, *Umgepflügte Zeit: Schriften und Gespräche* (Köln: Edition MusikTexte, 1999), p. 239.

31 Klaus Huber, Paris, 6 mars 1997 (trans. John Tyler Tuttle):
<<http://www.klaushuber.com/pagina.php?2,2,94,111,0,2,>>.

32 Watkins, pp. 244, 245

The way "I now intend to pursue" in my musical tribute to Vicentino, Gesualdo and the Ferrarese Avant Garde is still in its planning and experimental stages. I feel I still need to work out many of the *diminutions*, so that it will delight the listener more, like the "luxuriant" style of the 1580's. However, what I offer you, by way of closing, is a kind of synthetic Gesualdo, opened up to more octaves than human singers can practically sing in. Therefore, it will be for virtual instruments (an intabulation, shall we say). We'll listen to and watch a demonstration of Markhov processes using *lo parto* as a probability matrix. On top of the archicembalo sounds will be heard a modern piano playing in 12-tone equal temperament. In addition to the archicembalo-modern piano hybrid, a consort of wave guide bowed strings (almost sounding like viols at times) will be heard. And, as is so possible with virtual instruments, they will be sounding from all directions in random fashion. The result is a 3-part heterophony, not polyphony, with the 3 parts giving their version of the same line. Additionally, over the first half of this sample the intervals of the virtual viol music are gradually distorted around a given reference pitch and then gradually restored to their original size. This is my version of a modulation to the enharmonic genus, as it were. Thereby we will try to bridge the gap to a "third practice." (Oh, and, one more thing, the music of the archicembalo will only be in the chromatic genus.)

[Play example 6--Gesualdo Markhov]

The Pure Data patch that plays the examples referred to above may be downloaded via FTP (using a client like Filezilla) with the following user name and password -

host: ericsimonson.net

user name: u52187248-public

password: Archicembalo1550

Download the entire contents of the Pure Data folder and save all to a single folder on your computer. The PD patch is called archicembalo.pd (PD Extended is required, with the GEM video tools, to run the patch).

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