WHAT IS CHAPTER 17 OF GUIDO’S MICROLOGUS ABOUT? —
A PROPOSAL FOR A NEW ANSWER

EDWARD GREEN

Manhattan School of Music
120 Claremont Avenue
NEW YORK, NY 10002, U.S.A.
E-mail: egmusic@rcn.com

Chapter 17 is the most controversial section of Guido’s Micrologus. Even medieval commentators were unsure of its intent. A thoughtful attempt to explain its purpose was made by van Waesberghe in his 1951 article “Guido of Arezzo and Musical Improvisation.” Guido, he argued, intended to initiate students into the art of improvisation through an innovative methodology: aligning the vowel series along definite points of the gamut.

This essay explores the possibility that chapter 17 might have had a different significance: that Guido designed it as a logical continuation of the subject matter he had been pursuing in chapters 15 and 16—namely, the aesthetics of chant. Moreover, his notion of aesthetics illustrates what the great 20th century philosopher Eli Siegel explained is universal in world aesthetics: the oneness of opposites.

Written around 1025, Guido’s Micrologus was seen fairly swiftly as a “classic”—an indispensable text. More than once, it was given pride-of-place alongside the writings of Boethius. Nevertheless, its 17th chapter, “Quod ad cantum redivit...
omne quod dicitur, was regularly put aside by medieval commentators. As Joseph Smits van Waesberghes points out, only four mention it; and of these just one, Johannes Affligemensis, takes up Guido's ideas both at length and with enthusiasm.¹

If the general silence of his near-contemporaries points either to perplexity or quiet disapproval concerning Guido's intentions, at least none wrote vituperatively. This has not always been the case with more recent scholars, some of whom adopt a tone that is petulant, even scornful—as if this great man in the history of music had entirely lost his bearings as he penned the chapter.²

A thoughtful attempt to rehabilitate this controversial section of the Micrologus—to show that Guido had not «gone off the deep end,» but had written something valuable, and in keeping with the over-all intent of the book—was van Waesberghe's celebrated 1951 article «Guido of Arezzo and Musical Improvisation.»³ Guido, he argued, had a pedagogical purpose throughout Micrologus; this chapter was intended to initiate students into the art of improvisation.

The methodology Guido employs is striking: to align the vowel series a,e,i,o,u along definite points of the gamut, so that, upon seeing or hearing any group of words, a singer could improvise a melody to them immediately by observing which vowel was present in each syllable and then singing the pitch (or, more precisely, one of the pitches) aligned with that vowel.

Guido, it seems, took distinct pride in this idea. He presents it as innovative, explicitly saying so in the first sentence of the chapter.⁴ Johannes Affligemensis supports the claim. In chapter 20 of De Musica, written approximately 75 years later—(long enough for other contenders to emerge had the method really not been unique to Guido)—the «bragging rights» of the monk from Arezzo are affirmed,⁵ and in the process John gives his own opinion. He calls the method beautiful:

¹ Chapter 20, De Musica.
³ Musica Disciplina (1951), pp. 55-63.
⁴ «Hic breviter intimates aliud tibi planissimum dabinus argumentum utilimum visu, licet haec tenus inauditum.» [Ch.17:2] (p. 186)


In general, Guido is hardly shy of asserting his own merits as a thinker, musician, and teacher. The acrostic preceding the Micrologus is not the act of a man given to disproportional humility. There, as in the epistle to Theodaldus which follows, Guido is proud of his achievements and aware of the envy he has aroused in people of «ill will.» While he usually describes his achievements in terms of making things clearer or simpler, here, by contrast, he asserts that he has brought forth something completely new. I am not aware of any other passage in his works making a similar claim.

⁵ Hans OESCH, in his Guido von Arezzo (Bern: Verlag Paul Haupt, 1954) mentions in a footnote on page 67: «Wir erwähnen nur noch kurz, dass es in der musikalischen Völkerkunde, nämlich auf Bali,
Adhuc et aliam modulandi monstramus viam pulchram sane, sed ante Guidonem inusitatam.6

In this essay, I wish to raise the possibility that chapter 17 of the *Micrologus* might have a significance greater than that assigned to it by van Waesberghe.7 Could it be that Guido saw it as the climax, the crowning aspect of his teaching? If so, its placement as the concluding chapter of the first part of the book—the part dealing strictly with monophonic music—would be no accident.8 Far from intending it as a quasi-independent essay focused on the specific art of improvisation, might Guido have designed it as a logical continuation of the subject matter he had been pursuing in chapters 15 and 16: namely, the aesthetics of chant—that which makes one instance of it successful, beautiful, and another not?9


However, the parallel is not a true one. What Schlager references is actually more akin to the "solfege" syllables Guido would later propose.

6 For *De Musica* I am making use of the text as edited by van Waesberghe for the Corpus Scriptorum de Musica, I. (American Institute of Musicology; 1950). This citation is Ch.20:1.

7 The great Dutch musicologist deserves praise for rescuing this chapter from the neglect and opprobrium into which it largely had fallen. And judging by the fact his theory is cited nearly always when academic writing touches on this chapter—(cited without question as to completeness or accuracy)—his approach appears to have gained scholarly consensus. A premature consensus, I am suggesting.

8 It is worth observing—and it tends to support the validity of the thesis advanced in this essay—that the *Commentarius anonymus in Micrologum Guidonis Areinti* [Kodex 2502; Vienna, Kaiserliche Hofbibliothek] proceeds no further than this chapter.

While it is certainly possible there was originally further commentary which has simply not come down to us—the codex being a mere fragment—it is also distinctly possible this codex stands as witness to an earlier version of the *Micrologus* which did not venture into the field of diaphony, but dealt only with the art of chant.

Internal evidence (the concluding sentences of chapter 17) lends weight to this supposition. Leaving aside sentence 17:45 ("Iam nunc diaphoniae praecepta breviter exsequamur")—which naturally could have been inserted later—17:36-44 read very much as an author's "final words." They call the student to continue his work until it is so polished, it pleases [36-37]; gracefully leaves room for him to apply his own judgment [38-40] (for here, and elsewhere, we see that Guido is not the kind of teacher who insists on imposing his taste, or a rigid methodology on his students); echoes St. Paul (*Corinthians* I, ch.13) [17:41-42] as he talks of the progress from ignorance to full knowledge; and then [17:43-44] says it is only from a concern for brevity that he does not pursue the subject further; concluding: "ista sufficiant."

By contrast, chapter 19 ends abruptly and far less warmly [19:26], with 19:27 merely a transition to chapter 20. This final chapter (20) seems to function as an "afterword" since it suddenly brings up a subject not hinted before: the Pythagorean origins of musical knowledge.

The words of ch. 20:22 do have a conclusive ring to them, being praise (one assumes) of the Holy Spirit. Yet—at least to the ears of this reader—they seem more formulaic than those which conclude chapter 17, which seem infused with personal feeling.

If, indeed, Guido originally did conclude with chapter 17, it would explain these literary matters; these questions of style. Speaking in terms of literary aesthetics, the best ending was, indeed, the ending he originally intended.

9 John’s use of "pulchram" (Ch.20:1) points to the aesthetics involved. Guido uses many words in chapters 14-17 that imply aesthetic judgment—words not used earlier in the *Micrologus*. Among these are "suavitate" [14:17], "commoda" [15:1], "praedulcis" [15:43], and "delecteris." [17:11]
Guido’s »Aesthetics of Songwriting«

It is clear that in those chapters Guido is not merely describing »what has been,« but also »what should be.« There, in much detail, he outlines how a chant should coordinate its musical structure with the prosody and rhetorical divisions found in its text. As Nino Pirrotta observed, we see here a »striving for artistic poise and balance,«10 that, in its specific technical detail, was unprecedented in medieval music theory.11

When one considers chapters 15-17 as a unit—(with chapter 14 functioning both as their prelude and also as a graceful transition from what came before)—what emerges boldly is this: Guido is creating here an introductory text in »songwriting.« Let us consider the evidence.

