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Christopher Page

The performance of Ars Antiqua motets

This article is dedicated to the memory of Professor Frank Harrison, a scholar whose delight in the sound of medieval music was an inspiration to all who knew him.



1 A young cleric (perhaps a student at the University of Paris) offers money to a girl who, to judge by the frame-drum (? or tambourine) in her hand, is off to dance in a carole. From a 13th-century Bible moralisée produced in Paris (London, British Library MS Harley 1526, f.31r).

*Sequitur bene psallite ei . . . id est non vane leticie lascivie sicut illi qui cantant mundo in motetis, cantilenis et choreis . . .*¹

Praise the Lord well . . . not with vainglorious and wanton pleasure like those who sing for the world in motets, lyrics and dance-songs.

The author of these words, the early 14th-century and renowned theologian Pierre de Palude, suggests an association between the motet and the sprightly dances (or *caroles*) that were performed in streets and churchyards by young men and women. He clearly despises the 'wanton pleasure' that motets provide, and the implication is that they share the joyful and

primaverall colours always worn by secular music in the Middle Ages.

The treatise *De Musica* by de Palude's contemporary, Johannes de Grocheio, presents an altogether different picture.² When Pierre speaks of the motet he opens a window that lets in the sound of dance music; Johannes de Grocheio, in contrast, closes a door that shuts the motet into all the solid and professional chambers of Parisian life. Such music should not be performed for the laity, he declares, because it only baffles them; let these pieces be sung for the *litterati*—in other words for the theologians, the Masters of Arts,

the prosperous lawyers and the successful physicians who thrived on the banks of the Seine.³

The paradox of the 13th-century motet is that it is both playful and learned at the same time. Though Pierre de Palude and Johannes de Grocheio disagree, it is clear that each represents part of the truth; surveying the repertory as a whole, each fulfils a helpful role as guide. Pierre was right to speak of motets and dance songs in the same breath, for some *Ars Antiqua* motets incorporate scraps of dance songs (see ex.1). These quotations give many motets a light and informal air, confirming the impression that the genre's social background lies, in part, with the amorous interplay between Parisian students and the local girls with their ring-dances. Even in 'learned' pieces the freshness of dance music is rarely far away (see ex.2).

Ex.1 A dance-song, or rondet de carole, whose words are preserved in the early 13th-century romance of Guillaume de Dole by Jean Renart, and whose music can be reconstructed from a 'quotation' in a two-part motet. From F. Gennrich, *Rondeaux, Virelais und Balladen* (Dresden, 1921), i, p.10

C'est la gieus en mi les préz, J'ai a -
 6 mors a ma vo - len - té! da - mes i ont
 11 baus le - véz. Ga - ri m'ont mi
 15 oel. J'ai a - mors a ma vo - len -
 19 - té, te - les com ge voel.

Ex.2 Triplum, bars 1-8, of *Ut celesti possimus/Cum sit natus hodie/Hec dies* as it appears in the Bamberg MS. From Anderson, *CMM*, lxviii, no.21

Ut ce-le-sti pos-si-mus fru-i dul-ce-di-ne,
 5 ser-vi-a-mus il-li qui nos re-de-mit san-gui-ne.

On the other hand, Johannes de Grocheio was well-advised to emphasize the learned appeal of a genre in which two, sometimes three, songs are performed at the same time, their texts and melodies colliding

together in a way that seems to obliterate the very lightness and charm that has been admired (ex.3). And while the upper parts possess a melodiousness that may have an instant appeal for the modern listener, the tenor parts do their best to sound like a three-inch tape-loop. With unyielding determination they repeat their rhythmic (and often melodic) material, thus effacing the very qualities which most modern performers and listeners regard as the essence of medieval chant: an expressive melodiousness and a freedom from any mensural organization.

Above all, it is in the texture of these pieces that the force of Johannes de Grocheio's words about the learned character of the motet may be sensed. The harmony is intellectual—or at least highly controlled—in a way that may seem to be at odds with the gracious and appealing melodies from which the vertical sonorities are made. With a strictness of method that rivals the scholastic philosophy of the 13th century, virtually every perfection in a motet (represented by a dotted crotchet in ex.3) opens with a perfect consonance. This was usually an open 5th or octave, but it could also include the $\frac{8}{4}$ chord (the first sonority of bar 5 in ex.3) which even medieval theorists regarded as less *jocundus* than the $\frac{8}{5}$. The harmonic structure of an *Ars Antiqua* motet is therefore subject to a rigorous counting process, and for 13th-century musicians this was part of the mystique of measured music; in their eyes *mensurabilis* was to *musica* as *sapiens* is now to *homo*, implying a new departure in evolution with reason emerging triumphant after untold ages in which men had been governed by instinct alone.

Poised between the serious and the playful—between 'earnest and game', to borrow a phrase from Chaucer—the 13th-century motet offers much to modern performers and listeners, and by collating several hints in contemporary treatises with the results of practical experiment it becomes possible to reconstruct, at least in part, the manner of their performance. Needless to say, this cannot be a wholly objective enquiry, and what follows is based upon my own experience with professional British singers, most of whom received their training in the choir of some cathedral or collegiate establishment in England.

What kinds of voices were used for motets in the 13th century? I believe that the existence of something like the counter-tenor voice must be granted at the outset. In his *Scientia artis musicae* of 1274, the French theorist

Ex.3 Rencontre le tans/Quant fuellent/In ordorem, from Thomas, Robin and Marion motets, ii

[Triplum] En - con - tre le tans De Pas - cour, Que toz a - mans Mai - nent

[Duplum] Quant fuell - lent au - bes - pin, Qu'oi - seil - lon

[Tenor]

A!
IN ODOREM

6

joie Et bau - dor. Plus n'i de - meur, Que ne soi - e Ren - voi-siés et plains de joie Et

au ma - tin Chan - tent cler en leur la - tin, Je, qui de pen - ser n'ai fin Et qui por a -

13

d'a - mour; Sans se - jor Voel fere un no - viau chant. Ne - por-quant Ma joie est tor - nee_ en plor,

- dre - cier ting Seur mon che - val a droi-tu - re Sen - tier lés un che - min, Tro - vai par - de - soz un pin

20

Se ne puis a - voir_ l'a-mor De ce - le, qui mon cuer a Et qui toz jours mes l'a-vra, Se li plaist; el

Pas - to-rele au cors_ fin, Ou el chan - tot Et si no - tot; En son fre - stel

27

m'o - cir - ra, Tan - tost qu'on vou - dra. Mon cuer a en sa bail - li - e, Face en quan - que li plai - ra.

me - noit joi - e Ne qui - de, que nus hom l'oi - e. Je la vi sim - plete et coi - e, Seu - le sans Ro - bin.

