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Musica Ficta in the Cortona Laudario

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§ Il Laudario di Cortona (tardo XIII sec.), il più antico testimone superstite di repertori delle fraternità di laudesi della Toscana e dell'Umbria, non contempla l'uso di accidenti. Questo saggio analizza l'aggiunta degli accidenti nelle edizioni di Liuzzi (1935), Lucchi (1987), Terni (1988), Dürrer (1996) e Tischler (2002); l'edizione di Ernetti e Rossi Leidi (1980) non è invece considerata non utilizzando gli accidenti. Si propongo letture alternative sulla base della teoria degli accidenti proposta da Marchetto da Padova nel suo Lucidarium (1317-1319), un lavoro profondamente radicato nella primissima tradizione teorica italiana e successivo di pochi decenni al Laudario di Cortona. Si argomenta che il Si bemolle e il Mi bemolle non sono mai appropriati nei modi basati sul Sol (contrariamente all'utilizzo di Liuzzi, Lucchi e Terni), ma possono essere utilizzati in particolari situazioni nei modi basati sul Re o il Fa, e che il subsemitonium modi è appropriato in almeno un caso.

Parole chiave: monodia sacra medievale, criteri ecdotici, *musica ficta*.

§ The Cortona Laudario (late 13th century), the oldest surviving witness to the repertory of Tuscan and Umbrian laudesi fraternities, includes no accidentals. This paper surveys editorial accidentals added by Liuzzi, 1935; Lucchi, 1987; Terni, 1988; Dürrer, 1996; and Tischler, 2002 (Ernetti and Rossi Leidi, 1980, added no accidentals). It proposes alternative readings based on the theory of accidentals presented by Marchetto da Padova in his Lucidarium of 1317-1319, a work firmly rooted in earlier Italian theory and postdating the Cortona Laudario by only a few decades. The paper proposes that B- and E-flats are never appropriate in modes based on G (contrary to the practice of Liuzzi, Lucchi, and Terni), but may be used in particular situations in those based on D or F; and that the subsemitonium modi is appropriate in at least one case.

Keywords: medieval sacred monophony, editorial practice, *musica ficta*.

Jan Herlinger

MUSICA FICTA IN THE CORTONA LAUDARIO*

The Cortona Laudario (late thirteenth century) is the oldest surviving witness to the repertory of the Tuscan and Umbrian *laudesi* confraternities. It is notated in square black plainchant notation, entirely without accidentals, and it is an assumption of this study that the editorial use of accidentals in the Cortona repertory should model that of plainchant. In 1935 Fernando Liuzzi issued a monumental edition of the Cortona Laudario and of its younger Florentine cousin¹; later editions have appeared by Pellegrino M. Ernetti and Laura Rossi Leidi (1980), Luigi Lucchi (1987), Clemente Terni (1988), Martin Dürrer (1996), and Hans Tischler (2002)². In this paper I shall consider and evaluate the various editors' treatments of accidentals in five representative pieces from the repertory; as Ernetti and Rossi Leidi added no accidentals in their edition, it is not considered.

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^{1.} Cortona, Biblioteca Comunale e dell'Accademia Etrusca, MS 91 (Cort); Firenze, Biblioteca Nazionale Centrale, Banco Rari 18 (Flor). F. Liuzzi, *La lauda e i primordi della melodia italiana*, 2 vols., Roma, Libreria dello Stato, anno XIII E. F. [1935].

^{2.} Il laudario cortonese n. 91, edited by P. M. Ernetti, OSB, and L. Rossi Leidi, Roma, Edizioni musicali EDI-PAN, 1980; Il laudario di Cortona, Versione ritmica delle melodie, nota introduttiva e apparato critico di L. Lucchi, Vicenza, LIEF, 1987; Anonimi del sec. XIII, Laudario di Cortona: Testi musicali e poetici contenuti nel cod. n. 91 della Biblioteca Comunale di Cortona, Studio introduttivo, trascrizione e versione attuale di C. Terni, Perugia - Firenze, Nuova Italia, 1988; M. Dürrer, Altitalienische Laudenmelodien: Das einstimmige Repertoire der Handschriften Cortona und Florenz, 2 vols., Kassel - Basel, Bärenreiter, 1996 (Bochumer Arbeiten zur Musikwissenschaft, 3); H. Tischler, The Earliest Laude: The Cortona Hymnal, Ottawa, Institute of Mediaeval Music, 2002 (Gesamtausgaben/ Collected Works, 20).