First, if van Waesberghe were correct, then why would Guido—a man given to clear, sequential, logical exposition—have placed chapter 17 where he did? Had his purpose merely been to provide students with an easy introduction to the art of sight-improvisation, it should have followed chapter 13. Up to that point Guido’s interest was plainly in educating his students how to locate one’s voice accurately in ‘musical space.’ The goal: for students to sing at sight what they have never before encountered. Training in sight-improvisation would logically culminate that study.12

But it would not require the knowledge Guido presents in chapter 15 and 16, information much more relevant to the art of composition—which may indeed begin with an improvisation, but hardly ever stops there! Using van Waesberghe’s theory, it is hard to explain why Guido would first take this two chapter excursion, let alone have us read the ecstatic 14th chapter. However, if we imagine a different design to the Micrologus, the difficulty vanishes.

What if Guido, along with a preliminary desire to train his students in sight-singing, wanted their education to culminate in the ability to create new chant13—

---

11 Once again, it is Johannes Affligemensis who picks up on this point, in a way unequaled among the other theorists in the century following Guido. Nor is that accidental, for he and Guido seem to be the 11th century writers who were most interested in the question of »new chant,« and wished to give deep and precise guidance to those who would compose it. »Only John Cotton [of Afflighem] seems to have echoed Guido’s concern for a melody’s harmonious balance,« writes Dolores Pesce in Guido d’Arezzo’s ‘Regule Rithmice,’ ‘Prologus in Antiphonarium,’ and ‘Epistola ad Michalelem’—A Critical Text and Translation. (Ottawa: The Institute of Mediaeval Music, 1999). Page 35.
12 This purpose is clearly stated in chapter 1:4. »...donec vi et natura vocum cognita ignotos ut notos cantus suaviter canat.«
13 Concerning the 11th century controversy as to »new chant composition—as and Guido (and John’s) positions as champions of it—see Claude Palisca’s comments on pages 55 and 96 of Hucbald, Guido, and John on Music: Three Medieval Treatises. (New Haven and London: Yale University Press, 1978).
new melody whose effect, as he writes in chapter 15, should be coordinated closely with that of its words? In this reading, everything falls sensibly. (And there is evidence, which I explored in footnote 8, that Guido may have initially intended to conclude the Micrologus with chapter 17.15

The plan of the book would then be this: thirteen chapters to deal with the constitution of musical space as well as its visual analogue in musical notation; a transitional chapter (14); and then a three-part textbook on "songwriting." This text, as we shall see, proceeds quite sensibly from simpler to more complex aspects of the art.

Supportive of this view is the fact that prior to chapter 14 there is a striking absence of language dealing with the impact of music, with its meaning or emotional significance. Now Guido suddenly takes on a new tone; words implying feeling are encountered in nearly even sentence. Why? Because we have gone from a

14 See 50 and 51:

Item ut rerum eventus sic cantionis imietur effectus, ut in tristibus rebus graves sint neumae, in tranquillis iocundae, in prosperis exultantes et reliqua.

15 Dolores Pesce notes on page 35 of her 1999 text (op. cit.) that the clear focus of all of Guido’s extant writings is "the theory and practice of plainchant," for it is only in chapters 18 and 19 of the Micrologus that he deals with diaphony. According to the most commonly accepted chronology, Micrologus is the earliest of his extant works. If so, then Guido either felt diaphony was not central enough to his concerns to merit further writing, or that the chapters on diaphony in the Micrologus were indeed written later and subsequently appended to the Micrologus. In either case, it argues that the book reaches its culmination in chapters 15-17.

16 It is noteworthy that Guido uses "regula"—or a variant of the word—eleven times in these initial "structural" chapters, yet only once in what I am calling the book’s "songwriting" section. (Ch.17.8). Given that compositional guidelines are of necessity freer and more flexible than the hard-and-fast rules governing basic musical terminology (or any method for sight-singing,) the sudden dropping of the word "regula" in these concluding chapters makes perfect sense. In fact, though Guido does use the term once in ch.17, he surrounds it by passages undercutting the sense of strict obligation which a "regula" conveys.

Consider 17:3-5, which, after all, precede 17:8—and therefore create the atmosphere in which we hear this late use of the word "regula." Those sentences are:

Quo cum omnium omnino melorum causa clarius est, poteris tuo usui adhibere quae probaveris commoda et nilominus respuere quae videbuntur obscena.

Particularly important is the use of the word "causa," for it suggests not something applied with mechanical regularity, but rather a reason that can serve as a basis for the understanding of melody—all melody, in fact, says Guido. Since Guido obviously knew that all melody does not exhibit this method—at least in the mechanistic interpretation of it—he must be thinking of the method in other terms. My view is that this sentence (and the chapter as a whole) is an appeal to sensitive musical judgment, taste, and insight, rather than to rote discipline.

17 I wish to express my appreciation for the existence of two very fine indexes to Guido’s vocabulary. First, the Wortindex zu den echten Schriften Guidos von Arezzo, prepared by Ernst Ludwig Waeltner and put forth, after his death, by Michael Bernhard. (Munich: Verlag der Bayerischen Akademie der Wissenschaften, 1976). The other is contained within Dolores Pesce’s 1999 text. It, however, does not reference the Micrologus, but only Guido’s other texts.

18 Prior to chapter 14, Guido eschews words implying value. We do not hear of "delight," or "sweetness," or "beauty," or the "grateful" relation of one melodic design to another—matters very much asserted from now on. Again—this is evidence that we have entered into the field of aesthetic judgment.
focus on the abstract features of music to those immediate and concrete features that come forth when we engage—as Guido does now—the issue that he himself at the heart of song: how, through the addition of melody, a text can gain in both power and sweetness. Consider these words from chapter 14:

Item et David Saul daemonium cithara mitigabat et daemoniacam feritatem huius artis potenti vi ac suavitate frangebat. [16-17]

In praising David for having the art to make song both sweet and powerful, Guido provides evidence (roughly a millennium in advance) for the accuracy of Eli Siegel’s theory of Aesthetic Realism—that beauty results from the junction of opposites. (More about this later.)

That a medieval musician was expected to be sensitive to words—to all their aspects, in fact—was noted by Leo Treitler:

…a chant melody…is the record of its maker’s responses to the relationships among word order, syntax, and phrasing and to the ways these are related to the connotation of words and their symbolic coloration.19

Here, Treitler argues, melody functions in effect as a second form of punctuation—clarifying the structure of the rhetorical and grammatical design of a text. Yet this is not all; a medieval musician might also respond to the sheer sensuality of words: their sound as sound. Treitler argues against those who would »take the juice« out of this, and turn it simply into an abstract ‘structural’ issue. He continues:

When I speak of the phonetic level of poetic expression I am referring to properties that receive a great deal of attention in the analysis of poetry, to be sure, but are rarely spoken of as sensual phenomena, sound….When they are represented synoptically as structural patterns the sound quality is forgotten, and with it one of the main properties with which musicians coupled.20

I would like to suggest that Guido’s core strategy in chapters 15-17 is not to lay down ‘rules,’ but rather to impart to his students the knowledge they need to become sensitive to the living quality of song—the power of which he describes in chapter 14. He wants to convey his conviction that in a good chant, melody honors and heightens the significance of words.21 And it is in chapter 17 that this matter

20 TREITLER, 2003; pages 460-461. These sentences are part of a chapter entitled «The Marriage of Poetry and Music.»
21 One of the most thorough of scholars in this field is Don HARRÁN who, in his major text Word-Tone Relations in Musical Thought: From Antiquity to the Seventeenth Century (Stuttgart: HÄnssler-Verlag, 1986), says this of the significance of Guido’s Micrologus:
Not only does he relay here the ancient concepts of musical expression, [the concept of modal ethos], as he knew them probably from his reading of Boethius, but he presages the basic tenet of the new relation of word and tone as it formed under the humanist impulses in a later period. (p.57)
reaches its greatest point of subtlety—for its here Guido engages the ‘sensual’ quality of a text.

