SUMMARY

The French isorhythmic motet of the fourteenth century may truly be called one of the most polyphonic – in the literal sense of many-voiced – genres in the entire history of European music. Text and music form a web of crossing and interacting sound patterns and significations that resounds for an extremely limited time-span. The central question of this dissertation is how such a complex and compact work of art was and is to be appreciated and which elements merge the diverging textual, melodic and rhythmic lines into a coherent and harmonic whole. Contemporary theorists who described the motet as a harmonic unity offer little help towards an explanation how this harmony was attained. Consequently, only an analysis of the works themselves can bring clarity to this aesthetic problem.

As subjects for this investigation works were chosen from Machaut's corpus of motets, the largest extant collection by a fourteenth-century composer which is transmitted in no fewer than six manuscripts. As the copying of part of these manuscripts was supervised by the author their reliability is exceptional. And it may be reasonably supposed that text and music bear a certain relationship within the oeuvre of an artist who was as great a poet as a composer.

The dissertation consists of two parts. Part I contains a synopsis of the corpus and a discussion of three analytical approaches. In Part II, eight works serve as case-studies of analysis and interpretation; a detailed discussion of all motets would have extended the study beyond reasonable length. In these interpretations a second question is broached, in addition to the above mentioned problem. Machaut, in his literary works, repeatedly stressed the importance of 'newness' as an aesthetic ideal. To which extent is it justified to speak of innovation in Machaut's motets, which manifestly follow the formal tradition of the genre? It is my assumption that his "newness" can be found especially in the detail of the compositions, as in the chanson-genres of which he fixed the forms, yet endowed each work with an individual and special character. In order to study Machaut's inventiveness and art of variation in this genre, eight motets have been chosen which display a very high degree of similarity in their formal structure. Thus, this dissertation is also a study of a composer's imagination.

The synopsis of Machaut's 23 motets in Chapter I clearly shows that his oeuvre was thoroughly organised. As appears from the manuscripts, the larger part was finished around 1350; c. 1360 another three motets were added. The sequence is identical in five out of the six manuscripts and, according to the index of one of them, was thus ordered by the author. The main categorisation of the corpus is a bipartition according to the themes, in close connection with the language. The fifteen French and the two French-Latin motets 1-8, 10-17 and 20 have amorous problems for their theme, in which the poet represents the lyrical *I*. The six Latin motets 9, 18-19 and 21-23 are occasional works in the public sphere, with religious, ceremonial or political themes. Here the poet voices the feelings of the community as *We*. Thus, in each of the two groups one work from the other group has been placed which establishes a connection between the two thematical spheres, i.e. motet 9 in the French and motet 20 in the Latin group.

Criteria for further ordering are both thematic and musical. This is a crucial finding for the central question of the dissertation as it shows that text and music were given equal importance. Thematically the corpus shows a subdivision in groups of three motets on related subjects, except for the motets 16 and 17 which form a pair. Even the afore mentioned

'outsider'-motets 9 and 20 fit within a thematical grouping. The musical ordering is mainly determined by the isorhythmic structure and the length of the motets, which yields a main grouping into two times ten plus three motets. The series 1-10 consists mainly of works containing mensural changes in the tenor, in most cases by diminution. The motets 11-20 are much more diverse in structure but, except for motet 18, have no diminution. The great four-part motets 21-23 again are very similar in structure. In all three series similarities between individual motets determine the sub-grouping.

The criteria of ordering according to text and theme or to musical structure place different accents, yet it appears from the research that the position of a number of motets is best explained by both criteria in conjunction, while in addition the tenors play a role. For this reason the results from Chapter 1 were supplemented in the Concluding Remarks. These observations are summarized as follows.

The placement of the opening works of the two thematic series is appropriate as in both the theme concerns an initiation: of the *I* in love in motet 1, of a bishop in his function in motet 18. Another common feature is that the strophic and musical forms show an examplary correspondence which is found in no other motet. In the two closing works 17 and 23 it is the liturgical association of the tenors, both taken from a Marian antiphon, which explains their placement: in Machaut's days as now, these Marian antiphons were sung after compline; the tenor choice therefore symbolizes the closure of the two main groups.

Motet 20, originally planned as the final work, in the oldest manuscript of Machaut's works even closes off the entire codex. This placement is emphasized by the final *Amen* in the secualr texts of the upper voices. For this reason and because of the entirely perfect mensuration which is unique to motets 1 and 20, we may assume that Machaut already considered these twenty motets as a closed cycle.

