

Meter and Word Setting: Revising Machaut's Monophonic Virelais

By David Maw

Monophonic virelais constitute a significant proportion of Guillaume de Machaut's compositions in the *formes fixes*; together with the *complainte* and *chanson roial* of the *Remede de Fortune* and the lais, they represent the zenith of a medium which has not since been pursued with either such creative variety or such compositional resource. At first glance, the virelais seem simple, naïve even. Yet closer analytical attention has revealed that they harbor a range of sophistications, whether a subtle interplay of melodic phrase and poetic line,¹ or a variety of different tonal procedures and motivic reworkings.² This is no surprise given the remarkable technical skill and creative imagination of Machaut's other compositions. But it is a timely reminder that the monophonic songs are an integral part of his lyric output, rather than a marginal curiosity betraying indebtedness to the *trouvère* tradition at a time when the lyric genres were focused on the development of polyphony.

The transcriptions of the monophonic virelais given in the two extant complete editions of Machaut's music³ are nearly identical in substantive matters, and the manuscript sources differ very little in the texts that they present of them.⁴ The word underlay, which can be one of the most troublesome causes of variants in the melismatic polyphonic songs, is on the whole clearly indicated. Even where it is sometimes unclear—as in **A**, for example; see Earp (1983:220)—the generally syllabic manner of the word setting makes the intended alignment of poem and music easy to recover. Despite the basic textual consensus of the two editions, there is one area of transcription on which they disagree: that of meter. Eighteen of the monophonic virelais are notated in major-imperfect *tempus*, and the other seven are in minor-imperfect *tempus*. Friedrich Ludwig's edition differs from Leo Schrade's in transcribing seven of the songs (six of which have minor-imperfect *tempus*) also in imperfect *modus*. Schrade's eschewal of the *modus* level is characteristic of his edition as a whole, and is indicative of an editorial retreat from the imposition of anything that might seem to result from subjective judgment in the transcription of old notations into new.⁵

Any decision about the use of the *modus* level in the virelais arises from a consideration of its metrical function, since longs are not present in the rhythmic notation. The regular *tempus* groupings that satisfied Schrade in

his transcriptions reinforce the superficial view of these songs as being simple, bucolic settings with a regular duple meter. A systematic investigation of the metrical aspect leads to a rather different picture, one that supports and enhances Ludwig's use of *modus* but which reveals manipulation of meter as a further level of sophistication in the songs.⁶ This renewed metrical understanding of the repertory leads also to a reevaluation of certain textual decisions made by the former editors. Their expectation of a regular meter led them to iron out apparent irregularities in the notation of the songs; such emendation can be shown to be unnecessary in the light of revised transcriptions that are consistent with the metrical practice of the corpus as a whole.

Medieval music theory did not develop a concept of meter. Mensuration often coincides with meter for practical purposes, but does not invariably do so, and the two remain conceptually distinct in either case. Metrical thought is thus not explicit in the notation, but implicit in the compositional design. It is possible to imagine playing, say, the first movement of Mozart's Piano Sonata in A minor, K. 310, from a score without barlines. The meter of the music could still be worked out—from the rhythmic configuration, texture, rate of harmonic change, etc.—and this would still have an important effect on the way that the music was played; there would just be more thought needed to arrive at that understanding of the rhythm. An examination of meter in Machaut's *virelais* follows more or less the same course as this. Various compositional features must be analyzed for their latent metrical properties: the rhythmic form and pitch contour of the melodies; the syllabic rhythm of the word setting; and the placement and treatment of rhymes. Such laborious analysis is merely a compensation for the temporal distance at which we stand from the musical practices of the Middle Ages, an attempt to reconstruct the unconscious processes by which medieval performers comprehended the rhythm of the music.

Beyond its ostensibly narrow focus, this study is also a contribution to the broader debate concerning the relationship between the practical and theoretical sides of music. An implicit warning is voiced against the temptation to reduce musical works to the conceptual frame of the theory current at the time of their composition. Musical practice often exceeds or is at odds with theory, since its focus is the aesthetic end of music making rather than the means by which that is achieved. So while the theory of mensuration supplied a quantitative understanding of musical time sufficient to make sense of rhythm for the purposes of notation, metrical thought provided a supplementary qualitative understanding of musical time necessary in practice to make sense of rhythm for the purposes of musical effect. To view the rhythm of this music solely in terms of the theory of

mensuration is to impoverish it.

Meter is understood here as a structure of temporal units each containing two or three beats of which the first, the "strong beat," is qualitatively differentiated through accentuation. There is sufficient evidence to justify the recognition of it in Machaut's songs, and in other kinds of medieval music too, despite the concept's absence from medieval music theory. Machaut's *virelais* are dance songs. This is not to say that they would necessarily have been used for dancing; in fact, the analysis pursued here will suggest that their metrical schemes are often irregular, rendering the songs unsuitable for dancing except of a stylized nature. Nonetheless, they employ the style of songs that were danced to. A metrical rhythm is thus generically apt for them (Earp 1991; Arlt 1982:263–64; Leech-Williamson 1991:16). Several of the songs begin with rests indicating an anacrusis, a phenomenon not recognized by contemporary mensural theory⁷ but one that clearly points to a metrical practice underpinning the rhythm. Some system of metrical accent seems to have been a general part of modal-rhythmic thought, as the difference between second and anacrusic first modes attests.⁸ These two rhythms alternate longs and breves in the same way and so have the same agogic accentuation deriving from the longs. In the first rhythmic mode, this agogic accentuation serves a metrical purpose. The second mode requires a compensatory dynamic or articulative accentuation to align metrical accent with the breves, against the rhythm's intrinsic agogic accent. Consequently, the second mode has a more level accentual profile than the first, owing to the juxtaposition of agogic and dynamic accents.⁹ Despite their rhythmic differences, they are metrically equivalent, a fact born out by their interchangeability in the technique of modal transmutation (Wilson 1977:135–78).

A feature enhancing the metrical effect of the songs is the rapid tempo that seems to have been intended for them. They are written in what were then the "modern" note values of *prolatio* and they represent the new ethos of the *Ars Nova* lyric, based on the style of the dance song. It is unlikely that the rhythmic levels of fourteenth-century notation would have corresponded to absolute tempi. But Machaut's use of notation in *prolatio* for the *virelais*, in contrast with the *tempus* or *modus* that he used for the *chanson roial* and *complainte* of the *Remede de Fortune* and for the *lais*, suggests that he intended to convey some general indication of tempo. Two of Machaut's ballades make transitions from *tempus* to *modus* that place at least practical constraints on the choice of tempo. In *Pour ce que tous mes chans* (B12), *modus* organization is present throughout, but the decorative layers of *tempus* and *prolatio* are stripped off at the refrain, leaving movement solely in the *modus* level. Presumably, the tempo would not have been

Example 1: First part of *Hé! dame de vaillance* (V1), melody only.

> = pitch accent

so slow as to hinder recognition of the melodic quotation that serves as the song's refrain; *tempus* and *prolatio* would have been correspondingly faster, and perhaps even decidedly quick.¹⁰ The same conclusion is suggested by *Ne pensez pas* (B10), in which there is a similar change in movement at the refrain. Of course, these relative criteria do not carry over automatically into songs without the higher levels of rhythmic articulation; yet there is no ready justification for the use of *prolatio* rather than *tempus* to notate the rhythm of the virelais unless the connotation of its faster movement in songs with a metrical groundswell in *modus* is borne in mind.

Since metrical structure was not indicated by medieval notation, it must have been apparent to performers in the music itself if they were to project it in performance. It is beyond the scope of this article to speculate as to the nature of such projection; indeed, this makes little difference here, where the aim is only to recover the performer's perspective on the musical texts—that is, to identify those features of melodic design that have inherent metrical properties and that would have oriented the performer's understanding of the rhythmic form. Accentual effects arise in melody from pitch contour (tonic accent) and rhythmic duration (agogic accent). If these accentual effects are appropriately disposed, they yield the metrical impression of a strong beat. This impression, if it is regular, may be maintained in effect through the absence of any specific accent, where no other accent conflicts with the regularity to dispel the impression. A very clear example of the way that melodic design in itself results in the impression of a metrical order is the first part of *Hé! dame de vaillance* (V1),¹¹ the melody of which is given in example 1.¹² The metrical unit, hereafter more conveniently designated "bar," is demarcated by the recurrent rhythmic figures (bracketed and identified as x, y, and z in the music example) and further reinforced by pitch accents at the beginnings of all except the second and ninth bars. The metrical effect of this melody would be clear even from a performance completely lacking in dynamic emphasis or articulation. It would have been part of the musical experience for the medi-

eval audience, even if performers of the time were unaware of its presence because of the lack of a theoretically articulated concept.

