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Pitch series in chant composition: a demonstration

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ABSTRACT. *The exposition of an analytical method that reveals the simple basis of the melodic structure of Western liturgical chants belonging to the two general categories of responsory and antiphon. Included are historical observations meant to explain the origin and evolution of chant-melody in the period from the seventh to the thirteenth century.*

It was quite by chance that I became aware of the operation, in Western liturgical chant, of *pitch-series* (a term, I am well aware, that will raise eyebrows). I had occasional inklings that the melodies of several genres employed in the Ambrosian Mass and Office – even melodies with different *finales* – were constructed similarly. Many other scholars must also have had this experience, but an inkling became obvious when, to facilitate a particular line of research, I turned to letter notation. I was trying to make use of a computer to find similar stretches of melody in responsories, and to make 'string-searches' feasible I transcribed the melodies into letter notation. In the event, the results proved disappointing, but the advantages of pitch-letters emerged clearly in later projects devoted to the comparison of Franco-Roman and Ambrosian melodies.[1]

Representing the degrees of the diatonic scale by letters is a thousand or more years old, and in one form or another is still widely used. The system perfected by Helmholtz has practical advantages for chant analysis: he assigned lower-case letters for the pitch-range of the octave below Middle C,[2] where almost all chant melodies are centred; and all these letters, from *c* to *b*, fall serendipitously on a computer's keyboard under the left hand, leaving the right hand free to hold, with cursor or finger, the place in the source from which the melody is being transcribed. When the pitch-letters of the compared Gregorian[3] and Ambrosian melodies were aligned in

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[1] These comparisons were of Ambrosian and Franco-Roman counterparts. I will mention only a few: 'Introits and Ingressae – Milan and Rome: The Elaboration of Chant Melodies, the Operation of Musical Memory', *Plainsong & Medieval Music*, 19 (2010), 89–122; 'The Adoption of the Roman Respond Gradual in Milan', in *'Quod ore cantas corde credas': Studi in onore di Giacomo Baroffio Dahnk*, ed. Leandra Scappaticci (Città del Vaticano, 2013), 239–55; *Offertorium and Offerenda: Kinship and Structure* (Ottawa, 2012); 'Rome, Milan, and the Confractoria', *Papers Read at the 15th Meeting of the IMS Study Group Cantus Planus, Dobogókö, Hungary, 2009, August 23–29*, ed. Barbara Haggh-Huglo and Debra Lacoste, 3 vols. (Lions Bay, 2013), 1: 51–76.

[2] Octaves are differentiated with lower- and upper-case letters and added signs (*G*, *A*, *c*, *d*, *c'*, *d'*, etc.).

[3] By Gregorian I mean Roman melodies and practices as adapted and expanded by the Franks.

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columns and arrayed on the page in successive rows, similarities and differences were more immediately obvious than in staff-notation, where much less can be displayed and compared on a standard page. But what is more important, this arrangement of letters revealed that the Roman and Milanese chant-dialects were both constructed similarly from recurring pitch-series and segments of series.

Before we go further, one special usage in the letter notation of the examples given here needs to be explained. Its usefulness can be enhanced for our purposes if a single letter[4] is made to stand for a pitch that was immediately repeated, once or several times. There is an obvious exception when the last pitch of one series or segment is also the first of the next; and in such cases a pitch-letter *will* be repeated but always in parentheses to indicate that it had been sung just previously, and either occupies the same place in the sequence or begins a new one. It should be said at once that the result of this space-saving is only minimally reductive: the essential features of the melodies are preserved in the resulting outline – no pitches are ever omitted, and their exact order is preserved.

It became clear, after the analysis of hundreds of items, that the main corpus of Franco-Roman antiphons and responsories – elaborate chants that are not in evidence (even inferentially) much earlier than the late seventh century[5] – are constructed regularly[6] from a very limited number of simple melodic figures based on pitch-series, figures that were extended by repetition, whole or in part, as often as the text required. The presumption is that their use was to some extent *ex tempore* (more about this later), but *not* that the singers produced entirely different melodies on different occasions.

All the pitch-series, and all the figures derived from them – whatever the mode of the chant – are derived from the same diatonic scale (consider the parallel case of mode and key in ancient Greek music). And all the series, if represented on a staff, have the same simple shape: a melodic arc rising from its opening pitch and descending from the apex to the *finalis.* The ambits of these arcs are not fixed: their *minimal* compass (not, by the way, found in every chant) can be very narrow, confined within the interval of a third or fourth, as in Example 1 .