EXAMPLE 1a* shows the ripresa of Jesu Cristo glorioso (Cort 26); like the lauda that it opens and closes, it is cast in a G mode. Example 1b shows Liuzzi's transcription of the entire lauda; the ripresa occupies most of the first three staves. Liuzzi imposed a generally isosyllabic rhythmic structure on the composition, sometimes varying syllable lengths to accord with a meter alternating between 4-4 and 2-4, and even provided a tempo indication, one that seems more appropriate to the nineteenth century than the thirteenth: Mosso con fierezza. Most surprising is his key signature of two flats, which entails flatting every b and e in the piece³, and renders what appears in the original as a G-mode composition in what we might call G natural minor. The characteristics are typical of Liuzzi's editorial procedure, throughout his edition. Lucchi devised his own rhythms for the pieces; for some, like Jesu Cristo glorioso (EXAMPLE 1c), he was able to provide a modern meter (here, 6-8) as well. Though eschewing a key signature, he retained every one of the b flats Liuzzi had applied to Jesu Cristo glorioso and two of Liuzzi's e flats as well – the two that appear near b flats. Terni (EXAMPLE 1d) transcribed in stemless noteheads (providing as well performing versions of the pieces in which most notes are eighths, with quarters appearing generally at the ends of phrases; in this paper I'll ignore these performing versions). For Jesu Cristo glorioso he retained all of Liuzzi's b flats but none of his e flats; Terni's few e flats appear in a passage of the strophe that he transcribed as it appears in the manuscript (the other editors noted that this passage is notated a third too low, an error revealed by the position of a custos). Dürrer, though he did not attempt to impose rhythms on the melodies, did make occasional suggestions for editorial accidentals (flats principally on b, occasionally on e); none appear in his transcription of Jesu Cristo glorioso. Tischler forces almost all the laude into a 2-4 meter (some few into 3-4); though he is generally liberal in flatting bs (never es), like Dürrer he suggests no editorial accidentals for this piece.

Liuzzi's addition of key signatures and accidentals to pieces of the Cortona Laudario surely reflects his belief that the lauda repertory presages modern tonality. Though he conceded that «alcune melodie di laude (...) affondino le loro radici nell'*humus* modale gregoriana», he found the «Gregorian»

^{*} See at the end of this paper.

^{3.} In this paper I use capitals for notes in what medieval theorists call the "low" register, A-G lying on our bass-clef staff; lower-case letters a-g for those in the "high" register, extending from a below middle c to the g above it; double lower-case letters aa-ee for the "very high" register. Liuzzi's transcriptions are an octave higher than the originals.

elements evident principally in those melodies he believed to be «le più antiche». «La sfera modale gregoriana», he averred, «ne' suoi aspetti caratteristicamente arcaici, perde, nelle laudi, rapidamente terreno»⁴; indeed, he described the pieces much as if they had been composed according to the standards of eighteenth- or nineteenth-century tonality:

Vediamo melodie il cui impianto è chiaramente minore condotte a cadenzare (...) nella tonalità relativa maggiore; (...) si osserva non senza qualche stupore (...) il franco processo modulante di una melodia dal tono maggiore iniziale (...) al tono (...) della dominante (...).

Medieval theorists, in his view, were either unaware of these developments or attempted to suppress them:

Che i musicografi medievali non abbiano mostrato chiara coscienza di codesti fenomeni, non fa meraviglia: essi badavano a descrivere e a canonizzare le formule melodiche gregoriane e a mantenerne il più possibile inalterata la tradizione⁵.

Among theorists he singled out Marchetto da Padova. Though Marchetto's *Lucidarium in arte musice plane* was in Liuzzi's view «una delle guide medievali meglio ordinate» (p. 186), the theorist failed because «s'indugia (...) in distinzioni minuziose ed ultra-conservatrici» (p. 188).

Liuzzi, then, added key signatures and a great number of accidentals to a repertoire in which none were notated. Lucchi and Terni, though they eschewed the signatures, retained the bulk of the chromatic inflections Liuzzi had imposed through the signatures or otherwise. Ernetti and Rossi Leidi ignored the matter of editorial accidentals. Dürrer rethought the matter of accidentals, devoting several pages to the subject in his introduction and

^{4.} The complete text of the first sentence quoted: «Che alcune melodie di laude – segnatamente le più antiche – affondino le loro radici nell'*humus* modale gregoriana, è facile constatare». Liuzzi, *La lauda* cit., I, p. 187. These passages are quoted by A. Ziino - F. Zimei, *Quattro frammenti inediti del disperso laudario di Pacino di Bonaguida*, «Rivista italiana di musicologia», 34 (1999), pp. 3-45 (pp. 27-8).

