

The Selection of Clausula Sources for Thirteenth-Century Motets: Some Practical Considerations and Aesthetic Implications

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In addressing questions of compositional process, scholars of medieval polyphony have relatively little on which to build. They cannot gain insight from reading explicit written testimonies by medieval composers; nor can they look to evidence such as sketches, drafts, or revisions for guidance. Instead, they can only study theoretical accounts of how to compose good discant and examine the surviving pieces themselves to increase their understanding of medieval compositional process.¹

Of all the surviving types of medieval music, the early Latin motet offers perhaps the best opportunity to explore aspects of compositional process, for the vast majority of early Latin motets were created in several observable stages. More than one hundred years have passed since Wilhelm Meyer's pathbreaking report that many early motets originated with the the addition of text to preexisting discant clausulae (Meyer 1898). While Meyer's discovery prompted an intense effort to identify related motets and clausulae (Ludwig 1910; Gennrich 1957; van der Werf 1989), other elements of compositional process were largely overlooked. Norman Smith (1989) recognized this lacuna and drew attention to the process of *converting* clausulae into motets; in this paper, I shall focus on an earlier stage of compositional process—the process of *selecting* clausula models to convert into motets. In brief, I shall identify factors that may have attracted medieval “composers” to select certain types of clausula models for early Latin motets.² I shall then consider the extent to which their criteria for selection apply to other segments of the thirteenth-century motet repertory. As I will show, the initial selection criteria not only reflected practical considerations, but also had long-range aesthetic implications for the stylistic development of the medieval motet.

The surviving sources of Notre Dame polyphony indicate that the composers of the earliest motets did not indiscriminately add texts to all of the approximately 950 passages of discant; instead, they focused their efforts on less than twelve percent of the available repertory.³ To investigate potential criteria for selection, I compared a “motet group” of fifty-five clausulae that were converted into motets with a “control group” of 103 clausulae that did not become motets.⁴ The purpose of this comparison was to look for possible stylistic differences between the two groups; if

found, significant differences could shed light on the process of selecting clausulae to transform into motets.

The motet group contains both discant passages from organum (DP) and separate clausulae (CL) that served as models for early Latin two-voice motets collected in manuscripts F and/or W2. Some of the clausulae in the motet group were also turned into three-voice conductus-motets, and many of them provided the basis for French contrafacta and/or later thirteenth-century double motets. Clausulae that were originally converted into French motets were excluded from initial consideration because they seem to reflect different practical and aesthetic concerns.

The control group was selected from the first two series of two-voice clausulae in the fifth fascicle of F (Nos. 1–288), which contain the most recent and stylistically sophisticated clausulae in the manuscript.⁵ Since sixty of these 288 clausulae served as motet sources, it appears that the first two series of clausulae were not only available to composers for conversion into motets, but also generally suitable for texting. The same claim cannot be made for clausulae 289–462, which tend to be earlier in origin, simpler in style, and quite short in length (Baltzer 1995: xlv). Only the very last of these 174 clausulae served as a motet source.

As shown in table 1, the motet and control groups are directly comparable because their members are based on a common stock of tenors.⁶ This restriction attempts to minimize any stylistic variance that may result from formal or harmonic features of the tenor.⁷ In addition, all clausulae in the motet and control groups are included in the Florence manuscript, whether in the fifth fascicle or in the *Magnus liber organi*.

For the purposes of stylistic comparison, I shall focus on clausula features relevant to the texting process: the treatment of modal rhythm, phrase organization in the duplum voice, and cadences in the duplum and tenor voices. Significant stylistic differences between the motet and control groups may indicate which musical features appealed to composers who converted clausulae into motets.

Since the choice of rhythmic mode in the tenor voice affects modal rhythm and phrasing in the duplum, I will first consider the distribution of clausulae by rhythmic mode in the tenor. As summarized in table 2, the modal distribution varies between different groups of clausulae. Whereas nearly seventy percent of all Notre Dame clausulae are built on unpatterned tenors, the control clausulae are more evenly distributed among modal rhythmic classes. This discrepancy may be attributed to differences in chronology as ascertained from stylistic evidence; whereas unpatterned tenors in ternary or duplex longs dominate the earliest layers of the clausula repertory, later clausulae, including those in the control group, tend to exhibit more advanced stylistic features, including rhythmically

Table 1
List of Clausulae in Motet and Control Groups

Tenor	Tenor Text	Motet Number	Motet Group (source CL in F)	Control Group (related CL in F)
M 1	Dominus	43	No. 26	Nos. 27–35, 227–28
M 3	[Domi]ne	60 (=61)	No. 41	Nos. 47–48
M 5	Manere	70 (=69)	Nos. 42–45	No. 49
M 8	In Bethleem	98	DP (105r)	
M 9	Et illuminare	101	CL à3 (45r)	Nos. 57–58
M 12	Et confitebor	110, 112	DP (139v); No. 71	Nos. 67–70, 72, 231
M 13	Domino quoniam	131, 140; 133	DP (108v); No. 83	Nos. 78–82, 238
M 13	In seculum	141	No. 90	Nos. 85–89, 91–92, 94, 240–41
M 14	Nostrum	215	DP (109r)	Nos. 95, 242
M 14	[Immo]latus est	230, 232, 233, 234	DP (109r); Nos. 103, 104, 101	Nos. 98–99, 102, 243
M 15	In azimis sinceritatis	244	DP (110r)	
M 17	Et tenuerunt	248	DP (111v)	No. 115
M 23	[Captivi]ta[tem]	307, 308, 309, 310	Nos. 121, 122, 120; DP (116r)	Nos. 123–27, 248
M 24	Et gaudebit	313, 322	CL à3 (45v); No. 246	No. 131
M 25	Hodie perlustravit	337	No. 135	Nos. 134, 142, 250
M 26	Docebit	344, 345	DP (118v); No. 137	Nos. 138–39, 143
M 27	Amoris	360	No. 140	Nos. 141, 252
M 29	Mulierum	369	DP (121r)	No. 144
M 29	Iohanne	379	No. 147	Nos. 146, 258
M 32	Virgo	411, 414	DP (123r); CL à3 (11r)	Nos. 151–54, 156, 222
M 34	Regnat	437, 439, 442, 443, 444	DP (126r); Nos. 172, 170, 165, 164	Nos. 167–69, 171, 173–76, 203, 268–69

Table 1 (cont.)