34

Sa grant biau - té m'a - si pris Et sor - pris, De s'a - mor - sui si es - pris, Bien vi - vrai en
Vers li m'es - lais, De moi li fis lais, A li m'o - troi Du tout et m'a - mor li

41

joi - e, Se s'a - mor m'o - troi - e; Dieus doinst qu'ele soit moi - e! Si m'a - vroit tres - tout ga -
lais. Es - ba - hi - e Fu, si se des - li - e. Quant de li me vit

A²

48

- ri, A! Dieus, et res - bau - di. Ele a fre - sche la cou - lor.
pres, Si torne a la fuie Et je a - pres. Par la main l'ai pri - se;

55

Blan - che com - me flor Est, ce m'est a - vis: Che - veus blons, front bien as - sis, Les ieuz vairs, ri -
Ce que li dis, Mout pe - tit pri - se, Ce m'est vis. S'a - mor qui m'a - ti - se Veut que je soie a

62

ans, Les sor - cis - haus et vou - tiz, Bou - che ver - melle et ple - sant. Dieus,
sa de - vi - se Ses a - mis. Au col li mis Mes bras et

69

76

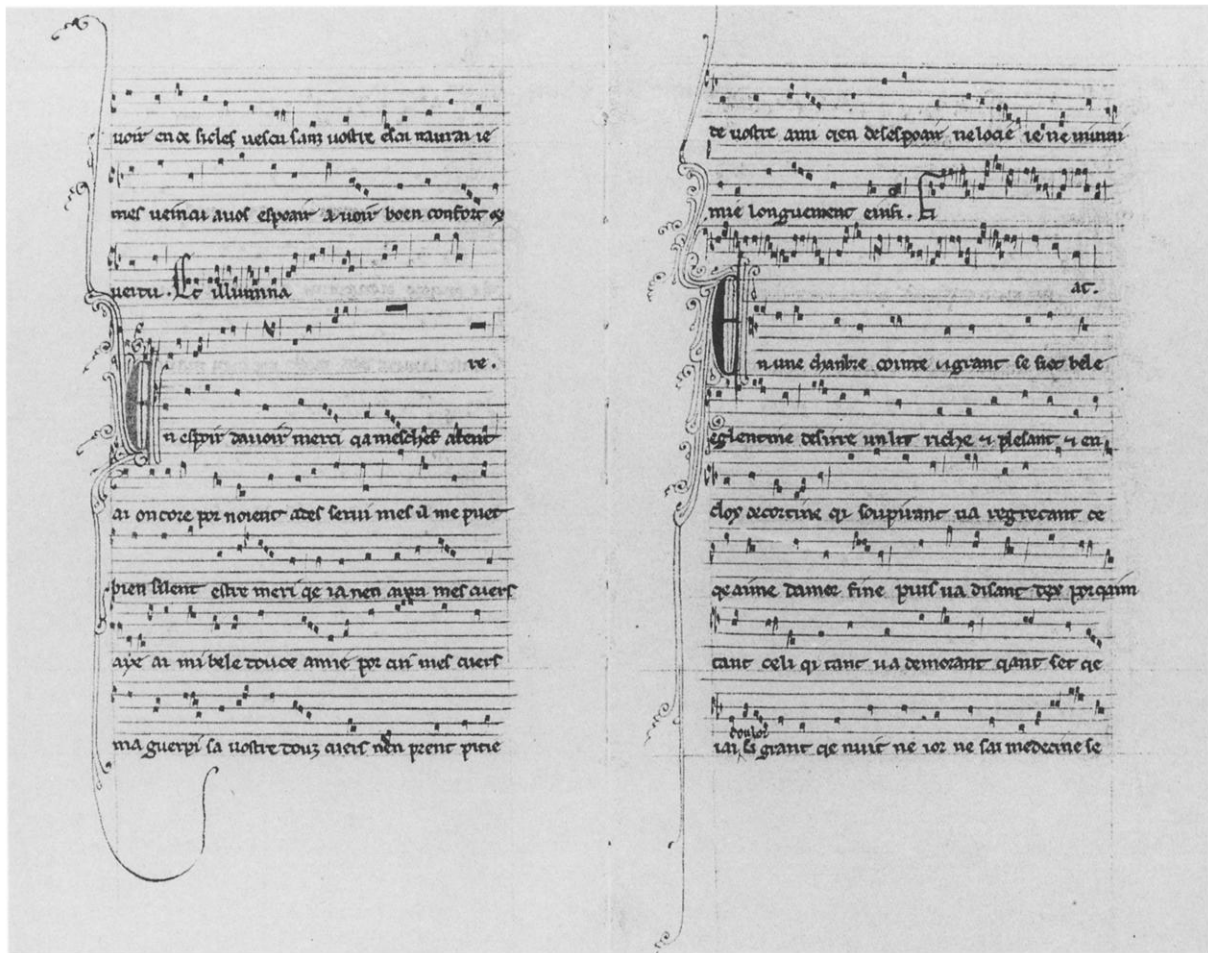
83

Elias of Salomon describes a form of improvised organum in which four associates double a chant at the 5th, octave and 12th,⁴ and when a plainsong with a range of seven or eight notes is performed in this way the lowest and highest sounding notes in the organum will lie some two octaves and a 5th apart. This is a very generous compass (sufficing for most of Dufay's music, for example) and it may be concluded that some 13th-century churches could muster singers with a compass of 20 notes between them. If Elias intends that one or more of the singers should be boys, he does not say so;⁵ nor does he say whether the chant should be transposed downwards from its customary range to make the parallelism possible. The most plausible interpretation of his directions would seem to be that the lowest part in this organum was sung in something approximating to a bass voice while the upper part was sung by some kind of high tenor who could move into

falsetto.

However, the mere existence of such voices does not prove that they were used in composed polyphonic music where the total compass used before 1300 never attains 20 notes and is often restricted to ten or even less. Elias is describing a technique which the Parisian *discontores* who performed motets would have regarded as rudimentary; it is possible that different standards of performance were involved in the two repertoires.⁶ It may be added that the sound of Elias's organum would have been so thick—especially in a resonant acoustic—and so full of interlocking harmonics, that the singer on the top of the texture would not necessarily have been required to possess a voice good enough to be exposed in motets.

A survey of the compass used in motets, taken together with the evidence of certain literary sources, makes it possible to assemble a rather more definite



2 This and illus.3 and 4 show pieces from the earliest layer of Ars Antiqua vernacular motets, as found in the tenth fascicle of W2. They have been chosen to show how systematically the first motet composers raided the contemporary monophonic tradition for poetic styles. On this opening are the two part motets *En espoir d'auoir merci/Fiat* and *En une chambre cointe et grant/Et gaudebit*. The first is a brisk and informal version of the high-style love language of the trouvères, ubiquitous in the motet repertory. The second attempts the manner of a *chanson de toile* (literally 'a song to sing while spinning cloth', a minor but fascinating genre in the monophonic song repertory). W2, f.232v and 233r.

picture of the voice types used in this repertory. For example, many of the motets in the Bamberg manuscript (probably dating from c.1285) exploit a range of around eleven notes from top to bottom,⁷ while some individual voice parts also employ this compass.⁸ It would therefore seem that 13th-century motets were conceived to exploit the resources of two, three or four equal voices; one singer, in other words, could normally perform any part in a motet—tenor, duplum, triplum or quadruplum—without undue difficulty. The result would have been a well-blended sound with each part distinguished by its text rather than by its colour.

This conclusion needs some modification, perhaps, for practical experience suggests that it will often be wise to place the tenor part with a singer who is at his

best about a 3rd lower than his colleagues. If this means that the tenor line always falls to the same person so much the better, for there is no greater asset to performers of this music than a singer who has accepted the initially thankless task of confining himself to tenors so that he can master their idioms and styles.

If motets were performed by identical (or by nearly identical) voices then a cherished assumption about medieval music may be called into question. It is often claimed that Gothic polyphony is essentially linear in character and that modern performers must therefore make each melodic line stand out, perhaps with the aid of contrasting instrumental timbres: a fiddle for the tenor, a harp for the duplum, and so on.⁹ We shall

return to the question of instrumental participation; for the moment let us concede the linear character of the motet, a genre where each line above the tenor has a well-wrought melody and its own text. That said, however, the evidence of voice ranges suggests that blend, and not contrast, is the guiding colour principle of the Ars Antiqua motet. This is quintessentially music for singers, designed to exploit the sounds of Latin and Old French as put into song by voices of very similar type singing in very much the same kind of way. Experience suggests that the contrasts between the voices of any motet become both more subtle and, strange though it may seem, more apparent when the piece is essentially monochromatic. I would therefore tentatively propose that Ars Antiqua motets, whether sacred or secular, preserved much of the sound world originally associated with the liturgical *clausulae* from which they were ultimately derived.