In song, word setting may also contribute to a metrical effect through the percussive rhythm of consonantal articulation and word stress. Consideration of word setting is particularly pertinent here, as there is good evidence that Machaut composed his songs from ready-made poems. Several times in the *Voir Dit*, Machaut states or implies that he is adding music to a poem that he has already written.¹³ In the Machaut Manuscripts, the poems of one rondeau and six virelais are included without music amongst the collection of songs, *Les Chansons Notees*, but there is no evidence that they were ever set; their inclusion in this collection may attest to an unrealized intention to set them to music, while confirming the priority of the poem in this procedure. *La Louange des Dames*, an anthology of some two hundred or so poems, demonstrates the fecundity of Machaut's lyric muse beyond song, yet no corresponding body of musical pieces was composed without words as a starting point. The poems of twenty-two of Machaut's songs¹⁴ are included in *La Louange des Dames*, and for five of these,¹⁵ the manuscripts preserving the poems predate those giving the musical settings, suggesting that the poems may have been written sometime before they were set as songs. The only piece by Machaut that lacks the starting point of a verbal text is the *Hoquetus David*. Many of the ballades and rondeaux are written to common versification patterns so that their musical settings are interchangeable from a purely technical point of view. This is not true of the monophonic virelais, each of which has a unique poetic form.¹⁶ The interdependence of music and poem is stronger in these songs; their basically syllabic word setting produces a closer-knit connection of musical phrase and poetic line than is generally found in the polyphonic songs. Nevertheless, the formal priority of the poem in the song is maintained through the regularity of syllabic declamation that is employed in the setting.

As the starting point for the composition of song, the poem represented for Machaut a basic rhythmic form from which the musical rhythm of the song was developed. The exact nature of this rhythmic form is a matter of controversy in linguistic scholarship, depending on whether or not intralinear word accent is thought to have had any function in verse composition.¹⁷ This is not the place to discuss the various positions that have been advanced, as the question is not of central importance here. The view according to which a rhythm of alternating accent underlies Old French verse certainly goes some way to explain the propensity for syllables to be set in pairs (Klausenburger 1970: especially 25). But by the fourteenth century, word accent is thought to have lessened to a large extent, ceding to a stronger group stress (Pope 1952:82–83 [§§ 170 and

Example 2: Setting of two lines from *Dame, se vous m'estes* (B37).

III:5
Que vous souffrez a tout le meins

II:3
Bon - té, va - lour, biau - té sou - vrein - ne

171], 102–3 [§223]), so that by this time the pairing of syllables need have been nothing more than a convention of musical setting. Group stress in the guise of end-line rhyme accent, which is clearly attested by fourteenth-century poetic theory, is of uncontested importance to the poetic rhythm.¹⁸ Rhymes were distinguished according to whether word accent fell on the final syllable (“masculine” or oxytonic rhyme) or the penultimate syllable (“feminine” or paroxytonic rhyme), where the final vowel was reduced *e*. So a poetic line constituted a certain number of syllables, possibly conceived in pairs, leading up to the rhyme accent. This can be illustrated by two octosyllabic lines from Machaut’s single monophonic ballade, *Dame, se vous m'estes* (B37):

| | |
|-------|---|
| iii:5 | _ / _ / _ / _ / |
| | Que vous souffres a tout le meins |
| ii:3 | _ / _ / _ / _ / _ |
| | Bonté, valour, biauté souverinne, ¹⁹ |

The first has an oxytonic rhyme, the second a paroxytonic one, of which the final unaccented syllable is supernumerary. These lines have been selected for the regularity of their word-accentual patterns, a dominant but not a consistent feature of the poem as a whole (Maw 1999, 1:47–49). If each syllable is given the same length of time, pairs are formed, the first accented, the second unaccented. A simple duple meter follows from this, with the first syllables of the two lines as anacrusis. This scheme forms the model for Machaut’s own setting, his only change to it being elongation of the anacrustic initial syllables to the length of complete bars (ex. 2).

Machaut rarely set poetic lines in so simple a way and more often imposed a modal rhythmic pattern on the syllabic pairs. The result of this, in

Example 3: Setting of lines 1 and 5 of *C'est force* (V16).

a) 

b) 

the virelais at least, is not to convert the duple rhythm into a triple one; rather, the triple rhythm is inserted within the duple one. So in the first line of *C'est force* (V16), which has seven syllables, the second and third syllabic pairs are set in the second rhythmic mode within the duration of the first syllabic pair (ex. 3a). The basic model of the line is subjected to a different kind of alteration in the fifth line, where the first syllable of each pair is elongated in relation to the second (ex. 3b). These examples show that the word setting, while respecting a basic rhythmic order in the poetic line, may manipulate the syllabic rhythm within the meter.

All four of the lines so far considered have placed their accented rhyme syllables so as to coincide with metrical accents—strong beats, in other words. Paroxytonic rhymes occupy complete bars, the unaccented syllable forming the weak beat. Treatment of rhymes in this way is only to be expected, given that they represent positions of fixed word-stress within the stanzaic form. Their alignment of accented syllables with strong beats may in turn serve to reinforce the song's metrical effect in performance. But how consistent a feature of Machaut's word setting in the virelais is placement of rhymes in this way?

Table 1 analyzes the correspondence of rhymes and strong beats in the monophonic virelais as transcribed by Ludwig and Schrade. Of the twenty-six songs, ten represent a complete correspondence, while seven others have a complete correspondence in one part. Overall, there is a clear majority of rhymes aligning with strong beats: 136 of the 189 rhymes do so. The proportion represents a significant tendency and invites further investigation of the stylistic circumstances that give rise to it.

Rhymes are situated most often at the ends of musical phrases. When this is the case, they are matched by distinctive cadence types. Example 4a illustrates the most typical examples of these: oxytonic rhymes are set to single notes on the strong beats at phrase-ends; paroxytonic rhymes are set to figures occupying a full bar, the first a strong beat, the second a weak beat. In some cases, the phrase end does not represent a stopping point in

Table 1: Correspondence of rhymes and strong beats in Machaut's virelais as in the extant editions.

| Virelai | Meter | | 1st Part | | | | | | | | 2nd Part | | | | |
|---------|-------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | | | <i>P</i> | <i>P</i> | <i>P</i> | <i>P</i> | <i>O</i> | | | | | <i>o</i> | <i>P</i> | | |
| 1 | /a | 2iii | <i>P</i> | <i>P</i> | <i>P</i> | <i>P</i> | <i>O</i> | | | | | <i>o</i> | <i>P</i> | | |
| 2 | | 2iii | <i>o</i> | <i>o</i> | <i>P</i> | | | | | | | <i>o</i> | <i>P</i> | | |
| 3 | /a | 2iii | <i>o</i> | <i>O</i> | <i>o</i> | <i>O</i> | | | | | | <i>P</i> | <i>O</i> | | |
| 4 | aa | II2ii | <i>P</i> | <i>P</i> | <i>P</i> | <i>O</i> | | | | | | <i>P</i> | <i>P</i> | <i>O</i> | |
| 5 | aa | 2iii | <i>P</i> | <i>O</i> | <i>P</i> | <i>O</i> | | | | | | <i>P</i> | <i>O</i> | | |
| 6 | | 2iii | <i>O</i> | <i>O</i> | <i>p</i> | <i>P</i> | | | | | | <i>O</i> | <i>O</i> | <i>O</i> | |
| 7 | | 2iii | <i>P</i> | <i>P</i> | <i>P</i> | <i>O</i> | | | | | | <i>o</i> | <i>o</i> | <i>P</i> | |
| 8 | | 2iii | <i>o</i> | <i>o</i> | <i>o</i> | <i>P</i> | | | | | | <i>o</i> | <i>P</i> | | |
| 9 | aa | 2iii | <i>o</i> | <i>o</i> | <i>P</i> | <i>P</i> | | | | | | <i>o</i> | <i>o</i> | | |
| 10 | | 2iii | <i>o</i> | <i>o</i> | <i>P</i> | <i>o</i> | <i>P</i> | | | | | <i>P</i> | <i>P</i> | <i>O</i> | |
| 11 | aa | 2iii | <i>O</i> | <i>O</i> | <i>O</i> | <i>O</i> | <i>O</i> | | | | | <i>O</i> | <i>O</i> | | |
| 12 | | 2iii | <i>O</i> | <i>o</i> | <i>P</i> | <i>O</i> | | | | | | <i>O</i> | <i>o</i> | <i>O</i> | |
| 13 | | II2ii | <i>o</i> | <i>P</i> | <i>o</i> | <i>P</i> | | | | | | <i>P</i> | <i>O</i> | | |
| 14 | a | 2iii | <i>P</i> | <i>O</i> | <i>P</i> | <i>O</i> | <i>P</i> | <i>O</i> | | | | <i>p</i> | <i>p</i> | <i>O</i> | |
| 15 | | II2ii | <i>o</i> | <i>o</i> | <i>P</i> | <i>p</i> | <i>p</i> | <i>O</i> | | | | <i>o</i> | <i>o</i> | <i>P</i> | |
| 16 | | 2iii | <i>O</i> | <i>O</i> | <i>O</i> | <i>O</i> | <i>O</i> | <i>O</i> | | | | <i>O</i> | <i>O</i> | <i>O</i> | |
| 17 | | 2iii | <i>P</i> | <i>P</i> | <i>O</i> | | | | | | | <i>O</i> | <i>O</i> | <i>P</i> | |
| 18 | a | 2iii | <i>P</i> | <i>p</i> | <i>O</i> | | | | | | | <i>O</i> | <i>O</i> | <i>O</i> | |
| 19 | | 2ii | <i>P</i> | <i>P</i> | <i>P</i> | <i>P</i> | | | | | | <i>P</i> | <i>P</i> | <i>P</i> | |
| 20 | aa | II2ii | <i>P</i> | <i>P</i> | <i>O</i> | | | | | | | <i>O</i> | <i>P</i> | | |
| 23/21 | | II2ii | <i>o</i> | <i>P</i> | <i>o</i> | <i>o</i> | <i>P</i> | | | | | <i>o</i> | <i>P</i> | | |
| 25/22 | | II2ii | <i>o</i> | <i>o</i> | <i>o</i> | <i>o</i> | <i>o</i> | <i>o</i> | <i>O</i> | <i>O</i> | | <i>O</i> | <i>O</i> | <i>O</i> | |
| 28/25 | aa | II2ii | <i>O</i> | <i>O</i> | <i>O</i> | <i>O</i> | <i>P</i> | | | | | <i>O</i> | <i>O</i> | <i>O</i> | <i>P</i> |
| 29/26* | | 2iii | <i>O</i> | <i>O</i> | <i>O</i> | <i>O</i> | <i>O</i> | <i>O</i> | | | | <i>O</i> | <i>O</i> | <i>O</i> | |
| 30/27 | /a | 2iii | <i>O</i> | <i>O</i> | <i>O</i> | <i>P</i> | | | | | | <i>P</i> | <i>P</i> | <i>O</i> | |
| RF6/33 | | 2iii | <i>o</i> | <i>o</i> | <i>o</i> | <i>o</i> | <i>o</i> | <i>o</i> | <i>o</i> | | | <i>o</i> | <i>o</i> | <i>o</i> | |

