CHAPTER IV

MELODIC STYLE OF THE SONGS

A first impression of the music of French monophonic song at the turn of the sixteenth century is one of somewhat bewildering diversity. Formal structures vary widely as do the choices of modes, phrase finals, and phrase lengths. However, upon greater acquaintance with the music this impression is dispelled and replaced with a feeling that what had seemed a diversified, heterogeneous array of stylistic traits is, in fact, a quite unified, homogeneous set of characteristics. Certain features recur so frequently that they may be considered typical of the repertoire. Nevertheless, to characterize the corpus exclusively as either diverse or uniform would be wrong. A truer picture of the repertoire reveals both its uniformity and diversity. One way to express this polarity is statistical.

Edward Lowinsky is among the few who have discussed the use of statistics in studying Renaissance music generally.[1] For a proper study, he insists on a number of prerequisites. First, the repertory to be examined should be feasibly limited. Secondly, the relative frequency of performance should be taken into account. And, finally, an adequate

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[1] Edward E. Lowinsky, "Tonality and Statistics," Chapter 7 of _Tonality and atonality in sixteenth-century music_, Berkeley and Los Angeles, University of California, 1961, pp. 72-74.

definition of variables should precede analysis. The reper-
toire of the present study is limited with regard to: 1) its
demarcation from other repertoires by the manner of its trans-
mission and the literary features it embodies; and 2) its
number of songs, which, large enough to allow conclusions to
be drawn, is limited enough to permit complete compilation of
the data. Furthermore, there are concordances among the various
sources which can be presumed to reflect the relative popularity
and hence the relative frequency of performance of the songs
concerned. In order to satisfy the third prerequisite which
Lowinsky has outlined, the writings of contemporary theorists
have been adopted as the starting point for the definition of
stylistic variables.

Lowinsky[1] has also drawn attention to the
accidental nature of the preservation of Renaissance sources.
By and large, sacred music seems to have been better recorded
and preserved than secular music, and within the realm of sec-
ular music, polyphony is over-represented compared with mono-
phony. In this sense, the two monophonic secular sources
upon which the present chapter is based, A and B, are no doubt
exceptional survivors. Nevertheless, they are close enough
in format and provenance to act as checks on each other. At
the same time they are far enough apart in date of compila-
tion to reflect the changes that might have taken place

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[1] Ibid., pp. 72 f.

throughout the repertoire during a generation. Thus, in the present and succeeding chapters, findings based on the two sources will be compared. Furthermore, in some cases a study of variants, songs common to A and B, may illuminate stylistic stasis or change during the period between their compilation.

Although theoretical concepts of the time are taken as a starting point, my analysis is not restricted to them alone. Frequently a pursuit of the theorists' concepts has led me to the adoption of notions which they did not specifically articulate. Among such notions are the statisticians' "central tendency" which will be referred to as "centricity". This is a tendency to choose values which are in the middle of a range of values. Another notion to be adopted is that of "polarity", the tendency to choose values associated with the upper levels of an hierarchy. A final example is the purely musical notion of "triad" which was not recognized by theorists until the time of Zarlino (1558). This term, which can be fraught with implications more appropriate for later music, is to be understood in its most neutral sense and is only used to avoid neologizing.

In the present chapter, aspects of style are examined separately. Despite the discreteness of the presentation, a number of threads run through the various sections. Where a finding in one section corroborates or has implications for the findings of another, this is indicated. A summary of

the different threads, which demonstrate the stylistic unity of the repertoire, stands at the end of the chapter.

Part I

Rhythmic Features: Meter

In the corpus of songs, meter is indicated in three ways: 1) by the mensuration sign $\mathbb{C}$; 2) by the proportional formulas $\frac{3}{2}$ and 3; and, 3) by the absence of either sign or formula. In B all songs begin with $\mathbb{C}$, the notational device for tempus imperfectum diminutum. This specifies that both the tempus and prolatio are imperfect,[1] that is, a breve is divided into two semibreves and each semibreve is in turn divided into two minims. The complete absence of longa rests throughout the corpus prevents a notational evaluation of the modus. Other aspects of the style such as text underlay suggest that the modus, in the many cases where it constitutes a functional relation, is imperfect.[2] As in all other mensurations of the time, durational units of a minim or less are divided into halves corresponding to the next lower unit: a minim into two semiminims, a semiminim into two fusas, etc. Thus the prevailing meter in B is binary at all levels of durational relationship.

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[1] Much of the following has been discussed by Willi Apel in The Notation of polyphonic music, 900-1600, Cambridge, Mass., The Mediaeval Academy of America, 5th edition, 1953, 72-74.

[2] See below, pp. 133-40.

In $\underline{A}$, mensuration signs are rare. According to Aaron (ca. 1523), the absence of a time signature implies binary meter.[1] However, the theorist does not state specifically whether such instances are to be considered examples of simple tempus imperfectum, C, or its diminished form, ¢. A number of circumstances point to ¢ as the implicit signature. By the end of the fifteenth century, tempus imperfectum diminutum had become the leading mensuration in polyphonic music.[2] In $\underline{B}$, ¢ is present in every song and C never appears. And, finally, when a binary time signature does appear in $\underline{A}$ it is ¢.[3] Thus it seems most likely that the absence of a signature in $\underline{A}$ implies diminished, rather than simple, tempus imperfectum.

The distinction between simple and diminished forms of tempus imperfectum has no effect on the manner in which the durational units are related to one another, this being in both cases binary. However, it does affect the tempo.

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[1] Pietro Aaron, Toscanello in music (1523), (trans. Peter Berquist), Colorado Springs, Colorado College Music Press, 1970 (Colorado College Music Press, Translations: Number Four). Vol. I, Chapter XXXVIIII, pp. 55 f.

[2] Leeman L. Perkins (ed.), Johannes Lheritier: Opera omnia, Rome, American Institute of Musicology, 1969, 2 Vols. (Corpus mensurabilis musicae, 48), Vol. I, pp. xxxiv f. Apel, op. cit. p. 152, suggests that the use of ¢ instead of C during the classical period of Dufay and Ockeghem (ca. 1450-1500) simply bestowed "upon the composition an aura of learning."

[3] $\underline{A}$:4, 20, and 120.

Gafurius implies that the _tactus_ in his time was constant[1] and sets the speed of each beat at the rate of the "pulse of a man breathing evenly,"[2] or about M.M. 60-80.[3] In simple _tempus imperfectum_, the lower extreme of each _tactus_ beat coincides with the beginnning of each semibreve;[4] in the

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[1] In the songs of A and B, there is no question of a 2/3 or 3/2 tactus, which were applied to different mensurations and proportions than are to be found in the monophonic sources. On 2/3 and 3/2 tactus, see Clement Miller, Sebald Heyden's _De Arte Canendi_: Background and Contents," _Musica Disciplina_, XXIV (1970), pp. 79-99, _passim_.

[2] Franchinus Gafurius, _Practica musicae_ (trans. Clement Miller), Rome, American Institute of Musicology, 1968 (_Musicological studies and documents_, 20), Book III, Chapter 4, p. 129.

[3] Gustave Reese, _Music in the Renaissance_, New York, W. W. Norton, rev. ed., © 1959, p. 179, arrives at the range of tempos between M.M. 60 and 80. Perkins, _loc. cit._, decides on M.M. 60. Miller in his edition of Gafurius" _Practica_, _loc. cit._, esp. note 10, disputes Reese's interpretation of _aeque resperantis_ as "quietly breathing" in favor of the more precise phrase "breathing evenly", claiming that Gafurius would have used another adverb to convey the meaning of "quietly" rather than "evenly". However, it must be objected that Gafurius would not have introduced the qualification on breathing in a passage devoted to pulse unless he wished to distinguish between the pulses of an excited person and a reposeful person. Had he wished to indicate that the pulse was that of an excited person, he would have done so in a more forceful way.

[4] Aaron, _Toscanello_, Vol. I, Chapter 38, pp. 51 f. See also Adam of Fulda's comment on the use of semibreve tactus in _tempus imperfectum_ in Martin Gerber's _Scriptores ecclesiastici de musica_, Milan, Bollettino Bibliografico Musicale, 1931, Vol. III, p. 362. See also Carl Dalhaus, "Zur Theorie des Tactus im 16. Jahrhundert," _Archiv für Musikwissenschaft_, XVII (1960), pp. 22-39.

diminished form, with the start of each breve.[1]   In this way a passage read in the diminished mensuration moves twice as fast as it would if read in simple _tempus imperfectum_.[2] If the tempos of songs in _tempus imperfectum diminutum_ cover the range M.M. O = 60-80, some degree of virtuosity is called for in performance, since passages of semiminims -- reminiscent of descriptions of _gringotage_ -- are not infrequent.[3] In order to convey the tempo of the songs in modern notation a 1:4 reduction is employed throughout; a breve (◼) of the original being reduced to a half-note (♩) in modern transcription.[4]

Songs or parts of songs in triple meter are rare in the repertoire and are indicated by the signs for _tripla_ and _sesquialtera_ proportions, 3 and $\frac{3}{2}$, respectively. In _A_, _ses-_

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[1] Gafurius equates the proportional sign $\frac{2}{1}$ with the mensuration sign ⊘, though he prefers the former. Adam and Aaron equate C2 with ⊘, and assign the tactus to each breve. Heyden equates the following signs and proportions: C2, $C\frac{2}{1}$, ⊃, and ⊘, and similarly assigns the tactus to each breve. See Gafurius, _op. cit._, pp. 118-19, and Miller, _op. cit._, p. 85.

[2] Gafurius, _loc. cit._, states that if the proportional sign C2, which is equivalent to ⊘, is used for a whole song, the durations are counted twice as quickly as normal. Heyden points out that a faster tempo is the only reason for diminution to be introduced. See Miller, _loc. cit._

[3] See, for example, the following songs: _A_:3, 4, 5, 6, 8, 12, 14, etc., where passages of four or more semiminims occur.

[4] Cf. Howard Brown who, in his edition of _Theatrical chansons of the fifteenth and early sixteenth centuries_, Cambridge, Mass., Harvard University, 1963, adopts a similar convention.

quialtera proportion appears in conjunction with diminished tempus imperfectum: $\math₵\, {}^3_2$.[1]   Here the tactus coincides with each breve. The single number 3 which should represent tripla proportion occurs either alone[2] or in combination with the sign $\math₵$.[3] In both cases it really represents a sesquialtera proportion,[4] and the tactus again coincides with the beginnings of all breves.[5]   In one case,[6] punctae perfectionis are even introduced into the notation to separate breves. Therefore, a steady tactus in breves could be beaten throughout the repertoire whether a song is in binary or ternary meter or a combination of both.

Clearly the breve is a unit of great importance in the repertoire. In early sixteenth-century polyphony cadences tend to take place at the beginning of a breve.[7]   And by far

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[1] A:120.

[2] A:30.

[3] B:32, 90.

[4] See Tinctoris, Proportionale, in Edmond de Courssemaker (ed), Scriptorum de musica Medii Aevi, Hildesheim, Georg Olms, 1864-76 (repr. 1963), 4 Vols., Vol. IV, p. 174, Book III, Chapter V; Gafurius, op. cit., Book IV, Chapter 5, p. 178; Heinrich Glarean, Dodecachordon, trans. Clement A. Miller, Rome, American Institute of Musicology, 1965, 2 Vols., Vol. 2, p. 234, Book II, Chapter 7.

[5] Heyden equates C3, C^3, $\emptyset 3$, and $\emptyset^3_2$, and assigns the tactus to each breve. See Miller, op. cit., p. 85.

[6] A:30.

[7] See, for example, the chansons transcribed in Helen Hewitt's editions of Odhecaton and Canti B. Also cf. Lowinsky's observation that cadences occur on the strong beats of measures in his article "Early Scores in Manuscript," Journal of the American Musicological Society 13, pp. 126-71, especially pp. 162-71.

the majority of cadences in B occur on a breve. However, cadences in A are not so consistent metrically.

In all but fifteen of the 102 songs in B each cadence concludes at the beginning of a breve, as follows:
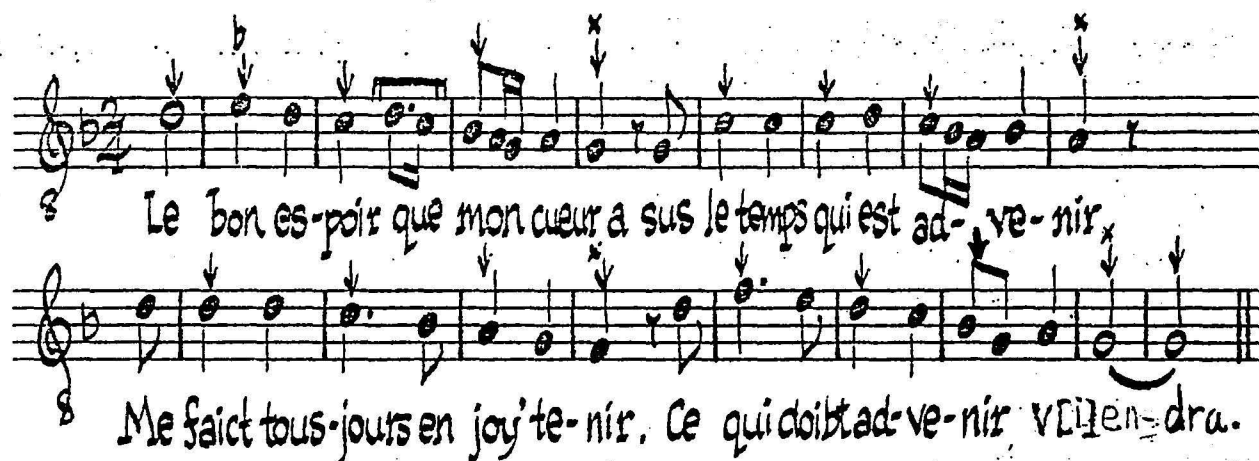
The exceptional cases can be accounted for as instances of three phenomena: scribal errors,[1] feminine cadences,[2] and passages which are implicitly "doubly-diminished".[3] Scribal errors usually take the form of missing rests as in the following case where introductory rests, which would complete the breve, were omitted (they have been added in square brackets):

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[1] B:2, 4, 6, 12, 24

[2] B:1, 20, 34, 35, 51, 69.

[3] B:48, 95, 97, 101.

On doibt bien ay-mer l'oy-sel-let, Qui chan-te par na-tu-re.

These discrepancies occur in the very first songs of the col-
lection which suggests that they reflect an episode of human
frailty on the part of the scribe rather than a deliberate
deviation from the norm.

The usual setting for a feminine cadence is one in
which the final syllable occurs at the beginning of a breve.
In a number of instances, however, the penultimate syllable,
which is prosodically stressed, occurs at the beginning of a
breve followed by the final syllable on the latter half of
the same breve, as follows:

Et que je vous pre- sen- tay bel- le.

Finally, passages occur which suggest that the tempo
has increased two-fold. Instead of movement in semibreves,
which is the norm, the motion is in minims, as follows ("Luy
disant...):

A l'om-bre d'ung buis-so-net, Tout le long d'u-ne ri- viè- re.
Trou-vay Ro-bin, le fils Mar-quet, Qui pri-oit sa da- me che- re.

Luy di-sant en tel ma-gniè-re « Je vous ai-me fin cueur doulx »

Frequently, as above, such "doubly diminished" passages in-
volve a feminine cadence with the accent on the penultimate
rather than the final syllable.

In <u>A</u>, only 31 songs of 141 are entirely regular.[1]
If scribal oversights are taken into account and editorial
rests inserted at the beginnings of songs, another 19 appear
to be regular.[2]   And if one allows for the possibility that
feminine cadences can be accented on the penultimate sylla-
ble, another 15 songs appear to be regular.[3]   Even with these
allowances, in only 65 of 141 songs are all cadences organiz-
ed in breves. This is one of the most outstanding differences
between the two sources.

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[1]
<u>A</u>:3, 6, 13, 27, 34, 35, 38, 42, 44, 45, 47, 51, 52, 54, 55,
56, 57, 58, 59, 61, 63, 64, 65, 67, 68, 79, 89, 90, 133, 135.
Compare <u>B</u> where only 3 songs (<u>B</u>: 51, 88, and 89) feature an
irregular phrase.

[2] <u>A</u>:10, 30, 31, 39, 43, 46, 70, 72, 81, 84, 88, 94, 95, 97,
109, 125, 126, 132, 134, 136, 138.

[3] <u>A</u>:11, 12, 18, 21, 22, 29, 51, 71, 76, 102, 112, 121, 124,
139, 143.

A number of hypotheses can be advanced to account for this discrepancy. The first and most obvious is that there was great carelessness on the part of the scribe of A, a carelessness further manifested in his failure to provide time signatures for many of the songs in the collection. However, in just that aspect of scribal accuracy which was most often neglected by contemporary copyists, namely text placement, he was not at all negligent.[1]   A second possibility is that the semibreve might be the _tactus_ unit in A. Glareanus remarked that in France the semibreve was preferred over the breve, which in turn was favored in Germany.[2] This still does not account for the evident breve organization in B. Possibly, then, there was a shift in counting from the semibreve to the breve in the period between the compilations A and B. However, Glareanus' visit to France coincides with the compilation of B rather than A,[3] so that this hypothesis, too, must be abandoned.

Finally, there is the possibility that the songs which are regularly organized in breves in A represent a special "sub-repertoire" in the corpus, a sub-repertoire to which the songs of B also belong. The fact that B was assembled later than A suggests that this sub-repertoire was in

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[1] See below, pp. 128f.

[2] Glarean, _op. cit._, Book III, chapter VII, p. 232.

[3] Glarean, _loc. cit._

the ascendancy around 1500. Although this is the most start-
ling hypothesis of the three offered, it appears to be the
most convincing one. It is corroborated by a study of the
twenty-nine songs common to both A and B. Of these all are
regular in B, as would be expected. Taking into account the
possibility of penultimately accented feminine cadences[1] and
"doubly diminished" passages,[2] all but five are regular in
A. Of these five, one appears to have been mis-copied.[3] In
another, the copyist of B has accommodated the irregularity
manifest in A's version by inserting rests.[4] This is not a
wholly satisfactory solution since it causes the opening of
the first phrase on its repetition as the fourth phrase to be
syncopated, and the opening of the second phrase to be simi-
larly syncopated, as can be seen below:

Pe-ti-te fleur cointe et jo- ly-   e,

Plai-sante flour gente et jo-li-   e,

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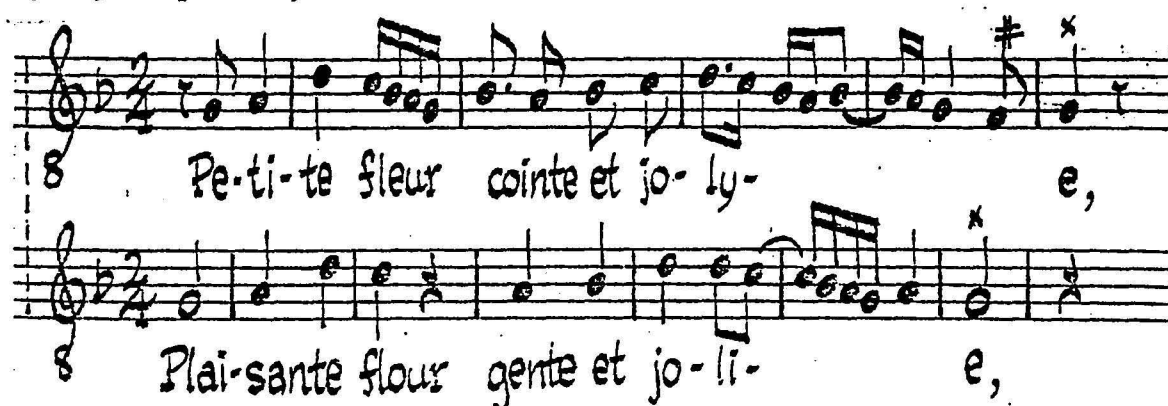
[1] In A:1, 9, 16, and 86, which correspond to B:65, 101, 35, and 64 respectively.