The question of performing pitch is a delicate one since it is generally accepted that there was no absolute pitch standard in the Middle Ages (none, that is, with more than a strictly local influence, since the members of individual religious communities may have followed a note provided by a bell or by an organ, if they possessed one). The musical sources suggest a certain amount of movement in performing pitch, for while 'transposition' cannot exist without reference to a standard pitch, it may be significant that some motets survive in variant versions a 5th apart (although the question remains open as to whether there may be some purely notational reason for these shifts).¹⁰

Even allowing for this movement, however, it may be possible to define the pitch range most commonly employed for motets in the 13th century (at least when they were sung by men). Long ago Yvonne Rokseth drew attention to the number of literary sources from the 13th century in which singers are praised for the *haut* or *alta* quality of their voices, and concluded that the favoured pitch of 13th-century polyphony was 'as high as possible'.¹¹ Does this mean that motets should be performed by women or falsettists at the top of their range? Almost certainly not. Let us look again at Old French *haut* and its Latin parent *alta*. It is now well-known (although it was perhaps not altogether clear to Rokseth) that these two terms meant both 'high-pitched' and 'loud' during the Gothic period.¹² This high/loud ambiguity is convincingly demonstrated by a hitherto unnoticed text of c1340, a sermon by Armand de Belvezér containing a brief discussion of a figure of speech current among singers:

*consuevit dici quando aliquis frater habens vocem sic altam sic pulchram quod eo cantante non est in ecclesia angulus quem non faciat resonare.*¹³

when a brother has a voice so *alta* and so beautiful it is customary to say that when he sings there is not a corner of the church which he cannot make resound.

Here it seems that an *alta* voice is a loud one that sets every corner of a church echoing with sound, and yet in another passage from the same source the word *alta* clearly means 'high-pitched':

*Est autem sciendum quod aliquis dicitur habere vocem altam qui pre aliis cantat altius .v. punctis . . .*¹⁴

It should be noted that any man is said to have an *alta* voice who sings five notes higher than his fellows . . .

There is nothing surprising about the convergence of the two meanings 'high-pitched' and 'loud' upon a single word, for if a singer wanders high then he will be loud unless, in deference to contemporary taste or to musical context, he 'covers' the sound in order to become less conspicuous or to soften the contrast between the lower and the higher regions of his voice. Nor is there anything surprising about the praise which medieval writers lavish upon loud and high voices, for modern experience shows that audiences admire them still; hence the present popularity of sopranos and tenors as opposed to contraltos, baritones and basses. In the Middle Ages, as now, singers who could soar above the common run, and who could even rise above their professional colleagues, won lavish praise.

In the 13th century the standard for judging whether a man had an *alta* voice was probably set by choral plainchant, the music likely to have established a sense of what most male singers could achieve in terms of range, and therefore to have defined what was 'high'. The entire plainchant repertory lies, for the greater part, within the compass of about a 9th; for most men who can sing reasonably well (but who have not received a special training designed to increase their range upwards) its optimum position may be tentatively placed in the region of *C-d'*. As we have seen, Armand de Belvezér records that *alta* singers could sing a 5th above the common run, suggesting that the 'high' male singers of the 13th century were high tenors with a total compass of about *C-a'* but mostly working in the upper octave of this range. These 13 notes are sufficient for most of the Ars Antiqua motets that have been preserved.

Both the theorists and the musical sources confirm

that a ritardando was often employed in the penultimate measure of a motet. The theorists usually referred to this device as *organicus punctus*,¹⁵ a term that likens it to the musical effect of two-part organum where, at least in the earlier 13th century, an upper voice executed an elaborate but (it may now be supposed) rhythmically free melody over the sustained and unmeasured notes of the tenor.¹⁶ The musical

Ex.4 Conclusion of Pucelete bele/Je langui/Domino, from the Montpellier codex, f.193v. The penultimate note of the triplum, marked with a fermata in the transcription, is written as a longa in the manuscript and clearly indicates a ritardando. The penultimate bars of the motetus part are also 'stretched'. In performance the semiquavers in parallel 4ths at the start of the penultimate bar should obviously lock together, and therefore the time should be strict at this point. As so often in this repertory, it is best to begin the ritardando late, on the second beat of the penultimate perfection or possibly even further forward (as signalled for the top part by the original notation).

vo bail - lie a - ves te - nu - e tant,
[ma-la]-di e qu'a - mors

je vous cri mer - ci en sous - pi - rant.
ne m'o - ci rit . . . e.

sources also reveal the ritardandi that performers used in the penultimate bars of motets, for there are many instances where the rules of mensural notation break down as the scribes introduced long note values where they do not belong. These can neither be performed nor transcribed strictly; they are clearly designed to indicate a ritardando (see ex.4).¹⁷

The theorists also mention the device of an internal ritardando, however, and these pauses can be of considerable help in shaping a piece. They are described in the later layer (?1270s) of the anonymous treatise known since Coussemaker as the *Discantus positio vulgaris*; the author discusses the ways in which the modal patterns of motetus parts accord with the modal patterns of tenors thus:

*Et primo de primo modo. Cujus quidem tenor aliquando concordat cum motheto in notis, sicut hic: Virgo decus castitatis [ex.5], et tunc semper nota longa de motheto notae longae correspondet de tenore et brevis brevi et e converso. Pausa vero utriusque valet unam brevem, nisi simul pauset uterque cum tripla, et tunc pausaes cantus ecclesiastici tenentur ad placitum.*¹⁸

Firstly, concerning mode 1. The tenor can concord somewhat with the motetus in notes, as in *Virgo decus castitatis*, and then a long note in the motetus will correspond to a long note of the tenor, and a breve to a breve, and vice versa. The pause of each [the motetus and the tenor] is worth one breve unless both of them pause with the triplum, and then let plainchant pauses be held for as long as may be pleasing.

The writer is referring to pieces with passages in which both the tenor and the motetus lock together in mode 1 rhythms, producing extended passages of note-against-note writing (see ex.5). He then says, quite correctly,

Ex.5 Res nova mirabilis/Virgo decus castitatis/Alleluya, from Anderson, op cit, no.95 (triplum omitted)

Motetus/Duplum
Vir - go de - cus ca - sti - ta - tis, vir - go re - gi - a
Tenor
Alleluya

that when such parts rest the pause will be worth one breve (a quaver after the customary reduction of note values in the earlier motet repertory by a factor of 16):

However, he goes on to say that when there is a third part,¹⁹ then the places where all three parts—tenor, motetus and triplum—phrase together are to be marked not by a measured pause of a breve, but by an unmeasured pause *ad placitum* such as would be employed in plainchant (*cantus ecclesiasticus*).

How were these internal pauses executed? The anonymous *Compendium musicae mensurabilis artis antiquae* (c1300) offers the advice that when the three parts of a motet phrase together, the penultimate notes before the general pause should be unmeasured: *quando [inveniuntur] tres cantus insimul concordantes, facientes insimul suas pausaes, tunc debent in tenore et in moteto et in triplo fieri duo tractus ad significandum quod penultime note immensurabiles fieri debent . . .*²⁰

when three parts [are found] concurring with one another and making their pauses together, then two strokes should be made in the tenor, motetus and triplum to signify that the penultimate notes are to be sung in an unmeasured way . . .

The writer even gives an extract from a double motet showing how this notational device should be employed. Unfortunately it is incomplete, as is the only independent source of the piece, which lacks the tenor part.²¹ By collating the two sources, however, it is possible to arrive at a plausible reconstruction of what was intended (ex.6).

Ex.6 Quomodo fiet/O stupor/tenor, reconstructed from *Compendium musicae mensurabilis artis antiquae* (c1300) and D-Mbs lat.5539, ff.76v–78r.

In practice, this device of an internal pause will often make good musical sense. A constant overlap of musical and poetic phrases is the essence of motet style, so when all the parts phrase together something is clearly called for in performance. These concerted pauses form an admirable check against the tendency of the brisker motets to rollick and become relentless.