- a = anacrusis
 aa = anacrusis to both parts
 /a = anacrusis to second part
 II = imperfect *modus* (not used in Schrade's edition)
 2 = imperfect *tempus*
 ii = minor *prolatio*
 iii = major *prolatio*
 O = oxytonic rhyme coinciding with metrical strong beat
 o = oxytonic rhyme not coinciding with metrical strong beat
 P = paroxytonic rhyme coinciding with metrical strong beat
 p = paroxytonic rhyme not coinciding with metrical strong beat

Italic type indicates that all the rhymes in one or both parts of a song coincide with strong beats.

Schrade's edition does not use *modus* and so yields complete correlation in the songs where Ludwig uses it.

*V29/26 is monophonic in C only; the other sources have a two-part version.

Example 4: Characteristic examples of cadences matching rhymes.**Oxytonic rhymes:**

a) 

Paroxytonic rhymes:





b) 

c) 

the melody, as the following phrase continues directly from the cadence without a break. This lessens but does not remove the cadential effect (ex. 4b). Not all rhymes occurring on strong beats are positioned at the ends of phrases; two poetic lines may be concatenated within a single phrase, so that the rhyme of the first line makes an emphasis within the phrase (ex. 4c).

Ludwig's reason for using imperfect *modus* with minor imperfect *tempus* becomes apparent in the correspondence between the paroxytonic cadence figures in that meter and those in major imperfect *tempus*.²⁰ In fact, the correspondence runs deeper than that, as comparison of the openings of *Douce dame jolie* (V4) and *Comment qu'a moy* (V5) shows (ex. 5). Both begin with a hexasyllabic line that culminates in a paroxytonic rhyme. After an initial anacrusic syllable, the next four syllables are paired within beats, then the stressed rhyme syllable is placed at the beginning of the second full bar and extended for the full duration of the first beat. The


unstressed syllable of the rhyme begins the second beat and leads directly into the anacrustic syllable of the second line, which fills out the rest of the beat. The second line in each case follows a similar pattern to the first, differing in *Comment qu'a moy* at the cadence, which is this time oxytonic.


These cases illustrate the extent to which the monophonic virelais correspond to a simple model of word setting, the rhyme scheme of the verse providing a basic metrical framework that is developed by the song. Yet table 1 reveals fifty-three instances in which rhymes and strong beats do not align, a significant minority that complicates the model of word setting elaborated so far. In all but two of these instances, the rhymes are set on the weak beat.²¹ So the question that must be addressed is why the other fifty-one rhymes are set on weak beats.

One cause is a distinctive aspect of Machaut's approach to lyric song: his exploitation of the potential independence of corresponding musical and poetical elements, setting them in a dynamic relationship to one another.²² The particular element of this that is relevant here is "cross-cadencing," where an oxytonic rhyme is set as if it were paroxytonic, and vice versa. The simplest form of this can be seen when an oxytonic rhyme encompasses a melodic figure typical of a paroxytonic cadence (ex. 6a). As with the normal oxytonic rhyme, the stressed syllable is placed here on the strong beat. The difference is that it is stretched over the second note, which would set the unstressed syllable of a paroxytonic rhyme. This phenomenon occurs quite commonly in both monophonic and polyphonic songs. More complicated, and less common, are cases where the oxytonic rhyme is set in the position of the unstressed syllable of a paroxytonic rhyme (ex. 6b).²³ Here, then, the oxytonic rhyme falls on the weak beat, and the accented strong beat coincides with the syllable two positions previous, a syllable that is not necessarily stressed linguistically. A similar reversal of word stress and metrical accent occurs in *Se ma dame* (V6), where a paroxytonic rhyme is set as if it were oxytonic, the accent of the strong beat falling on the unstressed syllable (ex. 6c). According to the extant editions, this is the only case in the monophonic virelais of a phenomenon that is more common in the polyphonic songs.²⁴ Cross-cadencing inevitably complicates the relationship between rhyme, cadence, and meter; the musical cadence defines the meter in such instances, and the stress of the rhyme syllable falls on a weak beat. It is thus not possible to assume that rhyme stress always coincides with metrical accent.


Aside from the exceptional case of *Se ma dame* (V6), there are just three songs in which paroxytonic rhymes occur on weak beats,²⁵ and these are all of the same type: the stressed syllable is set on the beat and the unstressed one within the beat (ex. 7). So the accentual hierarchy of the rhyme is retained in the setting but observed at a lower metrical level than

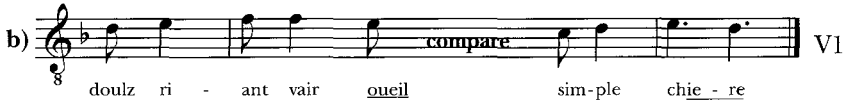
Example 5: Metrical correspondence of imperfect *modus* and imperfect *tempus*.


V4  Dou - ce da - me jo - li - e, Pour Dieu ne pen - ses mi - e


V5  Com - ment qu'a-moy lon - tein - ne Soi - es, da-me d'on - noue

Example 6: Examples of “cross-cadencing.”

a)  V30/27
joi - e et sans de - port

b)  VI
doulz ri - ant vair oueil simple chie - re

 V8
je vueil li - e - ment ma-la - di - e

c)  V6
ha don - ne - e

Example 7: Weak-beat paroxytonic rhymes.

 V14
Or m'est du - re Sans me - su - re

in the other cases. There remain to be considered thirty-nine rhymes not set on strong beats, and these are all oxytonic. The bias suggested by this number may indicate that paroxytonic rhymes are more metrically distinctive than oxytonic ones; their very clear correlation of a stressed syllable with a strong beat and an unstressed syllable with a weak beat would suggest as much. Yet the oxytonic cadence in its pure form is no less metrically definitive than this, a fact that has a particular bearing on *Dame, a vous* (RF6/V33). As revealed by table 1, this is the only song in which none of the rhymes aligns with a strong beat. All the rhymes are oxytonic and they are mostly set in the same way as the oxytonic rhymes that occur on strong beats in other songs. There is no reason why they should not be sung with a metrical accent, and this, of course, results in a complete alignment of rhymes with strong beats, resulting in semibreve anacrusis at the beginnings of the two parts. Such a commencement is not indicated in the original notation by an initial rest, but Machaut's notation of these songs, as it now survives, is not consistent in the indication of anacrusis.