^{5.} Liuzzi, *La lauda* cit., I, pp. 187-8. Later students of the repertoire have continued to find in it the same progressive tonal tendencies remarked by Liuzzi, e.g., T. Karp, *Editing the Cortona Laudario*, «Journal of Musicology», 11 (1993), pp. 73-105 (pp. 76-7): «The melodies are for the most part simple and direct, with a very clear sense of tonal order. They avoid the artificial and precious, the tortuous and the subtle (...). Tonal order is inherent in the construction of individual phrases and in the manner in which these relate to one another. Well over half of the melodies occupy an authentic range, with noticeable emphases on the final, third, and fifth degrees». Cf. M. J. Bloxam on Cort 31, *Lauda*, «Die Musik in Geschichte und Gegenwart», 2nd ed., Sachteil, vol. 5, coll. 922-33 (col. 923): «Charakteristisch (...) ist *Alta trinità beata* (...). Die Melodie gliedert sich in Phrasen, bewegt sich innerhalb eines Oktavrahmens und weist einen typischen tonalen "Dur"-Schwerpunkt auf C auf, mit G als sekundärem Kadenzziel».

citing certain principles from Marchetto da Padova's *Lucidarium*, which make it possible in some cases to determine his rationale for what he calls recommendations concerning the accidentals⁶. Even for Liuzzi, Lucchi, and Terni it is often possible to find the rationales that lay behind their choices of accidental inflection. But are these editors' choices, and the rationales behind them, in agreement with the practices and ideas that prevailed at the time the melodies were composed, first sung, and written down? And how might those practices and ideas be determined?

Though no chromatic signs appear in the Laudario, contemporary music theory offers clues to their use. Scholars have devoted a great deal of attention over the last fifty years to the question of *musica ficta*⁷; and while it is true, as Dürrer has noted (1:79), that neither practical nor theoretical sources give a unified picture of procedures concerning the use of accidentals, the most fruitful editions and scholarly studies – one thinks of those of Edward Lowinsky and Margaret Bent – have benefited by considering the music together with the theory. Moreover, just as past generations' conflated editions have been supplanted to a certain extent by present-day integral editions of single sources, so may editors – and performers – come to prefer to follow the *musica ficta* doctrine of a particular theorist appropriate to whatever repertoire is under consideration. Both Liuzzi and Dürrer intimated that the theorist whose work is most clearly applicable to the repertoire of the Cortona Laudario is Marchetto da Padova⁸.

Marchetto composed his *Lucidarium in arte musice plane* in 1317 or 1318, only a few decades after the presumed date of copying of the Cortona Laudario. The modal theory of the *Lucidarium* is firmly rooted in earlier Italian theory (for example, Guido of Arezzo and the anonymous author of the *Dialogus de musica* once attributed to Odo of Cluny). Yet, contrary to Liuzzi's assertion, Marchetto's theory is by no means «ultra-conservative»; Marchetto was the first medieval theorist to present polyphonic examples showing chromaticism and to work out a procedure he called *permutation* for negotiating chromatic progressions, a pioneer in the division of the whole tone into equal

^{6.} Altitalienische Laudenmelodien cit., I, pp. 79-81.

^{7.} A number of important contributions are listed by Ziino - Zimei, *Quattro frammenti inediti* cit., p. 24. To them add M. Bent, *Ciconia, Prosdocimus, and the Workings of Musical Grammar as Exemplified in 'O felix templum' and 'O Padua'*, «Johannes Ciconia, musicien de la transition», ed. by P. Vendrix, Turnhout, Brepols, 2003, pp. 65-106.

^{8.} Though Dürrer appreciated the appropriateness of Marchetto's theory to the Cortona repertoire, he does not seem to have turned to Marchetto's *Lucidarium* itself but to have considered only a few general principles abstracted from it by Harold Powers in his article «Mode» in the *New Grove Dictionary of Music and Musicians* (1980).

fractional parts, and the author of the earliest comprehensive treatise on the Italian system of mensural notation. Marchetto's modal theory had wide ramification for more than two centuries and became the foundation of the polyphonic modal theory of the Renaissance. Marchetto devotes a great deal of attention to the use of accidentals in plainchant, including the use of b flat, which he treats in a detailed and highly nuanced fashion closely entwined with his theory of mode. I propose to read melodies from the Cortona Laudario through the lens of Marchetto's theory, to see what light the latter might shed on the use of unwritten accidentals in the former.

I shall try to answer three questions:

- 1. When is it appropriate to use b flat, when b natural, in modes based on D and on F?
- 2. Is it permissible to use b flat and e flat in modes based on G?
- 3. Is the chromatically raised leading tone permissible?

1. When is it appropriate to use B flat, when B natural, in modes based on D and on F?

Cort II, Ave Dei genitrix, is clearly in a D mode, that is, in first or second mode; though the range of the piece (C-b) fits either mode, the prominence of a makes first mode the more likely choice. In his transcription (EXAMPLE 2), Liuzzi has added a signature of one flat, thus calling for every b in the piece to be flatted. Though Lucchi (pl. 34), Terni (p. 31), Dürrer (2:17), and Tischler include no key signatures in their transcriptions, the first three add editorial flats on every b, so that their suggestions for editorial accidentals match his in every respect; Tischler adds a flat on every b but the last (probably through oversight, as the melody in this last case mirrors that of the previous verse, where he has flatted the b).