Ex.3 shows how composers sometimes took these internal pauses for granted and disposed the musical material around them in a strategic fashion. In bar 7, for example, the general pause coincides with the end of an unusual sequential figure in the duplum. The triplum also changes character at this point; after the crowded movement of the first six bars it thins to a series of longs, which by bar 10 have developed into the smooth trochaic figures that form the bulk of the triplum material throughout the piece. The general pause in bar 37 has comparable significance; in bar 34 the composer signals that something is approaching by changing the rhythmic mode in the upper voices from mode 1 to mode 3; after the general pause in bar 37 the triplum immediately returns to mode 1 while the

duplum retains mode 3 until bar 48, creating a new counterplay of rhythms. It is almost always worthwhile to register these changes of mode in performance; they will stand a good deal of emphasis. Modes 2 and 3, when they make *brief* appearances like these, and especially when they are momentarily set against mode 1, may sometimes be emphasized by detaching the quavers in a forceful way, though this would be impractical for pieces cast entirely in these two modes.

Perhaps the most perplexing performance problem of all concerns what is to be done with the wordless tenor parts. Here the answer must vary according to the texture of the motet. In general, the individual tenor notes in an Ars Antiqua motet behave like momentary pedal points. In a passage like the one shown in ex.7, the first sonority of each perfection is invariably a perfect consonance with the tenor forming the root. Next, the upper parts move towards the consonance that will open the next perfection, but the tenor remains stranded at the point where it began. This feeling of a perfect consonance which sounds and then dissolves during the course of the bar is highly characteristic of the Ars Antiqua motet; it accounts for the momentary pedal-like effect of almost every perfection in our example. In pieces where the tenor moves in this way it will usually be wise to choose a sustained sound for the tenor part. In most cases the ideal solution will be to vocalize the tenor, perhaps using as a cue any syllable (or syllables) of plainchant text that may accompany it.²² This style

Ex.7 Par une matinee/Mellis stilla/Domino, bars 1–10, from Thomas, Robin and Marion motets, i

of performance has hardly ever been adopted by early music ensembles so far, but it should never be forgotten that the motet emerged from a tradition of liturgical and therefore of exclusively vocal polyphony;²³ the one thing that is certain about these motet tenors is that 13th-century musicians would have considered them idiomatic for singing.

Mark Everist has recently drawn attention to an intriguing piece of evidence that bears upon this problem.²⁴ In the manuscript *GB-Lbm Cotton Vespasian A.XVIII* the motet *Amor veint tout/Au tens d'esté/Et gaudebit* appears with the chant text *Et gaudebit* stretched under the tenor part. There is nothing striking about that, of course, for motet tenors were often written down in this way. Here, however, it seems that the scribe had some definite plan in mind, for the tenor melody appears twice, with the syllable *gau* placed exactly at the point where the repetition begins, while *-bit* is placed at the end (see ex.8). None of these details corresponds to the original Gregorian underlay, so it may be that the scribe intended the performer to change his syllable at a point that would emphasize the structure of the piece, introducing a change of vowel colour at the crucial moment. Might this have been a common practice? Experiment shows that if vocalization is used to supply the lack of a chant cue then the crucial factor in success or failure is usually the vowel that has been chosen. The vowel *o* (as in southern English 'pot') can become somewhat ominous in a resonant acoustic, seeming very dark and very large, while *i* (as in southern English 'feet') can produce a much brighter and (paradoxical though this may seem) less intrusive colour; being a high front vowel it lends itself very well to precise, meticulous articulation. It is ideal for ex.3.

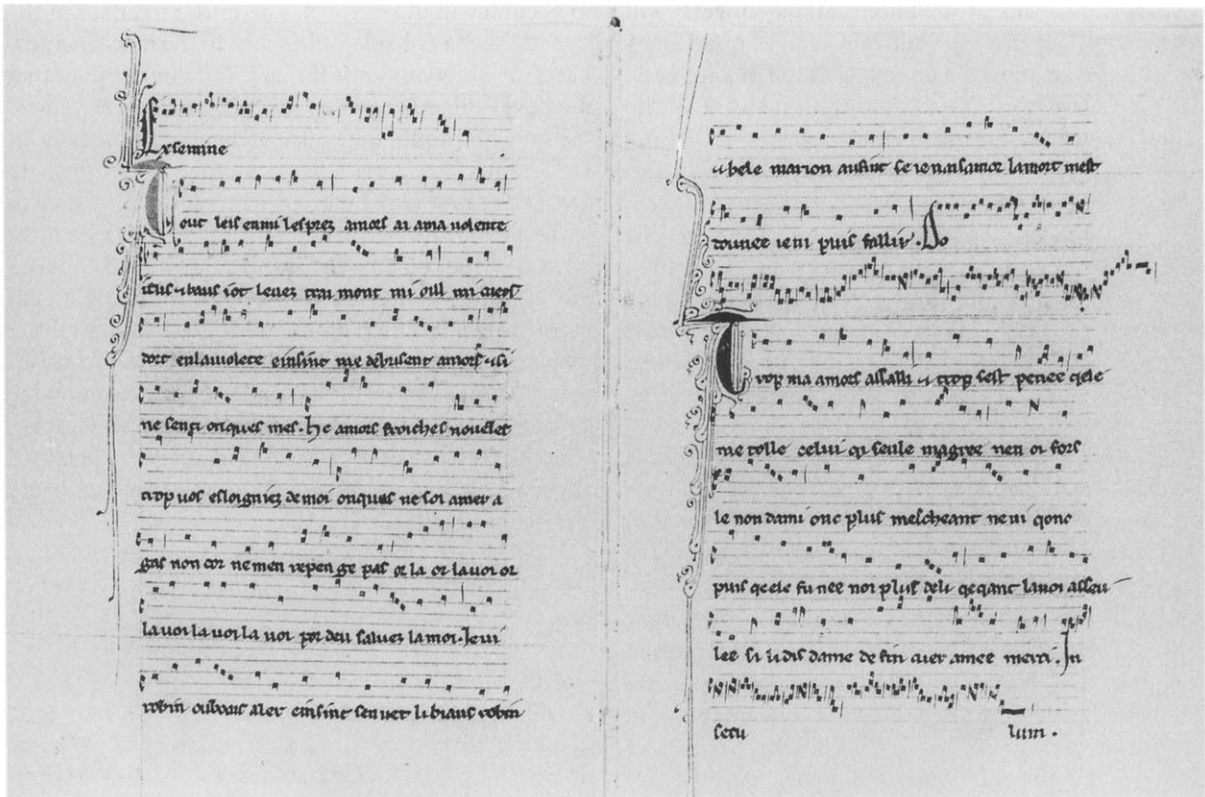
A major performance problem is created by the brevity (sometimes extreme) of these motets. The obvious solution is to perform three-part pieces once through as a duplum/tenor duet and then again with the triplum. This is not entirely satisfactory, however, for in some cases it cannot be done without turning the performance into two distinct renditions, each with its own tempo and movement, because there are many duplum parts in the motet repertory which must be sung with more pace when they are to be exposed than when they participate in a three-voice texture.²⁵ Furthermore there are many two-part motets (which cannot be treated in this 'layered' fashion) that are irredeemably short, and in performance it is probably best to accept that these pieces were as brief as they

Ex.8 The tenor of *Amor veint tout/Au tens d'esté/Et gaudebit* as it appears in *GB-Lbm Cotton Vespasian A. XVIII, f.164v-165r*, from Everist, *op cit.*

The image shows a musical score for a tenor part, consisting of 14 staves of music. The notation is in a medieval style with square neumes on a four-line red staff. The lyrics are written below the notes. Annotations include 'A1 Et' above the first staff, 'A2 Gau' above the eighth staff, and 'bit.' below the thirteenth staff. There are also some small 'b' symbols above notes and hyphens below the staffs.

look on the page. Another worry is that the passage often cited as evidence of such 'layered' performance, from the *Speculum Musicae* of Jacques de Liège, proves to be referring to something quite different—the practice of performing a motet voice entirely alone, as a free-standing song.²⁶ Perhaps this provides the best guide. A plausible solution may be that the duplum and triplum were sometimes performed as solo songs without the tenor, each with its own pace and character, and that the performers then joined forces to create the motet, each adjusting the pace of his line as seemed necessary.