M 38	Ex semine	483	DP (129v)	Nos. 181, 271
M 40	[Inquirien]tes autem	487 (=488)	DP (131v)	Nos. 273-74, 276
M 41	Domine	490	No. 184	
M 45	In odorem	495	CL à3 (45r)	No. 187
M 49	Et sperabit	505	DP (138r)	Nos. 189-90
M 51	[Adju]torium	516	DP (139v)	Nos. 198-99, 201, 214
M 51	Et exaltavi	517, 518	CL à3 (45r); No. 283	
M 53	Et florebit	524	DP (140v)	No. 225
M 54	Quia concupivit	529	DP (141v)	
O 1	Et Jerusalem	632	No. 1	No. 2
O 2	Tanquam	635, 636, 643	No. 9; CL à3 (10v); DP (66r)	Nos. 10-13, 15-18
O 16	Eius	697	DP (76r)	No. 159
O 18	Ad nutum	698	DP (76v)	
BD 1	Domino	655	DP (88v)	
BD 6	Domino	762	CL à3 (43r)	

Table 2
 Modal Distribution of Notre Dame Clausulae*

Rhythmic Mode (Tenor)	All Clausulae	Control Group	Motet Group
1	37/950 (3.9%)	6/103 (5.8%)	7/55 (12.7%)
2	38/950 (4.0%)	16/103 (15.5%)	6/55 (10.9%)
3	14/950 (1.5%)	14/103 (13.6%)	4/55 (7.3%)
5	167/950 (17.6%)	40/103 (38.8%)	30/55 (54.5%)
Unpatterned	650/950 (68.4%)	27/103 (26.2%)	8/55 (14.5%)
Unclassified*	44/950 (4.6%)	—	—

*Percentages in this and subsequent tables may not add up to 100 due to rounding. Some clausulae have mixed modal patterns and could not be assigned to a single modal category. In tables 2 and 3a, these clausulae are represented as "Unclassified."

patterned tenors and more sophisticated phrasing in the upper voices (Baltzer 1995: xlii–xliv). Differences between the control and motet groups, however, cannot be explained in terms of chronology. These differences indicate that motet composers had a strong preference for clausulae with patterned, fifth-mode tenors, and that they tended to avoid converting clausulae with unpatterned or third-mode tenors into motets. The reasons for these preferences will become more apparent after considering modal rhythm of dupla voices, aspects of phrasing, and cadential patterns.

The degree of rhythmic regularity in the duplum voice of a parent clausula has a significant impact on the nature of text declamation in the offspring motet. For purposes of comparison, the extent of rhythmic regularity, or "modal purity," may be expressed as the percentage of ternary-long beats that have a regular modal division as opposed to beats with substitutions in the prevailing rhythmic pattern. For example, in the first rhythmic mode, the strict alternation of longs and breves constitutes "modal purity." "Modal impurity" can result from breaking or "fracturing" the long into two breves, or from extending the long into a ternary long, which then substitutes for a long-breve combination. Table 3a summarizes the distribution of motet sources and control clausulae by duplum mode and indicates the average levels of modal purity (MP) and impurity from fracturing (FR) or extending (EXT) the modal pattern. Following Apel (1953) and Smith (1990), I will refer to the process of fracturing the long in the modal pattern as *fractio modi*, and extending the long in the modal pattern as *extensio modi*.⁸

Table 3a
Treatment of Modal Rhythm in Dupla Voices (overview)

MOTET GROUP

	No. of Exx./55	Avg. MP	Avg. FR	Avg. EXT
Mode 1:	39 (70.9%)	67.3%	10.8%	21.9%
Mode 2:	6 (10.9%)	76.7%	13.8%	9.5%
Mode 3:	8 (14.5%)	86.9%	9.0%	4.2%
Unclassified:	2 (3.6%)	—	—	—

CONTROL GROUP

	No. of Exx./103	Avg. MP	Avg. FR	Avg. EXT
Mode 1:	62 (60.2%)	58.5%	14.3%	27.2%
Mode 2:	17 (16.5%)	65.7%	28.0%	6.4%
Mode 3:	20 (19.4%)	86.6%	9.0%	4.4%
Unclassified:	4 (3.9%)	—	—	—

The findings presented in table 3a reveal some interesting differences between the motet and control groups with respect to modal rhythm. In terms of overall distribution, the motet group has a larger proportion of first-mode dupla and a smaller share of dupla in the second and third modes than does the control group. This difference is certainly related to the distribution of tenor modes, for first-mode dupla are often coupled with fifth-mode tenors. However, additional factors may also be at work.

Focusing on clausulae with first-mode dupla, table 3b shows that the average modal purity level is higher in the motet group than in the control group (67.3 vs. 58.5%). This discrepancy may indicate that composers preferred using clausulae with rhythmic irregularities rather than regular patterning as the basis for thirteenth-century motets. As I will demonstrate, the rhythmic irregularities found in the motet group offered composers greater flexibility with respect to text underlay, and this often resulted in more varied text declamation.

As summarized by table 3b, high levels of modal purity are uncommon among first-mode dupla in both groups; only four clausulae in the control group and five in the motet group have consistently regular rhythmic patterning. The strictest instance of modal patterning occurs in a *Regnat* clausula (no. 165) from the motet group, shown below in example 1.⁹ This paradigm of first-mode rhythm served as the basis for *Infidelem populum* (motet no. 443). Neither it nor a related *Regnat* clausula (no. 164), texted as *Deus omnium* (motet no. 444), experienced long lifespans as

Table 3b
Treatment of Modal Rhythm in First-Mode Dupla

MOTET GROUP: 39 Clausulae with First-Mode Dupla

	No. of Exx./39	Avg. MP	Avg. FR	Avg. EXT
High MP (>80%):	5 (12.8%)	86.8%	9.1%	4.1%
Moderate MP:	24 (61.5%)	70.2%	11.6%	18.2%
Low MP (<60%):	10 (25.6%)	50.7%	9.6%	39.8%

CONTROL GROUP: 62 Clausulae with First-Mode Dupla

	No. of Exx./62	Avg. MP	Avg. FR	Avg. EXT
High MP (>80%):	4 (6.5%)	83.4%	5.6%	11.0%
Moderate MP:	30 (48.4%)	68.8%	14.1%	17.2%
Low MP (<60%):	28 (45.2%)	43.9%	15.9%	40.2%

motets. They were both converted into two-voice Latin motets but, as far as is known, were never used as the basis for French or double motets.¹⁰ Only three other clausulae with high levels of modal purity were transformed into motets. Interestingly, all of them originated as three-voice conductus-motets but also survive in two-voice reductions.¹¹

Clearly, selecting clausula sources with high levels of modal purity (coupled with regular phrase lengths) and then underlaying the motet text in a syllabic fashion would have resulted in very regular text declamation, which might have appealed to motet composers who wanted to emulate the poetic regularity of the conductus.¹² The composer who underlaid the text *Infidelem populum* to the modally pure clausula source presented above as example 1 achieved this result. One can readily observe similarities between the texts to this motet and the conductus, *Auctor vite*, given below as example 2;¹³ both have regular line lengths and regular accentual patterns at the ends of lines, making them good examples of “rhythmic” poetry (defined by syllable count and final accent, as opposed to “metric” poetry, defined by regular scansion according to patterns of long and short syllables known as “feet”).¹⁴ In example 2, both motet and conductus texts feature predominantly seven-syllable lines and regularly recurring proparoxytonic accents on the antepenultimate syllable of each line. This pattern is represented as “7pp.”