[2] In A:33 which corresponds to B:32.

[3] A:19, which corresponds to B:30. See especially the third phrase.

[4] Compare A:48 with B:96.

Las! dic-tez-moy si vous m'a-mez

Las! dic-tez-moy se vous m'ay-més

De-pes-chez-vous si vous voul-lez

Dic-tez-moy tost et vous en ad-vi-sés

Car il m'en-nuy-e n'en doub-tez my- e. e.

Car il m'en-nuye n'en doub-tez my-e.

The copyist's rectification is immediately apparent and re-
sults in an adaptation less elegant, though more "correct",
than the original. In another case, deviation from the rule
occurs in only a single internal cadence.[1] This suggests a

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[1] B:53; A:41.

brief lapse on the part of the scribe. In yet another case, the entire song seems to have undergone considerable alteration between the time of <u>A</u>'s compilation and that of <u>B</u>.[1]

In summary, a large proportion of the regular songs in <u>A</u> survived to be collected at the time of <u>B</u>. Although regular songs are only a substantial minority in <u>A</u>, they are the rule in <u>B</u>. In the few cases where irregular songs from <u>A</u> survived to be compiled in <u>B</u>, they were either rhythmically altered to conform to the new ideals, or had undergone so great a change as to be almost unrecognizable in their new form.

The shift from the occurrences of cadences on any semibreve to their occurrences exclusively on breves seems to be a relative shift from monophonic to polyphonic ideals in rhythmic organization. In monophony, the occurrences of a cadence is unambiguous. In polyphony, it can be obscured by the movement of the several voices which overlap one another rather than progress together. The strongest beats, coinciding with the downward extreme of the <u>tactus</u>, can provide the unambiguous location for cadences in multi-part music. Cadences elsewhere appear to be metrically displaced or subsidiary, lying outside the piece's general movement in breves.[2]

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[1] <u>A</u>:74; <u>B</u>:5.

[2] See, for example, the polyphonic <u>chansons</u> in Helen Hewitt (ed.), <u>Canti B</u>.

Time signatures, whether implicit or explicit, and proportional signs indicate the basic metric organization of the songs. Generally, durations are organized commetrically, that is, in accordance with the primary metric scheme indicated by the time signature. At the same time, however, a secondary order can be implied by the durations employed. As a rule such secondary orders are ternary ones imposed on a basically binary scheme. The ways in which a secondary order can be implied range from the relatively vague to the explicit. A sequence of even semibreves or breves might suggest either a triple or duple organization depending on the positions of cadences or the presence of melodic sequences or direct repetitions. However, melodic repetition and sequence do not occur in the repertoire, and the cadences suggest a grouping of durations into duple units. The introduction of dotted values might suggest ternary groupings within a basically binary context if the groups were articulated melodically by sequence or repetition -- this, however, is never the case. For ternary implications to be determinate, a systematic use of syncopation is required as in the following case:

duple interpretation

triple interpretation

In the most interesting cases of "explicit implication", both duple and triple meters co-exist throught the entire song as in the following:[1]

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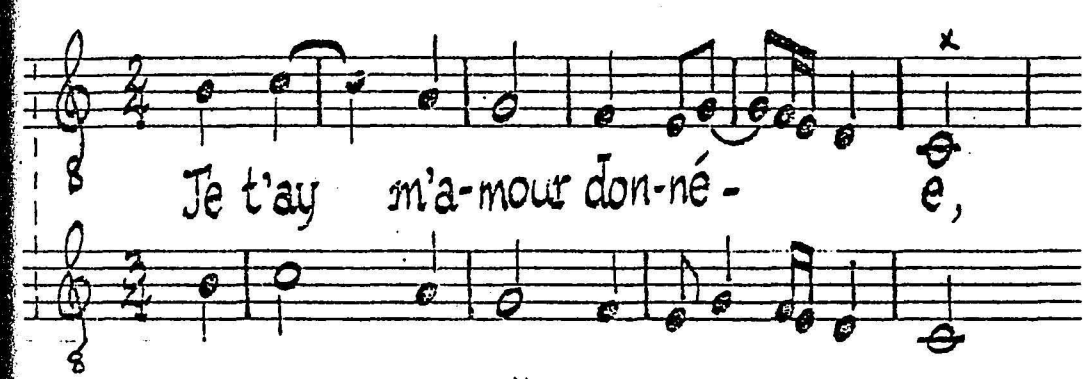
[1]Cf. also <u>B</u>:2 and <u>B</u>:43.

Bon vin je ne te puis lais-ser,
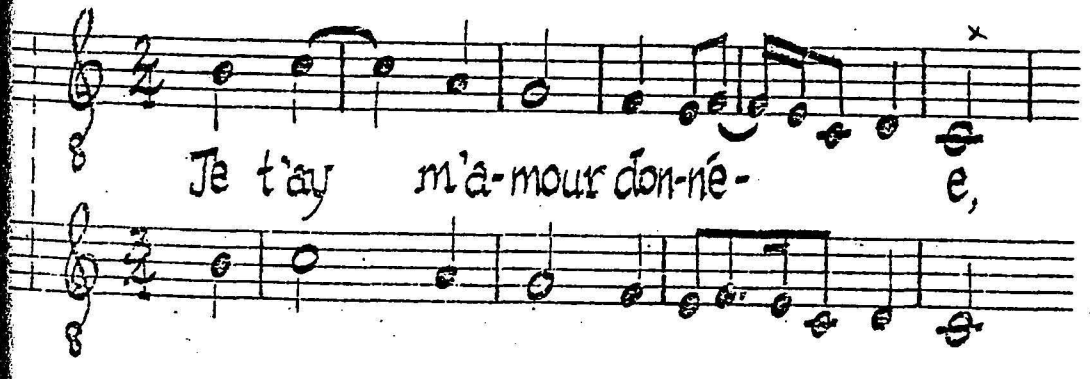
Je t'ay m'a-mour don-né- e,

A- ne hau-voy!

Je t'ay m'a-mour don-né- e,

Sou-vent m'as faict la soif pas-ser,

Ne soir,   ne ma- ti- né-   e,

A- ne   hau-voy!

Ne soir   ne ma- ti-né-   e

Bon vin   je   ne   te puis lais-ser

In other cases, the initial triple organization succumbs to
the overall duple order.[1]

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[1] B:24, 50, 55, 84, and 93 are examples. In B:24, a semi-breve rest is evidently missing between the second and third phrases.

Au feu, au feu, au feu qui mon cueur art

Par ung bran-don ti-ré d'ung doulx re-gart,

Tout em-bras-sé   d'ar-dent dé-sir   d'a-mours.

Ti-rez, bou-tez, mec-tez tout à l'es-   cart!
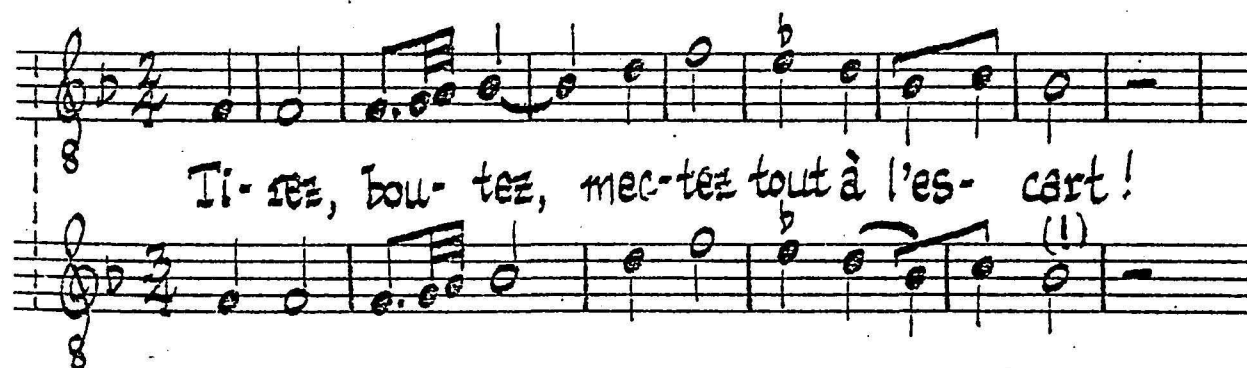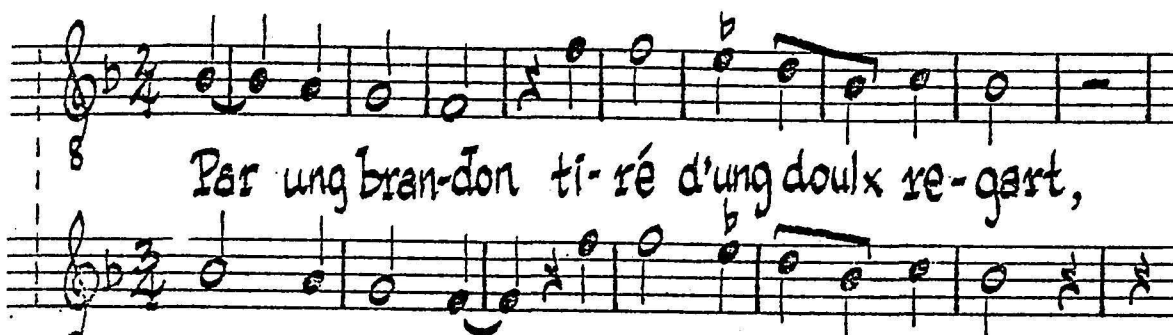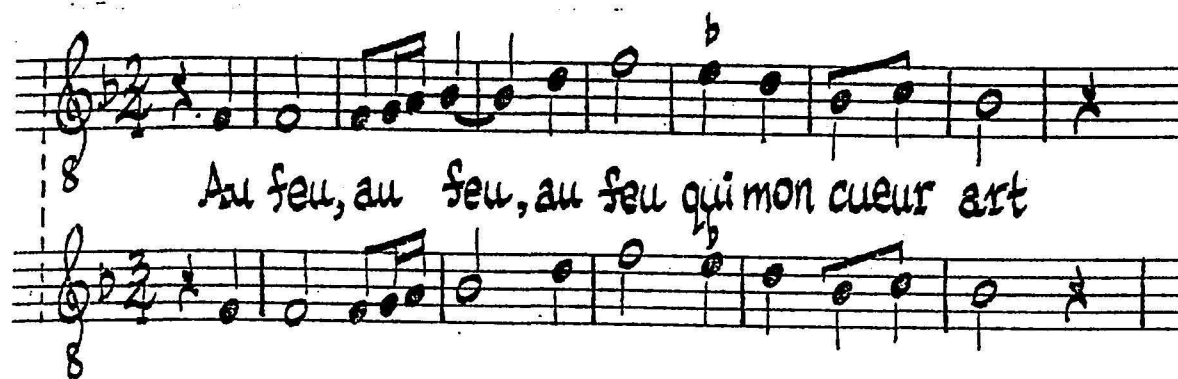
Sometimes conflict between the two types of organization
lasts only for a phrase: [1]

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[1] B:99

Tris-te et pen-sif suis sans mot di - re

La rai-son vous le sça - vez bien

Finally, there is often little competition: ternary is super-
imposed on binary for less than a phrase:[1]

En a-mours je suis bien eu- reulx

The conflict in organization is always between semi-
breves or minims grouped into twos and threes. In each case
it is the organization implied by the time signature or pro-
portional sign which survives the conflict unscathed.

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[1] A13, B6, also A62, 91, 115, and B63.

A and B differ in their employment of conflicting metric organization. In B such conflicts pervade entire songs or large stretches of them, while in A conflicts only span individual phrases or sections thereof.

To summarize, the metrical organization of the songs is predominantly binary. Binary organization takes place on several levels. Longs, breves, semibreves, etc. are usually divided into halves. Among the several levels, that of the breve enjoys pre-eminence, articulated as it is by the tactus. The importance of the breve can further be seen in the determining power it has over the positions of cadences, especially those of B. Later, one will see how it functions in cadential formulas and tends to underlie the rhythmic organization of entire phrases of melody. Finally, the rhythm of the songs tends to be commetric. This observation is consistent with those to be made regarding the apparent underlying "chordal" structure of the tunes and the rhythmic articulation of the texts.

Text Underlay[1]

One of the greatest problems in editing and assessing Renaissance music is that of placing the syllables under the musical notes. However, due to the style of French monophon-

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[1] The substance of this section appears in the present author's "Text Underlay in French Monophonic Song, ca.1500", Current Musicology, no. 24 (Fall, 1977).

ic songs and the general scrupulousness of the scribes of A
and B, fewer questions arise in matching a text to its mel-
ody in this repertoire than in others. The scribes' care is
manifest in several ways. Lines of poetry are aligned quite
carefully beneath their corresponding melodic phrases.
The end of a line is frequently written beneath preceding
parts of the line so that the beginnings and ends of lines
coincide with the beginnings and ends of phrases. Spaces
separate portions of text which fit different sections of a
tune. On moving from one musical staff to another, the
scribes frequently syllabify the text so that the first notes
on the following staff will be aligned with the proper syll-
ables. And repetitions of lines or parts of lines are fre-
quently written out in full.[1]

Thus the general aspects of underlay are meticulous-
ly indicated in the sources. However, details still remain
perplexing. In order to solve these remaining problems, re-
course can be made to contemporaneous theoretical writings
on text underlay.

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[1] In accordance with general scribal practice of the time,
a line is started directly beneath, or beneath and slightly
to the left of, its corresponding phrase. In general, the
ligatures described by the theorists do not necessarily
imply a specific syllabification. Informal ligatures, such
as a line joining the heads of two minims do seem to imply
a certain underlay.

Testimony of the Theorists

The most famous treatment of the subject of text underlay in the sixteenth century occurs in the thirty-third chapter of Zarlino's _Istituzioni armoniche_ (1558).[1]   Here Zarlino provides ten rules for correctly adjusting a text to its music. However, his rules appear to be hardly applicable to the problems of editing and assessing text placement in French monophonic songs around 1500. First, his account was written half a century after the songs we are dealing with were notated, and secondly, his discussion is based on Latin rather than French examples.

More relevant to us is a small treatise on text underlay by Gaspar Stoquerus: _De Musica Verbali Libri Duo_ (_ca._ 1570).[2]   Although it was written after Zarlino's work, it is of more importance to our present problems. Stoquerus, like Zarlino, provides ten rules for dealing with the music of his own time, that is, the Willaert generation, and he provides an additional ten rules for performing earlier music, that of the Josquin generation, with which we are dealing. Unfortunately, Stoquerus's comments appear to be irrelevant to songs

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[1] Gioseffe Zarlino, _Istituzioni armoniche (1558)_, Book III, Chapter 32 in Oliver Strunk (ed.), _Source readings in music history_, New York, W. W. Norton, c 1950, pp. 255-61.

[2] Edward E. Lowinsky, "A Treatise on Text Underlay by a German Disciple of Francisco de Salinas," in _Festschrift Heinrich Besseler_, Leipzig, VEB Deutscher Verlag fur Musik, 1961, pp. 231-52.

with French texts, for throughout his discussion he refers
to accented and unaccented syllables. Although these are an
important feature of Latin, Italian or German prosody, they are
not relevant to French song. In French poetry of the time only
the last syllable of a masculine line or the penultimate of a
feminine line regularly receives an accent. And if one were
to apply rules of stress or length to French song systematic-
ally, one would be forced to adopt the clumsy -- and often
impossible -- procedure of adjusting the underlay in each
stanza.

Recently Don Harràn has brought to light a section
of an earlier treatise by Lanfranco: <u>Scintille di Musica</u>
(<u>ca</u>. 1530).[1] The rules which Lanfranco provides for text
underlay accord well with those given by Stoquerus for the
Josquin generation providing corroboration for the later
writer's comments. In Lanfranco's work, the problem of
applying the rules to French song is met head on. The the-
orist unequivocally states:[2]

> Eccetuando alcuna volta la imitatione delle Canzoni
> Franzese. (with regard to his sixth rule)
>
> Et cio sia detto inquanto alle Messe: & Motetti:
> Perche ne delle Canzoni Franzese: ne do Madrigali
> io non ne parlo. (with regard to his eighth rule)

---

[1] Don Harràn, "New Light on the Question of Text Underlay
Prior to Zarlino," <u>Acta musicologica</u>, XLV (1973), pp.
24-56.

[2] Harràn, <u>op. cit</u>., p. 41: "Exceptions occur at times in
works imitating French <u>chansons</u>; <u>ibid</u>., p. 44: "I speak
neither of French <u>chansons</u> nor of madrigals."

For some reason, French texts cannot be placed in the
same manner as those of other languages, especially Latin.
Evidently, either composers of chansons wrote in a style
which transgressed the normal rules of underlay, or differ-
ent rules of underlay were at work in French song. In French
monophonic song around 1500, a special set of principles seems
to be at work. These rules can be inferred from the only
cases which are unambiguous: lines in which the number of
syllables is the same as the number of notes, i.e., strict-
ly syllabic passages. In A and B, there are about 400 such
instances, and of these approximately 90 per cent (91.5 in
A and 93.7 in B) strictly adhere to the inferred rules which
I will discuss presently. Furthermore, two of Lanfranco's
rules which are applicable to French songs are also fairly
consistent with the inferred rules: these are the prescrip-
tion to repeat words when necessary, and the forbidding of
syllables on notes of a semiminim ($\quarternote = \eighthnote$) or less. Two other
rules of Lanfranco forbid setting more than one syllable to
a dotted note or a ligature. These make sense only as cen-
sures of a widespread practice. Frequently, splitting a
dotted note or ligature into two parts is unavoidable in the
songs being dealt with here, if only because a given line
has more syllables in one strophe than another. Both
these rules as well as the remaining one that prescribes
consistently syllabic underlay for notes of a minim ($\halfnote = \quarternote$)
or longer appear to be attempts to establish notational and

stylistic norms for text placement, and these norms appear to have been adhered to quite strongly only in later years. As progressive elements in a treatise from around 1530, then, these three rules can be overlooked in dealing with song during the period 1480-1520.

Songs in Duple Meter

Since songs in duple meter greatly outnumber those in triple, the former will be discussed first. The simplest case occurs with phrases which set masculine lines with an odd number of syllables (usually five or seven). The last syllable, which is coterminous with the phrase final, can be of any length, though it is usually longer than the preceding syllable. Excluding from consideration this last syllable, such lines consist of an even number of syllables. These syllables are grouped into pairs. In each pair, the first syllable is as long as, or longer than, the second. The aggregate length of a pair corresponds to a binary durational unit. This unit can be a minim (♩ or, in transcription, ♪), a semibreve (o or ♩), a breve (⊨ or ♩), or a long (⊨ or o). Pairs totaling a semibreve or breve are most frequent.

Puis- que n'est fem-me pour vray

Je___ te donn'ray ung sou- las

Je vous ay-me fin cueur doulx

L'au- trier quant je che-vau- choys
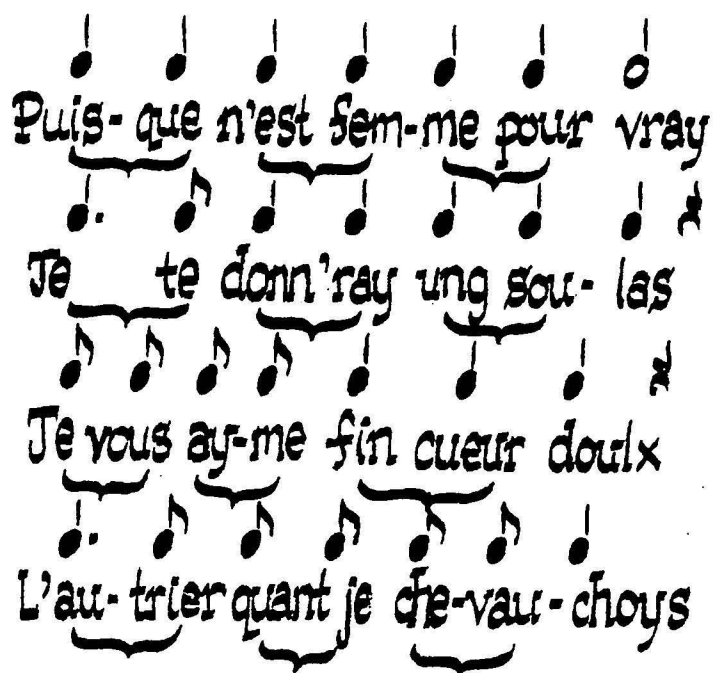
Feminine lines with an even number of syllables, ty-
pically six or eight, present few variations from masculine
lines with an odd number of syllables:

En___ di- soit en tell'ma-niè- re

However, although only the last syllable of the latter can
be of indefinite length, both the penultimate and last syl-
lables of the former can be prolonged indefinitely.