The motets 1, 5 and 10 display the closest affinity. All three are motets in two periods with a diminution 3:1; achieved in reality in motet 1 and speculatively in motets 10 and 5 in which the real proportion of diminution is 2:1. Their proportion as to length is 6:4:3. Of these three, the motets 1 and 10 have the strongest similarity, as the isorhythmic structure of motet 10 mirrors that of motet 1 on half its scale. These two motets are built on a tenor from Holy Week; probably the same holds true for motet 5. The taleae of the motets 5 and 10 share a rhythmic pattern of three perfect longs. In addition, both works refer to a motet by Philippe de Vitry through quotations and modelling, motet 10 in its texts and motet 5 in its music.

The second coherent group is formed by motets 1, 4, 7 and 10, which are placed equidistantly. Motets 4 and 7 form a pair, as is evident from their related tenors, themes, isorhythmical structure and proportional divisions. The sum of the lengths of the two motet-pairs 1-10 and 4-7 is equal (assuming for motet 7 the planned length of 171 breves), namely 648 semibreves. The biblical figures and liturgical contexts of the tenor pairs are complementary: David – Christ's prefiguration in the Old Testament – in motets 7 and 4, liturgically belonging to the time just after Pentecost; Christ – the fulfilment in the New Testament – in the motets 1 and 10, belonging to the period just before Easter. Within in the series of motets with diminution, motets 1 and 7 are both exceptional; they have perfect (1) or imperfect mensuration (7) at all levels, whereas motets 4 and 10 are closely related as regards text and theme.

In the second series of ten motets a repetition of this double structure in the ordering seems intended, although the similarities are less precise than in the first. Motets 11, 16 and 20 are the only three non-isorhythmic works, with chanson tenors and French texts in all voices. Motets 11 and 20 have a similar relationship as motets 1 and 10, as their proportion as to length is 2:1 and both works are divided by three hoquet passages. Motet 16, however, has

quite a different structure. The proportion in length of the three chanson-motets is not equal to that of motets 1-5-10, because of the somewhat deviating length of motet 16 (the proportion in length of the three works is 102:150:51 in breves, in semibreves 306:300:153). Yet, the refrains of the tenors do have the same proportion in length, 6:4:3 (72:48:36 semibreves). With respect to motets 1-5-10 the position of these three motets is mirrored: the distances between motets 1, 5 and 10 equal those between motets 20, 16 and 11.

The second coherent group consists of motets 11, 14, 17 and 20, again four works at equidistant positions. The common element here is the adoration of the Lady. In chanson motets 11 and 20, the courtly Lady is the object of adoration, while the texts in motet 20 are of an almost religious tone; in motets 14 and 17 the tenor is a Marian antiphon. The constellation 'courtly Lady-Mary-Mary-courtly Lady' thus mirrors the constellation 'Christ-David-David-Christ' of the first series. Motets 14 and 17 do not, however, display further similarities comparable to those of other pairs. And, adding together the lengths of both pairs 11-20 and 14-17 does not yield an equal sum as it did in the first series. Although the proportions and similarities in this series are thus less precise than in the first, nevertheless it is striking that, when three motets were later added to the corpus, again a Marian antiphon was chosen for the tenor of motet 23, and thus once more the relation 'Lady-Mary' is repeated at an equal distance (Marian chants occur only in motets 14, 17 and 23).

The original corpus thus appears to be governed by a mirror-symmetrical plan which explains the positions of ten motets; and of eleven in the extended, later form of the corpus, including motet 23. In this later format of the corpus yet another symmetrical grouping of four motets with strong mutual ties can be distinguished: motets 8, 12, 17 and 21. Motets 8 and 12 both have the capriciousness of Fortune for their themes, their proportion in length is 2:3 and they share a rhythmic pattern in their *taleae*. Motets 12 and 17 are the only works with a French triplum and a Latin motetus and both have texts of Boethian inspiration; probably this also holds true for the Fortune-motet 8. Motet 21 is based on the same tenor-melody as motet 8 (with a twice as long segment of the chant) and may therefore also be considered to belong to this group, even the more so as this work can – indirectly – be connected with the theme of Fortune. Three of these motets (8, 12 and 21) have a tenor from Lent.

Between the remaining works, setting aside their order, relations of different kinds exist, next to their thematical order which probably provides the best explanation for their placement. The literary complementarity of motets 2 and 3, connected as they are by their Jobian tenors, has been pointed out by other authors; the analysis of these works in the Chapters IX and X showed that they also have musical-structural relationships. Motet 6 is a sequel to motet 5, not only in theme but also because both works quote lines from the same trouvère-chanson. In addition, both tripla begin with an identical melodic motif. Of the group of motets 13, 14 and 15 two are equal in length (14 and 15) and two have similar isorhythmical structures (13 and 15). Motets 12 and 15 share the tenor figure of Jacob and their liturgical context, while themes and musical structure show complementarity; their *taleae* consist of the same two rhythmical patterns but in reverse order. Also, there are thematic and musical-structural connections to motets 8 and 14. Motets 21-23 clearly form a coherent group through their isorhythmic structure and their four-voice texture with a long introit.