Eleven of the songs listed in table 1 utilize anacrusis to their imperfect *tempus* or *modus* meters. Only three instances are fully notated in the sources in relation to the current transcriptions: the first part of *J'aime sans penser* (V14), the second part of *Hé! dame de valour* (V11), and the first part of *Helas! et comment* (V18). In *J'aime sans penser* (V14), the half-bar displacement is shown by an initial semibreve rest. Curiously, the semibreve rest is preceded by a breve rest, but this seems to be redundant, as no *modus* grouping is discernible. The second part of *Hé! dame de valour* (V11) begins with a minim anacrusis to the weak beat, prefaced by two minim rests. It is the only instance recognized by Ludwig and Schrade of a minim anacrusis in major imperfect *tempus* to the half bar. The metrical alignment is confirmed by a semibreve rest after the final semibreve.²⁶ *Helas! et comment* (V18) begins with two minims (the second altered) as anacrusis to the first bar, and a semibreve rest indicates the displacement of this. The alignment of rhymes and metrical stresses is clearly indicated by the original notation in these three cases—and, of course, in the songs without anacrusis. In the other songs using anacrusis, the alignment results from an interpretative judgment on the part of the two editors. In the majority of these cases,²⁷ the anacrusis is a minim lead into the first bar. This is prefaced in the sources by two minim rests, completing the semibreve. The editors have implicitly supplied an additional semibreve rest to complete the bar, though the conventions of modern notation do not require any initial rests to be shown.²⁸ *Douce dame jolie* (V4) has similar cases where the anacrusis is a semibreve to a bar of minor *modus* with minor imperfect *tempus* and an initial semibreve rest is given; here, Ludwig (but not Schrade) has understood an initial breve rest to complete the *modus* bar. *Tuit mi*

penser (V28/25) is also in minor *modus* with imperfect *tempus*, but in this case the anacrusis comprises a minim and two semibreves. An initial minim rest is given and Ludwig understood an additional semibreve rest.

In three cases,²⁹ Ludwig (and, in the first case, Schrade as well) has added anacrusis that are not notated by displacing half of the first bar in each case. These cases are significant because they show the editor making specifically metrical decisions solely on the basis of the melodic design and word setting; *He! dame de valour* (V11) is especially interesting for Schrade's retention of Ludwig's interpretation. As table 1 shows, the songs using anacrusis, when taken as a group, display a high tendency to align rhyme and metrical strong beat. Six of them do so completely,³⁰ and another four have just one or two rhymes that do not align;³¹ only *Dame, je vueil* (V9) shows a low level of alignment. All three of the cases where Ludwig introduced anacrusis result in complete alignment of rhymes and strong beats, and this may have been a factor that he had in mind. In *Tuit mi penser* (V28/25), anacrusis to the second part brings out the melodic identity of the cadences setting the paroxytonic rhymes at the ends of the two parts. The same figure occurs at the end of the second part of *Se d'amer* (V20), where anacrusis of the first part is indicated by the syncopated rhythm in the penultimate bar. Cadential rhyme between first and second parts indicates the supplied anacrusis to the first part in *He! dame de valour* (V11), but this is indicated by other rhythmic and melodic features too: the cadential figure at the end of the first phrase typically sets paroxytonic rhymes, but here sets an oxytonic one; the pair of semibreves at the end of the third phrase and start of the fourth outlines a distinct bar.

The evidence of the notational approach to anacrusis in the Machaut sources, and in particular the example of the last three songs, further supports the anacrusic version of *Dame, a vous* (RF6/V33), proposed above and shown here in example 8.³² Pitch accents at the beginning of the song reinforce the anacrusis too, providing points of orientation for the first, third, fourth, and fifth bars. The meter is straightforward at this point, but as the song progresses complications are introduced. Pitch accents tend to occur on the weak beats in the second half of the first part and in the second part, undermining the metrical effect previously established. Additionally, the phrasing of the music becomes dislocated from the poetic lines, with the cadences of the third and fourth phrases both falling within the sixth line of the poem. Three phrases of the melody set four lines of the poem in a cross-rhythmic effect. The regular meter articulated in the first two phrases is maintained throughout the song by the positioning of the rhymes, which all fall on the strong beats of this scheme. This regularity provides the framework for the song's rhythmical play. Without it, the compositional design would be meaningless.

Example 8: *Dame, a vous* (RF6/V33).

Dame, a vous sans re-tol - lir Dongcuer, pen-se-e, de -
 sir, corps et a - mour, Comme a tou-te la mil-
 lour Qu'on puist choi - sir, Ne qui vi - vre ne mo - rir Puist a ce jour
 Si ne me doit a fo - lour Tour-ner, se je vous a - our, Car sans men-tir

> = pitch accent
 — = phrase end

Like *Dame, a vous* (RF6/V33), *Foy porter* (V25/22) has a large number of oxytonic rhymes in the first part that are set on weak beats. Two considerations make this anomalous: the metrical difference between similar cadences in the two parts; and comparison of the syllabic rhythm at the song's opening with that in *Tuit mi penser* (V28/25), which uses lines of similar length. Addition of an anacrusis to the first part brings these into alignment with one another but throws the last two rhymes off the beat, and does not correlate with the long clearly notated for the end of the first part in the sources. In fact, Machaut has introduced an interruption of the imperfect *modus* here by protracting the first syllable of the penultimate line, creating a bar of perfect *modus* (ex. 9a).

Reexamination of the other songs reveals four more instances of a similar metrical shift: in both parts of *Loyauté vueil* (V2), where pitch accents reinforce initial anacrusis; in the second part of *Puis que ma douleur* (V7); in the first part of *Dou mal qui* (V8), where the anacrusis is again reinforced by pitch accent; and in the first part of *De bonté* (V10). These are shown in example 9b. In each case, the meter is set up by oxytonic cadences and elongated in the final line by a shift in accent arising from a terminal paroxytonic cadence.

The first part of *Dame, je vueil* (V9) appears to follow the same form, if the anacrusis at the outset is treated as being fully notated in the sources (ex. 9c). There is a complication here, though, arising from a notational detail: the final note of the first part is given in all the copies of the song as a breve, which should occupy a complete *tempus* bar. Ludwig and Schrade changed it to a semibreve, so that the closing falling-third paroxytonic cadence is the same as in other songs. If taken at face value, the notation of the sources yields another instance of cross-cadencing, with the paroxytonic cadence being set as an oxytonic one, similar to the falling-fifth cadence noted above in *Se ma dame* (V6). However, the close succession of two paroxytonic cadences renders this an unlikely possibility, and the editors' emendation would seem to be well justified here.

The second part of this song is almost identical in rhythmic form with that of *Hé! dame de valour* (V11); in particular, it commences with the same anacrusis and has the same closing cadence of semibreve followed by a semibreve rest. Nonetheless, Ludwig and Schrade transcribed it differently from the other song, treating the anacrusis as if it were only partly notated, leading to the first strong beat. By regarding the minim anacrusis as fully notated, like the anacrusis to the first part, the two oxytonic rhymes align with strong beats and the final semibreve rest completes the bar at the end. The pitch accent on the first *G* reinforces the metrical effect of this version.³³

A different sort of metrical displacement can be seen at the beginning of *Lient* (V30/27), where again Ludwig and Schrade barred in regular imperfect *tempus*. Comparison of the song's first and second phrases, which are melodically parallel, shows the metrical fluctuation of the start, resulting from a quasi-caesural melismatic lengthening of the third syllable (ex. 10).³⁴ In the second phrase, imperfect *tempus* is maintained because the cadence falls one beat later.

The cases of metrical irregularity encountered so far have depended on recognizing the intrinsic metrical design of the melodies as they stand in the current editions. Machaut's one monophonic ballade, *Dame, se vous m'estes* (B37),³⁵ presents an instance of metrical irregularity that requires a more substantive alteration to the text as given there. The version presented by Ludwig and Schrade, in consistent major imperfect *tempus*, deviates from the notation of the manuscripts at the *ouvert* and *clos* cadences of the first part. Example 11a gives the cadences in Schrade's transcription and a diplomatic transcription of the original notation following **A** and **G**. If the word underlay of the sources is followed literally, then a change from imperfect- to perfect-*tempus* meter is indicated at the *clos* cadence. This is directly comparable with the change from imperfect to perfect *modus* at the *clos* cadence of the two-part ballade, *S'Amours* (B1), shown by Ludwig's

Example 9: Some instances of metrical irregularity.

a)

Foy por - ter, Hon-neur gar - der Et pais que - rir, O - be - ir, Dou-ter, Ser-
 vir Et hon - nou - rer Vous veuil jus-ques au mo - rir, Dame sans per.

b)

V2

Loy - au - té veuil tous jours mein-te - nir Et de cuer ser -
 vir Ma da - me de - bon - nai - re.
 Mon cuer y veuil et mon de - sir Met-tre sans re - trai-re

V7

Si ne pleing pas mon la - bour, Car ce me sam-ble dou - cour, Fine et es-me - re - e,

V8

Dou mal qui m'a lon-gue - ment Fait lan-guir plai - sam - ment Mer -
 ci bon-ne - ment Ma da - me jo - li - e,

V10

De bon-té, de va - lour, De biau-té de dou - cour Ma dame est pa - re - e;
 De ma-nie - re, d'a - lour, De
^{clos} sens, de grace est cou - ron - ne - e.