Other types of lines, typically, masculine lines of
six, eight, or ten syllables and feminine lines of seven,
nine, or eleven syllables, show much the same relationship
between syllable number and duration. However, where the
first and second, third and fourth, etc. syllables were
grouped into pairs, here the second and third, fourth and

fifth, etc. syllables are so grouped. With such lines the first syllable forms a sort of anacrusis to the line. This anacrusis can be either one-half the length or the full length of the following pair. When the anacrusis is the full length of the following pair the characteristic "long-short-short" opening of the narrative <u>chanson</u> of the 1530's results: [1]

A qui di-r'el- le sa pen-sé- e

In several cases the first syllable is repeated in "stuttering" [2] fashion. In such instances the first utter-ance of the first syllable is twice the length of the second utterance, so that a doubly prolonged anacrusis results, as seen in the following phrase (the repeated syllables are underlined):

Qui, qui nuit et journe ces-sent de pen-cer

---

[1] See Reese, <u>op. cit.</u>, p. 292.

[2] "Stuttering" is used here in a purely descriptive sense to denote repetitions of the beginnings of words.

These beginnings are quite often explicitly indicated in the sources[1] as in A:10, and in some cases, formal repetitions of phrases require repetitions of the stuttering openings as in the following (note the second line):[2]

Qui, qui nuit et jour ne ces-sent de pen-cer.
[J'a-], j'a-roy'plus cher à la mort m'a-van-cer
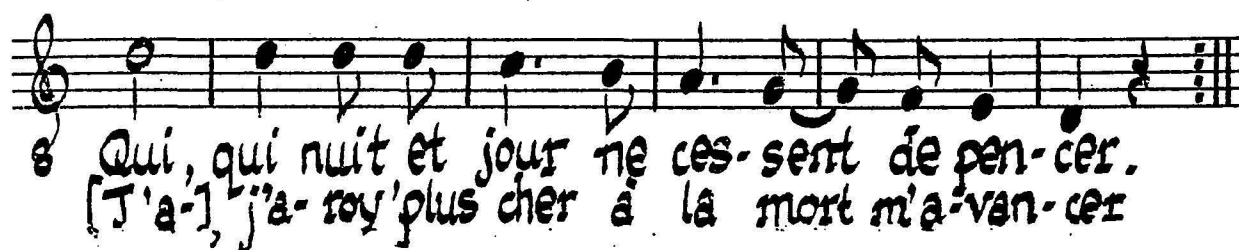
For the rest, the characteristic opening rhythm 𝅘𝅥 𝅘𝅥 𝅘𝅥𝅮 𝅘𝅥𝅮 or 𝅝 𝅘𝅥 𝅘𝅥 𝅘𝅥 and the number of syllables in the line provide the clue that a stuttering beginning is called for. Evidently in the latter cases the practice was so common that it could be assumed without writing the first syllable twice.

Disregarding the repetition of the first syllable, whether it is explicit or implicit in the source, can lead to four types of error. The least harmful consists in slurring the tones which should be underlaid by the two statements of the syllable into a single statement:

Gérold's version:

Il est ve-nu le pe-tit

Corrected version:

[Il], il est ve-nu le pe-tit

---

[1] A:10, 44, 54, 55, 56, 58, 63, 67, 68; B:4.

[2] A:10, 68; B:4.

More serious is the solution, adopted especially frequently
by Gevaert, whereby the initial note of the line is left
dangling without a syllable underlaying it as in the follow-
ing.

Perhaps the most serious error involves starting the phrase
late, so that the initial note is included in the preceding
interlude or "tail"[53] which serves to join two lines toge-
ther:

Finally a "stuttering" beginning is frequently buried with-
in a phrase marked by a number of false starts, as follows:

---

[53] Discussed in Gérold, op. cit., pp. xlix-liii. There is no
evidence that these were performed on instruments.

Gerold:

Vos-tre beau-té Vos-tre beau- té, vos-tre beau-té,

Corrected:

Vos-[vos]-tre beau-té et vos-tre beau-té, vos-tre beau-té,

Gerold:

Vos- tre beau- té gente et jo- ly - e

Corrected:

Vos-[vos] tre beau-té, gente et jo- ly - e
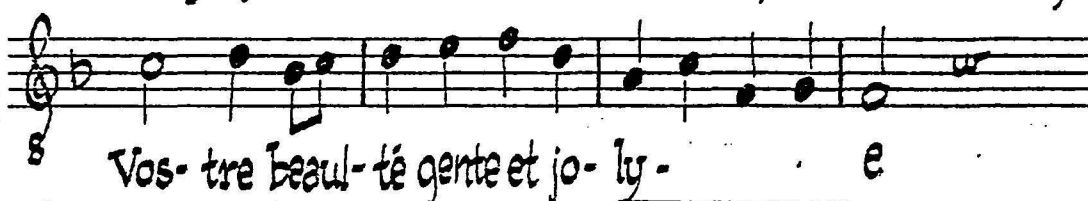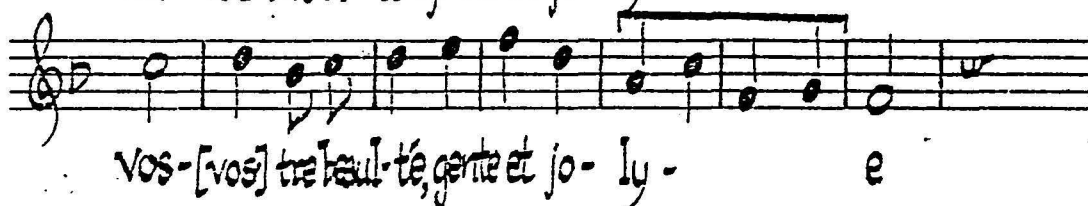
An extended anacrusis often has further metrical sig-
nificance. Depending on the durational unit of the first pair
of paired syllables, it can help to outline either the modus
and tempus of the song:

$$\text{♩ ♪ ♪ } w \quad \underline{incipit}$$
$$\text{♩ ♩ } w \quad \underline{modus}$$
$$\text{♪ ♪ } w \quad \underline{tempus}$$
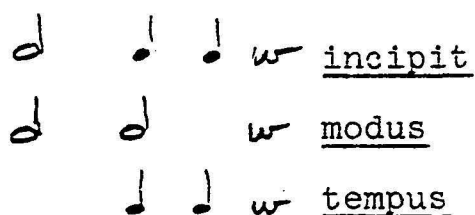
or the song's tempus and prolatio:

$$\text{♪ ♬ ♬ } w \quad \underline{incipit}$$
$$\text{♪ ♪ } w \quad \underline{tempus}$$
$$\text{♬ ♬ } w \quad \underline{prolatio}$$
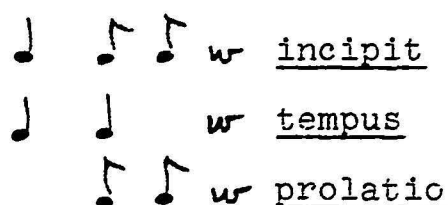
Furthermore, a "stuttering" beginning can outline all three, modus, tempus and prolatio:

𝅗𝅥   ♩   ♪♪ 𝅥 <u>incipit</u>

𝅗𝅥   𝅗𝅥   𝅥 <u>modus</u>

♩   ♩   𝅥 <u>tempus</u>

♪ ♪ 𝅥 <u>prolatio</u>
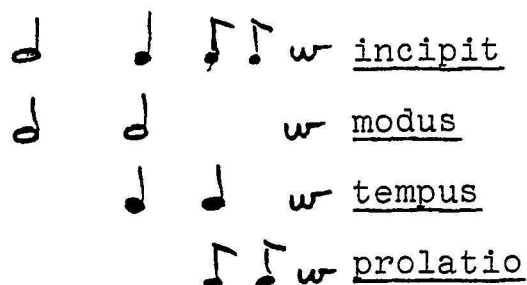
Songs in Triple Meter

In duple songs, the first syllable of a pair is as long as or longer than the second. If this scheme is translated into a triple context, the following pairs result: ♩. ♩. and ♩ ♪. Another possibility is the succession: ♪ ♩ . The majority of triple-meter songs use these groups exclusively.[1] The trochaic (♩ ♪) and iambic (♪ ♩) divisions of a triple unit can be understood as two of three ways to split a triple unit into halves. If the number three is considered to represent an intervallic rather than a rational value,[2] there are two approximations to its division into "halves": 2+1 and 1+2. The division of durational units into halves can be dispensed with altogether in favor of a division into thirds. This however, occurs only in conjunction with the successions ♩ ♪ or ♪ ♩ .[3]

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[1] B:24, 50, 55, 99; A:4, 30, 78, 89.

[2] I.e., an integer made up of indivisible units.

[3] A:134, 136.

Thus, the underlay of triple-meter songs represents a special case of underlay generally. It is more restricted in that at most, and only rarely, two durational units are involved. And it is freer in that the division of a durational unit into thirds is possible, though it is always accompanied by division of the same unit into halves.

In summary, text underlay in French monophonic song is predominantly commetric. It follows rather than opposes the scheme of dividing durations into halves. This scheme is embodied in the mensural notation of the time with its relations of _modus_, _tempus_ and _prolatio_, which are all, for the majority of songs in the repertoire, duple.

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Exceptional Cases

</div>

Although text underlay is predominantly regular in the repertoire, a number of exceptions do occur. Many of these result from an interruption of the regular scheme by means of _syncopa_ or extension. The following is an example of _syncopa_:

U-ne mous-se de Bis-cay-e

It is possible to regularize the scheme as follows:

U-ne mous-se de Bis-cay-e

An example of extension:

Hel-las pour-quoy vi-vent faulx en- vi-eux ?

can be regularized by reducing the length of the antepenulti-
mate syllable as follows:

Original:

Regularized:

Such irregularities constitute by far the majority of devi-
ations from standard text underlay. They can be considered
to embellish or elaborate the underlying scheme rather than
disrupt or destroy it. They are, thus, exceptions which
"prove the rule".

The procedure which entirely confounds the metrical scheme of underlay is reversal. Here syllables are paired in a manner different from, and indeed opposite to, the regular way. In the following example, syllables one and two, three and four, and five and six are paired metrically in an eight-syllable line where syllables two and three, four and five, and six and seven are normally paired.

Te-mès a-mou-reux bien n'au-ra

Here the usual scheme is completely obscured and replaced with its opposite. Such an irregularity is, however, rare in the corpus.

In addition a number of irregularities defy classification. The following are representative of such cases:

Au-près d'un jo-lis bou-quet

Dem-puis que j'a-di-ray bon-temps
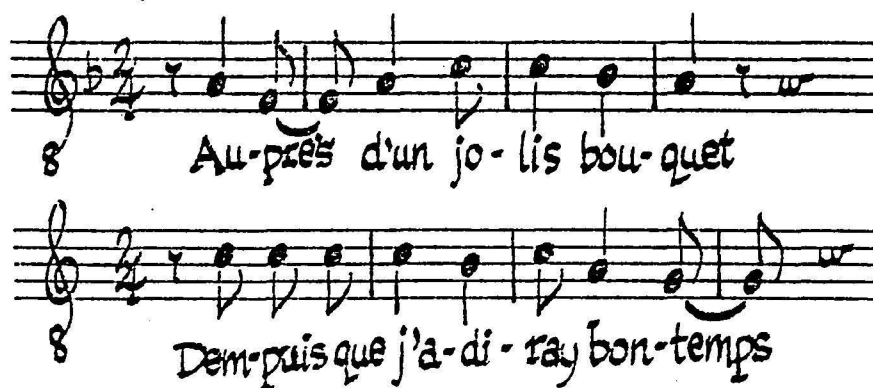
Table 1 describes the frequencies with which phrases are set in the regular or in the various irregular manners.

Table 1.   Frequencies and percentages of phrases.
with regular and irregular underlay in
A and B

	Type of underlay		
Source	Regular	Irregular	Total
A	622 (80.7)	149 (19.3)	771 (100.0)
B	583 (85.9)	96 (14.1)	679 (100.0)
A & B	1205 (83.1)	245 (16.9)	1450 (100.0)

Phrase Lengths

The coordination of syllables with musical durations provides an ordering of relatively short spans in the songs, whereas the overall metrical organization of the tunes serves to order entire pieces. Between these two extremes are medial units, namely, phrases. Since text underlay establishes relationships between the length of a syllable and the phrase as a whole, and the length of each song is the sum of its phrases, the lengths of phrases are worthy of consideration.

The length of a phrase can be determined by observing the number of complete semibreves contained in it. For the purposes of comparison, anacruses of less than a semibreve can be disregarded and the length of the phrase final arbitrarily set at a single semibreve regardless of its actual length.

Table 2 illustrates the frequencies of phrases of various lengths in A and B. Both the distributions are

approximately normal and the mode[1] for both distributions is six semibreves. Despite the fact that a much larger proportion of the distribution is to be found in the mode of B than in that of A, for B the frequencies are most evenly spread over the entire range rather than being clustered densely around the mode and its adjacent values as in A. The range of values is far greater in B than in A. Approximately two-thirds of the distribution of A ranges from four to eight semibreves in length. In B the same proportion ranges from two to eight or from four to ten semibreves. Thus, although the distributions for A and B are similar, B's is rather more spread out over a wider range, while A's is more concentrated within a narrower range.

A peculiarity is to be observed in both distributions. Although the general tendency is to approximate a normal distribution, frequencies of odd values far outnumber those of even values. There is thus a tendency for an even number of semibreves to precede the phrase final. In a phrase of three semibreves, two semibreves precede the final; in one of five, four; and so forth. This suggests a grouping of semibreves into pairs producing a substructure of movement in breves which represent the next higher level of rhythmic organization. The case of the modal value, seven semibreves, is interesting in that it suggests an even higher

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[1] The mode of a distribution is its most frequent value.

level of organization into longs and points toward the four-
measure phrase where each "measure" corresponds to a breve.
Nevertheless, one should not think that the overall structure
of the pieces necessarily corresponds to the modern system of
binary measures with phrases beginning and ending on the
first beats of bars. Phrases with odd numbers of beats pre-
ceding the final occur with great frequency, and the phrase
final itself can be held for an odd number of semibreves to
interrupt the flow of binary measures. But though the Ren-
aissance approach to rhythm and meter is still too subtle to
be confined to large even measures, the corpus being examin-
ed does demonstrate a tendency in that direction.

As has been observed above, there is a great deal of
variability in the lengths of phrases over the entire reper-
toire. Within individual songs, however, the case is some-
what different. If the longest phrase in each song is compared
with the shortest phrase, Table 3 results. Again a wider
variation in phrase lengths is to be observed in B than in A.
In A, one can observe a tendency for the phrases within a
song to be of similar length. The difference between lengths
of phrases is two semibreves or less in approximately half
the cases. In B, this range must be extended to a difference
of four semibreves or less to include half the instances.

To summarize, in both sources, phrase lengths of
approximately seven semibreves predominate. There is a ten-
dency toward binary grouping of semibreves into breves and

Table 2. Numbers of phrases of a given length,
measured in semibreves

Source: Length of phrase in semibreves:

	0	1	2	3	4	5	6	7	8	9	10	11
A	2	13	59	85	142	93	142	56	50	15	42	11
B	1	0	20	29	74	12	201	37	79	12	67	8

Source: Length of phrase in semibreves:

	12	13	14	15	16	17	18	19	20	21	22	23
A	35	2	18	2	3	1	1	0	3	0	2	0
B	45	9	23	7	23	2	10	0	7	0	5	0

Source: Length of phrase in semibreves:

	24	25	26	27	28	29	30	31	..	36	Total
A	0	0	0	0	0	0	0	0		0	771
B	2	1	1	0	3	0	0	0	..	1	679

Table 3. Frequencies of differences of various lengths
between shortest and longest phrases in A and
B

Frequency
in: Number of semibreves difference:

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	16	18	Total
A	18	31	22	14	20	14	14	0	1	2	2	1	1	0	0	0	140
B	8	7	18	6	20	6	9	5	12	1	4	0	3	1	1	1	102

in some cases longs. And the phrases of a song tend to be
equal in length. Nevertheless, B stands out as a source in
which there is a greater variability in phrase lengths.

Comparisons with Polyphonic Rondeaux

With regard to meter, text underlay, and phrase lengths, polyphonic rondeaux ca. 1500 are somewhat different in character from contemporary monophonic songs. Whereas duple meter is used in almost all of the monophonic songs, a number of rondeaux is notated in tempus perfectum. Although any account of text underlay in polyphony is confounded by the infrequency with which the settings are notated as scrupulously as A and B, one can discern in a number of cases a similar approach to underlay to what is found in the monophonic songs. In such instances, the relationship between text and music is basically "regular" with a few irregularities which arise from syncopation or extension:

Cueur langoreulx by Josquin:

Cueur lan-go-reulx qui ne fais que pen-ser

qui ne fais que pen-ser

Plain-dre gé-mir plou-rer et sou- spi-rer

plain-dre gé-mir plou-rer et sou-spi-rer

The phrases of polyphonic settings tend to be much longer than their monophonic counterparts. The findings presented in Table 4 were arrived at by calculating the time intervals between the final cadences of one phrase and the last cadence of the next. In the case of the first line of a song, the entire time-span up to, but not including, the final cadence of the first phrase was noted. As can be seen from Table 4, the range of polyphonic phrase lengths is wider than what is found in the monophonic repertoire. Almost two-thirds of the cases are between sixteen and twenty-eight semibreves in length. The average polyphonic phrase contains about twenty-two semibreves. In other words, it is about two to three times as long as the average monophonic phrase. As in the monophonic repertoire, phrases with an even number of semibreves are more frequent than those with an odd number. Indeed, this discrepancy between even and odd numbers of semibreves is even greater in polyphony than in monophony (Table 5). Finally, the range of phrase lengths within individual songs tends to be wider than in monophony.

If Tables 2 to 5 are compared, one can observe a general tendency among A, B, and the polyphonic settings. There is a great contrast between songs in A on the one hand and polyphonic settings on the other. Between these extremes, lie the songs of B, which, like the polyphonic settings, display a greater range of phrase lengths, a tendency toward longer phrases, a wider range of phrase lengths within indi-

vidual songs, and more frequent use of phrases consisting of an even number of semibreves. In summary, of the two monophonic sources, B appears to resemble the polyphonic rondeaux more than A. This seems to accord with B's more "courtly" character as a source. Of the two, it is by far the more expensive, and unlike A, it can be traced definitely to a royal household.