But whenever there are two or more text phrases,[7] as in virtually all melodically elaborate chants, the arc with the narrowest ambitus will be heightened in some of its iterations. The series *f–g–a–g*, for example, might be expanded as in Example 2, where the rows of pitch-letters are arranged as they might appear in the analyses (i.e. with

[4] In some earlier publications, a letter that indicated where successive syllables were sung on the same pitch was given in italic. My thinking was that when so written it might identify an underlying reciting-tone. But such 'recitation' in a chant is almost never limited to a single pitch, and the complication of italic letters proved pointless.

[5] James McKinnon, *The Advent Project: The Later Seventh-Century Creation of the Roman Mass Proper* (Berkely and Los Angeles, 2000).

[6] I goes without saying that some melodies exhibit irregularities. These can be reasonably explained, but perhaps it needs to be said that the melodies have not been, nor can be, forced into a Procrustean melodic framework.

[7] In antiphons such as *Deus judex iustus* for Tuesdays at Prime, and in responsories such as *Exsurge domine* for Wednesdays (these are the complete texts), the texts are too short to require repetitions of pitch-series. *Antiphonale monasticum*, Vatican Edition 1934 (available online), 12, 14.

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c–d–e–f–e–d
f–g–a–g–f–e
g–a–g–f
f–g–a–g

Ex. 1 Minimal series in chants with finales on *d*, *e*, *f* and *g*.

f–g– a–g
f–g–a–b– a–g
f–g–a–b–c'– b–a–g
f–g–a–b–c'–d'– c'–b–a–g
f–g–a–b–c'–d'–e'– d'–c'–b–a–g
f–g–a–b–c'–d'–e'–f'– e'–d'–c'–b–a–g
f–g–a–b–c'–d'–e'–f'–g'–f'–e'–d'–c'–b–a–g

Ex. 2 The maximum expansion of a pitch series with a g-*finalis*.

g a
g a
g a b
a b
g a b
g a b c' d' c'
a b c'
b c' d' c' b
c' b
c' b a
b a
b a g
a g

Ex. 3 Typical patterns of repetition.

gaps), although in no chant will we find such a predictable progression, and almost never all these successive stages.

It is probably important (because it suggests a process of elaboration that tended to preserve beginnings and endings) that the series with the narrowest ambitus is found significantly more often at the opening and conclusion of a chant.

The way a single pitch-series in a melody with a *g-finalis* might be extended by repetition of its segments is demonstrated in Example 3 (the illustration is hypothetical, because none of the potential pitches is ever skipped).

The pitch-series operate consistently in the two general chant-classes, responsories and antiphons (the former including all chants that, like the alleluias, offertories and the respond-graduals, have – or once had – elaborate verses, the latter, all the chants in the Mass and Office that might have simple recitation associated). The series might seem to operate in the authentic Tracts, those with the eighth-mode melody, but this is basically an elaborated recitation formula whose simple form – or something like it – should perhaps be seen as the explanation, the *fons et origo* of the characteristic

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melodic arcs generated by the pitch-series. These do not operate in hymns, where a melody is repeated more or less exactly for however many stanzas. Nor are the series to be expected in the later chant-forms. Although the earliest trope- and sequence-texts were set to repeated, successive segments of the melody of the host alleluia or responsory – a procedure significantly like that employed to extend the tone series – later sequences and proses do not always follow the early models.[8] But there is an argument *a fortiori* for passing over *all* late additions to the repertory (including late antiphons and responsories): this evidence, mainly inconsistencies – mistakes, it might be argued – revealed by analysis, suggests that by the tenth or eleventh century melodies were learned by rote, and that singers lost sight of the underlying patterns – even though these survived virtually intact, as we can see in the kind of analysis advocated here.

The surprisingly small number of basic figures involved in the production of responsories and antiphons is unsettling: our shared perception of the vast collection of chant melodies is of complexity and diversity. David Hiley, who kindly spent some time looking at schemata[9] such as those presented here, was struck, he said, by the 'up and down, up and down'; and indeed, the repetitive compositional procedure might be seen as merely mechanical *Fortspinnung*. The qualifier, 'might', is needed because some scope remained for 'artistic' decisions: not all the *potential* pitches need be used in every iteration, and the repetition of series or segments of series would have been *ad libitum* at a time when the melodies were not necessarily the same on every occasion and in every venue. But, of course, even to speak of artistic decisions is to take for granted what is not in fact in evidence, that the ancients allowed liturgical melodies an aesthetic value and importance beyond enhancing the solemnity of the occasion and making the texts more comprehensible, in the large interiors of a church, than they would be if simply recited.