Example 9 (cont.)

c)

V9

Da-me, je vueil en-du - rer, Tant com je por-ray du -
rer, Sans pen-ser lai - du - re, M'ar - du - re,
or (?)
rer, Sans pen - ser lai - du - re, M'ar - du - re.

Sai - ge, loy - al, dou - ce, plai - sant, Tres bon - ne et bel - le sans per,
En vos ser - vi - ce fai - sant Vueil tou - te ma vie u - ser.

compare

VII

Tres dou - ce da - me, de bon - té Pleinne et de plai - sant a - tour,
De sens, d'on - neur, de biau - té, En qui sont tuit mi re - tour,

Example 10: Metrical irregularity at the start of *Lieiment* (V30/27).

[1] Li - e - ment me de - port Par
[2]
sam - blant, mais je port, Sans joi - e et sans de - port

edition but not by Schrade's. As in *Dame, se vous m'estes* (B37), the remainder of the song is in a regular duple meter. The "jumping-off point" from the melody of the first part to the *clos* cadence is easily determined from the musical text alone,³⁶ and in fact, the manuscripts do not show the word underlay correctly at this point of the song. If the clear word underlay of the sources is insufficient to establish the metrical change in *Dame, se vous m'estes* (B37), there is a direct melodic similarity between it and *S'Amours*

Example 11: *Ouvert* and *clos* cadences in *Dame, se vous m'estes* (B37).

a)
from Schrade's transcription

de vous loin - teins, vous pro - cheins;

after
A: f.473v.
and
G: f.147r.

de vous loin teins procheins.

b)

de vous loin - teins vous pro - cheins;

a qui sui don - nés - fu - - - sés


- mour le sans prent en gré faus - se - té

(B1) at this point too: the melodies of both move from *c* to *f* before descending to *e* at the *ouvert* cadence and *c* at the *clos*. Another two-part ballade, *J'ai miex* (B7) provides a similar instance of such metrical variation at the *ouvert* and *clos* cadences, and shares the underlying melodic outline of these other two songs. Example 11b sets out these three instances for comparison.

The word underlay of *ouvert* and *clos* cadences presents a problem also in two other monophonic songs, *Aymi! dame* (V3) and *C'est force* (V16). The Machaut Music Manuscripts note *ouvert* and *clos* cadences in two ways for the monophonic songs. The more explicit of these has the notes of the *clos* cadence written to the right of the *ouvert*, with the appropriate syllables set beneath.³⁷ The other method has only the notes of the *clos* written to the right of the *ouvert*, not the syllables set to them.³⁸ Though less explicit, this

Example 12: Word underlay for the *clos* cadence of *C'est force* (V16).

a)  as given in the editions of Ludwig and Schrade

b) after
Vg: f.327v. 

second method is not problematic so long as the melodic correlation and implied word setting of *ouvert* and *clos* are obvious, as in songs where the *clos* differs from the *ouvert* by just one or two notes. On the whole, the manuscripts agree with one another on the notation of these cadences for a given song. Ludwig and Schrade treated *Aymi! dame* (V3) and *C'est force* (V16) as if they had been notated in the second way. This judgment was guided, it seems, by a stylistic sense of how the pieces should read, but it led to significant alteration of what the manuscripts actually present.

The *clos* cadence of *C'est force* (V16) is much longer than the *ouvert* but has only one syllable underlaying it. In other virelais in which the *clos* is much longer than the *ouvert*, such as *Je vivoire* (V23), words are written out beneath. Nonetheless, Ludwig and Schrade set words to the *clos* cadence of *C'est force* (V16), matching the setting of similar musical figures in the second part of *Dame, vostre doulz viaire* (V17) (ex. 12a). In C, the melisma for the *clos* cadence is grouped in triplets, which could indicate syllabic changes, but there is otherwise no direct basis for the syllabic underlay adopted by the transcribers here. What the manuscripts seem to indicate most clearly, though, is a melismatic extension of the penultimate syllable at the *clos* cadence (ex. 12b). There is no clear precedent in the monophonic songs for such a treatment of the *clos* cadence, but Machaut's music

admits a high level of technical and stylistic uniqueness, and this case could be representative of that tendency. The nearest equivalent is the melisma on the sixth syllable of *Dame, vostre douz viaire* (V17). As this occurs in the refrain, and is melodically integrated into the song, it does not, on its own, present a very close parallel. Examples of *clos* cadences that are melismatic and significantly longer than their corresponding *ouvert* cadences do occur in the polyphonic ballades, such as *Amours me fait* (B19). This seems to be a unique case of the same phenomenon amongst the monophonic songs.

In dealing with *Aymi! Dame* (V3), the editors changed two notational features of the second part: the rest in the middle of the phrase, which is clearly a semibreve in all the manuscripts, but which they replaced with a minim; and the final note of the *ouvert* cadence, which is clearly a semibreve, but which they altered to a breve. Example 13a shows the second part in Schrade's transcription and a diplomatic transcription of the original notation of **Vg**. The second part begins with a minim anacrusis, and the descending fifth here recalls the opening of the song's first part, so that the anacrustic minim leads directly to the first strong beat. If the paroxytonic rhyme and its associated melodic figure are taken as coinciding with the strong beat, then imperfect-*tempus* meter results. If the semibreve rest given by the manuscripts is assumed to be the correct reading at this point, the *f* semibreve must enter halfway through the next bar. Consequently, the final note of the *ouvert* cadence occurs halfway through the final bar, and its notation as a semibreve can be viewed as resulting from this. This becomes another case of cross-cadencing, with the oxytonic rhyme being set to the paroxytonic cadential pattern found in the first two phrases of *Puis que ma douleur* (V7) (ex. 13b).

The phrase of the *clos* cadence is not underlaid by syllables of the poem, so there is uncertainty about where in the melody it should take over. Ludwig, and Schrade following him, maintained the syllabic underlay that dominates the song, thus making the jumping-off point the first *c'*, with the word *mon*. The resulting *ouvert* and *clos* cadences have the same length, but this is contradicted by the notation of the final note of the *clos* as a breve rather than the semibreve of the *ouvert*. In **Vg** and **G**, the five notes of the *clos* cadence are grouped as two pairs and a singleton. If this grouping indicates the word underlay—which would mean a slight departure in the setting from its previously syllabic manner—then the jumping-off point would be the second *c'*, with the word *et*. Following this, the final *g* comes at the beginning of the final bar, and the notational difference between it, a breve, and the *a* of the *ouvert*, a semibreve, is justified. Example 13c shows the resultant version of the second part of *Aymi! dame* (V3), setting it for comparison alongside the end of the first part of *Dame, a qui* (V12), which is melodically similar.

Example 13: The second part of *Aymi! Dame* (V3).

a) from Schrade's transcription

2. Tres dou-ce cre - a -
3. Es - tre vers moy si

tu - re, Com - ment puet vo fi - ne dou - cour
du - re, Quant mon cuer, mon corps et m'a - mour

*Tres douce crea - tu - re: comment puet vo fi - ne doucur
Estre vers moy si du - re: quant mon cuer mon corps et ma mour*

b) Vg: f.323r.

ment puet vo fi - ne dou - cour

compare

V7

ma do - lour a - gre - e

ouvert clos

Tres dou-ce cre - a - tu - re, Com - ment puet vo fi - ne doucour
E - stre vers moy si du - re, Quant mon cuer, mon corps et m'a - mour

compare

ouvert clos

De cuer, sanz pen - ser lai - du - re, Je n'ay mi - e des-ser - vi
Vos cuers qu'a des - con-fi - tu - re Soi - e pour l'a - -mour de li.

A similar case of a semibreve rest that Ludwig and Schrade thought textually problematic occurs in the first part of *Helas! et comment* (V18). The rest in question is clearly indicated by all the manuscripts,³⁹ and as virelai form reuses the music of the first part at the end of the stanza, this music is written out twice in each of the manuscripts. The copies in the related sources **Vg** and **B** omit the rest in this repeat, but all of the other sources have it there. In this case, Ludwig and Schrade concluded that the rest was erroneously given by the sources, disrupting the meter and breaking the poetic line, and so they ignored it (ex. 14a). Yet if the rest is indeed

an error, it is one that succeeded in being systematically introduced into the text at an early stage in its transmission. Moreover, it is clear by now that metrical regularity is neither a necessary nor invariable feature of the monophonic songs, and any objection to the rest for breaking the poetic line must confront similar and undisputed cases in *Liement* (V30/27), *Dame, se vous m'estes* (B37), and *Se d'amer* (V20), as well as many of the polyphonic songs. So it is worth investigating what sense may be made of the text as it stands in the sources.