Another way to achieve regular patterning would have been to underlay text in a neumatic fashion to music with high levels of *fractio modi*. However, as discussed below, this approach was much more typical of French motets than of early Latin ones. With respect to the early Latin motet, it

Example 1: High modal purity in CL no. 165, *Regnat* (M 34); F, fol. 166r-v.

The musical score consists of five systems, each with two staves. The top staff is in treble clef and the bottom staff is in bass clef. The music is in 8/8 time. The first system includes the label 'Reg' under the bass staff. The score concludes with a double bar line.

appears that after some initial experimentation, composers came to prefer using clausula sources with greater rhythmic contrasts. This shift in preference marks an important step in the emergence of the Latin motet as a genre characterized by irregularities of design and therefore distinct from the more patterned style of the conductus.

As shown in table 3b, both the control and motet groups have a large portion of clausulae with moderate levels of modal purity, ranging from sixty to eighty percent. Although the twenty-four motet sources in this moderate range have slightly higher levels of modal purity than the thirty "moderate" control clausulae (70.2 vs. 68.8% on average), the "moderate" motet sources still feature more instances of *extensio modi* than the control clausulae (18.2 vs. 17.2%). A passage from clausula no. 101, shown below as example 3, typifies the style of the "moderate" motet sources.¹⁵ As I will

Example 2: Comparison of motet and conductus texts.a) Motet, *Infidelem populum* (443); F, fol. 403r

Infidelem populum.	7pp
Haman ad patibulum	7pp
Suspenditur proprium.	7pp
Apprehende gladium.	7pp
Frange manus hostium.	7pp
Veni in auxilium	7pp
Naufraganti seculo	7pp
Et populo fidelium.	8pp
Iebuseos eice	7pp
Nos respice per filium.	8pp

b) Conductus, *Auctor vite*; F, fol. 270v

Auctor vite virgine	7pp
Natus mori voluit	7pp
Sub sacci velamine	7pp
Quem pro reis induit.	7pp
Cuius vita lectio	7pp
Nobis et instructio,	7pp
Nos pro vite precio	7pp
Mundo mori docuit.	7pp
Ut surgamus oritur,	7pp
Ut vivamus moritur,	7pp
Celi pandens aditum,	7pp
Compensem igitur	7pp
Ut quod nobis creditur	7pp
Persolvamus debitum.	7pp

illustrate, the shifting rhythmic patterns made it possible for composers to underlay text in order to underscore units of text through contrasting rates of text declamation.

Differences between the motet and control groups are even more striking when one considers the substantial number of clausulae from both groups with low levels of modal purity. Of the twenty-eight control clausulae with low levels of modal purity, there are nineteen pieces in which *extensio modi* constitutes the principal component of modal impurity. In the motet group, eight of ten pieces with low modal purity feature significant amounts of *extensio modi*. The effect in such compositions is that the duplum voice moves in a mixture of first- and fifth-mode rhythms. Whereas clausulae in the motet group tend to alternate between longer passages of first-mode and ternary-long rhythms that allow for contrasting rates of text

Example 3: Moderate modal purity in CL no. 101, [Immo] *Latus est* (M 14); F, fol. 158r.

The image displays a musical score for a piece titled "Latus est" by Immo. The score is arranged in seven systems, each consisting of a vocal line (top staff) and a lute line (bottom staff). The key signature is one flat (B-flat), and the time signature is 4/4. The vocal line features a melodic line with various ornaments and phrasing marks, including slurs and ties. The lute line provides a harmonic accompaniment with a steady rhythmic pattern. The lyrics "La" and "tus" are placed below the vocal line at the beginning and end of the piece, respectively.

La

tus

declamation, ten of the control clausulae with high levels of *extensio modi* have significant numbers of single ternary longs followed by ternary-long rests. Individual ternary longs followed by rests would have presented difficulties for text underlay because they would have disrupted the semantic flow with their hocket-like effect; thus, composers generally avoided converting clausulae with isolated ternary longs into motets. *Alpha bovi et leoni* (762) represents one notable exception. As shown in example 4, the composer of this motet underlaid isolated ternary longs present in the clausula source with the monosyllabic exclamation “o,” which also reinforces the vowel sustained by the “[Benedicamus] DO-mino” tenor.

The control group also includes seven clausulae with exceptionally high levels of *fractio modi*. Example 5, a passage from clausula no. 12, illustrates this approach. This *Tanquam* clausula, from the Christmas Responory *Descendit de celis* (O 2), has fractured rhythms on seventy percent of its beats. Substantial amounts of *fractio modi* would have presented difficulties for the predominantly syllabic approach to text underlay characteristic of the early Latin motet. Thus, the motet group has consistently lower levels of *fractio modi* on average, and has no member with more than 37.5% of its beats fractured. Apparently, composers only

Example 4: Isolated ternary longs in *Alpha bovi et leoni* (762) / *Domino* (BD 6), mm. 21–40; F, fol. 407r.

21

gi - gan-ti ge - mi - ne - o o o o o o

o i - gni, nim - phe, gra - no, tra - mi - ti pla - no,

o o o o o u - ni -

Example 5: High *fractio modi* in CL no. 12, *Tanquam* (O 2); F, fol. 147v.

Tan

quam

avoided high levels of *fractio modi* when converting clausulae into early Latin motets, in which the predominant method of text underlay was syllabic; clausula sources for French motets often have significant amounts of *fractio modi*. I have argued elsewhere that composers of both clausula-based and newly composed French motets tended to underlay their texts in a more neumatic fashion in order to achieve greater regularity in text declamation (Kidwell 1996).