What were the customary performing forces? The evidence that can be brought to bear upon this question is unfortunately very slim indeed. It seems to be universally agreed that most medieval polyphony was intended for soloists, although specific information



3 The two-part motets *Tout leis enmi les prez/Do [minus]* and *Trop m'a amors asalli/In seculum*. The first begins with a quotation (both verbal and musical) from the dance-song, or rondet de carole, shown in the text as ex.1. W₂, f.247v and 248.

about the Ars Antiqua motet is lacking.²⁷ Instrumental participation (in addition, that is, to instrumental performance of the textless tenor parts) is a possibility, but there is no firm evidence for this practice and no obvious reason why it should be recommended.²⁸

The more subjective areas of performance practice where modern singers have only their own musical instincts to guide them may now be considered. To a large extent, I believe, the things that may profitably be asked of singers performing Ars Antiqua motets are much the same as those required in any accurate ensemble singing.

Something is often to be gained by pitching these motets in a way that lifts the singers on the upper parts away from the comfortable range where they can coast or croon. When the music is lifted above this range the relatively higher pitch brings many things under closer control because the vocal cords are vibrating more quickly and because the singers, recognizing that danger is only about a tone away, begin to work hard in a fashion that is always beneficial to this music (and perhaps to any music; modern critics generally seem to

admire performers who introduce an element of risk into their performances). Few motets last more than two minutes, even at the most lugubrious speeds, and they therefore ask both singers and listeners to make a concentrated effort. If they are sung in a forthright manner (that is to say with a good supply of wind and a great deal of busy vowel and consonant formation towards the front of the mouth) then it becomes possible to approach the crispness of diction, fullness of tone and scrupulous intonation that these pieces surely demand. It seems probable that the 'high' and 'loud' singers of the 13th century were praised for their ability to perform in this way.

In music as densely texted as this, and so dependent for its success upon a burst of energy, the manner of articulation is of cardinal importance. The motet emerged as a form when words were added to pre-existing sections of melismatic polyphony,²⁹ and it succeeds very well in performance when the two elements in this history—melisma and text—are allowed to co-exist. This can be achieved by singing the lines in a legato fashion and by allowing the words


to look after the articulation. Many singers will instinctively attempt to 'enliven' chains of mode 1 rhythms, for example, by imposing a kind of automatic articulation, 'coming away' during the course of the longer notes and almost turning

into 

which soon tires the ear. It will usually make good musical sense to maintain full tone and volume through the course of every long note value in a 13th-century motet; if the words are clearly pronounced then they will establish an appropriate manner of articulation.

A correct historical pronunciation of every text is therefore a great asset in the performance of this music.³⁰ Old French possessed many consonants that have softened a little down the centuries, or that have faded away altogether, and these crisp sounds help to project the principal features of medieval motet style in performance. Most notable amongst these are a texture in which two (or three) assertive and clearly articulated songs seem to compete for mastery, and a crowded sound picture in which the piece appears to be on the point of bursting the taut intellectual constraints that bind it together.

The importance of historical pronunciation to the shaping of phrases is considerable. In a line like the following, for example,


En a - mours

the listener should hear not only the final *s* of *amours* but also the rolled *r* immediately before it; both sounds must be rapidly produced at almost the last possible moment. In this way the word *amours* points the end of the melodic phrase in a most decisive manner. When lines ending in consonants follow one another in rapid succession (as when lines rhyme on *-er* verbs), the effect on melodic phrasing can be very marked indeed.

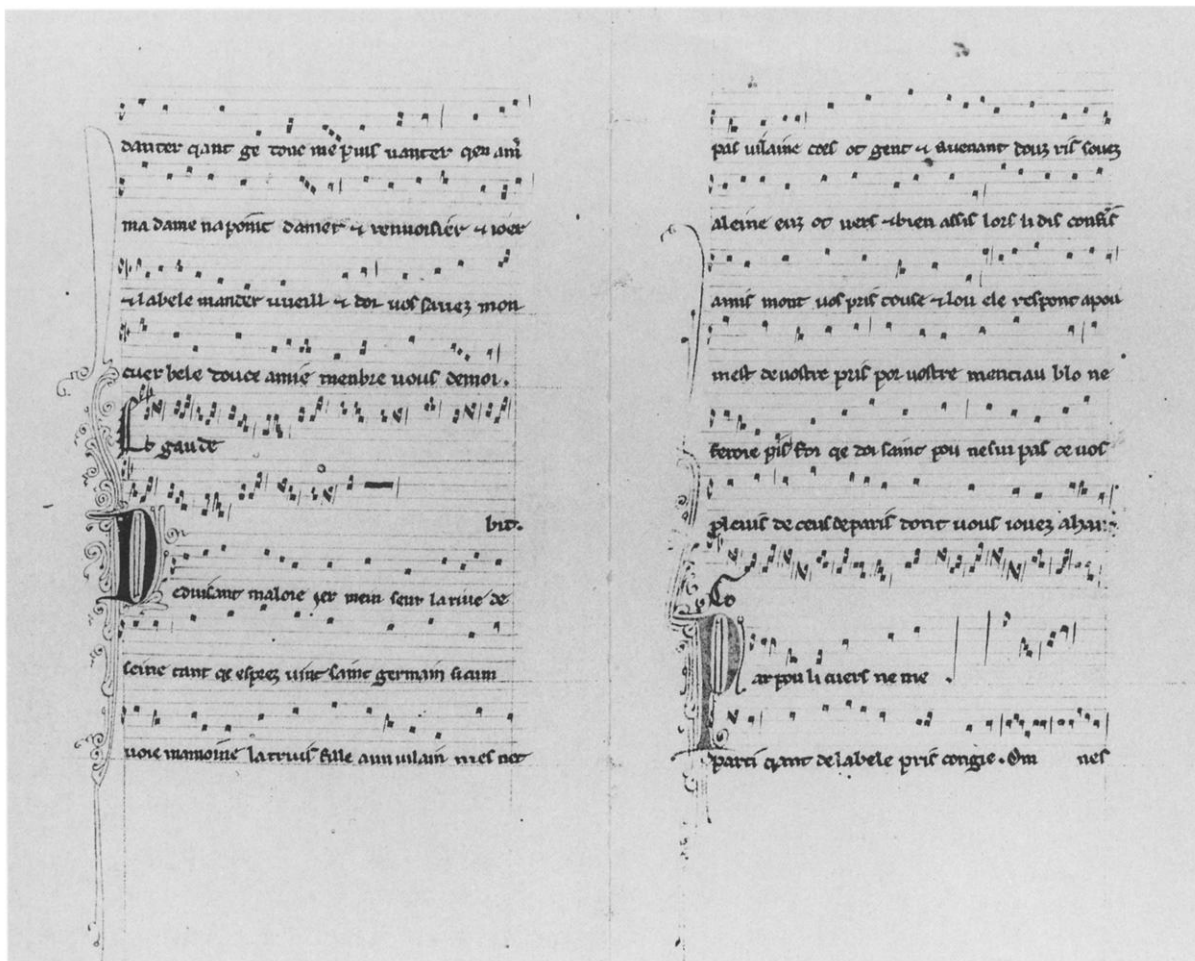
Two further points can contribute substantially to a successful performance of these pieces. The first relates to the shape of each note. When singing *Ars Antiqua* motets (and, perhaps, any medieval music) it is important that each note should start firmly with as much—or nearly as much—tone as it is ever to possess. A firm beginning counts for a great deal, and notes which are blown up like a balloon during their duration seem out of place in this repertory.