The rest cannot be fitted into a consistent imperfect *tempus*, as the final note of the part is a breve and the initial semibreve value is displaced by a semibreve rest, leaving nineteen semibreves in between. An obvious possibility is simply to interrupt the imperfect *tempus* meter with a single bar of perfect *tempus* at this point (ex. 14b); but the metrical effect is crude and unmotivated by comparison with the more sophisticated metrical schemes in the other songs. A possibility that accords the rest a more crucial metrical role and renders the metrical change more consequential is to effect a temporary switch from major-imperfect to minor-perfect *tempus*. Oscillation of this sort occurs in the *triphum* and *cantus* voices of *Rose, lis* (R10).⁴⁰ Here, as in *Helas! et comment* (V18), the metrical changes (which are also mensural changes) are not explicitly indicated by time signatures or coloration but are implicit in the use of rhythms characteristic of the respective mensurations, such as the minim followed by two minim rests which first indicates that minor-perfect *tempus* has given way to major-imperfect *tempus* in the *cantus*. The polyphonic texture ensures continuity through the metrical changes that are apparent in the individual voices. In *Helas! et comment* (V18), the change from major-imperfect *tempus* to minor-perfect *tempus* is indicated by the sequence semibreve, semibreve rest, and semibreve. The word setting at "me venroit baudour" reinforces note-grouping in minor-perfect *tempus*. The version of the first part of the song resulting from this interpretation is shown in example 14c.

This reading may not seem an obvious one to us now—and it was not obvious enough for Ludwig and Schrade to adopt it—but would it have been obvious to a medieval singer, or would he too have omitted the rest to yield a regular imperfect *tempus* meter? Certainly medieval performers would have been extremely sensitive to the nuances of medieval notation, being able to construe mensuration directly and easily from rhythmic figures and groups. Machaut considered the metrical changes in the similar notation of *Rose, lis* (R10) obvious enough for contemporary performers, and the significance of this was only understood by modern scholars quite recently. Both *Helas! et comment* (V18) and *Rose, lis* (R10) survive in the earliest of the Machaut sources, C (1350s). *Helas! et comment* (V18) is amongst the *virelais* and *ballades* that are in the earlier of the manuscript's

Example 14: The first part of *Helas! et comment* (V18).

a) from Schrade's transcription

R 1.5. He - las! et com - ment a - - - roi - e Bien ne joi - e,
Quant fai - re ne puis que - - - joy - e Ne que voi - e,

Ne dont me ven - roit bau - dour,
Da - me, vo fi - ne dou - - - cour?

A: f. 487r.

Helas et com-ment a soie bien ne ioie ne dont me venroit baudour
Quant faire ne puis que ioie ne que voie da-me vo fi-ne dou- -cour

b)

Bien ne joi-e, Ne dont me ven

c)

He - las! et com - ment a - - - roi - e Bien ne joi - e,
Quant fai - re ne puis que - - - joy - e Ne que voi - e,
ouvert clos

Ne dont me ven - roit bau - dour,
Da - me, vo fi - ne dou - - - cour?

two collections of musical compositions (identified by Ursula Günther (1963:96–97) as **CI**, compiled before 1349), while *Rose, lis* (R10) is with the rondeaux in the later collection (**CII**, before 1356). The reason for collecting the rondeaux with further ballades and virelais in the later part of the source need not indicate a later date of composition for them.⁴¹ *Helas! et comment* (V18) is one of the most developed of the virelais and most likely, therefore, to have been composed close to the time of **CI**'s compilation, so there might not have been much time between its composition and work on *Rose, lis* (R10); the two may even have been roughly contemporaneous. It seems plausible that Machaut would have experimented with the appealing rhythmic device in more than one song. The melodic contour of *Helas! et comment* (V18) is unusual by comparison with the other virelais, suggesting that it was experimental in other respects too. Perhaps, then, there is no need to omit the semibreve rest; the notation may stand as the sources give it.

Ses mesdisans (V15) and *Diex, Biauté* (V19) are unique in Ludwig's edi-

Example 15: *Ses mesdisans* (V15)

Se mes - di - sans en a - cort Sont pour moy gre-ver a tort, C'est par leur en-

vi - e, Car des-ser-vi ne l'ay mi - e; Pour ce de leur

gen - gle-ri - e Bien me re-con - fort. Mais pour eaus - met-tre en e -
Et si a - ray le cuer

ouvert clos

smay Plus que ne sueil je se - ray Joy-euse et jo - li - e,
gay Et sa - ge - ment me ten - ray Sans fai - re to - - li - e.

tion: the first because he twice interrupted imperfect *modus* with single bars of imperfect *tempus*,⁴² the second because it is the only virelai in minor-imperfect *tempus* that he did not transcribe in *modus* units. These circumstances suggest that the songs are metrically unusual. There are, certainly, metrical irregularities in both, but in the light of the picture emerging here of Machaut's treatment of meter, they can be seen as developed instances of the tendency, rather than unusual cases.

The metrical deviation introduced by Ludwig into the second part of *Ses mesdisans* (V15) is unnecessary, as a regular imperfect *modus* follows once the necessity of an initial anacrusis has been recognized (ex. 15). This brings out a close melodic similarity to the second part of *Foy porter* (V25/22). The first half of the first part also begins with an anacrusis, but the imperfect *modus* is interrupted by a bar of perfect *modus* in the third phrase, where a paroxytonic cadence shifts the metrical accent forward in the phrase one beat, another instance of the phenomenon noted above (ex. 15; cf. ex. 9b). The second half of the first part repeats the metrical pattern of the first half but without the anacrusis. Here the rhythm becomes more complicated, as the phrasing shifts within the meter. The first three phrases cadence on strong beats; the fourth phrase, though it has the same length as the first phrase, has no anacrusis and thus cadences on a weak beat, causing the next two phrases to run together into one, the rhyme of the first being swallowed into the phrase, the word setting of the second changing on the minim. The way in which the simple phrasing of the beginning of the first part is complexified towards its end is reminis-

Example 16: *Diex, Biauté* (V19).

a) from Schrade's transcription

Da-me de-si-re - - - e, - e.
De vous ne fu ne - - - e.

b) after

Vg: f.328r.

da-me de-si-re e:
de vous ne fine e:

ouvert clos

da-me de-si-re - - - e, - e.
de vous ne fu ne - - - e.

c)

Diex, Biauté, Douceur, Nature Mirent bien toute leur
Car tant est plaisir et pureté, Saige en port, belle en fi-

cu-re En vo douce pour-trai-tu-re, Da-me de-si-re - e, - e.
gu-re Qu'eins plus gen-te cre-a-tu-re De vous ne fu ne - - - e.

ouvert clos

Trop bien e-tes com-pa-re-e Au prin-temps qui tant a-rou-
Qu'en li douceur est trou-ve-e, Verdour, fleur, fruit et rou-

ouvert clos

gre-e Et tant a puis-san-ce, - ce.
se-e Et toute plaisir - - - ce.

cent of *Dame, a vous* (RF6/V33).

Ludwig's avoidance of *modus* barring in *Diex, Biauté* (V19) may have resulted from his decision about the word underlay of the *ouvert* and *clos* cadences, which are shared by the song's two parts. He put the final syllables of the paroxytonic rhymes on the final notes of each cadence, as did Schrade after him (ex. 16a). This follows the word underlay of **A**, **E**, and **G** for the cadences at the end of the first part; but this underlay is not given consistently in these sources at the points where the cadences are written out again.⁴³ By contrast, the word underlay given in **Vg**, **B**, and **C** is clearer

than that in the other sources and it is also internally consistent, the cadences being set in the same way each of three times they are written out. This consistency counts in favor of the word underlay in these sources. Moreover, the imperfect *modus* indicated by this word underlay makes sense of the distinction conveyed by all the sources between the terminal breve of the *ouvert* cadence and the terminal long of the *clos* (see example 16b, which shows the cadences as they are given by Vg).

The whole song can be barred in a regular imperfect *modus*, but only one of the rhymes coincides with a strong beat, the second of the first part. For the *ouvert* and *clos* cadences, this is attributable to cross-cadencing in the setting, a further instance of a paroxytonic rhyme set as an oxytone. The rhyme of the third line is set at the cadence of the third phrase, and the setting echoes the cadence of the preceding phrase, which occurs at a strong beat. An effect of hemiola results here, as the cadence creates the effect of a metrical strong beat in the middle of three bars of imperfect *modus* (Example 16c). The same cadence type is used for the first two lines of the second part of the song, creating an initial anacrusis and a change of meter just before the cadence. Once these derivations from metrical regularity are recognized, it is only the rhyme of the song's first line that avoids the strong beat.