Some of the observations about clausulae with first-mode dupla shed light on the use of clausulae with second- and third-mode dupla as sources for early Latin motets. In general, second-mode clausulae often have significant amounts of *fractio modi* while third-mode clausulae tend to be modally pure. Since composers avoided selecting first-mode clausulae with heavily fractured modal rhythms or with high levels of modal purity, it comes as no surprise that they used only a limited number of second- and third-mode clausulae as models for early Latin motets.

Clausulae with second-mode dupla made up 16.5% of the control group but only 10.9% of the motet group (table 3a). On average, the second-mode clausulae in the motet group have higher levels of modal purity than those in the control group (76.7% vs. 65.7%) due to considerably lower levels of *fractio modi* (13.8% vs. 28.0%). It also seems significant that none of the clausulae in the motet group has fractured rhythms on more than 18.5% of their beats. This once again supports the hypothesis that composers of early Latin motets found high levels of *fractio modi* problematic for texting because of their preference for syllabic text underlay. Conversely, high levels of *fractio modi* did not deter composers from converting heavily fractured clausulae in the second rhythmic mode into French motets any more than it hindered them from selecting heavily fractured clausulae in the first mode as French motet sources.

It is also striking that composers avoided converting third-mode clausulae into motets. Almost 20% of the clausulae in the control group are in the third rhythmic mode compared to less than 15% of those in the motet group. While clausulae with high levels of modal purity were avoided throughout the motet group, the rhythmic pattern of mode 3 would have presented special problems for composers of early Latin motets, who generally underlaid texts to preexisting clausulae in such a manner as to have poetic accents coincide with musical ones.¹⁶ Since the rhythmic pattern of mode 3 begins with two accented notes, it requires the text underlay of two adjacent accented syllables. The composer of *Ad veniam per veniam* (635) came up with an ingenious solution: as shown below in example 6, he started most lines of text with either a one- or a four-syllable word, which allows for correct text declamation in the third mode.¹⁷

Having focused on the rhythmic articulation of individual beats, I will now consider overall phrase organization in the duplum voice, and its effect on text structure. As with modal purity, significant differences between the source and control groups with respect to phrase organization support the hypothesis that composers were aware of stylistic attributes suitable for texting and chose their source clausulae accordingly. As summarized in table 4, clausulae that were converted into motets are generally longer (as measured in ternary-long units) and have more phrases than clausulae that did not become motets. In addition, those clausulae in the

Example 6: Third-mode text underlay in *Ad veniam perveniam* (635) / *Tanquam* (O 2); W2, fol. 145r.

Ad ve-ni - am per - ve-ni - am si ve-ni - am cum o - le -
Tan -

8

o, quod se-de - o et ca-ve - o se - du-lis o - cu-lis

15

ne dor-mi - am; som - pni-que de - si-di - am si pro-cul ad mo-ve -

22

am et vi-gil a - pe-ri - am. Nam cor - ri-tur ad gra-ti -

29

am quam con - se-quit ad glo-ri - am. Si ve-ni - am ob-vi - am

37

or - na-tu non ca-re - o nup - ti-is re - gi-is i - do-ne - o.
quam

Table 4
Treatment of Phrasing in Dupla Voices

	Avg. Length (in TL units)	Average No. of Phrases	No. of Exx. with Regular Phrasing
Motet Group:	81.6	13.7	6/55 (10.9%)
Control Group:	65.2	12.0	20/103 (19.4%)

control group that have regular phrasing (defined as clausulae in which more than eighty percent of their dupla phrases are the same length) are more than double the number of those in the motet group. Presumably, the combination of regular line lengths and consistent rhythmic patterning would support extremely regular poetry in terms of line lengths and text declamation. Therefore it seems significant that whereas only one motet source combines regular phrasing with a high level of modal purity, nearly half of the control clausulae feature such a combination.¹⁸ This suggests that motet composers not only wanted a meaningful number of phrases with which to work, but also that they were more interested in contrast and irregularities of design than in writing regular poetry. If the latter were the case and a "conductus-like" text with uniform line lengths was considered ideal, why did composers overlook so many clausulae with regular phrasing as sources? They seem to have perceived their new genre as something *different* from the conductus.

The manner in which a motet text is communicated is also affected by the nature of phrase endings in the clausula model. Example 7 illustrates six cadential patterns found in the selected repertory. The full cadence features simultaneous closure in both voices (exx. 7a.1-7a.3). Occasionally, these cadences are extended by the use of a *plica* or *longa florata* in the duplum that requires transcription of the following tractus as a breath mark (exx. 7b.1-7b.2). In effect, this weakens the sense of closure by providing for musical continuity between phrases. The half, implied, and "feminine" cadences are only found in clausulae that mix ternary-long with either long or breve rests. In the half cadence (ex. 7c), the last pitch in the duplum confirms the consonance initially established by the tenor and duplum, whereas in an implied cadence (ex. 7d), the final sonority suggested by the last pitch in the duplum contradicts that of the initial tenor-duplum consonance. The "feminine" cadence repeats the cadential pitch in the duplum, in a manner analogous to a feminine poetic ending (ex. 7e). In the sixth cadence type, the tenor continues beneath a phrase break in the duplum, resulting in overlap between the voices (ex. 7f).

Example 7: Cadence types.



a) Full cadences (3)



b) Extended cadences (2)



c) Half cadence

d) Implied cadence

e) "Feminine" cadence



f) Overlapping cadence

As summarized in table 5, the motet group has an average of three different cadence types per clausula; nearly all of its members have multiple cadence types per clausula and 34.5% of the motet sources feature more than three different cadence types. In contrast, one-third of the clausulae in the control group have only one cadence type. This condition is especially common in clausulae with tenors moving in unpatterned ternary or duplex longs, and may explain why composers avoided converting clausulae with unpatterned tenors into motets. The control pool also includes several clausulae that would have been especially problematic to convert into motets; two clausulae have dupla made up of one continuous phrase (nos. 15 and 176), and six have constantly overlapping cadences until the end (nos. 10, 17, 27, 57, 175, and 228).

If cadences are the musical equivalent of punctuation, then from the standpoint of texting, it would be logical that the motet group would favor a greater variety of types.¹⁹ This situation allows for various degrees of closure on a continuum that ranges from the strongest, or full cadence, to the weakest, or overlapping, type. In effect, a variety of phrase endings offers the possibility of grouping lines of text into larger syntactic or semantic units that are set off by full cadences. As I have shown elsewhere (Kidwell 1993) and will illustrate in example 9, early motet composers regularly availed themselves of such opportunities to segment their texts. Conversely, the two extreme approaches found in the control group would have been unsuitable for texting: a clausula without cadences fails

Table 5
Comparison of Cadence Types

	Avg. No. of Cad. Types	1 Type Only	>3 Types
Motet Group:	2.9	7/55 (12.7%)	19/55 (34.5%)
Control Group:	2.0	34/103 (33.0%)	9/103 (8.7%)

to convey any sense of punctuation whereas a clausula with only one cadence type lacks the hierarchical means to differentiate strength of closure and therefore to group lines into larger semantic units.