Chapter II focuses on the disposition of the texts and the significance of the tenor words. Whereas the formal aspect of the texts in relation to the musical structure of the motets has been discussed in a number of earlier studies, their content has only in the most recent studies been the subject of investigation. The meaning of the arguments and the form in which they

are expounded – its disposition – in relation to the strophic and musical forms, receive full attention in my study, although the underlying rhetorical principles would deserve further scrutiny.

Generally speaking, the interaction between the texts of motets with amorous theme in particular expresses the complexity of a problem by considering it from various angles in a dialectical process in which the texts display both similar and contrasting aspects, culminating into a pointed conclusion which often is a quotation. The subdivisions of the arguments, cross-references within the texts themselves and between texts through similar wordings and rhymes on significant positions, added to the many intertextual references to works of older authors by means of quotation, lead to the conclusion that the texts form a carefully contrived whole. Consequently, a thorough analysis of the disposition of the texts is essential to discovering the meaning of each work.

In order to discover whether similarity of subject or tenor also leads to musical resemblance, two pairs of motets are discussed as examples, one pair with closely related themes (16 and 17), and one with related tenors (12 and 15). Each of the four motets is divided into two equal parts, each in a different way. In motets 16 and 17, both having the problem of the eternal triangle for their subject, Machaut used rhetorical or literary models for the disposition of the texts, which it is essential to know to understand his train of thought. In motet 16 the bipartite musical form is brought about by its phrase-structure, in motet 17 by its isorhythmical structure, which in itself could represent various problems; it acquires its specific meaning only when compared with the disposition and content of the text. The irregularities in their musical structures extend this analogy and can only be explained as an expression of the problem under discussion. The music sometimes complements the meaning of the texts to such an extent that only through interpreting text and music together the problem is fully expressed. In these works related themes have led to comparable constructive ideas for both text and music, even if textual form and musical structure are entirely different.

Motets 12 and 15 are exemplary for the influence of the tenor words and their context on form and content of the argument and on the musical structure. The textual ideas of appearance versus reality and the possible reversal of the situation under deliberation originate from the history of Jacob and its Augustinian exegesis in the Lessons of the Office. The partition in two equal parts is effected by various musical means: by isorhythmic structure in motet 15, by an exchange of voice register between triplum and motetus until the midpoint of the work in motet 12; yet in each of the motets both devices are applied. Again, musical devices acquire specific meaning in combination with the texts. Both motets were clearly conceived as complementary works, which is also obvious from their *taleae* which consist of the same two patterns but in reverse order. In this case the relationship of the tenors has led to similar compositional ideas.

In most motets analysed in this study we find an opposition of two ideas, which are given an equivalent in musical bipartition. However, both parts are not always equal in length as in these four examples. Usually simple mathematical proportions can be shown in both textual and musical divisions. In many cases, especially in motets with diminution, the strongest twist in the argument coincides with the join between the first and second period. The motets discussed in Part II display a great variety in proportional divisions of the texts. The corresponding musical divisions are generally those of the isorhythmical structure but other means are used as well.

In Chapter III the relationship between rhythm and text is discussed. Motets with identical *talea*-rhythms are rare in the Ars nova-repertoire; therefore, when they are found the question arises if such works display other similarities. After comparing all the *taleae* four motets were found with an almost identical iambic pattern. In its simplest form it is the entire *talea* of motet 8; combined with other patterns and with variations, the pattern reappears in the *taleae* of motets 12, 14 and 15. The explanation for the similarity in rhythm cannot be found in the properties of the tenor-melodies. The four motets do share a thematical idea, which leads to the conclusion that the common rhythmic pattern symbolizes instability and unreliability, personified in the figures of Fortune or Faus Samblant. From analysis emerges that Machaut treated this 'Fortune'- pattern as an integral whole in his contrapuntal settings. A contrasting pattern of three perfect longs, which in motets 12 and 15 is combined with the Fortune-pattern, suggests that this, as an image of *perfectio*, symbolizes stability and truth. Taken together the analyses suggest that, at least in these four motets, Machaut did not construct his *taleae* from independent rhythmical units, but from longer patterns and their variants.

Rhythmical techniques such as syncopation may, too, bear significance regarding the theme. In two motets (9 and 17) syncopation comprises the whole tenor. The obvious explanation for these extreme cases of syncopation would be that the tenors provide practical demonstration of a theoretical possibility. In both motets however, it is plausible that the rhythmization also has an expressive function with relation to the thematic ideas.