Table 4. Phrase lengths in polyphonic rondeaux by Agricola, Compere, Josquin, and other composers whose works appear in Petrucci's Odhecaton and Canti B

no. of semibreves:	7	8	9	10	11	12	13	14
frequency in rondeaux of:								
Agricola	-	-	-	1	-	1	2	4
Compère	1	-	-	-	1	4	-	7
Josquin	-	-	-	3	-	-	-	7
Petrucci	-	1	-	2	-	1	-	3

Number:	15	16	17	18	19	20	21	22	23	24
Agricola	-	8	-	5	-	7	1	12	1	11
Compère	5	9	-	15	1	12	4	6	2	8
Josquin	1	11	1	5	-	7	-	4	2	8
Petrucci	1	6	-	3	2	10	2	10	-	4

Number:	25	26	27	28	29	30	31	32	33	34
Agricola	3	6	1	6	-	3	-	-	-	4
Compère	-	4	1	4	-	3	-	1	-	-
Josquin	-	2	-	1	-	1	-	2	-	1
Petrucci	-	10	1	10	-	7	-	3	-	1

Number:	35	36	37	38	39	40	41	42	48	52
Agricola	-	1	-	1	-	1	-	5	-	-
Compère	1	-	-	-	-	2	-	-	-	-
Josquin	-	1	-	2	-	3	-	-	1	1
Petrucci	-	3	-	1	-	-	-	-	-	-

Table 5. Frequencies and percentages with which
phrases have even and odd numbers of semibreves in
polyphonic rondeaux ca. 1500 and
in monophonic chansons of the time

number of semibreves:	Odd	Even	Total
source or composer:			
Agricola	8 (9.5)	76(90.5)	84(100)
Compère	16(21.3)	75(78.7)	91(100)
Josquin	4 (6.7)	60(93.3)	64(100)
Petrucci	6 (7.0)	79(93.0)	85(100)
All polyphonic rondeaux	34(10.5)	290(89.5)	324(100)
A	271(35.1)	500(64.9)	771(100)
B	117(17.2)	562(82.8)	679(100)
A&B	388(26.8)	1062(73.2)	1450(100)

CHAPTER FOUR: PART II: MODALITY

Until the middle of the fifteenth century dis-
cussions of modality concerned themselves exclusively with
plainchant. In the latter half of the century composers
of polyphony became increasingly sensitive to the modal
dispositions of their melodies and began to exploit all
the church modes. Theorists, too, stressed the point that
discussions of modality were relevant not only to chant but
also to polyphony. Tinctoris, in his Liber de Natura et
Proprietate Tonorum (1476) writes of "the eight tones which
we use not only in Gregorian chant, which is simple and
plain, but also in every other song, figured and composed."[1]
Earlier in the same book on the modes he discussed "the tones
of composed songs, in whose favor he had foremost and prin-
cipally begun the treatise."[2] By the 1530's, Sebald Heyden
was able to observe that anyone who understood the elements
of mensural music also understood plainsong.[3] Thus in about
sixty years quite a change had taken place. At first, fif-

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[1] Johannes Tinctoris, Concerning the nature and propriety
of tones (De natura et proprietate tonorum), trans. Albert
Seay, Colorado Springs, Colorado College Music Press, 1967,
Chapter 18, pp. 19 f. Tinctoris was the first to discuss
polyphony in terms of modality. See Richard L. Crocker's
review of Edward E. Lowinsky's Tonality and atonality in
Journal of Music Theory, VI (1962), pp. 142-53, p. 152.

[2] See Tinctoris, op. cit., Chapter 1, p. 8.

[3] Miller, op. cit., pp. 88 f.

teenth-century theorists introduced the concepts and find-
ings of monophonic theory into the study of polyphony.
Thereupon, sixteenth-century polyphonic theory became self-
sufficient.

The application of modal theory to polyphonic music
did not involve the mere transposition of one body of theory
to another. Tinctoris, himself, recognized that the modal
behavior of melodies in polyphony differed from that of
chant at least insofar as initial tones were concerned.[1]
Thus one must guard against simply applying chant theory to
mensural music in a mechanical fashion. Discrepancies be-
tween the relative applicability of modal theory to mono-
phony and polyphony are bound to occur, especially in secular
music, where the traditional chants did not form the basis for
composition. Nevertheless, the theorists' use of concepts
from the theory of ecclesiastical chant in discussions of
measured part music does show that they considered those con-
cepts to be relevant to polyphony. It is thus their concepts
we are interested in rather than their restrictive rules.
Their rules are based on the authoritative melodic traditions
of Gregorian chant, and there is no reason to believe that
composers slavishly followed these rules when writing poly-
phony. Rather it seems more likely that they interpreted
both repertoires from a common theoretical standpoint, rec-

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[1] Tinctoris, op. cit., Chapter 19, pp. 20 f.

ognizing that each repertoire had its ideosyncratic
features.

In Renaissance theory, a mode is principally distinguished by its ambitus or range, its _maneria_ or disposition of intervals, its _differentiae_ or cadential pitches, and its beginnings or initial tones, all these being considered in relation to the finalis.

Range

Ambitus is one of the most difficult variables to quantify since one is dealing with two variables at once: the lowest and highest pitches of the piece in relation to the finalis. Theoretical writers of the time described systems for classifying the ranges of melodies. However, with one exception these systems of classification are not comprehensive. They do not cover all the possibilities. The exception is Tinctoris' aforementioned book on the modes.[1] In Chapters 21 to 43, Tinctoris presents what seems to be the most exhaustive system ever devised for classifying melodic ranges.

The traditional starting point for describing ranges is the distinction between an authentic mode with an ambitus of 1 to 8 and a plagal one with an ambitus of V to

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[1] See note 58, above.

5.[1]   In fact, Tinctoris defines these ranges as VII to 8

and V to 6, respectively,[2] and notes that "by license" they

can be extended to VI to 8 and V to 7.[3]   Not all ranges en-

countered in chant or mensural music conform to this scheme.

Some rise or fall higher or lower and it is to handle such

cases that Tinctoris distinguishes among "perfect," "imper-

fect," and "pluperfect" ranges[4] to compare the ascent or

descent of a melody with the authentic and plagal forms ori-

ginal to the scheme.   The "original" forms (VI or VII to 8

and V to 6 or 7) are considered to be perfect in both ascent

and descent.   Extensions or contractions of these are consi-

dered to be pluperfect or imperfect.   This gives rise to the

classification system presented in Table 6.

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[1] Willi Apel (comp.) Harvard dictionary of music, 2nd ed.,
Cambridge, Mass., Belknap Press of Harvard University,
1969, "Church modes," pp. 165-68.   The following convention
will be used for scale degrees.   Arabic numerals indicate
degrees on or above the tonic or finalis, and Roman numer-
als indicate degrees in the octave below the tonic.   This is
an adaptation of the scheme in Constantin Brailoiu, "Sur une
Mélodie russe," in Emilia Comisel (ed.) Opere, Bucharest,
Uniunii Compositorilor, 1967, pp. 305-99, p. 316.

[2] Tinctoris, op. cit., Chapter 20, pp. 21 f.

[3] Ibid., Chapter 21, pp. 22 f.

[4] Ibid., Chapter 26, pp. 26 f.

Table 6. Tinctoris' system for classifying ranges.
(a=not directly described by Tinctoris
but implicit in his system; *9=9 or 10;
*IV=IV or III; M=mixed mode, i.e., mixtus)

Verbal description of range: Numerical description of range:

Ascent	Descent	Authentic	Plagal
perfect	perfect	VI or VII to 8	V to 6 or 7
perfect	imperfect	1 to 8	VI to 6 or 7
perfect	pluperfect	V to 8 M^a	*IV to 6 or 7
imperfect	perfect	VI to 7 ^{a}	V to 5 ^{a}
imperfect	imperfect	1 to 7	VI to 5
imperfect	pluperfect	V to 7 M^a	*IV to 5
pluperfect	perfect	VI or VII to *9	V to *9 ^{a}
pluperfect	imperfect	1 to *9	VI to *9 ^{a}
pluperfect	pluperfect	V to *9 M^a	*IV to *9M

Although the system of nomenclature would suggest an arrange-
ment of the eighteen cells of the table such that each is
filled with a unique range, this is not the case. The pairs
of cells joined by arrows represent the same ranges. These
could be classified as either plagal or authentic. Tinctoris
deceptively gets around this problem by ignoring the entries
surrounded by parentheses. Some ranges implied by the system
are not even mentioned by Tinctoris (see note a of Table 6).

Some cells represent a "mingling" or "mixture"[1] of authentic and plagal forms (see the M's in Table 6). Tinctoris inherited the term mixture from earlier theorists[2] and uses it, as they did, to denote a range which partakes of both authentic and plagal forms of the same maneria. A mixed range is considered to be plagal if it falls to its lowermost tones more often than it rises to its uppermost ones. Otherwise it is considered to be authentic.

Thus far, despite its discrepancies, the system is fairly complete in assigning a name to any range. However, it does not yet take into account ranges which lie within the ambitus VI to 6. These Tinctoris considers "confused."[3] His arbitrary rule for such ranges is that they are to be considered authentic if the 5th above the finalis is repeated more often than the 4th and plagal in the opposite case. It follows that a range of, for example, 1 to 4 can only be considered plagal. Table 7 presents the frequencies with which different ranges appear in A and B, the ranges classified according to Tinctoris' scheme.

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[1] Ibid., Chapter 22, p. 23. Mixture seems a preferable translation of the Latin mixtio, rather than "mingling" which is used by Seay. This usage forces Seay to adopt "mixture" as the translation of commixtio, where "commixture" would be a preferable translation.

[2] See Klaus Wolfgang Niemöller, "Zur Tonus-Lehre der Italienischen Musiktheorie des ausgehenden Mittelalters," Kirchenmusikalisches Jahrbuch 40 (1956), pp. 23-32.

[3] Tinctoris, op. cit., Chapter 34, p. 31.

The most obvious observation is that the mixed mode has almost no place in the repertoire. A basic difference is to be noted between A and B with regard to the choice of plagal and authentic ranges. In A, there is a fairly even split between the frequencies with which plagal and authentic are chosen. On the other hand, in B, the overwhelming preference is for the authentic ambitus. In both sources, there is a high frequency of dubious or confused cases where the range alone is not sufficient to determine whether the mode is authentic or plagal. Since the sources are so close together in origin, one would expect that ranges occurring with great frequency in one would occur with comparable frequency in the other. There are eleven cases where a given range appears in more than five per cent of the songs in at least one of the sources. In six of these cases (namely, V to 5, VII to 5, VII to 7, 1 to 6, 1 to 8, and 1 to 9) comparably high frequencies appear in both sources.

Table 7. Frequencies of different types
of ranges in A and B

Type of range:		plagal	authentic	mixed	confused	total
Source:	A	49	46	0	45	140
	B	17	59	1	25	102

Table 8 shows the frequencies with which various degrees appear as the lowest ones in the range. I and VII occur most frequently, VI and V rather less so, and IV and III very

rarely. V occurs almost equally frequently in the two sources, VII, VI and IV more often in A and 1 more often in B. In terms of their lowermost notes, the songs of B, then, tend to lie higher than those of A.

Table 8. Frequencies with which given degrees appear as lowest tones in ranges of songs of A and B

Lowest tone:		III	IV	V	VI	VII	1	Total
Source:	A	1	10	19	19	57	34	140
	B	–	–	14	4	29	55	102

Table 9 illustrates the frequencies with which various degrees appear as the highest ones in the range. By far the most favored degrees in both sources are 5, 6, 7 and 8, the upper diatesseron of the mode. On the whole the tendency is for the uppermost notes of B to lie higher than those of A. If tables 7, 8 and 9 are compared, one will observe that the songs of B tend to lie higher than those of A in all respects.

Table 9. Frequencies with which given degrees appear as highest tones in ranges of songs of A and B

Highest tone:		3	4	5	6	7	8	9	10	Total
Source:	A	6	10	53	25	15	24	5	2	140
	B	1	2	22	13	19	26	15	4	102

Table 10 shows the frequencies of ranges expressed simply as intervals, that is, not taking into account the positions of the lowest or highest pitches with respect to the finalis. Here one of the unities of the repertoire can be seen. Although ranges vary from a very narrow fourth to a quite wide eleventh the great majority of cases vary from a sixth to a ninth. A tendency in B to favor wider ranges can also be seen.

Table 10. Frequencies with which given intervals appear as ranges of songs in A and B

Range		4	5	6	7	8	9	10	11	Total
Source:	A	1	4	34	35	40	22	3	1	140
	B	0	5	16	13	37	24	6	1	102
A & B		1	9	50	48	77	46	9	2	242

In summary, the corpus is quite unified with regard to range. Although A and B do not exhibit dramatically different tendencies, the songs of B tend slightly to lie higher and to be wider than those of A.

Maneria

A maneria is determined by its finalis[1] and species of

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[1] Aaron's justification for basing one's judgement of a mode on the finalis is that "those things that are at the end are more closely observed than those that are at the beginning and in the middle." He defines the finalis as a "final and majesterial ending in music introduced in order that the tone be recognized." See Toscanello, pp. 207 f.

diapente and diatesseron.[1]   A piece ending on one of the
regular finals: d, e, f, or g[2] with no signature is in the
first, second, third or fourth maneria, respectively.   One
ending on one of the irregular finals:[3] g, a b-flat, or c
with a signature of one flat is in the first, second, third
or fourth maneria transposed.   Whether transposed or not,
the same disposition of intervals appears in the character-
istic penta- and tetra-chords of pieces in the same maneria.
Following Peter Bergquist, we will refer to manerie by their
Greek names: Dorian, Phrygian, Lydian, etc.[4]   Table 11 il-
lustrates the frequencies of each maneria in the repertoire.

Table 11.   Frequencies with which various manerie
appear in A and B

Greek name:	Ionian	Dorian	Phrygian	Lydian
Frequency in:				
A	53	63	0	3
B	28	55	0	1

[1] Lucie Dikenmann-Balmer, Tonsystem und Kirchentöne bei Johannes Tinctoris, Bern, P. Haupt, 1935, passim, discusses the importance of species of fourths and fifths in theory and practice in the late fifteenth century.

[2] Gafurius, op. cit., p. 46; Aaron, Toscanello, pp. 207 f.; Tinctoris, op. cit., pp. 37-39.

[3] See note 72, above.

[4] Peter Bergquist, "Mode and Polyphony around 1500", Music Forum, I (1967), pp. 99-161, pp. 102 f.

Table 11.   Continued

Greek name:	Mixolydian	Aeolian	Total
Frequency in:			
A	5	16	140
B	5	13	102

Two _manerie_, which are not accounted for by traditional theory, appear with great frequency in French monophonic song around 1500. These correspond to the modes which Glareanus was later to term Aeolian and Ionian.[1] Aaron seems to have been the first theorist to deal with these modes. Unfortunately, he forces them into the traditional scheme. Thus he calls modes ending on _d_ with a signature of one flat, Dorian, and on _f_ with a similar signature, Lydian. Modes with no signature and ending on _a_ he considers either Dorian or Phrygian, depending on whether cadences occur often on _d_ or _e_, respectively.[2] Although Aaron's solution to the problem of classifying Ionian and Aeolian modes is neither as successful nor as convincing as Glareanus' later definition of two new _manerie_, it does represent an attempt to accommodate traditional monophonic theory to current polyphonic practice and bespeaks a recog-

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[1] Glarean, _op. cit._, Book II, Chapters I to VII, pp. 103-21.

[2] Bergquist, _op. cit._, pp. 106 f.

nition of the modes which were new to theory. Since no example of Phrygian appears in the corpus, it is unlikely that pieces ending on a with no signature are really forms of the Phrygian with an irregular ending. Pieces with no signature and ending on c are not accounted for by Aaron. Due to their similarity with Aaron's Lydian on f with a signature of one flat, they will be grouped with the latter. Table 12 describes the frequencies with which the various manerie appear in A and B.

Table 12. Frequencies with which various manerie appear in A and B

Greek name:	Dorian				Lydian				Mixolydian		Total
Finalis:	d	g	d	a	f	b	f	c	g	c	
Signature:	-	♭	♭	-	-	♭	♭	-	-	♭	
Source: A	37	26	13	3	2	1	35	18	4	1	140
B	21	34	11	2	0	1	21	7	4	1	102

The problematic ending on a is generally avoided. Indeed due to its cadences on the fourth degree, one of the examples ending on a can be considered to belong to the Dorian maneria with an ending on the confinalis rather than the finalis.[1] The "purely Lydian" forms on f and b-flat are also rare.[2]

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[1] A:57.

[2] A:7, 46, 113; B:55.

If the examples of these are examined more closely, one observes that the fourth degree needs flattening in most instances by the traditional rules of _musica ficta_, which demand that _b_ or _e_ be flattened to avoid a leap of, or direct progression through, a tritone. In other cases, a raised fourth degree is required to effect a _superius_ cadence,[1] and a flattened one to effect a tenor cadence.[2] In the examples, only two instances -- and both of these occur within a single song -- emerge where either the flat or natural form is possible.[3] The great frequency of modes ending on _f_ with a signature of one flat suggests that, in these cases as well, a flat would be preferred. Thus the rules of _musica ficta_ and of cadential formation as well as the overall style of the repertoire indicate that the purely Lydian modes are really the result of an alternative notation for the "impure" Lydian mode (i.e., Ionian).

If this is taken into account, a pattern emerges in the selection of _manerie_. For in each case, the fourth, first, fifth and second degrees form a series of perfect 5ths (or their inversions, perfect 4ths), while the third, sixth, and seventh degrees are variable from _maneria_ to _maneria_. This
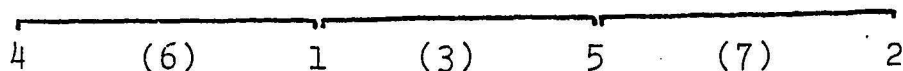
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[1] See _A_:7 and 46.

[2] See _A_:113.

[3] In _A_:46, and _B_:55.

suggests the following "triadic" arrangement as the basis

for all manerie:

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    ┌──────────────┬──────────────┬──────────────┐
    4     (6)      1     (3)      5     (7)      2
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N.B.   numerals indicate scale degrees, brackets join degrees
       which are always a perfect 5th or 4th apart, and paren-
       theses surround each degree which is variable, being
       either a major or a minor 3rd above the root of its
       triad.

The resulting manerie can be defined by the intervals

characteristic of their three variable degrees. Dorian can

be described by the formula: -3, +6, -7; Mixolydian by +3,

+6, -7; Aeolian by -3, -6, -7; and Ionian by +3, +6, +7.

Of the eight possible forms, the previous four are found and

the following are not: -3, -6, +7; -3, +6, +7; +3, -6, +7;

and +3, -6, -7. What unifies the four that are found and dis-

tinguishes them from those that are not, is the fact that in

each of the former the scale degrees can be arranged in an un-

broken series of perfect 5ths or 4ths as, for example, in the

case of Dorian:

scale degrees:	3	7	4	1	5	2	6
pitches:	f	c	g	d	a	e	b

The traditional manerie can also be arranged as follows:

	Lydian	Ionian	Mixolydian	Dorian
Finalis:	f	c	g	d

	Aeolian	Phrygian	Locrian
Finalis:	a	e	b

depending on whether the finalis occurs on the first, second, third, etc. members of the unbroken series of pitches arranged as six fifths. The _manerie_ chosen for the monophonic repertoire coincide with central values in the series; extreme values such as the "pure Lydian" and Phrygian are avoided.

Choice of _maneria_ thus appears to be the result of choosing a series of three perfect "triads" in accordance with the choice as finalis of one of the central values in a series of six fifths.

Phrase Finals

One of the most prominent tones in a phrase is its final. Coterminous with it are carried the rhymes of the text.[1] And in Renaissance polyphony the phrase final also marks the point at which imperfect consonances are resolved to perfect ones.[2]

So stable are these points of rest considered, that researchers have used contours of phrase finals to identify

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[1] Cf. Cone's observation that a phrase can be considered an upbeat to its ending. Edward Cone, _Musical form and musical performance_, 26 f.

[2] Cf. Richard L. Crocker's observation in "Discant, Counterpoint and Harmony," _Journal of the American Musicological Society_, XV (1962), pp. 1-21, pp. 11 f., that imperfect intervals are resolved at cadences. Although Crocker discusses only parallelism as a means of interrupting resolution, one can consider any succession of imperfect intervals as performing the same function.

whole strophes or stanzas.[1] A hidden assumption in such a practice is that the succession of phrase finals constitutes a summary of the tonal and rhythmic movement of the piece as a whole. Thus, the basic shape of the piece can be perceived by directing attention to its phrase finals. The limitations which the style tends to put on such shapes can be seen by examining the frequencies with which given scale degrees are chosen as the last notes of phrases. And the frequencies with which certain scale degrees are chosen as phrase finals can also cast light on the hierarchy of relationships in the tonal system itself.