The second point concerns tuning. It is plain that singers of the 13th-century attached great importance

to accuracy in this respect. The music treatises of the period devote considerable space to the mathematical basis of intervals, confirming the impression that medieval singers regarded polyphony as an advanced method of producing musical beauty by means of meticulous measurement. It is necessary only to glance at *Ars Antiqua* motets, with their abundance of perfect intervals, to realize that high standards must have been aimed for. Unless the intervals of octave, 4th and 5th are placed with precision (and with far more than is required to place 3rds and 6ths, whether major or minor) a 13th-century motet will tend to sound feeble and needlessly dissonant. The supreme goal is therefore accuracy, together with the strong, straight tone without vibrato that allows the ear to savour the purity of the perfect intervals and to detect the distinctive buzz that they possess when true.

What of the imperfect intervals, the 3rds and 6ths? Here it is almost always profitable (at least in French pieces—English music of this period is altogether different) to steer towards the Pythagorean tuning whose principles are expounded time and again in medieval treatises on music. The technical details of this tuning can be found in many places;³¹ the immediate practical consequences for the modern performer are straightforward and easily summarized. All perfect intervals are pure. All notes with a semitone step above them need to be raised (in other words E, A and B natural should, in most circumstances, be noticeably high). Major 3rds and 6ths should be appreciably wider than in equal temperament, giving a sense of strain to cadences where a major 6th widens to an octave or a major 3rd moves outwards to a 5th. Finally, all tone steps may be allowed to expand a little; it is never required in the *Ars Antiqua* motet that a tone step be narrowed.

This brings us to what is perhaps one of the most delicate questions about the performance of these pieces: the question of tempo. Some 14th-century theorists distinguish between 'fast', 'medium' and 'slow' manners of execution,³² but this is of no more practical help to the modern singer of medieval music than the doctrine of 'high', 'middle' and 'low' styles in rhetoric is a help to readers of Chaucer's poetry. Indeed the comments of the theorists, most of whom are discussing 14th-century notational practices when they broach this subject, reduce to little more than a codification of what would be expected, namely that the fewer note values a piece contains, the faster it goes. Crudely speaking, this means that a piece made



4 The two-part motet *Deduisant m'aloie/Go*. This is an ingenious adaptation of the genre of the pastourelle (where a man, often a knight, meets a shepherdess or comes upon rustics as they sing or indulge in other country pleasures). Here the encounter takes place outside the walls of Paris in the suburb of St. Germain (prez . . . saint germain in the second line of the motet). W2, f.251v and 252.

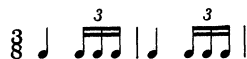
up exclusively (in modern transcription) of crotchets and quavers can go appreciably faster than one where the quavers are frequently (or even occasionally) broken into pairs of semiquavers.

Where the theorists fail, modern performers must use their own musical judgement. The principal objective is to overcome the consequences of the triple time which dominates *Ars Antiqua* polyphony. To some extent, perhaps, this is not an historical problem, for it may be imagined that 13th-century performers were not troubled by the relentless ternaries of the motet; when did they ever sing as many motets in sequence as today's musicians are required to do in one concert? Whatever the answer may be, the art of handling rhythm in 13th-century motets is a subtle one that must be acquired. I do not believe that the

problem is one of speed. No doubt many modern singers are liable to sing these pieces too fast—especially when they have learned their parts well and have become confident—and it will be wise to correct this tendency as soon as it makes itself apparent. Nonetheless, the speed of music has no necessary connection with its iterative qualities in performance; a fast piece in triple time need not be more emphatically 'in three' than a slow waltz where each beat is felt individually.

I prefer to suggest that the triple-time problem in 13th-century polyphony is essentially one of stability. The prime danger in this music is that modern singers, confronted by a motet transcribed with the customary bar lines, will start to compress the second beat of the bar and then lunge—very slightly, but nonetheless

fatally—towards the beginning of the next bar. It becomes especially serious with the use of the very common rhythmic figure



which seems ideally designed to cause trouble. Many singers will tend to 'come away' from the crotchet a little (probably around the start of the second beat); they will then come back and hammer the notes of the triplet figure in the hope of making them distinct. In doing so they will rush on to the next crotchet. If this occurs, the advice should always be to begin the long note with as much tone and conviction as it is ever to possess, to keep this tone and conviction absolutely steady throughout the note, and then to toss the triplets away as lightly as possible—to treat them as ornaments, in other words, which they are, rather than as tune, which they are not. The secret of success is rhythmic accuracy of a scrupulous kind. It must also be remembered that in this, as in all medieval music, perfect consonances accent themselves; there is no need to accent the start of a bar.

Two further considerations prove useful in shaping a performance. The first relates to the balance of the voices. As suggested above, medieval motet style exploits the excitement that can be created when the listener feels that the two or three upper parts are strenuously competing for attention. The triplum is generally rather more active than the duplum in the *Ars Antiqua* repertory (see ex.9), but this does not mean that in a double motet, for example, the busier part should be the more assertive one in performance. In ex.9 the singer of the duplum will do well to sing as if the triplum were not there; in practical terms this means giving long notes (minims in this example) full tone and commitment throughout their written value, without 'coming away'.

A second consideration relates to harmonic colouring. The composers of *Ars Antiqua* motets were remarkably strict in their adherence to the theorists' rule that every perfection should begin with a perfect consonance. Accordingly, it will often make musical sense to emphasize the places where this rule is broken. Ex.10 shows an extract from a double motet where the appearance of a *refrain* (a pre-existing piece of text and/or music)³³ in the triplum, coinciding with one complete statement of the tenor, is introduced by an uncharacteristic 6–5 movement at the beginning of bar 17 (uncharacteristic, that is, for the start of a

Ex.9 Conclusion of *Par une matinee/Mellis stilla/Domino*, from Thomas, Robin and Marion motets, i

Ex.10 Extract from *Je m'en vois/Tels a mout/Omnes*, from Anderson, op cit, no.90

perfection). There are also two stark (but in performance surprisingly gracious) dissonances at the opening of the second perfection in bar 19 and of the first perfection in bar 20.

Whatever tempo is chosen, the basic pulse should be absolutely strict. Medieval singers regarded polyphony as an art of accurate measurement and the terms which they associated with musical excellence include *recta* (correct), *integralis* (whole), and (perhaps

most frequently of all) *regularis* (disciplined).³⁴ One theorist of the mid-14th century, for example, records that the tenor parts of motets are best performed 'in a whole and secure fashion'.³⁵

Ornamentation was probably a major factor governing the choice of tempo. 'Let anyone who wishes to indulge in practical music beware that he does not exult too much in his voice', warns Johannes de Muris,³⁶ though there can be no doubt that his words often went unheeded by singers determined to show off their skill. References to liturgical singing in the writings of outraged churchmen suggest that polyphony was performed with Romanesque exuberance and Gothic flamboyance in the 12th and 13th centuries; even when allowances have been made for the exaggerated language of these moralists, the impression remains that polyphony, whether sacred or secular, was declaimed by singers determined to enjoy the experience and to make an impression. According to the late 13th-century writer Elias of Salomon, the task of keeping control over their exuberance fell to the *rector*,³⁷ who was required to correct any colleague who ornamented his part excessively by whispering a reproach into his ear. Elias is discussing improvised polyphony, but even motets, which look so busy with their chafing texts, were sometimes ornamented. An anonymous (possibly English) theorist of the 14th century makes this clear:

*Sciendum secundum curiam romanam et francigenos et omnes musicales cantores quod tenor, qui discantum tenet, integre et solide pronunciari debet in mensura, ne supra discantantes dissonantiam incurrant; et hoc ratio exigit nam super instabile fundamentum stabile edificium construi non potest, sic nec instabilem tenorem vix sine dissonantia discantus pronunciari potest. In motetis quippe et rundallis ac etiam in aliis cantilenis tenor prout figuratur pronunciari debet, tamen non est contradicendum tenorem pronuncianti, et pulcras ascenciones et descenciones facienti, quando sentit se discantu non impedire, sed pocius comendandum.*³⁸

It should be known that according to the singers of the Roman curia, according to the French and according to all musical singers, the tenor, which holds the polyphony together, must be performed in a whole and secure fashion in strict measure, lest those who are singing the upper parts fall into discord. And this principle imposes itself in many things, for just as a stable building cannot be constructed upon a shaky foundation, neither can polyphony be sung over a shaky tenor without discord. Certainly, in motets, rondelli and also in other kinds of music the tenor must be sung just as it is written; however there should be no reproach for the singer of the tenor who makes beautiful

ascents and descents when he senses that he is not becoming entangled in the polyphony; he should rather be congratulated.