The use of b flats in this case accords with Marchetto's doctrine: b flat is preferred in first-mode melodies that rise no further than b, as well as in all second-mode melodies:

If the [first] mode (...) ascends (...) to high b and no further, it should always be sung with round b, (...) as here [Example 3] (...). Second mode should always be sung with round b (...). If it were to ascend (...) to square b, the harshness of the tritone – which is to be avoided entirely in any melody – would occur however the melody might ascend from low F to that b or descend from that b to E.9

9. «Si (...) [primus tonus] ascendit (...) ad b acutum et non ulterius, (...) tunc semper per b rotundum debet modulari, (...) ut bic [Example 3] (...). Debet (...) cantari secundus tonus semper per b rotundum (...). Si

Marchetto's preferred inflection, then, is b flat, to avoid the tritone that would inevitably fall between b natural and F. *Ave, Dei genitrix* seems particularly appropriate as an illustration of the importance of avoiding the tritone, as in this melody F and b often lie close together, with each emphasized through a change of direction, as at the beginning of the strophe (middle of the second staff).

Cort 2, *Laude novella*, provides another example of a piece in a D mode (I consider only the *ripresa*, as the musical text of the strophe is corrupt). Liuzzi, again, has added a signature of b flat, thus flatting every b in the piece (Example 4a), as has Tischler. Lucchi (Example 4b) and Terni (p. 3) leave the first two bs natural, flatting the third; Dürrer (Example 4c) flats the first b and the third, leaving the second natural. Which solution is preferable?

Marchetto has a special rule for a mode I melody that, like the ripresa of *Laude novella*, rises to c but not to d:

Either it ascends to that high b (...) and after that ascends to high c before it descends to low c, in which case it will always be sung with square b, as here (EXAMPLE 5), or it ascends to that b and descends to low c before it ascends to high c, in which case we ought to sing it with round b¹⁰.

Thus Marchetto's rule clearly calls for the first b in *Laude novella* to be natural, as the melody thereafter reaches c without an F intervening; and it calls for the third b to be flat, as the melody thereafter reaches F without an intervening c. And though Marchetto's rule, read strictly, would require the second b to be flat, I suspect that the phrase break following the words *sia cantata* would take it out of the gravitational field of the F, for which reason it ought to be kept natural.

Cort 36, *Laudar vollio per amore*, provides a final example of a D-mode piece, one that on account of its range (C-d) clearly belongs to first mode. Liuzzi (EXAMPLE 6), again, adds a b-flat signature – which flats the two bs

ascenderet per b quadrum, tunc ab F gravi quomodocunque ascendendo ad dictum b vel ab ipso b quomodocunque descendendo ad predictum F fieret tritoni duricia, que in cantu quolibet est penitus evitanda» (Lucidarium II.4.10-I, 94-6. Text and translation from The "Lucidarium" of Marchetto of Padua, Critical Edition, Translation, and Commentary [by] J. W. Herlinger, Chicago, University of Chicago Press, 1985, pp. 398-9, 436-7). «Round b» is the normal medieval term for b flat, «square b» the normal term for b natural.

10. «Aut ascendit ad b predictum acutum (...) et ad c acutum post hec ascendit, antequam descendat ad F grave, et tunc semper cantabitur per b quadrum; ut hic, [Example 5], aut ascendit ad predictum b et antequam ascendat ad c acutum descendit ad F grave, et tunc per b rotundum cantare debemus» ("Lucidarium" of Marchetto cit., 11.4.13-4, pp. 398-401).

in the strophe. Terni (p. 113) adds no signature but flats the bs, so that his solution agrees with Liuzzi's with regard to chromatic inflections. Lucchi (p. 229), Dürrer (2:46), and Tischler, however, leave the bs natural.

Marchetto has a very simple rule for dealing with the bs in first mode pieces that rise to the octave above the final as this does:

Should the first mode be sung with round b or with square b? We say it should always be sung with square b when the mode fills its measure above [the final] as specified [i.e., ascending to high d], because then the first species of the diapente [T-S-T-T, i.e., D-E-F-G-a] and diatessaron [T-S-T, i.e., a-b-c-d], of which the mode is formed, are found in regular fashion. This would not be the case if the melody were sung with round b¹¹.

- the reason being that then the mode is constructed through the proper species of both diapente and diatessaron. Clearly, then, for Marchetto the bs ought to be natural.