A good clausula source, then, is one that provides the motet creator with one or more means to differentiate units of text: contrasting patterns of declamation, varied phrase lengths, or a hierarchy of cadential patterns. A close examination of two complete clausulae will demonstrate how the various stylistic elements interact and will further illustrate stylistic differences between the control and motet groups.

Clausula no. 99, representative of the control group, appears below as example 8. This setting of *Latus est* from the Easter Alleluia *Pascha nostrum* (M 14) combines a first-mode duplum with a fifth-mode tenor. Its overall length of seventy-four ternary-long beats could have provided a composer with enough material to support a meaningful added text. However, it has other attributes that are atypical of motet sources. It has a modal purity level of 83.1%, which exceeds the norms for both the motet and control groups. The phrase organization of this *Latus est* clausula is also quite regular: it has eight phrases of eight ternary-long beats before a phrase of ten beats leading to an organal conclusion (example 8 omits this organal ending because motet composers typically stopped texting just before such concluding flourishes). It should also be noted that the tenor and duplum cadence together with a full (or masculine) ending for all nine phrases.

This composition may well have been considered a good clausula in its time. In fact, its regularity and periodicity may reflect the influence of Perotinian style, and Perotin was regarded by Anonymous IV as the best composer of discant (Yudkin 1985: 39). A texted version of this model could have featured regular declamation of thirteen-syllable lines as prefigured by modal purity and uniform phrase lengths, in which case the resulting motet could have approximated a conductus. Yet while many attributes found in this *Latus est* clausula typify the control group, few thirteenth-century motets exhibit such regularity.

The representative from the motet group, a clausula based on an *Et gaudebit* tenor from the Feast of the Ascension, appears as example 9a. The Latin motet text, *Non orphanum* (322), is underlaid for reference.²⁰

Example 8: CL no. 99, *Latus est* (M 14); F, fol. 158r (control group).

La -

tus

Example 9a: CL no. 246, *Et gaudebit* (M 24); F, fol. 174v (motet group).

1. Non or - pha-num te de - se - ram sed ef - fe - ram 2. si - cut li - ba - num;
 Et gau de

7. si - cut cli - ba - num po - nam te sa - lu - tis; 4. si - cut tim - pha -

12. num et or - ga - num le - ti - ti - e et sa - lu - tis

17. 5. au - fe - ram E - gy - pti - e iu - gum ser - vi - tu - tis. 6. Con - fe - ram me

22. se - cu - tis, 7. post la - cri - mas gau - di - um, pre - mi - um post la - bo - ris te - di -

29. um. 8. Cum ie - ro ve - ni - am. 9. Sub ve - ni - am, 10. per gra - ti -


Example 9a (cont.)

36



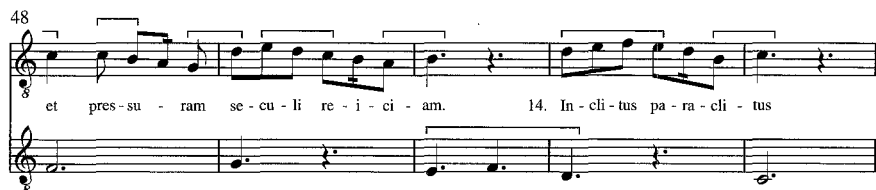
am tri - bu - am ve - ni - am, 11. ce - le - sti - um ci - vi - um glo - ri - am.

43



12. Men - tem pu - ram et se - cu - ram ef - fi - ci - am; 13. car - nis cu - ram

48




et pres - su - ram se - cu - li re - i - ci - am. 14. In - cli - tus pa - ra - cli - tus

53



15. di - vi - ni - tus tu - um cor do - ce - bit, 16. et ra - di - ci - tus;

59



17. tu - us spi - ri - tus 18. do - mi - no sic he - re - bit. 19. Tu - tus et in -

65



tro - i - tus 20. tu - tus sit et ex - i - tus; cor pe - ni - tus gau - de - bit.]

bit

Example 9b: Text for *Non orphanum te deseram* (322) / *Et gaudebit* (M 24).

1 <i>Non orphanum te deseram</i> sed efferam 2 sicut libanum;* 3 sicut clibanum ponam te sa-lú-tis;* 4 sicut timphanum et organum letitie et sa-lú-tis* 5 auferam Egyptie iugum servitútis. 6 Conferam me se-cú-tis, 7 post lacrimas gaudium, premium post laboris tedium. 8 Cum iero <i>veniam</i> .* 9 Sub <i>veniam</i> ,* 10 per gratiam tribuam <i>veniam</i> , 11 celestium civium gloriam. 12 Mentem puram et securam efficiam; 13 carnis curam et pressuram seculi reiciam. 14 Inclitus paraclitus 15 divinitus tuum cor <i>do-cé-bit</i> 16 et radicitus; 17 tuus spiritus 18 domino sic he-ré-bit.* 19 Tutus et introitus 20 tutus sit et exitus; cor penitus <i>gau-dé-bit</i> .*	I shall not leave you orphans but I shall lift you up like frankincense; like an oven of salvation I shall maintain you; like a tambourine and an organ of joy and of salvation I shall take off the yoke of your Egyptian servitude. I shall bestow myself to my followers, joy after tears, reward after the toil of labor. Although I shall go away, I shall come back. When I come, I shall come through grace and I shall bestow the glory of the heavenly hosts. I shall cleanse your mind and make it secure; I shall reject the cares of the flesh and the torments of the world. The glorious Comforter will teach your heart divinely and completely; your spirit will thus cling to the Lord. May both your coming and your going be safe; your inner heart will rejoice.
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Unlike its control-group counterpart, this clausula has a modal purity level of 52.8%, which allows for varied text declamation. While some ternary-long extensions of the mode occur in short passages of alternate third mode (e.g., mm. 24–26 and 35–42), other instances of *extensio modi* prefigure longer passages of ternary-long declamation (e.g., mm. 9–10 and 15–16). In the texted version, the poet-composer took advantage of the change in modal patterning to emphasize the word “*veniam*,” which is a direct quotation from the parent chant text. He then used the extended passages of ternary-long declamation to highlight the repetition of the word “*salutis*.” *Fractio modi* also contributes to modal impurity in this example. However, unlike the extreme and consistent fracturing of the mode found to be atypical of motet sources, the *fractio* in example 9a occurs on a more localized level of one or two ternary-long beats. This type of *fractio* offered the motet composer a bit of flexibility with respect to text underlay. For instance, he interpreted a ternary-long beat fractured into three breves (transcribed as eighth notes) in three different ways: as two syllables in first-mode declamation (e.g., m. 3), as one syllable in extended declamation (e.g., m. 14), or as three syllables in more rapid declamation (e.g., m. 49).