The operation of series allows us to imagine an alternative to prodigious feats of memory, namely a practice where the chants, many sung only once a year, might – to some extent at least – be re-created on each occasion from a small number of basic figures. And further to the matter of musical memory, there is evidence that liturgical chant was once melodically simpler, and that the repertory was considerably smaller – a relatively few items (most of them generally appropriate, rather than specific to the day) serving the whole of the Temporale and Sanctorale. We are told[10] that even after its very long history the entire sung-liturgy of the Coptic Church, Mass and Office, can be recorded on two digital-audio discs. But in the West at least, development was embraced. Christianity flourished after the reconciliation of Church and Empire in the fourth century, and splendid churches were built. One reads – and this is

[8] In the *Dies irae*, for example, the three melodies for stanzas 1–6 are repeated for 7–12 and 13–17 (the last line is not paired).

[9] I have used the terms *schema* and *schemata* to emphasise that these arrangements of the pitch-letters are artificial constructs and not to be seen as transcriptions of the melodies.

[10] Balázs Déri, 'The Coptic Psalmos', *Papers Read at the 15th Meeting of the IMS Study Group Cantus Planus Dobogókö/Hungary, 2009*, Institute of Mediaeval Music, Musicological Studies 100/101 (Ottawa, 2013), 163–92.

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significant in the history of the chant – that some of the clerics and monks were chosen, scandalously, for their musical skills and the beauty of their singing. That the melodic basis of the hundreds and hundreds of the antiphons and responsories we know is so simple would suggest what might anyway seem likely: that cantors, who still, in the seventh century, sang *solo* virtually all of the liturgy that did not take place at the altar – even the extensive psalmody of the Divine Office – that these cantors did not abandon the old settings, but adapted and gradually elaborated them for new liturgical texts. It would seem that the melodic figures revealed in analyses of the kind offered in this article are so simple, so similar, and so few, precisely because they were the basic shapes of the oldest musical settings, which were probably not far removed from recitation formulae.

A few words are needed about the relationship of tone-series and tonality. *Tonality* seems a better term than *mode*, which is complicated and ill-defined. Perhaps, even better, would be *key* – as this term has come to be understood for music of the seventeenth century and later. The tonality, or key, of a chant is set by the *finalis*. The term suggests that it refers only to the final pitch, the determinant of modal classification, but the *finalis* is much more. We might fairly think of it as a pitch sounding continuously in the mind of the singer to anchor him in much the same way that the *actual* drone of the *tampura* anchors the tonality of classical Indian music. Moreover, the *finalis* is the pitch on which the principal sense-units of the text regularly cadenced.[11] The exceptions, and certain other irregularities in the melodies, must be explained as faults in their transmission. Such faults, over time, were inevitable in an oral tradition, and began to pass unnoticed because the singers, whose new ideal (encouraged by Charlemagne's policy of liturgical uniformity) was to sing the melodies – on every occasion and in every venue – in exactly the same way. When chants came to be sung chorally, and rote learning became the principal method of transmission, irregularities that would formerly have been obvious were carefully committed to memory and eventually enshrined in notation.

That the ends of the major sense-units of sung texts coincided so consistently with cadences on the *finalis* has not been widely enough noticed, partly because the punctuation given in printed chant-books, though it may be perfectly grammatical, does not always divide the texts as they were understood by those who set them to music. Not infrequently, more than one cogent interpretation is possible, and in such cases a cadence on the *finalis* will reveal the sense-break that was intended.

It is now time to present a few of the schemata. It may seem startling to say so baldly, but the melodies of responsories, antiphons, offertories and alleluias are not *fundamentally* different; the distinctions lie in their function, their degree of elaboration (neumatic or melismatic) and their manner of performance. It will not, therefore, be necessary to show the operation of tone-series in all chant-types – only in a

[11] This way of marking the major divisions in the text is ideal, and no doubt the normal practice, but failures in the rote transmission of the melodies have sometimes obscured the governance of the *finalis*. Examples can even be found; for example, the antiphons *A bimatu et infra* and *Ambulabunt mecum in albi*, which were discussed (*c*.900) in the *Commemoratio brevis* – antiphons that have the same melody, but end on different pitches.

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representative sampling. Examples that require less explanation could easily have been found, but to avoid any suggestion that those presented here particularly suit the purpose of the present article, they have been selected randomly: they are simply the first of each type entered in the alphabetical index of the easily available *Graduale Romanum* of 1961, namely an introit, a communion (both are antiphons) and three chants that belong to the general class of responsories, namely a respond-gradual with verse, an alleluia with verse and an offertory[12] – all Mass chants, but only because – for those who will want to compare the schemata and the melodies in staff notation – these are much more easily available[13] than antiphons and responsories from the Divine Office.

To begin, the shortest and simplest of the examples is the communion antiphon *Ab occultis meis*. The text falls naturally into two sense-units:

> *Ab occultis meis munda me, domine;*
> *et ab alienis parce servo tuo.*
> (Cleanse me, Lord, of my [sinful] secrets;
> and spare your servant from [the wickedness of] others.)