From these analyses it follows that the tenor-rhythm should not be taken as a purely musical fact; it also symbolizes the theme or an aspect of it. In the analyses of Part II this has been further investigated and it appears that the tenor-rhythm can nearly always be demonstrated to be illustrative. The general conclusion is that Machaut in constructing his *talea* usually started from a simple pattern of symbolic or illustrative significance. He then elaborated on this pattern, adding a contrasting pattern or complicating factors such as rests, syncopations or variations on the pattern, sometimes by speculative or even misleading notations. As the talea forms the foundation of the movement, the literary idea, symbolized in a rhythmic ostinato, resounds below the other voices.

In Chapter IV the relationship between counterpoint and text is discussed. The choice of tenor-melody does not seem to have been determined by the character traditionally attributed to the mode of the source-chant; usually the selected fragment is too short to preserve its modal characteristics. On the other hand, several examples discussed in this study strongly suggest that Machaut's choice was not only prompted by musical qualities, required for making a good and complete composition, but also by some specific characteristics of the melisma, which he considered suitable for the expression of the subject.

The analyses lead to the conclusion that in recent studies of Machaut's counterpoint the melodic aspect is neglected in favour of a reductive analysis which presupposes motets were composed as an elaboration of a framework of consonances. Machaut's conception of counterpoint seems rather to take the melodic lines for its starting-point; the vertical results were calculated, but should be considered as emerging from the voice-leading. The function of motifs borrowed from the tenor, which at times effectively relate different passages of the texts, has also been somewhat neglected. In addition, it appears from many instances of extreme leaps in the melody that change of octave, although not affecting the quality of the consonance, has great significance as a melodic gesture; in some motets such leaps evoke an image or an emotional state of mind. The same is true for the exchanges of register between the upper voices. Generally, extremes of ambitus have an expressive value, the higher register

symbolizing joy or excitement, the lower sadness and depression. Plicae, which often occur in the lower register, usually signify plaintive accents. A reductive analysis would miss many if not all of these effects.

However, the analysis of the succession of cadences in which the divergent lines are co-ordinated remains essential for an understanding of the unity of a work.As has been demonstrated in earlier studies, in many motets a polarity, present or latent in the tenor melody, develops between two tones of which one is the final, often at a distance of a second or a third from each other. The gradual development of tension between the two poles emerges most clearly from the cadence-structure. The final is always the goal towards which the counterpoint is oriented, while the other pole is increasingly emphasized, parallel to the development in the counterpoint of the texts. Remarkably, the final is not always synchronised in all voices, which is of importance for the interpretation of the relation between text and music.

The comparative analyses of two chanson-motets, which are discussed in detail in this chapter, show the degree to which both form and meaning are outlined by melodic-rhythmic motifs, in part originating from the tenor. The considerable differences which nevertheless remain between these related works demonstrate Machaut's flexible compositional technique and can also be explained as the musical expression of the various subjects.

The analyses of the isorhythmical motets in Part II of the dissertation complicate this picture. To be sure, Machaut here too worked with motifs from the tenor, but they permeate the structure to a lesser degree than in the chanson-motets, while the tones of the tenor melody provide centres of gravity around which the melodies of the upper voices circle. The balance between vertical and linear counterpoint varies in the works; sometimes the vertical structure dominates, with motifs borrowed from the tenor being of secondary importance (4, 10), sometimes the counterpoint is of a very linear conception (especially in motets 2, 3 and 5) while in other works a middle course is steered between these extremes (1, 6, 7). With each of these techniques we find a subtle interaction with the texts.

Machaut's counterpoint is the result of a profound and imaginative reflection on the borrowed materials. It can be described as an exploration of the capability of a tenor melody of creating musical tension while giving expression to the ideas of the text. A comparison of the development and orientation of the counterpoint with the dialectical process in the texts shows that Machaut's musical language – in each work in its particular fashion – closely follows and reinforces the meaning and the tension of the poetry.

In Part II of this study eight motets are discussed in separate analyses of texts and of music, followed by an interpretation in which the conclusions from both analyses are combined. The order of discussion was determined by the similarities of tenor and of musical structure.

The first motet, *Quant en moy vint premierement / Amour et biauté parfaite / Amara valde* discussed in Chapter V, has for its theme both the genesis of love and the longing for its fulfilment. The work is built on the topical literary pun 'amer = amer' (to love = bitter) which is sung only at the conclusion of the triplum-text but which must have been Machaut's starting-point, to judge from his choice of tenor. The similarity in sound of the Latin 'amara' in the tenor to the literary topos joins the courtly and the transcendent worlds; a 'son dous', a sweet sound or song of love changes into a menacing 'son amer', because of the lover's wait for fulfilment.The musical structure of the motet reflects both the longing for fulfilment and the change of feelings expressed in the texts; the first by the emphasis on the number of

perfection, 3, in the mensural and isorhythmical structure, the other by the mutations between the *molle* and *durum* hexachords in the tenor which are mirrored by the polarity in the counterpoint. With subtle means Machaut conveys the complexity of the subject 'amer'. At the same time the work is a philosophical reflection on time and duration, in love and in music: the 'fin' amant' strives after a love 'sans fin', which can only be endless when it remains unfulfilled. In the musical symbol of the imperfect final the paradox of 'being' in love is expressed pointedly: love can only exist as a 'becoming'. At the very end of the original corpus the final of motet 20 expresses the same wish to turn the fleeting moment 'just before fulfilment' into an eternity, as its duration cannot be exactly defined.