Table 13 displays the frequencies with which phrase finals on on various degrees appear in A and B, and the two sources together.

Table 13. Frequencies of phrase finals on various degrees in A and B

Degree:	V	VI	VII	1	2	3	4	5	6	7	8	Total
Source:												
A	26	8	83	341	115	106	24	63	2	0	3	771
B	10	7	27	330	83	66	37	108	3	3	5	679
A & B	36	15	110	671	198	172	61	171	5	3	8	1450

[1] See, for example, the writings of Bartók and Kodály which are an application of Ilmari Krohn's suggestions. On the Hungarians' schemes for identifying and analysing melodies by means of their phrase final contours, see Stephen Erdély, Methods and principles of Hungarian ethnomusicology, Bloomington, Indiana, Indiana University, 1965 (Indiana University Publications, Uralic and Altaic Series, Vol. 52), pp. 44-49.

A number of striking trends can be observed. Although the degrees on which finals appear extend from V to 8, by far the heaviest concentration appears between degrees VII and 5. Thus, extremes are avoided and the middle is cultivated.

Walter Wiora, following such pioneers as Carl Stumpf, refers to the progression up and down in the ambitus of a piece as a change in its Helligkeit, ("lightness"), brighter values occurring as one proceeds upward and darker downward.[1] If there is a tendency, then, it is to favor neither extremes of brightness nor extremes of darkness but rather a moderate, central register or tessitura for the phrase finals. Rika Maniates has coined the term "modal centricity" without elaborating further on its precise meaning.[2] For our purposes it can be taken to imply a preference for the central values of Helligkeit. In the modal system, the central register is that of the diapente. Plagal modes can be considered to feature the diatesseron below this, authentic ones the diatesseron above, and mixed ones both diatesserons. But common

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[1] Walter Wiora, Die Variantenbildung im Volkslied, (diss. Albert-Ludwigs-Universitat zue Freiburg I. (Br.), also published in Jahrbuch für Volksliedforschung, VII (1949), p.6.

[2] Maria Rika Maniates, "Combinative Chansons in the Dijon Chansonnier," Journal of the American Musicological Society, XXIII (1970), pp. 228-81, pp. 234 f.

to all three basic types of ambitus[1] is the central dia-
pente, and it is this register which is emphasized by the
phrase finals of the repertoire.

Modal centricity explains some of the variation in
frequencies of phrase finals. However, striking discrepan-
cies are still found. The degree 4 appears consistently much
less frequently than either 3 or 5, as does VI if compared
with V or VII. In terms of the Helligkeit model these fre-
quencies are anomalous. This suggests that there is a tonal
hierarchy which operates separately from Helligkeit. The
nature of this hierarchy is suggested by the frequency with
which the finalis appears, for, disregarding its appearance
at the ends of songs, it is found as a phrase final two or
three times as often as any other degree. The pre-eminent
quality of the finalis is its "finality" or "weight". The
finalis can thus be considered to be the head of a hierarchy
of "finalities" or "weights".

Renaissance theory recognizes four degrees of final-
ity. The greatest is accorded to the finalis, the next great-
est to the confinalis, less still to the other differentiae,[2]
and none to the remaining pitches. Thus, as remarked above,[3]

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[1] The exceptionally narrow plagal and authentic forms discus-
sed above, pp. 156f.,are not considered here, though one can
observe that they too feature the center of the range.

[2] Lists of the differentiae in the various modes have been
compiled by Hugo Berger.

[3] Note 70.

Aaron justifies the usual judgment of a mode by its finalis as follows: "Those things that are at the end are customarily more closely observed than those that are at the beginning and in the middle." And Gafurius says of the confinalis: "There are also those who call the melodic structure of individual modes irregular when they terminate on their confinals." This is to distinguish such endings from regular ones on the finalis. The status of the finalis and confinalis as relatively weighty tones in a mode could be justified theoretically by the division of the octave into diapente and diatesseron species bounded by them.[1] The status of the other differentiae, however, was justified not on systematic grounds but on an empirical basis. They were the pitches observed to be used at cadential points in chant. Thus their enumeration by theorists takes the form of an inventory rather than a rational system.[2]

Nevertheless, some coherence can be observed if the differentiae of the several modes are compared (see Table 16). First, it can be observed that the differentiae demarcate the mode. This is important in cases where, by commixtio,[3] a second mode is implied. Consider, for example, the case

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[1] See Leo Treitler, "Tone System" on the significance of the finalis and confinalis for a mode's structure.

[2] In the same manner as initials. See below, pp. 181f.

[3] See below, pp. 216f.

of a piece in mode I which "modulates" by commixtio to mode
V. The temporary confusion which might result can be dis-
pelled by a cadence on d which would unequivocally reassert
mode I or by a cadence on c' which would clearly assert mode
V. If Table 14 is examined closely one will see that in all
cases where a pair of modes might be confused there is always
at least one tone which, if employed in a cadence, would as-
sert one rather than the other.[1] If the differentiae which
unequivocally assert one mode of any pair are compared, it
will be found that in 69 of 91 instances the degree involved
is the first (finalis), third, or fifth (confinalis) of the
mode. In some cases more than one differentia will assert
a given mode. However, in every case the first, third, or
fifth degree is one of the possibilities.

Table 14. Pitches on which differentiae
occur in the eight modes
(finalis underlined)

Mode:	Pitches:							
I			d		f	g	a'	
III			e	f	g	a'	b'	c'
V			f	g	a'		c'	
VII				g	a'	b'	c'	d'
II	a	c	d		f	a'		
IV			d	e	f	g	a'	c'
VI		c	d	f	g	a'	c'	
VIII			d	f	g	a'	c'	d'

[1] However, in some cases mode V is difficult to assert since
its differentiae are a subset of those of modes III, IV,
and VI. Nevertheless, it can be "negatively" asserted if
the differentiae peculiar to those modes are avoided.

Clearly the degree on which a _differentia_ occurs is related to its ability to define the mode, and the special capacities of degrees one, three and five can be observed in all the modes. If the _differentiae_ for the various modes are aligned according to scale degree as in Table 15, some further regularities among the modes can be seen.

Table 15. _Differentiae_ of the eight modes aligned according to scale degree

Scale degree:	V	VI	VII	1	2	3	4	5	6
Mode: I				x	LT	x	x	x	
III				x	x	x	x	x	x
V				x	x	x	LT	x	
VII				x	x	x	x	x	
II	x		x	x	LT	x	x	x	
IV	B		x	x	x	x	x	B	x
VI	x	x	LT	x	x	x	LT	x	
VIII	x		x	x	x		x	x	

In authentic modes (I, III, V, and VII), all pitches in the _diapente_ are _differentiae_, save those which would be "leading-tones" (LT in Table 15) a semitone below the third or fifth degrees. The same holds for plagal modes with the exception that the pitch B (which is a semitone below C) is not chosen as a _differentia_ even when it is on the third or fifth degrees. In the lower _diatesseron_, the fifth and seventh degrees are

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consistently chosen as <u>differentiae</u>, except when they occur

on <u>b</u> or form a leading-tone to the first degree. In both

plagal and authentic cadences, and especially the latter,

modal centricity is a distinctive feature of the choice of

<u>differentiae</u>.

Table 16 shows the frequencies with which scale de-

grees are used as phrase finals in <u>A</u> and <u>B</u>. The repertoire

is classified by mode, and the finalis, confinalis and other

<u>differentiae</u> of each mode are indicated by the letters F, C

and D, respectively.

Table 16. Frequencies with which scale degrees are used
           as phrase finals in <u>A</u> and <u>B</u> by mode
           (F=finalis; C=confinalis; D=differentia)

Tones I and II (Dorian)	C V	VI	D VII	F 1	2	D 3	D 4	C 5	6	7	8
<u>A</u>	10	0	55	178	64	44	13	32	0	0	0
<u>B</u>	3	2	22	180	53	32	32	60	0	2	1
<u>A</u> & <u>B</u>	13	2	77	358	117	76	45	92	0	2	1

Tones V and VI (Lydian or Ionian)	C V	D VI	VII	F 1	D 2	D 3	4	C 5	6	7	8
<u>A</u>	13	8	19	134	42	51	10	24	2	0	3
<u>B</u>	6	4	5	107	17	28	2	32	3	0	2
<u>A</u> & <u>B</u>	19	12	24	241	59	79	12	56	5	0	5

Tones VII and VIII (Mixolydian)	C V	VI	D VII	F 1	D 2	D 3	D 4	C 5	6	7	8
<u>A</u>	1	1	0	12	6	0	1	1	0	1	0
<u>B</u>	3	0	1	11	2	0	1	1	0	0	0
<u>A</u> & <u>B</u>	4	1	1	23	8	0	2	2	0	1	0

Table 16.   Continued

Tones VII and VII (Aeolian)	C V	VI	D VII	F 1	2	D 3	D 4	C 5	6	7	8
A	0	0	8	18	7	11	0	6	0	0	0
B	0	0	0	32	7	6	2	15	0	0	1
A & B	0	0	8	50	14	17	2	21	0	0	1

As might be expected from Renaissance theory, the consistently most frequent finals are the finalis followed by the confinalis. However, the frequencies with which the differentiae and remaining degrees appear are not so well predicted by the treatises. Degrees which are not indicated as differentiae occur: VI, 7 and 8 in tones I and II, II and 7 in tones VII and VIII, VI and 8 in tones V and VI. However, these are all relatively infrequent. Nevertheless, there are discrepancies which occur with great frequency. The following occur frequently in the repertoire though they are not differentiae in theory: 2 in tones I and II, VII in tones V and VI, 2 in Aeolian (i.e. tones I and II with flattened sixth degree). Clearly then the differentiae of chant and those inventoried by the theorists do not correspond to the phrase finals used in French monophonic song.

In order to pursue the issue of finality further, the concept of weight (or stability) should be clarified. The notion is well developed in terms of major-minor tonality, so that an examination of its use in that context will provide a basis on which to discuss it in terms of modality.

Schenker recognizes at cadences a "feeling of satis-
faction reached".[1]   However, on comparing cadences he ob-
serves that some manifest an "inferior degree of satisfac-
tion." This can be attributed to two things: the scale
degree on which the cadence is made, and the degree to which
the melody is resolved. Thus he distinguishes full closes
ending on I as most satisfying, followed by half closes on V
(or V of a new key) and deceptive cadences ending typically
on VI but also on IV and III.[2]   He also distinguishes melod-
ically perfect cadences ending on the root of the triad from
imperfect ones which end on the third or fifth.[3]   Thus, in
the major-minor system, two tonal factors -- according to
Schenker -- determine the finality of a cadence: an harmonic
one, the degree on which the final chord is built, and a tex-
tural one, the position of the melody tone in the final chord.

Though modality differs substantially from tonality,
harmonic and textural factors as manifest in cadences appear
to be coordinated with degrees of finality. The most basic
modal cadence is the joint progression 2-1/7-8 associated
with the tenor and _superius_ voices. Indeed, no matter how
many voices take part in a cadence, the 2-1/7-8 progression

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[1] Heinrich Schenker, _Harmony_, (ed. Oswald Jonas, trans.
Elisabeth Mann Borgese), Chicago, University of Chicago,
1964, pp. 214, 216, etc.

[2] _Ibid._, pp. 216-31.

[3] _Loc.cit._

forms the basis. Either it is present in its complete form or its presence is implied by a partial appearance. Thus examples b, c, and d are variants of the basic tenor-superius cadence (a):
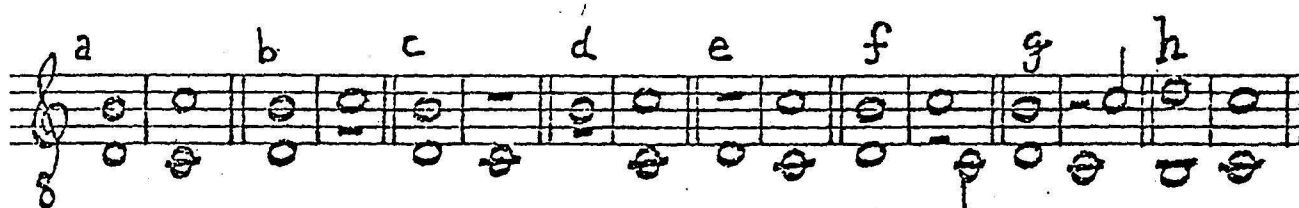
The textural positions of the voices can also be displaced as in Example h above. The essence of the cadence lies in its articulation of the octave sonority on the finalis by contrary motion.

The corresponding three-voice cadences are expansions of the basic two-voice tenor-superius one. A lower contratenor can proceed with the progression: V-I (or V-1), or, rarely by the turn of the century, V-5. A third possibility is the fauxbourdon type of cadence in which the contratenor is placed between the superius and tenor with the progression: 4-5:
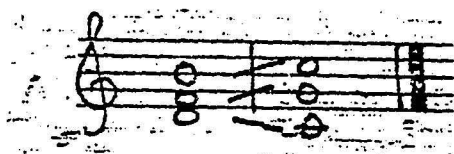
In their complete and undisplaced forms all of the cadences discussed thus far are "final"; that is, they are suitable for the end of a piece. From the thirteenth century onward, theorists insisted on the perceptual unity of the perfect intervals. Anonymous I writes of "sweet uniform-

ity", Anonymous II of tones "mixed together" and Philippe de Vitry of "a perfect pure sound". Jacob of Liège goes so far as to say that "through concord they [the separate voices of a polyphonic piece] make as it were one song."[1]   In other words, at the cadences, the finalis is intensified vertically, standing out from a background of dissonance and imperfect consonance.[2]   Thus the two-voice cadence forms the basis of all other cadences and unambiguously articulates the piece's finalis. To it can be added a voice progressing to the 5th of the octave sonority producing a sonority which does not lack finality. If a voice moving to the 3rd is added, the basic <u>orientation</u> of the sonority is not jeopardized, as it is in deceptive forms, but its perfection is contaminated by imperfect intervals:

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[1] These passages are quoted in full in Crocker, "Discant," p. 4.

[2] In the 2-1/7-8 cadence, the finalis can be considered to occur in the tenor, the <u>superius</u> providing its upper octave. The rare form 2-1/4-5 can be considered to articulate the finalis and its upper fifth. These two forms are thus consistent with one another in that the same descending melodic progression marks the tenor or "finalis-bearing" voice and both forms can be expanded to the 1-5-8 sonority based on the finalis.

Finality in major-minor tonality is primarily a product of the scale degree of the final chord of a cadence and secondarily of the textural disposition of voices. In modal music around 1500 finality is largely a product of the composition of the sonority on the final. Other considerations are the completeness or explicitness of the sonority and its textural disposition.

On the basis of cadences one can posit the following relative weighting for degrees 1, 3, and 5:

$1 \rightarrow 5 \rightarrow 3$, where $\rightarrow$ stands for the anti-symmetric relation "greater than (in weight)" -- usually represented by $>$ but modified here for later legibility. The frequencies with which degrees 1, 5, and 3 appear as phrase finals agree with this scheme, that is, what in theory are relatively heavier degrees are more frequently used as phrase finals.

Thus far, the weights of three of the seven degrees have been determined theoretically and corroborated empirically. In casting about for a principle by which the remaining degrees can be evaluated, one lights on that of transposition. In Renaissance polyphony, transposition of melodies and entire modes occurs pre-eminently at the 5th.[1]

[1] See, for example, Aaron, op. cit., pp. 207 f., and Gafurius on transposition of modes at the fifth. Cf. Bergquist, op. cit., p. 105. For two (among many) examples of melodic transposition at the fifth, see the opening measures of "Ce n'est pas jeu" by de la Rue and "Chanter ne puis" by Compere (nos. 7 and 43 in Helen Hewitt's edition of Canti B), where the initial memody is transposed through, respectively, two and four fifths.

The practice of transposition at the 5th suggests the following sets of weights for all seven degrees:

$$1 \longrightarrow 5 \longrightarrow 3$$
$$6 \longleftarrow 4 \longleftarrow 1 \qquad 5 \longrightarrow 2 \longrightarrow 7$$
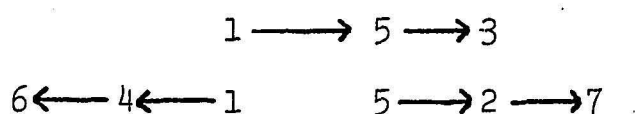
This scheme can be rewritten as follows:

$$6 \longleftarrow 4 \longleftarrow 1 \longrightarrow 5 \longrightarrow 3$$
$$\searrow 2 \longrightarrow 7$$
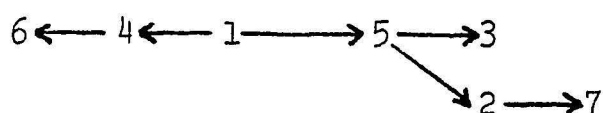
In such a scheme about half of the possible relations between degrees are not defined. At this point a glance at Table 15 suggests two things. First, there is a hierarchy among the triads, as follows:

$$I \longrightarrow V \longrightarrow IV$$
or   (1   5   3)$\longrightarrow$(5   2   7)$\longrightarrow$(6   4   1)
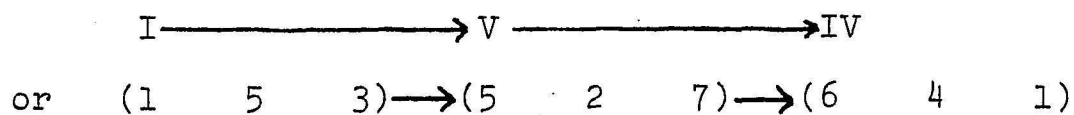
This should be understood as representing relations among _sums_ of weights within a triad rather than as relations among individual weights. For example, 5 in I is obviously not greater than 5 in V, nor is 1 in I greater than in 1 in IV. Secondly, the frequencies of 3 and 2, and of 7 and 4 are remarkably similar. This suggests the following, final scheme where the third of one triad is equal in weight to the fifth of the next, lighter triad (‖ joins degrees which are equal in weight):

$$1 \rightarrow 5 \rightarrow 2 \quad 4 \leftarrow 1$$
$$\searrow 3 \quad \searrow 7 \quad \searrow 6$$
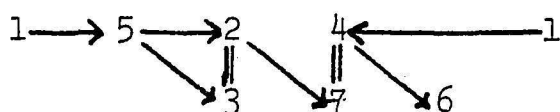
Reduced, the scheme can be expressed as follows: $1 \rightarrow 5 \rightarrow$ (2 and 3) $\rightarrow$ (4 and 7) $\rightarrow$ 6.

One discrepancy remains in the data. In <u>A</u>, 5 appears less often than 2 or 3, though the opposite is true in <u>B</u>. However, it should be noted that in the songs of <u>A</u>, the register VII-3 is favored for phrase finals over 1-5, which is favored in <u>B</u>. This is also consistent with the observation that the overall ranges of <u>A</u>'s songs tend to lie lower than those of <u>B</u>.[1] Thus the relations of <u>Tonigkeit</u> in A seem to be filtered through tendencies of <u>Helligkeit</u>.

The scheme of relative weights bears a strong resemblance to Benjamin Boretz's diagram of the triads which generate major and minor scales.[2] However, there is an important difference in that, with the exception of the Ionian and Aeolian modes, the 3rds are not all of the same type. Nor should the scheme of weights be understood as representing a full-blown version of tonality. The three sonorities do not determine harmonization in polyphony, and they do not imply a "latent harmonization" in monophony. In contemporary polyphony the root of one of the schematic sonorities is

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[1] See above, p. 158.