With the hope it might be helpful to those who wish to make their own analyses, I will outline the procedure. First is the transcription of the melody into alphabetic notation. Circumstances allow this notation to be surprisingly simple. The style of Western ecclesiastical chant is so consistently conjunct that with relatively few exceptions melodic intervals are a fourth or smaller; only when a larger interval is encountered (as in the first of the examples that follow) is an unobtrusive arrow (↑) used to indicate the direction of the leap. For the small minority of chants that do not begin in the central octave below Middle C, the Helmholtz modifiers, capital letters or superscript strokes (′), are used to specify the octave of the first pitch.

One begins by making alphabetic transcriptions, including repeated notes. To these I add a vertigule (|) after the last pitch of the last word of each of the important text phrases (sense-units) and, as a reference to the full text given at the beginning of each schema, this word in parentheses:

> ggbdcbgagaagfaccaccdeedbdcccb| (*domine*)
> a↑edefegeedefeedededcbbcdcbcdcbagagcbccbcedecddbb| (*tuo*)

The second step is to condense the transcription by representing immediately repeated pitches with a single letter:

> gbdcbgagagfacacdedbdcb| (*domine*)
> a↑edefegedefedededcbcdcbcdcbagagcbcbcedecdb| (*tuo*)

[12] Offertory verses were dropped centuries before the age of printed books, but they have been edited and published by Karl Ott, *Offertoriale sive versus offertoriorum* (Paris, 1935).

[13] The same chants are also available in earlier Vatican editions, beginning in 1908.

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It will be seen that the major sense-breaks, after *domine* and *tuo*, both coincide with cadences on *b*, the *finalis* of *Ab occultis meis*.

Proceding from simple 'strings' of pitches to a schema that reveals the structure of the chant is easier than it might seem: first, because the chant will end with a series concluding on the *finalis*, as will at least one other sense-unit; second, because iterations of the pitch-series will be additionally in evidence throughout (their conclusions are marked in the schemata with a raised period); third, because the structural figures (the melodic arcs) that are the basis of antiphons and responsories are so few and easily recognizable; and finally, because of the guidance offered by a 'rule' that emerged after the analysis of hundreds of items.

The rule, not as complicated as it might seem, is that once a melodic arc reaches its apex and begins its descent, the ambitus is fixed; subsequent segments that begin at an earlier point in the same series must neither expand nor reduce this range. When the pitches in the following row of the schema *would seem* to heighten or reduce the current arc, it must be assumed that the final pitch of the preceding or the first pitche(s) of the next series have been elided, and that another is under way. The concluding pitch of a series, the *finalis*, is quite frequently elided. It seems probable that this was a natural (if unconscious) tendency, for the same reason that phrases are overlapped and cadences avoided in the polyphony of the Renaissance: too many cadences tend to weaken the forward impetus of the melody.

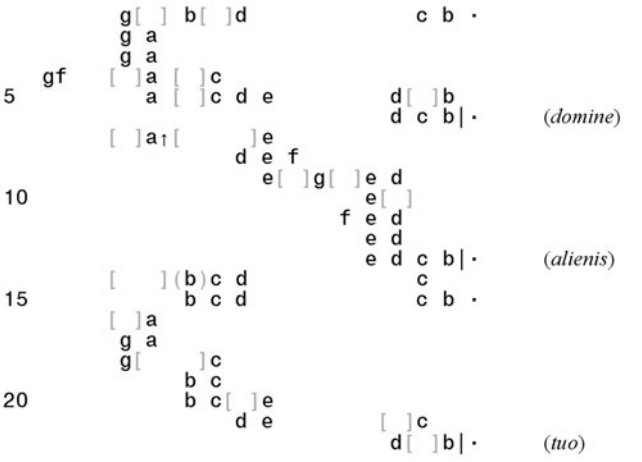
It emerges that *Ab occultis meis* is based on three pitch-series:

g–a–b–c′–d′–	c′–b	(Ex. 4, lines 1, 14–15)
g–a–b–c′–d′–e′–	d′–c′–b	(lines 2–6, 16–22)
g–a–b–c′–d′–e′–f′–g′–f′–e′–d′–c′–b		(lines 7–13)

A word about the representation of 'missing' elements. The structural series of the melodies almost never make use of all the potential pitches. In most cases, presumably, the elisions were deliberate, for the sake of variety in a repetitive procedure. In the schemata, empty brackets (in a grey font, to make the *apparatus criticus* less obtrusive) are usually nothing more than placeholders that make the alignment of the letters clearer. However, some damage in the transmission of the melodies over centuries is only to be expected, and editorial suggestions – not to correct the melodies (they are what they became), but to offer a guess about what had been intended. These suggestions, also given in grey in the examples are supported, whenever possible, by the earlier or later behaviour of the melody.