Cort 13, Ave, vergene gaudente, provides an example in an F mode. Example 7a shows Terni's transcription; he flatted all bs, essentially making the piece sound as if in F major throughout. Liuzzi (Example 7b), though adding a b-flat signature, canceled flats at two places in the strophe, over the words maravegla and madre. Dürrer (Example 7c) and Tischler left the bs over maravegla natural but recommended a flat for the first of the bs over madre (probably assuming that the flat would carry over to the second b – an element of the same neume – as well); Lucchi's transcription (p. 140) agrees with Dürrer's and Tischler's, with the second b over madre explicitly flatted. Which version is preferable? Or is there yet another alternative?

Marchetto begins his discussion of the fifth mode by stating that

the fifth mode is formed in ascent of the third species of the diapente [T-T-T-S, i.e., F-G-a-b-c] and the third species of the diatessaron above [T-T-S, i.e., c-d-e-f] (...); in descent it is formed of the same species of the diatessaron [f-e-d-c] and the fourth species of the diapente $[c-b^b-a-G-F]^{12}$.

To a hypothetical interlocutor's comment, «Therefore it seems that the fifth mode is sung with square b in ascent and with round b in descent», he answers,

^{11. «}Debet cantari primus tonus per b rotundum an per b quadrum? Dicimus quod per b quadrum semper quando modum suum implet superius, ut dictum est, et ratio est quia tunc in ipso prima species dyapente et dyatessaron, ex quibus formatur, rationabiliter reperitur, quod non esset si per b rotundum cantaretur» ("Lucidarium" of Marchetto cit., 11.4.5-8, pp. 396-9).

^{12. «}Quintus tonus formatur in suo ascensu ex tercia specie dyapente et tercia dyatessaron superius; (...) in descensu vero ex eadem specie dyatessaron et ex quarta dyapente» ("Lucidarium" of Marchetto cit., 11.4.138-9, pp. 454-5).

We say this is so for three reasons. First: in whatever manner a melody ascends from the final to the diapente above, it will sound sweeter and more pleasant and lie more fitly in the singer's mouth with square b, as is evident here: [EXAMPLE 8]¹³.

The first part of Example 8 shows the proper version, with all bs natural; the second part shows the improper version, with all bs flat. We can seldom expect to find as close a fit between a theorist's example and a passage of music as between the first part of Example 8 and the phrase setting the words *de te feice madre e filia*. Surely, then, Marchetto would have favored none of the edited versions but would rather have kept all bs in that phrase natural. That is clearly the version that for him would have sounded «sweeter and more pleasant» and would have lain «more fitly in the singer's mouth».

But what about the inflection of the bs over *maravegla*? Should they be flat, according to Terni, or natural, with Liuzzi, Lucchi, Dürrer, and Tischler? The third of Marchetto's reasons – the second need not concern us – explains why b natural is preferable in such a case:

(...) so that when the fifth mode wants to ascend to its perfection it does not find the harshness of the tritone that would be present if we sang ascending with round b — that is, the tritone from the first high b [flat] to high e. The fifth mode should be sung with round b in descent, so that when the melody descends from the diapente above to the final it may avoid the harshness of the tritone¹⁴.

To avoid the tritone between b flat and the e above it, raise the b flat to b natural. This reading is certainly contrary to what modern tonality has led us to expect; but it was clearly the preference of a judge who was living when the repertoire under consideration was still current.

^{13. «}Sed dicet aliquis: Ergo videtur quod quintus tonus in eius ascensu cantetur per b quadrum et in descensu per b rotundum. Dicimus quod sic, et triplici ratione. Prima est quod cum ascendit a fine ad dyapente supra, quomodocunque, talium prolatio notarum dulcior atque suavior ad auditum transit, necnon aptior in ore proferentis existit, ut hic probabiliter apparere potest [Example 8]» ("Lucidarium" of Marchetto cit., 11.4.140-4, pp. 454-7).

^{14. «(...)} ut cum vellet quintus ad eius perfectionem ascendere non inveniatur tritoni duricia, que adesset si per b rotundum ipsum ascendens cantaremus, scilicet a b primo acuto ad e acutum. Cantari debet etiam per b rotundum suo scilicet in descensu, ut cum vult se a dyapente supra ad finem deponere possit tritoni duriciam evitare» ("Lucidarium" of Marchetto cit., 11.4.146-7, pp. 456-9).