Any good teacher of songwriting would begin by teaching his students to observe how a text is structured. And so does Guido. In large measure this is the focus of chapter 15. Next, in chapter 16, he deals with ‘tune-smithing’—basing it (as one might expect) to a large degree on parallels with rhetorical structure.

We have progressed far in laying down the fundamentals of successful songwriting. And yet, as the history of music has proven again and again, good song-writing requires more than just good tune-writing. There are many tunes of great melodic merit which, over time, ‘shuffle off’ the text initially joined to it. The »fit« simply is not organic enough to create living song.

What Guido turns his attention to in chapter 17 is precisely this issue, whose charming, sweetly frustrating, astonishing subtlety has engaged every serious composer (and scholar) of song in the centuries since he, so bravely, first addressed it. The question can be framed this way: how should one organize the ‘pitch structure’ of a melody so that it gracefully and valuably coordinates with what can only be described as another melody: that of spoken verse?—a melody which Guido rightly observes is fundamentally dependent on, and actuated by, the vowels within any given group of words.

22 I do not mean, of course, that Guido in his three-part exposition has covered all the fundamentals of songwriting—only that he covered the fundamentals as they existed in his day. There are other factors we consider now such as «text-painting» and the power of harmony to give unexpected emotional shading to a melody. These he never touches upon. There is also no mention of instrumental background—independent figures within an accompaniment; this was hardly of vital concern in Guido’s time. These »advanced features« of song, however, do not displace Guido’s »big three,« which are more elemental—and even to this day remain the core of effective songwriting.

Meanwhile, Guido’s statements in 15:50-1 do indicate that, at least in a rudimentary way, he was aware of the power of melody to do a kind of «generalized» text painting.

23 And certainly more than mere «prosodic appropriateness»—the various instructions in hymnals for «interchangeability» based on correspondence of syllable count to the contrary!

24 Strangely—but also tellingly—van WAESBERGHE in his A Textbook in Melody: A Course in Functional Melodic Analysis (American Institute of Musicology, 1955) never engages this issue, or even refers to it! Without wishing to be uncharitable, one can gather from this that perhaps he was somewhat deficient in grasping the core meaning of song. Had the book dealt only with «instrumental» melody, this lack of interest in the interaction of tonal color and pitch structure would have been more excusable. Many of his examples, however, are vocal melody.

Meanwhile, the book is one of the very few to take up the study of melody in a synchronic fashion, aiming at an expositions of its laws. As such, it is a blessing to the world—especially as its author never tires of saying a true melody must have life! (See my ruminations on the subject in footnote 26.)

25 While it is likely far-fetched, it is not entirely beyond the realm of possibility that Guido might have had enough awareness of the Hebrew language to realize the mystic sense (which the later Kabbalists clearly asserted) that words do not come alive until we attend to their vowels. Chapter 17, sentences 15 and 16, can be read as being in keeping with such a conception. Note, too, that the very verb «movere,» first appears in Micrologus at this point:

Équia cum his quinque litteris omnis locutio moveatur, moveri quoque et quinque voces ad se invicem...[15]
Guido, in fact, defines the issue in precisely those terms: «double melody.» After saying that linguistic euphony can be achieved through a careful placement of inter-echoing of vowel sounds, he argues that a «double charm» emerges when a well-constructed melody is added—a melody whose organization exhibits a similarity to that of the words themselves:

Latin is a language rich in verbs conveying a sense of motion. Another of these is «motare,» frequently present in chapter 16, especially in the form «motus,» and found earlier only once in the work. (Chapter 10:12—in the form of «motione.») Then there is «mutare,» a verb which clearly is more «neutral» than either «motare» or «movere»—conveying as it does a sense merely of «change» rather than «motion» per se. Its presence in the work nevertheless begins in the pivotal chapter 14.

Moreover, the sense of «life» is enhanced by the reflexive «ad se invicem.» There is a sense of reciprocal activity—of each «voce» affecting and being affected by every other. Here «voce» can be legitimately read to mean «notes» in their fullest sense. We fully experience the «voice» as pitch and vowel combined. (For a modern parallel, consider Schönberg’s conception of Klangfarbenmelodien, in which the atomistic element is an inseparable compound of pitch and color.)

Only here, in all of Guido’s writings, do we encounter «movere» joined to a reflexive. There is dance in this—the «dance of life.» («Se movere» as «dance».)

It has been my critical experience, paralleled I believe by that of any sensitive musician, that the more fully a song exhibits in all its elements a quality of «reciprocity;» the more «alive» it is. Only when every pitch and every verbal coloration interact, does a song fully become a song—and not a mere tune to which words are loosely related. (Of course, this presumes that the tune, as tune, has integrity on its own. That, of course, is also something not easily attained—as the «circular file» of composers regularly attests.)

To relate art and life: just as the human body (and mind) can function, after a fashion, while its various parts have trouble communicating with each other, a «song» can hobble along despite various «dead patches» in it—notes (or even whole phrases) which don’t seem sufficiently connected to the rest of the song. But we notice a deficiency in integrity and vibrancy in both cases. Not the best life; not the best song.

What emerges from these considerations is the possibility that Guido, consciously or by an impulse unknown to him, reserved these «lively» verbs for his later chapters because only there would they be strictly appropriate. Was the purpose of the Micrologus to lead a student towards an awareness of how to «give life» to song? How, in «microcosm,» to do with words and melody what his Creator has done with reality as a whole?

Such a parallelism might commend itself to a capacious and adventurous medieval mind, such as Guido’s. For in Biblical terms, God first creates the structural, inanimate, inarticulate universe, and only then «breathes life» into it—culminating, of course, in human life which alone among all His creatures can praise its Lord through words and through song. Could Guido be aware of the design of Genesis, and be modeling his text on it? At the very least, it is a lovely speculation.

Having dived into these speculative waters, let us not lose heart; instead, let’s swim out even further from the solid positivistic shoreline, and suggest the following: when the chapters on diaphony were added, Guido is now considering the music made by two independent voices joining in song, with one clearly derived from the other, yet independent—and perhaps even more charming. Might we, in our Genesis analogy have reached Adam and Eve? (Genesis 2: v.18-23).

26 Ch.17:10:  «sicut persaepe videmus tam consonos et sibimet alterutrum repondentes versus in metris, ut quandam quasi symphoniam grammaticae admireris.» (p.188)

27 John STEVENS (1986; op.cit.) asserts:

The music of the chant is based on speech-music, on the sound not the sense of the words... The music of the chant is essentially non-referential; it does not express the meaning of the words directly. On the rare occasions when it responds at all to the detailed meaning, it responds to the sound of that meaning, as realized in the sound of the words, whether the words are onomatopoeic or expressive of human emotion. (p.301)
Cui si musica similis responsione iungatur, duplici modulatione dupliciter delecteris.\textsuperscript{28}

»Responsione« seems to imply the primacy of the words. The text is the exemplar, and the melody ought to model itself upon it, »respond« to it.\textsuperscript{29} The response has to be true, but it cannot be mechanical; creative individuality is to be honored. Throughout these ‘songwriting’ chapters—and clearly in chapter 17—Guido tells his students to make use of only those aspects of what he is presenting which seem suitable to them. No such freedom is granted elsewhere in the book.\textsuperscript{30}

Are the »Rules« in Chapter 17 Arbitrary?

There is no doubt that, on first glance, what Guido recommends in chapter 17 might seem arbitrary in the extreme. And yet if we regard it as a set of ‘training wheels’—as a way of having a student begin to appreciate the expressive impact of vowel recurrence, and in particular the impact of that ‘timbral’ recurrence joined to one of pitch—it makes sense as a heuristic device. For once a student confidently can manage

However the case may be concerning the utter lack of direct mimesis in medieval song (and I think Stevens is protesting a bit too strenuously), he is right in asserting the close association of word and melody in the medieval musical mind. This is exactly what I am contending Guido exhibits in chapter 17.