[2] Benjamin Boretz, "Musical Syntax (II)," <u>Perspectives of New Music</u>, 10 (1971), pp. 232-70, esp. p. 240.

not necessarily "harmonized" as the root of a chord. Thus
the tenor-superius progression 2-1/7-8 (Example 19a) can be
treated as a cadence to the root (contratenor 4-5, Example
19b), to the third (bassus V-VI, Example 19c), or to the 5th
(altus 5-4, bassus V-VI, Example 19d), as can be seen below.
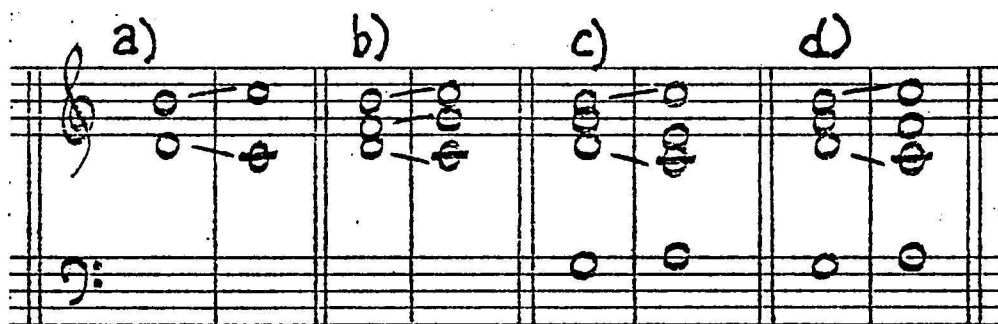
Most importantly, the "triad of triads" does not seem to de-
termine voice leading, which is based instead on cadences and
their interruption. Rather the hierarchy of weights among
phrase finals represents a further step away from the rela-
tively chaotic modality depicted by George Sherman Dickinson
toward a more comprehensively organized and integrated tonal-
ity. This integration is achieved by means usually associ-
ated with harmony, the division and transposition of refer-
ential sonorities. However, what results is a monophonic
order, a weighting of melodic goals. Thus, in this case at
least, the controversy between melodically- and harmonically-
oriented observers of Renaissance music would result in a
stalemate.[1]

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[1] This dispute is reviewed by Perkins in "Mode and Structure,"
pp. 189-91.

Initial Tones

In his <u>Liber de Natura Tonorum</u>, Tinctoris states that "there were in addition certain persons, who after they had looked through all the beginnings of simple Gregorian chant with the greatest diligence, assigned to each mode a certain number of beginnings."[1] As in the case of phrase finals or <u>differentiae</u>, then, the method of assigning initial tones to modes was empirical rather than rational. The theorists describe merely which finals appear rather than why they appear. Thus it is not surprising to find that there are discrepancies among the various inventories of initials just as there were among those of phrase finals. Nevertheless, on comparing the lists for the various modes (Table 17) one finds that a certain logic is hidden in the empirical findings.

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[1] Tinctoris, <u>op. cit.</u>, Chapter 19, pp. 20 f.

Table 17. Scale degrees on which initials occur according to Gafurius and Aaron. x's mark initials inventoried by Gafurius and Aaron in *Practica musica* (Venice, 1512), Bk. I, chaps. 8-15 and *Trattato della natura* (Venice, 1523) chapters 21-24. Single parentheses surround initials mentioned by Aaron but not by Gafurius, double ones, those by Gafurius but not by Aaron. B's and E's represent degrees which are not initials because they fall on the unstable pitches b and e, respectively.

Scale degrees on which initials occur:

Mode:	V	VI	VII	1	2	3	4	5	6	7	8
I			x	x		x	x	x			
II	x		x	x	x	x					
III				x	x	x	(x)	(B)	x		(x)
IV	B	x	x	x	x	x	x				(x)
V				x	x	x	B	x			
VI	x	x	E	x		x					(x)
VII				x	x	x	x	x			
VIII	x		x	((x))	x		x				

In authentic modes, degrees 1, 3, and 5 are regular initials; in plagal ones, V, 1, and 3 are regular initials. The fourth degree of authentic modes is a regular initial unless it falls on the pitch b, forming a leading-tone to the confinalis. The seventh degree in plagal modes is also a regular initial unless it falls on e, forming a leading-tone to the finalis, in which case the sixth degree takes its place. Basic to all modes, whether authentic or plagal, is the regularity of endings on tones of the triad built on the finalis. The

greatest irregularities in this regard occur in Phrygian,
where the confinalis b̲ is unstable. Since examples of
Phrygian do not occur in French monophonic song, one can dis-
regard this discrepancy. Table 18 shows the frequencies with
which the various degrees are chosen as initials in A̲ and B̲.

Table 18. Frequencies with which various degrees are
chosen as initials in A̲ and B̲. Encircled
numbers correspond to degrees belonging to
triad built upon the finalis.

	Scale degrees:											
	V	VI	VIII	1	2	3	4	5	6	7	8	Total
Source:												
A̲	6	0	3	52	8	35	8	25	1	0	2	140
B̲	2	0	5	49	3	16	2	20	1	0	4	102
A̲ & B̲	8	0	8	101	11	51	10	45	2	0	6	242

In monophonic song, tones from the tonic triad tend to be
chosen as initials. There are 30 exceptions to this rule.
Of these only 15, or one half, are regular initials in their
respective modes according to the inventories of the theor-
ists. Thus, the theorists' accounts, though suggestive,
again do not fully account for the choices of initials in
monophonic song.

    In order to explain the choices of initials, one must
consider how they function in individual songs. Since the
melodies are, with few exceptions, strophic and end on their
finals, upon repetition there is frequently a leap from the

end of the melody to its beginning. Thus, one would expect a preference for melodic consonances such as the unison, 5th or 3rd. More importantly, choice of the first, fifth or third degrees as initials provides tonal clarity for the beginning of the song. A well-articulated initial on a member of the tonic triad provides a solid point of departure for the tonal explorations of the rest of the piece. Tinctoris states that in polyphonic works openings on the finalis or confinalis occur in the great majority of pieces.[1] An examination of _chansons_ from the Ockeghem generation reveals that such consonances are almost invariably built on the mode's finalis.[2] Thus both polyphony and monophony of the time favor beginnings which emphasize degrees of the tonic triad. Openings on other degrees occur in pieces in which a clear articulation of the tonic is delayed. In 18 of the 30 exceptional cases the first phrase final is the finalis.[3] Another four songs are in the form: ABAB', and in these a strong articulation of the finalis is delayed until the very end of the song.[4] In these instances, a triad

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[1] Tinctoris, _loc. cit._

[2] See the opening measures of the _rondeaux_ and _virelais_ in Droz, Rokseth, and Thibault (eds.). _Trois chansonniers._

[3] _A_:23, 32, 42, 43, 62, 66, 79, 80, 82, 131; _B_:22, 28, 38, 42, 62, 69, 72, 95.

[4] _A_:13, 26, 39, 87.

other than that on the finalis is elaborated melodically as in the following example, which features the triad built on the confinalis:[1]

En a-mours n'a si-nonbien Nulmal qui ne luy pen- se

Ja-mès homme n'y eust rien qui eust peu des-pe-ran- ce

The remaining cases lie between these two extremes.[2]

As a whole, the songs of B show a greater tendency to favor a strong tonic opening. The proportion of initials on the finalis is larger in B than in A (47% as compared with 39%). Choice of initials on the less stable third degree is less frequent in B than in A (15% as compared with 22%). Openings on degrees other than those of the tonic triad are more rare in B than in A (10% as compared with 14%). Of the 10 songs with such exceptional openings in B, 8 end their first phrases on the finalis; in A, only 10 of 20 do so. Finally, no extreme cases of a delayed finalis occur in B.

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[1] Triads built on the confinalis (A:13, 39, 87) and the second degree (A:26) delay the finalis.

[2] A:37, 88, 111, 128, 134, 137; B:50, 88.

Comparisons with Polyphonic Rondeaux

As was the case with rhythmic features, there are
differences between monophonic and polyphonic chansons around
1500 with respect to modality. To judge from the tenor parts
of polyphonic rondeaux of the period, mixed ranges are far
more prevalent in polyphony and confused ranges are almost
never found. The ranges of polyphonic songs tend to be wider
than monophonic songs: they tend to descend lower and rise
higher. Again the songs of B lie between those of A and the
polyphonic rondeaux (see Tables 19-21).

Table 19   Frequencies of ranges of given sizes in
           polyphonic rondeaux and monophonic chan-
           sons (cf. Table 10).

Range:	6	7	8	9	10	11	12	13	Average
Source or Composer:									
Agricola	–	1	3	2	6	4	1	2	10.1
Compère	–	1	2	5	5	6	1	–	8.9
Josquin	2	3	1	1	4	–	–	2	8.9
Petrucci	–	–	2	8	4	3	1	–	9.6
Subtotal	2	5	8	16	19	13	3	4	9.4
A									7.3
B									7.8
A & B									7.5

Table 20. Frequencies with which given degrees appear as highest tones in polyphonic <u>rondeaux</u> and monophonic <u>chansons</u> (cf. Table 9).

Degree:	3	4	5	6	7	8	9	10	11	12	Average
Source or Composer:											
Agricola	-	-	2	2	7	3	2	1	1	1	7.7
Compère	-	-	1	5	7	6	-	1	-	-	7.3
Josquin	2	-	2	3	1	2	1	2	-	-	6.6
Petrucci	-	-	3	4	2	7	1	-	-	-	7.2
Subtotal	2	-	8	14	17	18	4	4	1	1	7.0
<u>A</u>											6.0
<u>B</u>											7.0
<u>A</u> & <u>B</u>											6.4

Table 21. Frequencies with which given degrees appear as lowest tones in polyphonic <u>rondeaux</u> and monophonic <u>chansons</u> (cf. Table 10).

Degree:	III	IV	V	VI	VII	1	Average
Source or Composer:							
Agricola	1	3	9	-	1	5	V.7
Compère	1	2	13	-	2	2	V.4
Josquin	-	6	1	-	2	4	V.8
Petrucci	1	2	10	-	3	2	V.4
Subtotal	3	13	33	-	8	13	V.5
<u>A</u>							VI.6
<u>B</u>							VII.2
<u>A</u> & <u>B</u>							VI.9

In contrast with the monophonic repertoire, instances of the Phrygian mode are found in polyphony. Otherwise, the modal tendencies are similar in both groups of songs, with the difference that Ionian is more prevalent and Aeolian less prevalent in monophony. Of the monophonic sources, B tends to use Ionian less frequently and Aeolian more frequently in accord with its general tendency to be closer to polyphonic style than A (cf. Table 22).

Table 22. Frequencies and percentages with which various *manerie* appear in polyphonic and monophonic sources (cf. Table 11).

Mode:	Ionian	Dorian	Lydian
Source:			
A & B	81(33.4)	118(48.8)	4(1.6)
Polyphonic	12(17.1)	33(47.1)	3(4.3)

Mode:	Mixolydian	Aeolian	Phrygian
Source:			
A & B	10 (4.2)	29(12.0)	0(0.0)
Polyphonic	5 (7.2)	15(21.4)	2(2.9)

With regard to phrase finals, one can observe the same tendency as was found in the monophonic songs. Finals corresponding to the triad on I tend to be more frequent than those corresponding to V which are in turn more frequent than those on the degrees of IV. But the finals in the polyphonic songs tend more frequently to be skewed to-

wards I and again the same tendency is to be found in B vis-
à-vis A (cf. Table 23).

Table 23.   Frequencies with which various degrees
             are chosen as phrase finals in poly-
             phonic rondeaux.

Degrees:	1	2	3	4	5	6	7
Source or Composer:							
Agricola	42	4	8	4	24	1	1
Compère	43	5	19	1	12	2	9
Josquin	24	8	3	7	15	1	6
Petrucci	42	3	5	4	25	3	3
Total	151	20	35	16	76	7	19

The polyphonic songs differ dramatically in their
choice of initials: unlike the monophonic pieces, they
rarely begin on the third degree. Rather the first and fifth
degrees are greatly preferred. Of the two monophonic sources
B again lies between A and the polyphonic songs in this res-
pect (cf. Table 24).

Table 24. Frequencies with which various degrees are chosen as initials in polyphonic <u>rondeaux</u>.

Degrees:	IV	V	VI	VII	1	2
Source or Composer:						
Agricola	-	3	-	-	10	-
Compère	1	1	-	2	6	1
Josquin	-	1	-	-	6	1
Petrucci	-	1	-	-	8	1
Total	1	6	-	2	30	3

Degrees:	3	4	5	6	7	8	9
Source or Composer:							
Agricola	1	-	5	-	-	-	-
Compère	1	-	7	-	-	1	-
Josquin	-	1	2	-	-	1	1
Petrucci	-	1	3	-	-	4	-
Total	2	2	17	-	-	6	1

All in all, the songs of <u>B</u> tend to lean away from the style of <u>A</u> and towards the style of the polyphonic <u>rondeaux</u> not only in general rhythmic features but with regard to modality as well.

CHAPTER IV: PART III: MELODIC PROGRESSION

Cadences

Both Théodore Gerold and Howard Brown have remarked on the fact that the cadences of French monophonic song are marked by fixed formulas or clichés. [1]   Although this could be considered a negative feature of the repertoire, it could also be considered positively as a sign of the repertoire's unity and coherence. Well-defined recurrent formulas at the cadence serve to render the ends of phrases unambiguous. Further, it seems reasonable to presume that a formula is used over and over again because it serves a valuable function.

The following example illustrates the cadential formulas which occur in 10 per cent or more of the songs of A and B. Two groups emerge: those of the tenor or 2-1 type which are more frequent, and those of the superius or 7-8 type. Within these groups there are further subgroups. Examples a, b, and c are very close variants[2] of one another as are l and m; d resembles a, b, and c by proceeding from the 3rd above the phrase final before moving to the 2nd above;

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[1] Brown, "The Genesis of a Style, The Parisian Chanson, 1500-1530," Chanson & Madrigal, Cambridge, 1964, pp. 20 f.; Gerold, Le Manuscrit, p. lvi.

[2] Cf. the use of the term "variante" in Gerold, Le Manuscrit, p. xlvii.

e, f, and g, like a, b, c, and d touch the 3rd at the begin-
ning of the breve before moving to the 2nd on the semibreve;
and h provides an embellished version of this pattern.

If the superius to these formulas were to move in
parallel 6ths to the cadence, an 8-7-8 formula or some close
variant thereof would result. This is precisely the type of
formula represented by 1 and m.[1]   The bulk of cadence form-
ulas which appear most frequently in A and B are, then, vari-
ants of the 3-2-1/8-7-8 cadential type. In this type the
usual 2-1/7-8 cadence is prepared by degrees 8 and 3, tones
belonging to the triad built on the phrase final. These
tones can be considered to function as a preparation for the
cadence in much the same manner as a cadential 6-4 triad in
major-minor tonality.[2]   In this way the predominant formu-

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[1] Examples (1) and (m) represent the 8-7-8 superius formu-
la with suspension noted by Aaron, Toscanello, p. 30 f.

[2] The paragraphs on chords in melodic progression, below, pp.
203ff. show how this preparation can be extended to include
the fifth of the phrase final's triad.

las of the repertoire serve both to prepare and dispatch
the cadences which they embody.

Another difference is to be observed between A and B.
Whereas, in the former, 61 of 140 songs conclude with the
superius cadence, in the latter, only 5 of 102 songs do so.
The remaining songs all conclude with the tenor ending.

Melismas on the Final Syllable

The discussion of text underlay revealed that the
last syllable of a line, in contrast with the others, was
generally set syllabically. In a significant minority of
phrases -- more than 50 -- the syllable which ends a line is
treated melismatically. This occurs in three ways. 1) The
cadence to the last syllable can represent a false close.
A cadence is made to the last syllable but on the "wrong"
tone (x), thereupon a melodic extension through the last syl-
lable prepares the correct tone (y) for its role as finalis.
This "false-close-extension-correct-close" sequence can be
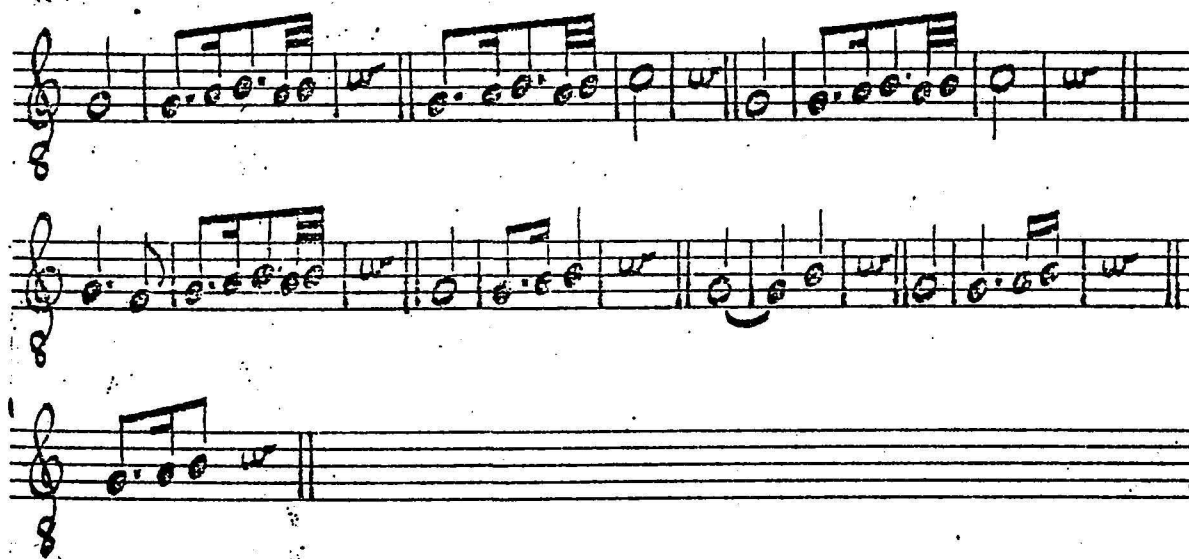observed in the following example:[1]

-vent

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[1] Other instances occur in A:41, 49, 80, 85, 88, 94, 97, 122,
138, 141 and 143 and in B:55, 57, 67, 69, 72, 80 and 99.

2) The cadence to the last syllable can represent a correct close which is emphasized by extension. The following examples illustrate this "correct-close-emphatic-extension" sequence:

And 3) the melisma can lead from the correct close to the beginning of the next phrase. Usually the melisma consists of passing notes which join the final of one phrase to the initial of the next phrase in an unbroken, conjunct motion. Extreme notes separated by a 4th seem to be favored with this treatment as the following examples show:

(⌣ indicates beginning of next phrase)

It is notable that, in length, these melismas usually correspond to one or more breves. In this way the continuity of movement in breves is not interrupted.

Gérold devoted four pages to these "petites phrases ornamentales."[1] While he recognized that in some instances the extension serves to complete the melody tonally, in others he states that it could be eliminated without altering the character of the song. The first type above corresponds to tonal completion and instances of the second and third types could be eliminated without greatly affecting the song's tonal organization.

Further on Gérold deals with the possibility that some melismas were to be performed instrumentally rather than as vocalises. The determinate clues that a given passage is to be performed instrumentally, according to Gérold, are the presence of a rest after the first note of some melismas, the lack of words underlaying such passages, and predominantly syllabic treatment up to the last syllable. To counter the latter argument, one can assert that the underlay of the last syllable is independent of that for the other syllables. One can also dispense with the first two arguments, since it is quite possible that parts of the text would be repeated to accommodate such passages. For example, in B:3, the copyist indicates that the last word is to

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[1] Gérold, op. cit., pp. xlix-liii.

be repeated as follows:

Quant à moy je n'y se-ray plus, plus   car [etc.]
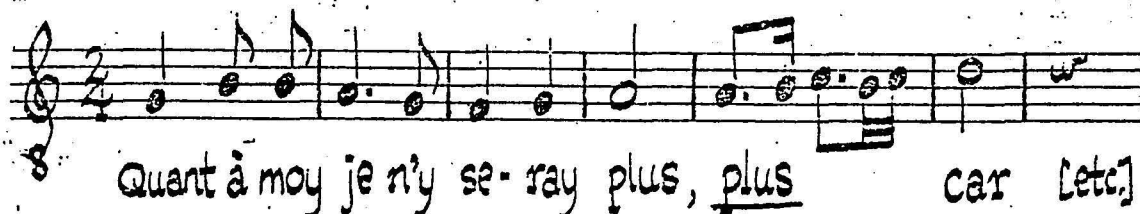
In B:46, the suffix "et ho" is appended to the line at a mel-isma:

Jusqu'[à] cent sols et ho! A [etc.]