2. Is it permissible to use B flat and E flat in modes based on G?

I would like to return now to Cort 26, Jesu Cristo glorioso. Recall that Liuzzi (Example 1b) added a signature of two flats to what had been notated as a G-mode piece (which due to its range – F - aa – and structure would surely belong to mode 7 rather than mode 8), in effect rendering the piece as in G minor with neither the sixth nor the seventh degree raised. Though Lucchi (Example 1c) and Terni (Example 1d) eschewed the signature, they followed Liuzzi in flatting all bs; Lucchi adopted some – though not all – of Liuzzi's e flats. Terni left them natural (though, as noted, he flatted es in his idiosyncratic transcription of a corrupt passage in the strophe); Dürrer and Tischler suggested no editorial accidentals in this piece. Consider now Marchetto on the use of b flat in the G modes:

The seventh mode should always be sung with square b, because if it were sung with round b there would be no essential difference between it and the first mode, for both would be formed of the same species of the diapente and diatessaron (...). The eighth mode should be sung with square b, for the reason given for its authentic counterpart. If the authentic mode were sung with round b, it would be similar to the first mode, and the eighth mode would be similar to the second for the same reason¹⁵.

In flatting all the bs, Liuzzi, Lucchi, and Terni have done precisely what Marchetto said one should *not* do: introduce b flats into pieces in a G mode.

What could have led these editors to such a bizarre reading of this piece? Surely it must have been the subfinal F natural, which occurs in the cadence of both *ripresa* and strophe, making a prominent tritone with the b natural above it; and the tritone, as Marchetto and many other theorists stated, is to be avoided. Moreover, the b flat, once admitted, creates a tritone with the e above it, a tritone that can then be avoided only by flatting the e. The chain of fourths in question is clearly evident at the end of the *ripresa*. The F on the third syllable of *victorioso* being natural, there will be a tritone between it and the b (if kept natural) on the first syllable of *victorioso* and on the last syllable of the preceding word *facesti*; and if that b is flatted, there will be a tritone between it and the e (if kept natural) on the second syllable of *surreximento*. (Precisely the same considerations hold for the end of the

^{15. «}Debet (...) cantari septimus tonus semper per b quadrum, cuius ratio est quia si per b rotundum cantaretur, tunc nulla essentialis differentia inter ipsum et primum esset, nam ambo ex eisdem speciebus dyapente et dyatessaron formarentur (...). Debet (...) cantari octavus tonus per b quadrum, ratione de eius auctentico dicta, nam si eius auctenticus cantaretur per b rotundum similis esset primo, iste eadem ratione similis esset secundo» ("Lucidarium" of Marchetto cit., 11.4.186, 201-2, pp. 476-9, 484-5).

strophe, over *ké surrexio, voi precederà gratioso*). Liuzzi and Lucchi, indeed, eliminated both tritones by flatting b and e; by suggesting no editorial accidentals, Dürrer (2:34) kept the tritone between F and b natural (with the effect that no tritone arose between b and e).

There is of course another way of eliminating the tritone between F and b, and that is to sharp the F. This brings us to the third question:

3. IS THE CHROMATICALLY RAISED LEADING TONE PERMISSIBLE?

Once again, Marchetto provides an answer.

Recall that the basic medieval scale – the «gamut» – involved only the natural notes plus b flats above and below middle c. Like other medieval theorists, Marchetto uses the signs round b and square b to distinguish the two inflections of b. Unlike most others, he uses the square b sign only on that particular note; to raise any other note by a semitone he uses a third sign he calls *falsa musica*, and this sign always produces a note not part of the gamut – a *musica ficta* note, as later theorists came to call such. A note marked with Marchetto's third sign also normally moves to the note immediately above it – in the manner of a leading tone. «The signs (...) are three», he writes,

the square b, the round b, and another sign commonly called falsa musica. (...) The first two signs (...) occur, or can occur, in any piece whether plain or measured [i.e., polyphonic]; but the third sign is employed only in a piece that is measured or in plainchant that either is sung with color or crosses over into measured (for instance, in the tenors of motets or of other polyphonic compositions)¹⁶.

As Marchetto generally uses the term *color* in connection with what we would call «sharped leading tones», his reference to «plainchant that (...) is sung with color» seems to give license to the use of a raised leading tone in plainchant in modes that normally have a whole tone below their finals. There is other theoretical support for such a practice. Theodor Dumitrescu has called attention to a dozen theorists who describe the use of *musica futa* notes in monophonic repertoires; the theorists range from England

^{16. «}Signa (...) sunt tria, scilicet b quadrum, b rotundum, et aliud signum quod a vulgo falsa musica nominatur (...). Prima namque duo signa (...) sunt, vel esse possunt, in quolibet cantu, plano ac etiam mensurato; tercium vero signum solum in cantu ponitur mensurato, vel in plano qui aut colorate cantatur aut in mensuratum transit, puta in tenoribus motettorum seu aliorum cantuum mensuratorum» ("Lucidarium" of Marchetto cit., 8.1.4-7, pp. 272-5).

to Spain and Italy, spanning the fourteenth and fifteenth centuries and extending into the sixteenth¹⁷.