Here it seems that the performer of the tenor may be allowed to make 'beautiful ascents and descents' if he can do it well enough not to become entangled in the upper parts and produce cacophony. If this was acceptable in the performance of a tenor, the *fundamentum totius cantus*, it is likely that singers of duplum, triplum and quadruplum voices would also have been free to decorate their lines. The melodic variants found in the motet repertory, readily available for study in several collected editions, may give some clue to the character of this ornamentation (see ex. 11).

Ex. 11 Au cuer ai un mal/Ja ne m'en departirai/Jolietement, *duplum*. Upper stave from Bamberg MS (Anderson, op cit, no.53, lower stave from GB-Ob Douce 139, f.179v (as ed. M. Everist, *Five Anglo-Norman Motets* (1986), p.10). To facilitate comparison I have halved the note-values of Anderson's edition.

The Ars Antiqua motet seems to come into its own when it has one singer on each part—a singer with a strong, straight tone who is able to go directly to the centre of the note and who, in return for complete freedom from instrumental doubling, can tune intervals in a tactical way, now wide, now narrow, according to the demands of the texture. The beauty of this music—and perhaps of all medieval music—surely lies in the opportunity it gives us to savour clear and fresh sounds being combined with perfect accuracy, and without any thickening from vibrato or any other source that might overscore the lines that make up this delightful geometry.

I am most grateful to David Fallows, Daniel Leech-Wilkinson, Mark Everist, Jeremy Summerly and Shane Fletcher for their comments upon an earlier draft of this article.

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¹F-T MS 144, vol.1, f.305r. Pierre de Palude, *In psalmos*.

The bulk of the 13th-century motet repertory is available in the following editions: H. Tischler, *The earliest motets: a complete comparative edition*, 3 vols, (Yale Univ. Press, 1982); *idem*, *The Montpellier codex*, 4 vols, (Madison, 1978 and 1985); G. Anderson, *Compositions of the Bamberg manuscript*, *Corpus mensurabilis musicae* [CMM], lxxv (1977); *idem*, *The motets of the manuscript La Clayette*, CMM, lxxviii (1975); *idem*, *The Las Huelgas manuscript*, CMM, lxxix (1982). The motets of the Montpellier codex, the major 13th-century collection, are also available in Y. Rokseth, *Polyphonies du XIII^e siècle*, 4 vols, (Paris, 1935–48). A recent performing edition that may be highly recommended to male singers (for all the pieces either lie in—or have been transposed to fit—the range of tenors and baritones) is W. Thomas, *Robin and Marion motets*, 2 vols, Antico edn, AE 22 and 25 (1985 and 1987). A third volume is in preparation.

On the performance of motets, see E. H. Roesner's introductions to two reprints of L. Schrade, *Polyphonic Music of the Fourteenth Century: Le Roman de Fauvel* (Monaco, 1956/R1984), v–vii; and *The Works of Philippe de Vitry* (Monaco, 1956/R1984), v–vi; H. Tischler, *The style and evolution of the earliest motets (to c1270)*, 4 vols, *Musicological Studies and Documents*, xl (Henryville, 1985), i, p.207ff; *idem*, *op cit*, *The Montpellier codex*, xl, pp.xxxii–xxxiii; Rokseth, *op cit*, *Polyphonies*, iv, p.41f; Thomas, *op cit*, *Robin and Marion motets* (introductory sections to both volumes); P. Jeffery, 'A Four-Part In Seculum Hocket and a Mensural Sequence in an Unknown Fragment', *JAMS*, xxxvii (1984), pp.1–48; and C. Page, 'The performance of medieval polyphony', in H. M. Brown and S. Sadie, eds, *Handbook of Performance Practice* (in the press).

²Text in E. Rohloff, ed., *Die Quellenhandschriften zum Musiktraktat des Johannes de Grocheio* (Leipzig, 1972); for comments on the motet, see p.144. Eng. trans. (to be employed with considerable caution), by A. Seay, *Johannes de Grocheio [sic] Concerning Music* (Colorado Springs, 2/1973), esp. p.26

³For this identification of those whom Johannes de Grocheio means by the litterati (to which he adds 'illis, qui subtilitates artium sunt quaerentes' (those who are investigating the finer points of the arts)) see, for example, the sermon which the 13th-century Dominican, Humbert of Romans, writing in Paris, addressed *Ad omnes litteratos in Sermones Beati Umberti Burgundi* (Venice, 1603), 2 vols, sermon lv: 'ut patet in Medicis, et Advocatis, et Magistris in liberalibus artibus, et in similibus'.

⁴See M. Gerbert, *Scriptores* (St Blasien, 1784/R1963), iii, p.57ff, and also J. Dyer, 'A thirteenth-century choirmaster: the *Scientia Artis Musicae* of Elias Salomon', *MQ*, lxxvi (1980), pp.83–111.

⁵It is possible that the upper level of such organum was sometimes performed by boys in the 13th century; in the absence of any explicit testimony, however, it is probably safest to assume that the singers envisaged by Elias were adult males.

⁶Compare, for example, the practice of 'fifthing', a technique for singing in parallel 5ths with contrary motion at the beginnings and ends of phrases; this was regarded as a preparatory stage in the training of a true *discantor*. See S. Fuller, 'Discant and the theory of fifthing', *Acta Musicologica*, l (1978), pp.241–75.

⁷For examples with a total compass of eleven notes, see Anderson, *op cit*, CMM, lxxxv, nos 3, 8, 9, 11, 18, 22, 23, 28, 36, etc. Ranges of a 10th (nos 4, 7, 12, 13, etc) and a 12th (nos 2, 10, 16, 17, 24, 26, 27, etc) are also fairly common. The compass of a 14th in no.48 is unusual. The average total compass of the motets in the Bamberg anthology is 11.5 notes. For a discussion of the ranges in the Montpellier motets, see Tischler, *op cit*, *Montpellier codex*, i, p.xxxiii.

⁸For some eleven-note voice-parts, see Bamberg nos 16 (both triplum and duplum), 18 (triplum), where the total compass of the piece is an 11th), 22 (duplum, again where the whole piece spans but an 11th), 30 (duplum), 38 (duplum), 47 (duplum), etc.

⁹See, for example, Tischler, *op cit*, *Montpellier codex*, i, p.xxxii, where reference is made to the 'distinct rhythm, phrasing, text, and timbre of the several lines of music' in motets. See also G. Reaney,

'Voices and Instruments in the Music of Guillaume de Machaut', *Revue Belge de Musicologie*, x (1956), pp.3–17 and pp.93–104. I have already questioned this view in 'The performance of songs in late medieval France: a new source', *EM*, x/4 (Oct. 1982), pp.441–50. Cf D. Leech-Wilkinson, 'Machaut's *Rose, lis* and the problems of early music analysis', *Music Analysis*, iii/1 (1984), pp.25–6, fn.13.