The phrasing in the clausula source for *Non orphanum* is irregular; its twenty phrases range from four to twelve ternary-long beats in length. The irregularities in phrasing seem even more intricate due to varied text declamation within phrases, and due to the alternation between simultaneous and overlapped phrase endings.

The Latin text to *Non orphanum* (together with a translation) appears as example 9b. As indicated, lines 3–6, and 15, 18, and 20 have final accents on the penultimate syllable, while the remaining lines have final accents on the antepenultimate syllables. The poet-composer was able to achieve such a mixture of poetic accents in part because this clausula source uses five different cadential patterns. Penultimate accents fit the feminine ending of line 5 as well as phrase endings such as line 3 that have extended declamation (marked with hyphens), while the antepenultimate accents work well with either full (indicated by asterisks), half, or implied cadences. In addition to this technical aspect of text underlay, the composer of *Non orphanum* seems to have drawn upon the strong closure of simultaneous phrase endings to show parallels between lines of text. For instance, the full cadences after lines 2, 3, and 4 articulate the succession of “sicut” clauses; those after lines 3 and 4 serve to reinforce the repetition of the word “salutis”; and the full cadences after lines 8 and 9 highlight the quoted text “veniam,” which is also emphasized by the contrasting modal pattern.

By comparing clausulae from the motet and control groups I have identified some stylistic features that might have attracted composers when converting clausulae into early Latin motets. It appears that the source clausulae for early Latin two-voice motets distinguish themselves from the larger repertory of Notre Dame clausulae in terms of their treatment of modal purity, phrasing, and cadential patterns. These differences suggest that for the purposes of texting, thirteenth-century composers did *not* view all clausulae as equal. Instead, it seems that a variety of practical and aesthetic concerns influenced their selection process. In general, clausulae that were too brief, were composed of very short phrases or one long phrase, had too many isolated single notes or rests, had uniform cadences, or had an excessive amount of modal fracturing rarely served as sources for early Latin motets. Apparently, these features were impractical and undesirable for texting. Nor does it appear that composers went out of their way to select clausulae that would be easy to sight read when converted into *cum littera* notation; very likely, the preference for internal variety in the rhythmic declamation would require prior knowledge of the clausula source’s *sine littera* rhythmic notation. In addition to these practical matters, stylistic features of the motet source group point to an aesthetic preference for variety, contrast, and irregularities of design. Since these

features were more pronounced in the motet sources than in the control-group clausulae, it appears that "irregularities" in the early Latin motet do not automatically result from texting clausulae, but instead reflect artistic choice.²¹

It is now worth considering the extent to which these selection criteria apply to other segments of the thirteenth-century motet repertory. Table 6 provides a comparison of how the parameters introduced thus far apply to different types of early motets. It presents average values for the motet and control groups, and then summarizes data gathered for different subgenres of motets. The data reported in table 6 combine statistics already reported for the motet group—which only includes clausulae that were converted into two-voice Latin motets—with additional data for clausulae that were converted into other types of motets.

As indicated in table 6, twenty clausulae were converted into two-voice Latin motets but disregarded as sources for French contrafacta or as the basis for later double motets.²² Several characteristics may have contributed to the fact that they were not chosen. All but three motets in this group have unpatterned or fifth-mode tenors; these slower moving tenors may have lost some of their initial appeal as composers began to experiment with faster tenors moving in first- or second-mode patterns (Baltzer 1995: xlili). The three motets with faster tenor patterns might have been excluded from further transmission due to their shorter-than-average overall lengths; *Virgo gignit* (133) is sixty-two ternary-long beats while *Hostem superat* (308) and *Quia concupivit vultum rex* (529) have respective lengths of forty-five and twenty-eight beats. In addition, the clausulae selected as models for two-voice Latin motets have lower-than-average levels of modal purity, marked by a substantial amount of *extensio modi*. As a result, most of the uniquely two-voice Latin motets have irregularly patterned text declamation, because their texts were underlaid syllabically according to the irregular rhythms of their parent clausulae. This approach

Table 6
Characteristics of Different Subgenres of Early Motets

Group/Subgenre	No. of Exx.	MP	FR	EXT	Length (in TLs)	Avg. No. of Cad. Types
Control Group	103	66.1%	15.6%	18.3%	65.2	2.0
Motet Group	55	72.0%	10.8%	17.2%	81.6	2.9
2v Latin motets only	20	69.9%	10.2%	19.8%	72.2	2.5
3v Conductus-motets	24	74.6%	6.4%	19.0%	92.7	3.3
2v French motets	42	65.0%	25.1%	9.9%	63.2	2.7
3v Double motets	17	67.1%	20.6%	12.2%	81.9	3.1

to text underlay allowed composers to emphasize selected units of text and therefore to communicate the meaning of their texts more effectively. However, while irregular declamation typifies early Latin motets, regular declamation became characteristic of other subgenres of motets.

Composers turned twenty-four clausulae into three-voice conductus-motets.²³ Many of these compositions were as short-lived as the two-voice Latin motets discussed above. In fact, less than half were transmitted beyond the earliest motet sources. However, clausula sources for conductus-motets have some striking differences from clausulae that were only converted into two-voice versions. The clausulae selected for conductus-motets are generally longer and have higher levels of modal purity than the two-voice motets. This makes them seem more "conductus-like" because they can support longer texts declaimed in a more consistent manner. Somewhat surprisingly, only one of the clausulae chosen to become a conductus-motet has consistently uniform phrase lengths, which could have prefigured uniform poetic line lengths.²⁴ In addition, these clausulae have a greater variety of cadence types than clausulae in any other group. This combination of conductus-like and motet-like features attests to the hybrid nature of conductus-motets, most of which were created before motet composers had solidified their preference for contrast and irregularities of design and thereby fully distinguished their new genre from the conductus.