There is practical support for the use of leading tones as well. *Jesu Cristo* glorioso appears also in the Firenze Laudario notated with a semitone below its final: this semitone occurs there through the piece's having been notated a fifth lower than the Cortona version, with its final on C (EXAMPLE 9)18. The B natural subfinal of the Firenze version would correspond to a hypothetical F# subfinal in the Cortona version. As noted previously by Ziino and Zimei, this is one of several pieces notated with a G final and an F subfinal in Cortona but with a C final and a B (natural) subfinal in Firenze. If I read them correctly, Ziino and Zimei proposed that if the Firenze version of Giso Cristo was the model, then the Cortona version needs an F# leading tone; if on the other hand the Cortona source was the model, then the Firenze version needs a B flat below the final 19. I would like to suggest that neither version was the model for the other: in each case, rather, the model was a piece that the respective scribes (or the scribes from whom they copied) heard sung. One scribe notated it ending on G, the other on C. And I can put forward a possible explanation for the discrepancy in pitch level.

In the course of the *Lucidarium* Marchetto defines several categories of mode. Regular modes (for instance) are those that are built on their normal finals. If a melody is such that it cannot be built on its normal final without using notes that do not belong to the regular gamut, it should be built on its cofinal – the note a fifth above its final – and in that case its mode is called irregular. If the melody is such that it cannot be built on its cofinal either without using notes that do not belong to the regular gamut, it should

^{17.} T. Dumitrescu, Leading Tones in Cantus Firmi and the Early L'Homme armé Tradition, «Studi musicali», 31 (2002), pp. 17-55. The theorists include the authors of the anonymous Quatuor principalia (fourteenth century, second half?), the Berkeley Compendium (1375), Quot sunt concordationes (fourteenth or fifteenth century), and the Ars mensurabilis et inmensurabilis cantus (Seville, ca. 1480), plus Fernand Estevan (1410), Ramos de Pareja (1482), John Hothby (d. 1487), Franchino Gaffurio (1496), Guillermo de Podio (late fifteenth century), Domingo Marcos Durán (1498), and Gonçalo Martinez de Biscargui (1538). For the Spanish theorists, see K.-W. Gümpel, Gregorian Chant and musica ficta: New Observations from Spanish Theory of the Early Renaissance, «Recerca musicologica», 6-7 (1986-1987), pp. 5-27, and idem, Gregorianischer Gesang und Musica ficta: Bemerkungen zur spanischen Musiklehre des 15. Jahrhunderts, «Archiv für Musikwissenschaft», 17 (1990), pp. 120-47. To the list of theorists discussing musica ficta notes in chant, add Nicolaus de Capua (1415); see J. Herlinger - L. P. Cummins, The "Compendium musicale per presbyterum Nicolaum de Capua ordinatum": A New Text, «Il saggiatore musicale», 15 (2008), pp. 5-31.

^{18.} The Florence Laudario: An Edition of Florence, Biblioteca Nazionale Centrale, Banco Rari 18, edited by B. Wilson, texts edited and translated by N. Barbieri, Madison (WI), A-R Editions, Inc., 1995 (Recent Researches in the Music of the Middle Ages and Early Renaissance, 29), p. 27.

^{19.} Ziino - Zimei, Quattro frammenti inediti cit., p. 34.

be built on some other note, and in that case its mode is called acquired. If a melody is notated using notes of the regular gamut, but its final is unconventional, it is said to be proper with regard to composition but improper with regard to location. If it is notated using notes other than those of the regular gamut, it is called artificial²⁰. In his discussion of these categories Marchetto implies strongly that melodies should be notated using notes of the regular gamut when possible. The date of the Lucidarium is critical here: the second decade of the fourteenth century. Karol Berger chose to begin his monograph on Musica Ficta²¹ with Marchetto because it was not until ca. 1300 that concepts of scale and interval had developed to the point where it was possible to construct a theory of musica ficta. The scribe of the Cortona Laudario, writing during the second half of the thirteenth century, was on the far side of the ca. 1300 divide, and notated the melody as ending on G; though the singer of the model may have sung a raised leading tone, the scribe did not notate its inflection, F sharp (just as he did not notate explicitly any of the b flats appropriate in other pieces of the collection). The scribe of the Firenze Laudario, believed to have been writing around the middle of the fourteenth century (thus on the near side of the divide, and alert to the sort of consideration Marchetto called attention to) took pains to write the piece using only notes of the regular gamut, and so he notated the piece as ending on C – in an «artificial» mode, in Marchetto's term. The high f naturals of the Cortona version appear in the Firenze version as bs, which undoubtedly should be flatted, as they are (editorially) in Wilson's edition; if not flatted, indeed, they would create tritones with the Fs below them. But the Firenze version's b flats are part of the regular gamut, as is the B below low C. Its scribe knew he was supposed to write down Giso Cristo glorioso using notes of the regular gamut if possible; the Cortona scribe wrote at a time when he was not vet expected to try.