Motet 10, *Hareu! hareu! le feu, le feu, le feu / Helas! où sera pris confors / Obediens usque ad mortem*, discussed in Chapter VI, mirrors motet 1 in its musical structure, on half its scale. The texts show up a strong influence of a motet by Philippe de Vitry, *Douce playsence / Garison / Neuma quinti toni*. Both motets treat the same theme but in a different way: burning desire and the question how the human heart can sustain it. There is tension between the tenor and the upper voices: the word 'obediens' finds no response in the other texts, only the 'usque ad mortem'. The tension between obeisance and non-obeisance is reflected by the musical structure, in which tension is created by a permanent syncopation which also influences the contrapuntal structure.The tension leads to instability of movement and finally to dissonant closure when the tenor reaches the final later than the upper voices. Herein lies the point of the motet: only the tenor is 'obedient until death', until the end, while the upper voices speak of 'not being able to last' and 'dying in spite of Nature'. Machaut dares to include an unresolved problem in his music, in the form of a dissonant ending symbolizing an impasse. This work, too, is a reflection on time and duration in love and music.

The theme of motet 5, *Aucune gent m'ont demandé que j'ay / Qui plus aimme plus endure / Fiat voluntas tua / Contratenor* discussed in Chapter VII, is that of subjection and is an answer – premature as regards the sequence of the motets– to the unresolved problem of motet 10. Both works refer to Vitry's motet. Both *taleae* share a pattern of three perfect longs – a symbol of stability – but it is placed in different rhythmical contexts.
Its four-voice structure, its mensural complexity, its many quotations and models make it clear that a grand theme is being discussed in this motet. The placement of the quotations follows the model of the thirteenth-century *motet enté*. The text of the motetus, beginning and ending with quotations and having a mirror-symmetrical rhyme-scheme, reflects the longing for a reversal of the situation where a hard lot falls to the perfect lover and the imperfect lover has a comfortable life as in a mirror. The triplum imitates form and style of a trouvère-chanson and quotes abundantly from this repertoire. In the musical setting Machaut took his inspiration from Philippe de Vitry's motet which was the textual model for motet 10. Machaut did not just quote Vitry's tenor-rhythm, he complicated the *talea* by retrograding it in a contratenor, creating a musical mirror-form. Moreover, he gave a demonstration of a music-theoretical speculation in the ambiguities of the notation: the longs of tenor and contratenor are both perfect and imperfect. Motet 5 is one of Machaut's most complex works in which text and music show closely related ideas while the diversity is extreme. The motet is both a theoretical speculation on perfection and imperfection, a literary reflection on perfect and imperfect love and also a reflection on the style of the genre, by the amalgamation of elements from both the Ars antiqua and Ars nova motet-styles. The point of intersection which brings

unity to the great diversity is the image of the mirror. The work can truly be called a *speculum amoris*.

Motet 6, *S'il estoit nuls qui pleindre se dehust / S'Amours tous amans joïr / Et gaudebit cor vestrum*, discussed in Chapter VIII, in several respects forms a continuation of motet 5. One of the chansons quoted in that work is used here again. It contains an image which forms the nucleus of meaning of motet 6: an excess of desire is the precondition for future joy in love. The ideas of futurity and of an excess of desire inspired Machaut to an extraordinary musical analogy. The temporal balance of time between the two periods is disrupted but by a subtle isorhythmic technique which causes the join between the *taleae* to appear to shift the impression arises that both parts of the motet are balanced exactly. The texts express this paradox in their conclusions, by the simultaneous words *trop* (too much) and *paire* (equal) in the two upper voices. In this work Machaut plays on the listeners' expectations and their sense of musical time, to express the paradoxical idea of an instable balance.