The *g–f* in line 4 of the schema (Ex. 4) is introductory; these pitches (like those of the cadential extensions that appear in the other examples) do not belong to the structural series. Such protheses – probably casual elaborations – are frequent features of antiphons and responsories. Prothetic pitches do not always introduce an iteration of the series, but are often (as in line 4) inserted after the series has begun, and are

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Ex. 4 Schema of the communion antiphon, *Ab occultis meis*.

often repeated – to relaunch it, as it were. Compare line 4 of the schema (Ex. 4) with lines 1–2, 31 and 33 of the schema of the introit antiphon in Example 5.

For the introit antiphon *Accipite jucunditatem gloriae*, and for the remaining examples, there is no need to repeat all that has been said. Its text falls naturally into three sense-units ending with alleluias:

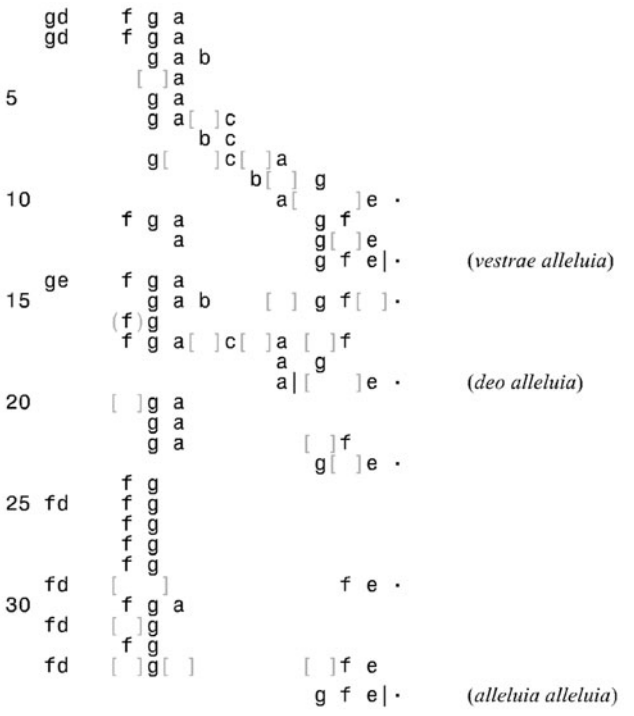
> *Accipite jucunditatem gloriae vestrae, alleluia;*
> *gratias agentes deo, alleluia;*
> *qui vos ad caelestia regna vocavit, alleluia, alleluia, alleluia.*
> (Rejoice in your glory, alleluia;
> giving thanks to God, alleluia;
> who calls you to the heavenly kingdom, alleluia, alleluia, alleluia.)

The break after the first sense-unit and at the end of the text both coincide with cadences on the *e-finalis*. The second break was probably intended to be similar, but presently coincides with *a*, the pitch just prior (see line 19 of the schema in Example 5; at this point in the melody some pitches appear to have been lost). The pitch-series are:

f–g–	f–e	(Ex. 5, lines 24–9)
f–g–a–	g–f–e	(lines 11–13, 20–3, 30–4)
f–g–a–b–	a–g–f–e	(lines 14–15 [the *finalis* is elided])
f–g–a–b–c'–b–a–g–f–e		(lines 1–10, 16–19)

and the protheses: *g–d*, *g–e* and *f–d*. The three protheses were perhaps all meant to be the same (either *g–d* or *f–d*).

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Ex. 5 Schema of the introit antiphon *Accipite jucunditatem gloriae*.