Some pages later (385) Stevens cites Dante from the Convivio (I.v.13), indicating that Guido’s conception of what makes for beauty in song was essentially carried on by the great Tuscan poet, who lived nearly 300 years later. The core concept was »responsiveness.« Writes Dante (in Steven’s translation):

Éwe say a song is beautiful when its soundsÉ.are responsive to one another according to the requirements of art.

This is largely the point I was aiming at in my comments in footnote 24.

\textsuperscript{28} Ch.17:11. In the Monte Cassino manuscript (one of the very earliest) we find, in superscript to »modulatione,« the words »id est dulcatione«—which certainly imply an approbation of the idea. (See footnote 11 on page 188 of van Waesberghe’s edition).

\textsuperscript{29} Here, too, let’s engage in speculation. Christ is »the Word.« Relative to humanity (the church), he is pictured as her bridegroom. Just as Eve must guide herself by Adam’s word, accommodate her actions to his statements, so those who create the melody of chant should guide their melody by the »word« which precedes it.

\textsuperscript{30} There is a marked change of tone here in Guido’s use of the second person—that is, as he addresses his students directly. There are ten uses of »te« or »tibi« in the Micrologus, one of which is simply contained within the text »Ad te levavi,« used in chapter 15 as an example of liquescence. Only in the 17th chapter, where it appears five times, is the word used with a sense of freedom—the »you« given the right to decide for itself. Elsewhere its use implies that a student’s »freedom« will lead him astray (Ch.3:12; Ch.9:04), or that following rules will »automatically« result in good diaphony (Ch. 19:26). The use of »te« in Chapter 5, sentence 12 is warmer—but still not a »grant of freedom.« It tells the student to be prepared for the amazing effect of singing at the distance of the diapason.
—he then would be prepared to train his mind and ear in the appreciation of greater sonic complexity. Therefore Guido next creates this pattern, which has a significantly richer relation of recurrence and variation:

As a step-by-step procedure, this is as educationally sound as what typically we now do in the teaching of harmony—allowing students, at first, only the use of primary triads, then the other diatonic triads, and finally more advanced chordal structures.

A good deal of scholarly levity has been had at the expense of both Johannes Affligemensis and the anonymous author of the Liber Argumentorum for suggesting that one might expand on Guido’s models and go even further—have three, four, or even five concurrent series of vowels. Van Waesberghe, for one, calls this last possibility (suggested by Mr. Anonymous) a »farce.« For purpose of ridicule, he quotes the medieval commentator:

Si quis autem hos subsonos vel supersonos studiose requirit, cognoscat pro certo quod omne quod canitur vel quod scribitur, citius ad laudem Dei cantum in eos cantare potuerit.

Yet it needs to be considered whether this scorn is premature. Might it not be a result of a modern preconception? For by van Waesberghe’s lights, there would

---

31 The text is part of Mss Rome Bibl. Vat. Lat. 9496; it is also found in the Bibl. Vallicell. (B. 81) and the library of Cambridge’s Trinity College. (1441)
32 See WAESBERGHE (1951), page 62. John goes as far as 4; the anonymous author goes »the whole nine yards,« and says every note can take every vowel.
33 Page 62.
indeed be no advantage in such a full-blown expansion of vowel-pitch coordination. Far from making sight-improvisation easier, it would bog it down in a plethora of choices.

But what if Guido had something else in mind, which John and our anonymous author tacitly understood—namely, the systematic education of the musical ear so that one might feel the impact of every possible relation of musical interval and vowel? For certainly the return of a given vowel on the same pitch feels different than its return a third apart—which is Guido’s second proposal, indicated above as Figure Two. Similarly, the aesthetic impact is different—very different—when the returning vowels are separated by a mere scale degree.34 This, John innovatively suggests in the following sentence and figure:35

Dispone sex vel octo, vel etiam plures si libeat, per ordinem notas, eisque vocales dupliciter adscribas, ita scilicet ut unicuique notae duas seriatim attributas hoc modo:

Figure 3

:o u a e i o u
F G a b c d e f
:o u a e i o u

The anonymous commentator to the Liber Argumentorum merely takes this to its final point.36 That a serious student of songwriting would want to be systematic, and ‘test out’ on his ear all the possibilities of vowel/interval interaction, and that his teacher should encourage him to do so, is hardly a matter for ridicule. It is simply good sense. As Claude Palisca wisely observes in his Introduction to Warren Babb’s translation of the Micrologus, most of us need that study, and Guido knew it:

…then, as now, not everyone was blessed with the divine afflatus for melodic invention.37

34 On the fundamental distinction of the second and the third, in terms of ‘pure melody,’ see—among other place—chapter two, ‘The Laws of Tonal Affinity,’ from WAESBERGHE, A Textbook of Melody, op. cit.
35 Ch. 20: 7-8.
36 Moreover, the very wording has an implication of careful thought that van Waesberghe overlooks in his eagerness to present improvisation as the core concern of chapter 17. This anonymous commentator encourages his readers ‘studiously to search’ for the right relation of vowel and pitch. If it is found, then, indeed as he says, the song will be in ‘praise of God.’ Perhaps the implication is—if you don’t choose wisely (musically), that praise will be defective.
What about Consonants?

At this point, as we are considering what the study of chant-composition takes in, I would like to suggest there is evidence in the *Micrologus* that Guido was not just interested in vowels—but rather in the full color of the human voice. It is not impossible (though, to my knowledge it has not been done before) to read his words

Sed ne in longum nostra regula producatur, ex hisdem litteris quinque tantum vocales sumamus... (Ch. 17:8)

as merely a pedagogical concession. Aware that a complete course in the musical possibilities of the spoken word would require a book longer perhaps than the entire *Micrologus*, Guido prudently focuses on that aspect of words which singing, by its very nature, heightens—the vowels. For it is highly unlikely that as an experienced choirmaster Guido would not have been sensitive to the power, diversity and subtlety of consonants. Anyone who cannot hear that »thud« or »tug,« »lull« and »nut« have inherently divergent melodic characteristics, even as they share a common vowel, has an ear which (in the phraseology of our time) is »poetically challenged.« Guido is not one to diminish the sheer richness, the wide-ranging possibilities, of verbal sound. He says:

Nec mirum si varietate sonorum delectatur auditus. (Ch.14:7)

While I am taking this excursion, allow me a few more words concerning the subject. Since every scale degree in a given mode has its own »feel«—for as we vocalize on a single vowel, we are aware the emotion we get as we place that vowel on the *final* of, say, the Dorian mode is strikingly different from the emotion we receive if it is placed on the *second* modal degree—it follows that where a syllable falls in an overall modal design will make a great deal of expressive difference.

The unique structure of vowels and consonants within a syllable gives it not only a distinctive ‘timbral color,’ but also an inherent melodic tendency—to rise, fall, or stay level. Also an inherent speed—for spoken syllables are very diverse in tempi. To illustrate: placing »thud« on a modal final would, due to the weight of the concluding »d«, make the impression of inexorable cadence doubly strong. To place it, by contrast, on the second would make for dramatic tension: while the syllable falls heavily, the scale degree remains vibrantly active.

38 In chapter 15 (50-53), Guido writes of how repetition can appear to be elevation or lowering—depending on our sense of the accentuation of a word.

39 Gratitude requires I acknowledge two works which have deeply shaped my thought on this subject: Eli SIEGEL’s as-of-yet unpublished essay »The Alphabet,« and Deryck COOKE’s *The Language of Music* (Oxford: Oxford University Press, 1959).
»Componere« implies that we be careful as we »place« sounds in relation to each other. It is this ability to treat sounds lovingly—literally to care for them, as we take care with them—which I think Guido is hoping to inculcate in his students. And no teacher of music can do his students any greater service!

Where van Waesberghe May Have Erred

At this point, before proceeding to a consideration of Guido’s own practice in chant composition as illustrated by the two examples he presents in chapter 17, I would like briefly to mention some other possible weaknesses in van Waesberghe’s approach.