Evocative power and extraordinary sound-effects are at their pinnacle in the second motet, *Tous corps qui de bien amer / De souspirant cuer dolent / Suspiro*, discussed in Chapter IX. Its theme is the sighs and languishing of the lover, which is expressed in contrasting ways in the texts of the upper voices, there is hope in one voice, despair in the second, while both urgently press the fulfilment of love. In the muisc the composer plays on the effects of rest. In the tenor conspicuous rests illustrate the sighing. The motetus has the same isorhythmically returning motif as the tenor but in a contrasting mensuration, causing a complex hocket which forms an ostinato throughout the motet. Melodic motifs in this voice contrast sharply with the tenor melody and cause a great number of dissonants, in combination with broken declamation. By speculative notation the rests give a misleading impression of the real mensuration in diminution. The contrast between the motetus and the initially silent but increasingly talkative triplum makes for a colourful evocation of a sighing and timid lover, who is lost for in his words, while pleading urgently for the fulfilment of his love.

The theme of motet 3, *Hé! Mors, com tu es haïe / Fine Amour, qui me vint navrer / Quare non sum mortuus*, discussed in Chapter X, is more difficult to determine. The tenor words signify both a longing for death and a cry of despair. In the light of the motet's literary context, appearing from a number of trouvère-quotations, the theme may be defined as two contrasting aspects of dying for love: despair, as separation from the beloved will bring about death, but also a desire to die if death is the condition for the realisation of love. In the music the composer again plays on the effect of the rest, as in motet 2, and on the perception of form by the listener, as in motet 6. Simultaneous rests in the upper voices change the isorhythmically determined form of the motet, creating a mirror-symmetrical form, in which the unusual *talea*-structure becomes functional. The form accords with both the structure of the tenor melody and with the content of the texts when in the centre of the mirror-form mention is made of complete reversal. The counterpoint, in which the tones dominating the two halves of the tenor-melody strongly contrast, contains surprises similar to those in motet 2; they emphasize the drama of the subject. The texts contain a crosswise disposition as in motet 10: Death and Love mirror each other at the beginning and at the end of the texts. In its variety of mirrorings the work is a pendant of motet 5, as a *speculum mortis*.

Also in motet 7, *J'ay tant mon cuer et mon orgueil creü / Lasse! je sui en aventure / Ego moriar pro te*, discussed in Chapter XI, the central theme is dying from and for love, and again we find mirror-forms appearing both in the text and the musical setting. As in motet 3 the tenor words should be taken in two meanings: as an expression of longing and of the fear of death. Again, the theme was inspired by a trouvère-chanson. Subject is the punished *orgueil* of the Lady who scorned her faithful lover. Their relationship is set against the biblical history of David, Joab and Absalom in the tenor and the mythical story of Narcissus and Echo, in the motetus. Symbol of the reversal is the mirror which is not mentioned in the texts but is evoked by the almost anagrammatical aural similarity between the tenor's *moriar* and the French *miroir*. The mensural structure suggests that the idea of imperfection has great thematical significance, in the sense of lack and unfulfilment. All mensural values are imperfect. The important theme of *desmesure* is symbolized in the tenor rhythm, in an 'unmeasurable' talea. Underneath the motet's imperfect surface structure however, a fully ternary, perfect proportion lies hidden. The simultaneously sung *amour* in the upper voices indicates the proportion's main division. The perfect proportions in the plan of the motet are illusory and are disrupted by a shortening at the end. This formal imperfection and the imperfect mensuration symbolize the unfulfilment and desire of the texts. Thus, the motet becomes a model of imperfection and the pendant of the entirely perfect first motet.

Motet 4, *De Bon Espoir, de Tres-Dous Souvenir / Puis que la douce rousée / Speravi*, discussed in Chapter XII, forms a complementary pair with motet 7, because *umblesse*, in courtly lyric the counterpart of *orgueil*, is its theme. The biblical figure in the tenor is again David. The subject of the motet is the contrast between hope, expressed in the psalm word *speravi*, and despair; in the texts of triplum and motetus an excess of fiery desire causes the lover to lose all hope. The conclusion is that the only hope left for the lover is humble obedience until death. In this work, as in motet 7, the *desmesure* of longing is symbolized by a 'measureless' talea rhythm, combined with other irregularities in the rhythmic structure. As in motet 7, the work is divided by a proportion marked by the point at which the word '*amour*' sounds in both upper voices; in this case it is the proportion of the Golden Section which possibly symbolizes the 'golden mean' – *mesure* – between desire and humility. Measure and excess are the ideas common to the text and the music, by which their relationship is expressed. In the counterpoint a half-tone motif permeates the sound of the entire work obsessively; this motif probably was borrowed from a chanson by Thibaut de Champagne, of which the words are echoed in the texts. In addition Machaut construed an opposition between two tones which symbolize the 'sweet' and the 'hard' respectively, bringing to mind motet 1. *Dur* in the counterpoint is here connected with *duree* in time. This motet's signification is that 'hard' desire should be purified by changing it into an intention to obedience and subjection.