¹⁰The notational explanation may perhaps be that scribes wished to avoid certain accidentals wherever possible. A piece requiring F# in the triplum, for example, and possessing no other accidental, would become free of all such markings if written out 'in C'.

¹¹Rokseth, *op cit*, *Polyphonies*, iv, pp.46–8

¹²The point is well made in E. Bowles, 'Haut and Bas: the Grouping of Musical Instruments in the Middle Ages', *Musica Disciplina*, viii (1954), pp.115–40.

¹³F. Armandi de Bellovisu . . . *Sermones plane divini assumptis ex solo Psalterio Davidico Thematis*, (Lyons, 1525), f.75v

¹⁴*Ibid*, f.156. The passage continues: 'sed altiorem si .x. altissimam autem si .xv. hoc enim nunquam visum fuit'. Thus a singer was said to have a 'higher' voice if he could sing ten notes above the common run, and 'highest' if he could sing fifteen, 'but this is unheard of'. Whether this represents genuine usage, or merely Armandus's determination to pursue the issue of 'high' voices through the comparative and superlative stages of the adjective *alta*, is difficult to determine. As far as 'highest' voices are concerned, Armandus is clearly propelled by passion for neatness at this point since he acknowledges, in effect, that the term can never be used, for such voices are 'unheard of'.

¹⁵Anonymous 1 in C.-E.-H. de Coussemaker, *Scriptorum de musica*, iii, p.362. The device of the final ritardando was probably carried over from plainchant; for the technique of drawing out a chant 'slightly near the end', see C. Palisca, *Hucbald, Guido and John on Music* (New Haven, 1979), p.139

¹⁶This is still a matter of controversy; for recent literature see Page, *op cit*, 'The performance of medieval polyphony'.

¹⁷Needless to say, these ritardandi must be carefully controlled, and should hardly ever begin earlier than the second beat of the penultimate bar.

¹⁸S. M. Cserba, ed., *Hieronymus de Moravia O. P. Tractatus de Musica*, (Regensburg, 1935), p.193

¹⁹His term is *tripla* ('cum tripla'), where *triplo* would have been the expected form. It is possible that the author, having seen the neuter plural *tripla* in other writings, construed the form as a feminine nominative singular. I am otherwise unable to explain *cum tripla*, but have no doubt that a third part is meant.

²⁰F. A. Gallo, ed., *Compendium musicae mensurabilis artis antiquae*, *Corpus Scriptorum de Musica* [CSM], xv (1971), p.71. As Gallo points out, (p.65), the 'content of the work refers to the moment of transition from the Franconian teaching to the notation of the fourteenth century'.

²¹*D-Mbs* 5539. See G. Reaney, *Manuscripts of Polyphonic Music (c1320–1400)* (München-Duisburg, 1969), p.78

²²This question is discussed in Jeffery, *op cit*.

²³The unconvincing arguments that have been advanced in favour of instrumental participation in the Notre Dame *clausula* repertory have been finally exploded by E. Roesner, 'The performance of Parisian organum', *EM*, vii/2 (Apr. 1979), pp.174–189.

²⁴M. Everist, ed., *Five Anglo-Norman Motets* (Antico Edition, 1986), AE 24

²⁵An example is provided by the motet *Quant vient/Ne sai que/Amoris [Johannes]*, in both the Bamberg and Montpellier manuscripts. The most recent edition is in Thomas, *op cit*, *Robin and Marion motets*, i, pp.13–15. The duplum and tenor survive as a two-part work in some sources (the *Roman de Fauvel*, for example, where the duplum bears the text *Veritas arpie*), and the duplum, which has only two note values, seems to demand a brisk tempo if it is to be exposed in a layered performance of perhaps dotted minim = 100. The duplum, a much more active line, requires a tempo in the region of

dotted minim = 48. In order to make the motet work in performance as a three-part composition it is necessary to take the tempo from the triplum, and for the duplum singer to perform his line in a way that will feel very slow to him.

²⁶Rokseth, *op cit*, *Polyphonies*, iv, p.221. See also R. Bragard, ed., *Jacobi Leodiensis Speculum Musicae*, CSM, iii/7, (1955–73) p.9.

²⁷For a more detailed account of instrumental practice in Ars Antiqua music, see Page, *op cit*, 'The performance of medieval polyphony'. It has been suggested (for example, by Tischler, *op cit*, *The Montpellier Codex*, i, p.xxxiv), that the instruments sometimes named in motets are a guide to the instrumentation of these pieces. The striking feature of Tischler's comprehensive listing of references in the Montpellier corpus is that the most popular instruments of 13th-century culture, the harp and fiddle, are missing. The case of the motet *In seculum viellatoris* remains as puzzling as ever.

²⁸The often-cited passage from the *Roman de la Rose* in which Pygmalion plays the portative organ and sings *Motet ou treble ou teneüre*, probably refers to the performance of motet voices as isolated monophonic songs. For the text, see E. Langlois, ed., *Le Roman de la Rose* (Paris, 1914–24), line 21041. On the portative organ, see Page, *op cit*, 'The performance of medieval polyphony'. See also L. Gushee, 'Two Central Places: Paris and the French Court in the Early Fourteenth Century', in H. Kühn and P. Nitsche, eds, *Bericht über den Internationalen Musikwissenschaftlichen Kongress Berlin 1974* (Kassel etc, 1980), p.143.

²⁹The earliest motets and their source clausulae can now be examined in bulk in the complete and comparative edition by Tischler, *op cit*, *The earliest motets*.

³⁰The standard guide is J. Alton and B. Jeffery, *Bele Buche e Bele Parleure: a guide to the pronunciation of medieval and renaissance French*

for singers and others (London, 1976). The usefulness of this volume is immeasurably increased by the accompanying cassette.

³¹For a clear exposition of the Pythagorean system and its mathematics see J. Backhus, *The Acoustical Foundations of Music*, (London, 1970), p.116f. See also Page, *op cit*, 'The performance of medieval polyphony'. The subject of tuning in medieval music has principally been investigated in terms of keyboard temperaments, with a marked emphasis upon the 15th century; see, for example, M. Lindley, 'Fifteenth-century evidence for meantone temperament', *PRMA*, cii, (1975–6), pp.37–51, and *idem*, 'Pythagorean Intonation and the Rise of the Triad', *RMA Research Chronicle*, xvi (1980), pp.4–61.

³²Roesner, *op cit*, pp.vi–vii.

³³The standard guide to the *refrain* material is still N. Van den Boogaard, *Rondeaux et refrains du XII^e siècle au début du XIV^e* (Paris, 1969).

³⁴See, for example, the *Ars discantus secundum Johannem de Muris* in Coussemaker, *op cit*, *Scriptores*, iii, p.110.

³⁵*Ibid*, p.362

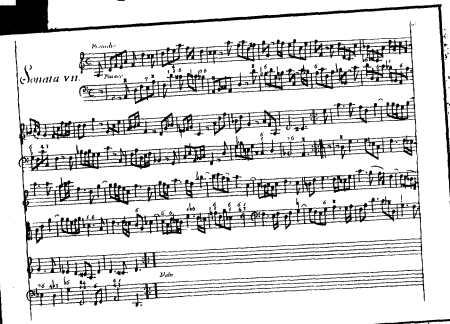
³⁶*Ibid*, p.60

³⁷Dyer, *op cit*

³⁸As the manuscript *GB-Lbm* Cotton Tiberius B.IX was severely damaged in the fire of 1731, I have followed the early 18th-century copy (*GB-Lbm* Add. MS 4909, f.54r), checking this, where possible, against the original (f.213v). There seems no reason to believe that the 18th-century transcript is unreliable. Indeed it is more reliable than the text which Coussemaker printed in his *Scriptores*, iii. The same material also appears in the *Quatuor principalia musica* (*op cit*, iv, p.295).

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