First, as Leo Treitler and others have conclusively demonstrated, melodic improvisation in Guido’s time focused around a ‘core melody,’ an aural paradigm, whose defining ‘gestures’ are to be left fundamentally unchanged. This being current practice circa 1025, it would be odd indeed for Guido, who was ‘practical’ if anyone ever was—who prided himself on making things ‘clearer,’ so that learning could take place swiftly—to introduce his students to the art of improvisation along lines that bore no connection with what they needed to do in the ‘real world.’

It would be as counter-productive as a contemporary instructor of jazz improvisation telling his beginning students to ignore a ‘standard’s underlying chord progression and melody, and improvise instead around intervals taken from the digits of their girlfriends’ phone numbers! Fun—but not too useful; and unlikely to shorten your odds in getting a gig at a local nightclub.

Second, a good deal of improvisation in Guido’s time—perhaps even the lion’s share of it—concerned the creation of the *vox organalis* relative to a pre-existing *vox principalis*. Such an added voice must, by necessity, use the vowels of the text sung by the principle voice—(we are centuries away from ‘multiple-text’ motet-writing). It is obvious one cannot create a diaphony having acceptable vertical structures while simultaneously following the pitch pattern required by adhering to the vowel layout Guido suggests. If this were a system primarily designed for improvisation, then it is a self-defeating one.

Finally, there is the question of why Guido would have created the double vowel series of **Figure Two** at all were he merely trying to enable his students to turn words into melody at sight. Surely a single series would suffice, a double one only making the issue more complex. One might argue the extra series was necessary to give the musician sufficient flexibility to create a melody would yield a proper modal cadence. Yet were this true, one would need more options than Guido

40 See pages 1-38; *op. cit.*
'mechanically' provides—as is shown when Guido himself was willing to bend the rules in order to make a successful cadence. Yet there is no logical reason why, if you can give yourself permission to bend the rules with a double series, you might not do so with a single one. Surely Guido has something else in mind here as he takes his students from «Level A» to «Level B». As I said earlier, I think he is prodding them forward to a new level of aural sensitivity.

Guido as Songwriter

Let us now consider Guido’s own work. After laying out his vowel/pitch template, derived from Figure One, he proceeds to create the following short song.

It is based on the portion of that figure which I bracketed earlier:

Figure 4

The text is very appropriate as an initial «model» of songwriting, for these words praise Saint John, and «In principio erat Verbum», is not only John’s assertion, as he opens his great Gospel, it seems likewise to be Guido’s—and very noticeably so in this particular chapter. Also fitting is the statement that he finds himself unequal to praising John’s merit adequately in song.

As far as I have been able to determine, the text appears to be Guido’s own, and some of the strongest evidence for that surmise is internal. What are the odds that a set of pre-existent words would yield such a perfectly lovely short melody—

41 Ch.17:31. Aribo comments on this in his De Musica. See page 71 of vol. 2 of the Corpus Scriptorum de Musica.

42 Since the text to «Ut queant laxis» is a hymn to St. John the Baptist, it has generally been assumed that this text, too, honors him. There is no evidence, per se, why this should be so—rather, as I am suggesting, it seems more logical to give the palm to the Evangelist.

43 After an extended search of the on-line data base Patrologia Latina, as well as Hesbert’s Corpus Antiphonarium Offici, and Lütolf’s «Register» to the Analecta Hymnica Medii Aevi, I can find no evidence of this text predating Guido.
one which not only cadences in complete accord with the requirements of Mode 2 and honors its reciting tone, but also exhibits so many of the compositional features Guido advocates in chapters 15 and 16? No; it is far more likely that Guido, the »songwriter,« carefully crafted the words and the music together—that they were more than just the result of a moment of inspired improvisation.44

Looking at Figure Four, we see the ‘motivic’ play of identity and variation which Guido calls for in 15:22-25.45 There is, in this short chant, the use of inversion and also the balance of arsis and thesis. There is the variety of melodic movement called for throughout chapter 16—the famous idea of »motus,« which is the first appearance in Western music theory of the concept of »melodic figure.«

The rhetoric of the text makes for a three-part division: 1) Sancte Johannes; 2) meritorum tuorum copias; 3) neqeo digne canere. In Figure Five we see the song from this perspective, and as a result even more of Guido’s compositional craft emerges to view.

Segment 1 and 3 each have rhetorical closure—the first by completing the salutation, the third by completing the sentence. Segment 2 does not close; the thought is still in process. Thus, by appropriate contrast, it ends not with the security of the finalis, but with the yet-to-be-resolved sub-finalis.

Segment 1, the ‘cell’ which generates the entire song, is itself a miniature ternary phrase, with the melodic gesture C→D surrounding a central F. Segment 3 is a clear variation of this cell, yet unlike its model—which features the motion of C

44 We know both from his use of verse forms in several of his writings, that Guido was a man who enjoyed literary composition. From his letter to Bishop Theobold we learn that music was not the only subject he taught at Arezzo’s cathedral school. This fact, combined with his aversion to presenting the more complex mathematics of the Boethian system—(an unlikely hesitancy from a teacher of the quadrivium)—makes it likely that these other subjects were the trivium. Van Waesberghe, for one, definitely thinks so. (Op. cit., 1951; page 59).

45 Guido knows the delights of sensual diversity. He writes in chapter 14:
Nec mirum si varietate sonorum delectur auditus, cum varietate colorum gratuletur visus, variete odorum foventur olfactus, mutatisque saporibus lingua congaudeat. (7-8)
He also knows this diversity needs to be tempered by a countervailing principle—that of rational restraint:
...in omnibus se haec ars in vocum dispositione rationabili varietate permutat. (ch. 15:19)
to D—it, at first, makes no such gesture. Only at the end, with the word »canere,«
does it arrive.

Now this word is the ‘clincher’ for the entire text. It is what we’ve been driv-
ing towards. Therefore it is artful of Guido so to arrange the syllables of this phrase
relative to its ‘motivic structure’ that we yearn for a motivic completion exactly at
the same moment we yearn for a verbal completion—a rhetorical one. That the
prosody of »canere« is such that attention is drawn to its first syllable, and thus to
that important ‘motivic recapitulation’ is, I believe, no accident.46

Nor is the subtle unification of the entire song through having that gesture,
C→D, bridge the 2nd and 3rd segments of the chant. Subtle, for neither syllable
involved in this bridge is accented, whereas the other three uses of the C→D ges-
ture all have attention drawn to them through an initial accented syllable.

As an aside, let it be noted that neither Mozart nor Brahms was a stranger to
the value, charm and power of what Guido presents here: the subtle retransition.
(See, respectively, the first movements of the 40th and the 4th Symphonies.) The
art precedes them, however, by a large number of centuries.

Guido has also composed this short chant so masterfully that its 2nd segment,
taken by itself, is in nearly a perfect mirror-form. Once we include the ‘bridge,’ which
takes us as far as the D for the initial syllable of »nequeo,« that mirror is complete
(albeit with one C as an ornamental tone): D, E, F, G—F—G, F, E, [C], D.

We have already noted that this ‘middle segment’ has a different pitch design
than the segments surrounding it, thus giving to the song as a whole an over-
arching ternary structure. Its range is larger, since it ascends three times to a cli-
max on G. Yet observe Guido’s art—an art of tempering opposites: for while G is
indeed the climax from the melodic point of view, the syllables which fall on this
pitch are not accented. Instead, a lower note, F, set to the vowel »o,« receives in
this segment all the prosodic accents.

As accented sounds are muted and muted sounds are accented, the result is a
smoothly integrated work. Opposites are experienced simultaneously.

The art with which this is accomplished is impressive—for only in this seg-
ment does the pitch F arrive on accented syllables. Guido earlier prepares us for it;
this is not the first time we have met that pitch and that syllable. But he doesn’t
»give it away« since never before were they brought, through accentuation, to the
foreground.