These eight works have in common their moral significance: the elevation of the labours of love into the ethical charge of ennoblement, in which the paradoxes and unfulfilment of love are accepted in subjection. But they are also reflections on the significance of a word, supported by well chosen quotations: what is it 'to love', what do 'perfection', 'longing', 'sighing', 'dying', 'hoping', 'obeying', 'joy' signify? It is precisely in the musical expression of the pursuit and the dynamics inherent in these ideas that the origin is found of the large differences between these structurally so similar motets. The play with musical time is different in each of these works. Where we encounter related ideas in the detail of the composition, the themes will also be found to be closely related. Nevertheless, each motet has

been given an unmistakable form of its own and it is the motets 6 and 3 in particular which show just how flexible the form of the isorhythmic motet can be.

In the Concluding Remarks I return to aspects of this study, to which I devoted special chapters, but which were also referred to in the analyses of Part II. Subjects under discussion are: the ordering of the corpus, borrowings from older repertoire, the composition of texts, some questions concerning the declamation of the texts, rhythmization and counterpoint, and finally the relationships between text and music, by which the motet is unified. The findings regarding Machaut's ordering of the motets, the disposition of the texts, the rhythmization of the tenor and the counterpoint have been summarized above, under chapter headings.

The materials taken from older repertoire refer to the tenors and to the – mainly textual – quotations in the poems of the upper voices.

The tenor, in accordance with tradition, is taken from ecclesiastical chant or from the repertory of secular song. In each of the motets analysed the words are found to have been chosen very appositely with regard to the subject of the texts in the upper voices; they express the themes succinctly, whilst their liturgical or biblical background – when known – enhances the significance of the other texts. A characteristic trait of Machaut's tenors is that the words often can be read in contrasting ways, which usually corresponds with the contrast between the texts of the upper voices. The frequency with which this occurs suggests that Machaut had a preference for texts which imply a diametrical contrast or give occasion for construeing such a contrast. If the words themselves do not show any contrast, it is often implied in their context. In some cases Machaut even omitted part of the text belonging to the melisma to obtain this effect.

Borrowings remain not restricted to the tenor. In many cases one or more quotations were found in the upper voices which had not been remarked upon previously but which are important for the understanding of the motets. The works quoted – which have been identified – are the bible (7, 9, 21), hymns (21, 23), Boethius' *De consolatione philosophiae* and Alain de Lille's *De planctu naturae* (both in 17), chansons by the trouvères Gace Brulé (12), Thibaut de Champagne (3, 4, 5, 15), Robert de Castel (5), Perrin d'Angicourt (3, 5, 6, 7), the Roman de la Rose (1, 2, 3, 13) and contemporary works, among which the only surviving motet in the French language by Philippe de Vitry *Douce Playsence / Garison / Neuma quinti toni* (5, 10). In only a few cases musical quotation can be shown (motets 4, 5, and 7).

The various forms of quotation vary from topoi to imitations of the syntactical structure of an older text. The placement of quotations suggests that Machaut usually took as his example the thirteenth century *motet enté*; as in this genre, we often find quotations at the beginning and/or end of the texts. In several cases the quotation is found in the same position as in the source poem (usually Machaut quotes from the first and the last stanza); in some cases the positions at the beginning and the end are reversed. The crosswise disposition of the argument of the texts in Vitry's above mentioned motet – the triplum begins with the idea the motetus ends on and vice versa – is imitated in a number of works (motets 3, 10 and 17).

A specific image in the quoted chansons manifestly inspired Machaut repeatedly to a musical analogy, which led to original and subtle constructions, as in motets 5 and 6. Another way of modelling can be found in motet 17, where it is not so much quotation as the choice of certain words and especially the syntaxis which refer to the literary models of Boethius and Alain de Lille.

Machaut did not quote the older texts slavishly as an *auctoritas*, he gave his quotations a meaningful function. The analyses show that he reflected on the significance of the old texts

and sometimes even undermined their meaning by small modifications. He added thoughts of his own and in some cases chose a specific design with regard to his models, made recognizable by means of quotations. In the hands of Machaut the motet is not just based on a quotation – in the tenor –, it is a form of art in which the practice of quotation constitutes an essential part.

Two questions with regard to rhythmization have not yet been considered in this summary: the declamation of texts and the choice of mensuration.

In general the moments that suggest emotional expression of the text by means of text declamation, show the greatest deviations from regularity. In some motets the emotional tension of certain statements is underlined by an acceleration or a deceleration of declamation. The most expressive voice is usually the motetus; in this voice the most frequent occurrence of extremes of note-value and of irregular diction are found, its melody also often seeks the extremes. Yet, the declamation – even of exclamations – is not generally marked by special effects. In many motets an evident relationship between text-declamation and emotional expression cannot be found; then declamation follows the rhythmic patterns of the upper voices.