^{20. &}quot;Lucidarium" of Marchetto cit., 11.4.29-30, 46-8, 79-80, pp. 404-7, 414-7, 430-1. See also the introduction, p. 9.

^{21.} K. Berger, Musica Ficta: Theories of Accidental Inflections in Vocal Polyphony from Marchetto da Padova to Gioseffo Zarlino, Cambridge, Cambridge University Press, 1987, p. xiii.



EXAMPLE 1a

Jesu Cristo glorioso (Cort 26), ripresa, from the Cortona Laudario, 57v-58r (Liuzzi, 1:366)



Example 1b Liuzzi, transcription of Jesu Cristo glorioso (1:368)



EXAMPLE 1c Lucchi, transcription of *Jesu Cristo glorioso* (p. 185)



Example 1d
Terni, transcription of *Jesu Cristo glorioso* (pp. 73-4)



EXAMPLE 2
Liuzzi, transcription of Ave Dei genitrix (Cort 11) (1:301)



Example 3
Marchetto, *Lucidarium* 11.4.11 (Herlinger, pp. 398-9)



Example 4a Liuzzi, transcription of *Laude novella*, *ripresa* (Cort 2) (1:261)



Example 4b Lucchi, transcription of *Laude novella*, *ripresa* (p. 98)

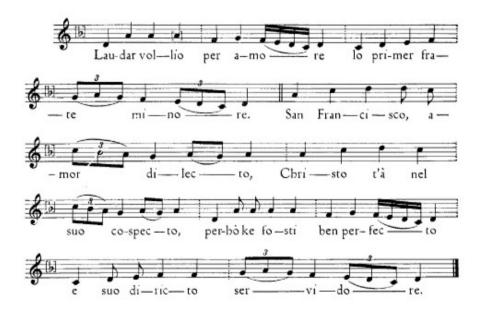


Example 4c

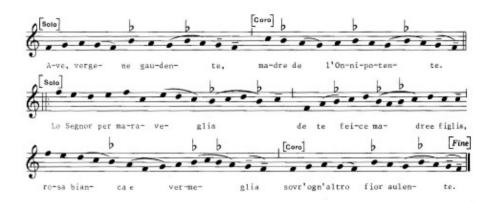
Dürrer, transcription of *Laude novella*, *ripresa* (2:8)



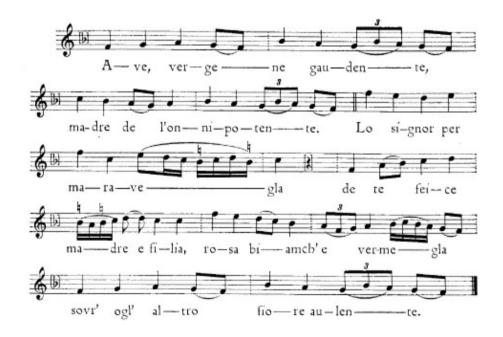
EXAMPLE 5
Marchetto, *Lucidarium* 11.4.13 (Herlinger, pp. 400-1)



Example 6 Liuzzi, transcription of *Laudar vollio* (Cort 36) (1:419)



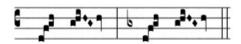
Example 7a
Terni, transcription of Ave, vergene gaudente (Cort 13) (p. 36)



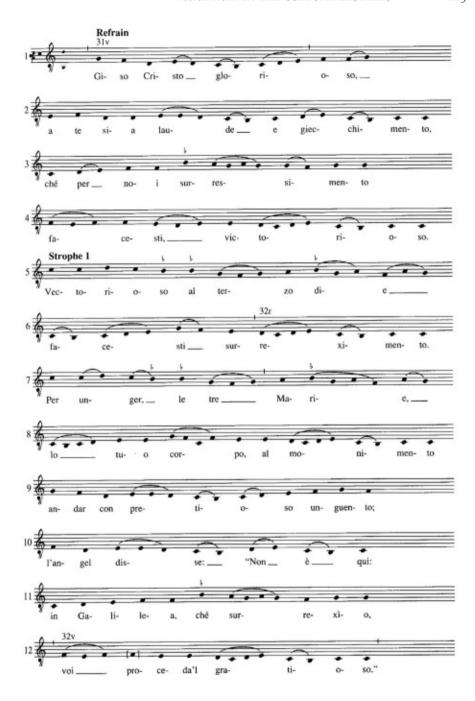
Example 7b Liuzzi, transcription of Ave, vergene gaudente (1:309)



Example 7c Dürrer, transcription of *Ave, vergene gaudente* (2:19)



Example 8 Marchetto, *Lucidarium*, 11.4.144 (Herlinger, pp. 456-7)



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