Clausulae selected as models for two-voice French motets also have distinctive features.²⁵ They tend to exhibit faster tenor modes and a larger-than-average share of second-mode dupla (table 6). As a group, the clausula models for French motets have moderately low levels of modal purity due to consistently high amounts of *fractio modi*. Since the standard procedure for texting fractured rhythms is to use neumatic text underlay corresponding to the modal rhythmic pattern, high levels of *fractio modi* typically result in modally regular text declamation. In terms of overall style, high levels of *fractio modi* and regular text declamation are characteristic of newly composed French motets, such as those found in W2, fascicle 10, and of Latin contrafacta of French originals, such as those found in the appendix to the third Latin alphabetical series in W2, fascicle 8.²⁶ The present study indicates that stylistic differences between early Latin and early French motets may stem in part from the "precompositional" act of clausula selection, which was itself most likely influenced by different approaches to text underlay.

As shown in table 6, only seventeen clausulae were transformed into later thirteenth-century double motets, with independent texts for the motetus and triplum voices.²⁷ What factors led composers to use these clausulae as the basis for sophisticated double motets while ignoring

countless other potential models? Their overall lengths and number of different cadence types are close to those for the motet group as a whole. However, since many of these clausulae were converted into two-voice French motets as well as three-voice double motets, they have a higher incidence of second-mode dupla, higher levels of *fractio modi*, and lower amounts of *extensio* than the motet group overall. These features, combined with the presence of three clausulae in relatively pure third mode, result in fairly regular or “patterned” text declamation. In fact, as summarized in table 7, ten of seventeen clausula-based double motets feature patterned text declamation in at least the motetus voice.

Undoubtedly the clausulae listed in table 7 possess additional features that composers found appealing and worth preserving into the later thirteenth century. Many of them seem exceptionally tuneful, in part because of the presence of melodic repetition. Others may have enjoyed continued popularity on the basis of their texts. However, one additional factor seems striking: As indicated by table 7, eight of the seventeen clausulae that were transformed into double motets had three-voice clausula sources and/or prior conductus-motet versions. The textung of a prior three-voice model was an uncommon procedure. More typically, composers created a

Table 7
Clausulae Converted into Double Motets (additional parameters)

Motet	Patterned Declamation	Prior à3 Version
Ad solitum vomitum (439)	X	CondMot
Au doz tens (343)	X	
Ave Maria fons letitie (230)	X	CL, CondMot
Clamans in deserto (379)		
De virgula veris (112)	X	
Ex semine Abrahe (483)		CL, CondMot
Flos de spina (437)		CondMot
Gaude Syon (632)		
In Bethleem Herodes (98)	X	CondMot
Mens fidem seminat (495)		CL
Non orphanum (322)		
Qant voi le douz (235)	X	
Qui amors veut (218; Tr)	X	
Tanquam suscipit (636)	X	CL (triplum missing in ms.)
Trop m'avez (396)	X	
Velut stelle (315)		CondMot
Veni salva nos (360)	X	

three-voice motet by adding a newly composed triplum to a preexisting two-voice foundation. Furthermore, many of the motets generated by adding new text to a three-voice model are exceptional in terms of style as well as in terms of compositional process. For instance, later composers converted *Ave Maria fons letitiae* (230) and *Ex semine Abrahe* (483) into double motets by adding text to the tripla of their earlier conductus-motet versions. As a result, both motets feature parallel phrasing between their motetus and triplum voices, a fairly homogenous rhythmic style, and for the most part, simultaneous text declamation. This contrasts with the more typical style associated with double motets: overlapped phrasing, rhythmic contrast, and more distinctive text declamation.

Mens fidem seminat (495) illustrates a somewhat different situation. After its early history as a two-voice Latin motet, composers turned *Mens fidem* into three-voice bilingual and French motets by simply adding text to the triplum voice of its preexisting three-voice clausula source. While the sources for *Ave Maria* and *Ex semine* were adapted into conductus-motets because they have parallel phrasing in the upper voices, the *In odorem* (M 45) source for *Mens fidem* has overlapped phrasing between the upper voices and would not have been suitable for conversion into a conductus-motet. The three-voice textings of this clausula are therefore closer to the expected style of a double motet because they feature contrasts in phrasing and declamation.

The composers of at least four motets with preexisting three-voice versions replaced the extant tripla with new ones: *In Bethleem Herodes* (98), *Velut stelle* (315), *Flos de spina rumpitur* (437), and *Ad solitum vomitum* (439).²⁸ While the triplum to *Ad solitum vomitum* generally moves with the motetus in note-against-note counterpoint,²⁹ the other three motets exhibit significant degrees of musical independence between the upper voices.

The fact that clausula sources used as the basis for later thirteenth-century motets differ from those chosen for the earliest motets underscores the significance of clausula selection. By texting clausulae with irregular modal rhythms and variable numbers of phrases and cadential patterns, composers of the earliest Latin motets defined their new genre as something different from the clausula and the conductus. Composers seem to have been attracted to a different type of piece when creating double motets; in general, they seem to have preferred clausula-based motets with more regular rhythmic patterning and/or text declamation in the motetus voice. While double motets feature greater regularity within individual voices, these individual voices combine in highly sophisticated ways due to the independent nature of their texts, rhythmic profiles, phrasing, and cadential points. The resulting combination of voices often

sounds “irregular” due to its polyphonic, polytextual complexity. In effect, the composers of later thirteenth-century double motets transferred an established preference for irregularity and contrast from the horizontal dimension (*within* the motetus voice) to the vertical dimension (*between* motetus and triplum voices). Thus reinterpreted, the aesthetic foundation established by composers of the earliest Latin motets continued to shape the subsequent development of the genre.

Notes

* A shorter version of this paper was read at the annual meeting of the American Musicological Society in Pittsburgh, in November of 1992. I would like to thank Rebecca Baltzer, Mark Everist, Thomas Payne, Darwin Scott, and Michael Tusa for their helpful comments and suggestions.

1. In many cases, these pieces exist in multiple versions, raising serious questions about authorial intentions. Some scholars, inspired by recent trends in literary criticism, would undoubtedly prefer to avoid any discussion of compositional process because it privileges the position of the author—obviously problematic in the largely anonymous repertoires of medieval music—over that of the reader.

2. I will use the term “composer” in the medieval sense: someone who puts something together—in the case of the early Latin motet, the person who converted a *clausula* into a motet by adding text. Everist (1994: 6) offers a fuller justification for using the term “composer” when discussing the creators of medieval motets.