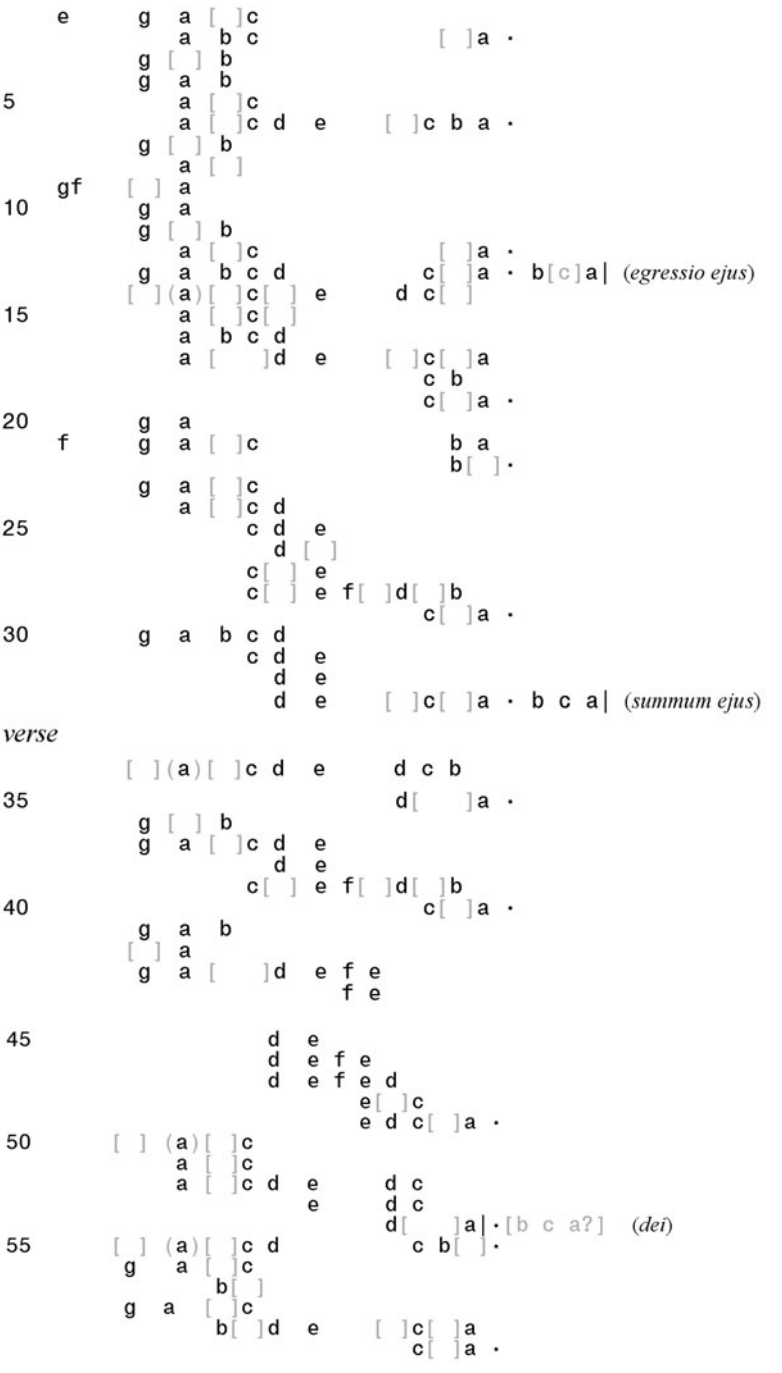
Next, the respond-gradual *A summo caelo* reads:

> *A summo caelo egressio ejus;*
> *et occursus ejus usque ad summum ejus*.
> *V. Caeli ennarant gloriam dei;*
> *et* opera *manuum ejus annuntiat firmamentum.*
> (From heaven's heights is his going forth;
> and his course even to its end.
> *V*. The heavens display the glory of God;
> and the firmament declares the work of his hands.)

The text, taking the caput and verse together, consists of four phrases, with natural sense-breaks occurring after *egressio eius*, *suum ejus* and *dei*. All four phrases concide with cadences on *a*, the *finalis*, and it may be that all once ended with the same cadential extension, that is, *b–c′–a* (cf. Ex. 6, lines 13, 33 and 69 of the schema). The extension is presently missing at *dei* (see Ex.6, line 54). The unusual fall of a fifth in lines 68–9 suggests that some other pitches have also been lost. The pitch-series are:

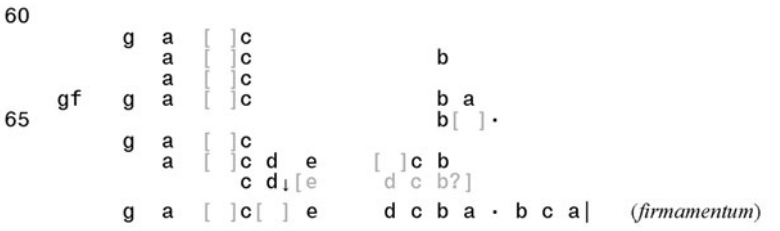
g–a–b–c′–	b–a	(Ex. 6, lines 1–3, 7–12, 20–1, 61–5)
g–a–b–c′–d′–	c′–b–a	(line 55)
g–a–b–c′–d′–e′–	d′–c′–b–a	(lines 3–66, 14–19, 30–3, 34–5, 50–5, 56–60, 66–9)
g–a–b–c′–d′–e′–f′–e′–d′–c′–b–a		(lines 23–9, 36–40, 41–9)