In some cases the choice of mensuration was inspired by the theme, especially when the mensural combination is extraordinary. This is the case with the fully perfect and fully imperfect mensuration, which refer to perfection in love and unfulfilment respectively. The combination of tempus imperfectum and prolatio minor seems also to have thematic significance, as in two of three works (7 and 16) the speaking voice is female, while in the third (8) a female character, Fortuna, is indicted. Imperfect mode usually occurs in works with sombre themes (2, 3, 7, 13). Conflicting mensurations in three motets (2, 10, and 17) can be explained as the expression of the textual conflict between Nature and Amour.

The relationships between text and music constitute the final subject of the Concluding Remarks. One of the greatest difficulties in defining the precise interaction between poetry and music, is Machaut's great flexibility in choice of means for bringing about such interaction. It confounds a classifying decription of the range of subtleties. The various degrees of interaction range from direct or indirect associations of meaning between a word or an idea and a musical sign or number, to relationships between text and music in which the succession and combination of various associations and observations realize a larger signification.

Machaut's use of numbers with a symbolic meaning is evident, yet apparently it is not a consistent practice. The numbers which have musical significance, e.g. 3 and 2, receive the greatest symbolic significance. When they are given unusual emphasis in the musical structure, the theme of the motet is generally related to their traditional meanings: perfection and imperfection. This is the case in the motets which are fully perfect (1 and 20) or fully imperfect (motet 7). Some large numbers, pertaining to the length of certain motets, most likely refer to a traditional symbolic significance, e.g. 144 in motets 1 and 18, and 153 in motets 4 and 20. Certain prime numbers which are frequently used, e.g. 17 and 19, probably also have symbolic significance, although their interpretation is less certain as they are not tradition-bound.

Certain words and concepts have both a literary and a musical meaning, and will therefore naturally provoke musical realisation or illustration. Such words describe a musical sign, a sound, time and duration, a proportion, sweetness and hardness, elevation and depression and

similar contrasts. In this vocabulary Machaut shows himself an early master of *poesia per musica*. There are some instances in which a theme and a musical motif are combined in several works, where no illustration of the text can be found. An example is the rhythmic pattern which is common to the *taleae* of motets 8, 12, 14 and 15.

The different functions which musical signs can have, offers the possibility of conceiving them as different symbolic meanings, dependent on their literary context. An example is the rest which allows breathing and subsequently comes to mean 'sighing', which, as an interruption of sound, is a symbol of death, but can also illustrate 'being silent', 'waiting', even 'to make a mistake' when used as a misleading mensuration sign. A rhythmical technique as syncopation is rich in meanings too: 'enclosure', a 'chain', 'perseverance', 'instability'. Extremes of range can be used to many expressive purposes: utterances of hope or despair, rhetorical contrasts, or an illustration of discord.

Contrapuntal tension and the polarity between two tones in particular, operative in almost every motet, often symbolize the longing of love and the difficulty of reaching fulfilment. The way in which the final is approached can almost always be interpreted as a clear symbol of the textual point. This moment of final resolve may even be disturbed when the problem remains unsolved, as is the case in several motets; in this Machaut is extremely consistent. The music may even evoke thoughts which have no equivalent in the texts and thus complement the significance of the poetry. By their combination these expressive means realize a complex signification in which the tensions inherent to a problem are demonstrated.

The layered process of signification in the motet might be best understood from the position of the performers, as many clues are hidden in the notation and performance of the parts. The interpretation begins from a consideration of the tenor, as this part determines the formal outline of the work and its words contain the meaning of the motet in a nutshell. The unique characteristics of the tenor rhythm, symbolizing an essential aspect of the theme, and the general form of each motet as defined by the tenor give the first indications as to the meaning of the entire motet. The texts of the upper voices are then studied for their relation to the tenor words and for the form and disposition of the argument, for which emphases on certain words and on shared or contrasting aspects constitute important indications. Quotations, if traced, contribute to the understanding of Machaut's train of thought. In performance, the textual and musical forms in the upper voices can clarify and sometimes change the basic form of the work as defined by the tenor. Symbolism of numbers and concepts, and special effects in melodies and rhythms in the upper voices enliven the performance, when they are understood as illustrations of the texts. The rhythmic and contrapuntal tensions emphasize the growing tension in the literary counterpoint. Related concepts and strategically placed words and musical motifs illuminate various aspects of the subject and its treatment. Problems arising during performance and their possible solution provide further indications. In an attentive performance the continual shortcitcuiting of ideas between text and music sets in motion a gradual process of discovery of the many facets of the central problem, which often converge into a central image, capturing and summarizing it all. Machaut's ingenious and imaginative method has resulted in an ordered series of extraordinarily 'new' motets, in which language and music permeate each other in a subtle process of signification.