46 A case has been made for a full-blown use by at least some musicians of Guido’s time of distinct
quantitative temporal values, along the lines of traditional Latin quantitative verse. See, for instance,
Rhythmic Proportions in Early Medieval Ecclesiastical Chant by J.W.A. Vollaerts (Leiden: E.J. Brill,
1958). However this may be—and its accuracy has been sharply questioned by the majority of contem-
porary musicologists who engage the issue—it remains true that even when quantitative distinctions
are muted, a residual awareness remains of the distinction between syllables in terms of significance.
That »accentual« Latin poetry grew out of »quantitative« cannot be denied. See, in particular, the
opening and the sixth chapter of Dag Norberg’s An Introduction to the Study of Medieval Latin Versifi-
Having mentioned the muted and the accented, we now observe other opposites at work in this example of Guido’s art. If we follow the song’s accented syllables as its central ‘story line,’ we see that they help not only to individualize the segments, but also to unify them. In segment 1, only the vowel ßa˙ (and hence the pitch C) is accented. In segment 2, only ßo˙ and the pitch F receive this emphasis. In segment 3, the drama intensifies: we get three different accents: on D, E, and C—thus, on the vowels e, i, a. Meanwhile the final ‘accented’ sound agrees with the first: the vowel ßa˙ and the pitch C.

All five vowels, all five pitches are used in this short song, but Guido first restrains their progress, and then bursts forth. Meanwhile, the bursting forth is simultaneous with a perceived stability brought about by the conjunction of the ‘motivic’ and ‘sonic’ recapitulations—(the impact of first and last words being very close in their Klangfarbenmelodie).

Again, the oneness of opposites is sought for, and achieved. And this seems, then, an appropriate moment to note that Guido’s sense of beauty strongly evidences the truth of Eli Siegel’s great principle of Aesthetic Realism: ßAll beauty,« he stated, ßis a making one of opposites, and the making one of opposites is what we are going after in ourselves.«47

**Guido and the Joy of Contrary Motion**

Claude Palisca, writing of chapter 17 of Micrologus, notes this:

A perplexing detail of the system is that the vowels a e i o u are assigned to an ascending series of pitches, when the progression from open to closed vowels would suggest rather a descending scale, at least if voice production in the eleventh century was anything like ours.

And then he adds:

ßBut it must not have been.«48

The unstated premise causing the ßperplexity« is the assumption that a composer would want to coordinate sung-pitch and spoken-pitch in parallel motion. But history teaches us that musicians of this time enjoyed contrary motion very much, and in their diaphony sought to employ it as often as possible. Guido himself was an advocate of contrary motion. So if he were aware of the natural tendency of his vowel series to imply a ‘quasi-melodic’ motion contrary to that of the

47 (From a lecture of 5 August, 1949, «Aesthetic Realism and Beauty,« in Aesthetic Realism: Three Instances. (New York: Terrain Gallery Publications, pp. 7-8).

'pitch series' to which they were applied, then we might be in the presence of another case of Guido impelled to create an artistic technique by which opposites interpenetrate in behalf of beauty.

One need only listen to what would have happened had he aligned the vowels directly to pitch.

Figure 6

The resultant chant is far less musical, and—in the context of the music of Guido’s era—quite problematic in its ultimate cadence. It is plain the impact of what might be called the ‘implied contrary motion’ of the ‘two melodies’ helps unify the chant and give it over-all sonic equipoise.

Interestingly, far less composition and equipoise is present, at least as it appears to this listener, in this example which Johannes Affligemensis gives as a ‘parallel’ to Guido’s ‘single vowel’ series. Again, I have not been able to find any source for the text—so I will proceed on the assumption that John (like Guido, before him) gave himself the liberty of crafting his own syllabic design. However this may be, the syllables do fall much less artfully than in Guido’s parallel example. Not only is there confusion about the modality—(Dorian? Phrygian?)—there are several very awkward melodic motions. Among these is the fall on ‘libera,’ which seems prematurely to draw the chant to a cadence. This is not only a hurtful thing in terms of both the underlying grammar and the art of ‘tune-smithing,’ but also just the wrong gesture for a word implying freedom! Meanwhile, the setting of ‘supplies’ is lovely.

It is clear that John is not only following Guido’s theoretical model but also his musical/textural one. He too creates a three-part rhetorical plan. His chant likewise begins with a salutation—this time to the mother of God. John’s melodic design also reserves the highest pitch for the middle segment.

And yet, and yet—for all the parallelism, there is so much not here, in terms of aesthetic power and finesse, that Guido’s superb composition does have. As an

---

49 Through correspondence with several Latin scholars, I have learned that medieval education could indeed inculcate such an awareness of the placement of vowels relative to each other. Dr. Larissa Bonfate of NYU wrote me (via e-mail) that the reason the vowels were taught in the order a, e, i, o, u was not merely a result of that being the order in the alphabet but ‘had to do with the sound.’ It seems there was a figure used in that education—the ‘vocalic triangles’—in which ‘a’ was placed at the apex, and the two radiating sides descended, respectively, ‘e’ to ‘i’ and ‘o’ to ‘u.’ Hence Guido might very well have consciously created the contrary-motion effect which so plainly can be heard in the chant—yet more indication of his impulsion to make a one of opposites.

50 Chapter 20:4.
example, let us only mention John’s ‘ham-fisted’ approach to his high notes. Lack- 
ing Guido’s compositional suavity and surprising yet convincing imagination, John 
has each ‘high A’ land crudely on an accented syllable. When we add to this 
graceless ‘over-emphasis,’ the apparently random structure of his melody as a 
whole, the unavoidable conclusion is: John is to be esteemed tremendously for 
his unparalleled appreciation of Guido (and for his own, independent contribu-
tions to music theory)—but simply as composer he is nowhere near Guido in stat-
ure.

Another lesson that emerges is this: a mere ‘mechanical’ application of Guido’s 
idea will not yield pleasing chant. Since few (if any) of those who followed Guido 
were skillful enough to avoid the difficulties his method raises, one can easily un-
derstand how—throwing up their 11th century hand in frustration—they deemed 
this chapter an aberration and chose, out of ‘respect’ for Guido, not to comment 
on it.

51 Including the fact that, unlike Guido’s model, the accented syllables in John fall on pitches that 
create no discernable pattern.

52 Out of courtesy, and not to belabor the point, I will not take up the other examples in John’s 
twentieth chapter. I do believe similar criticism, however, would be appropriate to them.

53 Such things have happened often in music history: the inability of an ‘average’ musician, 
when applying a great musician’s mode of composition, to obtain the high aesthetic results of the latter. 
Under such circumstances, it is not difficult, in terms of human psychology, to understand the silence 
(or the opposition) that might follow. Many people attacked Bach, after all, for being ‘artificially math-
ematical.’ Schönberg, too, suffered from it. Guido may even have been alluding to something like this 
(at least in part) as he wrote (so often!) of the envy and ill will he encountered.
Guido Sets St. Ambrose with Finesse

Let us turn now to Guido’s other example from chapter 17—his setting of the words “Linguam refrenans temperet ne litis horror insonet visum fovendo contegat ne vanitates hauriat,” which may be translated freely as: “Let him rein in and control his tongue, so that the horror of strife may not resound [among us]; encourage him also to cover his sight, lest he drink up empty vanities.”

Here Guido gives himself a far greater challenge, for the text is not original. It is the second stanza of a hymn attributed to St. Ambrose, “Iam lucis orto sidere,” which is used for the Office of Prime. Not only is he now unable to shift vocal sounds to help him shape his melodic line, he must also contend with the fact that the meter of this venerable hymn is far stricter than that which he allowed himself in the earlier example.54

Even for a mind as powerful as Guido’s, these restrictions are onerous. He knows it, and says “ut tibi paulo liberius liceat evagari alium item versum subiunge vocalium,”55 expanding his system, as we saw in Figure Two, to make room for another element of choice.56 He then creates the following chant—again, derived from the portion of the figure which I earlier bracketed.

Figure 8

54 Where his first text breaks into 3 rhetorical units of unequal syllable count (5, 10, 8), and whose prosody scans unequally (dactyl, trochee, 3rd paeon, amphibrach, dactyl, dactyl, trochee, dactyl), this second text falls into strictly symmetrical rhetorical and prosodic structures. Four units, balanced as 2 + 2, with each unit being cast in trimester: dactyl, trochee, dactyl.