3. The three principal collections of this repertory are: (1) W1: Wolfenbüttel, Herzog August Bibliothek 677 (olim Helmst. 628), (Baxter 1931); (2) F: Florence, Biblioteca Laurenziana, Plut. 29.1, (Dittmer 1959); and (3) W2: Wolfenbüttel, Herzog August Bibliothek 1206 (olim 1099), (Dittmer 1960). For a guide to the contents of these sources, see Ludwig 1910 and Reaney 1966. Baltzer (1974) has classified the two-voice *clausula* repertory by tenor mode: 37 *clausulae* in mode 1 (22–23), 38 in mode 2 (87–88), 14 in mode 3 (139), 167 in mode 5 (227–35), ca. 320 in unpatterned ternary longs (311–24), ca. 330 in unpatterned duplex longs (360–75), and 47 in other categories (311–24, 360–75). These figures add up to ca. 953.

4. Smith (1980) includes a useful inventory of the 107 *clausula* sources used as models for 247 motets. This inventory provided the basis for the current study.

5. Transcriptions of all *clausulae* are available in a recent edition by Baltzer (1995), who also provides an excellent summary of *clausula* style and chronology (xlii–xlvi).

6. Tenors are identified in table 1 and throughout this paper according to the traditional system established by Ludwig (1910). M, O, and BD prefixes identify tenors drawn from Mass, Office, and *Benedicamus Domino* chants, respectively; tenors are then assigned numbers based on the liturgical order in which they are used in the church year, with chants for the *Temporale* (beginning with Christmas) preceding those for the *Sanctorale*. Motet numbers, also established by Ludwig (1910), were assigned in the order of their parent tenors. *Clausula*

numbers used in table 1 and throughout this paper correspond with those in Baltzer's edition (1995) and differ slightly from the traditional clausula numbering established by Ludwig (1910), again based on the liturgical ordering of their tenors; for clausulae 59–236, Baltzer's numbers are one lower than those used by Ludwig.

7. Supported by descriptions of compositional process by medieval theorists, analytical studies of the motet all recognize the impact of the tenor on the polyphonic structure. Hofmann (1972) systematically explored this issue by examining the harmonic, tonal, melodic, and rhythmic implications of the cantus firmus with respect to motets based on the *In seculum* tenor from the Easter Gradual *Hec dies*. Crocker (1990: 641) provides a more recent discussion of why certain tenors were favored as motet sources.

8. Apel uses the term *extensio modi* without reference to a source, but cites Anon. IV as the basis for *fractio modi* (1953: 234–35). Smith cites Johannes de Garlandia's description of how to notate *fractio modi* using either plicas or four-note ligatures (1990: 284).

9. All transcriptions are my own, based on Dittmer's facsimile editions of manuscripts F and W2. For published transcriptions of all clausulae in the Florence manuscript as well as detailed summaries of variants between other manuscript readings, see Baltzer (1995).

10. *Infidelem populum* has a modal purity level of 95.0% while *Deus omnium* exhibits 83.3% purity. Hereafter, motet incipits will simply be followed by their standard catalogue numbers for reference.

11. See *Deo confitemini* (131; 83.3% modal purity), *Laudes referat* (140; 86.1% modal purity), and *Gaudeat devotio* (215; 86.1% modal purity).

12. For some of the most recent discussions of the conductus, see Page 1997 and Traub 1995.

13. For a modern edition of the text for *Infidelem populum*, see Blume and Dreves 1906: 241; for an edition of *Auctor vite*, see Anderson 1981: 3: xxii.

14. For more on rhythmic poetry, see Fassler 1987 and Sanders 1995.

15. The irregular reading of the five-note *currentes* figure in mm. 8–9 was adopted from Baltzer 1995: 82.

16. For more on this point, see Kidwell 1993: 181–95.

17. The text to *Ad solitum vomitum* (439) is constructed in a similar fashion to accommodate the 98.6%-regular third-mode patterning.

18. The clausula source for *Deus omnium* (444) has a first-mode duplum with a modal purity level of 83.3%; the duplum is also organized into completely regular six-beat phrases. Clausulae in the control group that combine regular modal rhythm and regular phrasing include nos. 30, 48, 87, 99, 138, 175, 189, and 241. The vast majority of these clausulae have third-mode dupla.

19. For more on the relationship between music and grammar, see Bower 1989.

20. The actual text underlay varies slightly from that shown in example 9, due to minor variants introduced in the conversion from clausula to motet. For a transcription of the motet as it appears in the Florence manuscript, see Kidwell 1993: 481–83. For an alternative transcription based on the manuscript reading in W2, see Anderson 1976: 162–66.

21. Sanders provides a clear statement of the more mainstream but alternative viewpoint: 'The musical phraseology of most clausulas and Notre Dame motets, while carefully planned, exhibits no regularity. . . . Since the versification has to accord with the musical phrases of the pre-conceived clausula (or discant section), it cannot be regular. Irregularity of verse structure thus became a hallmark of the 13th-century motet, as the primary measuring tool was the pre-conceived music with its varied phrase layout' (1980: 12:618).

22. Clausula sources for the following two-voice Latin motets are summarized in table 6: motet nos. 43, 133, 141, 234, 244, 308, 309, 310, 442, 443, 444, 487, 490, 505, 516, 518, 529, 655, 697, and 698.

23. Clausula sources for the following conductus-motets are summarized in table 6: motet nos. 70, 98, 108, 131, 140, 215, 228, 230, 232, 307, 313, 315, 337, 345, 411, 437, 439, 441, 483, 517, 524, 635, 643, and 762.

24. The clausula source for *Homo quam sit pura* (231) has a 94.1% reliance on four-beat phrases.

25. Clausula sources for the following two-voice French motets are summarized in table 6: motet nos. 8, 48a, 54, 55, 62, 63, 79, 100, 102, 104, 111, 115, 122, 132, 135, 165, 233a, 235, 249, 250, 307a, 314, 319, 328, 339, 343, 344a, 370, 380, 397, 402, 406, 413, 415, 419, 485, 515a, 634, 641, 663, 764, and 817 (528e).

26. For transcriptions of these works, see Tischler (1982) and Anderson (1972, 1976).

27. Clausula sources for the following Latin motets, later converted into double motets, are summarized in table 6: motet nos. 98, 112, 218, 230, 235, 315, 322, 343, 360, 379, 396, 437, 439, 483, 495, 632, and 636.

28. It is impossible to comment on the conversion of a three-voice *Tanquam* clausula into the motet *Tanquam suscipit* (636) because the triplum to the clausula source was never entered into the Florence manuscript (Dittmer 1959: fol. 10v).

29. Baltzer (1974: 140–41) has pointed out that the use of note-against-note counterpoint is typical of third-mode clausulae.

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