And throughout the corpus, especially in the songs of B, parts
of lines and even entire lines are repeated to render the
setting more syllabic.[1]   In the case of "stuttering" be-
ginnings of lines, it was found that the copyist rarely in-
dicated repetitions of the first syllables of lines, but that
the places where such syllables were to be repeated would be
clear to a performer of the time. Similarly, one can also presume
that melodic finals also demanded textual repetitions in perform-
ance. The only other clue to instrumental performance offered by
Gerold is the supposed instrumental character of certain phrases,
which remains undefined, so that the notion cannot be applied to
determine how individual cases are to be treated. Thus, the

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[1] See above, p. 129.

arguments for instrumental performance of certain passages in French monophonic song do not withstand scrutiny, and one can only conclude that the songs were performed vocally in their entirety.

Meter and Melodic Progression: "Chords"

Step-wise movement dominates the melodies of French monophonic song. Leaps of a 3rd are rare and larger skips even rarer.[1] Smooth, conjunct motion rather than bounding arpeggiation is the hallmark of the style, as it is of Renaissance music generally.[2] Thus, it is surprising to observe that triads or other gapped sonorities are unfolded melodically. With no harmonic accompaniment to clarify the functions of tones within a phrase of melody and without arpeggiation, the possibility for grouping disjunct scale degrees would seem remote. Nevertheless, the possibility exists. For these melodies are not merely successions of tones, but rather successions of tones within a durational framework. Certain tones are highlighted by their position in the metrical scheme, while others appear subsidiary.

Generally, tones which appear at the beginnings of durational units are highlighted. Thus in proportio dupla,

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[1] This is a casual observation for which no interval count is offered.

[2] See Szabolcsi, A History of Melody, p. 63.

the beginnings of groups of two breves (the _modus_), two semi-breves (the _tempus_, which is accompanied by the tactus), and two minims (the _prolatio_) stand out much as the first and third beats of modern common time.[1]   In the sixteenth century, the beginnings of measures and parts of measures were considered "good" beats.[2]   Furthermore, according to an unwritten rule cadences in polyphony occured at the beginnings of durational units, in _proportio dupla_, at the beginnings of the _modus_ or _tempus_.[3]

If the notes of such outstanding positions in the durational scheme are linked together they form what Dickinson refers to as "supercontour,"[4] an intermediary between the simple foreground succession of the "notes" and the highly ordered background succession of the phrase finals.

In the simplest case, the tones of a "chord" are presented in direct succession in such a manner that their

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[1] See Apel, _op. cit._, pp. 148-54. For a more theoretical treatment of the phenomenon of accentuation, see below, Chapter VII.

[2] Edward E. Lowinsky, "Early Scores in Manuscript," esp. pp. 156-71. The special status accorded to the beginnings of durational units is a legacy from the Middle Ages. Thus John of Garland prefers consonances at the beginnings of modal feet and Franco at the beginnings of perfections. See Crocker, "Discant."

[3] See, for example, the works transcribed in Hewitt's editions of _Odhecaton_ and _Canti B_.

[4] Dickinson, _The Pattern of Music_, p. 3.

attacks are separated by a single durational unit. Thus, in
(a) of the following example, the pitch contour a c e is pre-
sented with the durational contour: 𝅝 𝅗𝅥 𝆺, the second mem-
ber of the contour beginning a breve after the first, the
third a breve after the second.

In (b), the pitch contour f a c a is presented with the dur-
ational contour: ♩ ♩ ♩ ♩ 𝆺, each successive member of the
durational contour beginning a semibreve after the previous
member. In most instances, however, the chord is not pres-
ented in a simple contour, but rather with intervening tones
not belonging to it. For example, the pitch contour d b-flat

g of (c) is presented with the durational supercontour:
𝅗𝅥 𝅗𝅥 𝅝 , with other tones between the beginnings of the
skeletal ones.

In each of the above cases the chord was presented
as a pitch succession or as a supercontour joined with a dur-
ational contour marked by a single durational unit. In many
cases, however, the durational unit is not constant. In (d)
and (e), the durations separating attacks of the skeletal
tones correspond to a breve and semibreve. Nevertheless, in
both cases one can see that successions of equal durations
are embedded in the scheme. Thus, the former example can be
understood as the result of combining (1) and (2) as follows:

$$
\begin{array}{llll}
(1) & c & a & e \\
 & 𝅗𝅥 & 𝅗𝅥 & 𝅝 \\
(2) & a & c & e \\
 & 𝅘𝅥 & 𝅘𝅥 & 𝅝 \\
\end{array}
$$

And (e) can be seen as the product of superimposing (3) and
(4) as follows:

$$
\begin{array}{lllll}
(3) & a & c & a & f \\
 & 𝅗𝅥 & 𝅗𝅥 & 𝅗𝅥 & 𝅝 \\
(4) & a & c & c & \\
 & 𝅘𝅥 & 𝅘𝅥 & 𝅘𝅥 & \\
\end{array}
$$

Example (e) also exemplifies another possibility, namely,
that consecutive tones in the same skeleton are not differ-
ent. Similarly, (b) could have been considered the sum of
the following schemes.

$$
\begin{array}{llll}
(5) & f & a & c & a \\
 & 𝅘𝅥. & 𝅘𝅥 & 𝅘𝅥 & 𝅝 \\
(6) & 𝅗𝅥 & & 𝅗𝅥 & \\
\end{array}
$$

Examples (a) to (3) illustrate the main possibilities
for chord formation. To this, it should be added that the
durational unit can range from a semiminim through a minim
to a semibreve and breve. One feature that is shared by all
chords so constructed is that of pairing. If a pair is sep-
arated by a given durational unit, the first member's attack
coincides with the beginning of the next larger durational
unit. Thus one finds scheme (7):

(7)
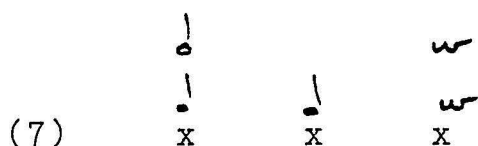
but not scheme (8):

(8)
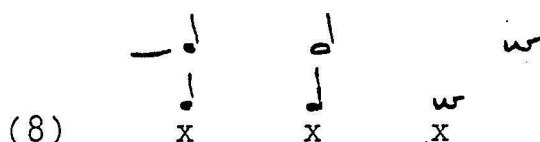
It should be noted that this pairing applies only to the
first pair of a succession, and thus gives the whole "chord"
a downbeat beginning. Finally, the span over which the chord
is referential is often extended by an anacrusis. If such an
upbeat is consistent with the chord it can be heard as part
of it. For example, the first _f_ of Example (e) is consistent
with the following chord: _f_-_a_-_c_ and is thus "absorbed" into
it. Thus an anacrusis can extend the range of durations
which are joined by pairing.

Although the procedures for extracting chords from
the foreground of a melody appear complex, they can be re-

duced to pairing and choice of durational unit with allowances
for embedding, repetition and extension by anacrusis. In
assigning syllables to durations, the principle of pairing
was also observed and the choice of durational unit was simi-
larly flexible. Thus, the rhythmic principles of text under-
lay and chord formation are similar. However, within a pair,
syllables can be assigned durational values corresponding to
a dotted unit and its half (e.g., the pair ♩. ♪), while chord
tones are assigned only durational values corresponding to a
unit (e.g., the pair ♩ ♩).

As one can see in the preceding examples, chords ap-
pear at any position in a phrase: at the beginning (b and
d); in the middle (a); at the end (c); or throughout the
entire phrase (e). [1] There are even instances where a
single chord is maintained throughout two phrases (as in
A:109) or even three phrases (as in A:50 and 88).

Three gapped combinations occur with great frequency
in the repertoire: the interval of a third (e.g. d-f), [2]

---

[1] For the purposes of analysis, a chord was considered to
be at the beginning, if its first member (excluding an ana-
crusis) coincided with the first "downbeat" or beginning of
a pair of durations, and if its last member appeared before
the end of the phrase; at the end, if its last member co-
incided with the end of the first phrase and its first mem-
ber appeared after the first downbeat; in the middle if
its first member appeared after the first downbeat and its
last member appeared before the end of the phrase.

[2] Thirds with such a simple contour as d-f or f-d (which
occur with great frequency) were not accounted for in
favour of thirds with more complex contours, such as d-f-d,
f-d-f, d-f-d-f, etc., in which the third is outlined at
least twice.

the "triad" (e.g. d-f-a), and the "seventh chord" (e.g.
d-f-a-c).[1]   In order to assess the tonal implications of
chords, their relation to the scale being used is determin-
ed as follows. The lowest member of the chord can, for des-
criptive purposes, be considered its root or "basis tone."[2]
The chord can thus be located in the scale by citing the de-
gree on which its basis tone occurs. If, in the above ex-
amples of a third, triad, and seventh chord, the finalis were
d, their location would be 1; if g, V, and so forth. Table
27 represents the distribution of chords in the songs of A
and B.

In A, chords occur 254 times, in B, 244 times. In
other words, on the average, a chord appears in A about 1.8
times per song, and in B about 2.4 times. By far the most
frequent combination is the triad. In both sources a chord
on 1 appears most frequently at the beginning of a phrase,
and a chord on VII, 2 or V, most frequently in the middle.
In the cases of chords which span an entire phrase, one on 1
is most frequent in both sources. Thus there is some corre-

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[1] Once again it should be pointed out that the terms
"triad" and "seventh chord" are, for our present purposes,
not to be construed functionally, but merely serve as con-
venient descriptive labels.

[2] Cf. Hendrick van der Werf, The Chansons of the trouba-
dours and trouvères, Utrecht, A. Opsthoes, 1972, pp. 51 f.
for the term "basis tone". For our present purposes, even
the minimal functionality which he attributes to the basis
tone is to be denied. The designation merely serves the
descriptive purpose of locating the chord in the scale.

lation between the location of a chord in the scale and its position in the phrase.

For the most part, such chords should not be construed as fixed, closed entities. In terms of functionality, one can imagine two chains of 3rds, one passing through the finalis and the other not, as follows:[1]

```
first chain:        IV --- VI --- 1 --- 3 --- 5 --- 7 --- 9
second chain:  III --- V --- VII --- 2 --- 4 --- 6 --- 8
```

Although the triad on 1 predominates at the beginning, that on 3 which forms the next set of links in the first chain also appears frequently. Similarly, chords on V, VII and 2 from the second chain appear frequently in the middle. A third chord can be considered to articulate two links in a chain; a triad, three; and a seventh chord, four. The prevalence of chords on 1, VII and 2 is thus not seen as a result of special functions assigned to them as opposed to other chords, but rather as a product of modal centricity, groups of notes around the diapente being preferred over less central ones.

A discrepancy between the sources A and B appears if the chords favored for the ends of phrases are compared. In A, the chords from the second chain occur more frequently,

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[1] Cf. van der Werf, op. cit., p. 52, who posits two contrasting chains of thirds as the background for some troubadour and trouvère melodies.

while in <u>B</u>, ones from the first are favored. However, this discrepancy is more apparent than real. In general, a triad can assume any shape such as <u>d</u>-<u>f</u>-<u>a</u>, <u>d</u>-<u>f</u>-<u>a</u>-<u>f</u>, <u>f</u>-<u>a</u>-<u>f</u>-<u>d</u>, <u>a</u>-<u>d</u>-<u>f</u>-<u>a</u>, etc. Nevertheless, at the ends of phrases one configuration: 5-3-1 (corresponding to <u>a</u>-<u>f</u>-<u>d</u>) predominates. In <u>A</u>, it constitutes 38 of 48 triads, in <u>B</u>, 63 of 82, that is, about 75 to 80 per cent of the triads used. This configuration can be considered to "tonicize" the phrase final which it articulates by outlining that final's triad in a direct descent through its 5th and 3rd.[1] Thus chords at the ends of phrases tend to prepare and articulate cadences.[2] As a corollary, chords at the ends of phrases tend to depend on phrase finals for their location. Thus, choice of phrase final is, in a sense, prior to choice of chord location at

---

[1] Many of the remaining cases end similarly on their basis tones but have configurations such as 3-5-3-1, 5-3-5-3-1, as well as 3-5-1 which are mere extensions or variants of the basic 5-3-1 type. It should be noted that the 5-3-1 configuration often has embedded in it cliche cadential formulas such as:

See examples <u>c</u> and <u>e</u>, above.

[2] A similar and early case of melodic figures serving to intensify cadences is to be seen in Dufay's hymn settings where the phrase final is prepared in the tenor by a descent through the tetrachord or pentachord above it. See Heinrich Besseler (ed.) <u>Guillaume Dufay, Opera Omnia</u>, Rome, American Institute of Musicology, 1955-66, 6 Vols., (<u>Corpus mensurabilis musicae</u>, 1), Vol. V, <u>passim</u>.

the ends of phrases.

In A, 44 per cent of the phrases end on on the final-
is, in B, 49 per cent. This explains some of the discrepan-
cy, but not all. In the second chain, 30 and 85 of 771
phrases end with V or VII in A; in B, the figures are 14
and 27 of 679.[1] Thus, there is little discrepancy between
the frequencies with which triads occur on various degrees
at the ends of phrases and the frequencies with which those
degrees are chosen as phrase finals. The single great dis-
crepancy is between the frequency with which phrase finals
on 1, 3 and 5 are articulated by the 5-3-1 configuration in
A and B. In B, phrase finals on the triad above the finalis
are more often picked out to be intensified by the descend-
ing supercontour. This special emphasis, in the songs of B,
on chords based on tones of the "tonic triad" accounts for
much of the greater relative frequency of chords in B than
in A.[2] In summary, chords are selected according to their
position in a phrase and in the ambitus. Chords from the
first chain (and especially those based on 1) are preferred
to begin a phrase and to span an entire phrase. Those from
the second chain tend to occur in the middles of phrases.
And at the ends of phrases, chords tend to intensify the
cadence to the phrase final by outlining the pentachord above

---

[1] Cf. the table of phrase finals above, p. 166.

[2] See above, p. 209.

it and the triad built upon it. While the location of a
chord at the end of a phrase depends greatly on the final it-
self, in B, finals on 1 (and to a lesser extent on 3 and 5)
are specially earmarked for cadential intensification.

The appearance of chords represents the exception
rather than the rule. A chord or group of chords does not
form the basis or background for an entire song. Rather it
has a merely local effect on tonal integration.[1] In fact,
one can assert that such chords are for the most part studi-
ously avoided. For the style itself actually encourages
their appearance. Movement is predominantly stepwise. And
even values predominate, whether these be of semiminims,
minims, semibreves or breves. If these two aspects of the
style were to run their course unimpaired, organization by
chains of 3rds would be inevitable. Thus, the relative in-
frequency of chords points to a determined avoidance of them.
This is not to attribute their occurence to mere accident or
oversight, to temporary lapses in stylistic vigilance. For
when chords do occur, it is within a definite tonal and for-
mal context, though their exceptional character is usually
smoothed over by its obedience to the general tendencies of
the style to proceed in even duple durations and by conjunct

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[1] In this way, their occurences differ from chains of thirds
in troubadour, trouvère and Minnesinger songs. There, a
chain or pair of chains can provide the basis for an entire
melody. See van der Werf, op. cit., pp. 50-52.

movement. Such supercontours made of gapped sonorities can be considered to be melodically outlined "chords". As chords they function as referents for the passages within which they appear. Intermediary pitches can then be considered to serve as passing or neighbor tones.

Disjunct Motion

Although rare, leaps of a 4th or more do occur in the repertoire. Table 25 describes the frequencies with which such leaps occur in A and B and in each case indicates the scale degree involved:

Table 25. Frequencies of leaps between various degrees in A and B

Size of Leap	Source	Degrees involved in leaps:									
		V-1	VI-2	VII-3	1-4	2-5	3-6	4-7	5-8	6-9	7-10
4th	A	17	13	18	23	31	16	0	9	0	0
	B	7	4	13	46	47	13	10	21	2	1
		V-2	VI-3	VII-4	1-5	2-6	3-7	4-8	5-9	6-10	7-11
5th	A	0	0	4	61	3	0	0	1	0	0
	B	1	1	0	48	0	3	2	0	0	0
		V-3	VI-4	VII-5	1-6	2-7	3-8	4-9	5-10	6-11	7-12
6th	A	2	0	3	3	0	0	0	0	0	0
	B	0	0	0	0	0	0	0	0	0	0

Table 25.   Continued

Degrees involved in leaps:

Size of Leap	Source	V-5	VI-6	VII-7	1-8	2-9	3-10
octave	A	0	0	0	0	0	0
	B	1	0	0	1	0	0

In A, leaps appear on the average about 1.4 times per song, in B, 2.2 times. As the size of interval increases, its frequency decreases. As was the case with phrase finals, both sources reveal a modal centricity of leaps. The largest number of leaps of a 4th and 5th occur within the diapente (between degrees 1 and 4, 2 and 5, and 1 and 5). Smaller but still large numbers of leaps occur between the upper or lower auxiliary tones to the diapente and a tone within the pentachord (e.g., leaps between VII and 3, 3 and 6, VII and 4, and 2 and 6). Beyond such modal centricity, a certain "modal polarity" appears to govern the choice of degrees involved in leaps. Thus, relatively large numbers of leaps occur in which the final, confinal, or their octaves are involved. For example, between V and 1, 5 and 8, V and 5, and 1 and 8, polar degrees are involved exclusively. Between V and 2, 5 and 9, V and 3, VII and 5, and 1 and 6 at least one boundary tone is involved. Together, modal centricity and modal polarity account for 93.5 per cent of the leaps in the

repertoire. The very great frequencies for leaps between 1 and 4, 2 and 5, and 1 and 5, can be considered a product of the combined effects of modal centricity and modal polarity.

If _A_ and _B_ are compared, the leaps of the former will be seen to tend to lie lower in the ambitus than those in the latter.

Leaps of a 4th or 5th which cross the boundary tones of the mode's _diapente_ and _diatesseron_ are interesting for the possibility of _commixtio_ which they provoke.[1] _Commixtio_ is the implication of a mode other than the main one of the piece or its collateral, in other words a shift of tonal focus analogous to modulation. The implication of another mode is produced by outlining its characteristic species of _diapente_ or _diatesseron_. Tinctoris' examples of _commixtio_ make it clear that a leap of a 4th or 5th corresponding to the boundary tones of the characteristic species of a foreign mode is required.[2] The remaining melodic motion in the new mode occurs within the boundaries of the characteristic species. At least three progressions, including a leap, from one boundary tone to another seem, from examples Tinctoris

---

[1] In the theorists' examples, it is clear that outlining fourths within the mode's _diapente_ (that is, making leaps between 1 and 4 or 2 and 5) does not result in commixture.

[2] Tinctoris, _op. cit._, p. 18, exx. 24-28. In six cases, Tinctoris' examples show two leaps of a fourth or fifth; in two cases, a single leap.

provides, necessary to make the implication of a new mode un-equivocal.[1]   If these requirements are kept in mind, one sees that only one unequivocal case of _commixtio_ appears in the entire repertoire:[2]

Nu à nu en-tre mes bras. Com-pains, ne l'ai-me plus El n'a plus de qui-bus c'est u-ne ra-bat-joy- e Et qui pire est plus vi-vre ne pour-roy- e.