55 Ch. 17:23.

56 Technically, even his first system had several aspects of choice built into it, even if it were applied to a pre-existent text. One could always vary the implied mode by beginning the vowel series at different points. (John, in fact, illustrates this: Chapter 20:5). Moreover, if one chose to, there is no inherent reason one needed to restrict the range of the chant to a fifth—Guido originally lays out the first vowel series over 16 notes, allowing every vowel three presentations, and “a,” four. (Ch. 17:14). While leaping from one register to another would hardly seem stylistically appropriate to the early 11th century, expanding a chant’s range to a sixth or seventh was quite common. An octave range, and even, though more rarely, a bit beyond, are hardly unknown.
In the *Liber Usualis* the following melody is given for »Iam lucis orto sidere,« to be used for Solemn Feasts. Its second quatrain, of course, contains precisely the words which Guido will set—and so I give this chant with its second stanza, in order to facilitate comparisons with Guido's new setting:

**Figure 9**

\[ \text{Melody} \]

The great likelihood is that this melody preceded Guido's, and that Guido (with breath-taking art) not only managed to navigate his own restrictive system well enough to create a very pleasing new chant of his own, but to have his chant echo the earlier one, as if in paraphrase of its essential melody.

**Figure 10**

*John's Chant*

\[ \text{Melody} \]

*Original Chant*

\[ \text{Melody} \]
That a paraphrase was intended by Guido is evidenced by how John—who is, after all, modeling his own writing on that of Guido—does precisely the same thing at this point in his text. For his first example using a double vowel-series, John likewise chooses a set of pre-existent words. Only they are even more famous, »Vox clamantis in deserto: parate viam Domini, rectas facite semitas Dei nostri.«57 Like Guido, moreover, he not only casts his new melody to match the mode of his model, he also attempts to parallel several of its core melodic gestures.

Returning to »Linguam refrenas temperet,« let us compare the two versions and see what information about Guido’s compositional methodology might arise from that study. Guido’s version, in keeping with his methodology, is naturally purely syllabic, whereas the original chant also makes use of melisma. To a degree this restricts Guido’s compositional freedom. Nevertheless, in some regards, his new song has a significantly finer relation of words and melody than does the earlier chant.58

Guido’s setting of the opening words very aptly conveys the text: its sense of curb and restraint. In this melody, the tongue is, indeed, curbed as it closely circles the least tonally active of scale degrees: the tonic. And a particularly fine gesture is the monotone setting of »temperet,« made aesthetically engaging by falling on the active second degree of the mode. The result is a oneness of stasis and energy. The earlier chant, by contrast, is very fluid, even glib; the tongue is anything but restrained here! Meanwhile, as tune, the earlier chant is lovely, indeed. By contrast, Guido, the »modernist,« is far more engaged with what we now call the art of »word-painting.«

Turning to the issue of prosody, we can observe that Guido’s setting is likewise clearer than that of its exemplar. To go at it in perhaps excruciatingly fine detail, we notice that the original chant weakens the accent for the middle syllable of »refrenans« in three ways: First, the ‘two note’ neume (to our modern ears) on the initial syllable gives away the pitch for the accented syllable before we reach it. Second, by setting that first syllable on the second degree of the mode, it makes the motion up to the third degree less noticeable. Guido, by contrast, lowers the pitch for the weak initial syllable, and gains thereby a leap upwards of a third. Finally, it seems in this instance less jolting to reach the concluding unaccented syllable by a conjunct motion (Guido) rather than a disjunct (the original chant.) That extra ‘jolt,’ delicate as it is, does skew the prosody a bit.

57 Isaiah, 40:3. More evidence of how closely John modeled his writing on Guido’s can be seen in the fact that the second example he gives for composition with dual vowel-series takes, as its text, the second stanza of the »Ut qeant laxis« hymn to the Baptist, made so famous in music history by Guido in his Prologus in Antiphonarium.

58 To be fair, it must be said that likely the melody of »Iam lucis orto sidere« was composed in relation not to this stanza primarily, but to the opening stanza—whose words it does, indeed, fit more closely. The hymn is strophic, and as every composer knows, it is hard, hard and hard to craft a melody which will meet every stanza equally well.
Finally, let us look at this first phrase in terms of grammatical structure. It is ‘part one,’ of a two-part idea, needing the next phrase to complete it: »linguam refrenans temperet / ne litis horror insonet.« It is therefore more appropriate that this initial phrase fall on a tone requiring the melody to proceed—a dissonant tone. Guido does this, by ending on the second degree of the mode. The original chant ends on the finalis; prematurely, I believe; and to the detriment both of meaning and melody.

For phrase two, one needs to say that the setting in the original chant of the word »horror« on its highest pitch—the sixth—is very effective. However, there is also a loss: for one thing, the prosody is twisted, with attention now drawn to the second syllable of the word. Moreover, one can feel this climax comes perhaps a bit too early—on the 13th of the 32 syllables in this stanza. The impact is to make the second rhetoric unit (phrases three and four—»visum fovendo contegat / ne vanitates hauriat«)—seem, a bit, like an anti-climax.

Guido, on the contrary, manages his choices of pitch so that we are actually pulled across the rhetorical divide. Far from anticlimax, this second large rhetorical unit begins with this highest of all his notes. Moreover, Guido leaves the climax alone; it comes only once. In the original chant, the climactic pitch is recapitulated on the middle syllable of »fovendo.« This is awkward. Were anyone to speak this phrase, and heighten »fovendo« at the expense of the other two words in it (which are more important to its meaning), it would indicate the speaker lacked rhetorical insight.

Here, one might fault Guido a bit, too—for »contegat« would generally be more accented in a sensitive reading than »visum,« insofar as its sonic structure needs to be brought out as preparation for the »near-rhyme« with »hauriat.« Moreover, the fall to the »finalis« is as ill-placed here as earlier we observed it was for phrase one in the chant from the Liber Usualis.

Meanwhile, compared to his other options for setting »contegat,« it is hard to see how Guido might have chosen better. Every other possibility carries with it different and, indeed, more fatal weaknesses from a rhetorical point-of-view. In addition, strictly in terms of the tune, we would lose an important structural dovetail—a repetition of a small motivic unit binding the two phrases together—as can be seen in the following figure:
We proceed now to another comparison between the two chants. Praise for the earlier chant can be given in relation to the subtle echo which can be heard, at the beginning of its fourth phrase, of the incipit of the entire tune. The melisma for »hauriat« also seems, in this setting, to be very apt—congruent with the sound and with the meaning of the word. Yet if we turn to Guido’s setting, it becomes clear, by comparison, that the aesthetic palm should be awarded to him.

Let us go at it word by word. »Ne« for Guido is on the second degree of the mode, which conveys an energy that the earlier chant cannot convey since the word, there, was set on the finalis. Negation, as a concept, always requires energy, not the stasis which the finalis, by necessity, implies to the ear. »Vanitates« is certainly more ornate in the earlier chant, but by being so it tends to undermine the expressive power of the melisma on »hauriat.« And visa-versa. The »overuse of melissma,« of course, is a fault to be encountered in later centuries of songwriting, too!

Guido manages matters more simply, and more boldly. »Vanitates« begins with its highest note, and ends on the second degree—both gestures making it ‘unstable,’ which is the clear ethical criticism implied by the word. The earlier chant, interestingly, has »vanitates« beginning and ending on the finalis, which does convey a certain appropriate smugness—but whether this tonal gesture is as telling in this context as what Guido presents, could be questioned. To my ear, it is not.

Finally, there is the masterstroke of Guido’s setting of »hauriat.« He ends, as he begins, with the repetition of the finalis. Something similar is done in the earlier chant, but with much less power, for the penultimate neume is a ‘double-neume,’ whose entrance is on the second degree. Moreover, the finalis is approached entirely from above, which makes it seem far less ‘physically’ appropriate to the meaning of the word—which implies a deep intake—than does Guido’s melodic gesture, which begins with a sudden presence of a pitch we have not heard since the beginning of the chant: the subfinalis.