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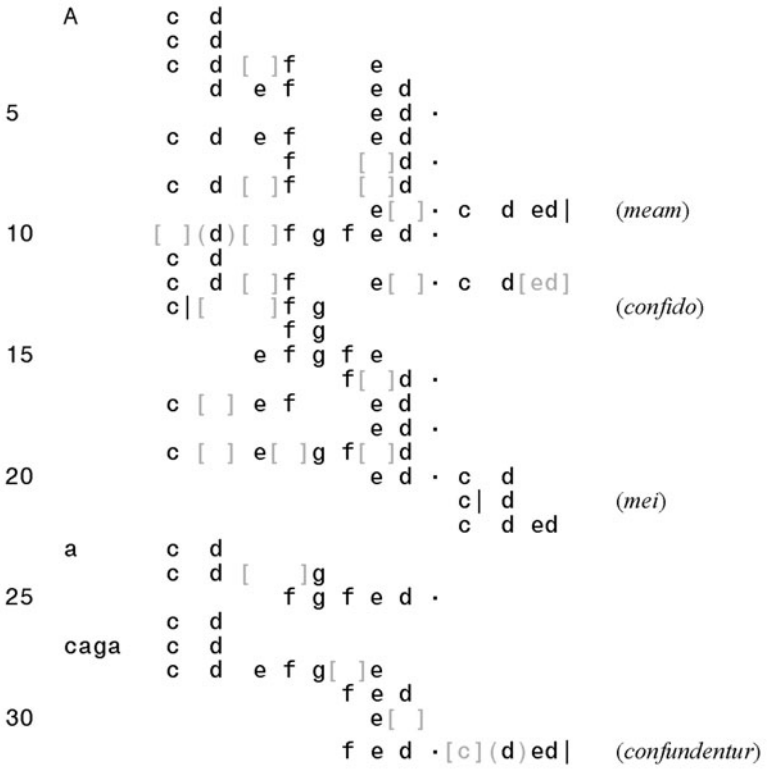


Ex. 6 Schema of the respond-gradual *A summo caelo*.

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Ex. 6 Continued.



Ex. 7 Schema of the offertory *Ad te domine levavi*.

The prostheses are *e*, *g–f*, *f* and the extension *b–c′–a*.

The text of the Example 7, the offertory *Ad te domine levavi*, falls naturally into four sense-units:

Ad te domine levavi animam meam;
Deus meus in te confido;
Non erubescam neque irrideant me inimici mei;
Etenim universi qui te expectant non confundentur.
(To you, Lord, I have offered up my soul;

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In you, my God, I trust;
I will not be ashamed, nor will my enemies mock me;
Truly, none of us who await you will be thrown into confusion.)

The pitch-series are:

c–d–e–f– e–d	(Ex. 7, lines 1–5, 6–7, 11–12, 17–18)
c–d–e–f–g–f–e–d	(lines 10, 13–16, 19–20, 23–5, 26–31)

The prostheses are *A*, *c–a–g–a* and the extension *c–d–e–d*.

Let us consider what is regular and irregular about this offertory. The two series are employed quite regularly ten times, and the first of the sense-units (ending with *meam*) cadences on the *finalis* with a familiar extension, *c–d–e–d* (see Ex. 7, line 9). Details suggest some damage in the transmission of the melody. The cadential extension found in line 9 was probably intended at the end of the second sense-unit as well (line 12), and again at the end of the chant (line 31), although in these places it is presently incomplete. The extension is slightly elaborated by the repetition of its first two pitches at the third sense-break, after *mei* (lines 20–2). These considerations suggest that the text underlay is not as originally intended: the last syllable of *confido* would seem to belong at the end of line 12 (not on the next pitch at the beginning of 13); and, similarly, the last syllable of *mei* and the end of the third sense-unit would seem to belong at the end of line 22 (not, as presently, in the previous line).

The last example, and in some ways the most difficult, is the alleluia with the verse *A summo caelo egressio*, whose scriptural citation is similar to that of the respond-gradual already examined:

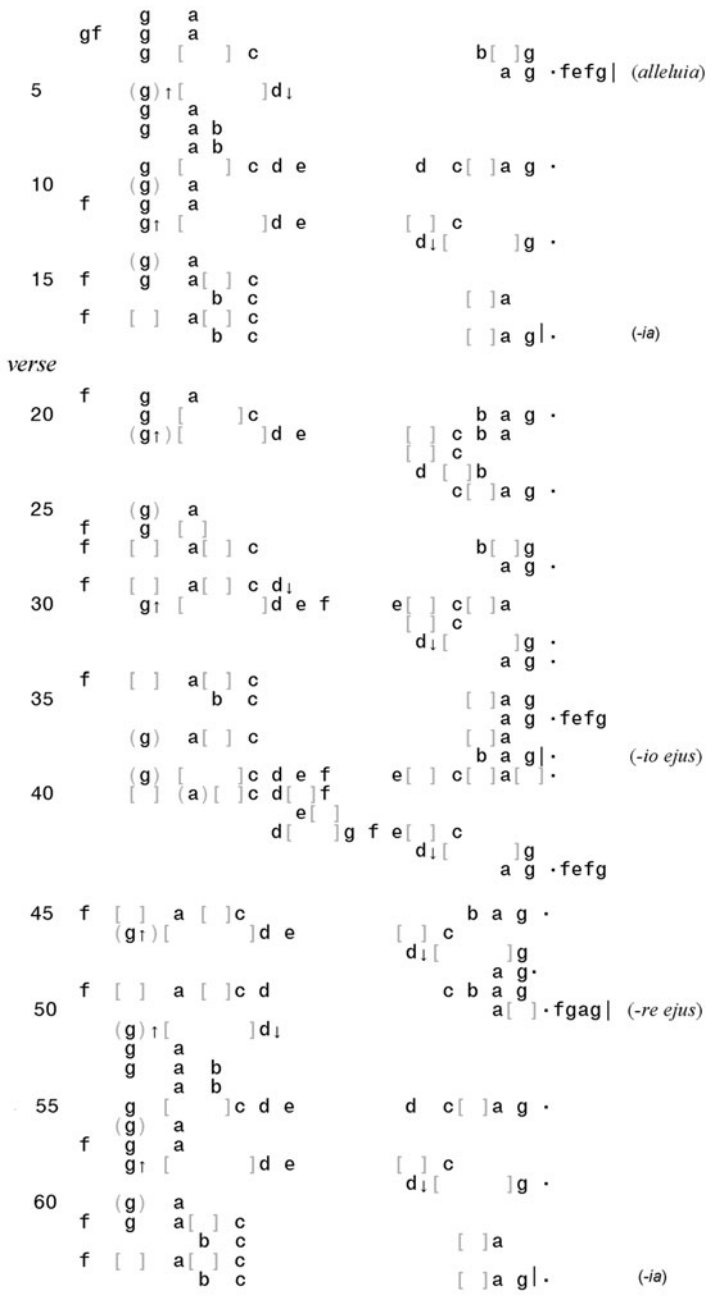
Alleluia
A summo caelo egressio ejus;
nec est qui se abscondat a calore ejus.
(Praise God
From heaven's heights is his going forth;
and no one may hide from the heat thereof.)

There are four major sense-breaks: the first after the opening word (see line 4 of the schema in Ex. 8), the second after the jubilus (line 18), the third after the sense-break in the verse (after *egressio eius*, line 38), the fourth after *calore eius* (line 50), after which the jubilus is repeated. The pitch-series are:

g–a–b–c′–	b–a–g	(Ex. 8, lines 1–4, 14–18, 25–8, 34–6, 37–8, 45)
g–a–b–c′–d′–	c′–b–a–g	(lines 49–50)
g–a–b–c′–d′–e′–	d′–c′–b–a–g	(lines 5–9, 10–13, 20–4, 46–8)
g–a–b–c′–d′–e′–f′–	e′–d′–c′–b–a–g	(lines 29–33, 39)
g–a–b–c′–d′–e′–f′–g′–f′–e′–d′–c′–b–a–g		(lines 40–4)

The prostheses are *g–f*, *f* and the extensions *f–e–f–g*, *f–g–a–g*.

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Ex. 8 Schema of the alleluia V. *A summo caelo*.

The first word, *alleluia*, concludes with a cadential extension, *f–e–f–g* (see Ex. 8, line 4). A different extension, *f–g–a–g*, is employed at the end of the verse-text, before the repetition of the jubilus (everything after line 50 in the schema is the same as lines 5–18). These two extensions may once have been the same. The extension *f–e–f–g*

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appears twice more, at the end of lines 36 and 44. The simplest explanation for these difficulties is that the text underlay of the verse has been corrupted, that a minor sense-break after *abscondat* and the median break after *egressio eius* did once coincide with these two extensions.

The schema of the alleluia and verse has been placed last in this article because it requires the most explanation, and because it provides an appropriate occasion for a necessary caveat. Besides what appear to be two egregious instances of faulty text-underlay, the melody seems to have lost pitches in several places. With respect to such difficulties, analysis is uncertain and is offered with due reservation; other explanations are possible, if less likely. To be sure, even where no irregularity needs to be accounted for, different arrangements of the pitch-letters might be defended. But the differences would be in detail, and would not change the big picture, the revelation that the same compositional procedure underlies all the various genres that can be included in the general categories of responsory and antiphon.

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