Form

Théodore Gerold, concentrating on four-phrase stro-phes, lists the following forms as appearing in B: ABAB, ABA'B', ABBA', ABCA, AABC, ABCD, ABAA', ABB'A, ABCA, ABCB'.[3] Howard Brown remarks that "the schemes are not stereotyped."[4] Even if one restricts oneself to strophes of four phrases, it can be seen that comparison of forms is difficult and a gen-

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[1] In three cases, Tinctoris' examples show three progres-sions; in another three, four; and in two, five. See Tinctoris, _loc. cit._

[2] Tinctoris' example 29 (_loc. cit._), with no leaps involved and only two progressions from one boundary tone to another, probably represents an oversight on the theorist's part.

[3] Gérold, _op. cit._, pp. xl-xliii. Brown, _Music in the French secular theater_, p. 115, lists a few of Gérold's examples.

[4] Brown, _loc. cit._

eral statement about them even more so. This difficulty increases if forms of three, five, six, or more phrases are considered. The problem of comparing forms can be approached in two ways. First, a typology of forms which takes temporal ordering into account can be constructed. Secondly, form can be considered arhythmically. The first approach is reserved for the chapter on formal types and especially the section on quatrains.[1] The second approach will be developed presently.

George Herzog has identified three formal processes: the iterative, progressive, and recursive.[2] During an iterative process, the same phrase is repeated immediately. In the extreme case, this iteration dominates the entire piece as follows: AAAA. In less extreme cases, iteration forms only a part of the overall formal process, as follows: AABC, ABBA, ABCC, etc. During a progressive process, different phrases succeed each other. In the extreme cases this progression dominates the entire piece as follows: ABCD. In less extreme cases, progression forms only a part of the overall formal process as follows: ABBB, AABA, AAAB, etc. During a recursive process the same phrase is repeated after a different one has intervened, as follows: ABAB, ABCA, ABAC, etc.

---

[1] See below, pp. 251-54, 266ff.

[2] George Herzog, "A Comparison of Pueblo and Pima Musical Styles," *Journal of American Folklore*, 49 (1936), pp. 305-06.

The extreme cases of iteration and progression repre-
sent the two poles between which other, mixed or recursive
forms can be compared. The formal process can be considered
essentially as one of adding new material or repeating old.
This process in turn can be quantified as follows. Consider
the form ABBA. After the first phrase, three are added. Of
these three, one is a repetition of the first, and one a re-
petition of the second. Thus, of the last three phrases,
only one is new and the percentage of new material to the
total material is 33.3. In the extreme case of iteration,
e.g. AAAA, the percentage is zero, and in the extreme case
of progression, e.g. ABCD, the percentage is 100. All other
cases lie between the iterative minimum and the progressive
maximum.[1]   This provides a quantitative framework within
which the relative "progressiveness" of a form can be assign-
ed a value. Table 26 shows the distribution of percentages
of progressiveness in A and B. In both cases the distribu-

---

[1] A more "intuitive" approach has been considered but re-
jected. This involves taking the percentage of distinct-
ive material in the piece as a whole (including the first
phrase). Thus ABBA would be represented by the figure 50%;
AAA, by the figure 25%; and ABCD by the figure 100%. This
approach has been discarded for two reasons. First, the
forms AAAA (25%) and AAAAA (20%) would be distinguished,
though formally the represent the same extreme case of
iteration, while ABCD (100%) and ABCDE (100%) would not be
distinguished though they represent an analagous case.
Also AA (50%) would be grouped with ABBA (50%) though they
differ fundamentally. Secondly, the range of possible
values would have no minimum, only approaching 0% as the
number of iterative phrases increased to an infinite limit.

tion is an approximation to the normal. And in both, approximately two-thirds (or about one standard deviation) of the distribution appears in the central third of the range of values. Finally, while the frequency of values in the lower third is small, those in the upper third are rather more frequent. Thus, there are two tendencies in the repertoire. The first is towards values in the center of the set of values, in other words, central tendency, or what we have termed centricity. The second is towards values in the upper region of the set of values.

Table 26. Frequencies with which songs of A· and B have given percentages of "progressiveness"

	Percentages of "progressiveness" grouped in tens:				
	1-10	11-20	21-30	31-40	41-50
A	0	2	7	18	30
B	0	5	8	18	14
	51-60	61-70	71-80	81-90	91-100
A	19	24	11	16	13
B	8	19	8	6	16

Variation

In order to arrive at a value for the variable "progressiveness", it was necessary to analyze each piece and reduce it to a letter formula representing the form. For

the most part, this was a relatively simple task, any two
phrases being literally the same as or different from each
other. In a number of instances, however, internal varia-
tion occured. While closely resembling each other, two
phrases or halves of phrases were not identical. Thus, there
appeared to be a certain variability with regard to repeti-
tion. As a result, a distinction between formal and literal
equivalence must be made. The degree of variation ranges
from the significant to the trivial. A survey of these varia-
bilities demonstrates the tendency of French monophonic song
with regard to formal identity. The types of variation
which recur in the repertoire include alterations in a phrase's
anacrusis, changes in the text underlay, ornamentations and
extensions of the middles of phrases, modifications of ca-
dential formulas, additions of postludes to cadences, and
transpositions of pitches.

Anacruses can be changed in both pitch and duration.
Frequently, a phrase is placed into a new tonal context so
that the preceding phrase final differs. In such cases, the
anacrusis is often changed to match the tone of the previous
final as follows:[1]

[1] A;40, 70, 127; B:19, 30, 49.

Sometimes, the pitch of an anacrusis is altered to form a passing tone between the preceding phrase final and the first accented tone of the following phrase:[1]

Hel-las, pour-quoy?   Par chas-cun jour

In both cases, the anacrusis is changed in order to help smooth over the transition from phrase to phrase. In masculine lines with an even number of syllables and their feminine counterparts with an uneven number of syllables, considerable leeway is allowed to the duration of their first sung syllable. If, for example, the first pair of paired syllables lasts a breve, the anacrusis to the phrase can have a duration of a minim, semibreve, or breve. Often an anacrusis of alternate duration is employed when a phrase is repeated:[2]

Roy- [roy]-ne des flours   C'est tous les jours

---

[1]   A:20, 50, 66, 88;   B:33, 64, 105.

[2]   A:17, 141;   B:5, 19, 37, 45, 69, 70, 102.

Finally, anacruses can be added to accommodate an extra syllable. Often such an added upbeat matches the pitch of the preceding phrase final:


Il est jo-lis et de hum-ble fa-çon

Que les ja-loux en se-ront bien es-ba-hyz.

Other variations in underlay arise due to a change in the number of syllables carried by a phrase:[1]

Nous y-rons jou-er vous et moy. Et dan-cer sus le mu-guet.

Often, however, a repeated phrase begins with a different durational contour, not to accommodate a different number of syllables, but to provide the variety possible from alternate and equally regular schemes of underlay:[2]

---

[1] A:27, 29, 53, 82, 91, 98, 111, 119; B:10, 27.

[2] A:27, 36; B:37, 40, 67.

L'amour de moy si est en-clo- se.

Et aus-sy fait la pas-se-ro- se.
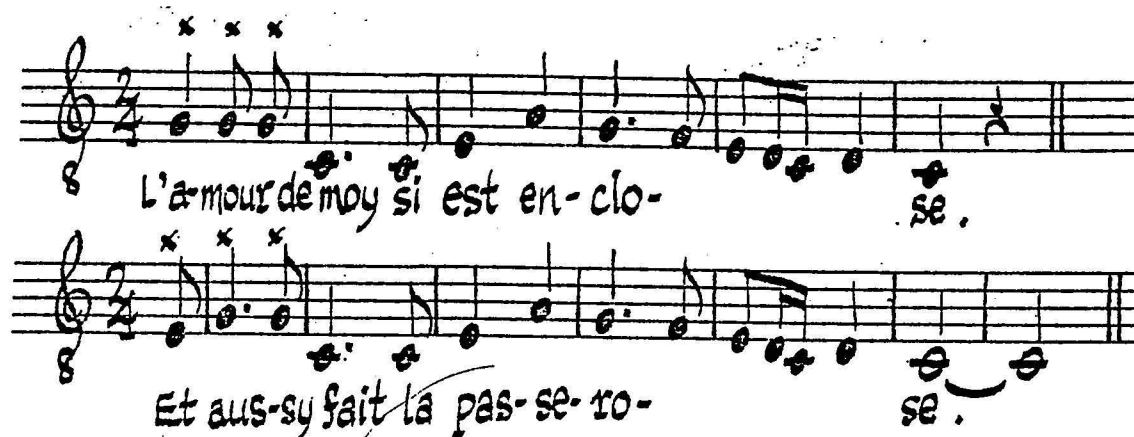
As was seen in the case of text underlay and melodically elaborated chords, the metrical style of the songs allows for a liberal shifting among the various durational units. Frequently, on repetition, part of a phrase which had a duration of, for example, a breve is compressed into the time of a semibreve, providing a similar shift.[1]

-ce   Doulx fut le jour   -che De me ban-nir

In text underlay, a pair of syllables could assume, for example, the contour ♪ ♩ or ♩. ♪. Similarly, such free variation among paired durations is apparent in the repetitions of phrases:[2]

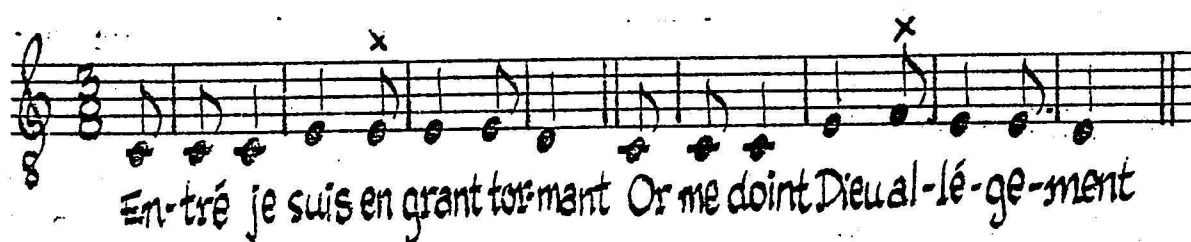
[1] A28, 122; B:45, 48, 88, 98.

[2] A:128; B:7, 26, 45, 70, 94.

et en grant de-plai-san- ce! que j'en ay sou-ve-nan- ce

On being repeated a passage is frequently ornamented.
In such cases the duration of the passage and its basic rhy-
thm are maintained while the rhythmic density is increased.
Ornamentation can range from the mere addition of passing
notes:[1]

Qui com-man-ça à   Vous or-rez com-ment

or a neighbor tone:[2]

En-tré je suis en grant tor-mant Or me doint Dieu al-lé-ge-ment

to a more elaborate embellishment.[3]

A process similar to ornamentation is the extension

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[1] A:35, 54.

[2] A:89; B:63, 82.

[3] A:14, 69, 72, 79, 82, 95, 105, 108 etc.; B:14, 19, 23,
33, 39, etc.

of a phrase's middle portion:[1]

Frequently one cadential formula is substituted for another.[2]

Especially in the songs of <u>B</u>, post-cadential melismas are added to a phrase on its repetition:[3]

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[1] <u>A</u>:18, 23, 34, 114, 115, 133, 136; <u>B</u>:91.

[2] <u>A</u>:23, 41, 42, 43, 46, 51, 55, 56, etc.; <u>B</u>:10, 11, 12, 16, 20, 41, etc.

[3] <u>B</u>:11, 17, 51, 54, etc.

Finally, a phrase or part of a phrase can be trans-
posed:[1]

Ma for-te- raite et

Ma for-te-raite et

Often only a single pitch is transposed:[2]

Dem-puis que j'a- di- ray bon-temps

Ou aul-tre-ment je suis ban-ny

The favourite interval for transposition of all types is the
3rd. The beginnings and ends of phrases are also often
transposed a 2nd or 4th.

In summary, the types of variation found from phrase
to phrase in the repertoire can be explained in terms of, and

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[1] A:85, 119, 132; B:21, 53, 70, 88.

[2] A:14, 32; B:21, 53, 70, 88.

are consistent with, the rhythmic and tonal style of the repertoire as a whole.

Summary

So far the musical style of the repertoire has been discussed under various headings such as meter, text under-lay and phrase lengths. Although such an approach is appropriate for the initial purposes of exposition, it does not do justice to the unity or integration manifest within the style. Individual stylistic features are merely abstractions wrested from the continuity of melody. In actuality, the different elements of style function together, supporting one another in the service of a unified expression. Indeed, at times, it has been necessary to discuss several aspects simultaneously. Thus, for example, an examination of "chords" in melodic progression involved taking into account the meters of the songs, and that of phrase lengths the notion of centricity, which is applicable to other stylistic domains. Several aspects of style can be seen to cut across the boundaries of individual features: binary meter; the functions of the fifth and the third; position within a phrase; and centricity.

Binary meter, with its hierarchical relations of modus, tempus and prolatio, provides the accentual framework within which the text and melodic chords are articulated. The accents involved do not necessarily entail stress, but are

rather positional by nature, events occurring at beginnings
of duple durational units being special, in contrast to sub-
sequent ones. Since the songs are generally thoroughly
binary, there is, in articulating pairs of syllables and
chords the possibility of shifting from one unit to another,
such as from semibreve to minim or breve. Among these units
the breve stands out as being of special importance. The
breve coincides with the tactus; cadences tend to appear at
the beginnings of breves, phrases tend to be made up of
groups of complete breves, and in tenor cadences (which pre-
dominate), the 3rd above the final tends to appear on the
penultimate breve of the phrase.

The intervals of a 5th and a 3rd enjoy a special
status in the repertoire. This is manifest in several ways.
The modes chosen consist of an unbroken succession of 5ths
or their inversions. The confinalis, a 5th above the final-
is, is, next to the finalis, the weightiest tone with which
to end a phrase. And leaps tend to move to or from the con-
finalis or finalis, a manifestation of modal polarity. As
for 3rds, the chords which are melodically articulated con-
sist of chains of 3rds and the 3rd above the final tends to
be made prominent by occuring on the penultimate breve of a
phrase in cadential formulas of the tenor type. Combining a
5th and a 3rd gives rise to the "triad". This is especially
prominent at the ends of phrases where the "chords" articu-
lated melodically tend to progress from the 5th through the

3rd to the root of the "triad" based on the final. The modes chosen consist of a triad of triads with variable 3rds. The same triad of triads forms the basis of relations of weight among phrase finals.

Positions within a phrase determine melodic progression and text underlay. Chords from the first chain tend to occur at the beginnings of phrases, ones from the second in the middle; those at the end depend on the phrase final. Special melodic formulas, which in the repertoire as a whole amount to clichés, are reserved specifically for use as cadential formulas, providing distinctive conclusions to phrases.

Centricity is a general feature of the songs. Phrase lengths tend toward a length of seven semibreves or four breves. The progressiveness of forms tends toward central values ranging from one- to two-thirds. Melodic motion tends to be focussed on the middle of the range: phrase finals and leaps tend to take place within the first pentachord of the mode, the center of the ambitus.

Throughout this chapter, a general consistency between the stylistic tendencies of A and B has been observed. At the same time, a number of striking discrepancies have appeared. Superficially, the tendencies of B seem contradictory. On the one hand, there appears to have been a move toward stylistic expansiveness, and on the other, one toward contraction and even ossification. Expansive features of B

are its wider range of phrase lengths, its tendency toward metric conflicts over larger spans of a song, the greater ambitus of individual songs, and the more extensive spread of its phrase finals. Aspects of stylistic contraction in B include its tendencies to employ tenor cadences almost exclusively at the ends of songs, to fall back on melodic clichés at cadences, to be rhythmically organized by strict successions of breves and to emphasize cadences on the finalis by the preparatory outlining of triads based on it. However, tendencies toward expansion and contraction need not be seen as contradictory. Expansion in one area can be viewed as the result of contraction in another, much as a balloon will bulge at its ends if squeezed in its middle. The increased clarity provided by strong articulation of the finalis, unambiguous cadential formulas and a rigid organization in breves seems to liberate both the pitch and rhythmic organization of a song, allowing its melody to sweep further afield in both tonal and durational space than was previously feasible.

Comparisons with Polyphonic Rondeaux

The tunes of B also tend to resemble polyphonic rondeaux (or their tenors) more than do those of A. This has already been seen to be the case with regard to the rhythmic and modal features discussed in Parts I and II. With regard to melodic progression this tendency is, however, not borne

out as strikingly. For example, the melodic cadences found
in the rondeaux are much more diverse than those found in A
and B. There is no special tendency to outline "chords"
melodically in the polyphonic tenors as there was in the mono-
phonic pieces. And A, B, and the rondeaux display similar
tendencies with regard to the use of post-cadential melismas
and leaps (See Table 27). Nevertheless, within these overall
tendencies, the phrases of polyphonic tenors -- like the songs of
B -- tend more often to conclude with 2-1 cadences and to
employ leaps which deviate from the norms of modal centri-
city and polarity. Therefore, it seems that the rondeaux
and the songs of A represent extremes of polyphonic and mono-
phonic style respectively. For the most part, the tunes of
B lie between these extremes stylistically, but the strong
tendency to employ stereotyped endings for phrases seems to
be unique to B. Possibly this tendency is related not so
much to the monophonic style as represented by A or the poly-
phonic style found in the rondeaux, but to the special style
of polyphonic settings of monophonic songs which appear to
have been popular at French courts ca. 1500-1520, for in the
settings of MSS British Museum Harley 5242 and Cambridge,
Pepys, 1760 much the same tendency to stereotyped endings
appears (cliché endings are bracketed):

Cha-cum maul-dit ces ja-leux[Mais] je ne les mau-dis
my-e, Car il n'est pas vray a-mou-reux Qui n'est
ja-leux de s'a-my- e Qui n'est ja-leux de s'a-
my-

Whether this general observation is valid cannot be determined until a thorough study of such polyphonic settings has been made.

Table 27. Frequencies of leaps of various types in the tenors of polyphonic rondeaux ca 1500

Fourths

Degrees involved:

Sources or Composers:	III-VI	IV-VII	V-I	VI-2	VII-3	1-4	2-5	3-6
Agricola	1	1	15	3	7	22	22	4
Compere	–	1	6	4	15	28	17	5
Josquin	–	3	15	–	6	9	10	–
Petrucci	–	–	17	4	10	26	18	2
Total	1	5	53	11	38	85	67	11

Table 27.   Continued

<u>Fourths</u>, cont'd.

Degrees involved:

Sources or Composers:	4-7	5-8	6-9	7-10	8-11	9-12
Agricola	2	6	2	1	1	2
Compère	3	6	-	1	-	-
Josquin	8	5	1	-	-	-
Petrucci	10	11	1	-	-	-
Total	23	28	4	2	1	2

<u>Fifths</u>

Degrees involved:

Sources or Composers:	IV-1	V-2	VI-3	VII-4	1-5	2-6	3-7	4-8
Agricola	2	6	-	7	35	2	1	-
Compère	1	9	2	7	23	-	3	1
Josquin	10	9	1	4	21	-	-	7
Petrucci	0	3	6	4	22	2	2	2
Total	13	27	9	22	104	4	6	10

<u>Fifths</u>, cont'd.

Degrees involved:

Sources or Composers:	5-9	6-10	7-11
Agricola	-	-	-
Compère	1	-	-
Josquin	6	-	-
Petrucci	1	-	-
Total	8	0	0

Table 27. Continued

Octaves

Degrees involved:

Sources or Composers:	III-3	IV-4	V-5	VI-6	VII-7	1-8	2-9
Agricola	-	3	4	1	1	4	1
Compère	-	1	10	-	1	-	-
Josquin	-	-	4	-	-	3	2
Petrucci	1	1	6	2	5	2	-
Total	1	5	24	3	7	9	3

Sixths

Degrees involved:

Tenths

Sources or Composers:	V-3	5-10	VII-5	1-10
Agricola	-	-	1	1
Compère	-	-	-	-
Josquin	1	2	-	-
Petrucci	1	1	-	-
Total	2	3	1	1