And here we marvel at another aspect of Guido’s art—for he has so organized things that the conclusion of his chant is a retrograde of its opening.

Figure 12

Moreover, a ‘cellular’ analysis of the melody as a whole reveals that it artfully makes use, once again, of the various structures Guido took pains to outline in chapters 15 and 16—including inversion and transposition. And it is interesting to
observe how Guido, having first made available to himself a double series of vowels, nevertheless clearly wishes one of them to predominate, using it 72% of the time—23 of 32 syllables.59

Most dramatic, still, is what occurs on the pitches ßa˙ and ßc.˙. The first (ßa˙) is used for nine syllables in this chant; and eight of these are given to the vowel ße.˙. The second (ßc˙) is used for six syllables; and it, too, has a near consistency of vowel—ßo˙ being used five times. If we examine the exceptions, the following emerges: the vowel consistency which has just been described is disrupted precisely in words having a disruptive meaning; the accented syllable of ßhorror,« and the melodically most prominent syllable of ßvanitates.«

It is not only musically, but ethically acute of Guido thus to subtly relate the concept of ßhorror« and ßvanity.« Perhaps, it is only coincidence—but I choose to think, or at least to hope, it was part of Guido’s over-all artistic plan. In either case, what we hear is lovely, subtle, and tellingly appropriate.

Another Look at Guido’s Vowels

It is a curious fact that when one analyses the vowel structure of the ßLinguam refrenans temperet« as it appears in the Liber Usualis, (Figure 9) that structure hints at the kind of vowel-pitch layout Guido develops in the Micrologus—or, to be more precise, the type of double-vowel series presented by Johannes Affligemensis: one in which neighboring pitches share a common vowel.60

This suggests the possibility that Guido, innovative as he was in Chapter 17, might yet have been influenced by aspects of prior practice. I have begun looking into this, but lacking a super-computer capable of analysis the astonishing amount of data involved, I hesitate to present my very tentative preliminary findings, which do tend to suggest the validity of the aforementioned hypothesis. More research

59 John’s practice seems different, here, than Guido’s. In his setting of «Vox clamantis» the 28 syllables are more nearly equally divided between the two vowel-series: 16 and 12.
60 Whenever a syllable is set melismatically, I am considering only the initial pitch in this analysis. The restriction seems reasonable.
plainly is needed. Given Guido’s praise of the particular loveliness of Ambrosian chant,\textsuperscript{61} that body of song, perhaps, deserves special investigation.\textsuperscript{62}

Since we have been considering Guido’s thought about melody and vowels, it seems only right to add a brief word about »Ut queant laxis,« the chant which inaugurated the concept of solfège, and whose melody he almost certainly composed—at least in the form it has come down to us. In keeping with the idea of separate pitches being represented by separate vowels, we note that the syllables which lay out the hexachord do exactly that—albeit in a somewhat different order than that suggested in the \textit{Micrologus}.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure14.png}
\caption{Example of Ambrosian Chant}
\end{figure}

Moreover, when a sixth vowel must be found for the sixth note, the one chosen for repetition (»a«) is placed a third away from the earlier use of that vowel; exactly as recommended in chapter 17.\textsuperscript{63}

\textit{Echoes of Guido}

I conclude this consideration of Guido’s marvelous, strange, controversial chapter with a few remarks as to its impact on later music. As we saw, few writers picked up on it in the immediate decades and centuries which followed its composition. By the time of the \textit{Summa musicæ}, which dates, according to Christopher

\textsuperscript{61} Ch.15:43, where he calls these »praedulcis.« Also to be noted is that, once again, in this passage, Guido is calling for the oneness of opposites. He wants similarity and difference at once: »similitudo dissimilis.«

\textsuperscript{62} Another possible source for Guido’s thought could be the various tonaries influenced by the Hartkner Antiphonary (\textit{Monumenta palaeographica gregoriana}, iv/1-2. Münsterschwarzach, 1988) for in it vowels—both Latin and Greek—are used to indicate the psalm tone for an antiphon.

\textsuperscript{63} When the placement by Guido of all the vowels in this chant is analyzed relative to its melody, one can get a further sense—an even more breath-taking one—of the boldness and richness with which he marshaled »double melody.« To keep this paper from venturing beyond gargantuan to truly monstrous proportion, I purposely held myself back from including this analysis. But it is available upon request!
Page, around 1200, we have, for instance, very extensive comments on how to create new chant (lines 2097-2294), many of which plainly derive inspiration from Guido and John—and yet no reference at all to the matter of coordinating pitch and vowel.

Perhaps the reason for the lack of interest is that composers and theorists in Guido’s own day were increasingly interested in wrestling with the new problems brought forth by polyphony. And as was mentioned before, Guido’s method is singularly inappropriate for it; at least so long as one requires that the voices coordinate around a single text.

However, beginning in the late medieval period, and into the Renaissance, we do see a conscious attempt to make use of Guido’s core concept—albeit, as I think, without an understanding of his own deeply flexible approach to it, let alone its fundamentally heuristic purpose. One of the first is Jean Charlier de Gerson who, in his Collectorium super Magnificat, aligns sol, fa, mi, re and ut to the vowels a, e, i, o, and u. Others include (chronologically) Eustacius Leodiensis, John Lloyd, and Romano Micheli—all of whom create musical designs through coordinating vowels to a fixed pitch-series. The practice (or variants of it) was common enough that Zarlino, by 1558, felt the need to coin the term «sogetto cavoto» in his Le institutioni harmonische to describe it.

Perhaps the most distant echo of Guido’s conception can be found in the serial procedures of many 20th-century composers. Might Thomas Mann have been aware of the Guidonian roots lying quietly underneath some of the technical ideas employed by his devil-driven genius of a composer, Adrian Leverkühn?

Meanwhile, if the central argument of this essay is correct, and Guido’s core purpose in the 17th chapter of the Micrologus was to convey to other musicians the necessity of respecting the word in its fullness, and loving all the possible ways words can be beautifully coordinated with «musical» sounds—then Guido’s enduring legacy is far more extensive. One would find it nearly everywhere a musician in the Western tradition had achieved excellence in songwriting.

65 See pages 118-124 of PAGE, 1991; op. cit.
66 Notice, apropos of our earlier discussion, that Gerson aligns the implicit «pitch-levels» of the vowels in parallel to his musical pitches—just the opposite of Guido’s procedure.
67 Insofar as Leverkühn was affected by Kretchmar’s lectures about Conrad Beissel, this is plausible. Such «linkage» was also posited by Julian HERBAGE in his review of Thomas Mann’s novel Doktor Faustus for the August, 1949 issue of The Musical Times. (Vol. 90, pages 279-280).
**Sazetak**

**O ČEMU SE RADI U 17. POGLAVLJU GUIDOVA MICROLOGUSA? PRIJEDLOG ZA NOVI ODGOVOR**


Shvatimo li poglavlja 15-17 kao cjelinu (a 14. poglavlje kao njihov »preludij« i kao dražestan prijelaz iz onoga što im prethodi), ono što se neustrašivo javlja jest ovo: Guido u tim poglavljima stvara uvodni tekst za »pisanje pjesama«. On nije toliko zainteresiran za improvisaciju per se, koliko za stvaranje novoga pjeva: jedinstva riječi i melodije koje je relativno »fiksirano«.

Donose se dokazi kojima se sugerira da su pravila u 17. poglavlju ustvari niz »uputa za trening«, odnosno načina kojima se učenika navodi da počne cijeniti izražajni utisak što nastaje ponavljanjem samoglasnika, osobito utisak onog »timbarskog« ponavljanja na jednoj tonskoj visini. Pravila pokazuju smisao kao heurističko sredstvo. Dokazi proizlaze iz dubljeg proučavanja ne samo Guidova teksta i njegovih glazbenih primjera, nego i iz tekstova i glazbe koji se nalaze u djelima *De musica* Johanneasa Affligemensisa i *Liber Argumentorum* nepoznatoga autora.