A basic assumption of this study has been that simple oxytonic and paroxytonic cadences project word stress in order to create the metrical effect of a strong beat. In other words, the musical figures which match the two types of rhyme have been chosen by Machaut because they preserve in the musical setting the accentual properties of those rhymes as they occur in the poetry, and these accentual properties are harnessed to a metrical purpose when the poems are turned into songs. This assumption is controversial only in so far as it leads to metrical changes, since it has already been accepted, at least implicitly, by Ludwig and Schrade in their editions as the basis for handling anacrusis in major imperfect *tempus*, and in *Hé! dame de valour* (V11) in particular. Ludwig additionally, and to my mind quite rightly, pursued the consequences of this assumption to the recognition of meter at the *modus* level in the songs with minor imperfect *tempus*, orienting this anacrusistically where necessary. Schrade's barring in minor imperfect *tempus* is more an obstruction to musical sense than an aid to the eye in these songs. The metrical changes that have resulted in this study from generalizing the assumption emerge as a stylistically integrated feature of the repertory; a number of the cases fall into the same type of metrical pattern, deriving from the use of a paroxytonic rhyme after one or more oxytonic rhymes. That this should be so ought to come as no surprise, since metrical variation is already known in Machaut's poly-

phonic songs, even if it has proved a controversial aspect of these.⁴⁴ Discovery of it in the monophonic songs as well is a further sign both of the consistency of Machaut's song style throughout his *oeuvre* and of the integration of the monophonic songs into that larger *oeuvre*.

The setting of rhymes in Machaut's monophonic songs retains the accentual effect of these far more often than is indicated by the current editions. Rebaring of the editions may seem a relatively trivial alteration, but it is one that has brought with it two significant repercussions.

First, it has enabled an important clarification of Machaut's lyric technique, drawing a clear distinction between the majority of cases where rhymes do coincide with strong beats and the small minority where they do not. The conditions obtaining in the latter cases may be attributed to two types of cause: cross-cadencing,⁴⁵ a specific feature of the dynamic relationship between poetic and musical forms that is more generally apparent in Machaut's lyric songs; and exceptional setting arising from peculiar aspects of design in individual cases.⁴⁶

Second, it has enabled a reassessment of some of the emendations made by the editors to the texts given in the manuscript sources. Metrical regularity need not now be regarded as an essential prerequisite for an intelligible text. The semibreve rest in *Helas! et comment* (V18) can be accommodated by a switch from major imperfect *tempus* to minor perfect *tempus*. The word underlay indicating a change of meter at the *ouvert* cadence of *Dame, se vous m'estes* (V37) may be taken as it stands.

The question of word underlay has occurred also in relation to the *ouvert* and *clos* cadences of three other songs,⁴⁷ where again the plea has been to take literally what the sources indicate, rather than to emend, as Ludwig and Schrade did. Although there are numerous and significant differences between the copies in the word underlay of certain of the polyphonic songs, this aspect of the musical texts is on the whole unusually consistent and clear within the Machaut sources. There is, then, good reason to follow the alignment of notes and syllables that the sources show when they are sufficiently clear and in agreement with one another.

Barring is a valuable tool in modern musical notation for indicating meter, and it has proved invaluable here for demonstrating the metrical variations that Machaut employed in his music. So the question must arise of how Machaut could have employed a notation that lacked barring for the composition of music in which metrical structure apparently played so important a part. An answer is in part supplied by an aspect of medieval notation that has tended to be overlooked: the word setting. This is not simply a matter of how individual syllables relate to notes in the sources, but it is more fundamentally a matter of the rhythm of the song. Florid and melismatic styles of syllable setting provide groupings of notes that

should be investigated for their significance in the overall rhythmic design. They would have presented an important visual guide for the medieval singer reading through his voice part. The position of rhyme accents would also have presented important rhythmic—and as I contest, metrical—information about the shape of the music. Certain melodic gestures would have guided the singer as well, such as the rising third at the beginning of *Dame, a vous* (RF6/V33), which invites performance as an anacrusis to the metrical accent on the upper note. By these means, the meter of the music would be, as I suggested at the outset, obvious to the medieval singer directly in the musical design. It is thus a mistake to regard word setting as ancillary to musical notation, certainly in the context of the Machaut sources. The grouping of the notes required by word underlay is an integral part of the notation of the song, indicating its basic rhythmic form.

The approach adopted in this article has risked anachronism by bringing present-day musicianship to the study of medieval music, where the bases for musical understanding and the conventions of musical practice were very likely different from ours in many ways that we cannot tell. It is, of course, important to avoid distorting medieval music by the imposition of our own preconceptions and values, if we can; we should not deny it the chance to be heard on its own terms, even if we can never be sure of the extent to which such a chance exists. Yet there is also a danger—recognized perhaps insufficiently these days—of not bringing our musicianship to bear in the study of medieval music and consequently of belittling it as music. The human impulses that gave rise to musical activity in the Middle Ages were not fundamentally different from our own, and our duty to medieval music is as much to respond to it in the light of those impulses as in the light of theoretical dicta.

The differentiation of strong and weak beats which we now understand by the term meter is a musical phenomenon that may be appreciated in listening and reproduced in performance directly in sound without the necessity of theoretical exegesis or conceptual mediation. It would have been as important a part of medieval dance music as it is of modern dance music, even though no medieval theorist troubled to explain the phenomenon; and for that matter, it is hard to see how the rhythm of Machaut's songs assumed the form it did without the regulation of a metrical practice. We need not suppose that Machaut meant something so very different from what we might by the words, "Et musique est une science/ Qui vuet qu'on rit et chante et dance."⁴⁸

Notes

1. The shifting relationship of musical phrase and poetic line found in *Aymi! Dame* (V3), *Dou mal qui* (V8), and *Diex, Biauté* (V19) is discussed in Göllner (1989:

especially 61–67); the phrasing of *Douce dame jolie* (V4) is discussed in Edwards (1996: especially 13–14).

2. A thorough study has been made by Daniel Leech-Wilkinson (1996; an extension and amplification of 1991). See also Plumley (1996:91–111).

3. Ludwig (1926–54) and Schrade (1956). Although I give the titles of Machaut's songs as much as possible, it is sometimes more convenient to refer to them by their numbers in the editions. For the most part, the editions use the same numbering; where they differ, the number of Ludwig's edition is given first, followed by that of Schrade's edition after an oblique line.

4. The manuscripts will be referred to in the conventional way: **A, B, C, E,** and **F/G** are Paris, Bibliothèque Nationale, fonds français 1584, 1585, 1586, 9221, and 22545/6, respectively; **Vg** is the manuscript now owned by the Wildenstein Galleries in New York. Summary details about the sources are given in Earp (1995:77–79, 84–94).

5. Compare the remarks of Ludwig (1926–54, 2:46) with those of Schrade (1956: Commentary Notes, 14).

6. The account presented here extends, refines, and develops observations of Arlt (1982: especially 262–71) and Weber-Bockholdt (1992).

7. Anonymus IV came close to it with the concept of *principium ante principium*, though this relates specifically to cases in polyphonic music where one voice enters in advance of the others on the upbeat, and could not be applied to monophonic song. See Reckow (1967, 1:88) and Roesner (1990:52).

8. David Fenwick Wilson argues that accentual meter was introduced during the transition from modal to mensural rhythm, around the time of Franco of Cologne. *Modus* became the metrical level, marked by accent, while *maximodus* became a hypermetric level of phrase. Rhythmic organization during what he refers to as the “mensural period” was still, as Franco acknowledged, modal. See Wilson (1977: especially 326–32).

9. Jean Beck also observed this feature of the second rhythmic mode (1927, 2:58).

10. Richard Sherr has argued that all rhythms in Machaut's music would have been construed upwards from the minim, thus making that value the fastest duration countable (1992:327–28). While this view certainly accords with the theory of mensuration, it seems unrealistic from a practical point of view. The manuscripts frequently group short notes together into the values of semibreves or breves. As these groups often conform to standard rhythmic patterns, they would surely have been read as distinct units, not assembled laboriously from the smallest constituent. From a historical point of view, the minim originated as a species of semibreve, that is, as a division of the breve; it is unlikely that by the time of Machaut the entire mensural system would have been reconceived for practical purposes to build up the semibreve by addition of the minim. The simultaneous use of both minims and longs, which is common in Machaut's polyphonic music, would have required that the two values were both directly intelligible as durations and related to each other. This would not have been possible if the (roughly similar) tempi proposed by Willi Apel (1961:343) and Richard Sherr (1992:330) were accepted as having been normal.

11. The term “part” is used throughout to refer to the two musical compo-

nents of virelai form, the first corresponding in the poem to the refrain and second half of the stanza, the second to the first half of the stanza.

12. The texts of both music and poetry are based on those of Schrade's edition. There are, of course, frequent differences with regard to barring. Note values of the original notation are reduced by two rhythmic levels (a breve becomes a half note, and so on.) For consistency, *Dame, se vous m'estes* (B37) is notated, like the other songs, in the tenor clef. Ligatures are indicated by slurs. The character *w*, though used extensively in the Machaut sources and retained by Ludwig and Schrade, has been replaced by *vu*. Accented terminal *e* is shown by *é*. One or two slight changes have been made to syllabification in the interest of consistency. Rhyme syllables are underlined in the examples to make clear their positions in the settings.

13. This is the case for *Nes qu'on porroit* (B33), *Quant Theseus* (B34) (where Machaut was apparently writing in response to a ballade by Thomas Paien), and *Dix et sept* (R17); see letters 4, 31, and 35 in Machaut (1998:76–79, 400–1, 440–41;).

14. Sixteen ballades (3, 9, 14, 16, 19, 22, 23, 25, 27, 28, 32, 33, 35, 36, 37, and 39), five rondeaux (4, 15, 19, 20, and 21) and one virelai (26/23).

15. Ballades 35, 37, and 39 and rondeaux 19 and 20.

16. Machaut duplicated only one virelai pattern, that used by *Dame, a vous* (RF6/V33), which occurs elsewhere in three poems that were not set to music and three that were given two-voiced musical settings. A full formal analysis of the poetic forms of the virelais is given in Maw (1999, 1:232–34).

17. A helpful summary of recent work in this area is given by Switten (1995:82–94).

18. Two treatises in particular are relevant: *L'Art de Dictier* (1392) by Eustache Deschamps and the chapter "Des rymes et comment se doivent faire" of Jacques Legrand's *L'Archiloge de Sophie* (c. 1405): Deschamps (1891, 7:266–92) and Langlois (1902:1–10), respectively. Though both postdate Machaut, they are close enough to him in time and technique to be taken as representative. Dechamps was a pupil, and possibly nephew, of Machaut.

19. The manuscripts have "sovereinne," but this gives the line nine rather than the regular eight syllables. The additional syllable is retained by Schrade but bracketed by Ludwig. It is eliminated here.

20. *Je vivoie* (V23/21) is unique amongst the virelais with major *prolatio* in having suggested to Ludwig the necessity of a transcription in imperfect *modus*. Three factors seem to have prompted this: the use of breves rather than semibreves at the ends of lines; the word underlay, which moves here unusually for songs with major imperfect *tempus* in semibreves and breves; and the setting of the paroxytonic rhymes. The latter may well have been the decisive factor. The two syllables of the paroxytonic rhymes are set in equal breves, pointing to a binary organization of breves at the *modus* level, analogous to that in the songs with minor imperfect *tempus*. While this meter aligns all the accented syllables of the paroxytonic rhymes with strong beats, the oxytonic rhymes, which terminate over half of the lines in the song, are not so aligned. This seems to have been an intentional effect of "cross-cadencing" (a term explained below).

21. The exceptions are the first and third lines of *Aymi! Dame* (V3), each of

which is concatenated within a phrase to the following line. Their oxytonic rhymes are effectively ignored in the setting, being placed within the beat, the only occasions in these virelais where rhymes have absolutely no bearing on the setting.

22. A full exposition of this is given in part 3 of Maw (1999, 1).

23. In addition to *Hé! dame de vaillance* (V1) and *Dou mal qui* (V8), this type accounts for the two displaced oxytones in *Quant je sui mis* (V13) and the four in *Je vivoie* (V23/21).

24. Two further examples emerge from the reevaluation of the transcriptions given here below: one possible, but unlikely, in *Dame, je vueil* (V9), and one more or less certain, in *Diex, Biauté* (V19).

25. The first two lines of the refrain of *J'aim sans penser* (V14), the fourth and fifth lines of *Se mesdisans* (V15) (discussed below), and the second line of *Helas! et comment* (V18).

26. But see also *Dame, je vueil* (V9), discussed below.

27. V1-ii, V3-ii, V5-i and -ii, V9-i and -ii, and V30/27-ii.

28. In this respect, Ludwig's edition is consistent. Schrade's, however, adopts a variety of approaches: in V5, V9, V14, and V18 the initial rests of the sources are transcribed; in V28/25 the initial rest of the sources is supplemented by an editorial rest in brackets; in V4 the initial rest of the sources is not transcribed; in V11 he gives no initial rest, in the same way as Ludwig.

29. V11-i, V20-i and -ii, and V28/25-ii.

30. V4, V5, V11, V20, V28/25, and V30/27.

31. With one exception: V1 and V18; with two exceptions: V2 and V14.

32. The copy of the song in Manuscript E (f.33v.) provides implicit support for this by giving the final note of the first part of the song as a long rather than the semibreve found in the other sources. The long would have to be taken as *nota finalis*, commencing on the beginning of a bar, and this would require the anacrustic shifting of the beginning of the song. Admittedly, this evidence is weak, as the repetition of the first part that terminates the stanza has a semibreve at the end in that source.

33. These metrical corrections enhance the resemblance between this song and *Puis que ma douleur* (V7) noted by Leech-Wilkinson (1996:134–35).

34. Uniquely among the virelais, this song presents some significant differences in the word underlay. Comparison of the different versions leads to a preference for the copy in C, being the one with the most consistent setting. Ludwig and Schrade followed the word underlay given in Vg, A and G, while deviating from these sources at the *ouvert* and *clos* cadences; the copy in B is now missing. These differences between the sources are discussed and evaluated in Maw (1999, 1:94–95). C and E differ from the other sources in giving the first note of the second phrase as *g* rather than *a'*. C's copy alone provides an internal check by notating the first part a second time for the end of the stanza, and here too *g* is given. As C appears to be the most reliable source for the word underlay, I have opted to incorporate its different reading for this note. Ludwig and Schrade give the *a'* of the other sources.

35. Though considered a ballade by Machaut, this song may be examined here with the virelais both because it is monophonic and because its form is not fundamentally dissimilar to that of the two exceptional virelais, *Quant se sui mis*

(V13) and *J'aim sans penser* (V14). In any case, Machaut seems to have been the first to make a clear formal distinction between ballades and virelais, which are thoroughly intermixed in the collection of "balettes" in the manuscript Oxford, Bodleian Library, Douce 308. See Hoepffner (1920).

36. See Apel (1961:350–51), though like Schrade, he does not observe the *modus* meter here.

37. Virelais 6, 10 (except in C), 12 (1st part slightly inconsistent in notation), 15 (except in C), 17, 18 (1st part), 20, 23 (except for 2 syllables), 25, and 30, as well as ballade 37.

38. Virelais 4, 7, and 19. Virelais 3 and 16 may also be of this type, as discussed here.

39. E has staves but no notes in its copy of this song.

40. A revised transcription of the piece, taking into account Richard Hoppin's comments on the notation (1960:20–23), is given in Leech-Wilkinson (1984:14–17). See also Apel (1961:349).

41. This view is shared by Alison Bullock (1997, 1:79–81), though she, following Lawrence Earp (1983:140–41), maintains that *Rose, lis* was most likely composed close to the time of CII's compilation. The evidence for this, depending on details of manuscript layout and musical style, is suggestive but not conclusive. It does not, in any case, affect the argument here: the employment of similar metrical flux in the virelai and rondeau does not depend on proximate dates of composition for them, and the date of CII's compilation, which might affect the time between composition of the two pieces, is not precisely known.

42. Schrade comments on this case: "The *modus* upon which Ludwig's transcription is based is not justified in the notation" (1956: Commentary Notes, 140–41). It is not clear whether, in singling out this example, Schrade is conceding that Ludwig's use of *modus* in the other virelais is justified in the notation, if not essential for transcription, or whether his avoidance of it in transcription is an implicit generalization of the reserve expressed in this case. In any event, much depends on what exactly is meant by "the notation." The view pursued here is that word underlay is an integral component of the notation of the song and that this presents a justification for Ludwig's use of *modus*. The purpose of transcription is not simply the replacement of one set of symbols by another, but a rendering of the compositional thought expressed in one set of symbols according to a different set of symbols.

43. A gives the same word underlay for the cadences at the end of the first part where this is repeated as the second half of the stanza, but E and G agree with the other sources here. All six sources have the same setting for the cadences of the second part.

44. This can be seen in the differences between Ludwig's and Schrade's use of *modus* in transcription of a number of the songs. See also the discussion in Hoppin (1960:23–26).

45. V1-ii, V3-ii, V6-i, V8-ii, V13-i, V19-i and -ii, and V23/21-i and ii.

46. V3-i, V12-i and ii, V14-ii, V15-i, V18-i, and V19-i.

47. V16, V18, and V19.

48. *Prologue*, lines 198–199 (Machaut 1973:10).

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